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**Aspects of European Economic Integration: The Single
Market and the Single Currency.**

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November 1995.**

**A Thesis submitted to the Faculty of Graduate Studies and Research in partial
fulfillment of the requirements of the Degree of Master of Arts.**

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Abstract

This paper considers two major issues in the evolution of the European Union, the Single Market and the Single Currency. The first chapter deals with the projected effects of the 1992 Programme, and the second chapter deals with the collapse of the Exchange Rate Mechanism of the European Monetary System and examines the prospects for European Monetary Union given this collapse. The third chapter revolves around the concept of Central Banking under Monetary Union and focuses on the European Monetary Institute and the European System of Central Banks. Chapter four presents data regarding the progress of the European Union towards the target of the Single Currency, as well as other macroeconomic indicators.

Résumé

Ce mémoire examine deux sujets importants dans l'évolution de l'Union Européenne: le marché uni et la monnaie unique. Le chapitre 1 explore les effets prévisibles du marché uni de 1992 et le chapitre 2 traite de l'effondrement du Mécanisme des Taux de Change du Système Monétaire Européen et examine la perspective de l'union monétaire européenne face à cet effondrement. Le chapitre 3 aborde le rôle des banques centrales dans le contexte d'une union monétaire en prêtant une attention particulière à l'Institut Monétaire Européen et au Système Européen des Banques Centrales. Enfin, le chapitre 4 présente des données sur l'évolution de l'Union Européenne vers l'édification d'une monnaie commune ainsi que d'autres indicateurs macro-économiques.

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Abbreviations

Currencies

B/LFR	Belgian/Luxembourg franc	FF	French franc
DKR	Danish krone	HFL	Dutch guilder
DM	Deutsche Mark	IRL	Irish punt
ESC	Portuguese escudo	PTA	Spanish peseta

Other abbreviations

EC	European Community
ECB	European Central Bank
ECOFIN	Council of Economic and Finance ministers
ECU	European Currency Unit
EMI	European Monetary Institute
EMU	Economic and Monetary Union
EMS	European Monetary System
ERM	Exchange Rate Mechanism
ESCB	European System of Central Banks
EU	European Union
GEMU	German Economic and Monetary Union
NTB	Non-Tariff Barriers
VSTF	Very Short Term Financing Facility

Introduction

The European Community (EC) was founded by the Treaty of Rome in 1957 and initially consisted of six members: Belgium, the Netherlands, Luxembourg, France, Italy and West Germany. In 1973, Britain, Denmark and Ireland joined, followed by Greece in 1980. Spain and Portugal joined in 1987 bringing up the total to twelve member states. Austria, Sweden and Finland joined in 1995 but the analysis in this paper will focus on the first twelve countries (EC12).

The two most ambitious plans of the European Community are the Single Market and the Single Currency. The Single Market was launched on January 1, 1993 and it represented the result of the 1992 programme, a series of measures introduced by the member countries aimed at merging their national markets into one European market which would be characterised by free mobility of goods, services, capital and labour. The latest endeavour of the European Commission is to establish Economic and Monetary Union (EMU) among the member states. The main attribute of EMU is that national currencies will be replaced by a single currency, the European Currency Unit (ECU) and that monetary policy will be transferred from the national central banks to a new European Central Bank (ECB).

In chapter 1 of this paper, I will focus on the rationale behind the introduction of the 1992 programme. I will then examine the measures introduced by the 1992 programme and present the projected effects of each part of the Single Market. The chapter ends by giving the views of several economists who did not believe that the Single Market would have such profound effects.

Chapter 2, starts with a presentation of the advantages and disadvantages of Monetary Unions. The second part of the chapter examines the causes of the collapse of the Exchange Rate Mechanism (ERM) in 1992-93. The future of EMU given this shock is then debated with various options being presented, and the viability of each evaluated.

Chapter 3 attempts a look into the future: on the assumption that EMU does occur, there exists the problem of increasing the degree of cooperation among the national central banks and the transfer of responsibility for monetary policy to the ECB. Therefore, the European Monetary Institute (EMI) is presented. The EMI is the intermediate institution which is charged with promoting cooperation among the national central banks, and preparing the ground for the ECB. The European System of Central Banks is then examined with close reference to the ESCB's primary task of promoting price stability. Finally the need for fiscal policy coordination in the context of the loss of monetary policy by the national governments is explained.

Chapter 4 presents various macroeconomic indicators of European countries, and data for the last five years and uses these to evaluate whether the EMU convergence criteria will be met by 1996. A final summary and conclusion then follows.

Chapter 1: The Economics of 1992

1.1 Introduction:

When the European Community was founded, its format was that of a customs union. Article 9 of the Treaty of Rome discusses a customs union “which shall cover all trade in goods and which shall involve the prohibition between member states of customs duties on imports and exports and of all charges having equivalent effect, and the adoption of a common customs tariff in their relations with third countries.” Following the Oil Crises of 1973-74 and 1979-81, the European Community countries fell into the longest and deepest recession since the end of the Second World War. In five years, EC12 unemployment rate doubled from 6% in 1979 to 12% in 1984 (Tsoukalis 1991: 45). Intra-EC trade stagnated and EC shares in world markets were shrinking due to the loss of competitiveness of European products. There was widespread concern regarding the loss of momentum of the integration process and there was increased use of non-tariff barriers by members against their partners. It was feared that Europe would become a low growth area plagued with “Eurosclerosis”, characterised by small inflexible local markets protected against competitive pressure from the outside. As a response to these concerns, the European Commission prepared the White Paper entitled *Completing the Internal Market* (Commission of the EC, 1985) which specified a list of 297 measures aimed at eliminating intra-EC trade barriers. The White Paper also included a timetable for the adoption of these measures, extending to 31 December 1992. The White Paper suggestions became EC legislation through the Single European Act. This Act was ratified by the ten member

states in February 1986 (Spain and Portugal ratified it upon joining in 1987) and came into force in July 1987. This Act entails freedom of movement within the community for goods, services, labour and capital. Following the passage of the Act, the European Commission asked a group of economists to prepare a study indicating the projected results of the 1992 programme. The projected results of the Single Market were presented in *The Economics of 1992* (Emerson et al. 1988); a book that has become synonymous with the European ideal, and which was repeatedly used by the Commission in its efforts to convince sceptics that the Single Market was worthwhile. Although it has been two years since the Single Market was launched, there are still no reliable and comprehensive data available for its results, mainly due to the fact that many of the measures have not been fully completed. The groundwork for the Single Market was prepared for 31st December 1992 but getting from the groundwork to the completion is a long and tedious process. Given this absence of data, the Emerson Report remains the only comprehensive and official source of information.

The purposes of this chapter are to examine the “new” customs union theory which deals mainly with gains arising due to the presence of unexploited economies of scale, to explain the barriers that the 1992 programme sought to tackle, and to examine the microeconomic and macroeconomic implications of the Single Market.

1.2 The “New” Customs Union Theory

Standard customs union theory purports that international trade reflects comparative advantage, i.e. differences in factor endowments and productivities. However, a great proportion of European trade is intra-industry; two-way trade of

goods produced using the same factor inputs. Rather than, say, Germany focusing on cars and France focusing on electronics, both countries produce differentiated models of the same goods and trade these goods among them. Clearly, intra-industry trade is not the same thing as trade creation from comparative advantage. It could be argued that standard customs union theory is not entirely relevant in the case of the European Community.

In the past 15-20 years, the “new” customs union theory argues an increase in social welfare comes from two sources. Firstly, allowing foreign firms to enter the domestic market reduces a national monopoly’s market power. But more importantly, product differentiation supports imperfect competition consistent with economies of scale. However, in the absence of an efficient redistribution tool, a negative effect arises: some nations will gain and some will lose. It is in the interest of the Community to ensure that all member states gain to a certain extent. The redistribution tool should work in such a way that everyone gets part of the gain, but not necessarily an equal share. For example, assume that a Dutch initiative increases European output, but also decreases French output. Clearly if this increase ^{were} redistributed equally among the twelve members, it would be unfair ^{to} the Dutch. The French should be compensated, and Holland should receive a larger amount of the increase than anyone else.

Krugman (1987) argues that international trade facilitates the exploitation of economies of scale rather than comparative advantage. Advantages to large scale production can imply a decrease in average costs when the production of each good is concentrated in a specific location within individual countries.

The removal of trade barriers within a customs union increases the possibility for a firm to expand to a partner's market. Thus a firm reallocates its resources for a multinational market and its long run average cost decreases. High cost producers may choose to produce the same product using a cheaper technology. Alternatively, they may use brand loyalty and advertising to decrease substitutability, increasing product differentiation.

Within the context of a customs union, increased competition decreases prices, with the price setting powers of pre-1992 oligopolists decreasing as the market structure moves towards a more competitive framework. The creation of a Single Market may act as an anti-trust policy because it makes the coordination of a cartel more difficult. However the absence of cartels is not guaranteed, and therefore oligopoly pricing through collusion may still prevail.

Krugman (1987) also points out the possibility of a negative effect. There may be industries where a factor will have greater returns than any of its alternative uses, and the Single Market may allow the establishment of these industries in countries that could previously not support them. Each country has an incentive to take unilateral measures, referred to as Strategic Trade Policies (e.g., support to research and development), to attract these industries in a rent seeking behaviour. The outcome of such non-cooperative strategic behaviour may waste resources and create high-cost, fragmented industries.

Another point made by Krugman (1987) is that gains from integration are not shared equally among the members of the Community, at least in the short run. For

example, the owners of a factor which prior to integration was scarce stand to lose when that factor relocates to their national market from one of the partners. He points out that prior to the 1992 programme, the integration of the original six countries was fairly costless due to the fact that the industrial base of these countries was more similar than dissimilar, and to the fact that what we had was a situation of intra-industry trade to exploit economies of scale.

Also, Krugman (1987) addresses a point beyond the “new” theory: with the enlargement of the community to twelve countries, there arises a very obvious segregation of countries into North and South. The “North” countries are those with a more developed industrial base and include Belgium, the Netherlands, Luxembourg, Germany, France, Britain, Denmark, and Italy. The “South” countries are those within which agriculture is the main contributor to GDP and ^{whose} industrial base is less developed. These countries are Ireland, Spain, Portugal and Greece. Krugman (1987) argues that the nature of trade between North and South will tend to be of a more conventional nature: Greeks will export agricultural products to Germany and import German heavy industry products like machines. An adjustment problem is expected to arise because prior to 1992, traditional industries were protected in the North, just as heavy industries were protected in the South. The bottom line of Krugman’s argument is that trade expansion in the enlarged European Community will not be as painless as it was in the original situation, mainly due to the differing natures in the economies of the partners, and more specifically the presence of high-cost domestic producers, the result of infant industry protection.

1.3 The 1992 Programme

According to the Emerson Report (1988) there were four major groups of non-tariff barriers that restricted trade within the Community prior to the 1992 programme. These were customs procedures, technical regulations, discriminatory public procurements and fiscal barriers. Non-tariff barriers will be analysed in greater detail below. The essence of the 1992 programme is the removal of these barriers and the elimination of the segmentation that is evident in the European market due to non-tariff barriers, different tastes from country to country, problems of language, and deliberate market-segmentation strategies by the producers (e.g., price discrimination). Finally certain national market characteristics differ among the countries and these disparities can not be tackled by the 1992 programme: for example the English drive on the other side of the road from the rest of Europe and they use different plugs for electrical appliances than the rest of Europe. Also there exists a productivity gap which is thought to be due to unexploited economies of scale; unexploited since agents are not aware of these economies in the first place.

1.3.1 Customs Procedures

The Emerson Report (1988: 33) states that in 1985 intra-EC trade amounted to 500 billion ECU, which is about 14% of total ECGDP and more than half of total community trade (EC12). In moving towards its country of destination, it was common for cargo to cross more than one or two frontier stops. The Emerson Report (1988) justifies the presence of customs procedures as follows: Customs are needed due to (a) differences in indirect taxation that force firms to adhere to the principle of

destination, (b) differences in health standards that require veterinary and plant health checks, and (c) checks of road transport licences and whether vehicles are fit to travel. Also, customs offices ensure that the inflow and outflow of goods and traffic are registered for statistical purposes. Finally, customs offices are needed to ensure the enforcement of bilateral trade quotas that members of the community maintain with third party countries.

According to Catinat (1988), the mere presence of frontier controls gives rise to extra costs which penalise intra-community trade. Additional transport costs are manifested in the form of customs delays and administrative costs, with firms paying for the services of forwarding agents and customs formalities; and governments incurring more costs for the mere maintenance of customs offices and those who are employed in them. The estimated direct costs of customs formalities in billions of ECU are summarised in table 1.1 below. In addition, there is an indirect cost to the presence of customs formalities: To the extent that foreign suppliers are restricted from entering the domestic market, it means that domestic suppliers are sheltered from foreign competition.

1.3.2 Technical regulations

It was estimated that there once existed over 100,000 technical regulations and standards in the community. Increasing concerns for health, safety and consumer protection made this set of barriers a most important one. According to the Emerson

Table 1.1: Estimated Direct Costs of Customs Formalities Borne on Intra-Community

Trade in Goods for 1985 (billion ECU)

Administrative costs to firms:

Internal	5.9
External	1.6
Total administrative costs	7.5
Costs of frontier delays to firms	0.4 - 0.8
Total Costs to firms	7.9 - 8.3
Administrative costs to governments	0.5 - 1.0
Total costs of customs formalities	8.4 - 9.3

Source: Emerson et al. (1988: 38)

Note: These costs were estimated for the European Commission by Ernst and Whinney. Their study involved interviews and questionnaires with 467 industrial firms in Belgium, France, Germany, Italy, the Netherlands and the United Kingdom. The sample accounts for 0.8% of intra-EC trade. Evaluation of costs of delays at customs posts involved a similar sample pattern with 85 road transport operators. Finally, the cost to national authorities was based on publicly available data. The estimates were then adjusted for total intra-EC trade.

Report (1988), industrialists rated this category of barriers as the most important hindrance to intra-EC trade. The commission adopted a series of tools in order to respond to the threat of these barriers. Firstly, it has applied the principle of mutual recognition. According to the principle, all goods that are lawfully manufactured and marketed in one member country, are acceptable in all member countries. The principle originated following the Cassis de Dijon ruling in 1979. In this case, a German firm was trying to import Cassis de Dijon to Germany but was prevented from doing so because the liqueur allegedly did not meet German standards. The case went to the European Court of Justice where it was ruled that Cassis could be prevented from being sold in Germany if it could be proved that it was harmful to health, which it was not. In short, mutual recognition implies that if a product is good enough to enter one market, then the standards it has passed are sufficient to allow it to enter all markets. Therefore, recognition refers to the countries recognising each other's standards as acceptable for their own market.

Secondly, the commission proposed the harmonisation of national regulations. The "New Approach" to technical standards specifies the essential requirements for all markets and does not prescribe the methods that producers will employ to meet these requirements, contrary to the prior situation where different methods had to be used depending on where the goods were being sent, and often different standards had to be met. The new approach has greatly simplified the process of preparing, packaging and dispatching goods destined for export.

Finally, the Commission uses the "Mutual Information" Directive. According to this, countries must register new regulations and standards. The commission has the power to freeze new regulations for up to a year. The directive has served as a positive restraint on the introduction of new trade barriers.

The presence of different standards and regulations results in much higher costs. These are incurred by companies in the form of higher inventory and distribution costs, loss of efficiency due to the different methods that have to be employed depending on the destination of the good, and research being national-market specific as opposed to Europe-specific. Governments also incur higher costs in the form of more testing for products, depending on their country of origin, and finally these costs are passed on to the consumer in the form of higher prices.

1.3.3 Public Procurement

Public procurements are purchases made by central, regional and local governments as well as purchases made by enterprises which are under the control of these governments (nationalised, strategic). Public procurements represented 15% of total ECGDP in 1986, about 530 billion ECU. Tendered purchases represent more than half of the total (240-340 billion ECU in 1986) and those are the ones relevant to the 1992 programme. These purchases primarily occur in two sectors: Construction and transport equipment. It is often the case that when a government awards a contract to a national firm it does so for regional and occupational reasons rather than because they are the least-cost producer or the one that has the better good. It is

estimated that in the long run a larger proportion of government spending, 80% of the total or 12% of ECGDP, will be open to tenders from all community firms.

As a result of the liberalisation of public procurements, governments will be able to utilise competition to ensure the best products and the lowest price for their purchases. It is hoped that their choice will depend more on economic than on political criteria and will be beyond nationalistically oriented preferences. The national suppliers of these goods will be able to move in the markets of one or more of the partner countries, and compete with their community counterparts. A result of this increased competition could be lower profit margins and a reallocation of market shares. It is expected that in time the inefficient firms will be driven out of the market and the lower cost firms will survive with higher market shares. Resources will be reallocated to countries where public-procurement-related firms are more efficient and as a result both the governments and the suppliers will be made better off. Of course, countries that have many high-cost producers will suffer considerably as these producers are eliminated, yet in the long run this implies more efficient resource allocation. Another eventuality is that high-cost producers may restructure and decrease costs and thus stay in business. It is expected that the liberalisation of this area will yield considerable economies of scale because the area has been protected extensively over the years.

1.3.4 Financial Services and Fiscal Barriers

The financial services sector is a rather large one accounting for about 6.5% of ECGDP in 1985. Prior to the 1992 programme there were barriers to financial

services in the form of restrictions on the right of establishment, and controls on the mobility of capital. Barriers of this type result in extra costs for the suppliers of financial services. The removal of these barriers could reduce prices. In addition, lower prices might be encouraged by the removal of monopoly profits arising from market segmentation. The removal of the barriers will increase the availability of financial services throughout the community as insurance risks would be spread wider and in the case of loan default, there would be no need for special legislation to enable, for example, a UK bank to sue a Greek debtor in Greece.

Pressure of competition and capital mobility are expected to reduce interest rates and boost productive investment (leading to growth) and housing investment (leading to job creation). Also, the freedom of capital movement could ensure that there is better matching between financial resources and the projects to which they are invested. Clearly, when you are not restricted to investing within your own country you might find a better project in a partner country, which, once you make an allowance for transaction costs, can lead to a higher yield. Of course, the actual search for a better project somewhere in the community requires time and resources. Even if the 1992 programme does lead to fully integrated financial markets where all agents have access to all information, it can not guarantee that agents would be willing to undertake a foreign project.

Fiscal barriers arise mainly from the differences in indirect taxation present in the community countries. VAT and excise duties differ from country to country and this diversity causes complications and delays. The principle of destination is used to

neutralise the difference. According to this principle, when goods are exported, the home country authorities have to return the VAT collected on these goods, and when the goods ultimately reach their destination they are taxed at that country's rates. However, the use of the principle implies registering goods both when they leave a country and when they enter the new one, a justification for customs offices. The Commission is trying to harmonise indirect taxation with VAT being the first form that is dealt with. VAT harmonisation is a two-stage process: First, determine what goods would be placed in each classification and, second, fix a rate to be charged on each classification. However, problems arise because although VAT harmonisation has been agreed to in principle, national authorities have considerable control over minimum rates. Also, for any substantial change to occur in the fiscal area, the relevant legislation has to pass unanimously from the Council of Ministers - by no means an easy task. Article 99 of the Single European Act reads: "The Council of Ministers shall, acting unanimously on a proposal from the Commission and after consulting the European Parliament, adopt provisions for the harmonisation of legislation concerning turnover taxes, excise duties and other forms of indirect taxation to the extent that such harmonisation *is necessary to ensure the establishment and the functioning of the internal market* within the time limit laid down" (emphasis added). The whole argument is about what is necessary and what is not. Britain has repeatedly argued that harmonisation is not necessary for the functioning of the internal market, suggesting that as the integration process begins to bring results, then a need for VAT harmonisation would arise, and that is when harmonisation should take place. The

final agreement regarding VAT was signed in Luxembourg in October 1992. A legally binding minimum standard rate of 15% was established. This meant that three countries would have to raise standard VAT to the minimum rate of 15% (Germany from 14% and Luxembourg and Spain from 12%). The VAT agreement has been effective since January 1993.

1.4 The Microeconomic Effects of the 1992 Programme

The Emerson Report (1988) included calculations of the projected benefits arising from the Single Market. In order to calculate the benefits, the authors used estimates for Germany, France, Italy, the Netherlands, Belgium, Luxembourg and the United Kingdom. These countries made up 88% of total ECGDP in 1985, or 2900 billion ECU out of a twelve-country total of 3300 billion ECU. The Commission assumed that the gains realised by the remaining five countries would be of similar magnitude. There is one additional and overpowering assumption of full employment being made here, namely that resources released by the cost cutting effects of the 1992 programme will be employed elsewhere. The method for calculating the estimated results involved the calculation of partial equilibrium estimates for each sector and aggregation over these sectors. The scope of the exercise was to calculate welfare gains, that is, increases in consumers' surplus net of decreases in producers' surplus. The Commission's estimates of the gains of the 1992 programme can be seen in table 1.2 below.

Table 1.2: Estimates of the Total Economic Gains From Completing the Internal Market, According to Partial Equilibrium Estimation per Sector (EC7).

ITEM	Billion ECU		% of ECGDP	
	A	B	A	B
Estimate type:				
STATIC EFFECTS				
Barriers affecting trade only	8	9	0.2	0.3
Barriers affecting all production	57	71	2.0	2.4
STATIC TOTAL	65	80	2.2	2.7
DYNAMIC EFFECTS				
Economies of scale effects	60	61	2.0	2.1
Increased competition effects	46	46	1.6	1.6
DYNAMIC TOTAL	106	107	3.6	3.7
GRAND TOTAL	171	187	5.8	6.4

Source: Emerson (1988) Table 10.1.1 page 203

Note: Estimates were calculated based on seven countries for which data were available for 1985: Belgium, the Netherlands, Luxembourg, Italy, France, Germany, and the United Kingdom (EC7). Estimate A and B are based on different sources of information. Estimate A for barriers to trade is based on a study of the cost of frontier barriers by the consulting firm Ernst and Whinney, whereas estimate B is based on a 3000 firm survey. Also, for the other barriers to production, estimate A assumes no change in the prices of steel and agricultural products, whereas estimate B assumes that both of these will decrease by 5%. When figures in billions of ECU are altered to include all twelve countries (based on the assumption that percentages of GDP calculated would apply to all twelve members) the maximum amount increases from 187 billion to 257.

1.4.1 Static Effects

The abolition of customs barriers, or barriers to trade, was estimated by the Commission to lead to a decrease of 2% in intra-EC trade prices. Resulting from this decrease, a 4% increase in intra - community trade was expected and 2.5 % decrease to non-EC trade. The sum of these effects would be reflected in an overall increase of 0.2-0.3% of ECGDP (Emerson et al. 1988). Discriminatory public procurement, the existence of technical standards and the barriers to financial services are classified as barriers to production. According to the Emerson Report (1988), the abolition of these barriers will lead to an increase of 2.0 - 2.4% of ECGDP. So we have a static total increase of 2.2 - 2.7% of ECGDP arising from the abolition of non-tariff barriers, which may not seem to be worth the trouble that the European Community has been through in order to generate it. However, the abolition of tariff barriers when the community was founded led to a much smaller increase, a once-and-for-all increase of 0.15% of ECGDP according to Balassa (1975).

1.4.2 Dynamic Effects

There exists within the EC the potential of utilising economies of scale which were foregone prior to the 1992 programme. As market size increases, firms can specialise in certain products, and invest in research and development leading to better quality and cheaper production techniques. Based on the assumption that the more competitive producers will take over the market from high-cost producers, or force the latter to restructure, we will have better resource utilisation.

Firms that are producing on a large scale are able to achieve reductions in costs beyond those that are explained by standard economies of scale theory. By "standard" one refers to internal and external economies of scale. Internal economies are firm-specific and refer to average costs decreasing as firm size increases, especially in firms with high fixed costs and constant marginal costs. External economies occur at the industry or sector level and imply decreasing costs as production increases (Nielsen et al., 1992). Dynamic economies of scale occur when costs decline further due to learning effects. As the workers within a company become more familiar with the production and marketing of a given product, they are able to increase their productivity and may enhance social welfare within the community.

Any industrial plant can be described in terms of its minimum efficient technical size, METS; the production size (as a percentage of the total production for the relevant market) at which long run average costs reach their minimum. Small markets imply a risk that production occurs at a higher cost than the METS. The Emerson Report (1988: 131) refers to a study involving 68 plants in different sectors of industry. When the community market becomes the relevant market for these plants, it can be seen that for roughly 75% of the companies studied, estimated optimal production size per plant is below 5% of the total EC market. Thus the integrated market can support at least 20 plants of optimal size in the industries that these companies belonged to. What is suggested by these figures is that we can have more optimal-sized producers in the Single Market and thus possibly decrease resource wastage. Clearly though, the Emerson figures in this case are based on a rather small

sample. There is no indication of what percentage of total EC output is produced by these 68 plants, nor how many firms actually own these plants. A question arises as to who will own the 20 plants of optimal size that the Report argues could be present in each industry. To the extent that optimal size plants are under the control of few firms per industry, there is scope for monopoly pricing.

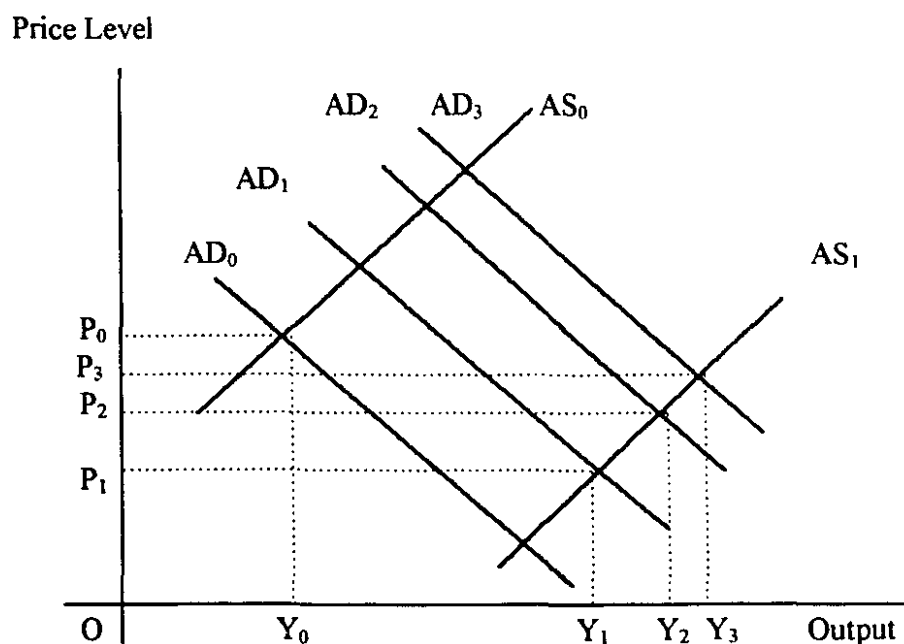
Total industrial costs are expected to decrease by 1.5% in the long run, leading to an increase in trade. The overall effect of the exploitation of economies of scale is estimated to be equal to 2.0-2.1% of ECGDP (Emerson et al., 1988).

Beyond the effects of economies of scale, one should also mention anticipated benefits from increased competition. Pressure from increased competition can decrease prices, through a reduction in profit margins to maintain (or increase) market share and through an effort to make the production process more efficient. There may arise efficiency gains in the form of a firm's own conscious effort to restructure itself internally in order to be able to respond to the 1992 challenge. We expect to observe a reduction in the extent to which resources are wasted within a firm due to bad internal organisation. There are certain dynamic efficiency gains that can be realised: the possibility of entering foreign markets represents a possible source of long lasting profits for a firm. In the light of this opportunity for profits, firms have an incentive to improve their production process as well as their product innovation. Looking at things from another perspective: competition may intensify in the form of threat of entry. Incumbent firms within an industry know that a firm from another EC country can now enter their market and take part of its sales. Therefore, national incumbents

have a motive to restructure so that they can maintain their market share. The Emerson Report (1988) estimates that the benefits arising from increased competition are of a magnitude of 1.6% of ECGDP, bringing the grand total of the projected effects of the 1992 programme to a value of 5.8 - 6.4% of ECGDP.

1.5 Macroeconomics

The Emerson et al. (1988) estimates of the projected macroeconomic effects of the 1992 programme are presented in table 1.3 below. According to Nielsen et al. (1992: 206) the formation of the internal market is what would be defined as a simultaneous supply and demand shock. With the creation of the Single Market, the aggregate supply for the Community as a whole increases due to increased efficiency. Aggregate demand (AD) is also boosted. The increase in AD can be explained in three ways: firstly, due to the substitution of imports from non-EC countries by those from community members. The import leakage is decreased and therefore AD increases. The second source of the increase in AD is the integrated financial markets. Financial markets are no longer segmented or characterised by interest-rate disparities, and therefore investment is boosted. Finally firms are motivated by the possibility of increased profits - or the need for survival - to invest in order to maintain or increase market shares. Thus we have an increase in both aggregate demand and supply, and since there is no way of knowing which of the two effects will dominate, we can not conclude whether the price level will rise or fall. According to the results presented by Emerson et al. (1988) however, the price level will fall.



Assume that in the original situation, the EC is in equilibrium at the point where AS_0 intersects AD_0 corresponding to price level P_0 and output level Y_0 . Following the creation of the Single Market, both curves shift out, and in order to remain consistent with the Emerson estimates, assume that the new equilibrium corresponds to P_1 and Y_1 , where the price level has now decreased. Under the unchanged macroeconomic policy scenario, GDP increases by 4.5%, and the price level drops by 6.1%. The budget improves by 2.2% of GDP and the current account improves by 1% of GDP. Finally employment is expected to increase by 1.8 million,

beyond the reallocation of workers moving out of inefficient firms and also after the customs employees find alternative employment.

However, the Emerson predictions suggest that there is room for a more expansionary macroeconomic policy. The European Community can change its macroeconomic policy in such a way that the expansion is funded either by the gain in the Community's budget or by the gain in the external balance. The first case is shown in the graph with the AS_1 and AD_3 being the relevant curves. The increase in GDP is 7.5% and the fall in the price level is 4.3%. The job creation estimate is even more encouraging: 5.7 million new jobs will appear. The equilibrium price level is P_3 corresponding to an output level of Y_3 .

When the expansionary policy is large enough to offset the improvement on the external balance, AS_1 and AD_2 become relevant. Equilibrium is defined by the price level P_2 and the output level Y_2 . The increase in GDP is less than before, only 6.5% but still greater than when no expansionary policy is pursued. The fall in the price level is larger though, standing at 4.9%. Finally, employment increases by 4.4 million.

Table 1.3: Estimates of the Projected Macroeconomic Effects of 1992 depending on the Macroeconomic Policy Chosen.

(Figures are generally in percentages, except for employment, which are in millions)

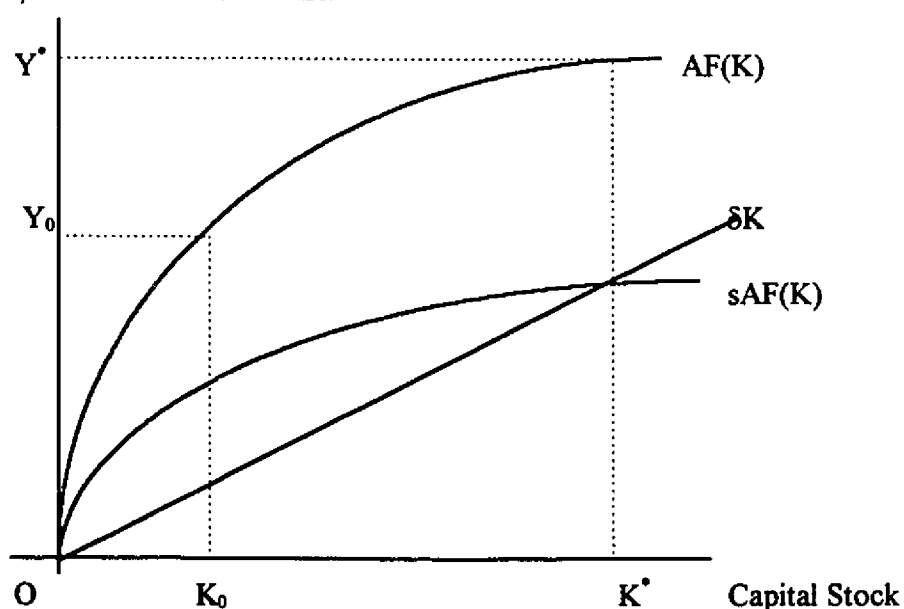
Macroeconomic Policy	Rise in GDP	Effect on Inflation	Effect on EC Budget	Effect on External balance	Employment Change
Policy Unchanged	4.5	-6.1	2.2	1.0	1.8
Expansionary Policy:					
EC Budget Unchanged	7.5	-4.3	0	-0.5	5.7
External Balance Unchanged	6.5	-4.9	0.7	0	4.4

Source: Emerson (1988) Table 10.2.2 page 216

Notes: The estimates refer to projected increases with respect to the 1985 level of total ECGDP for twelve countries, and they have a $\pm 30\%$ margin of error. The calculation of results with a change in macroeconomic policy worked as follows: The results with no change in policy reflect an improvement in both the external balance and the EC budget. The changed macroeconomic scenarios are in such a way that in the first instance the improvement in the EC budget is offset, and in the second the improvement in the EC's external balance is offset.

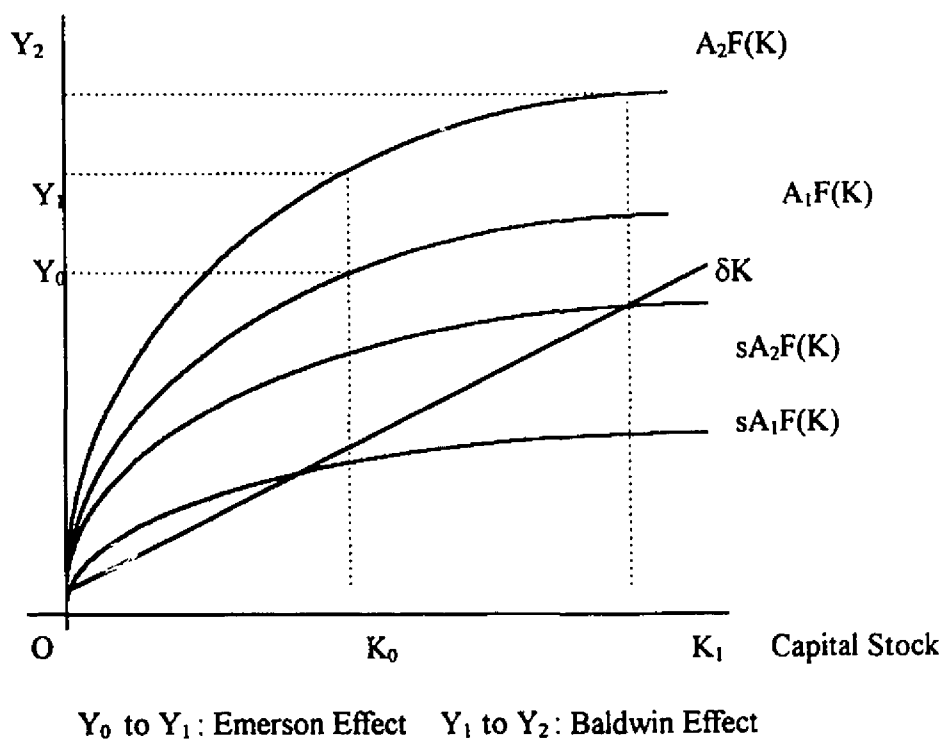
1.5.1 The Baldwin (1989) Estimates

The Emerson Report (1988) estimates that the completion of the internal market will result in a once-and-for-all productivity increase equal to 5% of ECGDP. However, the dynamic effects of this increase have not been discussed by the Commission. Baldwin (1989) used a growth model in order to estimate these effects. He used a Cobb-Douglas production function with capital and labour inputs being employed in the production of one good as follows: $Y = AK^{(w+\alpha)} L^{(1-\alpha)}$ where A is an exogenous efficiency indicator. The returns to scale are $(1+w)$ and they could be constant or slightly increasing. Baldwin assumes the latter and since he wants to estimate the role of capital accumulation in the growth process, he ignores changes in the labour force. Capital accumulation is equal to gross investment less depreciation. He also assumes external balance and therefore sets gross investment equal to gross savings. Savings are a proportion of output, sY , and investment is spent on replacing depreciated existing capital δK (δ is a fixed depreciation rate) and on purchases of new capital, ΔK , such that $sY = \delta K + \Delta K$.



In the diagram above production is treated as a function of capital alone, with a given labour force and a given rate of efficiency, A . The production function thus becomes: $Y = AF(K)$ where $F(K)$ is the function $K^{(w+a)}$ for a given L . If capital is less than the equilibrium level, investment exceeds depreciation and therefore we have an increase in the capital stock until the economy reaches the stable point of Y^* and K^* .

In terms of the 1992 programme, Baldwin's analysis suggests that the completion of the market will increase the efficiency factor from A_1 to A_2 in the graph below thereby rotating the production function anti-clockwise from the origin. So for a given level of capital, say K_0 , output increases from Y_0 to Y_1 , reflecting what Nielsen et al. (1992) refer to as the "Emerson Effect". There exists, however, a "Baldwin Effect" too.



According to Baldwin's analysis, the shift in the production function will cause a shift in the investment function and for a given depreciation rate, the stable equilibrium level of capital is no longer K_0 but K_1 corresponding to an even higher level of output Y_2 .

1.6 On a More Sceptical Note

Not every economist has come to accept the estimates proposed by the European Commission and a number of articles have been written condemning its over-optimism. This section will try and raise a few of the points being made by these economists in an effort to give some alternative views regarding the 1992 Programme.

Peck (1989) argues that the Commission's "story" of gains to be realised has certain questionable aspects, and suggests that a combination of assumptions, omissions and limitations makes the Emerson estimates over-optimistic. In addition, he stresses that there is one crucial political assumption being made: namely that the 12 nations of the European Community will cooperate with each other beyond national interests and with the common interests at heart.

He raises the first doubt regarding the analysis of the results of the abolition of barriers: that the researchers for the Commission assume perfect competition, no cost of adjustment and make no allowance for the time that it will take for the benefits to be realised. These assumptions, he argues, do not hold and therefore the results may be overstated. Regarding the benefits of economies of scale, he mentions that they were calculated on the assumption that markets will be in equilibrium and that competition is determined by concentration. Peck argues that even competitive

markets are often in disequilibrium, and that empirical studies show no correlation between concentration and competition. Once again no time frame is supplied.

It is suggested by Peck that as a result of these omissions and misguided assumptions, the results are over-estimated by a factor of three. His own prediction is that the gains should be twice as large as those for when the tariffs were abolished, and allowing for the enlarged union he suggests that the microeconomic gains would be around 2% of ECGDP.

Peck's second argument deals with his doubt^{about} whether national governments are able to operate as one European government with the enhancement of welfare for the whole being the policy target, despite negative effects for individual countries. He uses the example of industrial reorganisation and the UK. According to the Emerson simulations, the UK will lose 46 of its 65 footwear firms, 31 of its 52 carpet firms, and 1 of its 3 motor vehicle firms as a result of the 1992 programme. Peck stresses that historically, not only did nations not accept the closing of firms, but instead, the nations got actively involved and state aid has repeatedly saved dying firms. He argues that (the much needed) 'sticking to the rules' requires a change in attitude on behalf of the European countries which will be very hard to achieve, especially in the light of the contagious nature of such dissenting action - if one country saves an inefficient firm, other countries will want to do the same. For the field of public procurement, Peck states that although the community has been trying to eliminate own firm preferences since the 1970's, the fact that twenty years on, only 2% of public

purchases within the union are awarded to foreign firms casts a shadow of doubt on the Emerson story.

Cutler et al. (1989) argue that despite the removal of non-tariff barriers, consumers will tend to prefer local products, and state the 1992 programme will not change the cultural preferences of consumers or the nepotism of national governments. The authors accuse the Commission of using the "Christmas tree approach." Cutler suggests that when despite the over-simplifying assumptions and the amalgamation of best case scenarios without any concern for the probability of them happening, the results regarding the abolition of NTB's were unimpressive, in order to make "1992" worthwhile the Commission introduced the theme of indirect effects to enhance the credibility of the programme. Cutler et al. argue that the economies of scale story contradicts the NTB story. If the returns from the abolition of the NTB's are small, then their presence does not hinder the entrance of firms to foreign markets and there really are no significant economies of scale to be realised by the completion of the internal market!

Dornbusch (1989) also deals with the projected macroeconomic consequences of the 1992 programme. He stresses that the margin of error in these calculations is large since we have no theoretical models to evaluate the multicountry, multisector effects of a shock of the type generated by the completion of the internal market. In the immediate short-run, it is obvious that a lot of the policies proposed will result in unemployment. However, it is estimated that these unemployment effects will be offset by the boost to AD through increases in investment and increased intra-EC

trade. In order to ensure that the unemployment does not have a negative effect on AD, unemployment insurance has to take the pressure. If this happens, Dornbusch argues, the improvement in the budget will not be as much as the Emerson Report expects. He points out that if the increase in productivity relies so much on investment, then we should expect an increase in the price level rather than a decrease. As far as the budget-offsetting expansionary policy is concerned, Dornbusch argues that even if this improvement in the budget occurs in the first place, governments will use the extra funds to contain the growth of public debt rather than re-invest them back into the economy.

Regarding the projected increases in employment, Dornbusch argues that even the smallest of the three figures, that of 1.8 million, represents 1% of the total employment within the community. He cites an empirical study conducted for the period 1961-88 where it was derived that an increase in output of 5% is needed in order to generate a 1% increase in employment. In aid of this, he stresses that part of the estimated increase in GDP will be due to a once-and-for-all increase in productivity which will decrease employment, so he concludes that employment will not increase by as much as the Emerson Report hopes.

1.7 Conclusion

Despite the above concerns regarding the 1992 Programme, one thing must be stressed. The creation of the Single Market is an endeavour without precedent. Never before has such a diverse group of countries attempted to achieve such a high degree

of integration. Fifty years ago these countries were at war. Today they are working hard to achieve economic, monetary and perhaps political union. The completion of the Internal Market has created a trade area which is greater than both the US and Japan, with all the possibilities that a market of this size entails. The scope for growth and welfare is there. However the true extent of the effects will not be fully known for many years to come. The Single Market has been in place for just over two years now, hardly long enough for relevant data to be collected, let alone shed some light as to the impact of 1992. However, the Emerson Report (1988) is not misleading in any way. The techniques used were specified throughout the work and the results were not presented as a certainty. They were presented as estimates for a best case scenario.

The 1992 programme, together with the concept of monetary union has been the driving force of European Community politics in the late 1980's and early 1990's. The Single Market and the single currency have both been given great importance in any European Community member's political agenda. The interesting thing is that to fully reap the benefits of the Single Market, monetary union is needed; however, monetary union can not be attained without the Single Market in place. The idea of "one market, one money" had lost steam due to the collapse of the ERM in 1992-93, but it is now once again in 'full steam'. It is rather obvious that the system is not as safe or as stable as it seemed. In the next chapter, I intend to cover the benefits and costs of monetary unions, discuss the causes of the collapse of the ERM, and examine the future of EMU.

Chapter 2: Monetary Unions, the Collapse of the ERM and the Prospects for Economic and Monetary Union

2.1 Introduction

The concept of monetary integration has been the source of heated debate for economists, statesmen and laymen alike. Europe's money has a turbulent history. From the Snake to the EMS, and from the collapse of the ERM to the ultimate dream of the Single Currency, one could fill volumes of literature trying to explain what happened, why it happened, and what were its implications for Europe.

In the first part of this chapter I explain the benefits and costs of monetary unions from a European perspective. The second part deals with the Exchange Rate Mechanism of the European Monetary System and examines the reasons for its collapse in 1992-3. The final part of this chapter examines the prospects for EMU in the aftermath of the collapse of the ERM.

2.2 Benefits and Costs of Monetary Union

A monetary union is achieved when a group of countries fuse their individual currencies into one common currency. A less developed form of monetary union, accepted as an option among the European countries, is one where national currencies are preserved but the exchange rates among them are irrevocably fixed. Theoretical discussions deal with the trade-off between the microeconomic benefits arising from a

monetary union, due to increased efficiency, and the macroeconomic consequences associated with the loss of national autonomy in monetary and exchange rate policies.

The first benefit of a monetary union is the saving on actual transaction costs from exchanging one currency for another. According to the European Commission, such costs amount to around 0.4% of ECGDP per annum (Emerson et al., 1992: 63) and if the national currencies were replaced by a single currency this cost would be saved. Of course, banks would have to forego commissions charged on foreign exchange transactions - about 5% of their revenue.

Monetary union can eliminate exchange rate uncertainty, at least in agents' intra-community dealings. Efficiency gains can be realised because the presence of such uncertainty hinders the movement of goods, services and factors of production. To the extent that agents are risk averse, they would be less willing to engage in transfrontier activities because an unfavourable exchange rate change can decrease their profits. The use of forward and options markets in order to offset this risk represents an additional cost which will be eliminated with the establishment of monetary union. Finally, the creation of the union can equalise interest rates in the member countries, leading to better capital allocation. Also, the removal of exchange rate uncertainty is expected to enhance the workings of the Single Market.

Through the creation of the monetary union, coordination of members' monetary and exchange rate policies is achieved. In response to any exogenous shock, countries can not resort to devaluations and lax monetary policies, which would only worsen the situation. Concerted action on behalf of the union as a whole reduces the

damage by allocating it across countries. Of course, actually determining what form this “concerted action” should take is a Herculean task because countries must reach a consensus regarding medium and long term objectives. Such consensus does not currently exist among the European countries.

“Economic agents follow optimal strategies in response to the strategies of the authorities and these private sector responses have profound influences on the effectiveness of government policies. In particular the reputation governments acquire in pursuing announced policies has a great impact on how these policies are going to affect the economy” (De Grauwe, 1992: 45). According to the Barro and Gordon model (1983), when monetary rules are in place, the policymaker has the temptation to renege on commitments. In a purely theoretical context, if lower (or zero) inflation is expected by economic agents, the policymaker would like to attain a positive inflation rate in order to secure benefits from an inflationary shock, like monetisation of government debt or lower unemployment. However, repeated use of surprise inflationary shocks by the government will eventually be incorporated into agents’ inflationary expectations and therefore, government claims regarding targets will not be believed by agents.

Monetary union can enable a country to restore some of its credibility by importing credibility from a more respected, foreign, monetary authority. France was a high inflation country, and through institutional change (pegging the Franc to the DM) managed to convince agents that it had a new target. Given fixed exchange rates, monetary policy is wholly devoted to maintaining the parity of the Franc to the

DM, and thus France follows Germany's monetary stance. So long as the country works hard at maintaining the parity, in time, agents' expectations will be revised and lower inflation will be expected. Such low expectations may lead to lower inflation in the next period.

The first criticism of monetary union is associated with demand shifts. The theoretical argument is as follows: assume that Britain and France are affected by positive and negative external demand shocks, respectively. As a result, prices and output increase in Britain and they fall in France. Inflationary pressures are generated in Britain and unemployment increases in France. If we assume that the current account is estimated as domestic output less domestic spending, and expressed in money terms, then in France the value of domestic output decreases due to the shift in aggregate demand (AD), and if the value of domestic spending is unchanged then France will have a current account deficit. In Britain, value of output increases and assuming that domestic spending is unchanged, then Britain has a current account surplus (De Grauwe 1992). The reaction that would return both these countries to equilibrium is exchange rate manipulation: Britain has to revalue its currency and France has to devalue. When France devalues, its products become more competitive and exports increase, therefore boosting AD and reducing unemployment and the trade deficit. When Britain revalues, British goods lose competitiveness and therefore exports fall, AD decreases and thus the inflationary pressure and the current account surplus are reduced. Yet, when the two countries are in a monetary union the

exchange rate tool disappears, and in a context of wage rigidity and labour immobility, the union will have disadvantages for its members.

Another disadvantage pointed out is that countries may have different preferences regarding inflation and unemployment and therefore when entering a monetary union, they are forced to compromise their preferences in order to make them compatible with those of their partners. Consider a low inflation country and a high inflation country. The high inflation country has to devalue its currency vis-à-vis the low inflation country in order to maintain the competitiveness of its goods. If the two countries enter a monetary union where exchange rate realignment is not possible, the high inflation country will steadily lose competitiveness. The two countries would have to choose a point where the inflation rates would be equal, which would mean higher inflation for the low inflation country, and lower inflation matched with higher unemployment for the high inflation country. The argument becomes very relevant in the short run: if a country wants to reduce inflation, it will have to accept short run increases in unemployment.

Another argument against monetary union is that countries have different labour market structures. Depending on the extent of centralisation of wage bargaining (among other factors), wages and prices adjust differently in response to supply shocks. In some countries labour markets are highly centralised and wage bargaining takes place at an economy wide level (corporatist economies); in Germany some wages are set by negotiations of the IG Metall (engineering workers union) and the employer's association. Once they determine the wage increases, the rest of the

national unions use IGM's claims as guidelines and make their own claims. In other countries, bargaining takes place at a much lower level; in England, wage bargains are negotiated on a firm level and there is little coordination on behalf of the employers.

In a corporatist economy, unions comprehend that their claims have effects on the whole of the economy, and therefore when a supply shock has hit the country, they may not make excessive claims. Inflationary pressure on the country will be less than in a non-corporatist country where each union has little effect on the economy. Because of this little effect of individual unions' claims, all unions have an incentive to make excessive claims and achieve large nominal wage increases in order to ensure the highest possible increase in real wages. When countries join a monetary union they will be faced with a problem as supply shocks will have to be tackled differently, and the loss of the exchange rate tool greatly hinders countries' capabilities to react to these problems in the way that would be better according to the structure of their economy. De Grauwe's counter-argument to this point is that the reason that the labour market structure varies so much is that countries have historically followed different policy regimes. With the joining of the union though, it is hoped that eventually trade union and bargaining structures are likely to converge, thus eliminating the need for different reactions to the same problem.

When countries join a monetary union, differences in growth rates may cause a problem. When the income elasticity of imports is the same for fast and slow growth countries, faster growing countries have a faster growth rate of imports and this can lead to a trade imbalance as imports grow faster than exports. To rectify this, the

country would need to alter its terms of trade, and in the absence of the exchange rate tool the only way that it could do so would be through the adoption of deflationary policies which would plunge the country into recession and slow down the growth process. According to an empirical study conducted by Krugman (1989), faster growing countries are the ones that successfully develop new products. Therefore, it is expected that the income elasticity of their exports would be higher than that of their imports and therefore they could continue growing without the possibility of trade imbalances.

Finally, a cost of monetary union is reported to be the loss of seigniorage, the revenue that a government makes by issuing money on which it has to pay no interest. Price stability has a cost in the sense that it reduces seigniorage. By joining a monetary union aimed at price stability, a country loses the “inflation tax revenue”, and this loss may be considerable for a high debt country, especially if the country’s tax system is inefficient and spending cuts are politically impossible.

However, in the EU, countries do not really rely on seigniorage anymore. As can be seen from table 2.1 below, the only two countries that still rely on seigniorage to a certain extent are Portugal and Greece.

Beyond this, the assumption that seigniorage will disappear is rather misguided. Seigniorage will now be associated with the creation of the Single Currency by the ECB. It is possible that these funds could be redistributed to countries that still rely on seigniorage for revenue generation.

Table 2.1: Seigniorage Revenues as Percentage of GDP
(Period Average)

COUNTRY	1976-85	1986-90
Greece	3.4	1.5
Italy	2.6	0.7
Portugal	3.4	1.9
Spain	2.9	0.8
West	0.2	0.6
Germany		

Source: De Grauwe (1992: 29)

2.3 The ERM and its Collapse

Economists are generally in agreement regarding the causes of the collapse of the ERM. A long-troubled EMS was thrown into greater turmoil by the recent German Reunification. The resulting speculation on currencies and the inability of the EMS to react to the shock were more than enough strains to cause the collapse. The following quotes illustrate this view:

"The simple explanation for the events of autumn 1992 is that this was an accident waiting to happen. The new EMS was fragile, held together by expectations ready to be destabilised; a DM realignment was long overdue:

the consequent high real interest rates were unsustainable outside Germany" (Portes, 1993: 8).

"Overt competitiveness problems... hidden competitiveness problems associated with German economic and monetary union, anticipated future competitiveness problems caused by a predictable backlash against policies pursued to maintain competitiveness; and speculative crises of a purely self-fulfilling nature" (Eichengreen and Wyplosz, 1993: 122).

"My view is that the collapse of the ERM came from the reunification shock and the inability of the new EMS to allow an upward revaluation of the DM... The pressure was building in the balloon and it had to burst sometime and somewhere" (Branson in Eichengreen and Wyplosz, 1993: 129).

The comments above point out that the negative answer of the Danes to the Maastricht Treaty on June 2nd, 1992 was merely the immediate cause which triggered a destructive process, the end product of which was the collapse of an already troubled ERM. The immediate path of collapse was the following: after the Danish referendum, the negative answer of the Danes generated panic in the Italian business world and the Lira started sliding, recovering only slightly after the Irish ratification. The situation worsened after French polls in late August predicted a rejection of the Treaty by the French. Jacques Delors' threats to resign from his post as President of the European Commission if France rejected Maastricht on 31st August achieved nothing; the Sterling, the Lira and the French Franc continued sliding. Speculative

pressure led to a 7 % devaluation of the Lira on September 12th, followed by Sterling and Lira leaving the ERM, on 16th and 17th of September respectively, and the Spanish peseta devalued by 5 %. On 22nd September the positive results of the French referendum became known but it was too late and on 21st November, Spain and Portugal devalued their currencies by a further 6%. On the 2nd of August 1993 the EU Finance Ministers sealed the fate of the new EMS by allowing the exchange rates of ERM currencies to fluctuate in bands of $\pm 15\%$ of their central rates.

The Exchange Rate Mechanism of the European Monetary System was established in 1979 in the form of an adjustable peg system. The member countries were committed to maintain their exchange rate within $\pm 2.25\%$ of a predefined central parity rate with the ECU. Italy was allowed a wider fluctuation band of $\pm 6\%$ (and so were Britain and Spain when they joined the ERM in 1989 and 1990 respectively). According to the ERM, each currency had a central rate expressed in ECU and bilateral rates were defined using ratios based on these central rates. Rules regarding the changing of parities required collective decisions by all members so that a country could not unilaterally change its rate. It was hoped that timely realignments would occur in order to eliminate the need for discrete realignments and thus avoid speculative pressures. A crucial point about the ERM is that although its architects had a symmetric system in mind, the ERM had evolved far from this; it was a DM dominated area, much in the same way the Bretton Woods system evolved into a US dollar dominated system. Germany's anchor role came about because of its size and the DM's growing status as a reserve currency (at least after the mid 1980's). The

Bundesbank would choose its monetary policy and all the other countries had to follow suit in order to maintain exchange rate parity.

In the early days of the ERM, realignments were common. Two realignments occurred in 1979 and another five between 1981 and 1983. Here lies the strength of an adjustable peg system: it serves as a mediator between fixed and floating exchange rates. When deviations from purchasing power parity bring forth inflation and unemployment problems, then a realignment is required. However, from 1987 onwards, the ERM was more of a fixed rather than a floating regime. Apart from a technical realignment of the lira in 1990 (when it joined the narrow fluctuation band), no realignments occurred in the five years between 1987 and the collapse in 1992, and thus currencies were, for all practical purposes, fixed.

One should now turn to the “inconsistent quartet”: free trade, free capital mobility, national policy autonomy and fixed exchange rates. Broadly speaking, it is impossible to have all four of these attributes within a system. Either one will be sacrificed for the other three, or all four will be compromised to a certain extent. Under the Gold Standard, national policy autonomy was sacrificed, and the Bretton Woods system sacrificed capital mobility. In the early days of the ERM, the sacrificed attributes were capital mobility, and to a certain extent fixed exchange rates, as rates could float within specified brackets and if it became necessary, parities could be redefined. As capital controls began to be abolished, national policy autonomy had to be given up. According to the Basle-Nyborg Agreement of 1987, the EMS was to be defended by a mixture of three tools: first, currencies would be allowed to move

inside the margins in response to market forces, second, countries made a commitment to extend credit lines to allow intervention in support of a currency under pressure, and third, when market pressure was excessive, short run interest rate changes would be used to relieve tension. The arrangement was successful in stopping two speculative attacks; on the French franc in late 1987, and the Lira in early 1988. From then on, a period of aversion to realignments began. This was fuelled by the convergence of macroeconomic indicators which was beginning to become evident, and a belief that if inflation was to be defeated, a fixed exchange rate with the DM should be maintained. Yet, the absence of realignments meant that one crucial parameter of the success of the ERM was neglected: timely realignments of smaller size and higher frequency were no longer evident.

After 1987, capital controls were abolished in accordance with the Single European Act, and realignments were abandoned. European statesmen ignored the inconsistent quartet, or at least did not pay enough attention to it: the extension of credit and the commitment to interest rate policy coordination do not constitute a large enough sacrifice to ensure the balancing of the quartet. EMU was seen as a solution to the inconsistent quartet: under EMU, national policy autonomy was to be replaced by a collective and sovereign monetary authority, but the Basle-Nyborg agreements were far from serving as a collective and sovereign monetary authority.

Portes (1993) argues that the abolition of capital controls was the catalyst for the ERM crisis. Abolition of capital controls is a very drastic move, and one that requires one of two environments: either full monetary union or floating exchange

rates. Yet, not only did Europe not have floating rates or monetary union, but also it ignored the one tool that could have allowed the system to survive: timely realignments. For nearly five years, the ERM went through a trouble-free period despite this lack of foresight, but then German Economic and Monetary Union (GEMU) occurred.

The asymmetric shock of German Reunification came to stir the seemingly calm waters of the post-1987 ERM. Reunification brought Germany dramatic increases in public and private spending without the much needed offsetting increases in aggregate supply. The source of all these problems for Germany was, in my opinion, the ill-considered and rather erratic political decision to introduce a one-for-one conversion rate between DM's and East German Marks. The Kohl administration did this in order to ensure that Chancellor Kohl would be re-elected in the forthcoming elections. The disastrous results could have been avoided, or at least mitigated, if the conversion rate was a bit more realistic. However, since this was a "domestic" problem for Germany, its effects on Europe were not considered, a fact that casts a shadow of doubt on the concept of intra-EC policy coordination. As a result of the conversion rate, inflationary pressure in the home goods market was generated, and of course inflation is never an option for the Bundesbank. The only other solution to this problem was a real appreciation of the exchange rate, which would cause German goods to be diverted from export markets to the home market, thus dampening the excess demand.

The Bundesbank saw the need for an appreciation of the DM, and asked for such a revaluation as early as 1989. The Bundesbank's request was met with resistance from both the French and the British. France refused to abandon its franc-fort policy by changing the parity of the Franc, and Britain, which had just entered the ERM, argued that any realignment vis-à-vis the DM would undermine the credibility of its new monetary strategy. France even tried to force Germany into an expansionary monetary policy in 1991 by decreasing its short term interest rates, hoping that the Bundesbank would do the same. Yet, German rates remained unchanged and France had to reverse its action in order to stop capital from flowing out of the country.

One of the arguments against revaluing is that as soon as the transition period was over and the former East Germany caught up with the rest of the country, a real depreciation of the DM would be needed in order to liquidate the excess supply and repay foreign debt. This argument is very unrealistic. In the most ambitious catch-up scenario, Dornbusch and Wolf (1992) predicted that East Germany would require 10-15 years to achieve West German levels of output and productivity, therefore a real appreciation was necessary. Surely fifteen years is a long enough period to make the appreciation worthwhile.

In the light of refusal of a realignment of parity values and the aversion of the Bundesbank to inflation, a real appreciation could only come about through the maintenance of constant prices in Germany and deflation (and recession) in the rest of the partners. German monetary policy tightened increasing interest rates. The

countries that were credibly pegged to the DM had no choice but to follow suit with matching interest rate increases. The alternative to increasing interest rates is to allow the exchange rate to take as much of the pressure as possible. However as a currency reaches its low boundary, a loss in credibility may arise and this will require the intervention of the Central Bank, or the raising of interest rates.

The contractionary policies forced on Europe by Germany resulted in unemployment increases. As can be seen from table 2.2, German Reunification reversed the process of decreasing unemployment rates in Europe. As unemployment rates soared, the political and economic implications of these rates were beginning to

Table 2.2: Unemployment Rates in EMS Countries, 1987-1993

YEAR	GERMANY	OTHER EMS
1987	6.1	11.9
1988	6.1	11.2
1989	5.8	10
1990	5.1	9.4
1991	4.3	10.1
1992	4.8	11.2
1993	5.8	11.6

Source: Eichengreen & Wyplosz (1994: 170)

Note: The table shows unemployment rates for Germany and the rest of the EMS countries. One can easily see that from the year that German Reunification was completed (July 1991), the previous decreasing unemployment trend was reversed and unemployment rates for the rest of Europe started increasing. (See table 4.8 for a more details.)

get too heavy for governments and it was evident that the contractionary policies would need to be eventually abandoned.

According to Eichengreen and Wyplosz (1993), the currency markets anticipated the change in these policies and speculative attacks were unleashed on countries' currencies just before these policy changes were implemented. Speculators sell a currency at a high price, and after devaluation takes place, they buy the currency back at a much cheaper price. The theory behind Eichengreen and Wyplosz's argument is that as soon as the market becomes aware of the imminent change in policy, it attacks the currency which can ultimately force the monetary authorities to devalue the currency and thus enable speculators to realise huge profits.

A lot of the credibility and the stability of the exchange rates within the ERM came from a belief that the EMU would eventually occur and its projected benefits would outweigh the costs. The belief that EMU will occur has two serious implications: first, a country has an incentive to adhere to German monetary policy and thus meet the convergence criteria required for EMU (see next section), and second, agents perceive that the country will stick to this monetary policy and therefore speculative pressures are curbed. Monetary policy commitment on behalf of the ERM countries was crucial to the stability of the mechanism. Yet, in the immediate period prior to the collapse, the prospects for EMU looked rather grim: the Danes had rejected Maastricht, and it looked like the French might do the same. At that time it was uncertain whether it was even legally possible for eleven (or ten) countries to go on with launching the Maastricht reforms. Therefore, this stability that the exchange

rates borrowed from the spirit of Maastricht was no longer there and thus the fall was inevitable. However, Eichengreen and Wyplosz (1993) point out that a few details go wrong in this explanation: unemployment was increasing in all countries and not just those whose currency was attacked, and if the Maastricht Treaty could not come into force, it would not come into force for anyone and therefore pressure should have been on all currencies and not just those who were attacked. Yet, one could refute this argument by merely stating that when speculative attacks occur, they are based on the *relative* weakness displayed by a currency when compared with the other ERM currencies. Eichengreen and Wyplosz argue that what the ERM crisis proved was that self fulfilling attacks can and will occur.

One should explain why speculative attacks are more likely to succeed in a context of free capital mobility. The absence of capital controls means that agents are free to move their capital from one country to another in search for the higher rate of return. According to the uncovered interest rate parity condition, the difference between two countries' interest rates should be offset by a difference in their exchange rates, therefore what a speculator would make due to interest rate differentials he might lose from a change in the exchange rate between two currencies. For example say that the interest rate on one-year Sterling Treasury Bills is 6.5% whereas for one-year German bonds it is 4%. The interest gain from holding sterling rather than DM bonds is 2.5%. If the pound to DM exchange rate is expected to depreciate by 2.5% over the next year, then investors are indifferent between sterling or DM bonds.

The condition can also work backwards: if a currency is expected to depreciate over the next year, then agents will sell what they have of that currency and buy a stronger, more stable currency, unless interest rates are increased in the depreciating currency's country. However, in the context of speculation, the time periods involved are much smaller. For example, assume that the pound is expected to depreciate within a month. An agent uses £500 to buy 1500 DM at an exchange rate of one to three. When, a month later the pound depreciates, it is worth 2.85 rather than three DM and the speculator can convert his 1500 DM to £526.30 (a depreciation of 5 %). Clearly in real life, huge quantities of a currency are traded. The government can not prevent this trading of currencies without capital controls. It can however prevent speculation in another way: in the above situation, the investor earned a return of 5.26 % in a month on his initial amount. Alternatively he could have kept his money in bonds. But if interest rates are at 10% per annum then in one month he would have made £4.17! Thus he has an incentive to 'attack' the currency. The government can avoid that by raising interest rates to make bonds as profitable as attacking the currency. But in order to equate the returns, the interest rate needed is something that in a month will return £26.30 pounds on £500 pounds, an interest rate of 63% per annum. Obviously, this can prove to be a very costly option for a government, and the narrower the period (in this case one month) the higher the interest rate needs to be.

During the ERM crisis, Sweden whose currency was linked to the ERM (without being a member) raised its interest rates beyond 100%, and in January Ireland

raised its overnight rate to 100%. The costs implied in raising interest rates to such levels are immense and can only be tolerated by an economy for a limited amount of time. Although it is possible to fight off an attack by using 'stratospheric' interest rates, it is not as easy as central banks may have thought, and clearly, the changes in the interest rates needed are much greater than five or six percentage points.

The only other tool available to national currencies is foreign central bank support. The EMS featured a Very Short Term Financing Facility (VSTF) whereby it was guaranteed that EU partners would intervene to save a currency under attack. The mistake here was twofold: firstly, governments did not realise how huge an amount of foreign reserves is required to save just one currency, and secondly they assumed that their partners, and more specifically Germany, could offer this support indefinitely. Unfortunately for the ERM currencies, the Bundesbank had already secured its option "not to intervene" from the German government. In the summer of 1992 the Bundesbank was faced with the dilemma of supporting the EMS or maintaining domestic price stability as it saw its foreign reserves rising by DM92 billion and the growth rate of M3 reaching 10% when the target was 3.5 to 5.5 % (Eichengreen and Wyplosz 1993: 107-111). The Bundesbank defended as many currencies as it could (or according to some, as many currencies as it wanted) namely the French Franc and the Danish Krone. Why were these countries chosen to be the recipients of such massive aid? Eichengreen and Wyplosz offer two answers to this question. The first view is that in the light of events, the future of EMU was in danger and thus Germany chose France because it was needed for any kind of stronger

monetary cooperation and Denmark because it had not yet ratified Maastricht and therefore a show of European cooperation was felt to be necessary. Germany is a firm believer in the principle that EMU should be the final step to a long process of convergence. It is argued that since at the time France and Denmark had lower inflation than Germany and were therefore deemed worthy of assistance. The second view regarding the choice of country was that Germany wanted a smaller EMU and therefore chose to help the countries it wanted in this elite group, and used the crisis to eliminate those that it did not.

Therefore, we see that the abolition of capital controls and the inability of any central bank to support all currencies brought about the collapse of the ERM, a mechanism that had been considerably weakened by both the shock of GEMU and the short-sightedness of those who thought that, just because no exchange rate crisis had occurred since 1987, the ERM was immune to such a possibility. Despite the experiences of 1992-93, Monetary Union is still at the top of the European Commission's agenda and in the next section I will cover several options for the future of Europe's money.

2.4 EMU and its Future

The present drive for European Monetary Union was launched in 1989 with the publication of the Report of the Delors Committee. The report suggested that the EU follow a gradualist approach to this endeavour. Monetary union would be reached

in stages. The basic idea was that the degree of monetary cooperation and interdependence would be increased during each stage so that at the beginning of the final stage, monetary union would be both desirable and inevitable. The first stage of EMU began on 1 July 1990 with the abolition of remaining capital controls. During this stage, the Maastricht Treaty was ratified, with 1999 accepted as the absolute deadline for the launching of EMU. The second stage of EMU began on 1 January 1994. During this stage, the European Monetary Institute (EMI) will act as the institution that will enhance cooperation between central banks and lay the foundations for the European Central Bank. The latter will begin operating at the start of the final stage of EMU, during which currencies will be irrevocably fixed and the single currency will gradually replace national currencies. However, accession to the last stage of EMU is conditional on the convergence criteria. These state that a country will be allowed to join the monetary union if (a) it has an inflation rate which is not more than 1.5 % higher than the average of the three lowest inflation rates in the EMS, (b) its long-term interest rate is not more than 2% higher than the average of those in the three low inflation countries, (c) it has not had a devaluation in the previous two years, (d) its budget deficit is a maximum of 3% of GDP, and (e) government debt is a maximum of 60% of GDP.

The collapse of the ERM showed the problems associated with ignoring the inconsistent quartet. Any workable solution to the problem must sacrifice one of the quartet's components. Attempting to proceed with the mechanism as it was before the collapse, in the hope that any future shock would not be as severe as GEMU, is

inadvisable. GEMU did not bring about the collapse of the ERM directly, but revealed its weaknesses. From then on, the markets took over and the collapse could not be prevented. So if the ERM was to continue in its pre-collapse structure, it would still be vulnerable to self fulfilling speculative attacks. Even if more realignments were to become evident in an otherwise pre-collapse ERM, problems would arise due to the absence of capital controls. Eichengreen and Wyplosz (1993) note that one of the most important lessons of the ERM crisis is that markets anticipate events, and speculators would therefore be expected to know when a realignment was imminent and attack accordingly. Attempting to prevent the scope for attacks by more continuous realignments would reduce credibility, and therefore it is very unlikely that Europe will achieve EMU by proceeding as planned.

Eichengreen and Wyplosz (1993) argue that more flexible exchange rates would reconcile monetary policy independence and full capital mobility, and this has been presented as a solution to the EU's monetary dilemma. However, the functioning of the Common Agricultural Policy (CAP), which was designed to stabilise domestic prices of agricultural products, is disrupted by floating rates. Also, as intra-EC trade expands, exchange rate fluctuations would give rise to more import penetration. How is a national firm to react when competing imports from a European partner or extra EC imports are suddenly sold at bargain prices because of an exchange rate change? Firms would in turn, press their government to devalue and this could create conflicts. Floating rates would prevent Europe from reaping the full benefits of the Single Market in another way: the presence of fifteen floating currencies can restrict the

possibility for market linkages, and might hinder foreign direct investment from one member country to another.

Wider fluctuation bands are viewed as the compromise between fixed and floating exchange rates. If they are sufficiently wide, the need for realignments would be removed. Wider bands would make speculation a 'two-way street'. When there is a 'one-way' wager, speculators who guess wrong only face transaction costs. Yet when the exchange rate can move both ways an expectation of profit with depreciation carries with it the risk that the currency might appreciate. Furthermore, with wider bands, it is probable that when realignments occur they are within the bands so that market rates need not change and thus a discrete jump in the currency is avoided. However, although wider bands reduce the possibility of speculation, they do little to stabilise exchange rates; they may even encourage markets to anticipate that the wider bands are there to enable big variations and thus the possibility for speculative profits remains (Artis and Lewis, 1993).

In the absence of a single currency or at least until one is introduced, "throwing sand in the wheels of speculation" has been suggested (Eichengreen and Wyplosz 1993: 120). A Tobin tax of 1% on the sale or purchase of foreign exchange, i.e. 2% for a 'round-trip' transaction, would discourage speculators from taking 'one way' bets. Alternatively, an implicit tax could also work. Financial institutions purchasing foreign currency would be required to make non interest bearing deposits with the central bank. For example, during the September 1992 crisis, the Spanish government

required purchasers of foreign currency against the peseta to deposit a sum equivalent to the transaction on an interest free account with the central bank for one year.

Both the Tobin and the implicit tax would work by raising the cost of cross border capital flows. Also they penalise short term capital movements more heavily than long term ones. A 1% tax on each transaction represents an annual cost of nearly 800% on a one day shift, but is only a 0.2% cost for a ten year shift. Since speculative attacks are short-term occurrences, the presence of the tax could limit the amount of intervention required to support the currency. Although it could not support weak currencies indefinitely it would offer time to governments to arrange an orderly realignment. The cost to speculators of the implicit tax as used by Spain, increases with the interest rate. If the rate is low, so is the cost, but at times when interest rates are raised to excessive rates then this cost becomes quite considerable and may cause speculators to refrain from launching attacks. The tax is not an administrative restriction and is in accordance with the provisions of both the Maastricht Treaty and the Single European Act. Of course, this solution to the speculation problem does not come free of costs. Deposit requirements could limit the development of local financial markets. In order for this cost to be avoided, the measure should only be used in the short run and by all ERM countries simultaneously.

Another solution that was put forward is that of a quick move to EMU within the framework of the Maastricht Treaty. According to the Treaty, the EMI and the European Commission have to report on who qualifies for stage III before the end of 1996. However this does not prevent such reporting from taking place earlier. Yet,

the beginning of stage III prior to 1999 requires a majority of the member states, i.e. seven out of twelve (or eight out of fifteen). Currently, only six members are candidates for this early launch of EMU: Germany, Belgium, the Netherlands, Luxembourg, France and Denmark. At least two more are needed. Germany, argue Eichengreen and Wyplosz (1994), is likely to veto monetary union if it requires a country like Ireland, Spain or Portugal, compared to that of the European 'elite'. Austria could also join the group, but EC legislation requires that Austria be considered together with Sweden and Finland for accession into Stage III. According to the European Commission, four countries are expected to meet the convergence criteria regarding the budget deficit and debt by the end of 1996: Britain, Germany, Luxembourg and Ireland. In a meeting of the EU finance ministers held in Luxembourg on June 19, 1995 it was announced that 1999 was the earliest date that EMU could realistically be launched, two years after the earliest date specified by the Maastricht Treaty. Thus, any talk of an early jump to EMU is naive, unless the convergence criteria are revised. Even if the criteria were revised, still an early-jump solution would require some sort of institutional framework which currently is not there.

Thygesen (1994) suggests that the Basle-Nyborg agreement be updated. The events of September 1992 rendered the Basle-Nyborg agreement inoperative. Yet, outside turbulent periods, the Basle-Nyborg agreement seems to offer sufficient protection to the EMS. What is required is for the agreement to be modified so as to be able to defend the System in times of excessive turbulence. The three defence tools

need not be changed, Thygesen argues, but the balance between them needs to be altered. A mechanism is needed to ensure that interest rate manipulation occurs early in response to currency pressure. He suggests narrowing the fluctuation bands in order to signal to speculators a greater determination to maintain the exchange rate and also to force countries to use the other two tools earlier on in the defence process.

On the subject of realignments, Thygesen (1994) argues that an exchange rate system may commit two errors: try to defend misaligned currencies, and give in to speculative pressure when a currency corresponds with fundamentals. When a currency is misaligned, a realignment sufficiently large to convince markets that another one will not eventually follow is needed. For example, in January 1993, the Irish Punt was devalued by 10%. The Punt had become misaligned due to the large depreciation experienced by sterling, the currency used by Ireland's main trading partner. Following the realignment, credibility in Irish exchange rate policy was restored. Realignments of this type are crucial to the survival of the System. However, the use of small realignments as a last response to pressure, even after the revised Basle-Nyborg tools fail, is inadvisable. The mere fact that the possibility for realignments of this type - as opposed to the type used by Ireland - exists, serves as an invitation for speculation, and as such should be avoided.

De Grauwe (1994) argues that the Maastricht road does not lead to EMU. Following the collapse of the ERM, the transition strategy leading to EMU (as specified at Maastricht) can no longer be followed. It is argued by De Grauwe, that conflicts about monetary policy will undermine the credibility of fixed exchange rates.

Credibility is expected to worsen as the final phase is approached because expectations of a final realignment will generate speculative pressure. The lack of credibility in the exchange rates will have negative effects on interest rates: they will have to diverge in order to prevent speculation.

Different governments have different reputations regarding their stance on inflation. Given that countries will maintain their national currencies during the transition, different expectations will lead to different inflation rates. De Grauwe (1994) expects that differences in national reputations will make it difficult to achieve inflation differences of 1.5% or less. He then argues that the convergence criteria regarding the budget and public debt are misconceived. The rates have been selected arbitrarily, and they are unrelated to the workings of a monetary union. A country should always follow a sustainable fiscal policy, regardless of the monetary regime.

The Maastricht convergence criteria are obstacles to monetary union in Europe, concludes De Grauwe. The theory of optimum currency areas suggests that labour markets should be flexible and labour itself should be highly mobile in order to provide a cushion for asymmetric shocks. It is very likely that the Maastricht criteria will be fulfilled *after* EMU has occurred, and therefore imposing them as necessary conditions for EMU is reversing the causal order. The Maastricht statesmen introduced the criteria because of economic and political problems associated with European Monetary Integration. The economic problem is that Europe is not an optimum currency area. Asymmetric shocks will tend to occur, and in the absence of a sufficiently mobile labour force and a fiscal redistribution tool, countries will

experience serious adjustment problems within the confines of a monetary union. A smaller group of countries (Germany, France and the Benelux) could form a monetary union. Their economic structures are more similar than those of other countries, and therefore the probability of asymmetric shocks is diminished. The political problem is that Germany does not want a monetary union with all twelve countries as members (De Grauwe 1994: 162). In such a large union, Germany would lose its leadership of European monetary policy, and possibly lose control of its own monetary affairs. Also, Germany has no incentive to abolish its national currency: the DM is revered in exchange markets, has a reserve currency status and has displayed more stability than both the US dollar and the Yen. There is no guarantee for Germany that the new currency will be as fortunate.

The existence of these problems suggests that EMU can take the form of a union where countries maintain their national currencies, albeit irrevocably fixed. Irrevocably fixed exchange rates means that the benefits that could be enjoyed due to a reduction in transaction costs are foregone. Also, credibility of the exchange rate system will always be threatened. The mere presence of exchange rates means that their fixity is not guaranteed: realignments and competitive devaluations could still occur and this would distort the market.

De Grauwe suggests that if monetary union is seen as a monetary reform which merely eliminates national currencies, the transition can be easier and the convergence criteria can be discarded. Announcing that on say, January 1, 1996 the monetary reform will be initiated does not require exchange rates to have been fixed for the

previous two years. Actually, wider fluctuation bands for currencies would make the transition easier because any expectation of a realignment would be neutralised. The need for interest rate convergence is done away with: when the monetary reform is announced, debt contracts will have to be adapted to the new single currency and interest rates will be altered using transitional formulae depending on the differences that existed before the reform. Also, with the introduction of the single currency, countries lose their national currencies. When Italy abolishes the Lira, the fact that the Lira experienced a 10% annual loss in purchasing power becomes irrelevant, and therefore differences in inflation rates do not have to be as small as Maastricht requires. However, when differences in inflation rates between countries are large, prices in these countries may continue to diverge even after monetary union occurs, mainly due to the different types of wage indexation present today. De Grauwe suggests that this problem can be solved through the use of appropriate transitional mechanisms, for example periodic contract adjustment.

2.5 Conclusion

It is clear from the preceding analysis that it is very unlikely that EMU will occur in the format specified by the Maastricht Treaty. Indeed, an EU summit for the discussion and modification of the Treaty is scheduled for 1996. Still, it would be unrealistic to say that monetary cooperation will not tighten. Some form of stronger monetary cooperation will eventually arise - the ERM crisis has proved the need for such stronger coordination. I believe that from an economic point of view, the

benefits of such a union outweigh the costs, and Europe would be overall better off with a single currency rather than without. Of course, there is a lot of work to be done before this monetary integration is reached - Europe is not yet ready to receive a single currency, but it is gradually getting there, albeit at a slower pace than the Commission would have us believe.

Beyond the actual prospects for EMU given the collapse of the ERM, there exists the genuine question of how the EMU institutions themselves will function. How is this increase in monetary coordination going to be achieved? Will central banks relinquish monetary policy to the European Central Bank? If central banks relinquish control of monetary policy to the Bank, how will it cope with the conflicting needs of its members? I will try and answer these questions in the next chapter.

Chapter 3: The European Monetary Institute and the European System of Central Banks

3.1 Introduction

Despite the collapse of the ERM and the problems associated with EMU in the aftermath of the collapse, the drive for EMU is still in full steam, enriched with a new, albeit expensive, wisdom. The purpose of this chapter is to examine the institutions of EMU, beyond the problem of whether EMU will actually occur or not. I will examine the European Monetary Institute (EMI) and the European System of Central Banks (ESCB). It is my aim to discuss how these institutions are supposed to operate, to examine the concept of the coexistence of at least twelve national central banks acting independently of each other with a "common" target in mind, as well as the problems associated with the transition of monetary authority from these central banks to the ECB.

3.2 Stage III of EMU

According to the Maastricht Treaty, by 31st December 1996 at the latest, the European Council will decide whether a majority of the member states fulfil the convergence criteria for the adoption of the single currency, determine whether it is appropriate for the community to enter the third stage of EMU and set a date for the beginning of this stage. A majority of countries would mean either seven out of twelve, or eight out of fifteen. The United Kingdom already has an opt-out regarding

the third stage, whereby the UK will only enter the third stage if the House of Commons has authorised the government to do so, before the European Council makes its decision. Given the present domestic situation of the ruling Conservative party, it is unlikely that such an authorisation will be secured by Mr. Major's government. Denmark has also secured recognition from the EU that a referendum may need to be held before it joins the last stage of EMU.

Regardless of whether a majority exists or not, those countries which have qualified for accession will enter the last stage of EMU, by 1st January 1999 at the latest. These countries will have to be decided upon by July 1998, thereby allowing time for the EMI to transfer power to the ECB, so that the latter will be fully operational by January 1999. Therefore it is specified that by July 1998 the following three steps will be taken: The Executive Board of the ECB will be appointed. They will be chosen by common accord of the EC governments participating in stage III. Second, the ECB will be established immediately after the Executive Board has been appointed and will exercise its powers from the first day of stage III. On this first day, the rates at which the participating currencies will be 'irrevocably fixed' will be determined, as well as each currency's conversion rate vis-à-vis the ECU. Thirdly, The European Council will adopt the legislation required by the statute of the ESCB. The schedule is presented in table 3.1 below.

3.3 The European Monetary Institute

The actual transition of monetary authority was quite an important component of the negotiations prior to the signing of the Maastricht Treaty. There were those who would have wanted to see the institutions necessary for the single currency in place right from the start; and there were those who wanted economic convergence before the single currency institutions were launched. Maystadt (1994) argues that the EMI represents a compromise solution to these differing opinions. The Maastricht Treaty itself referred to a new institution, to be set up during stage II of EMU, with the aim of strengthening the coordination of monetary policy. The EMI was set up on 1st January 1994, and in addition to monetary policy coordination, it was charged with the monitoring of the EMS, the use and development of the ECU, and the technical

Table 3.1: Schedule for Stages II and III

January 1, 1994			Stage II starts
			EMI established
			Bans on monetary financing and bailouts take effect
			Ban on excessive deficits takes effect
December 31, 1996			EMI specifies framework for ESCB
			EC Council decides if majority of EC countries meets necessary conditions for adopting the single currency and if it is appropriate to start stage III. If not, stage III starts on January 1, 1999.
Before	Stage	III	ECB board chosen, ECB established, EMI liquidated
starts			EC Council initiates legislation needed by ESCB
When	Stage	III	Exchange rates irrevocably fixed
starts			ECB assumes responsibility for monetary policy

Source: Kenen (1992: 20)

preparation for stage III of EMU. Its likely life span is three years, unless the Maastricht Treaty is revised in the 1996 conference. Authority over the EMI lies in the hands of the EMI Council, the president of which is appointed by the European Council for a three year term, and the rest of the members are the Committee of Governors. This committee would elect the vice president of the EMI Council from among its ranks. The structure of the Council may lead to problems, in the sense that the president's authority may be challenged by Council members. For example the latter could be anxiously trying to prove that monetary policy has not yet shifted to the European level, in an effort to preserve their national central bank's authority and power. Yet, it is hoped that the council members will respect the EMI Statute which calls for them to act as Europeans rather than as citizens of one of the member states. Council members are forbidden to take instructions from national authorities and member states are asked to respect this rule.

The Delors Report (1989) suggested that the EMI should do no more than prepare the formulation and execution of the policies for which the ECB would be given full responsibility in the third stage of EMU. The report was very careful in the wording of the EMI proposals so as not to give any impression of the EMI being able to challenge the sovereignty of national central banks. However, as the degree of exchange rate fixity increases with the approach of the date of irrevocable fixing, it is clear that national policies will become severely constrained. It has been argued that the strengthening of common monetary policy should be a gradual process too, rather than an immediate one as is currently stipulated.

Maystadt (1994), argues that in the aftermath of the 1992-93 currency crisis, the environment in which the EMI is operating may seem more complex, yet it may actually be more favourable than before. Although currency fluctuation bands are much wider, countries have decided to go through with launching the Single Market and the Single Currency. Countries' policies since the ERM crisis have been consistent with their commitment to EMU. No country has used the wider fluctuation bands for any reason other than protection from speculative pressure. Instead, Maystadt continues, we have seen generally prudent monetary policies. In the Maastricht Treaty itself, countries are asked to regard their policies as a matter of common concern (article 103). Competitive devaluations have not happened, and 2 months after the September crisis, the Single Market was initiated. The fulfilment of the Maastricht criteria might take longer, and this suggests that the presence of the EMI will be prolonged, which increases the importance of the role of the Institute.

The EMI is often mistakenly regarded as a consulting agency continuing the work of the Committee of Governors, as argued by Thygesen (1994b). However, this is far from the truth. The various EMI sub-committees and working groups are to be presided over by EMI officials rather than by national representatives. This arrangement ensures tighter coordination and lower probability of observing national objectives. The EMI should prepare the ground for stage III in the fullest extent possible, so that institutions are 'up and running' by the beginning of stage III, ensuring that all that would be required is the actual transfer of monetary authority from national central banks to the ECB. The Institute is unable to prepare the

institutions on its own, but should do so through the coordination of national central banks. Due the increasing number of autonomous central banks, the EMI is already more independent of political authorities than its predecessor (the Committee of Central Bank Governors) was. The Maastricht Treaty gives the EMI the right to formulate by a qualified majority (9 out of 13 members) opinions and recommendations regarding monetary policy, the functioning of the EMS as well as a member state's individual policies. Thygesen argues that policy opinions and recommendations coming from a significant majority of increasingly independent central banks and prepared by respected professionals in the EMI will be hard to ignore.

The EMI statute gives the institute the right to "hold and manage foreign exchange reserves as an agent for and at the request of national central banks" (Protocol of EMI Statute, article 6.4). This is subject to a contractual relationship being initiated between the central banks and the EMI, with the restriction that EMI foreign exchange transactions do not interfere with the monetary and foreign exchange policies of members' monetary authorities. It is unclear whether countries will accept this, and if they do, would the EMI's task include EMS currencies or just non-EMS currencies? Thygesen argues that if the EMI was only given control of non-EMS currencies, then the EMI's role in foreign exchange markets would be rather meaningless.

However, given the prolonged presence of the EMI, it has been suggested that the Institute play a more active part in the transition process. Lamfalussy (1989)

proposes that there could be a gradual centralisation of operations from the central banks to the EMI. Central banks, he argues, could establish subsidiaries in the EMI and, from there, perform some of their operations in domestic and foreign exchange markets without requiring any formal transfer of authority. Each central bank would staff its own operations, and later these staffs could be merged in a single unit. The centralisation of operations would facilitate the development of a framework for the design and implementation of a common monetary policy. In addition to the centralisation of operations, Lamfalussy (1989) suggests that a gradual centralisation of instruments and authority could be initiated. The advantages of the Lamfalussy proposals were that increased centralisation would make the operations of each participant visible to its partners, allow a community appearance in markets as agents would not know who initiated the actions in the jointly owned institutions, and provide some degree of cost effectiveness. In addition, it would provide a more efficient training ground for foreign exchange and money market operators. Despite the obvious advantages, the Lamfalussy proposals never became popular. Of course, when the proposals were made in 1989, the ERM was still problem-free and there was no indication that the EMI would be present for more than the specified three years.

Maystadt argues that the proposals were rejected due to the principle of indivisibility of monetary policy. Since the ultimate responsibility for monetary policy would still remain in national hands, it was feared that if too many tasks were delegated to the EMI it could lead to policy conflicts or that if too few tasks were delegated it could give the EMI a reputation of being ineffective - a reputation that

could be inherited by the ECB, thereby generating a negative bias on the credibility of common monetary policy in stage III. Thygesen supports the view that the Lamfalussy proposals lost support because some countries saw them as too minimalist as was the case for France, while others wanted to give the EMI more authority over a domestic instrument, reserve requirements.

The EMI could attempt to impose uniform or differentiated reserve requirements on either the increase of monetary liabilities of each national central bank or on the credit extended by central banks to their domestic sector. The requirement would be met with holding reserves in the EMI, in a parallel currency. This system would introduce a system of hierarchy between the EMI and the national central banks similar to the one that the central banks have with commercial banks, while allowing central banks to use their own domestic instruments to achieve compliance with the reserve requirements. However, this suggestion relies on the creation of a parallel currency and was rejected immediately by the Delors Committee.

Alternatively, all commercial banks could be asked to hold a fraction of their deposits as reserves with the EMI, denominated in ECU. The supply of these federal funds would be under the direct control of the EMI, the only institution allowed to issue them. Distribution of funds could be left to a federal market where commercial banks could trade among themselves. The European reserve requirement should be in addition to the national one, thus in no way interfering with national monetary policy. The EMI would be able to directly intervene in any market if this European reserve requirement was introduced. Of course, in order to ensure gradual transfer of

authority from the national to the community level, initial restrictions should be imposed to limit the number of open market transactions that the EMI could undertake within a certain time period.

3.4 The European System of Central Banks and the European Central Bank

The ESCB will consist of a central institution, the ECB, and the national central banks of the member states that have joined the last stage of EMU. Central bankers of countries who have not entered the final stage will not take part in the ESCB decision making process. The ECB will have two governing bodies: the Executive Board made up of a president, a vice president, and four members nominated by the European Council for an eight year term; and the Governing Council made up of the six members of the Executive Board and the governors of the national central banks, and they will hold office for at least five years. All members of the Governing Council will have one vote, decisions will be taken by simple majority with the president being able to resolve ties with an additional vote. The acceptance of the "one man, one vote" principle represents a major concession by Germany, in exchange for the explicit target of price stability as well as ECB independence. Weighted voting could create a situation where an alliance of some of the larger states could *de facto* dominate decision making, as is the case in the International Monetary Fund.

Decision making power will be in the hands of the Governing Council which will be responsible for formulating monetary policy decisions and the guidelines for their implementation. The Executive Board would then implement monetary policy

according to the decisions and guidelines of the Governing Council, by giving the necessary instructions to the national central banks.

A quick comparison of the ESCB to the Bundesbank or the Federal Reserve makes it obvious that the Executive Board will be in a weaker position than its German or US counterparts. The Executive Board will be dominated in the decision making process. It will have six votes out of a minimum of 13, and if all European Community members join EMU, the Executive Board will have six votes out of 21, and its powers will be diluted further as the European Community expands.

Regarding policy implementation the Executive Board will meet resistance from the national central banks, who will try to preserve as many operational tasks as possible arguing that they are able to implement policy at least as efficiently as a new and inexperienced Executive Board. It seems that the national central banks are in favour of a high degree of decentralisation regarding the operation of the ESCB, and this is in accordance with the principle of subsidiarity. What they would like is a delegation to them by the ECB of those operations that they can carry out, while the Bank keeps for itself those operations that require centralisation. The statute refers only to the guidelines that the ECB will supply regarding the implementation of monetary policy. The statute does not specifically state that execution of monetary policy should be centralised, nor does it define a specific set of operations that the ECB should delegate authority to the national central banks.

3.4.1 The Task of Price Stability

In the Statute of the ESCB, it is specified that "... the primary objective of the ESCB shall be to maintain price stability. Without prejudice to the objective of price stability, it shall support the general economic policies in the Community." This statutory mandate for price stability will give a clear direction to the policies of the ESCB. However, a statutory obligation to price stability is only going to be effective if the ECB does not have any other obligations, like maintaining the exchange rate of the single currency or the financing of government debt.

If the Bank undertakes to support the exchange rate of the single currency, it might be unable to combat imported inflation if the currency is pegged to that of an inflationary country. It is very unlikely that the Bank will be forced to intervene in third currencies, but efforts to stabilise the dollar or the yen are likely to occur, due to the impact that fluctuations of these currencies have on the world economy. According to the Maastricht Treaty, the ECOFIN Council has to agree unanimously before it enters negotiations to establish an exchange rate system for the ECU vis-à-vis non EC currencies. If no formal agreement is being negotiated, the Council may, by a qualified majority, formulate general directions for exchange rate policy, so long as they do not compromise the ECB's task of maintaining price stability. Given the above, the ECB is unlikely to be forced to intervene in exchange rate markets for several years, since unanimity in the ECOFIN Council is improbable in the near future. Supporting currencies along the lines of the Louvre Accord should not seriously

threaten price stability, partly due to the fact that the Bank can abandon a sliding dollar when supporting it threatens price stability. According to the Statute of the Bank, the ECOFIN Council can not instruct the Bank to support any currency, but has to convince the ECB bankers that intervention is a wise option.

The ECB task of defending price stability could also be compromised if the Bank became involved in financing government debt. The Statute forbids extending any kind of credit facility from the Bank to the member states. Gros and Thygesen (1992) argue that a bank that is not allowed to absorb government debt may be less susceptible to political pressure to do so. However, it could be possible for the Bank to work around its Statute and purchase government securities on the secondary market. For this reason, it has been suggested that the Bank be allowed to purchase government securities of the highest credit rating, thereby eliminating pressure on the ECB to reduce risk premia on the securities of heavily indebted countries. Finally, the support of Community economic policies could make the bank deviate from price stability, however, the statute is clear in explicitly defining that such support should only be given if does not compromise price stability.

Treutler (1993) argues that since the instrument of price controls is not available to the ECB, and since monetary policy can not directly influence the price level, the Bank will have to choose an intermediate monetary target. It could use the ECU exchange rate, the interest rate, or the growth rate of the money stock.

During the EMS years, the central banks of some member states targeted their exchange rates by pegging their currencies to the anchor (the DM), and used monetary

policy to maintain its value. It would be unwise for the ECB to allow the single currency to be pegged in a similar relationship. Both of the candidates for the role of anchor, the dollar and the yen, are unsuitable as they are unstable compared to the DM.

Other countries preferred to use their interest rates as a monetary policy instrument, whereby a low interest rate oriented monetary policy led to increases in economic activity. However, it is unclear, argues Treutler, whether medium and long run interest rates are affected by monetary policy or by market forces. In addition, a monetary policy aimed at low interest rates could always fall victim to reducing the interest burden of government debt. So Treutler concludes that a monetary policy aimed at low interest rates is inconsistent with maintaining price stability.

The money stock is the tool that Treutler suggests that the ECB uses. He states that if monetary policy is to be successful, it must be credible, and for this to happen the intermediate monetary target must also be credible and understood by the public. The money stock seems to fulfil these requirements. A money stock target published at the beginning of the year would make it very difficult for politicians to convince the Bank to channel monetary policy towards ends other than that of price stability, argues Treutler. Therefore the choice of the money stock as a target makes it easier for the Bank to fulfil its obligation, and also strengthens the independence of the ECB.

3.5 A word about fiscal policy

There is one controversial issue at the heart of the EMU debate: that of national fiscal policy coordination, and more specifically whether binding guidelines should be used. Economists are still divided on whether fiscal policy should be coordinated or autonomous.

The main argument in favour of binding rules is that unsustainable fiscal positions may lead to instability. Whatever the exchange rate regime, there are international spillover effects to a country's fiscal policy. Within a monetary union, a country becomes more likely to use fiscal policy in response to a country-specific shock, rather than a country that has control over its monetary policy. But these unilateral policies can have adverse effects on the union. Yet Kenen (1992) argues that if countries' economies are highly diversified, industry-specific shocks may not result in country-specific shocks. In addition, if economies are similar, they will tend to experience similar shocks, and therefore they can alter their common monetary policy in response to these shocks. Thus, if shocks are small and have similar effects across countries, they may be easier to combat with common monetary policy. Empirical evidence presented by Weber (1991) shows that shocks to inflation rates and supply shocks tend to be highly similar for the EC and are expected to become more so as the EMU process strengthens. However demand shocks are country-specific enough to justify the use of autonomous fiscal policy for domestic stabilisation. The Delors report suggested that since the EC Budget is small, the

stabilisation problem must be faced at the national level, with an effort aimed at protecting the fiscal stance of the union.

The small size of the EC budget means that the sum of the national deficits will in practice determine the fiscal stance of the community. Combined with the monetary policy of the ECB, the Budget will determine the community policy mix. Suppose that a large EC country runs a large budget deficit. Holders of that country's debt will expect a risk premium if they are to keep their savings in that country. However, if countries' currencies are irrevocably fixed, or replaced by a single currency, then investors are likely to require a risk premium on all the currencies in the area or the single currency. Therefore, EC real interest rates are expected to rise, leading to crowding out of domestic investment and an appreciation of the ECU caused by inflows of foreign capital. Such an eventuality is unwelcome because it means that even countries with a sound fiscal position will have to pay higher interest rates. The Delors report tries to avoid this negative scenario by calling for fiscal policy coordination, as well as establishing binding limits on individual deficits for all countries and not just those traditionally identified as large debtors like Italy. Gros and Thygesen (1992) argue that the use of binding measures may at least prevent more improvised and harsh measures from being implemented when a country has already incurred a large debt.

Kenen (1992) also mentions that another problem, that of solvency which arises when the growth rate of the debt is greater than the interest rate on the debt. Solvency is not a problem for most of the large EC countries but it is a problem for

Italy, Greece, Belgium, Ireland and the Netherlands. The EC should not get involved with governments' debt problems, and to the extent that Community-wide disturbances arising due to national debt are small, national debt should be treated as a national responsibility argues Kenen. Both the Maastricht Treaty and the Statute of the ECB are explicit in pointing this out. However, it is possible that the ECB will receive political pressure from an indebted country which will ask the ECB to compromise its price stability target and inflate a country's debt.

The Treaty calls for members to regard their economic policies as a matter of common concern and to coordinate them with the Council. For this reason, the Council will formulate broad guidelines for economic policy. If a country's policies are inconsistent with the guidelines and threaten the functioning of EMU, "the necessary recommendations" will be made to the country.

In my opinion, the optimal arrangement for fiscal policy would be centralisation. If the Community had the sole responsibility for government spending and taxation for all countries then there would be no need for coordination. However, fiscal policy centralisation requires political union as it very unlikely that countries would relinquish control of government spending and taxation to the Commission. If political union existed then the Community could be rearranged in a central government (Commission) and local government (national governments) whereby each country would be given a percentage of the EC budget. Yet, beyond the fact that it violates the principle of subsidiarity, such centralisation of fiscal policy requires an increase in labour mobility, greater homogeneity of the EC population, as well as

harmonisation and centralisation of the provision of State services such as education, health, defence, and law and order. Clearly, there is a long way to go before Europe is ready for political union, and therefore, until then, fiscal policy coordination and binding constraints are the only option.

Chapter 4: In Lieu of a Conclusion: The European Union Today

The period from the mid 1980's to the mid 1990's has been one that completely changed both the role and the importance of the European Union. The collapse of the Eastern Bloc and German reunification are two examples of dramatic changes that occurred. The European Union saw its membership increase from nine to fifteen, launched the Single Market and is preparing for the Single Currency. Crucial to the introduction of the Single Currency is the nominal convergence of macroeconomic indicators of the member countries. The Maastricht convergence criteria explicitly define what is meant by convergence and in this section I will examine the Union's progress regarding the convergence of these indicators specifically, as well as present Europe's overall performance in general.

4.1 The Convergence Criteria

4.1.1 Inflation

During the early 1990's inflation was steadily decreasing in the Union, falling from 5.4% in 1991 to 3.1% in 1994. Table 4.1 below presents the inflation rates for each of the first twelve member countries as well as the average inflation rate for the Union. The table covers the period from 1990 to 1996, with estimates being used for the second part of 1995 and 1996. According to the data, inflation is expected to go on decreasing during 1995 and increase slightly in 1996. The convergence criterion regarding inflation states that a country can join Stage III of EMU if its inflation rate is no more than 1.5 percentage point higher than the average of the lowest three inflation

rates in the Union. For 1994, the lowest inflation rates were recorded in France (1.7%), Denmark (1.8%) and the Netherlands (2.3%). The average of these three rates is equal to 1.93% so the maximum acceptable inflation rate is 3.43%. In 1994, Greece, Spain, Portugal and Italy had unacceptably high inflation rates. For 1995, the projections yield an average lower inflation rate of 2.07%. Thus the threshold level becomes 3.57%. This means that once again, Greece, Spain and Portugal

Table 4.1: Annual Inflation Rates (1995 and 1996 projected)

Country	1990	1991	1992	1993	1994	1995	1996
Belgium	3.6	2.5	2.1	2.6	2.6	2.5	2.6
Denmark	2.7	2.2	2.1	1.7	1.8	2.1	2.4
W. Germany	2.8	3.8	4.8	3.9	2.8	2.2	2.4
Greece	19.2	18.5	14.6	13.6	10.8*	9.5*	9*
Spain	6.5	6.3	6.4	5.6	4.9*	4.5*	4.4*
France	2.9	3.2	2.4	2.1	1.7	1.9	2.1
Ireland	1.6	2.5	2.8	1.6	2.8	2.7	2.7
Italy	5.9	6.9	5.2	5.1	4*	3.5	3.5
Luxembourg	3.6	2.9	2.8	3.6	2.3	2.5	2.7
Netherlands	2.2	3.2	3	2.1	2.3	2.4	2.5
Portugal	12.6	11.1	9.8	7.9	5.5*	4.6*	4.4*
UK	5.5	7.4	4.8	3.5	2.5	2.9	3.3
EC12	4.7	5.4	4.6	3.9	3.1	2.9	3.1

Source: Commission(1995) and Eurostat (1995) [*: Rate too high for Maastricht]

underperform but Italy improves its performance. The 1996 projections yield a low

average of 2.3% leading to a threshold of 3.8%, which Greece, Spain and Portugal do not satisfy. Although the inflation rates of these countries are decreasing they are still too high for them to qualify for EMU, at least in the 1996 evaluation. In addition, inflation for Europe is estimated at 3.1% for 1996, which is just 0.1% higher than the target rate of 3%.

4.1.2 Government Fiscal Positions

During stage I of EMU, the public finance situation in the EU deteriorated dramatically. According to the convergence criteria, government borrowing should be no more than 3% of GDP. In 1991 this figure peaked at 6% for Europe as a whole, as can be seen in table 4.2. The 3% target was met by Germany, Luxembourg, and Ireland in 1994. These countries will be joined by Denmark according to the 1995 and 1996 projections which means that four countries out of twelve meet the criterion. Clearly, this is not enough for the 1996 evaluation. What is very interesting is that in 1996 the situation will be worse than it was in 1990 and 1991 when six countries met the criterion. It is however obvious from the table that *all* countries are expected to improve their position in 1995 and then improve it further in 1996, so it would seem that more countries may meet this criterion in the 1999 evaluation.

The situation looks even grimmer regarding countries' government debt situation. The relevant data are presented in table 4.3 below. The threshold value is 60% of GDP and a lot of the countries deviate markedly from this value. In 1994, Germany, France, Luxembourg and England met the criterion. The same countries are expected to meet the target in 1995, but the positions of all of them will be worsened. In total, eight countries are expected to be in a worse debt situation in 1995 than they

were in 1994. The same four countries are expected to meet the target in 1996 as well, but the position of eight countries will once again worsen. The rate for Europe has been steadily increasing since 1991, and in 1996, Greece, Belgium and Italy will still have debt ratios in excess of 100%.

Table 4.2: Budget Deficits as a Percentage of GDP (1995 and 1996 projected)

Country	1990	1991	1992	1993	1994	1995	1996
Belgium	5.4*	6.5*	6.7*	6.6*	5.5*	4.7*	4*
Denmark	1.5	2.1	2.5	4.4*	4.3*	3	2.2
W. Germany	2.1	3.4*	2.3	2.9	2.3	2.2	2
Greece	14*	13*	11.7*	13.3*	14.1*	13.3*	12.9*
Spain	3.9*	4.9*	4.2*	7.5*	7*	6*	4.7*
France	1.6	2.2	3.9*	5.8*	5.6*	4.9*	3.9*
Ireland	2.2	2.1	2.2	2.5	2.4	2	1.5
Italy	10.9*	10.2*	9.5*	9.5*	9.6*	8.6*	7.9*
Luxembourg	-5.9	-2.3	-0.3	-1.1	-1.3	-1.6	-2
Netherlands	5.1*	2.9	3.9*	3.3*	3.8*	3.5*	2.7
Portugal	5.5*	6.6*	3.3*	7.2*	6.2*	5.8*	4.8*
UK	-1.5	2.6	6.1*	7.7*	6.3*	4.6*	3.4*
EC12	4	4.5	5	6	5.6	4.7	3.9
Threshold	3	3	3	3	3	3	3

Source: Commission(1995) and Eurostat (1995) [*: Rate too high for Maastricht]

Table 4.3: Government Debt as a Percentage of GDP (1995 and 1996 projected)

Country	1990	1991	1992	1993	1994	1995	1996
Belgium	130.8*	132.9*	133.8*	138.9*	140.1*	138.7*	136*
Denmark	59.6	64.6*	68.8*	79.5*	78*	78*	78.2*
W. Germany	N/A	41.5	44.1	48.1	51	59.4	58.9
Greece	82.6*	86.1*	92.3*	115.2*	121.3*	125.4*	128.1*
Spain	45.1	45.9	48.2	59.8	63.5*	65.8*	66.1*
France	35.4	35.8	39.6	45.8	50.4	53.4	55.6
Ireland	96.8*	96.2*	93.4*	96.1*	89*	83.7*	79.1*
Italy	97.9*	101.3*	108.4*	118.1*	123.7*	126.8*	128.6*
Luxembourg	5.4	4.9	6	7.8	9.2	9.8	9.9
Netherlands	78.8*	78.9*	79.9*	81.4*	78.9*	78.8*	78*
Portugal	67.7*	69.3*	61.7*	66.9*	70.4*	71.7*	72.3*
UK	N/A	35.7	41.9	48.3	50.4	52.4	53.1
EC12	N/A	57	60.8	66.1	68.9	72.9	73.2
Threshold	60	60	60	60	60	60	60

Source: Commission(1995) and Eurostat (1995) [*: Rate too high for Maastricht]

4.1.3 Exchange Rate Variability

According to the Maastricht treaty, currencies of countries wishing to enter Stage III of EMU should *not* have experienced realignments in the two years prior to accession. Since the earliest date for Stage III is January 1996, I am presenting the exchange rates of the ERM currencies vis-à-vis the ECU from January 1994 to July 1995, in table 4.4 below. Table 4.5 shows the percentage deviation from the central parity in any given month of the same period. These same percentage fluctuations are presented graphically on Graph 4.1. In addition to experiencing no realignments, currencies are expected to maintain their exchange rates within a band of $\pm 2.25\%$ of their central rate. However after the collapse of the ERM, currencies were allowed to fluctuate within a wider band of $\pm 15\%$, an arrangement that holds to this day. As can be seen from table 4.5, the only currency that has stayed within the $\pm 2.25\%$ band is the Danish Krone. The Escudo has been within the band since July 1994 and the French Franc was in the band until the March 1995 technical realignment (which took place to accommodate the currencies of Austria, Sweden and Finland). The Belgian Franc's performance deteriorated in 1995, and so did the DM's performance. The Dutch currency, too, started deteriorating in the end of 1994 and the Irish punt was also a victim of the new realignment. The only currency that seems to have benefited from the 1995 realignment is the Peseta which fell back in line in May 1995 after a year's absence. However if $\pm 15\%$ becomes the relevant band, then all currencies satisfy it. Thus, assuming the Maastricht Treaty is revised to allow the wider band, then all countries meet this criterion.

Table 4.4: Exchange Rates of the ERM Currencies vis-à-vis the ECU

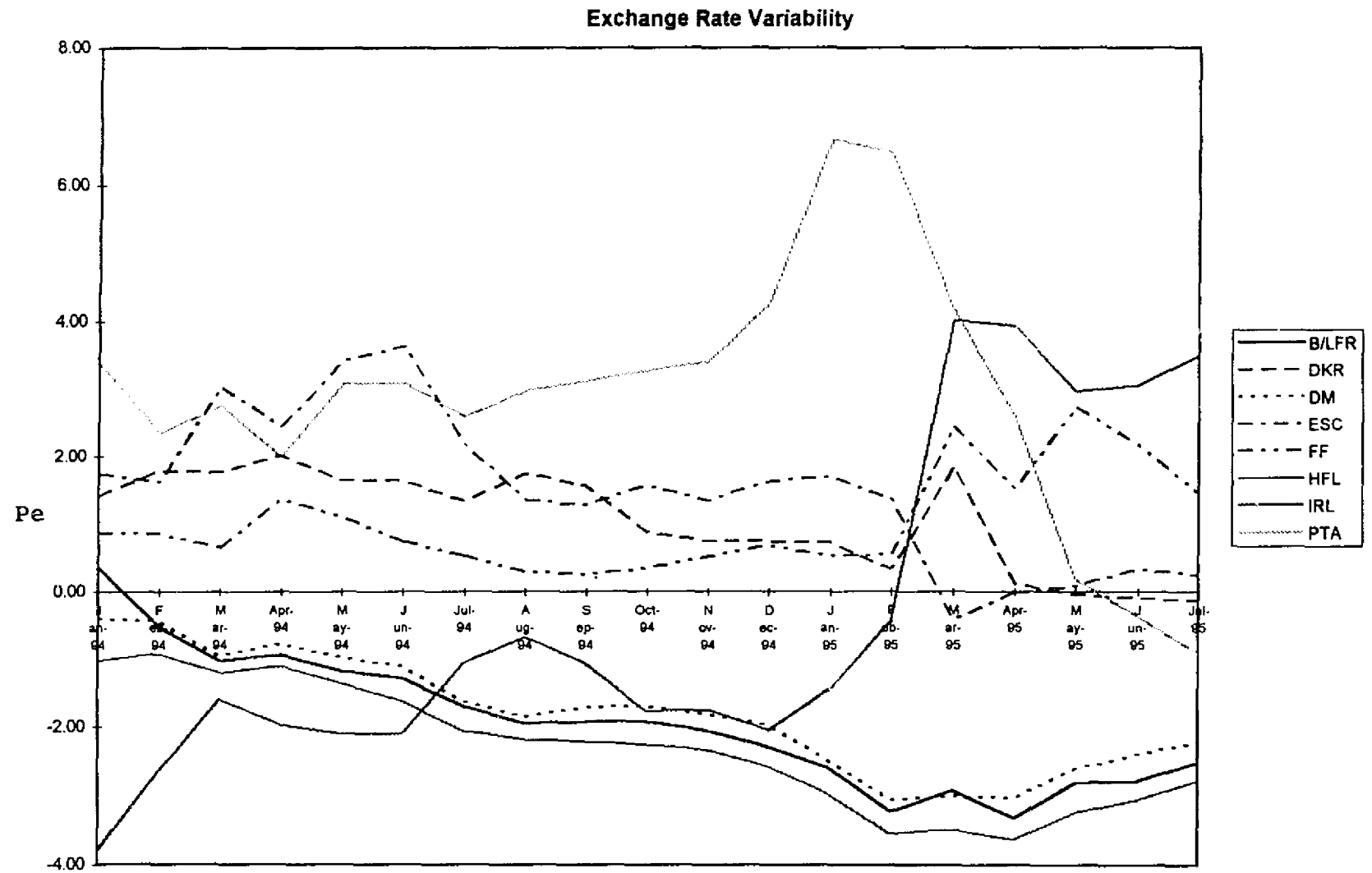
Currency	B/LFR	DKR	DM	ESC	FF	HFL	IRL	PTA
Central Rate	40.212	7.437	1.94964	192.854	6.5388	2.19672	0.8086	154.25
August 1993								
Central Rate	39.396	7.286	1.91007	195.792	6.4061	2.15214	0.7922	162.493
March 1995								
Jan-94	40.358	7.542	1.942	196.21	6.596	2.174	0.778	159.46
Feb-94	40.000	7.570	1.941	195.98	6.595	2.176	0.787	157.85
Mar-94	39.798	7.568	1.931	198.71	6.582	2.170	0.796	158.48
Apr-94	39.832	7.586	1.935	197.57	6.628	2.173	0.793	157.33
May-94	39.740	7.559	1.931	199.42	6.611	2.167	0.792	158.99
Jun-94	39.693	7.558	1.928	199.87	6.588	2.161	0.792	159.02
Jul-94	39.532	7.536	1.918	197.04	6.573	2.152	0.800	158.23
Aug-94	39.430	7.566	1.914	195.46	6.557	2.149	0.803	158.83
Sep-94	39.441	7.553	1.916	195.32	6.555	2.148	0.800	159.05
Oct-94	39.440	7.502	1.917	195.87	6.561	2.147	0.794	159.28
Nov-94	39.386	7.492	1.914	195.43	6.572	2.146	0.795	159.49
Dec-94	39.294	7.492	1.911	196.00	6.583	2.140	0.792	160.81
Jan-95	39.163	7.490	1.901	196.13	6.573	2.131	0.797	164.52
Feb-95	38.914	7.461	1.890	195.48	6.574	2.119	0.805	164.24
Mar-95	38.242	7.420	1.853	194.97	6.562	2.077	0.824	169.27
Apr-95	38.091	7.295	1.852	195.76	6.503	2.074	0.823	166.67
May-95	38.284	7.283	1.860	195.95	6.581	2.083	0.816	162.79
Jun-95	38.300	7.278	1.865	196.44	6.545	2.087	0.816	161.91
Jul-95	38.408	7.276	1.868	196.28	6.500	2.092	0.820	161.01

Source: Commission(1995) and Eurostat (1995)

Table 4.5: Percentage Deviations from Central Parities (ERM only)

Currency	B/LFR	DKR	DM	ESC	FF	HFL	IRL	PTA
Jan-94	0.36	1.41	-0.41	1.74	0.88	-1.04	-3.78*	3.38*
Feb-94	-0.53	1.78	-0.45	1.62	0.85	-0.92	-2.64*	2.33*
Mar-94	-1.03	1.76	-0.95	3.03*	0.66	-1.21	-1.58	2.74*
Apr-94	-0.94	2.01	-0.77	2.44*	1.36	-1.10	-1.96	2.00
May-94	-1.17	1.64	-0.97	3.40*	1.11	-1.36	-2.10	3.07*
Jun-94	-1.29	1.63	-1.11	3.64*	0.75	-1.62	-2.09	3.09*
Jul-94	-1.69	1.33	-1.61	2.17	0.53	-2.06	-1.06	2.58*
Aug-94	-1.95	1.74	-1.85	1.35	0.28	-2.19	-0.68	2.97*
Sep-94	-1.92	1.56	-1.71	1.28	0.25	-2.20	-1.06	3.11*
Oct-94	-1.92	0.88	-1.69	1.56	0.34	-2.25	-1.76	3.26*
Nov-94	-2.06	0.75	-1.81	1.34	0.51	-2.33*	-1.74	3.39*
Dec-94	-2.28*	0.74	-1.96	1.63	0.68	-2.58*	-2.05	4.26*
Jan-95	-2.61*	0.72	-2.48*	1.70	0.53	-2.98*	-1.44	6.66*
Feb-95	-3.23*	0.33	-3.06*	1.36	0.54	-3.55*	-0.43	6.47*
Mar-95	-2.93*	1.84	-3.00*	-0.42	2.44*	-3.48*	4.01*	4.17*
Apr-95	-3.31*	0.12	-3.02*	-0.02	1.51	-3.64*	3.93*	2.57*
May-95	-2.82*	-0.04	-2.60*	0.08	2.73*	-3.24*	2.95*	0.18
Jun-95	-2.78*	-0.10	-2.39*	0.33	2.18	-3.05*	3.04*	-0.06
Jul-95	-2.51*	-0.14	-2.21	0.25	1.46	-2.78*	3.48*	-0.91

*: Currency out of the $\pm 2.25\%$ fluctuation band



4.1.4 Long Term Interest Rates

Another threshold prescribed by Maastricht is that a country's long term annual interest rate should be no larger than 2 percentage points above the average of the three low-inflation countries. From table 4.6 below, for 1994 the lowest inflation countries were France, Denmark and the Netherlands. The average of their interest rate is equal to 7.47% which means that the threshold is 9.47%. With this threshold, only Spain, Italy, Portugal and Greece do not meet the criterion.

Table 4.6 Long Run Interest Rates (Nominal Annual Averages)

Country	1990	1991	1992	1993	1994
Belgium	10.1	9.3	8.6	7.2	7.8
Denmark	11	10.1	10.1	8.8	8.5
W. Germany	8.9	8.6	8	6.3	6.7
Greece	N/A	N/A	N/A	N/A	N/A
Spain	14.7	12.4	12.2	10.2	9.7*
France	9.9	9	8.6	6.8	7.5
Ireland	10.1	9.2	9.1	7.7	8.1
Italy	13.4	13	13.7	11.3	10.6*
Luxembourg	8.6	8.2	7.9	6.9	6.4
Netherlands	9	8.7	8.1	6.7	7.2
Portugal	16.8	18.3	15.4	12.5	10.9*
UK	11.1	9.9	9.1	7.8	8.2

Source: Commission(1995) and Eurostat (1995) [* : Rate too high for Maastricht]

4.2 Getting There by 1996?

In 1996, at least six countries out of twelve need to meet all the convergence criteria in order for Stage III to be launched. Table 4.7 below is a criteria check-list for the twelve European members.

Table 4.7: Projected Number of Countries Satisfying Each Criterion in 1996

Criterion	Number of Countries	Number of Countries
	(Narrow band)	(Wide band)
Inflation	9	9
Debt	4	4
Deficit	5	5
Realignments	12	12
Variability (ERM)	1	8
Interest Rate	8	8
All	None	Germany, Luxembourg

Clearly, unless the Maastricht Treaty is revised to allow wider fluctuation bands and larger debt, or unless countries curb government debt and deficits, it is very unlikely that stage III of EMU will begin before 1999. Furthermore, given countries' poor performance as reflected in the fiscal indicators it is possible that in 1999 only a very small number of nations could launch the EMU. The only way out of this situation seems to be the revision of the Maastricht Treaty in the forthcoming inter-governmental conference.

4.3 European Economic Outlook

According to the European Commission (1995), the Community is now in the process of recovering from the 1992-3 recession. Growth rates have increased, and extra-EC exports have increased in 1994. Unemployment showed a decrease during 1994 and early 1995 and is expected to go on decreasing in 1996. The European Commission expects growth rates of 3 to 3.5% in the latter part of the 1990's and the creation of 10 million new jobs by the year 2000 which would mean that EC12 unemployment rate would fall to 7%, which in my opinion seems immensely optimistic. The only threat, according to the Commission, comes from the fear that the speed of the recovery will generate inflationary pressures but it is expected by the Commission that these pressures can be mitigated if authorities stay faithful to the convergence process and steer their indicators towards the rates specified at Maastricht. Table 4.8 below presents unemployment rates in the European Community nations, and table 4.9 contains information regarding the growth of GDP.

Finally, as far as the new additions to the Union - Austria, Finland and Sweden - are concerned, economic performance is very encouraging. Of the three countries, Sweden had the highest annual inflation in 1994 at 3.2%, followed by Austria at 2.9 and Finland at 1.5. Sweden is the only one of the three that had a deficit higher than 6% of GDP (11.7%) whereas Austria's deficit stood at 4.4 % and Finland's deficit was 4.7% of GDP. The government debt of all these countries is above the threshold value but not by as much as some of the older partners. Austria's debt stood at 65% of GDP in 1994, Finland's government debt registered at 70% of GDP and Sweden's government debt was the highest of the three at 78.9% of GDP. Clearly these

countries are doing much better than some of the more experienced members in the Union, and it is anticipated that their ascension into Europe's elite club will not cause any serious disturbance to the convergence process or the achievement of the European ideal.

Table 4.8: Unemployment Rates

Country	1991	1992	1993	1994	1995	1996
Belgium	7.5	8.2	9.4	10	9.8	9.3
Denmark	8.9	9.5	10.3	10.2	9	8
W. Germany	4.2	4.5	5.6	6.3	6.2	6.4
Greece	7.7	8.7	9.7	10.2	10.6	10.8
Spain	16.4	18.2	21.8	22.4	21.9	21.2
France	9.5	10	10.8	11.3	11	10.6
Ireland	16.2	17.8	18.4	17.7	16.8	15.7
Italy	10.1	10.3	11.1	11.8	11.1	10.4
Luxembourg	1.6	1.9	2.6	3.3	3.2	3.1
Netherlands	7.1	7.2	8.8	10	9.8	9.4
Portugal	4	3.9	5.1	6.1	6	5.6
UK	8.9	10.2	10.4	9.4	8.5	7.6
EC12	8.7	9.4	10.5	10.9	10.4	9.8

Source: Commission(1995) and Eurostat (1995)

Table 4.9: Real Annual Percentage GDP Growth

Country	1993	1994	1995	1996
Belgium	-1.7	2.2	2.7	3.1
Denmark	1.4	4.8	3.2	3
W. Germany	-1.2	2.5	3	3.4
Greece	-0.5	0.4	1.1	1.7
Spain	-1.1	2.2	2.8	3.2
France	-1	2.2	3.2	3.2
Ireland	4	6	5.6	5.3
Italy	-0.7	2.4	3	3.2
Luxembourg	0.3	2.3	3	3.2
Netherlands	0.3	2.3	3.2	3.3
Portugal	-1.2	1.1	3	3.2
UK	2	3.8	2.7	2.8
EC12	-0.4	2.6	2.9	3.2

Source: Commission(1995) and Eurostat (1995)

Summary and Conclusion

This paper focused on the economic analysis of the European Union, and more specifically, the rationale, the effects and the prospects of the Single Market and the Single Currency. In chapter 1, I showed why, at the time of its launch, the Single Market seemed to be the “only way out” of Europe’s recession. Economists agree that the Single Market will yield benefits; they disagree over how large these benefits will be. Although the full effects of the 1992 programme have not yet manifested themselves, clearly Europe is better off with the Single Market. Of course a counterfactual scenario is now impossible and therefore, we are unable to know how different Europe would have been without the 1992 programme. The Emerson estimates of the results presented in Chapter 1 are in no way binding, nor are they the European Commission’s promised “payout”. For the time being they remain best case scenario estimates, predicting increases of 6.4 % of ECGDP on the microeconomic level, and depending on the choice of macroeconomic policy, further increases ranging between 4.5 to 7.5% of ECGDP. However, the Single Market requires the establishment of the Single Currency before it can operate at its full potential.

In chapter 2, I explained why monetary union would be beneficial for the European countries, and argued that lack of organisation, speculative attacks and the asymmetric shock of German reunification led to the collapse of an already troubled ERM. Given that the collapse disturbed the EMU process, I then proceeded to present the future of EMU as well as several alternatives towards some higher degree of monetary cooperation. I conclude that given the current format of the Maastricht

Treaty it is unlikely that EMU will occur by 1996. In addition, if the Treaty is not revised to increase coordination between states, enhance the security of the system and make the convergence criteria more lenient, it is unlikely that enough countries will qualify by 1999 to make EMU worthwhile.

In chapter 3, the EMI and the ESCB were covered. If EMU does not happen in 1996, then the presence of the EMI will be prolonged. Therefore, it would be advisable to increase the EMI's powers by allowing it to control reserve requirements, and giving it responsibility for some open market operations, rather than continuing with the current situation where the Institute has no control over either of these. Concerning the ESCB, it was argued that the task of price stability may be compromised if the European Central Bank is expected to maintain the Single Currency's exchange rate, or supply credit to indebted member countries. Finally, the need for fiscal policy coordination and eventual centralisation has been argued.

The final chapter presented current data reflecting the economic performance of the European countries and proved that, according to the EU's own projections, an early launch of EMU in 1996 is doubtful, as only two countries, Germany and Luxembourg are expected to meet the convergence criteria in their present format. Finally, the economic performance of the new members was referred to and it was concluded that Sweden, Austria, and Finland are well on their way towards meeting the criteria, and in several indicators, they are performing much better than their partners.

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