OPTIMUM CURRENCY AREAS: POLITICAL AND ECONOMIC OPTIMUMS OF THE EUROPEAN MONETARY SYSTEM

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INTRODUCTION

Until 1971, the western world had ordered its monetary system reasonably well, in that in could be claimed that the member countries had developed a, albeit imperfect, single currency area form around the American dollar. The two instruments of the system were a fixed parities structure and international finance mechanisms, which were being constantly adapted, in the context of cooperation between countries, to eliminate balance of payments disequilibrium.

The debacle of the Bretton Woods system and the Nixon declaration of August 15, 1971 rescinding the convertibility of dollars into gold did away completely with an international fixed exchange rate system. The emergence of the floating rate regime in 1973, however, failed to solve national balance of payments problems and gave rise to increasing concern over the impact of exchange rates on national economies. Floating exchange rates contributed to inflationary pressures by relaxing by relaxing discipline on global reserve control and thus permitted higher prices of all goods to be sustained rather than reversed. The exchange rate management of the international monetary system has thus in vain tried to find a

monetary solution for a structural problem.

In view of these events, debate over the choice of monetary policy to be implemented in national economies has increased, rather than abated. In the absence of international agreement on monetary reform, of whatever nature, that would bring the world inflationary and destabilizing process under control, the EEC countries have opted for a more limited, narrower regional approach to monetary stability. The establishment of the European Monetary System is to be seen in the light of the theory of optimum currency areas. That is, it should be seen as an attempt at creating a single currency area, through the use of fixed exchange rates and the creation of a parallel currency, the European Currency Unit.

Linking it to a sketch of the aims of the fixed exchange rate school in order to assess the EMS in the light of future developments, this research will include a survey of the theory of optimum currency areas, making the crucial distinction between what is a currency area and what criteria needs to exist in order for it to become an "optimum" currency area.

A currency area is a geographical domain that possesses a single "form" of currency, based on the irreversible fixing of exchange rates with full convertibility, or by creating a parallel or new currency replacing national currencies. A currency area becomes optimal when it meets certain economic and

political criteria. Economic optima are defined in terms of price stability, highest possible level of employment, global welfare and payments equilibrium over the area; the political optima are defined as the best trade-off balance of national and international policy requirements and are more difficult to identify. The theory of optimum currency areas has identified these conditions for optimality: factor mobility, degree of openness of an economy, lack of money illusion, converging propensities to inflate, financial and policy integration. If these represent conditions for the optimality of a currency area, then it is clear that a currency area and an optimal currency area represent two distinct, if interrelated, phases of a dynamic process of monetary and political cooperation. A currency area can be formed that is sub-optimal in order to achieve the optimal conditions. A currency area, through the stabilization tool of fixed exchange rates, aims at controlling diverging inflation rates, at promoting capital and labor mobility and at financial integration. This clearly implies the concept of evolution over a considereble time lag. In effect, the optimums produced by a successful currency area are two: political and economic. These are interrelated, but still distinct. It must be stressed that the fact that certain economic pre-conditions must exist in order to eventually form an optimum currency area should not, obviate or obfuscate the political process --and its relative characteristics-- involved. After all, a fixed exchange rate regime implies that the same

authorities that were nationally "undisciplined" become those that will be internationally "committed". The commitment to global welfare, or in this case, regional welfare, and the minimization of individual costs call for political negotiation, consensus and decision-making. The underlying political process becomes exlicit particularly in assessing the costs of such a model. In order to overcome these costs,decision-makers must rise above certain considerations through the tool of political cooperation. It is this process of political cooperation which can guarantee the achievement of full labor and capital mobility, financial integration and monetary and fiscal harmonization.Certain costs of forming a currency area, let alone an optimum one, will always exist; the point is to create or possess more overwhelming economic and political considerations that will minimize those cost. Therefore, the analysis of the EMS in terms of the optimum currency area theory will really be a study of the "process of cooperation" (economically and politically) with the ultimate result of establishing a single currency area.

This thesis proposes to analyze the EMS as a trend in the EEC to create an optimum currency area. The establishment of the EMS meant the fixing of exchange rates, and therefore, the creation of a common currency area within which changes can occur which will eventually lead to the EEC being an optimum currency area. The EMS is therefore analyzed as an instrument

for promoting and fostering those changes. Such an analysis and assessment of the EMS is particularly relevant in the context of contemporary monetary relations. In an arena where individual actors are refusing to commit themselves to some type of monetary reform, the establishment of the EMS is bound to affect not only intra-EEC relations, but also US-EEC and EEC - third country relations.

Finally, it is useful to use such an analysis as the basis of projections of the role Europe can play in the future in international monetary relations.

Theoretical Premises

The choice on the part of the EEC members to opt for a monetary arrangement such as the EMS relies primarily on the adoption of a fixed exchange rate regime. Therefore, it is initially useful to delineate the constrasting ideological underpinnings involved in the debate of whether to adopt fixed or flexible exchange rates. This is useful if one is to understand why the EEC has found it more attractive to implement a fixed exchange rate system. The clarification of what the debate is all about, will be the means by which the premises of this thesis are set out.

The cause of the world depression has been much debated. This debate has revolved around the choice of exchange rate policies to be implemented in order to control the inflationary

and destabilizing process at hand in the international system. The policy choice debate that surrounds the two alternatives of fixed and flexible exchange rates reflects their ideological assumptions. On the one hand, the floating exchange rate school or "pure monetarists" envisage a world consisting of separate national economies, while, on the other, fixed exchange rate advocates or "global monetarists" wiew the world as a highly inter-dependent, closed economic circuit.

The pure monetarists stress the significance of exchange rates as an effective equilibrating toll for maintaining national balance of payments without resorting to the painful option of increased unemployment or inflation. Changes in real income through exchange rate variations would affectively substitute for real income variations through adjustments in its money wage rate or price level, as would be the case under fixed exchange rates. In addition, flexible exchange rates act as an insulator for the national economy from disturbances or monetary shocks that generate from abroad due to policy misjudgments. Under flexible exchange rates, therefore, nation states can pursue independent monetary policies disregarding their neighbor's and/or allies' needs.

The global monetarists, however, argue that exchange rate fexibility is an ineffective tool for payments adjustment, and that, on the contrary, has a significant propensity towards dynamic instability. In view of the lack of money illusion in

small, open economies (which constitute the majority of the world), undisciplined exchange rate behavior can only give rise to vicious circles of price-wage exchange devaluation spirals that my be very difficult to arrest in face of daily political realities, thus constituting an indpendent source of inflation. In addition, countries which adopt fixed exchange rates can diffuse their policy mistakes. This in itself is not a desirable prospect for partners despite the fact that the weight of burden upon many shoulders is always inferior to the same burden on one pair of shoulders. As a consequence, a fixed exchange rate regime implies a firm and explicit commitment to monetary cooperation.

Therefore, three major ideological distinctions must be made between these two approaches: first, the pure monetarists depend on a fragmented vision of the world constituted of a series of isolated national black boxes in which political events and human interactions play a small role and have limited significant impact on international trade and monetary relations due to the implicit belief of the constraining effect of the existence of exchange illusion, while the global monetarists envisage the international system as characterized by highly interrelated market places and political forums where exchange illusion does not exist or is reduced to a minimum; second, pure monetarists believe in policy makers that are disciplined hence, in "managed floating", while global monetarists intrincically distrust the capacity of policy-makers to resist the temptation

of responding to internal political forces (e.g. labor union demands for wage increases or employment creation), therefore leading to uncontrolled eexchange rate behavior; third, and as a consequence, purists tend to view welfare in national terms in contrast to the globalists who argue in favor of world welfare.

This thesis ascribes to the latter school of thought, i.e. to the global monetarists, because the premises of the fixed exchange rate approach reflect a more realistic picture of international political economic relations and problems, taking into account both national and international requirements of policy-making, unlike the flexible approach which depends on the single facet of economics. It is not that the purists do not acknowledge the existence of political forces, but rather, they believe that these forces are subservient to governments' lack of will to abdicate national sovereignty. The globalists, in contrast, argue that national governments' reluctance can be overcome, when other political considerations become overwhelming. The interesting aspect of this debate, in light of the EMS, is to analyze whether the interaction between these political forces has led to a viable evolutionary process in the EC towards the establishment of an optimum currency area.

Finally, this thesis recognizes that, though economic costs and benefits are measurable, political workability is not, and, therefore, weighing economic and political fectors against each other is ultimately a subjective matter.

Keeping in mind the ideological underpinnings of a fixed exchange approach, Chapter One will proceed to deal with a particular regional fixed exchange regime, namely the theory of optimum currency areas. This chapter will survey the literature dealing with this concept, high lighting the major contributions and the most significant criteria for establishing an optimum currency area. Chapter One will conclude with a cost/benefit analysis of the theory in order to, not discredit the flexible exchange view, but to underline the advantages an optimum currency area approach can offer to nations possessing or attaining certain economic and political optimal criteria. In this way, an argument in favor of a regional fixed exchange regime is to be seen as offering a viable alternative to the present international monetary chaos, by presenting conditions by which th EC will be able to gain control over and modify long-term trends.

The establishment of the EMS is mooted in both economic and historical/political forces. Chapter Two will address the considerations that led the Community to create the EMS. Part of Chapter Two will delineate the historical/political evolution of the European Monetary Union and its impact on the process of consensus in creating the EMS; major consideration, however, will be dedicated to the economic forces and indicators that pushed decision-makers to pursue stabilization policies in monetary affairs. First, general economic performance indicators

of the EEC as a whole are analyzed as playing a role in this integrationist policy. Second, and more specifically, the cases of five EEC nations will be presented in order to clarify the individual reasons for which these member states chose to join a currency area. These nations are France, Germany, Italy, The Netherlands, and the United Kingdom. The Netherlands will be representative of the extremely small, open-economy case, an economy highly susceptible to exchange rate changes and traditionally closely linked to the stronger currencies,such as the DM. Germany and France are examples of relatively less open and larger economies, which, however, have a large stake in the success of monetary stabilization policies in order, for example, to protect their agricultural product, prevent rising inflation and reduce the competitiveness of the dollar in relation to their depreciating currencies. Italy, though another less open and larger economy in the EEC will show how the enactment of internal vicious circles can lead decision makers to opt for contractionary monetary policies, as advocated by the establishment of a currency area. Finally, the United Kingdom will be used as somewhat of a contrast to the above-mentioned cases. It is a contrast because, though a member of the EEC, the United Kingmdom has not consented to full participation in the EMS while being member to the swap deposits of the ECU. This is the classical situation of a nation that may considler it politically desirable to join a currency area in order not to remain isolated from its partners, but that may be costrained by

real market and ecomomic factors. In this way, the United Kingdom will show what drawbacks a currency area membership can present if certain preconditions do not exist.

Chapter Three will proceed to give a brief description of the structure and operation of the EMS, followed by a detailed description and assessment of the ECU, pivot mechanism of the system. The ECU will be compared to the parallel currency notion in Chapter Two. The very fact that the ECU is not a fully-fledged parallel currency does not, however, reduce its importance as a stabilization tool or reference point for improving economic conditions and furthering convergence within the EEC. In this way, the ECU is then assessed as the trend-setter for the EEC towards the eventual establishment of an optimum currency area, by first attaining the political and economic optimal criteria envisaged by the optimum currency area model.

Finally, Chapter Four will conclude this research by drawing the conclusion that the EMS, though not an optimum currency area now, does represent an important landmark in and stimulus for the process of European monetary integration. However, this thesis does not go to the extent of predicting developments in terms of complete monetary integration, but rather, is concern with seeing the potential development of the EMS in the light of an optimum currency area formation. The conclusion argues that in light of the March 1983 crisis of the

French Franc, and the trends since 1979, the EMS is not in immediate danger of falling apart as did the snake, and that, in contrast, it has proven to be a more credible and solid institution than the snake.

Yet, Chapter Four also addresses a fundamental problem and paradox of the EMS: when the dollar is weak, the political rationale of the EMS becomes stronger, yet the EMS parities become harder to maintain; on the other hand, when the dollar is stronger, the original political motivation disappears whilst technical operations become easier. This contradiction needs to be resolved and gives rise to an important question: are the roots of such a contradiction to be found in the EMS or also in the optimum currency area theory? The answer given by this research suggest both the empirical and theoretical casses are at fault.

The EMS is not an optimum currency areas, yet the theory does not resolve problems such as interregional imbalances. The view of this thesis, however, is that the EMS can play a significant role in bringing about a certain amount of ecomomic reform in the monetary field. Can this role be extended to creating conditions for an optimum currency area, at the risk of modifying certain features of the theory which do not apply in practice?

In conclusion, this thesis attempts to discuss the role

of the EMS in creating an optimum currency area. The establishment of the system has created some form of economic regulation. If this great experiment and test of political will within the EEC to "stick-it-out-together" will resist and constructively fight adversity, the EMS may succeed in drawing economic perfomances closer, in reducing ideological biases of different national political parties/systems in order to pursue realistically common stringent and contractionary policies. If the whole of the EMS and EEC partner can achieve this much, interregional imbalances may be reduced, factor mobility may be freed, at least within the EEC.

The paradox of the EMS vis-a-vis the dollar can only be resolved when internal economic problems of disparity and political conflictuality of the EEC are resolved -- possibly through a common policy fostered by such a system as the EMS. The dollar problem may be resolved through a full-fledged promotion fo the ECU creating strong and healthy competition.

Chapter 1

OPTIMUM CURRENCY AREAS

The Theory

On November 1st,1975, The Economist published "The All Saints' Day Manifesto for European Monetary Union" signed by eminent monetarists.[1] This manifesto called upon the European public to use sound economic analyses, in conjunction with the presents political aspirations in forming a European monetary union. Propositions were sketchily outlined by which a union in Europe and a single European currency, the Europa, could be achieved. In essence, these economists were placing reliance on the optimum currency area approach for restoring order to a monetary situation marked by inflation, unemploment and, particularly, confusion.

The optimum currency area approach has traditionally advocated fixed exchange rates as a means of realizing simultaneously full employment, price stability and external balance without the impositions of controls on payments, trade and investment: the standard objectives of economic policy. However, in face of reality, it is certain that one cannot rely solely on one facet -- i.e. economics -- to provide the tools of analysis of the optimum currency area theory. Political and structural developments of economies are necessary, if not

sufficient, factors involved in fixing exchange rates.

If fixed exchange rates are at the core of an optimum currency area, then one must ask: what conditions favor fixed exchange rates in order to constitute an optimum currency area? Various authors have attempted to answer this question, and there has been no unambiguous solution presented. The test of validity can only be empirical proof, and after a discussion of the theoretical framework, a practical application to the European Economic Community and, in particular, the workings of the European Monetary System,should provide the practical framework.

The theory of optimum currency areas was first pioneered by R. Mundell in 1961 [2] and, with McKinnon (1963) [3] and Kenen (1969), [4] constitutes the traditional school of thought. These authors were writing during a period when fixed exchange rates and convertibility were the order of the day --international monetary conditions which differed quite considerably from those of the seventies, when "floating" became increasingly accepted and economic and regional differences within the EEC were becoming more obvious. This group essentially emplasized economic criteria in defining the optimalty of currency areas. Consequently, there is a touch of idealism in their criteria for implementing stabilization policies through the use of fixed exchange rates: after all, double digit inflation and unemployment rates were virtually

unknown in a Europe characterized by full employment and low inflation. The experience of the seventies was to put their models to the test.

The second group of economists, such as Corden (1973), Magnifico (1972), Tower and Willett (1976), Ishiyama (1975), etc., presented more critical and complex theoretical propositions. There was an increasing tendency to compare the theoretical propositions with then practical case of the European Monetary Union, and to take into account the phenomenon of inflation and steeply falling employment. The pressing realities of a floating exchange rate regime called for a cost/benefit analysis of optimum currency areas, and particularly called for the substitution of a purely economic approach by a more practical political economic analysis of conditions under which to establish fixed exchange rates.

Mundell (1961) defined a currency area as a "domain within which exchange rates are fixed." [5] He further emphasized that the optimum currency area was characterized by internal factor mobility and external factor immobility. Flexible exchange rates would function as the equilibrating mechanism between different optimum currency areas while factor mobility within the areas would act as an effective substitute for flexible exchange rates as an internal equilibrating mechanism within the area.

Two elements are implicit in this initial concept of optimum currency areas: first, Mundell did not advocate that the whole world should constitute the opimum size area, particularly in view of the lack of full-fledged factor mobility; second, flexible exchange rates are not excluded as effective equilibrating mechanisms between currency areas.

The world does not constitute an optimum currency domain because it is too large, and consequently too politically, geographically and economically varied which causes breaks in the degree of factor mobility. Between the two extremes of the spectrum -- a global currency area or the splintering of currencies into individual barter -- Mundell envisages a currency area constituting either a single large country or an arrangement comprising a group of countries whose currencies are linked together through fixed exchange rates, floating vis-a-vis other major currency areas. This is the case of the EMS which is attempting to pursue stabilization policies through linked exchange rates in order to offset the contemporary monetary chaos.

It is important to note that currency areas, as invoked by Mundell and subsequent authors, are seen as increasing the usefulness of money as a medium of exchange. It is clear that if the international system were reduced to individual-type currencies, we would be reduced to a barter system.By "unifying" or "linking" currencies, greater monetary cohesion is created,

and currency conversion costs are reduced as the number of currencies decreases. In addition, a currency area would inhibit speculation, common to thin exchange markets of small currency units under a flexible exchange rate system. By inhibiting or curtailing the disruptive force of speculation, stabilization policies have a better chance of being successfull.

The second implication that factors of production mobility can substitute for flexible exchange rates as a means of payments adjustment is somewhat dubious when applied at an international level.

It is unrealistic to believe that labor mobility is free. Cultural, linguistic and geographic differences are very great between even the closest neighbours (Europe is an example), differences which necessarily inhibit rapid and immediate transferral of workers from one region to another. Indeed, the psychological and social costs are very real and high. Also, one cannot ignore the fact that present social security benefits may prove to be a disincentive to labor mobility, as well as that -- as in the case of the EEC -- though labor mobility is legally guaranteed as envisaged by Art. 48 of the Treaty of Rome, national authorities are increasingly screening residence applications, and applying new national labor criteria laws.

How effective can factor mobility be as a substitute of flexible exchange rates when we see increasing attempts to block both labor and capital mobility from one country to another? The

experience of the sixties has shown that both capital and labor tended to move to already highly developed and wealthy regions.

The formation of a currency area can lead to interregional imbalances. In the same fashion that a nation state has more prosperous and depressed areas, a currency area could induce or aggravate regional differences. In the case of both capital and labor mobility, there would be a factor flight to more developed and prosperous regions, thus depressing the poorer region even futher.

In order to avoid this process, nations would impose stringent capital and labor controls: decidedly a nonoptimal solution. This would lead to a deterioration of intra-area trade relations and eventually to a process of disintegration. There would be a loss of general welfare through the loss of capital and labor mobility. If, on the other hand, these controls were not imposed, how would interregional imbalances be adjusted.

It has been proposed that the establishment of a reserve fund would provide the depressed areas with financing for the deficits. However, this is far from an optimal alternative and would be at least only an interim solution. Financing of depressed areas, if not accompanied with effective policies for increasing the economic performance of those areas, would only cure the symptoms rather than cause of depression and therefore, perpetuate the underlying conditions of economic disparity. The balance of payments will not be adjusted or improved in the

long-run.

The best solution for redressing interregional imbalances would be the transfer of payments through a supranational fiscal transfer system. This payment mechanism, on the other hand, carries with it enormous implications of monetary and fiscal integration and the need for political negotiations and commitment.

McKinnon (1963) was the first to criticize Mundell's factor mobility approach. He argued that factor mobility did not constitute an essential feature of an optimum currency area, unless all else failed. [6] He emphasized that "openness" of an economy should be used as an economic criterion for analyzing the optimal condition under which fixed exchange rates should be implemented. "Openness" is defined by McKinnon as the "ratio of tradeable to nontradeable goods" (tradeable goods include both exportables and importables). [7] In essence, McKinnon's argument is that the effectiveness of flexible exchange rate policy as a means of payments adjustment -- through, for example, the improvement of the trade account -- is inversely proportional to the increasing openness of an economy. In short, the more open an economy is, the less effective flexible exchange rates are as a policy for achieving internal price stability and full employment.[8] McKinnon advocates internal fiscal policies in order to restore the balance of payments disequilibrium. He restates Mundell's concern over inhibiting

speculative movements that would arise under flexible exchange rates, and concludes that a "policy of completely fixed exchange rates (or common currency ties within the outside world) would be optimal." [9]

In his discussion of how the openness of an economy influences the choice of optimal economic policies, McKinnon argues that there exists little money illusion in a very open economy. This is an extremely important point, a point that was to become the basis of further propositions in favor of fixed exchange rates in Europe in such documents as the OPTICA Reports (1975,1976). McKinnon (1971) defined money illusion as "the maintenance of stationary expectations regarding the existing price levels by individuals in the face of aggregate price level movements," [10] or as Tower and Willett argue (1976), "participants in the market act as if they are unaware of the effect on real wages of changes in the price level." [11] The lack of money illusion on the part of workers implies that exchange rate variations are seen as affecting in real terms their purchasing power. That is, they lack "exchange rate illusion" or they do not act "as if they were unaware of the effect of exchange rate change on the purchasing power of domestic currency." [12]

Basevi and De Grauwe (1978) [13] have shown that flexible exchange rates can lead to the enactment of vicious circles in which the rise in the price of imports, due to a currency

devaluation or an external shock, will eventually be transmitted to the price of domestic exports through wage agitation, price-wage indexation mechanisms and consequently wage increases. [14] The Basevi and De Grauwe study has become what is known as the vicious circle theory in economics. Marion Bond (1980) succinctly defines the main argument of the vicious circle theory:

> "... an initial foreign or domestic disturbance can set into motion a cumulative process of price inflation and exchange depreciation, through which the exchange rate is rapidly passed through into domestic prices and costs and back again to the exchange rate." [15]
>
> (underline added)

The words "cumulative" and "rapidly" need to be stressed as they are particularly relevant to the case of small open economies, and therefore to the EEC countries.

Vicious circles are created in an economy when the economic system of a nation is subjected to a monetary shock that leads to a currency devaluation. An increase in the money stock, for example,leads to a monetary expansion that provokes a lowering of domestic interest rates and capital outflow.Currency devaluation ensues, rendering the price of domestic exported goods cheaper in terms of foreign currency (i.e. denominated in domestic currency for foreign buyers), but making foreign

imported goods more expensive relative to the domestic currency. A whole process is set in motion, a process which is provoked by this initial disequilibrium and which moves towards establishing a new equilibrium point, where price increases match inflationary expectations, increases in domestic currency and exchange rate devaluation occur at the same rate. [16] This adjustment process is seen as a natural response mechanism of the economic organism. If interfered with by misguided national policy-makers, a spiral of exchange rate depreciations and price inflation is set off. This spiral is primarily caused by the rapid transmission of the exchange rate devaluation from the price of imports to the price of exports. This process becomes cumulative in small, open economies, which are vulnerable to this rapid transmission. However, the vicious circle theorists maintain that vicious circles are enacted only when inappropriate monetary policies are chosen by policy-makers.

These wrong policies include accommodating monetary policies that illusorily alleviate the immediate and pressing problem such as unemployment, but which have very short-term effects and imply an eventual need for further devaluation. [17] As a consequence, the vicious circle theorists stress the need for fixed exchange rates as a way of removing this policy option from undisciplined decision-makers, and thus reduce inflation caused by these vicious circles. This argument is linked to the aims set out by McKinnon, of price stability, full employment

and external balance. With the upswing of inflation and unemployment in the seventies, however, interest has been concentrated on resolving inflation.

At the basis of any discussion of inflation and unemployment, or rather, inflation versus unemployment, lies the significance of the Phillips Curve. The Phillips Curve shows that the rate of unemployment and the rate of change of money wages are negatively correlated.In short, there is a negative trade-off between unemployment and inflation. The choice for governments is to accept less inflation and more unemployment or less unemployment at the cost of increasing inflation. There has, however, been a great deal of literature which deals with the real impact of the Phillips Curve in the longrun. Many authors argue that there really is no long-run trade-off between unemployment and inflation. [18] If this is so, in the case of open economies that possess little or no money illusion and that are extremely vulnerable to external shocks or disturbances, the solution may have to be fixed exchange rates. It would be extremely difficult for the national authorities to be highly disciplined and refrain from using the exchange rates to redress payments disequlibrium, even if only so in the short-run. This is certainly not the political case, where national authorities experience strong pressures from their electorate to intervene in some way to fight rising unemployment, and hence, policy-makers are somewhat forced to intervene in the natural adjustment process of the economy.

One need look only at the effect the oil shocks of 1971 and 1973 had one the Western European economies. Not only did all the prices of imports increase, but in addition, the price of production inputs fuelled inflation. It was difficult to arrest this inflationary cycle, particularly in countries such as Italy and Britain, where negative balance of payments positions led to only greater deficits and rising unemployment. Authorities intervened in the economy with artificial solutions to the problem of unemployment through the use of accommodating monetary policies that gave rise to vicious circles and continuous devaluations. Accommodating monetary policies were blamed for the vicious circles. In this way, fixed exchange rates could be seen as one method, in conjunction with others, to insulate economies from both imported and domestically produced inflation.

It is important to point out, however, that McKinnon's analysis was based on microeconomic disturbances rather than macroeconomic ones. He was looking at the effect of flexible exchange rates and the elasticity of foreign demand for and supply of goods. Under fixed exchange rates high elasticities reduce the change in the domestic price level needed to effect adjustment, thereby substituting for wage and price flexibility.

High elasticities tend to reduce labor union power and the industrial "patronat" power. With fixed exchange rates and

high elasticities, the private sector is stimulated to adjust wages and prices automatically according to changing competitive pressures, and the level of these prices and wages will tend to diverge the least possible from the levels that maintained full or maximum employment in that region. However, the majority of the EEC countries do not possess wage and price flexibility due to the existence of various price-wage indexation mechanisms. If the impact of these indexation mechanisms were reduced, high elasticities could become an important tool of substitution for the national authorities, rendering fixed exchange rates more efficienty.

In contrast, the vicious circle relies heavily on macroeconomic disturbances, even though the two schools of thought both argue in terms of the lack of money illusion and openness of an economy. Finally, McKinnon writing in 1963, did not concern himself with macro economic disturbances springing from abroad; that is, he implicitly assumed that price stability prevailed in the rest of the world: he was to be proven empirically wrong.

Kenen (1969) offered an interesting contraposition to McKinnon' s openness argument. Agreeing with the logic and theoretical validity of Mundell' s criteria of factor mobility, he disagreed with its practical application, pointing to how real factor mobility does not prevail in the real world and that, therefore, one needed other criteria of analysis. Kenen' s

motif was the diversity of production in the economy. [19] The proposition stands thus: economies possessing high degrees of product diversification may opt for fixed exchange rates while economies with a low product mix need and should maintain "flexible" exchange rates. In the case of an external shock under fixed exchange rates, a well-diversified economy (diversification defined in term of import-substitution) [20] can substitute an exchange rate change with a factor shift (capital and labor) from the declining industry (i.e. the industry that is losing demand due to the shock) to the rising industry (i.e. the industry to which demand is being diverted). Not only would the shift of factors of production occur, but in addition, any unemployment that may result would ony represent a very small proportion of the total working population of the nation and therefore not constitute a heavy economic burden. In short, "product diversification always serves to shield the labor from this class of [external] shock." [21]

Conversely, an economy with a low degree of product diversification would experience a severe increase in unemployment that could not be shifted to another industry. The unemployment occurring as a result of a shock or disturbance to the system under fixed exchange rates would inflict unacceptable damage to the economy.

Kenen's approach presents us with two problems. First of all, it implies that labor in a well-diversified economy is

homogenous; that is, that workers possess identical skills and/or that industries require identical skills, thus allowing for a shift of labor from one industry to another. This is unlikely because if a nation is well-diversifed -- and diversification is defined in terms of import-substitution -- it would seem rational to assume that diversification represents a variety of different industrial sectors requiring varying divergent skills and know-how in order to produce import-substitution goods. Secondly, Kenen's position contradicts completely McKinnon's "openness" argument. In his criticism of Kenen, McKinnon has pointed out the non-optimalty of Kenen's prescriptions for a currency area. [22] A well-diversifid economy tends to be very large and with a small foreign trade sector -- therefore, closed. Therefore, what Kenen is prescribing is that large, closed economies should adopt fixed exchange rates while small,not well-diversified economies (with large foreign trade sectors and hence, very open) for flexible exchange rates. This seems to be decidedly non-optimal inasmuch that a large economy with a small foreign trade sector representing a small proportion of GNP is not as vulneable as small open economies to the negative effects of using flexible exchange rates as a form of payments adjustment. Yet Kenen's model prescribes that these larger economies pursue monetary and fiscal policies to maintain external balance. Flexible exchange rates for small open economies are only an illusory alleviation of the problem of redressing the terms of trade.

Kenen, though conceding that this point constitutes a main counter-argument to his model, finally dismisses it as weak. [23] The differences in prescription between McKinnon and Kenen are also due to the difference in what they analyze as being the source of disruption to the economy. McKinnon bases his propositions on internal shocks as the source of the problem, while Kenen sees adjustment necessary due to external shocks. For Kenen, flexible exchange rates allow an economy to insulate itself from outside disturbances. If foreigners are less adept at economic management or more prone to err, flexible exchange rates are much to be preferred to insulate a stable domestic economy from another country's errors.The problem with this type of logic in application to international monetary relations is that optimality of a system has always to be judged from a global point of view, because a small open economy may be insulating itself from its neighbor's errors by using flexible exchange rates, but it is also compounding the consequences of those errors; and if fixed exchange rates allow a large economy to diffuse its own mistakes, it also inflicts these same mistakes on its trading partners. In addition, one could argue that open economies are, in the end, more prone to being unstable and therefore have difficulties pursuing a flexible exchange rate policy, while large closed economies tend to be more stable and worry-free under flexible rates.

Clearly, exchange rate movements are generated by a lack

of confidence in a national currency or as a result of some external shock. Lack of confidence is linked to various economic and political factors. France experienced three large and painful devaluations since the election of the Mitterrand and Socialist government. Capital flights took place as investors wanted to avert losses that might accrue through nationalization and other economic policies the Mitterrand goverment had promised to pursue. Italy's political instability and chaotic monetary policy of the early seventies distinctly discouraged investments in Italy, and contributed to massive capital flights abroad. On the other hand, Germany has experienced appreciations as a consequence of capital flights from other countries, dollar instability, and confidence in its consistently stable and anti-inflationary economic policy. Devaluations in a country tend to become a self-fulfilling process: that is, as lack of confidence may give rise to devaluations, those very same devaluations generate more lack of confidence.

Ingram (1969) [24] further underlined the implicit concept in Mundell's model of financial integration. Ingram called for a high degree of financial integration in order to establish am optimum currency area. Integration of financial markets would ensure perfect capital mobility which would obviate the need for exchange rate fluctuations, as capital would move as a response to fractional changes in the interest rate. In this case, the interest rate differentials would act as the equilibrating factor within an optimum currency area, with

financial integration reducing capital flows.

While it is generally agreed that capital is highly responsive to attractive interest rate differentials, the establishment of a fixed exchange rate regime as within a currency or optimum currency area can actually force national decision-makers to impose exchange or capital controls, thereby building up major undesirable obstacles to capital flows. Therefore, the promotion of financial integration may be severely hindered by a decentralized single currency area. That is, if a single currency area does not set up a centralized monetary authority controlling tha supply of money and interest rates, national authorities may move to implement stringent capital controls in order to arrest capital outflow that put a great deal of strain on the national currency, and consequently, pressure on the national authorities to dip heavily into their reserves and intervene in order to maintain the exchange rate level.

As far as private sector short-term capital movements are concerned there is already a large measure of integration of money markets across the exchanges, though, because of low transaction costs and the international importance of the dollar, this integration has tended to be on a world scale as on a community scale. Unfortunately, <u>complete</u> capital mobility within the EEC has been restricted <u>and</u> has been a reflection of the problem nation-states encounter by the establishment of a

fixed exchange rate regime. In March 1983, the Mitterrand Goverment in France was forced to impose extremely harsh exchange and capital controls on its citizens due to the increasing burden on the Central Bank to intervene in the exchange market in order to save the Franc. This illustrates clearly the dilemma confronting a nation-state when becoming a member of a currency area, while pursuing incompatible national economic policies which undermine confidence in the national currency. Therefore, though it may be desirable to remove all exchange restrictions -- a necassary pre-requisite of financial integration -- it must be kept in mind that capital mobility is not compatible with a fixed exchange rate system that is not governed by one monetary authority. The kind of cost and trade-off that nation states must incur in order to set up a supra-national authority is a major consideration analyzed in further detail in the next section on the costs and benefits of an optimmum currency area.

Critics of Ingram have argued that financial market integration is not likely to happen as long as "no large stock of internationally acceptable finance assets" exist. [25] However, there is no chance for any financial assets to exist in large amounts unless confidence is borne out of financial market integration. In addition, critics have further argued that Ingram's proposition does not make the crucial distinction between financing and adjustment of payment. [26] That is, if

capital flows were to be the equilibrating factor in an optimum currency area, the adjustment in the balance of payments would not be real. Capital flows would be a form of borrowing and real adjustment would be postponed.

However, though Ingram's model leaves much to be desired and does not present a viable criterion for establishing an optimum currency area, it does give rise to some fundamental questions on the nature of the optimum currency area, its evolution, its goal. Ingram was describing a much more dynamic concept that pioneered by Mundell. Its dynamism stems from view of an optimum currency area as one part of the whole procedural machinery of attaining integration. Mundell addressed the issue of what criteria or conditions constituted an optimum currency area. Ingram's proposition goes futher than just establishing fixed parity criteria; it calls for a full-fledged monetary integrationist process. From an arrangement based on convenience and economy, Ingram presents a picture that is much more complex. Integration is a word that starts to creep through the literature and gives rise to other possible alternatives, alternatives that were to be significant in relation to the events taking place in Europe and the European desire to shield itself from capricious American monetary behavior.

Corden (1972) [27] in his famous essay on monetary integration discussed the costs and benefits of forming a monetary union. He made a distinction between two types of

unions: the pseudo-union and a real union. The pseudo-union, to Corden, is the monetary arrangement of fixed parities that we have discussed so far, while a real monetary union calls for full monetary and financial integration in the currency area. Relating his theoretical propositions to the EEC, he attempted to give a framework of conduct for countries envisaging eventual integration.

He goes some way in agreeing with McKinnon on the openness argument and on the lack of money illusion. [28] In the first case, a very small open economy will wish to fix it exchange rate to its main trading partner since the inhabitants of the open economy would prefer to hold the foreign currency. He also agrees that the lack of money illusion given impetus to the fixed exchange rate decree. In addition, he gives some validity to Mundell's factor mobility element inasmuch that factor mobility does make it less necessary to adjust real wages in response to demand and supply conditions. As he puts it, "the more mobile labor is within the union, the less the costs of an exchange-rate union." [29] But Corden still considers that "labor mobility is an inadequate substitute for exchange-rate flexibility, though it certainly reduces the costs..." [30]

Haberler (1970), Fleming (1972) and Magnifico (1971) [31] have added to the theory of optimum currency areas and monetary integration by stating that the establishment of a fixed parity system requires some degree of policy integration. This policy

integration allows nations to sustain some difficult strategies that need to be implemented if the system is to function. One important aspect of forming a currency area is that the members must have the same "propensities to inflate" [32] quite a sophisticated concept and a very difficult one to implement. As long as the inflation rates and behavior of the countries are steeply divergent, this will constitute an obstacle to maintaining fixed parities. These authors argue that if nations have divergent propensities to inflate then it will be extremely difficult for them to have some form of policy integration and maintain any permanent type of monetary arrangement.

Essentially this entails a great deal of convergence in national economic performance. It is true that countries with deficits and high inflation will be under pressure to deflate, while surplus countries will be under pressure to inflate their economies. However, economic convergence relies on finding ways to bring states up to the same level of economic and regional development. Again, the problems envisaged are at the macroeconomic hevel, but this is a more practical and political approach. Differences in inflation rates are seen as caused by structural differences, political differences (parties that may be strong or weak vis-a-vis trade unions) and regional differences.

Exasperation of these differences takes place as national authorities pursue different national policies that seem to

serve their direct interests, but as is the case of Europe, the degree of interdependence of these nations is so high that a continuing trend of divergent economic performances only harms further each national economy. Furthermore, if Europe is trying to achieve some form of cohesion through a monetary arrangement it needs to pursue converging economic policies, not only due to the monetary arrangement in itself, but also as a means of avoiding the further exasperation of the interregional differences of the continent. If not, surplus countries or regions will just have to finance the deficits of the regions trailing behind. Up to now, the deficit country has always carried the burden of adjustment but contemporary international events are starting to force surpus countries to feel the sting as well.

Policy integration therefore requires full consensus amongst the partners -- and this is not only so for inflation, but applies equally well to freeing labor and capital mobility, to the avoidance of all customs duties. Finally, policy integration reaches its climax when the nations share the same particular goal. (A general goal can only lead to vaguenness.)

Policy integration as a means of forming an optimum currency area envisages that this area should eventually evolve into a single currency area. It may do so in two ways: either simply adopt one major currency as the currency or create a parallel currency formed by a basket of the area's currencies.

The first option can be almost automatically eliminated since national authorities, which have already difficulty in accepting a supranational power as the EC, would rebut any proposal to give up their monetary sovereignty in exchange for a currency of another country, thereby submitting to the monetary decisions of that nation. In addition, all segniorage benefits would accrue to that nation. The second option, though more viable, also has faults. First of all, a parallel currency based on a basket of the members' currencies would suffer from the weaknesses of its weak currencies. It would be doubtful whether confidence could be generated in this type of currency that is so complicated to exchange and reliant on unpredictable monies. In addition, a parallel currency of its kind would require that true financial market integration has taken place. Exchange controls would have to be eliminated and full convertibility assured. This gives rise to another question: would the parallel currency be solely for Central Bank use or would it also be available to individuals? If the latter should be the case then the problems multiply. If full convertibility (and equal convertibility) is not established, an individual wishing to cash this parallel currency in Paris after having bought it in Bonn will not be sure that the initial and final value is the same minus transaction costs. In addition, a parallel currency needs to be issued by a central authority that is capable of both issuing the money and controlling its supply.

The concept an optimum currency area as an integrationist policy is to be seen as the natural consequence of both the pressures borne from the contemporary events and of the idea to create a fixed exchange rate system.

One must make a distinction between what was originally conceived as an optimum currency area and what has become the concept of an economic and monetary union. Mundell pioneered an economic concept, simple though it was, that envisaged an area comprising a group of countries whose currencies are linked through fixed exchange rates. As theories multiplied, an optimum currency area was implicitly seen as constituting a monetary union which not only implied fixed exchange rates but also common economic, fiscal an monetary policies, as well as a common currency. [33] It is crucial to draw this distinction in attempting to assess the viability of an optimum currency area to particular economies. First of all, an optimum currency area consists of countries which are not at the same stage of economic development but which aim at achieving a high degree of economic convergence; secondly, a monetary union implies heavier costs than does an optimum currency area, costs that may be so overwhelming that no amount of benefits could offset these costs.

Convergent economic policies needed to maintain monetary stability stability seem to be the logical springboard for pursuing integrationist policies. But is this in fact true? A

cost/benefit analysis may reveal that in the case of joining an optimum currency area, the costs are either outweighed by the benefits or constitute acceptable losses in the pursuit of a common goal, while, conversely, the formation of a monetary union may present extremely high costs to individual nations that would override any desirability for the attainment of a common goal.

Therefore, in order to assess such a process, it is necessary to analyze the costs and benefits an optimum currency area presents to national economies. It is obvious that for nations to join a currency area, the benefits must outweigh the costs, or if not, that fixed exchange rates are a better form of monetary relatiouship than flexible exchange rates. Hence the question: for what types of countries or under what circumstances is one arrangement or the other more likely to be better? [34]

The following cost/benefit analysis looks in closer detail at what effects fixed or flexible exchange rates have on small, open economies.

Costs and Benefits

Ishiyama (1975), Tower and Willett (1976) [35] have made major contributions to this type of literature on the theory of optimum currency areas. Rather than simply proposing a criteria by which to establish a currency are, they are more concerned

with explaining why nations would want to join. Again, the analysis is predominantly economic and, in this way, is also limited. However, the analysis is still relevant and, in fact, gives more significance to the political aspect.

Benefits

The benefits of an optimum currency area arise from:

1) the maximization of the usefulness of money as a medium of exchange, store of value, unit of account, standard of deferred payment and as a means of efficient resource allocation;

2) the elimination of speculation;

3) the saving on exchange reserves;

4) risk-pooling; and

5) acceleration of fiscal integration.

Johnson encapsulated the benefits accruing to nations from a fixed exchange rate regime as follows:

> "(a common currency) ... simplifies the profit-maximizing computations of producers and traders, facilitates competition among producers located in different parts of the country, and promotes the integration of the economy into a connected series of markets, these markets including both markets for products and the markets for the factors of production."[36]

In an optimum currency area, a common money will serve as a universal medium of exchange, where transaction or conversion

cost are reduced, if not eliminated altogether. When currencies are rigidly pegged to one another with perfect convertibility, forward cover is eliminated because exchange rate changes are eliminated with the assurance that spot and forward rates will be equal. At the same time, a common currency is a good store of value because the price of commodities will not be affected by changes in the exchange rates (ignoring inflation).

The smaller and more open an economy is, the more the usefulness of a single money increases. Under flexible exchange rates and floating currencies, money loses its usefulness as a means of exchange as conversion costs increase, as spot and forward rates cannot be predicted thus requiring forward cover arrangements.

This argument loses somewhat its force in the context of efficient forward markets, within which transaction costs can be considered to be negligible. However, in view of the experience of the seventies, in which period western economies were subjected to sudden oil shocks and internal monetary disturbances, forward markets fell prey to both overshooting and undershooting of exchange rates (as in the case of Italy and Belgium) which was further exacerbated by speculative movement in the exchange market. Therefore, fixed exchange rates present a relatively more efficient way of reducing costs, and becomes an attractive, if not overriding consideration in joining an optimum currency area. In addition, a fixed exchange rate regime

will stimulate greater allocative efficiency at the microeconomic level, as it gives impetus to larger, more efficient markets for capital, goods and services. [37] As allocative efficiency increases so does the interdependence of the economy, thus giving rise to eventual integrationist policies.

A common money also inhibits speculation. Small, open economies are particularly susceptible to private speculation due to their thin exchange markets. [38] Under a flexible exchange rate system, a nation that suffers from a lack of confidence in its currency, will also suffer from speculation against that currency in favor of a stronger one. It is in this way that doubts arise about the EMS. It is a fixed, but adjustable exchange system, which does <u>not</u> gurantee that speculation will be avoided. On the contrary, the case of the Franch franc in 1982 and the German case immediately before the 1983 federal elections illustrate how speculation still affects these national currencies. It was also in this way that the Bretton Woods system did not represent a single currency system (and in fact, has been described in the beginning of this section as an imperfect currency area formation around the dollar). Hence, it is a truly fixed exchange rate system, a currency area with a single money, that inhibits speculation simply because there is no other available currency in which to speculate. It is then to be seen whether the EMS is effective in inhibiting speculation through the use of the ECU, a parallel

currency -- an issue addressed in the third chapter of this thesis.

A major argument against flexible exchange rates has been presented by the "vicious circle theory." In the face of highly undisciplined policy-making, flexible exchange rates cease to be the viable instrument for adjusting the balance of payments disequilibrium, but rather become a tool for increasing inflation and unemployment. Though vicious circles can be generated by shocks or forces beyond the control of the authorities, this type of anti-flexible exchange argument implies a basic mistrust of national decision-makers' capacity for self-discipline and control in not using exchange rates movements but rather pursuing stringent contractionary monetary policies. However, accommodating monetary policies, such as price-wage indexation which is widespread in one form or another in Europe, guarantees an "import pass-through effect" of devaluations. [39] Of course, the lack of discipline stems from national policy-maker dilemmas of either satisfying short-term electorate demands or pursue more painful long-term contractionary policies. Therefore, this line of argument sees flexible exchange rates as a dangerous tool in the hands of politicians, an the establishment of fixed exchange would remove the possibility of decision-makers creating vicious circles.

On the other hand, the removal of this policy option may arrest vicious circles, but does not guarantee that

undisciplined policy-makers will not enact other undesirable processes such as, for example, Stop-Go programs. Decision-makers do not automatically become disciplined because flexible exchange rates are not a monetary tool any more; on the contrary, they may try to offset the painful consequences of fixed exchange rates (unemployment) by implementing short-term economic policies with the view of alleviating interim the problem. However, these short-sighted and short-term programs that are implemented, stopped and re-implemented as circumstances may arise, create a disastrous "hiccough effect" in the national economy which leads to uncertainty, and exacerbation of negative economic performances.

This possibility should not render the vicious circle argument less effective. The problem is, admittedly, of discipline of policy-makers, but fixed exchange rates do serve somewhat to force economic coordination that may act as a source of restriction even on policy induced Stop-Go programs. Under flexible exchange rates, the lack of obligation on the part of national actors to consult each other in one form or another makes it easier for them to pursue economic programs that are both self and community-damaging.

The effects of floating exchange rates on small economies are enormous, when one takes into consideration the following: 1) the degree of money illusion; 2) the elasticity of demands for imports and exports; and 3) the fraction of domestic income

spent on foreign goods.

The lack of money illusion means that domestic consumers are aware of the impact of the exchange rate changes on their purchasing power. Consumers of a small open economy tend to spend a large fraction of their income on foreign imported goods. A negative change in the exchange rate will inevitably affect their purchasing power, reducing their capacity to buy these goods. Since elestiçity of demand for imports is very low in small, open economies, greater exchange changes would be necessary to improve the balance of trade by a given amount of imports or export. Essentially, the lack of money illusion implies that changes in real income through variations in the exchange rate under a flexible sytem, cannot effectively substitute for real income variations through adjustments in its money wage rate or price level, under fixed exchange rates. Advocates of flexible exchange rates have always used this as their classical argument, but the lack of money illusion characteristic of small open economies, invalidates this theory. On the contrary, cost-push inflationary forces are generated.

Another benefit accruing from the formation of an optimum currency area is the saving on the pooling of exchange reserves. [40] By pooling reseves, risk-sharing is extended to all members, and, one country is allowed to run down its own currency holdings, cushioning the impact of its loss by drawing on the resources of other countries until the cost of adjustment

has been efficiently spread over the future. Hence the internal market becomes a shock absorber. In addition, reserve pooling maintains confidence in the common money backed up by these reserves. This is what Mundell terms the "insurance principle." [41]

Reserve-pooling not only means risk-pooling but also gives rise to savings, particularly where intra-area trade exists. [42] Now credit can be easily granted between traders and producers of different areas. This promotes regional trade liberalization, fostering the "international principle," [43] i.e. "the internalization through credit of what was formerly external trade and can be achieved through swap arrangements (or a reseve pool)."

Reserve savings can be netted by channelling direct payments throughout a union rather than by using great financial center. This "inventory principle," [44] of achieving economies of scale by merging financial managements, allow overhead transaction costs to be spread even further.

Furthermore, Mundell outlines three other principles by which reserve pooling yields gains: the joining or fixing of currencies leads to 1) a higher degree of intermediation between the authorities and reduce the risk content of the money; 2) the information saving of only one price quotation of a single currency; and 3) the innovation of money that would be superior

to the previous ones. [45]

A common currency would, therefore, demand a high degree of joint management and intermediation. An important side-effect of a common currency would be a push towards fiscal integration.

Grubel (1973) [46] argues that a commitment of permamently fixed exchange rates renders aggregate monetary and fiscal policy hormonization necessary in order to maintain long-run balance of payments equilibrium. However, it can be arqued that this so-called benefit may transform itself into an enormous hurdle, that countries may not be willing or able to surmount. It is already difficult to envisage the willingness of countries to give up their monetary sovereignty, in order to create a common currency, or even to simply fix their exchange rates; this constitutes a loss of an important tool of payments adjustment.But that nations would subsequently give up their last tool of internal sovereignty is really to shoot for the moon.

Costs

Therefore, the very basis for constituting a common currency, i.e. the handing-over of national supremacy over monetary affairs constitutes the major hurdle and cost of forming an optimum currency.

Loss of monetary sovereignty does not only represent a

danger to democratically-elected politicians; it also means giving up a very important political symbol of independence and power. It has proved extremely difficult for the member states of the EEC to pursue complete integrationist policies in other fields, least of all overcome the problem of national versus supra-national power, particularly in the fields of jurisprudence and customs duties.

Since its inception in 1957, the EEC has pursued negative integrationist policies. That is, member states have been willing to eliminate obstacles, such as trade barriers, but have difficulties over implementing positive policies. The EEC's tendency to remain passive in policy-making is caused by a general disinclination to be bound to policies that would preclude states from exercising national judgement and sovereignty.

The Common Agricultural Policy stands out as the notable exception, as an attempt to pursue integrationist policy. On the other hand, it is also noted for its confusing and chaotic system of subsidies and income deficiency payment. However, this same system had interesting consequences for the establishment of a common currency system in order to avoid distortion of competition and reduce the expenditure incurred by the European Agricultural Guidance and Guarantee Fund (EAGGF) to maintain the price-support system in function.

Politicians are under pressure to respond to internal and

external changes. Politicians have to be willing to accept the trade-off between inflation and unemployment in the short-run. Unfortunately, policy-makers are more preoccupied with short-term effects than with long-run benefits. They may be, for example under pressure to respond to increasing unemployment by implementing accommodating monetary policies, which, in the long-run produce only stagflation and continuous devaluations. It is only when authorities realize that a long-lasting negative trend has set in, that they may opt for another type of monetary arrangement. However, for the trade-off to be acceptable and parallel, the members need to possess a reasonable degree of compatibility between the members toward inflation, growth and unemployment.

The costs of such a trade-off are, in effect, short-run; it has been convincingly argued that there is no long-run tradeoff between inflation and unemployment. However, politicians have to be the ones who believe this. As long as they do not, and as long as the Phillips Curve position of each country is very different, the belief perception of high unemployment costs will persist.

The cost inherent in giving up monetary autonomy can be minimized only if welfare considerations [47] of the global community are considered and if coordination is based on "communitarian" political values. In short, this cost can only be offset by an overriding political commitment, also implied by

the case of abdication of fiscal authority on the part of national authorities.

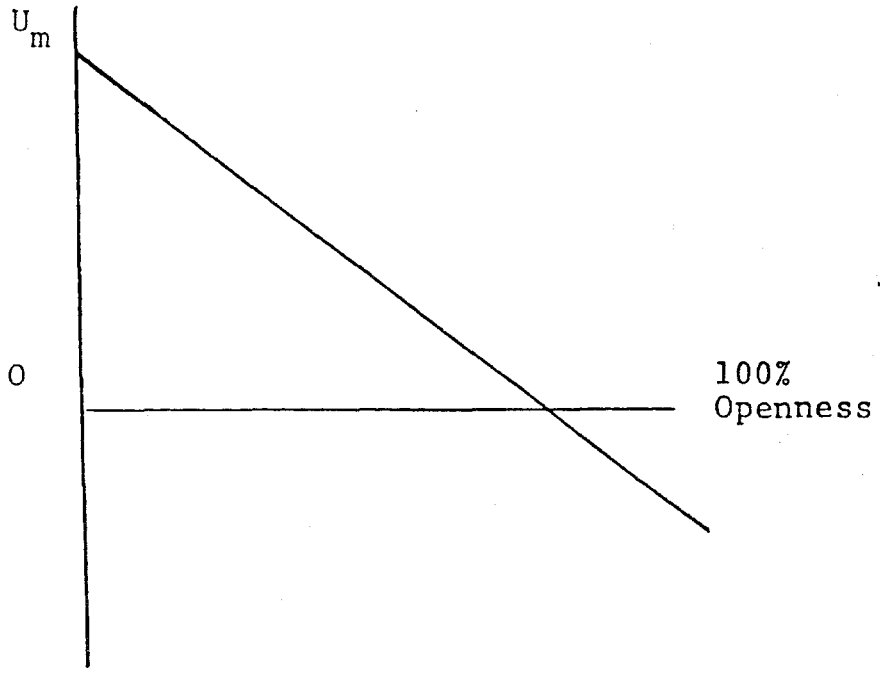
A move from flexible to fixed exchange rates increases the comparative strength of fiscal policy. However, capital mobility is necessary for fiscal policy to possess that leverage, particularly because it dampens the interest changes that would be brought about by government fiscal imbalances. Unfortunately, capital mobility is not free to circulate in the EEC, due to sensitivity to political outcomes, thereby making fiscal policy much weaker.

If exchange rates cannot be used as a means of payments adjustment, and if exchange controls are ruled out, then the only tool that can alter the payments disequilibrium under fixed is a change in the expenditure pattern of residents. That is, the balance of trade can only be improved if real domestic expenditure declines relative to real domestic output; but, in the case of small, open economies, it is impossible to alter real domestic expenditure without affecting domestic output. Hence, domestic activity will be affected by an alteration in the balance of payments. This creates a costly constraint on the balance of payments process. Unfortunately, much of domestic monetary of fiscal policy in payments adjustment is based on "touch-up" or "finely-tuned" changes in short-run policies. [48] This impies again that authorities are interested in short-term results and in the certainty with which effects can be

predicted, rather than the strength or long-run results of a policy. The constraint of both fiscal and monetary policies and on the balance of payments forces authorities to achieve stability in monetary expansion, i.e. strict control of the money supply and control of government budgeting. The former has a positive effect, but the latter entails a radical alteration to the fabric of some national political structures. In small, open and mixed economies, goverment intervention plays an important role. The welfare state has become a mainstay of many national societies. Public expenditure has drastically increased over the seventies. Welfare and social benefits, amongst other things, required a high degree of poblic expenditure; but in order to keep deficits under control, governments have to cut public expenditure and reduce government intervention and aid in the economy. This may become a popular move in the eyes of the private sector, but it certainly would be highly unpopular for the majority of the electorate.

APPENDIX TO CHAPTER ONE

FIG. 1. - Net benefit from the standpoint of the usefulness of money and the efficiency of resource allocation.



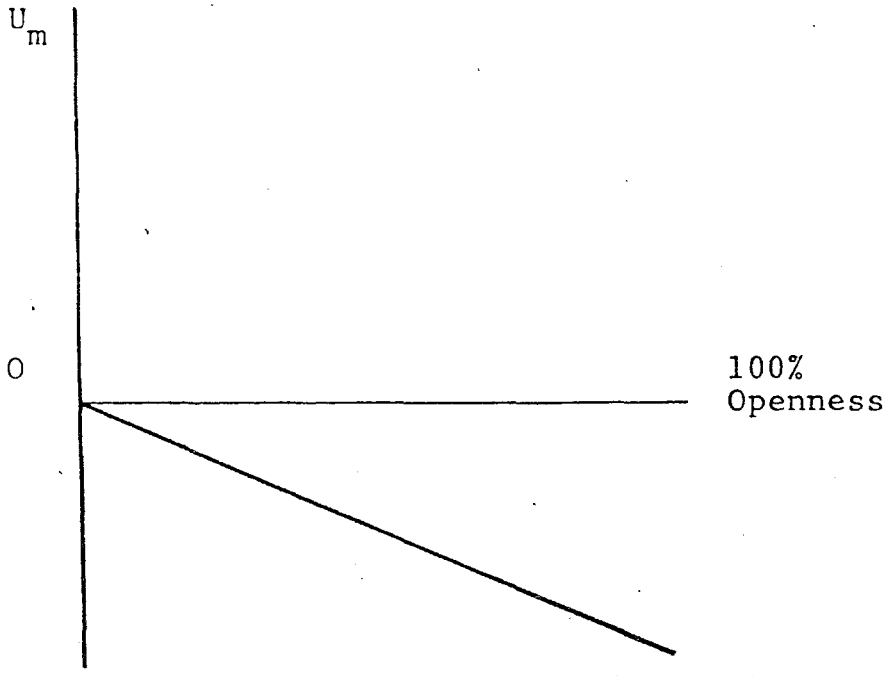
U_m - net benefit associated with switching from membership in a currency area to a system of variable exchange rates.

Openness - defined as ratio of imports or exports to GNP

Net benefits in usefulness of money and efficiency of resource allocation are highest when there is a maximum open economy participating in a currency area.

Source: Edward Tower and Thomas D. Willett: The Theory of Optimum Currency Areas and Exchange-Rate Flexibility. Special Papers in International Economics, N. 11, Princeton University Press; 1976, p. 14.

FIG. 2. - Net benefit from the standpoint of the usefulness of money as a medium of exchange.



U_m - net benefit associated with switching from membership in a currency area to a system of variable exchange rates.

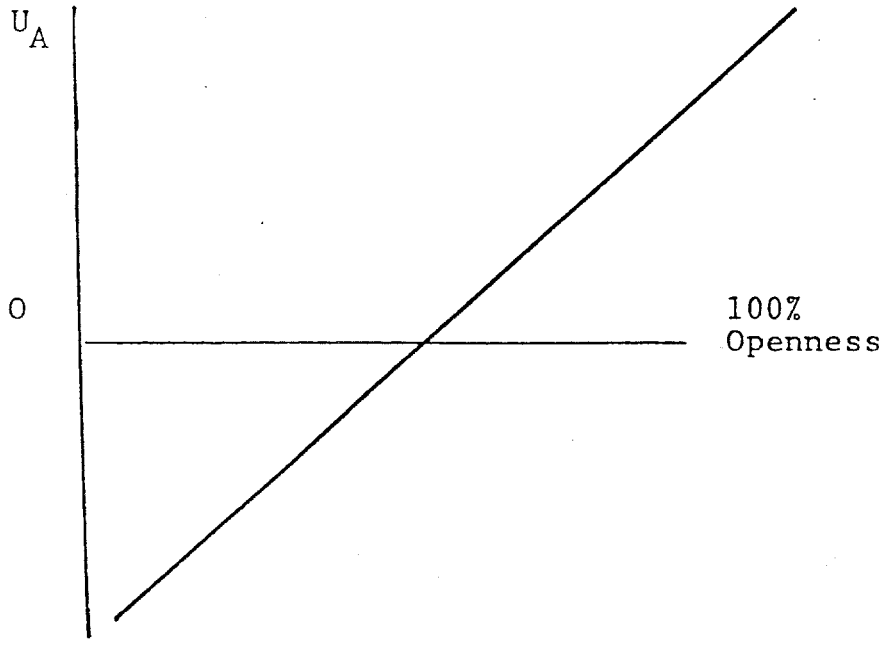
Openness - defined as ratio of imports or exports to GNP

Net benefits of the usefulness of money as a medium of exchange decline for a very open economy participating in a system of variable exchange rates.

- Reflects transaction costs of multiple currency conversions are related to volume of international trade.

Source: Edward Tower and Thomas D. Willett: The Theory of Optimum Currency Areas and Exchange-Rate Flexibility. Special Papers in International Economics, N. 11, Princeton University Press; 1976, p. 14.

FIG. 3. - Improvement in total adjustment efficiency associated with entry into a currency area.



U_A - Benefit derived from the improvement in the adjustment process.

Source: Edward Tower and Thomas D. Willett: The Theory of Optimum Currency Areas and Exchange-Rate Flexibility. Special Papers in International Economics, N. 11, Princeton University Press; 1976, p. 75.

NOTES TO CHAPTER ONE

1) G. Basevi, M. Fratianni, H. Giesch, P. Korteweg, D. O'Mahony, M. Parkin, T. Peeters, P. Salin and N. Thygesen, "The All Saints's Day Manifesto for European Monetary Union," The Economist, November 1, 1975, pp. 33-38. Reprinted in M. Fratianni and T. Peeters, eds., One Money for Europe (London: The MacMillan Press Ltd., 1978), pp. 37-43.

2) Robert A. Mundell, "A Theory of Optimum Currency Areas, " in American Economic Review, Volume 51, September 1961, pp. 657-665.

3) Ronald I. McKinnon, "Optimum Currency Areas," in American Economic Review, Volume 53, September 1963, pp. 717-25.

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

5) Robert A. Mundell, op. cit., 1961, p.661.

6) Ronald I. McKinnon, op. cit., 1963, p. 724.

7) Ibid., p. 717.

8) Ibid., p. 719

9) Ibid., p.719.

10) Ronald I. McKinnon, "Exchange Rate Flexibility and Monetary Policy," Journal of Money, Credit and Banking, Volume 3, May 1971, p. 343.

11) Edward Tower and Thomas D. Willett, "The Theory of Optimum Currency Areas and Exchange Rate Flexibility: A More General Framework, " Special Papers in International Finance, n. 11 (Princeton, N.J.: Princeton University Press, May 1976), p. 17

12) Ibid., p. 17.

13) G. Basevi and Paul De Grauwe, "Vicious and Virtuous Circles and the OPTICA Proposal: A Two Country Analysis," in M. Fratianni and T. Peeters, eds., op. cit., pp. 144-57.

14) See the analysis of the costs and benefits of joining an optimum currency area and how the vicious circle theory has been used as a means of justifying such membership. See Chapter Three, The Case of Italy.

15) Marion Bond, "Exchange Rates, Inflation, and Vicious Circles," IMF Staff Papers, Vol. 27. n. 4, December 1980, p. 679.

16) Ibid., p. 685.

(7) See Morris Goldstein, "Have Flexible Exchange Rates Handicapped Macroeconomic Policy? ", Special Papers in International Economics, n. 14 (Princeton, N.J.: Princeton University Press, June 1980), pp. 18-24, for price effects of exchange rates, in particular Table 2 on p. 20.

8) See Marion Bond, op. cit., F. Spinelli, "Wage Inflation in Italy: A Re-Appraisal," Banca Nazionale del Lavoro Quarterly Review, n. 135, December 1980, pp. 483-487, and Morris Goldstein, op. cit. pp. 32-33, for a discussion on the erosion of the concept of a long-run trade-off between unemployment and the increasing notion of a vertical Phillips Curve shope, and David Laidler, "Monetarism: An Interpretation and an Assessment," The Economic Journal, Vol. 19, n. 361, March 1981, pp. 1-28, for general considerations on the effectiveness of the Phillips Curve.

9) Peter B. Kenen, op. cit., 1969, p. 49.

0) This seems to be an implicit definition in Kenen's article, see pp. 49-54.

1) Peter B. Kenen, op. cit., 1969.

2) See R.A. Mundell and A.K. Swoboda, eds., op. cit., 1969, "Summary of Discussion," p. 112.

3) Ibid., p. 112

24) James C. Ingram, "Comment: The Currency Area Problem," in R.A. Swoboda, op. cit., 1969, pp. 96-100.

25) Yoshihide Ishiyama, "The Theory of Optimum Currency Areas: A Survey," IMF Staff Papers, Volume XXII, n. 2, July 1975, pp. 356-57

26) W. Max Corden, "Monetary Integration," Essays in International Finance, n. 93 (Princeton, N.J.: Princeton University Press, 1972), p. ; Edward Tower and Thomas D. Willett, "The Concept of Optimum Currency Areas and the Choice Between Fixed and Flexible Exchange Rates," in George N. Halm, ed., Approaches to Greater Flexibility of Exchange Rates: The Burgenstock Papers (Princeton, N.J.: Princeton University Press, 1970), pp. 407-415.

27) W. M. Corden, op. cit., 1972, pp. 3-6.

28) Ibid., pp. 12-13.

29) Ibid., p. 15.

30) Ibid., p. 16.

31) Gottfried Haberler, "The International Monetary System: Some Recent Developments and Discussions," in G. Halm, ed., op. cit., 1970, pp. 115-23; J. Marcus Fleming, "On Exchange Rate Unification," Economic Journal, Volume 81, September 1971, pp. 467-88; Giovanni Magnifico, "European Monetary

Unification for Balanced Growth: A New Approach," Essays in International Finance, n. 88 (Princeton, N.J.: Princeton University Press, August 1971), p.

32) G. Magnifico, op. cit., 1971, pp. 11-13.

33) See Corden, op. cit., 1972, pp. 3-6, and Peter Coffey, Europe and Money (London: The MacMillan Press Ltd., 1977), pp. 41-42.

34) E. Tower and T. Willett, op. cit., p. 1.

35) Yoshihide Ishiyama, op. cit., 1975, pp. 359-71, and E. Tower and T.D. Willett, op. cit., pp. 6-26.

36) Harry G. Johnson, "The Case for Flexible Exchange Rates," in G.E. Halm, op. cit., pp. 91-111.

37) Herbert G. Grubel, "The Theory of Optimum Currency Areas," Canadian Journal of Economics, Volume 3, May 1973, pp. 105-116.

38) E. Tower and T.D. Willett, op. cit., 1976, p. 6.

39) Morris Goldstein, op. cit., pp. 18-24.

40) R.A. Mundell, "Uncommon Arguments for Common Currencies," in H.G. Johnson and A.K. Swoboda, eds., op. cit., 1973, p. 127.

41) Ibid., p. 127.

42) See Alexandre Kafka, "Optimum Currency Areas and Latin

American, " in H.G. Johnson and A.K. Swoboda, op. cit ., 1973, pp. 210-12, for a discussion of pooling of reserves.

43) Mundell, op. cit., 1973, p. 128.

44) Ibid., p. 128.

45) Ibid., p. 128.

46) Horbert G. Grubel, "The Theory of Optimum Regional Associations," in H.G. Johnson and A.K. Swoboda, op. cit., 1973, p. 101.

47) For a discussion of world - welfare maximization versus individual resident welfare maximization, see H.G. Grubel, ibid., pp. 99-113.

48) Tower and Willett, op. cit., 1976, p. 19.

Chapter Two

THE PROCESS OF EUROPEAN MONETARY INTEGRATION

Notwithstanding all previous failed attempts at some form of stable monetary arrangement within the EEC, the establishment of the European Monetary System on March 13,1979, constitutes a landmark in the history and evolution of both EEC objectives and the international monetary system. In fact, it is impossible to study the EMS without taking into consideration the history of Economic and Monetary Union (EMU) and the backdrop of the economic developments of the seventies.

The EMS is the fruit of a process that has been developing for several years. While EMU and the EMS are not the same, the EMS can only be properly understood if it is to be seen within the context of a long-term trend towards the emergence of a monetary block.

In the seventies, four distinct approaches to EMU were advocated: [1] the "big-leap" approach, the "step-by-step" approach, the "snake" approach, and the "parallel currency" approach. Each approach implied a different speed for completion of the process and presents different economic and political

implications.

The "Big-Leap" Approach

The first approach advocated the establishment of EMU in one "lig leap" [2] i.e. all at one time. This meant setting up a Central Bank which would take over the foreign exchange reserves of the member countries, while acquiring at the same time the sole right to create money. This once-and-for-all jump constituted a decisive and irrevocable transformation of the monetary sytem. It argued against the need for gradualism, thus by-passing the uncertainties and frictions that would be generated by a gradual approach. Needless to say, this approach did not prove politically feasible and was immediately shelved.

The "Step-by-Step" Approach

EMU had reached a high point at the Hague Summit of December 1969, when the heads of the member states of the EEC decided to adopt it as the long-term goal of the Community. This led to the establishment of an ad-hoc committee, presided by Pierr Werner, Prime Minister of Luxembourg, to help to plan economic and monetary integration. On October 8,1970, the Committee submitted to the EEC Council and Commission, a Report on the realization by stages of economic and monetary union in the Community, otherwise known as the Wernel Plan. This Plan envisaged the attainment of a monetary and economic union

through a gradual process whereby total and irreversible convertibility of currencies, the elimination of margins of fluctuations in exchange rates, the irrevocable fixing of parity rates and the complete liberation of movements of capital would be established. [3]

In March 1971, the governments of the member states adopted the main short-term proposals put forward by the Werner Plan, without, however, endorsing its more far-reaching longer-term political implications. Their commitment centered mainly on the gradual reduction of exchange rate fluctuations between the member states' currencies. The other conditions set forth by the Werner Plan were criticized as being too ideal, if not premature.

The "Snake" Approach

While the major world currencies were preparing in 1972-73 for the changeover to unrestricted floating the Member States of the Community were attempting to limit the margin within which their currencies were allowed to deviate from one another, to 2.25%. The intention was to underpin monetary cohesion within the Community.

The member states were to be given a yardstick against which they would be able to assess their economic policies. A coordinated stabilization policy was to be pursued to ensure

that the margin of only 2.25% was observed against a background of generalized floating of currencies.

In practice, however, not all member states were able to live up to the highly ambitious objective underlying the Community exchange rate system at a time of hectic fluctuations in the world's currencies, particularly the dollar. In the course of time, the United Kingdom and Ireland (June 1972), Italy (February 1973), France (January 1974 and, after re-entering for a short while, again in March 1976), and the associated non-member countries, Sweden (August 1977) and Norway (December 1978), withdew from the snake. [4] The member countries that belonged to the snake on the eve of the changeover to the EMS were the Federal Republic of Germany, Denmark, Belgium, the Netherland an Luxembourg.

The joint float of 1973-79 had achieved some success in avoiding totally free floating exchange rates for very small open economies such as Denmark and the Benelux countries. However, the joint float had suffered from one fundamental weakness: the political will, necessary for success, had been absent. Member countries had had little inclination to modify national policies, preferring to pursue narrow self-interested policies at the expense of wider Community objectives. The snake had been able to protect, somewhat, the European economies from the dollar volatility, but it had not been successful in keeping its members together. The float had really given rise to a

two-tier currency sytem of stronger versus weaker currencies. The economic performances of the participating countries were too divergent to promote cohesion amongst the member states. This also led to the implementation of protectionist measures in the weaker currency countries as a means of protecting their weak balance of payments position vulnerable to capital flights.

In 1975 the Marxolin and Tindemans Reports pointed out the lack of membership cohesion and argued for a more communitarian type of snake or monetary arrangement. The snake had been left in the hands of Central Banks, rather than requiring Ministerial intervention and coordination, while no rules and guidelines had been laid down for the role the EEC Commission was supposed to play, in this way lacking a real connection to the Community.

The snake fell apart by 1979, particularly as it was not capable of withstanding the free fall of the dollar. The DeutscheMark got the brunt of the currency flights from the dollar, pushing its exchange rate upwards and, consequently, producing further tensions in its relationship with the weaker currencies. The snake was simply not able to meet the demands such a problem posed. As a consequence, there was a tendency for enthusiasm over EMU to wane, and for commitment to experiment, to weaken.

The "Parallel Currency" Approach

The fixing of exchange rates had been at the heart of all the proposals as a way of attaining a single form of currency but there still remained controvesy over the form this single currency would take. In 1975, two publications made substantial contributions to the problem of European monetary integration and its optimality as a currency area. One was the OPTICA Report (1975), [5] a study, commissioned by the EEC, which convincingly argues for the creation of a new currency. The other was an article appearing in the November 1st, 1975, issue of The Economist, entitled " The All Saints' Day Manifesto for European Monetary Union." [6]

The group of economists that penned these writings criticized the previous approches for basing EMU on coordinated decision-making, thus rendering it a non-automatic process placing reliance on political discretion. Though they conceded that the process needed to be gradual, so as to avoid resurgence of negative nationalist feelings at the loss of monetary sovereignty, these economists argued that monetary integration could be truly brought about only through the use of market force. "The All Saints' Day Manifesto" sets out a framework within which a parallel European currency, the Europa, would be created. [7]

The Europa would guarantee constant purchasing power to its holder, and would freely circulate along with the already

existing European currencies. Its purchasing power would be kept constant by indexing it to the inflation rates of the national member currencies. The Europa would revalue against a basket of national currencies in proportion to the erosion of each currency's purchasing power due to national inflation. This new currency would be available for both private and official use, thus becoming a competitor to other national currencies.

This approach envisages the eventual replacement of national currencies with the use of the Europa, particularly as full confidence is automatically created in the currency unit, through its built-in feature of guaranteeed constant purchasing power. The proposal clearly implies the eventual removal from the governments of the power to print money. The Europa reduces the likelihood of governments imposing the inflation tax through their national monies, which is a taxation without representation. In effect, these economists convincingly argue that it is smarter to attempt to reduce inflation than to eliminate it altogether, particularly when the latter task is quasi-impossible from a practical point of view. [8] Therefore, monetary integration becomes linked to monetary reform.

The concept of monetary reform called for a change in the path that European economies had followed so far. The Europa was to be tool through which these economies would be able to control and close the gap between their inflation rates. It

would serve to force national policy-makers to pursue less inflationary internal policies, to restore some stability and confidence in their economies in order to to be ousted from the currency makets by the competiton of the Europa. The only way, however, that national monies would be able to survive the onslaught of the Europa in the long-run would be by offering high interest rates on their currency deposits. In this way, investors could choose to diversify their portfolios and hold interest-bearing deposits.

The "parallel currency" approach has been criticized as being "too attractive," a "non-starter" and "brilliant." [9] In fact, the proposition is too attractive and is too quick to attack the other approaches for a weakness it possesssses itself, even if in a more covert fashion. The Europa's mechanism seems to be so attractive that, inevitably, there will be a change from current use of national money to use of Europas. So far, so good; but is it true that this process depends on <u>automatic market forces?</u> While this process may guarantee automaticity and the use of market forces <u>after</u> it has been implemented, it still presupposes political will on the part of national governments to pursue "full-fledged" monetary reform. [10] It presupposes national consent to the free circulation in private and official use of this new currency. Linked to the creation of this unit, is the recognition of a supra-national monetary authority.

It seems we are back to square one. The signatories of the manifesto attempted to find an approach based on free-market philosophy to replace a vulneable politico-economic approach; but they failed. They failed because they did not recognize that any type of monetary reform and change will always require political will and consensus, which will always initially call for political coordination, negotiation and compromise. In addition, these signatories are guilty of the same sin as previous EMU advocates: they all possess an impatience in seeing this process take place in the short-run, in a short span of time. Even the gradualistic approach sets very short time periods for transition phases. This is a blindness to the demands of political and economic realities of the Community. This is not to argue that an EMU process should take place over an infinite time span -- conditions do change -but rather it is necessary not only to correctly assess the element of disruption -- as has been done so far -- but also to astutely identify their time equation for solution.

General Community Considerations in the Establishment of the EMS

Implementation of the stage-by-stage plan for creating an economic and monetary union out of the Community did not prove possible during the 1970s. The difficulties the individual

member states had to contend with showed, however, that economic and monetary union had not become less important but even more essential than before. Growing community interdependence, increasing inflation rates and exchange rate volatility vis-a-vis the dollar constituted solid economic reasons for attempting to implement a fixed exchange rate system.

The year 1977 witnessed a revival of interest in EMU, as the President of the EEC Commission, Mr. Roy Jenkins, called for a new debate about monetary integration. [11] The following year, France's President, Giscard d'Estaing, and Germany's Chancellor, Helmut Schmidt, collaborated in drawing up plans for the establishment of what was to become the EMS, an arrangement ensuring a "zone of monetary stability." [12] Though negotiations took place both at the technocratic and political level, the EMS is fundamentally a political event. [13] The Heads of State chose to implement the EMS.

What is striking is that, despite the previous failure of the snake and the excessive optimism and idealism of other advocated approaches, national decision-makers were still keen to experiment with fixed exchange rate regimes. Ironically, it is not despite the past record of instability, but because of the past record of instability that the heads of state felt most urgently the need for some kind of monetary reform in terms of fixed exchange rate, that would reflect a more communitarian approach.

With more than half of their emports and exports coming or going to their Community partners and with foreign trade accounting for about one quarter of the Community's national product, the member states are heavily dependent upon one another. [14] In some member countries (Ireland, Belgium, the Netherlands and Luxembourg), the share of foreign trade actually exceeded 50%, while the figure for Denmark was 33%. In Germany and the United Kingdom this figure had ries to just under 30%, in Italy it was around 25%, while in France it was 20%. A quarter of the manufactures, farm products and services produced by the Community are exported.

This crucial 25% of Community income was highly vulnerable as long as currency exchange rates could fluctuate sharply enough to price a country's products out of foreing markets altogether. The fact that member states already carried out such a high degree of intra-EEC trade reflected a high degree of mutual reliance. [15]

In fact, the Common Agricultural Policy (CAP) of the EEC was a major victim of the currency crisis of the post Bretton-Woods period. When member states changed their currency parities, or the central exchange rate, it became necessary to set up a system which would override the deflective effect of this on trade in agricultural produce, so as to avoid any distortion of competition. The CAP had brought common prices, community financing of the price-support expenditure, and

structural improvements. There had, therefore, to be a common denominator for the currencies of the Six and later Ten member countries. It was for this reason that the Community's unit of account was introduced in 1962, a fictitious currency, or better a standard of measurement the value of which was defined by reference to a weight of 0.88867088 grams of fine gold (which corresponded at that time to the gold parity of the American dollar as declared by the IMF).

Since each of the national currencies in the Community had a declared parity in the books of the IMF, it was possible for prices fixed in units of account to be converted, the earnings of each participant assessed and collected and the expenditure refunded. The system was, however, put into a state of disorder by the successive changes in exchange rates occurring within the Community from 1969 onwards.

In theory, when any country revalues its money, the price of its farm produce expressed in its national currency -- but fixed, of course, in the unchanged unit of account -- should normally decrease to the same extent. By the same token, when the national currency is devalued, these same national prices should normally increase. The majority of the EEC member, wishing to protect their producers (e.g. Germany, Benelux) or consumers (e.g. the United Kingdom) were unable to bear the consequences of this phenomenon. This led to the introduction of rates of exchange for the agricultural unit of account into

national currencies which differed from the rates quoted on the exchange markets, these new rates becoming known as the representative rates or green rates.

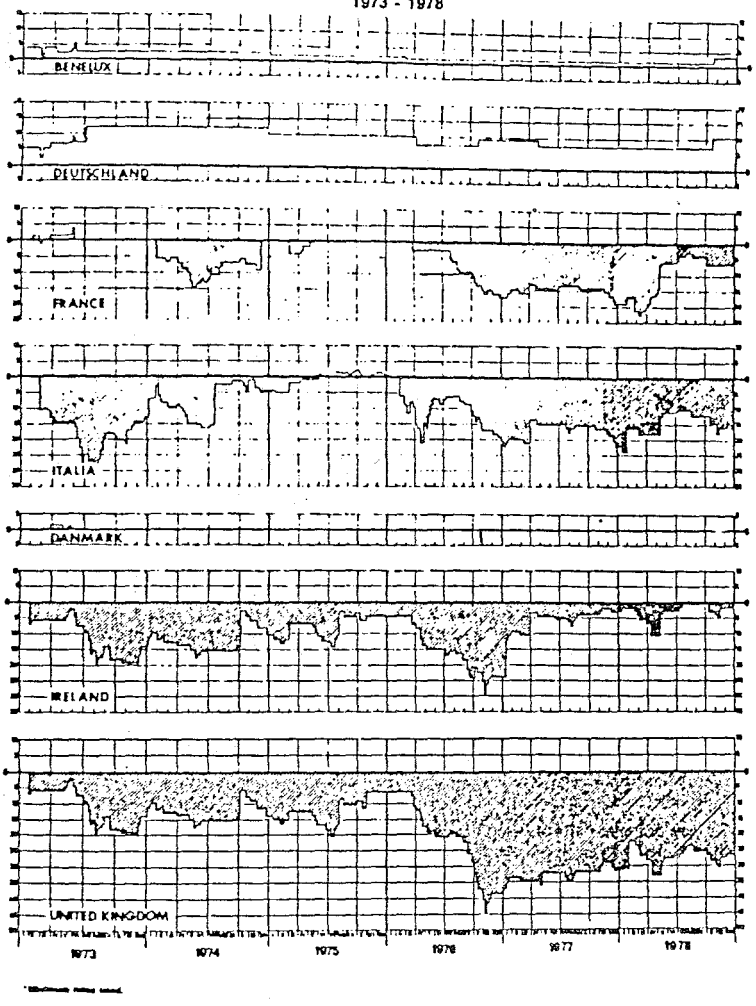
However, when the common prices are maintained in the national currencies without any adjustment at the frontier, the export from a currency with depreciated money will be cheaper and may well disturb the economy of country where the currency has remained stable, or has revalued upwards. On the other hand, exports from a country which has revalued cannot be competitive in a country where the currency has depreciated.

In order to avoid distortion of competition in the farm sector as a result of monetary fluctuations, a system of "monetary compensatory amounts" (MCAs) was introduced. The level of MCAs depends on the differences between the market exchange rates or central rates and the green rates. At the end of May 1978, these differences were as follows, depending on the product: [16]

Benelux	+1.4%
Germany	+7.2% to 7.5%
France	-6.2% to ± 14.4%
Italy	-11.2% to 24.7%
Denmark	-0%
Ireland	-2.8% to 9.4%
U. K.	-27.9% to - 38%

Source: European Bulletin, 1979

9. Rates (%) used for calculating monetary compensatory amounts*
1973 - 1978



Source: European Bulletin, 1979

The aim of the MACs was to cancel out the effects of parity changes on the trade in agricultural produce which, if this had not been done, would inevitably have affected the common prices expressed in national currencies, putting them

either up or down as the case might be.

These compensatory amount enabled CAP to continue despite the breakdown in price unity as expressed in national currencies, which is such a serious strain on the unity of the market itself. Unfortunately, these amounts were to become an obstacle to the necessary structural adaptations in agriculture and generated extra administrative red tape which, in the long run, was also to have its impact on prices and trade.

The implication of uniform prices over a whole community market gave rise to the establishment of a centralized system for deciding what common price levels should be and to a community machinery for manipulating markets in order to bring them about. However, the system of MACs and green rates had become so complex and chaotic that there was also a need for a centralized form of currency that would ensure price stability. The community system for financing CAP support policy needed to depend on the greater monetary stability one currency would produce. The above graphs summarize the complexity of calculating MACs between 1973 and 1978. This led to further considerations to establishing at least a parallel currency, and hence to a form of participation in a currency area. Therefore, CAP and its underlying problems in price-support system were a major reason for supporting such a venture as the EMS. It was hoped that the EMS and the ECU in particular would allow CAP to function more efficiently.

In addition, the EMS was to be an exchange rate regime that essentially reflected a different economic and political philosophy vis-a-vis the predomiant American monetarist view. This contrast has been coined as "the untrammeled market position" (United States) versus "the minimum variance position" (Europe and Japan), which mirrors the difference in intellectual and ideological approach to exchange rate variability. The former advocates a "laissez-faire" attitude towards exchange rates and macro-economic political freedom, while the latter emphasizes exchange rate stability and the avoidance of uncertainties and disruptions in forward exchange markets.

The choice to pursue a floating exchange rate policy could not have come at a worst moment in history. Oil shocks inflicted by OPEC had a devastating affect on the Western economies. However, in the case of the US-oil trade, the transaction bill was denominated in American dollars, a fact which favored the American economy, and not the EEC which did not have its oil trade denominated in the individual European currencies. In short, the dollar, even after the fall of Bretton Woods and the floating of exchange rates, remained the predominant trading currency.

The dollar experienced a 48% devaluation during the mid1976 to December 1979 period, due to American expansionary fiscal and monetary policies. In 1977-78, Jimmy Carter's political philosophy of "benign neglect" prevailed in US-EEC

relations. This neglect became malign when the effects spilled over into monetary relations and encompassed the neglect of the external dollar value, thus constituting an abuse of the dollar's role as a major reserve currency. This led to a growing lack of confidence in the dollar and funds were withdawn from the eroding hegemonial currency and investment was made mainly in D-Marks, French francs and Dutch guilders, which acted as popular hedges against exchange rate risks. These heavy inflows into the domestic money supply of Western European economies clearly reduced their competitive position in international trade, undermining their economies. In addition, there was growing tension between the strengthened DM and the weaker currencies, which resulted in the demise of the snake. At the same time, European currencies would continue to depend on the dollar as long as it remained the EEC international medium of exchange and means of settlement.

One possible response to the dollar instabilty could be the creation of a single money, or parallel currency, that would eventually replace the dollar as the international medium of exchange within the Community. The parallel currency could, therefore, provide an alternative to the dollar. It could do so, however, only if it were a stable mechanism and widely used at both the official and private level. This hoped-for parallel currency would reduce the EEC's dependence on the dollar and therefore, insulate it more from that currency's fluctuations.

The floating rates of the seventies gave impetus to rising inflation and consequently to inflationary expectitions which were to influence the currency markets, potentially leading to overshooting on the part of national authorities. This was in contrast to the fixed exchange system of the sixties, which had forced national policy-makers to adjust internally their payments disequilibrum. Deficits had to be adjusted by tightening the monetary belt. In this way, fixed exchange rates played a significant role in restraining and constraining undisciplined monetary authorities and self-interested politicians from abusing variable exchange rates. The seventies stand proof to such abuse, as floating exchange rates presented no such constraints and generated no concern over maintaining payments equilibrium through internal policies, because the monetary authorities could always resort to exchange rate changes to manipulate the balance sheet.

Tables 1 and 2 [18] compare the nominal and real exchange rate changes of the main EC currencies against the dollar in the periods, 1960-69 and 1970-78. It is clear that there were larger nominal and real exchange rate changes during the 1970-78 period than there were in 1960-69. The increasing currency instability coincides with the free flotaing of international currencies, while greater currency stability seems to have beeen the trade-mark of the fixed exchange system under Bretton Woods.

Table 3 [19] lists the consumer price inflation of major

EC countries and the US from 1960-78. During the 1970-78 period, most countries experienced inflation rates that were much higher and variable, on average, than those of the 1960-69 period. The differences in inflation rates between countries also tended to increase over time along with the average rate of inflation of the group of countries as a whole, while inflation in the US was lower, on average, than the average rates of inflation in the countries of the EEC in both periods. It would then appear that there was a qualitative difference in the manner in which the world economy behaved in passing from fixed to floating rates. During the fixed rate period, at least through the sixties, it was common to find inflation rate differentials among the major countries that exceeded three or four percentage points for as long as a year. Under floating rates, not only have larger inflation rate differentials been experienced, but effective inflation rate differentials have become enormous. (Effective inflation rate: the sum af the nominal inflation rate differential and the rate of appreciation of the currency for which we are measuring the difference.)

Table 4 [20] summarizes the growth of money stock (M1) in the major EC countries and the US between 1960 and 1978, while Table 5 [21] present the volume growth of gross domestic or national product during the same period. In Table 4, with the exception of Denmark and France, the EC countries all experienced higher and more variable rates of money growth, on the average, during the 1970s than in the sixties. The

differences in rates of monetary growth between countries have also tended to increase along with the average rate of monetary growth in the group of countries as a whole. Table 5 indicates that these countries also experienced lower rates of output growth during the seventies and the sixties.

Tables 3-5 not only show that inflation rates and money growth spiralled during the seventies' experiment with floating rates, while the output growth declined, but that differences even increased amongs these nations. Therefore, not only did inflation rates of each EC country rise,but, in addition, the disparity gap between the member states widened.

1977-78 was a period in which the EEC heads of government and the Central Bank authorites had to look at these economic indicators and attempt to find a solution, a mechanism that would arrest the damaging process that had set in. The two economic reasons for supporting the EMS were, in fact, the mistake in analysis of exchange rate policies that had plagued the seventies (and which had set off vicious circles in certain economies), and the unstable and volatile dollar policy. The EMS was seen at that time as a policy response to these fundamental problems of the EEC, a policy that possessed two profound differences from the past attempts: a new, more communitarian political approach and the implementation of new technical innovations.

TABLE I

NOMINAL AND REAL EXCHANGE RATE MOVEMENTS AGAINST THE US DOLLAR, 1960-1969.

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	p.m.[1]	s.d.[2]
BELGIUM (Franc)												
e-nom	49.87	49.87	49.77	49.87	49.75	49.64	49.83	49.69	49.94	50.14	49.84	0.14
ê-nom		0.0	-0.2	0.2	-0.2	-0.2	0.4	-0.3	0.5	0.4	0.1	0.3
ê-real		0.1	0.1	-0.8	-3.0	-3.8	-0.8	0.0	2.1	1.9	-0.5	2.0
DENMARK (Krone)												
e-nom	6.90	6.91	6.90	6.90	6.91	6.92	6.91	6.99	7.48	7.52	7.03	0.25
ê-nom		0.1	-0.1	0.0	0.1	0.1	-0.1	1.1	7.0	5.3	1.5	2.6
ê-real		-2.4	-6.4	-4.7	-2.0	-3.4	-4.1	-4.5	3.2	711	-1.9	4.3
FRANCE (Franc)												
e-nom	4.90	4.91	4.90	4.90	4.90	4.90	4.91	4.92	4.95	5.20	4.94	0.09
ê-nom		0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.6	5.0	0.7	1.6
ê-real		-1.4	-4.0	-4.1	-1.8	-1.0	0.6	0.0	0.3	4.2	-0.8	2.5
GERMANY DeutscheMark)												
e-nom	4.17	4.02	4.00	3.99	3.98	4,0	4.00	3.99	4.00	3.93	4.01	0.06
ê-nom		-3.6	-0.5	-0.2	-0.2	-0.5	0.0	-0.2	0.2	-1.7	-0.6	1.3
ê-real		-4.9	-2.3	-2.0	-1.2	-1.1	-0.4	0.8	2,7	1.9	-0,7	2.3
ITALY (Lira)												
e-nom	621	621	621	622	624	625	624	624	623	627	623	1.99
ê-nom		0.0	0,0	0.2	0.3	0.2	-0.2	0.0	-0.2	0.6	0.1	0.2
ê-real		-0.9	-3.6	-6.1	-4.4	-2.4	0.5	-1.1	2.5	3.4	-1.3	3.1

TABLE I cont'd.

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	p.m.[1]	s.d.[2]
NETHERLANDS (Guilder)												
e-nom	3.77	3.63	3.60	3.60	3.61	3.60	3.62	3.60	3.62	3.62	3.63	0.05
ê-nom		-3.7	-0.8	0.0	0.3	-0.3	0.5	-0.5	0.5	0.0	-0.4	1.3
ê-real		-4.2	-1.5	-2.7	-4.2	-2.6	-2.1	-1.1	1.3	2.3	-1.6	2.2
UK (Pound)												
e-nom	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.42	0.42	0.37	0.03
ê-nom		0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.7	0.0	1.8	5.5
		-1.6	-2.9	-0.8	-2.0	-2.9	-0.8	-0.1	16.1	0.0	0.5	5.9

SOURCE: IMF/IFS May 1978
Feb.1979
reproduced in "The European Monetary System - Will It Really Bring More Monetary Stability for Europe?" by Pieter Korteweg (1979),p.5.

LEGEND: $p.m._{2}^{1}$ - period mean
s.d. - standard deviation
e - exchange rate (average of daily rates)
ê - rate of depreciation(+) or appreciation (-) of exchange rates (percentage changes at annual rates).
ê-real - ê minus the rate of domestic consumer price inflation plus the rate of US consumer price inflation;(+ real depreciation; - real appreciation; percentage changes at annual rates.)

TABLE 2

NOMINAL AND REAL EXCHANGE RATE MOVEMENTS AGAINST THE US DOLLAR, 1970-1978.

	1970	1971	1972	1973	1974	1975	1976	1977	1978	p.m.[1]	s.d.[2]
BELGIUM (Franc)											
e-nom	49.66	48.59	44.01	38.98	38.96	36.78	38.61	35.84	31.41	40.32	6.00
ê-nom	-0.9	-2.1	-9.4	-11.4	-0.0	-5.6	5.0	-7.2	-12.4	-4.9	5.8
ê-real	1.1	-2.1	-11.5	-12.0	-1.8	-9.1	1.6	-7.8	-8.4	-5.5	5.3
DENMARK (Krone)											
e-nom	7.50	7.41	6.95	6.05	6.09	5.74	6.04	6.00	5.51	6.36	0.73
ê-nom	-0.3	-1.2	-6.2	-12.9	0.7	-5.7	5.2	-0.7	-8.2	-3.3	5,5
ê-real	-0.9	-2.7	-9.5	-16.0	-3.6	-6.1	2.0	-5.3	-11.8	-6.0	5.6
FRANCE (Franc)											
e-nom	5.53	5.51	5.04	4.45	4.81	4.29	4.78	4.91	4.51	4.87	0.44
ê-nom	6.3	-0.4	-8.5	-11.7	8.1	-10.8	11.4	2.7	-8.1	-1.2	8.8
ê-real	6.4	-1.6	-11.4	-12.8	5.3	-13.3	8.0	-0.3	-9.8	-3.3	8.7
GERMANY (DeutscheMark)											
e-nom	3.65	3.48	3.19	2.67	2.59	2.46	2.52	2.32	2.01	2.76	0.55
ê-nom	-7.1	-4.6	-8.3	-16.3	-3.0	-5.0	2.4	-7.9	-13.4	-7.0	5.5
ê-real	-4.5	-5.7	-10.5	-16.9	0.9	-1.7	3.7	-5.3	-8.5	-5.4	6.2
ITALY (Lira)											
e-nom	627	618	583	583	650	653	832	882	849	697	121
ê-nom	0.0	-1.4	-5.7	0.0	11.5	0.5	27.4	6.0	-3.7	3.8	10.2
ê-real	1.1	-2.1	-8.1	-4.5	3.3	-7.3	16.4	-4.5	-8.4	-1.6	7.8

TABLE 2 cont'd.

	1970	1971	1972	1973	1974	1975	1976	1977	1978	p.m.[1]	s.d.[2]
NETHERLANDS (Guilder)											
e-nom	3,62	3,50	3,21	2,79	2.69	2,53	2.64	2.45	2,16	2.84	0.49
ê-nom	0,0	-3,3	-8,3	-13,1	-3.6	-5,9	4,3	-7.2	-11.8	-5.4	5,5
ê-real	-4,9	-5,1	-12,3	-14,1	-2,1	-7,2	1,3	-7,3	-8,4	-6,7	4.7
UK (Pound)											
e-nom	0,42	0,41	0,40	0,41	0,43	0,45	0,56	0,57	0,52	0,47	0.07
ê-nom	0,0	-2,4	-2,4	2,5	4,9	4,6	24,4	1.8	-8.8	2,7	9.2
ê-real	-0,4	-7,5	-6,5	-0,3	-0,2	-10,4	13,7	-7,6	-9,6	-3,7	7.5

SOURCE: IMF/IFS May 1978
Feb 1979.
reproduced in "The European Monetary System - Will It Bring More Stability for Europe?" by Pieter Korteweg (1979), p.6.

LEGEND: $p.m._{2}^{1}$ - period mean
s.d. - standard deviation
e - exchange rate (average of daily rates)
ê - rate of depreciation (+) or appreciation (-) of exchange rates (percentage changes at annual rates).
ê-real - ê minus the rate of domestic consumer price in-lation plus the rate of US consumer price inflation. (+ real depreciation; - real appreciation; percentage changes at annual rates.)

TABLE 3.

CONSUMER PRICE INFLATION IN MAJOR EC COUNTRIES AND THE U.S., 1960-1978.
(Percentage changes at annual rates)

YEAR	BELGIUM	DENMARK	FRANCE	GERMANY	ITALY	NETHERLANDS	U.K.	U.S.	WHOLE GROUP		EUROPEAN GROUP	
									MEAN	ST. DEV.	MEAN	ST. DEV.
1960	0.4	1.1	4.0	1.4	2.3	2.5	1.1	1.5	1.8	1.1	1.8	1.2
1961	1.0	3.6	2.5	2.4	2.0	1.6	2.7	1.1	2.1	0.9	2.2	0.8
1962	1.4	7.4	5.1	2.9	4.7	1.8	4.0	1.1	3.5	2.2	3.9	2.1
1963	2.2	5.9	5.3	3.0	7.5	3.9	2.0	1.2	3.9	2.2	4.2	2.0
1964	4.0	3.3	3.0	2.2	5.9	5.7	3.2	1.2	3.5	1.6	3.9	1.4
1965	4.1	5.2	2.7	3.3	4.3	4.0	4.6	1.7	3.7	1.1	4.0	0.8
1966	4.3	7.1	2.7	3.5	2.4	5.7	3.9	1.7	3.7	1.1	4.0	0.8
1967	2.9	8.2	2.8	1.6	3.7	3.2	2.7	2.6	3.5	2.0	3.6	2.1
1968	2.6	8.0	4.5	1.7	1.5	3.4	4.8	4.2	3.8	2.1	3.8	2.2
1969	3.9	3.6	6.2	1.8	2.6	3.1	5.4	5.4	4.0	1.5	3.8	1.5
p.m.[1]	2.7	5.3	3.9	2.4	3.7	3.5	3.4	2.3	3.4		3.5	
s.d.[2]	1.4	2.4	1.3	0.7	1.9	1.4	1.3	1.5	0.8		0.8	
1970	3.9	6.5	5.8	3.3	4.8	10.8	6.3	5.9	5.9	2.3	5.9	2.5
1971	4.3	5.8	5.5	5.4	5.0	6.1	9.4	4.3	4.3	1.6	5.9	1.6
1972	5.4	6.6	6.2	5.5	5.7	7.3	7.3	3.3	3.3	1.3	6.3	0.8

TABLE 3 cont'd.

YEAR	BELGIUM	DENMARK	FRANCE	GERMANY	ITALY	NETHERLANDS	U.K.	U.S.	WHOLE GROUP MEAN	WHOLE GROUP ST.DEV.	EUROPEAN GROUP MEAN	EUROPEAN GROUP ST. DEV.
1973	6.9	9.4	7.4	6.9	10.8	7.3	9.1	6.3	6.3	1.6	8.2	1.5
1974	12.7	15.2	13.7	7.0	19,1	9.4	16.0	10.9	10.9	3.9	13.3	4.1
1975	12.7	9.6	11.7	5.9	17.0	10.5	24.2	9.2	9.2	5.7	13.1	5.9
1976	9.2	9.0	9.2	4.5	16.8	8.8	16.5	5.8	5.8	4.5	10.6	4.5
1977	7.1	11.1	9.5	3.9	17.0	6.4	15.9	6.5	6.5	4.7	10.1	4.9
1978	4.5	11.1[a]	9.2	2.6	12.2	4.1	8.3	7.5	7.5	3.4	7.4	3.7
p.m.[1]	7.4	9.4	8.7	5.0	12.0	7.8	12.5	6.6	6.6		9.0	
s.d.[2]	3.4	2,9	2,8	1.5	5.8	2,2	5.9	2,3	2,3		2.9	

SOURCE: IMF/IFS May 1978 pp. 42-43.
March 1979,p.35
reproduced in "The European Monetary System - Will It Bring Stability for Europe?" by P. Korteweg, p.

1. p.m. : period mean
2. s.d. : standard deviation
a. Average of percentage change of consumer price level of quarters I,II & LLL of 1978 over consumer prices of corresponding quarters of 1977.

TABLE 4 :

GROWTH OF MONEY STOCK (M1) IN MAJOR EC COUNTRIES AND THE US, 1960-1978

(percentage change at annual rate)

YEAR	BELGIUM	DENMARK	FRANCE	GERMANY	ITALY	NETHERLANDS	U.K.	U.S.	WHOLE GROUP m.[1]	WHOLE GROUP s.d.[2]	EUROPEAN GROUP m.[1]	EUROPEAN GROUP s.d.[2]
1960	2.1	6.6	12.3	8.8	13.0	5.2	3.1	0.2	6.4	4.7	7.3	4.3
1961	5.1	7.7	16.5	9.4	14.1	7.8	0.7	1.7	7.9	5.5	8.7	5.3
1962	7.3	10.9	16.9	10.6	17.9	5.7	0.8	1.5	8.9	6.4	10.0	6.1
1963	9.8	10.1	16.7	6.8	16.9	9.8	5.9	3.0	9.9	4.9	10.8	4.4
1964	5.9	10.6	10.3	8.6	8.3	8.5	5.4	3.7	7.6	2.4	8.2	2.0
1965	7.3	11.0	8.9	9.5	13.4	10.9	3.1	4.1	8.5	3.5	9.1	3.3
1966	6.7	14.0	9.0	4.4	14.5	7.2	3.1	4.6	7.9	4.3	8.4	4.4
1967	5.1	11.6	6.2	3.3	13.6	6.9	3.9	4.2	6.8	3.8	7.2	3.9
1968	6.4	11.5	5.5	7.9	13.4	8.8	4.5	7.5	8.2	3.0	8.3	3.2
1969	3.4	13.9	6.4	10.0	14.9	9.4	-0.5	5.2	7.8	5.2	8.2	5.5
p.m.[3]	5.9	10.8	10.9	7.9	14.0	8.0	3.0	3.6	8.0		8.6	
s.d.[2]	2.1	2.3	4.5	2.4	2.6	1.8	2.1	2.1	1.0		1.1	

TABLE 4 continued.

YEAR	BELGIUM	DENMARK	FRANCE	GERMANY	ITALY	NETHERLANDS	U.K.	U.S.	WHOLE GROUP m.	WHOLE GROUP s.d.	EUROPEAN GROUP m.	EUROPEAN GROUP s.d.
1970	-3.5	4.2	1.5	6.4	21.8	10.6	7.1	3.6	6.5	7.5	6.9	8.0
1971	10.0	4.1	13.7	12.4	22.8	16.7	13.3	6.7	12.5	5.8	13.3	5.7
1972	14.7	10.8	13.1	13.7	18.0	17.7	16.8	7.3	14.0	3.7	15.0	2.7
1973	10.4	12.1	9.9	5.3	21.1	7.4	10.0	7.1	10.4	4.8	10.9	5.0
1974	6.9	5.0	12.2	5.9	16.6	3.1	3.5	4.3	7.2	4.8	7.6	5.0
1975	11.6	16.6	9.9	14.1	8.3	18.8	15.1	4.5	12.4	4.7	13.5	3.7
1976	10.3	17.8	14.9	10.2	20.5	11.6	14.6	5.1	13.1	4.8	14.3	3.9
1977	8.0	6.0	7.3	8.3	19.8	13.6	13.5	7.2	10.5	4.7	10.9	4.9
1978[4]	8.3	10.5	11.2[4]	13.8	23.3[4]	5.6	20.3	7.1	12.5	6.3	13.3	6.4
p.m.	8.5	9.7	10.4	10.0	19,1	11.7	12.7	5.9	11.0		11.7	
s.d.	5.0	5.2	4.0	3.6	4.6	5.5	5.1	1.5	2.6		2.9	

Source: IMF/IFS May 1978,pp. 40-41
May 1979,p. 34.
Reprinted in "The European Monetary System - Will It Really Bring More Monetary Stability for Europe?" by Pieter Korteweg (1979) p. 8.

LEGEND: 1 - m. - mean
2 - s.d. - standard deviation
3 - p.m. - period mean
4 - Averages of the percentage changes of the money stocks of quarters I,II and II of 1978 over the money stocks of the corresponding

TABLE 5 :

VOLUME GROWTH OF GROSS DOMESTIC OR NATIONAL PRODUCT IN MAJOR EC COUNTRIES AND THE US,1960-78
(Percentage changes at annual rates)

YEAR	BELGIUM (gdp)	DENMARK (gdp)	FRANCE (gdp)	GERMANY (gdp)	ITALY (gdp)	NETH. (gdp)	U.K. (gdp)	U.S. (gdp)	Whole m.[1]	Group s.d.[2]	Euro. G. m.	Euro. G. s.d
1960	5.8	6.6	7.6	10.5	6.7	9.9	5.0	2.3	6.8	2.6	7.4	2.0
1961	5.0	6.4	5.6	5.1	8.2	2.9	3.3	2.5	4.9	1.9	5.2	1.8
1962	5.2	5.7	6.7	4.4	6.2	4.3	1.0	5.8	4.9	1.8	4.8	1.9
1963	4.4	0.6	5.2	3.0	5.6	3.3	3.9	4.0	3.8	1.5	3.7	1.7
1964	7.0	9.3	6.3	6.7	2.6	8.6	5.6	5.3	6.4	2.1	6.6	2.2
1965	3.6	4.6	4.8	5.6	3.2	5.3	2.3	5.9	4.4	1.3	4.2	1.2
1966	3.2	2.7	5.3	2.5	5.8	2.8	1.9	6.0	3.8	1.6	3.4	1.5
1967	3.9	4.7	4.7	-0.2	7.0	5.3	2.6	2.7	3.8	2.2	4.0	2.3
1968	4.2	4.2	4.3	6.3	6.3	6.7	3.4	4.4	5.0	1.2	5.0	1.3
1969	6.6	6.9	7.2	7.8	5.7	6.8	1.4	2.6	5.6	2.3	6.0	2.1
p.m.[3]	4.9	5.2	5.8	5.2	5.7	5.6	3.0	4.2	4.9		5.0	
s.d.[2]	1.3	2.4	1.1	3.0	1.7	2.4	1.5	1.5	1.1		1.3	
1970	6.4	2.6	5.9	6.0	5.0	6.9	2.5	-0.3	4.4	2.5	5.0	1.8
1971	4.1	2.4	5.4	3.2	1.6	4.4	2.8	3.0	3.4	1.2	3.4	1.3
1972	5.6	5.5	5.9	3.7	3.1	3.9	2.4	5.7	4.5	1.4	4.3	1.4
1973	6.5	5.2	5.4	4.9	6.9	5.9	6.6	5.5	5.9	0.7	5.9	0.8

TABLE 5 continued.

YEAR	BELGIUM	DENMARK	FRANCE	GERMANY	ITALY	NETH.	U.K.	U.S.	Whole group[1] m.	s,d.[2]	Euro.g. m.	s.d.
1974	4.7	0.6	2.8	0.5	4.2	4.2	-0.6	-1.4	1.9	2.4	2.3	2.1
1975	-2.1	-1.2	0.3	-2.1	-3.5	-0.9	-1.6	-1.3	-1.5	1.1	-1.6	1.2
1976	5.7	6.3	4.6	5.6	5.7	4.5	2.6	6.0	5.1	1.2	5.0	1.2
1977	1.3	1.8	3.0	2.8	1.7	2.4	0.7	4.9	2.3	1.3	2.0	0.8
1978[4]	2.0	0.3	3.0	2.7	2.2	1.9	3.2	4.0	2.4	1.1	2.2	1.0
p.m.	3.8	2.6	4.0	3.0	3.0	3.7	2.1	2.9	3.1		3.2	
s.d.	2.9	2.6	1.9	2.5	3.0	2.3	2.4	3.1	2.2		2.3	

SOURCE: Commission of the European Communities
Annual Economic Review 1978/79,Table 4;
Federal Reserve Bank of St. Louis,
Annual Data, June 1978
International Economic Conditions,Jan. 1979
Reprinted in "The European Monetary System-
Will It Really Bring More Monetary Stability
For Europe?" by Pieter Korteweg (1979),p.9.

LEGEND: 1.m.- mean
2.s.d. - standard deviation
3.p.m.- period mean
4. 1978 - 1978 estimate

Nation State Considerations for Participation in the EMS

The previous section has attempted to give a general overview of the problems that were afflicting the Commnity as a whole and which gave rise to a need for more stable monetary arrangements within the EEC as a whole. This section will deal primarily with the issues at stake within five nations participating in the EMS. These are the Federal Republic of Germany, France, Italy, the Netherlands and the United Kingdom. It is clear that the private interests of these nations sometimes overlap with the interests at stake mentioned in the previous section. However, there were certain different variables affecting the decision-making process within each nation that reflect the different economic conditions of these.

Germany and France are examples of two large and relatively less open (vis-a-vis the Netherlands, for example) economies, that had, perhaps one could argue, more political issues at stake than economic ones. These two countries were the main supporters and promoters of the EMS. Without their initiative, the EMS venture may never have taken place.

Italy, on the other hand, used both political and economic argumentation in promoting support for EMS participation. Its commitment to "Europeanism" constituted a

strong element in its EMS adhesion.

The Netherlands, instead, is the case of a small open economy that has linked both its money and its economic performance to that of West Germany.

Finally, the United Kingdom will be used as a contrast to the above examples, as the case of an EEC country that chose not to join the EMS, even though it possessed economic conditions parallel to those of Italy. The United Kingdom neither possessed the overwhelming "European Sentiment" nor the tight trade interdependence its partners, France, Germany, Italy and the Netherlands had.

It must be noted here that the case studies will not deal in depth with the political reasongng behind the EMS participation, but rather will be more interested in fleshing out the economic costs and benfits of the EMS. [22]

Germany

By 1978, Germany was by far the strongest and most influential economy within the EEC. Germany is the largest single intra-community trading partner (in terms of both total

imports and exports) of each and every EEC (9) member (see Appendix, Tables A and B).

Its economic performance was bound to have an impact on its partner's markets. In this way Germany could perform the role of leader and trend-setter for the rest of the Community.

In the course of 1978, the DM appreciated against all the major currencies with the exception of the Swiss franc and the yen. In spite of large exchange market interventions by the Bundesbank, the bilateral appreciation vis-a-vis the United States dollar was particularly pronounced. By the end of October, the dollar exchange rate had dropped to an historical low of DM 1.73. [23] For the year as a whole the exchange value of the DM in dollar terms increased by about 15%. Against the currencies o the members of the snake, the exchange rate of the DM increased an average of 0.75% in 1978. [24]

However, the DM had experienced its most difficult moment vis-a-vis the dollar in November-December 1977. [25] Germany had felt the brunt of the large capital outflows from the U.S., as a result of Carter's "benign neglect" policy. This led to heavy appreciations of the DM, causing both a deterioration of Germany's competitive position and increasing tension between the DM and other snake currencis.

There has been a high average deterioration of Germany's relative competitive position between 1970 and 1978

[26].This has, however, not been due to excessive domestic wage inflation, but rather, on the contrary, due to DM appreciation over this period. For example, the account of private long-term capital transactions in 1978 was actually in surplus for the first time since 1973, mainly due to the doubling of capital inflows. Given the surplus on current account and capital inflows foreign exchange purchases by the Bundesbank amounted to DM 19.8 billion, second in size only to the DM 26.4 billion record purchases effected in 1973. [27] Due to the appreciation of the DeutscheMark in the course of 1978, the Bundesbank showed a valuation loss of DM 7.6 billion on its total foreign exchange reseves. [28]

In addition to these pressures on the DM and the central bank authorities to intervene in the exchange market, Chancellor Helmut Schmidt signalled his exasperation and rejection of the "locomotive" solution as an answer to the slow growth of West European economies. [29] The locomotive theory put pressure on Germany to extricate other economies from their economic period of stagnation. While it was clear that Germany's economic performance was to have an impact on its partners' economic performance, Germany could not carry the full weight of partner economic problems. A notable feature of the German economy in 1978 was the marked reduction of inflation as measured by the consumer price index. In addition, important expansionary fiscal policy measures that had been announced in 1977 provoked a rise

in domestic demand and marked acceleration in output in 1978, with a decrease in unemployment. [30] A marked improvement in the terms of trade gave rise to reduced consumer prices -- the lowest level since 1969 -- while the external surplus rose despite sharp increases in imports in response to stronger domestic demand. [31] In short, by 1978 the German currency was in a relatively healthy state of affairs, disturbed only by the exchange tensions primarily with the dollar, and consequently with the snake currencies.

The state of Germany's economy could have easily suggested that Germany would be better off on its own, rather than link its currency to its weaker partner. Bundesbank monetary policies had always been relatively strict, bent on strong anti-inflationary policies through the use of Central Bank Monetary (CBM) stock targets, which in genearal were achieved. Low inflation and unemployment rates contrasted sharply with diverging trends in Italy, the U.K. and France. What led Sechmidt to become one of the axis supporters of the EMS, together with France's President Giscard d'Estaing?

First, Schmidt's support was based on strong political motivations. [32] Schmidt was committed to a "European" view, to maintaining a zone of monetary stability within the EEC. He recognized the high trade interdependence amangst community partners. Therefore, his commitment was ideological, bent on greater European monetary cohesiveness vis-a-vis the dollar.

Linked to this political commitment, Schmidt was attracted to the idea of a monetary arrangements which would be consultative. In rejecting the locomotive theory, he however did not reject the belief that consultation between partners could reduce economic divergences which had proved to be harmful to both German and partner trade. High trade interdependence called for cohesion between partners.

Finally, Germany was interested in promoting and improving the CAP sytem as agriculture represented DM 33.80 billion of GDP in 1978, employing about 6.6% of its total working population. [33]

France

France has traditionally always supported fixed exchange rates and monetary union. M. Barre, French Finance Minister from 1962 onwards had always been in favor of monetary union. [34] He had argued in favor of monetary stability, a belief that president Giscard d'Estaing strongly shared.

The French President essentially took advantage of a moment of political stability, to pursue ambitious monetary programs. Between 1979 the French economy had experienced a generally stable growth of output of about 3.5% per year. [35] However, gross fixed investment had all but stagnated on average

between 1973 and 1978. [36] Giscard d'Estaing viewed the EMS as providing support for his own domestic program of economic expansion and increased production output. The President, in the EMS negotiations stressed the French relations with the other largest European nation, Germany. He saw a Franco-German venture as extremely important in bringing about European political cohesiveness and economic stabilty. In addition, such a venture would ensure that a European process towards monetary stability would not be dominated by Germany alone. [37] In this way, France could pursue stable monetary policies aimed at promoting domestic French prosperity in collaboration with Germany. It seems that Giscard d'Estaing believed that emulation of Germany was in France's long-term interests. [38] He stressed the need for stability and the priority of a monetary and economic policy which would guarantee this. In fact, one factor that emerges strikingly from a reading of the political negotiations of the EMS, is how both the French and German heads of government were on the same political and economic wave-length.

Italy

Italy's willingness to participate in the EMS stems from both political and economic factor. Luigi Spaventa, in his study on the diplomatic and political origins of the EMS has stressed a great deal the political motivation behind the Italian

authorities' desire to join the system. [39] This political motivation was rooted in a desire to promote European integration and in a desire to avoid political isolation within the Community. However, this primarily political analysis takes place at the expense of ignoring the economic motivation behind Italy's participation. One of the foremost causes used for pushing Italy into the EMS was the existence of an internal vicious circle. Italy had suffered in the seventies from high and intense inflation.

The wage explosion that took place in Italy at the end of the sixties is not unique to the Italian case, but it represents an extreme in relation to the same events taking place in other Western European countries. Unlike Germany of France, this wage explosion was not kept under control but rather persisted for a long time in a more intensive fashion. [40]

The increasing inflation rates of the seventies were caused primarily by two factors: wage-indexation mechanisms that were linked to job security legislation, and large public debt. In 1975, a new wage-indexation mechanism, the scala mobile was negotiated between the Confindustria and the labor unions. This new scala mobile -- wage indexation mechanism have existed in Italy since the end of the war -- was innovative inasmuch as it guaranteed virtuall 100% indexation of wages to inflation. This led to serious inflationary consequences as this meant that the national authorities were not able to pass along extra charges

due to oil increases, for example, or devaluations to the Italian consumers. The rapidly increasing consumer prices and fully developed wage indexation to prices required a very rapid increase in productivity in order to reduce inflation: which in actuality did not take place.

By 1977, the Governor of the Banca d'Italia [41] was arguing that employment goals would have to be sacrificed in order to improve the current account, to repay foreign debts and to stabilize the exchange rate, thus suffocating partially the inflationary tendencies of the system. In fact, the monetary authorities tried to implement more stringent monetary policies in 1977, with some success, in reducing foreign debts and liabilities, but the fall in inflation was slow to take place. The price index was still almost double that of other European countries (12-13%), while wages increased in the same year by about 15%. The increase in the productivity level had only been modest. [42]

Therefore, when the option to join the EMS was presented, feelings were mixed. On the one hand, the "fixing" of exchange rates could be one tool for curbing or arresting the vicious circle enacted in Italy by the implementation of full and effective wage indexation mechanisms and of accommodating monetary policies. On the other hand, to establish an exchange rate that would be "fixed" with that of West Germany, the main commercial partner of Italy and where unit labor costs rose

consistently and only by 2% seemed to be a risk and a counter-productive choice to the Italian Central Bank authorities. [43] It was little consolation that the divergence band permitted Italy was of 6% and superior to that of other participating countries. However, this was eventually to work in their favor. The lira, in effect, started at a relatively "low" rate within the EMS grid, thereby getting a "high" starting position in the band. This could allow it to fall, say, 10% before hitting the lowest intervention rate which it later did.

Ultimately, both the political and economic forces came together to put Italy into the EMS. The growing national concern of all social and political forces in Italy over the economy found its climax in the "Pandolfi Document" presented by the Minister of the Treasury in September 1978, calling for more stringent and severe monetary and labor reforms. [44] By the end of 1978, Italy chose to join the EMS.

The Netherlands

The Dutch economy, due to its openness and smallness is susceptible and vulneable to exchange rate fluctuations. Holland's trade is characterized by 56.4% of its imports coming from, and 72.9% of its exports going to, its ten EEC partners; in particular it trades most heavily with Germany (30.5% of its total exports and 24.23% of its total imports -- for a detailed

overview see Table 1 in the Appendix.) [45] One way of reacting to exchange rate fluctuations was the linking of the Dutch guilder to the DeutscheMark. In fact, when the fixed exchange rate system broke down in the early seventies, the Netherlands joined the other European countries in the snake arrangement for maintaining relatively stable exchange rates among themselves, while floating collectively against other currencies. Membership in the snake quickly dwindled and the snake became increasingly dominated by th DM. One of the few currencies to remain within the snake was the guilder. This close link to the DM was accepted, even welcomed, as a stabilizing influence on prices. This had other implications for the Netherlands: domestic cost increases had to be roughly in line with those of Germany if international competitiveness and balanced economic development were to be maintained.

The Netherlands had always kept its economic performance close to that of Germany. It had experienced various cycles in relation to Germany in the manufacturing industry, for example, which had been favorable vis-a-vis that country in the early seventies because of a 5% revaluation of the DM in 1969, a position which it maintained up to 1973. After 1973, and between 1973 and 1975 in particular, a significant deterioration took place. [46] The deterioration however was not dominated by the price effects on the balance of payments, but rather was due to the decline of Dutch production sectors in such areas as the chemical, steel, optical instruments, textiles and clothing

industries: sectors in which products were characterized by a high price elasticity of demand. The Netherlands is an example of a "hard currency" country in which the price effect did not dominate the overall balance of payments impact on the exchange rate adjustments in years leading up to 1979.

By 1978, the guilder was in a relatively strong pasition as price developments were dominated by the strength of that currency to the dollar. This could be attributed in part to the effective revaluation of the guilder and partly to the weakness of the dollar itself, to the extent that Holland made its export contracts in dollars, and that its currency was not fully linked to the dollar. In addition, the Dutch current external position relative to that of most trading partner countries was strengthened by the growth of the natural gas sector. [47] The existence of natural gas had put the Netherlands in the uniquely favorable position of having to face not balance of payments constraints. This led to a large current external account surplus accompanied by upward pressure on the guilder. The appreciation of the guilder contributed to a dampening of domestic inflationary pressures via lower import prices and reduced scope for wage increases (virtuous circle). As wages are de facto indexed in the Netherlands, the appreciation of the guilder had also dampened the price-wage spiral. For a country as open and trade-dependent as the Netherlands, these beneficial effects must have been very substantial.

A further impetus to Dutch participation in the EMS with a more "global" or Community scope can be found in its wish to stabilize currencies in order to maintain CAP in functioning order. Dutch agriculture is the most important net exporter in the EEC, [48] dependent on implicit national subsidies since 1973 due to the rapid and widening disparity between market exchange rates and the green rates of devaluing countries. This form of partial protection was a burden on the public sector. The creation of a common currency that would be more stable would avoid the pre-1979 problems of CAP (mentioned in the previous sector) and would reduce the need for national subsidies in order to offset increasing competitiveness from devaluing nations. Linked to the CAP, is the large Dutch investment in the agricultural sector, which experienced a boom particularly after 1976 (see Appendix). [49] This growing sector became particulary strong due to the EEC's operation of CAP, and therefore, the maintence of CAP also assured the growth of investment and productivity in this sector.

In view of these two factors, participation within the EMS meant the continuation and stabilization of Dutch economic policy.

The United Kingdom

The U.K.'s refusal to join the EMS is rooted in two major

factors. First, the U.K. has historically preferred a flexible exchange rate policy and second, the U.K.'s trade patterns gave rise to a conflict of interests with its EEC partners.

Though it shares its concern with the rest of the partners (and the rest of the world, one could argue) over reducing internal inflation, the U.K. believes in pursuing restrictive policies without giving up its monetary independence. Britain had already shown its incapacity in handling fixed exchange rates, exemplified by the 1920 and 1960 sterling crises. By 1978-79, the U.K. differed from it Community partners in its assessment of the economic and financial policies appropriate to the times. The U.K. put a great deal of emphasis on avoiding increased unemployment which would surely result from a monetary arrangement such as the EMS. Mr. Healey, the British Chancellor of the Exchequer was an adamant supporter of reflation, [50] a view sharply contrasting that of the Germans.

In addition, the U.K. felt a greater loyalty towards devising a monetary solution to the crisis through the IMF and in cooperation with the United States. [51] In essence, the U.K. mistrusted a European monetary arrangement and held no illusions that the U.K would benefit from it.

The reason behind the latter point is not hard to find. The United Kingdom has experienced a stormy history from its application to the EEC through its actual participation. The

United Kingdom is an important nation in Western Europe, yet it trades predominatly outside the Community. The U.K. undertook in 1979, 58.21% of its total export trade and 59.2% of its total import trade with the rest of the world excluding the EEC (see Table A in the Appendix). Though this represents a substantial decrease since 1958 with a related increase in U.K.-EEC trade, it still represents a dominant reason for which the U.K. needs to maintain some monetary independence from the EMS. Monetary stability was not exclusively to be had through linking the sterling Pound to EEC currencies.

The trade patterns in themselves dissuaded the U.K. from fixing its currency in the EMS arrangement, but, in addition, these trade patterns also reflect a historical tradition and commitment towards other trading partner. That is, the U.K. was (and is) still strongly bound to Commonwealth relationships guaranteeing a certain preferential status. This is a very difficult bond to break and one that would have carried high political and economic cost.

In addition, the Pound was experiencing an appreciating trend due to North Sea oil development and production. The EMS would have eventually placed constraints on the appreciating trend of the Pound and would have inevitably led to tensions between the U.K. and its EEC partner.

Therefore, in the light of these considerations, the British authorities chose not to join the EMS. The existence

of an internal vicious circle was not sufficient to push the U.K. to fix its exchange rate. On the contrary, the authorities believed that they could impose internal disciplined, contractionary policies under a flexible exchange rate regime.

On the other hand, the United Kingdom did not want to politically isolate itself from the EEC members, and chose to join the ECU arrangement. In this way, the U.K. does deposit 20% of its gold and dollar reserves with FECOM, and is calculated in the basket of currencies. This astute move permitted the U.K. to keep one foot in the door, without committing itself competely to the potentially negative implications and consequences of the EMS.

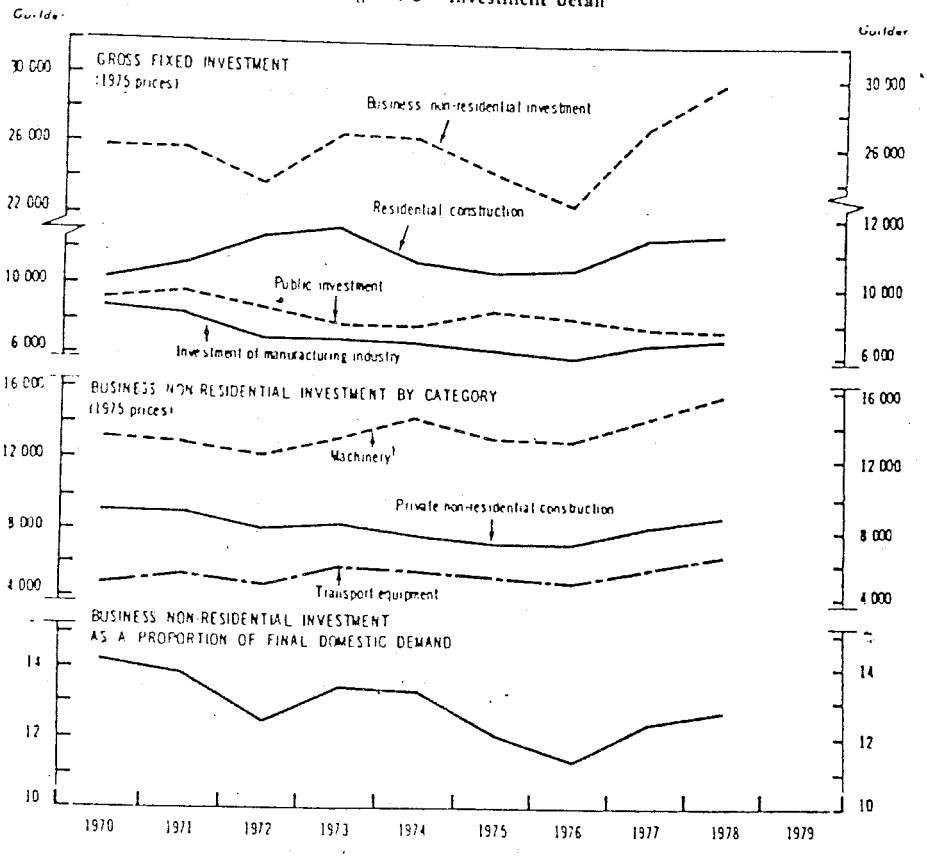
re of EC exports by country and region 1958 and 1979, percentages of total

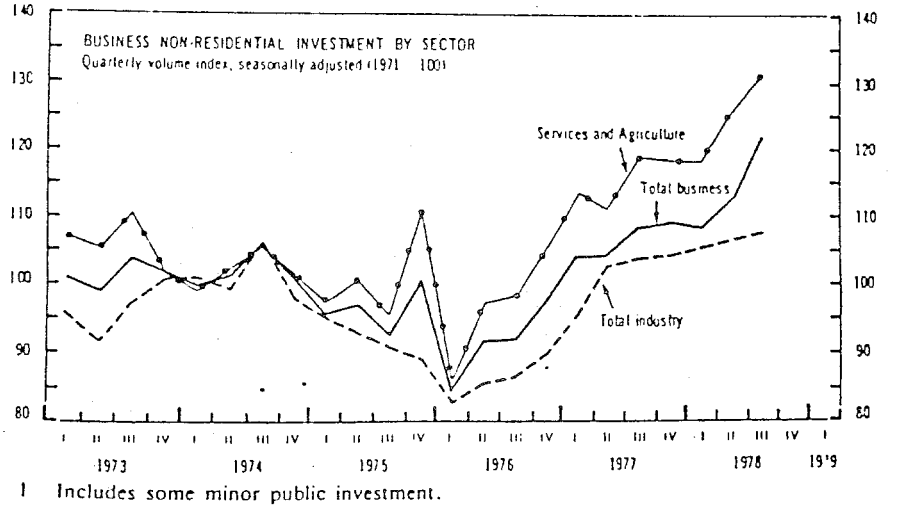
Exports of	DK		D		F		IRL		I		NL		BLEU		UK		EC	
	1958	1979	1958	1979	1958	1979	1958	1979	1958	1979	1958	1979	1958	1979	1958	1979	1958	1979
			2,96	2,17	0,75	0,88	0,05	0,69	0,77	0,75	2,63	1,82	1,63	1,20	2,37	2,38	2,00	1,60
	20,05	17,68			10,40	17,21	2,22	8,87	14,29	18,91	18,98	30,50	11,56	22,52	4,20	9,91	7,45	13,03
	2,97	4,89	7,58	12,72			0,79	6,08	5,31	14,81	4,87	10,65	10,60	19,18	2,42	7,18	4,59	10,06
	0,30	0,50	0,25	0,41	0,16	0,48			0,13	0,35	0,45	0,45	0,35	0,32	3,50	5,98	1,16	1,29
	5,31	5,24	5,02	7,80	3,37	11,42	0,43	2,34			2,74	5,27	2,27	5,31	2,11	3,43	3,08	6,09
	2,19	3,90	8,10	9,95	2,03	5,35	0,51	5,33	2,05	4,58			20,70	16,15	3,14	7,16	5,41	7,34
	1,24	1,90	6,64	8,51	6,34	9,80	0,80	5,57	2,27	3,42	14,97	15,49			1,93	5,77	4,89	7,40
	25,91	14,90	3,95	6,69	4,89	7,68	78,76	46,41	6,83	6,53	11,90	8,41	5,71	8,07			5,72	6,81
s-Community trade	57,97	49,01	34,49	48,26	27,98	52,82	83,54	77,60	31,64	49,35	56,53	72,59	52,81	72,75	19,64	41,79	34,28	53,64
ropean untries	17,55	28,12	25,17	20,73	11,14	12,71	1,87	4,69	18,69	15,29	13,19	8,92	11,07	8,75	10,31	16,38	15,46	15,50
	9,34	4,87	7,31	6,60	5,93	4,89	5,85	4,89	9,71	6,46	5,64	2,80	9,42	3,74	8,83	9,48	7,79	5,96
	0,68	0,66	1,19	0,74	0,83	0,69	0,67	0,99	1,19	0,70	0,79	0,29	1,13	0,32	5,77	1,79	2,34	0,80
	0,20	2,30	0,95	1,32	0,32	0,95	0,05	0,82	0,32	1,08	0,41	0,55	0,60	0,61	0,81	1,42	0,56	1,11
	0,26	0,54	1,02	0,63	0,42	0,30	0,08	0,72	0,79	0,60	0,68	0,32	0,55	0,20	7,11	1,96	2,50	0,70
ng countries	9,65	7,33	22,30	14,28	48,38	22,43	1,27	7,82	27,86	20,62	18,14	10,28	18,80	10,44	33,81	21,56	28,49	16,64
	2,33	3,89	4,78	6,10	21,27	7,75	0,27	3,65	7,49	10,75	4,48	4,62	3,34	4,08	7,03	7,96	7,81	6,81
veloping countries	7,32	7,44	17,52	8,18	27,11	14,68	1,30	4,17	20,37	9,87	13,66	5,66	15,46	6,36	26,78	13,58	20,68	9,83
r-planned economies	3,80	2,83	5,00	6,05	3,70	4,62	0,21	1,07	4,69	4,23	1,98	2,13	3,75	2,22	3,09	2,87	3,75	4,12
rld and unspecified	0,52	0,34	2,57	1,39	1,30	0,59	6,16	1,40	5,09	1,67	2,64	2,12	1,87	0,97	10,83	2,75	4,83	1,51
xcl EC)	42,03	50,99	65,51	51,74	72,02	47,18	16,46	22,40	68,36	50,65	43,47	27,41	47,19	27,25	80,36	58,21	65,72	48,36
ncl EC)	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Structure of EC imports by country and region, 1958 and 1979, percentages of total

Imports of / from	DK		D		F		IRL		I		NL		BLEU		UK		EC	
	1958	1979	1958	1979	1958	1979	1958	1979	1958	1979	1958	1979	1958	1979	1958	1979	1958	1979
DK			3,35	1,63	0,63	0,67	0,70	0,72	2,19	0,93	0,67	0,86	0,53	0,46	3,07	2,22	2,04	1,20
D	19,84	19,73			11,64	17,98	4,00	6,77	12,13	17,17	19,48	24,23	17,16	21,99	3,60	11,79	8,33	13,04
F	3,43	4,72	7,59	11,41			1,60	4,73	4,86	14,07	2,79	7,30	11,60	15,73	2,67	8,00	4,29	8,81
IRL	0,01	0,24	0,10	0,40	0,05	0,59			0,05	0,22	0,05	0,50	0,10	0,44	2,90	3,36	0,91	0,92
I	1,70	3,38	5,46	8,85	2,35	10,14	0,85	2,39			1,77	3,64	2,15	4,06	2,04	5,13	2,57	5,97
NL	7,34	6,28	8,03	12,83	2,53	6,06	2,86	3,98	2,58	4,19			15,72	16,59	4,22	5,90	5,29	8,87
BLEU	3,81	3,76	4,53	8,18	5,37	9,04	1,83	2,43	2,02	3,56	17,85	12,20			1,61	4,40	4,46	6,49
UK	22,82	11,92	4,38	6,04	3,59	5,62	56,41	54,38	5,50	4,04	7,39	7,67	7,40	7,96			5,14	6,02
Total intra-Community trade	58,95	50,03	33,44	49,33	26,16	50,08	68,25	75,39	29,33	44,19	50,00	56,40	54,66	67,25	20,11	40,80	33,03	50,38
Other European OECD countries	19,51	25,70	17,55	14,90	8,55	9,79	4,43	5,12	12,50	10,47	7,84	7,51	8,19	6,51	14,11	15,71	12,69	12,07
USA	9,10	5,21	13,57	6,54	10,04	7,57	6,98	7,33	16,23	6,78	11,31	8,42	9,92	6,60	9,34	11,67	11,16	7,82
Canada	0,25	0,49	3,10	1,04	1,02	0,72	2,97	0,80	1,44	0,96	1,43	0,77	1,42	0,80	8,17	2,58	3,71	1,16
Japan	1,48	2,09	0,61	2,64	0,18	1,92	1,07	2,35	0,41	1,14	0,82	1,94	0,63	1,68	0,94	3,25	0,69	2,23
Australia	0,03	0,21	1,21	0,44	2,42	0,54	1,21	0,06	3,01	0,71	0,20	0,23	1,73	0,34	5,40	0,99	2,71	0,54
Developing countries	6,06	10,63	24,43	18,00	46,71	24,40	9,67	6,03	31,18	27,77	25,02	21,30	19,50	14,00	34,98	18,35	30,41	20,08
of which: OPEC	0,30	3,58	6,71	9,21	19,68	15,54	0,72	2,79	13,87	17,45	11,48	12,98	5,91	7,41	11,26	7,69	10,87	11,10
Other developing countries	5,76	7,05	17,72	8,79	27,03	8,86	8,95	3,24	17,31	10,32	13,54	8,32	13,79	6,59	23,72	10,66	19,54	8,98
Centrally-planned economies	4,59	5,06	5,31	5,44	3,30	3,46	1,24	1,82	3,60	5,59	2,61	3,02	2,01	1,82	3,19	3,23	3,55	4,04
Rest world and unspecified	0,03	0,58	0,78	1,67	1,62	1,52	4,18	1,10	2,30	3,38	0,77	0,41	1,94	0,90	3,76	3,45	2,05	1,66
World (excl. EC)	41,05	49,97	66,56	50,67	73,84	49,92	31,75	24,61	70,67	55,81	50,00	43,60	45,34	32,75	79,89	59,20	66,97	49,62
World (incl. EC)	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Diagram 5 **Investment detail**





1 Includes some minor public investment.

Sources: Nationale Rekeningen 1977; Maandstatistiek Industrie; OECD Secretariat estimates.

NOTES TO CHAPTER TWO

1) See Roland Vaubel, "Choice in European Monetary Union," Occasional Paper, n. 55 (London: Institute of Economic Affairs, 1979), pp. 27-29, W.M. Corden, Inflation, Exchange Rates and the World Economy (Oxford: The Clarendon Press, 1981), pp. 149-156.

2) It should be mentioned that Mr. Roy Jenkins, President of the EEC Commission, actually used this term when he called for a rediscussion of EMU, in his Jean Monnet Lecture in Florence in October 1977. However, the all-at once approach had already been proposed by the first ardent European integration-ists as mentioned by Roland Vauble, op. cit., p. 27.

3) Commission of the European Communities, Commission Memorandum and Proposals to the Council on the Establishment by Stages of Economic and Monetary Union (Brussels: EEC), Offprint of Chapter Two of Part One of Bulletin II-1970 of the EC, October 1970.

4) "European Economic and Monetary Union," European Documentation, Periodical 4, 1981.

5) Commission of the EC, OPTICA Report '75, Towards Economic

Equilibrium and Monetary Unification in Europe. II/909/75-E final (Brussels: EC, January 1976), pp. 25-31.

6) "The All Saints' Day Manifesto for European Monetary Union." Reprint in M. Fratianni and F. Peeters, eds., One Money for Europe (London: The McMillan Press, 1978), pp. 40-43.

7) Ibid., p. 38.

8) Ibid., p. 40.

9) See Corden, op. cit ., 1981, pp. 154-55.

10) "All Saint's Day Manifesto for European Monetary Union," op. cit., p. 43.

11) See Peter Ludlow, The Political and Diplomatic Origins of the European Monetary System, July 1977 - March 1979, Occasional Paper n. 32, June 1980; and G. Basevi and W. L. Kohl with S. Papas and J. McDonald, The Political Economy of the European Monetary System, A Conference Report. Occasional Paper n. 31 (Bologna: The Johns Hopkins University Bologna Center Research Institute, June 1980), for an in-depth survey of the negotiations involved in establishing the EMS. While it is not the scope of this research to delve into these details, it must be absolutely stressed that the political implications of these negotiations are enormous in the functioning of the system. The political considerations in establishing the EMS, it can be argued, are at the heart

of its continued survival in the face of recent events in the Community.

12) Ibid., Ludlow, p. 15ff and G. Basevi, et al., p. 3-7.

13) Peter Ludlow termed the creation of the EMS as "an act of state," op. cit., p. 53

14) Michael Emerson, "The European Monetary System in the Broader Setting of the Community's Economic and Political Development," in Philip H. Trezise, ed., The European Monetary System: Its Promise and Prospects (Washingon, D.C.: The Brookings Institution), 1979, pp. 27-28.

15) Ibid., p. 29; the author argues that high interdependence is a major element for achieving and pursuing monetary integration.

16) European Bulletin, 1979.

17) See "Commente" by Ralph C. Bryant, in Trezise, ed., op. cit., pp. 17-18.

18) Reproduced in Pieter Korteweg, The European Monetary System - Will it Really Bring More Monetary Stability for Europe? (1979), pp. 5-6.

19) Ibid., p. 7.

20) Ibid., p.8.

21) Ibid., p.9.

22) For a detailed study on the political negotiations of EEC countries prior to the establishent of the EMS, see Peter Ludlow, The Political and Diplomatic Origins of the European Monetary System, July 1977 - March 1979, Occasional Paper No. 32, (Bologna: The Bologna Center Research Institute, June 1980).

23) OECD economic surveys, Germany, June 1979, p. 19.

24) Ibid., p. 19.

25) Peter Ludlow, op. cit., p. 18.

26) OECD economic surveys, Germany, June 1979, p. 20.

27) Ibid., pp. 40-41.

28) Ibid., pp. 40-41.

29) Peter Ludlow, op. cit., p. 18.

30) OECD economic surveys, Germany, June 1975, p. 5.

31) Ibid., p. 6.

32) Peter Ludlow, op. cit., p. 16.

33) OECD economic survey, Germany, June 1979, Tables A and I in Statistical Annex, respectively, p. 64-74.

34) Peter Ludlow, op. cit., pp. 20-21.

35) OECD economic surveys, France, January 1982, p. 8.

36) Ibid., p. 70.

37) Peter Ludlow, op. cit., p. 21.

38) Ibid., p. 22.

39) Luigi Spaventa, Italy Joins the EMS -- A Political History, Occasional Papers, No. 32, (Bologna: The Bologna Center Research Institute, June 1980).

40) Micheal Salvati, Alle origini dell'inflazione italiana (Bologna: Il Mulino, 1980), pp. 145-150.

41) Ibid., p. 148.

42) Ibid., p. 145.

43) Ibid., p. 147.

44) Ibid., p. 150.

45) OECD economic surveys, The Netherlands, March 1979.

46) Ibid., p. 16.

47) OECD economic surveys, The Netherlands, March 1978, p. 36.

48) OECD economic surveys, The Netherlands, March 1979.

49) Ibid., pp. 16-18.

50) Peter Ludlow, op. cit., p. 25.

51) Ibid., p. 25.

Chapter Three

THE EUROPEAN MONETARY SYSTEM

The heads of government agreed that the EMS was to be an instrument for steering the Community back on to a path of growth and stability by way of closer coordination of economic and monetary policies. Its immediate limited objective was to create a zone of monetary stability in Europe by closer monetary policy cooperation. It was to be used initially as an instrument for combatting excessive fluctuations in exchange rates and hence for reducing a factor of uncertainty in trade and payments between member states. In addition, through a more stable exchange rate policy, it would endeavor to create room for an economic policy geared to achieving a greater measure of internal and external stability.

Structure and Operation [1]

The EMS consists of four basic elements: 1) the European Currency Unit (ECU); 2) a pegged-rate with intervention system; 3) the European Monetary Fund (EMF) and 4) monetary and financial support mechanisms.

The ECU lies at the center of the EMS and is used as the denominator (numeraire) for the exchange-rate mechanism, as the basis of the divergence indicator, as the denominator for operations under the intervention and credit mechanism and as a means of settlement between monetary authorities. It is thus the new European unit of account, which is not yet a generally accepted means of payment, but is intended to be used increasingly as such, initially between member states' central banks and subsequently perhaps in connection with international capital movements. The ECU is a unit of account defined by the weighed averages of a basket of ten member states' currencies. The amount is fixed in principle but adjustable in practice if needed. The amount of each currency in the basket corresponds to the economic importance of the country in question (see Table 6). [2] In this way, the weight of each currency influences the value of the ECU basket, which is calculated each day by the Commission on the basis of quotations on the relevant national foreign exchange markets. If one currency devalues, it changes its exchange value in relation to another currency and the ECU itself. This has an important effect when bigger countries appreciate. Appreciating currencies gain further in weight in the basket of currencies while depreciating currencies lose weight.

As in the snake, a grid of bilateral exchange rates has been established restricting the margin to 2.25% either way,

TABLE 6 :

THE ECU BASKET

Currencies	Amounts in Basket	1 ECU= ..... Currency Units 13/3/1979	Maximum margin around central rate vis-a-vis ECU (%)	Threshold margin around central rate vis-a-vis ECU (%)
DeutsheMark	0.828	2.51064	1.51	1.13
Pound Sterling	0.0885	0.663247		
French Franc	1.15	5.79831	1.80	1.35
Italian Lira	109.00	1148.15	5.43	4.07
Dutch Guilder	0.286	2.72077	2.01	1.51
Belgian Franc	3.66 ----	39.4582	2.03	1.52
Luxembourg Franc	0.14 ----			
Danish Krone	0.217	7.08592	2.18	1.63
Irish Pound	0.00759	0.662638	2.25	1.68

SOURCE: "The European Monetary System" Structure and Operation. in The Monthly Report of the Deutsche Bundesbank, March 1979, Volume 31, n.3, p.12.

Maximum margin around central rate vis-a-vis ECU (%)= (1-share of currency in basket)x2.25% or x6% in case of Italy.

Threshold margin around central rate vis-a-vis Ecu (%) = 75% of above.

with the exception of Italy which has opted to apply initially a wider margin of 6%. When a currency is in danger of leaving the grid as its exchange rate fluctualions by more than 2.25% (or 6%), this currency must be supported through intervention, that is, it must be brought by the central bank responsible for the currency which has risen to the upper limit of its margin. These interventions are obligatory and without limit as to the amount.

In addition to the above conventional policy of intervention, provision has been made for preventive measures when a currency deviates unduly (by more than 75% of its margin) from its average ECU rate. This most interesting and controversial provision is the alarm signal given by the divergence indicator.

The early warning signal of the divergence indicator implies "presumption to act" [3] in order to restore the currency to its previous rate or to stop it from hitting its outer margin of fluctuation. The Resolution of the European Council of December 5, 1978 specifies that when this threshold of divergence is crossed, the country concerned is expected to correct the situation by taking appropriate measures (for example, in respect of interest rates), other economic policy measures (for example, in the field of taxation or incomes policy) and lastly, changes in the central rate itself. Changes in the central rate must not become the rule when a country experiences difficulties. Such changes should be carried out,

however, where underlying economic circumstances have altered: they should not be delayed or ruled out for reasons of prestige. If no action is taken, the country concerned will have to give reasons to the other member states.

Therefore, the divergence indicator means that partners can demand action on the part of the divergent actor; it triggers policy coordination and discussion. The divergence indicator is a mechanism that signals the divergence of both strong and weak currencies. This brings in the important concept of symmetry in interventions and shares the burden of adjustment to exchange rate pressures equally among the strong and weak countries, independent of where, and why, such pressures originate.

The EMS is also based on a partial pooling of gold and dollar reserves currently held by the central banks of the EMS member countries. The arrangement for depositing 20% of gold and dollar reserves was the first step towards establishing a genuine European reserve fund -- largely a symbolic step, since the reserves remained the property of member states' central banks even though their corresponding values in ECU is used to finance intervention. The dollar and gold reserves used to back the ECUs are valued at their respective market rates. The EMS had envisaged the establishment of a European Monetary Fund (EMF) by March 1981 that would have been responsible for issuing ECUs, and controlling their supply. However, the EMF has not

still become an actuality, and for the time being the European Fund for Monetary Cooperation (EMCF or FECOM) acts as interim supervisor.

Against these deposits of gold and dollar, ECUs are issued to an equivalent amount. Central bank holdings of ECUs at FECOM serve as an official means of payment in intervention debt settlements between participating central bank. At the formal policy level, ECUs become a unit of settlement of debts between the central banks of the EMS; but remains a limited means of settlement. The EMS has set up a system of credit facilities consisting of 1) very short-term financing; 2) short-term monetary support; and 3) medium-term financial support.

In the fist case, any participating central bank that must intervene to keep its currency from crossing its upper intervention point with respect to some other currency, but lacks the foreign currency to intervene with, can borrow an unlimited amount from the central bank of the foreign currency. Though the amount of currency that can be borrowed is unlimited, the term of loan is extremely short. The funds borrowed for defensive action have to be settled after 45 days. The effective amount of such loans is converted into ECUs at daily values and entered in the books of FECOM for the member countries. Likewise, the amounts of partner currencies that central banks take out of the market in order to help prevent these currencies from crossing their intervention point are

converted into ECUs and entered into FECOM's accounts.

As a result, some central banks become net ECU-creditors while other central banks turn into net ECU-debtors. The settlement period of very short-term intervention debts may be automatically extended twice by three months if the creditor central bank consent. Any debt not settled in the creditor's currency can be settled with ECUs that the debtor holds in FECOM, although no creditor is obliged to acept more than 50% in settlement of its claims in ECUs. This financing facility has been used quite extensively since the inception of the EMS, particularly as this mechanism imposes no quantitative or policy conditions, as to the short-term and medium-term monetary and financial supports.

Short-term and medium-term financial assistance impose quantitative limits and policy-restrictions on borrower countries. While short-term monetary support imposes the same loan term as does the very short-term financing, a ceiling of 11 billion ECUs is imposed. Medium-term financial assistance has a term of maturity of two to five years but conditions are attached as to the policies debtor countries are to pursue. Conditionality presupposes obligation to pursue policy coordination and policy discipline. Yet, for this very reason, countries are unwilling to give un national freedom to pursue internal, policies, and as a result, these mechanisms have rarely been used.

The ECU .. A Parallel Currency?

One of the great difficulties attached to the option of returning to fixed rates has always arisen from the lack of a central reserve currency. Although the dollar performed that role well for over twenty years under the Bretton Woods system, it could not do so again in the foreseeable future for lack of confidence in the ability of the United States' monetary authorities to manage the dollar to serve the common good, rather than the narrow national interest of the U.S.

The signatories of the All Saints' Day Manifesto had advocated the creation of a parallel currency, the Europa. Was the ECU, pivot of the EMS to become the hoped-for Europa? Certainly, the intention of the architects of the EMS was to create the ECU as an alternative to national currencies and as a way to foster the development towards a European parallel currency. This seems to be the case, particularly when the ECU becomes the main instrument of intervention in the EMS. However, the ECU has been harshly criticized for presenting a superfluous option to monetary authorities and as possessing few chances of growing into a parallel currency.

In fact, the ECU suffers from fundamental weaknesses which do not render it an attractive alternative to national monies.First, the gold and dollar backdrops of the ECU are not really deposited, but rather constitute a "swap" arrangement,

that is, a temporary exchange which automatically terminates after a certain period, in this case, three months. Though the book-keeping amount of gold and dollar reserves terminates after three months, these swaps are automatically renewed for a period up to two years. The impact of these "non-deposits" is important. The member countries are not irrevocably tied down and committed to this arrangement. Politically, it allows partner to signal their wish to withdraw from the system at the end of the two-year renewed-swap period. This could lead to a gradual "drop-out" process; but in practice, it is difficult for this to happen. A very tough provision has been implemented, whereby unanimous agreement amongst the partner is needed in order to stop the swapping. This is an "all-together or no-one" approach. It is effective in deterring one country from upsetting the whole system, but not effective if there are strong internal pressures in the group as a whole to break up. This, however, is the inevitable risk any comunitarian-type approach present. It presupposes that the system work for all members, and for only a few. The costs of such a group approach, is that individual demands need to be scaled down or compromised upon, in order to achieve a higher common welfare effect. This is both the strength and weakness of the system. If it effectively deters any participants from wanting, or risking, to become the odd-man out, then the system holds up; but if the deterrence does not work, then the whole system falls apart.

Second, the very nature of the holdings backing the ECU is unstable and volatile. If gold and dollars are used against which to create the stock of ECUs, and the gold and dollars are valued at market prices, then will the ECU not suffer from the same fluctuations of the dollar and gold? Though the European stock of gold is constant due to a US-European agreement, the price of gold has wildly fluctuated in the past decade. After the EMS was launched, the gold price, determined on the narrow market, more than doubled and at times even tripled. This, with the added volatility of the dollar, could lead potentially to inflation through excessive creation of ECUs.

Triffin [4] has identified the problem of excessive creation of official reserve assets since the post-war period. The following chart can give an idea of the trend this excessive reserve asset creation creation has taken:

Table 7

Reserve Assets

(World Gold and Credit Reserves)

(in SDR millions)					(in $ millions)	
1949	1959	1969	1980	June 1981	1980	June 1981
45,510	57,120	78,725	317,908	349,998	963,214	803,132

Source: Robert Triffin, The World Monetary Scandal: Sources and Cures?, p. 9.

The tremendous increase in reserve assets has been labeled by Triffin as a "monetary scandal." [5] Looking at the date of the 1969-1980 period of eleven years, reserve assets

have multiplied four times in SDRs. The source of this increase can be traced to the impact of fluctuations in the market gold prices and exchange rates. Table 8 summarizes the impact of market gold price and exchange rate fluctuations on reserve increases. [6]

Table 8 Sources of 1970-80 Reserve Increases

		in billions	in % of total
I.	Measured in SDRs	239	27
	A. World Gold	- 2	-
	B. Credit Reserves	241	27
	1. Concerted*	21	2
	2. Reserve Currencies	220	25
II.	Impact of Fluctuations in Market Gold Price and $ - SDR Exchange Rate on:	645	73
	A. World Gold	625	71
	B. Credit Reserves	20	3
	1. Concerted*	- 49	- 8
	2. Reserve Currencies	70	11
III.	Total in $, at Market Prices (I and II)	884	100

*declined due primarily to "sterilization" of IMF gold profits not credited to member countries' reserves.

Source: Robert Triffin, The World Monetary Scandal: Sources and Cures?, p. 14.

Table 8 shows how gold, internationally concerted credit lines and net IMF credits do not account for this massive increase in official reserve assets, while on the other hand, market gold price and exchange rate fluctuations account for 73% of reserve increases.

It this way, gold and dollar backings of reserve assets,

including the ECU, become the engine of inflation. As a consequence, the ECU does not appeal to countries commited to anti-inflationary policies; an example is Germany, where the ECU is actually prohibited by Art. 3 of the basic law constitution. In this way, the ECU is not a stable reference currency. This method of creating ECUs could also lead to perceived increased international liquidity as unusable gold reserves are changed into ECUs which, in turn, can be converted into national currencies. This is certainly not an enticing prospect at the moment, in the full swing of a recession.

Another drawback of the ECU is that it bears no attractive interest rates for central banks. [7] The rate is the mean rate of the discount rates, which is usually lower than the market rate (see Table 9). Therefore, central banks are not interested in holding more ECUs that they are forced to. Due to general uncertainty of the underlying swap arrangements, banks usually accept only the minimum 50% ECUs required of debt settlements, but quickly return them to FECOM exchange for stronger currencies.

Table 9

Short Term Real Interest Rates

		ECU	U.S.$	DM	SDR
1982	I	1.70	5.25	2.30	4.00
	II	1.55	5.09	1.50	3.96
	III	1.52	3.20	1.83	2.90

Medium Term Real Interest Rates

		ECU	U..S.$	DM	SDR
1982	I	1.75	6.35	3.89	5.07
	II	2.61	6.9	3.54	5.53
	III	3.01	6.73	3.78	5.71

Source: ECU Newsletter, February 1983

The value of the ECU in terms of any national currency depends on a basket of currency weights. In principle there has to be a continuous recalculation of the value of the ECU while exchange markets remain open. In reality, the problem may not be of practical significance in the daily functioning of the exchange markets unless the larger EEC currencies change their ECU rate, thus having an appreciable impact on the ECU value of all other EEC currencies.

In any case, the ECU represents a complicated calculation of the daily rates of national currencies: certainly a deterrent to the common usage of the ECU as a means of payment and settlement at both the private and official level. Though

technically feasible, these recalculations of the market value of the ECU on a continuous basis would complicate central bank relations, by increasing both information and transaction cost.

Politically, even though the EMS attempts to foster economic and monetary coordination amongst the members, the value of the ECU, thus based on a basket of national currencies, calls for a need, not only to depend on the actions taken by any one among the national authorities to influence the ECU rate through intervention and/or parity changes, but it would also depend on the actions by all other participating national authorities. This situation may constitute extreme uncertainty for the private operator, unless s/he is firmy committed to the reputations of the actors in the EMS.

A further criticism of the ECU-based system of the EMS stems from the asymmetry of weak versus strong currencies. The EMS has ensured that the burden of adjustment fall upon the shoulders of weak and strong currencies, but it has not been able to guarantee that the burden would fall upon them equally. The stronger currencies carrying greater weight in the ECU basket have scope for wider fluctuations in the bilateral exchange rates. They also pull the whole center of gravity with them and thereby obviate the need for intervening to keep inside their ECU limits. For example, a currency with a weight of 50% in the ECU basket could never be pushed to the intervention limit. This clearly puts weaker currencies to a disadvantage,

which, with smaller fluctuation margins, need to intervene more often to keep their currencies within the fluctuation limits. This certainly constitutes a problem, as smaller countries with weaker currencies are also more susceptible to external shocks. Their markets tend to be extremely open, ever more so than the larger, open economies of the stronger currenies. Therefore, this "asymmetrical-symmetry" stands to obfuscate the real underlying weakness.

The criticisms so far addressed to the ECU are directed at the instability such a unit represents at the official level. However, the advocates of the Europa, had distinctly argued in terms of private holders of the currency. The very foundation upon which the Europa based itself was on the demand on the part of individuals for the currency. The competition created by this currency demand would eventually overtake the national currencies, leading to the eventual formation of a single currency area.

In contrast, no provision had been made in the EMS for private use of the ECU. This new currency of the EMS is based only on formal arrangements, but not on formal protection. The ECU is not protected by the EMS, the EEC Commission or the central banks. A private market for ECUs would have to be created and protected by private financial markets. It is also obvious that the evolution of the use of the ECU from an intervention currency to a parallel currency would require it to

be also held by private market operators. The technical complications of the ECU, mentioned above, however, deter private operators from holding ECUs as a valid unit of account. The kind of predictions that a trader would become involved in, if s/he used ECUs in bilateral transactions, are enormous. A trader is usually preoccupied with pedicting the forward exchange market. If the ECU truly were the inflation-indexed Europe, the trader would not need to predict the forward exchange market, because it would be equal to the spot rate. However, the ECU is not the Europa, and in addition to the forward exchange market uncertainty a transaction in ECUs would require a calculation of the forward exchange rates of all basket currencies, since the change in the rate of one currency would affect the ECU rates of the other currencies. Obviously, the private operator will prefer to deal directly in the national currencies required for his/her deal, thus reducing both transaction and information costs.

The partial backing of the ECU with dollar reserves gives rise to another side-effect that can give rise to further problems within the EMS. This dollar backing has not eliminated the fundamental problem the EMS had set out to solve: that is, the need to pursue more autonomous European monetary policies through the dissociation of European currencies from the American dollar policy. Instead, the majority of national interventions in the foreign exchange market to protect weak EMS

currencies take place in dollar reserves, rather than in ECUs. This, therefore, forces the EMS to maintain partial dependence on the use of the dollar and to remain vulnerable to dollar policies.

Private operators wanting to avoid both the complex technical considerations of the ECU and its dependence on the dollar may decide to transact in the currency that has shown the most stable and least inflationary performance: in this case, the DeutscheMark. This would give rise to an interesting phenomenon: the hegemonial currency problem. [8] This refers to the fixing of the exchange rates of n-1 currencies to an unchangeable nth currency. The n-1 currencies give up their freedom to pursue monetary policies in order to maintain stable exchange rates, while the nth currency remains free to pursue whatever monetary policy it wishes. This means that the n-1 currencies are obliged to coordinate monetary policies relative to the nth currency's monetary policy. This type of arrangement clearly imposes constraints on the n-1 currencies' monetary freedom. The nth currency, for this reason, is called the hegemonial currency. This role was fulfilled by the dollar under the Bretton Woods system, and would be played by the DeutscheMark if enough private demand exists for it. After all, it makes sense to use the strongest currency as a means of payments in order to avoid exchange uncertainties. However, the political implications of such a situation are tricky. Countries of equal size and political importance, such as England and

France may not be willing to acquiesce to German monetary policy. These countries would be extremely reluctant to abdicate their monetary autonomy to Germany, supposedly a partner in the EMS. If they accepted to do so, they would be forced to accept the monetary goals of Germany, goals that may not complement their economic climates. This is a process that should not be dismissed lightly, as its potential for occurring is quite high, particularly in relation to the recent and recurring weakness of the French franc vis-a-vis the DM.

It is quite clear that for the ECU to develop into a parallel currency, it needs to gain credibility as a valid and stable unit of account, of investment, of exchange and of payments settlements. To do so, it absolutely needs to be used extensively at the private level. If the present administrative obstacles are not removed, the ECU's prospect of developing into a fully-fledged parallel currency are dim. These administrative obstacles are constituted by the double series of regulations and controls to which the ECU is subjected as a result of its national and foreign currency characteristic. The ECU, as it stands presently, involves excessive transaction costs. Banks and ECU-users are obliged to go through a double set of foreign exchange operations, the ECU having to be converted first into a natinoal currency by the payer and then re-converted into ECU by the payee. In addition, each bank covers itself against exchange risks by investing into national currencies, pro rata of their

shares in the basket, and any difference between their loans and deposits in ECUs. Triffin [9] has suggested the establishement of clearing houses in order to reduce these unnecessary costs.

However, the ECU should not be underestimated. Though it has certain constraints, there have been major efforts to foster growing private private use of this unit of account. Despite all of its limitations, the ECU, by definition, is less volatile than national currencies. The ECU has not varied largely in the past few years. [10] (see Tables 10A-10E in the Appendix), thus proving a certain amount of stability. In February 1982 the ECOFIN Council of the EEC discussed at great length the need to encourage the private use of the ECU and of opening the system to third countries. [11]

Propositions for simpler ECU rate computations were presented. There included the official ECU fixing in Brussels as an alternative to the unofficial and indirect method of daily spot rate calculations of the ECU. [12] This certainly would be a step towards simplifying ECU transactions, and reducing information costs.

Private banks have begun to transact in ECUs. They have begun to accept ECU-denominated deposits, to issue ECU-bonds and to grant ECU-loans. [13] Even private banks in the U.S. are accepting ECU-deposits, and Canadian corporation has issued the first ECU-bond in North America, guaranteed by a European bank. [14]

National governments have also attempted, if some-what in limited fashion, to contribute to ECU-propagation. Of all the EMS countries, Italy is probably the one that has committed itself the most in actions to the ECU market. On 14 September 1981, the ECU was established as a fully convertible currency in Italy, while Italian insurance companies have launched an ECU-denominated life insurance. [15] In addition, in the recent renegotiations of the "scala mobile" (the price wage indexation mechanism) of January 1983, the new agreement links the wages of Italian workers directly to the ECU by dropping considerations in changes on the prices of imports caused by an appreciation of the dollar against the ECU. [16] Another exciting development has been the beginning of intercompany use of ECUs as a means of payments between subsidiaries located in different European countries.[17]

The amount of ECU bonds issued since 1981 has been enormous, all to private corporations and enterprises and outside the EEC (see Table 11 in the Appendix.) [18] Some banks are even considering ECU travellers cheques and eventually, who knows American express ECU credit cards. All these prospects are quite exciting for the development of the ECU into a parallel currency, but these efforts though laudable, have remained limited in number and in effectiveness. The reasons for this are quite clear. It is not that the EMS or the ECU is inherently faulty, but rather, that the underlying conditions for such a

system are lacking. The ECU process is slow, painful and tortuous. This should not constitute a criticism of the EMS but rather a statement of fact. What needs to be questioned is why is it so? Political commitment and efforts one the part of private institutions have not been enough to foster a parallel currency. Why? The answer is to be found in a final assessment of the EEC as an optimum currency area. More specifically, the EEC is not an optimum currency area but the ECU has been created as a means by which the EEC can become one. The next chapter is devoted to analyzing the past four years' performance of the EMS and in drawing conclusions on its propects as a monetary arrangement for Europe and a potential model for the international system.

VALUE OF THE ECU

CURRENCY AMOUNT FOR 1 ECU

Currency	4/12/81	11/12/81	18/12/81	31/12/81	8/1/82	15/1/82	22/1/82	29/1/82	5/2/82	12/2/82	19/2/82	26/2/82
DM	2.45008	2.43418	2.45333	2.44559	2.44452	2.44573	2.44129	2.44438	2.44731	2.45087	2.44963	2.42429
FF	6.18169	6.19168	6.21615	6.20086	6.21008	6.20471	6.21304	6.22233	6.22627	6.21683	6.22301	6.18342
LIT	1315.0300	1305.3300	1307.3800	1301.2500	1308.6500	1309.6900	1309.4600	1310.9200	1309.2600	1305.9700	1309.0100	1302.2900
HFL	2.67778	2.67283	2.67911	2.67472	2.68100	2.67639	2.67630	2.68181	2.68236	2.68630	2.68614	2.66121
BFR	41.66493	41.76388	41.48437	41.75357	41.63035	41.57350	41.55565	41.61519	41.74936	41.71095	41.75737	44.48319
DKR	7.90758	7.92310	7.94615	7.96359	7.97957	7.97376	7.98841	8.01492	8.01899	8.01061	8.03863	8.11609
UKL	0.56512	0.57486	0.57131	0.56848	0.56458	0.56574	0.56687	0.56207	0.56011	0.55953	0.55838	0.55381
IRL	0.68922	0.68575	0.68746	0.68740	0.69168	0.68967	0.69247	0.69582	0.69420	0.69624	0.69591	0.69751
$	1.10317	1.07972	1.07004	1.08433	1.08148	1.06302	1.06068	1.05886	1.04636	1.02591	1.03762	1.01658
CAD	1.30014	1.28187	1.27264	1.28709	1.28406	1.26736	1.26567	1.26598	1.26121	1.24452	1.25939	1.24764
SFR	1.96587	1.99038	1.95950	1.94216	1.97876	1.96370	1.95939	1.95371	1.96426	1.96768	1.95127	1.92561
YEN	238.05757	235.87459	234.59178	238.58636	239.81125	237.56394	240.04766	241.86716	243.35688	245.20653	241.29217	240.67455
NKR	6.26294	6.22534	6.23869	6.31552	6.29673	6.23632	6.22189	6.22174	6.19035	6.14198	6.15976	6.10830
SKR	6.02065	5.99986	5.98809	6.01039	6.00960	5.98032	5.96266	5.98758	5.97236	5.94758	5.96088	5.88606
OSH	17.18522	17.08100	17.17480	17.14653	17.12534	17.09644	17.11220	17.14204	17.16387	17.15312	17.19870	17.02384
ESC	70.89111	70.55838	69.67120	69.21543	70.85273	70.98591	70.70518	71.12968	72.13554	71.05386	71.14185	70.81512
PTA	105.10150	104.86263	104.99358	104.01679	105.32394	105.05254	104.62288	104.14872	103.76129	103.15719	104.65382	104.89650
SDR	1.06542	1.07627	1.08041	1.07284	1.07419	1.08395	1.08353	1.08399	1.08936	1.09863	1.09518	1.10872

Source: ECU Newsletter based on quotations at the Milan Stock Exchange

VALUE OF THE ECU
CURRENCY UNITS FOR 1 ECU

CURRENCY	5/3/82	12/3/82	19/3/82	26/3/82	2/4/82	8/4/82	16/4/82	23/4/82	30/4/82	7/5/82	14/5/82
DM	2.41958	2.41553	2.39953	2.39565	2.39621	2.39350	2.39460	2.39085	2.38387	2.38394	2.38453
FF	6.19100	6.19372	6.26310	6.25573	6.23650	6.23746	6.23060	6.24194	6.21767	6.22253	6.22828
LIT	1305.0000	1304.7700	1322.1400	1315.0800	1319.8300	1315.7300	1316.9000	1318.3600	1324.2400	1325.7100	1325.4400
HFL	2.65201	2.64418	2.63884	2.65249	2.65623	2.65322	2.65681	2.65210	2.64319	2.64962	2.65051
BFR	44.73008	44.71760	45.09345	45.23839	45.26321	45.25297	45.25430	45.19265	45.02686	45.05367	45.07839
DKR	8.11820	8.10114	8.13124	8.16566	8.20464	8.14189	8.11699	8.11298	8.12168	8.08113	8.07555
UKL	0.56055	0.56357	0.55869	0.55916	0.55845	0.56286	0.56194	0.56294	0.57082	0.56935	0.56808
IRL	0.68497	0.68481	0.69012	0.69106	0.69401	0.69183	0.69234	0.69125	0.69296	0.69040	0.68997
$	1.03097	1.01614	1.00731	0.99892	0.99983	0.98942	0.98677	0.99683	1.02215	1.03994	1.03223
CAD	1.25150	1.23324	1.22818	1.22630	1.22501	1.21649	1.20650	1.22138	1.24605	1.26808	1.27975
SFR	1.91419	1.90605	1.91088	1.90573	1.93260	1.95665	1.95694	1.96550	1.99554	1.96862	2.00551
YEN	241.93548	243.33644	245.06766	247.24196	247.62289	245.33470	244.82246	242.21202	240.63965	241.52122	244.32074
NKR	6.13281	6.09079	6.07378	6.08552	6.06066	6.04378	6.04610	6.07259	6.11235	6.16466	6.13658
SKR	5.92509	5.90527	5.86848	5.89867	5.90766	5.89168	5.89428	5.89554	5.93563	5.96361	5.96052
OSH	16.95664	16.94617	16.86231	16.82635	16.84101	16.80800	16.82789	16.81153	16.77633	16.79581	16.81369
ESC	71.62459	70.91141	70.32660	70.79838	72.91878	73.09611	71.68753	73.16093	72.64070	72.64164	72.70653
PTA	105.84800	106.07024	105.43381	105.74783	106.65293	105.76608	105.33515	105.36765	105.87991	106.32047	106.07763
SDR	1.10062	1.10704	1.11176	1.11538	1.11516	1.12133	1.12331	1.11917	1.10595	1.09662	1.09900

Source: ECU Newsletter based on quotations at the Milan Stock Exchange.

VALUE OF THE ECU
CURRENCY UNITS FOR 1 ECU

CURRENCY	21/5/82	28/5/82	4/6/82	11/6/82	18/6/82	25/6/82	2/7/82	9/7/82	16/7/82	23/7/82	30/7/82
DM	2.37963	2.38705	2.38712	2.38836	2.35963	2.36385	2.36279	2.36361	2.36312	2.35568	2.35982
FF	6.20413	6.21858	6.23675	6.26595	6.54353	6.55333	6.55761	6.57325	6.57751	6.55829	6.57079
LIT	1321.1700	1323.5000	1327.4300	1325.0600	1326.7000	1330.8500	1327.1300	1323.2600	1320.3700	1324.7100	1322.7000
HFL	2.64551	2.64151	2.64813	2.64151	2.60285	2.60946	2.61020	2.60818	2.60505	2.60518	2.60908
BFR	44.92553	45.13984	45.11999	45.15146	45.24435	45.07078	45.15430	45.07170	45.00545	44.93894	45.04649
DKR	8.10037	8.13310	8.16528	8.14519	8.16381	8.15722	8.16444	8.17079	8.17162	8.18328	8.20788
UKL	0.57645	0.56817	0.56467	0.56290	0.55395	0.55130	0.55097	0.55078	0.55195	0.55702	0.55262
IRL	0.68845	0.68986	0.69128	0.69014	0.68634	0.68671	0.68594	0.68669	0.68616	0.68592	0.68737
$	1.03422	1.01784	1.01482	1.00039	0.96141	0.94956	0.95559	0.94776	0.94732	0.98123	0.96123
CAD	1.27219	1.26518	1.26772	1.25861	1.24316	1.22029	1.22621	1.21847	1.19881	1.23206	1.20894
SFR	2.02441	2.03069	2.05021	2.04138	2.03810	2.01568	2.01214	2.01532	2.01224	2.99202	2.01263
YEN	245.29707	247.29073	246.82596	247.02834	245.18573	243.92412	245.40126	242.93372	242.58130	244.99908	246.45053
NKR	6.16447	6.13697	6.14124	6.11303	5.99140	5.98727	6.06549	6.04781	6.04344	6.11226	6.19126
SKR	5.99143	5.95152	5.95687	5.91888	5.84269	5.86278	5.85748	5.83294	5.83873	5.88420	5.84748
OSH	16.78209	16.80656	16.79441	16.84413	16.62948	16.65124	16.62341	16.64771	16.62809	16.60350	16.62602
ESC	72.71161	72.92011	73.13664	72.56627	79.68168	79.21726	80.14070	79.85878	80.41230	81.37039	81.29687
PTA	106.16924	106.65646	106.83541	106.94592	106.70795	106.86983	106.42582	106.70591	106.76559	107.43796	107.50163
SDR	1.09649	1.10469	1.10695	1.11426	1.13655	1.14438	1.14004	1.14581	1.14599	1.12466	1.13577

Source: ECU Newsletter based on quotations at the Milan Stock Exchange.

VALUE OF THE ECU

currency units for 1 ECU

CURRENCY	6/8/82	13/8/82	20/8/82	27/8/82	3/9/82	10/9/82	17/9/82	24/9/82	1/10/82
DM	2.36208	2.36150	2.35715	2.35560	2.35284	2.35254	2.35418	2.35511	2.35260
FF	6.57623	6.58106	6.59660	6.62931	6.63993	6.66343	6.65046	6.65199	6.64774
LIT	1320.1200	1318.1200	1328.8200	1331.1000	1327.9200	1325.8900	1324.4400	1325.0100	1324.2300
HFL	2.60327	2.60102	2.59181	2.58341	2.58149	2.57965	2.57433	2.57819	2.57342
BFR	45.07837	45.11329	45.29193	45.21246	45.25971	45.17621	45.28000	45.55804	45.66625
DKR	8.20715	8.21463	8.22646	8.24313	8.25205	8.39543	8.28915	8.22834	8.23629
UKL	0.55166	0.55244	0.55067	0.55022	0.55112	0.54843	0.55027	0.54832	0.54966
IRL	0.68674	0.68602	0.68496	0.68606	0.68538	0.68931	0.68927	0.68932	0.69042
$	0.94281	0.94466	0.95975	0.96053	0.95692	0.93988	0.94029	0.93554	0.93220
CAD	1.18047	1.18536	1.18676	1.18774	1.18095	1.16301	1.16077	1.15283	1.15876
SFR	2.01468	2.02308	1.99958	1.99835	2.00108	2.00862	2.00734	2.02128	2.02559
YEN	245.96982	247.02399	245.48679	245.77179	245.41120	246.53961	247.65146	249.53107	250.80114
NKR	6.35284	6.35361	6.38549	6.33254	6.36312	6.50584	6.53141	6.49738	6.48814
SKR	5.82834	5.84092	5.86210	5.83560	5.86459	5.85459	5.86554	5.85614	5.84907
OSH	16.60779	16.59265	16.57172	16.57452	16.57931	16.55335	16.53483	16.54815	16.54357
ESC	81.13829	80.96560	81.52270	82.42105	82.73645	82.97184	81.85661	82.29876	82.09733
PTA	106.88365	106.53196	106.30560	106.40288	106.53189	106.50574	106.11650	106.13665	106.23586
SDR	1.14692	1.14491	1.13736	1.13647	1.13864	1.14850	1.14728	1.14951	1.15086

Source: ECU Newsletter based on quotations at the Milan Stock Exchange.

VALUE OF THE ECU

currency units for 1 ECU

CURRENCY	8/10/82	15/10/82	22/10/82	29/10/82	5/11/82	12/11/82	19/11/82	26/11/82
DM	2.35361	2.35048	2.35084	2.35375	2.35170	2.35015	2.33377	2.32327
FF	6.65201	6.64435	6.64720	6.64362	6.63666	6.64024	6.59969	6.57149
LIT	1332.7300	1340.8300	1343.9300	1347.9900	1349.1000	1350.1600	1344.9500	1341.1100
HFL	2.56739	2.56505	2.56035	2.55354	2.55919	2.55369	2.54441	2.55333
BFR	45.68838	45.64528	45.61416	45.50792	45.57770	45.54888	45.35017	45.51536
DKR	8.29380	8.36398	8.31743	8.25873	8.24734	8.23570	8.17201	8.17202
UKL	0.54665	0.54723	0.54776	0.54752	0.54799	0.54954	0.56706	0.57452
IRL	0.69080	0.68955	0.69194	0.69092	0.69124	0.69080	0.68778	0.68743
$	0.93522	0.93288	0.93089	0.91697	0.91421	0.90779	0.91615	0.91885
CAD	1.15323	1.14807	1.14221	1.12445	1.11662	1.11207	1.11949	1.13572
SFR	1.99807	2.00967	2.01873	2.03170	2.03117	2.02444	2.00407	1.99641
YEN	248.73647	250.95078	253.28496	254.77036	252.45135	243.31591	237.12094	232.06610
NKR	6.74800	6.77255	6.71965	6.63969	6.65466	6.63534	6.63092	6.60060
SKR	6.82052	6.85566	6.87256	6.82561	6.84093	6.84943	6.89082	6.89694
OSH	16.49377	16.50760	16.51425	16.52191	16.49004	16.48547	16.39383	16.33806
ESC	83.66164	83.38495	83.78616	83.98692	83.74302	83.34321	84.32288	84.61262
PTA	105.97408	107.05230	107.53161	107.82195	108.04036	108.97175	109.11488	109.99016
SDR	1.15067	1.15116	1.15094	1.15684	1.16202	1.17096	1.16725	1.16838

Source: ECU Newsletter based on quotations at the Milan Stock Exchange.

VALUE OF THE ECU
(Currency units for 1 ECU)

CURRENCY	3/12/82	10/12/82	17/12/82	23/12/82	31/12/82	7/1/83	14/1/83	21/1/83	28/1/83	4/2/83	11/2/83	18/2/83	25/2/83
DM	2 31583	2 31173	2.30685	2 30459	2 30755	2 29360	2 29210	2 30407	2 29619	2 29754	2 29090	2 28843	2 28[illegible]
FF	6.56656	6 55628	6.53015	6 52798	6 49951	6 50386	6 50099	6 53510	6 50657	6 51735	6 48905	6 49162	6 48[illegible]
LIT	1340.1700	1336.7600	1340 5100	1329 7500	1329 1500	1322 9500	1317 3600	1323 6200	1322.7200	1320 3500	1319 0300	1320 7200	1320 6[illegible]
HFL	2.54756	2.54597	2 54053	2 54986	2 53534	2 53410	2 52673	2 52623	2.52177	2 52293	2 52891	2.52919	2 52[illegible]
BFR	45.44490	45.42168	45.32118	45 00152	45.34027	45 18581	45 04411	45 02875	44.98130	44.98331	45 11047	45 10964	45 05[illegible]
DKR	8.15635	8.14849	8 17434	8.12011	8 11447	8 11626	8 07503	8.10148	8 06832	8 06468	8 11311	8 10855	8 13[illegible]
UKL	0.57986	0.58466	0 59040	0 59638	0 60143	0 61022	0 61605	0 60211	0 61292	0 61088	0 61605	0 61657	0 62[illegible]
IRL	0 69367	0 69370	0.69421	0 69421	0.69662	0 69102	0 69080	0 69209	0 69008	0 68084	0 68933	0 68949	0 68[illegible]
$	0 94994	0.94467	0.95747	0 95938	0 97022	0 97746	0 97147	0 94853	0 94174	0 92643	0 95216	0 95184	0 94[illegible]
CAD	1.17559	1.16697	1.18420	1.18680	1.19474	1 20230	1.18713	1.16250	1 16396	1.13921	1 16656	1 16574	1 16[illegible]
SFR	1 98420	1.96791	1 95872	1 93615	1.93754	1.90385	1 88679	1.88322	1 87980	1 88414	1 90405	1 90259	1 90[illegible]
YEN	234.78802	230.47586	232.44495	229 30678	226 31534	225.41319	224 38426	223 16979	223.20621	222 43093	223 33728	222 90633	222 36[illegible]
NKR	6.59532	6 65551	6.70221	6.79172	6 80394	6.83307	6 79087	6 73358	6.71159	6.67214	6.70750	6 73218	6 73[illegible]
SKR	6.97714	6 98777	7 03643	7 04279	7.10775	7.07157	7 06094	7.00180	6.99445	6 96461	7 02958	7.02287	7 01[illegible]
OSH	16.27328	16.26328	16.23719	16.22042	16.22399	16.10016	16.10465	16 17524	16.12503	16 14258	16 08573	16 08398	16 07058
ESC	85.90833	89.17678	87.84469	89 24497	83.07187	91.55363	91 48333	94.54429	87.30825	88.02333	86.77829	87.29147	88 04[illegible]
PIA	111.81128	121.77826	121.74280	121.63831	120.06775	122.23505	122.04558	121.80179	121.66299	121.83722	122.18898	122.89197	123.48[illegible]
SDR	1.14704	1.15244	1.14324	1.14315	1.13806	1.13397	1.13715	1.15245	1.15563	1.16572	1.14945	1.15001	1 15[illegible]

Source: ECU Newsletter based on quotations at the Milan Stock Exchange.

ECU BONDS DISTRIBUTION
(in millions of ECUs)

YEAR OF ISSUE	BORROWER	ITALY	IRELAND	FRANCE	EEC INSTITUTIONS	OTHER EUROPEAN INSTITUTIONS (*)	SCANDINAVIAN COUNTRIES	NORTH AMERICA
1981	SOFTE	35						
	EIB				40			
	Hydro-Quebec							40
	EIB				57			
	Istituto Bancario San Paolo di Torino	30						
	Euratom				42			
1982	NERSA			30				
	Republic of Italy	500						
	Council of Europe Resettlement Fund					25		
	S.D.R. France			30				
	Hydro-Quebec							50
	IMI	40						
	EIB				40			
	Crédit Foncier			50				
	Council of Europe Resettlement Fund					30		
	Gaz de France			50				
	Gaz de France			50				
	Citicorp O/S Fin							15
	EIB				60			
	CEPME			50				
	Euratom				50			
	Republic of Italy	700						
	Thomson Brandt			40				
1983	Electricité de France			60				
	Republic of Ireland		30					
	Caisse Nationale des Telecommunications			125				
	EEC				50			
	Crédit Foncier			100				
	Swedish Export Credit						60	
	Republic of Ireland		30					
	Province of Quebec							50
	EIB				30			
	Elf Aquitaine Norge						30	
	TOTAL AMOUNT	1.305	60	585	369	55	90	155
	ISSUES	5	2	10	8	2	2	4

(*) Council of Europe Resettlement Fund

NOTES TO CHAPTER THREE

1) The Monthy Report of the Deutsche Bundesbank, Vol. 31 March 1979, pp. 11-18.

2) Ibid., p. 17.

3) Art. 3.6 of The Resolution of the European Council of 5th December 1978 on the Establishment of the European Monetary System.

4) Robert Triffin, The World Monetary Scandal: Sources and Cures? Off-print from "Experience and Problems of the International Monetary System" Economic Notes by Monte dei Pashi di Siena, No. 2, 1982, p. 9.

5) Ibid., p.4

6) Ibid., p.5 and p. 14.

7) Istituto Bancario San Paolo di Torino, ECU Newsletter , No.4, February 1983, p.11.

8) Pieter Korteweg, The European Monetary System - Will it Really Bring More Monetary Stability for Europe?, 1979, p. 15.

9) Roberet Triffin, How to End the World "Infession": Crisis

Management or Fundamental Reforms?, Paper submitted to the opening conference of the Centre for European Policy Studies in Brussels, December 1982, p. 258 (mimeo).

10) Tables from Istituto Bancario San Paolo di Torino, ECU Newsletter, No. 1, February 1982; No. 2, July 1982; No. 3. November 1982 and No. 4. February 1983.

11) Istituto Bancario, op. cit., No. 1, February 1982, p.2.

12) Ibid., p. 3.

13) Ibid., p. 4.

14) The American Banks are the Continental Illinois Limited, The Salomon Brothers International, the Chase Manhattan Limited, the Kleinwort Benson Limited and the Chemical Bank, in op. cit., p. 4; The Hydro-Quebec company issues ECU-bonds which are backed by the government of Quebec.

15) Ibid., p. 7.

16) Op. cit., No. 4, February 1983, p. 12.

17) Op. cit., No. 1, February 1982, p. 7.

18) ECU bond distribution table, in op. cit., No. 4, February 1983, p. 6.

19) Robert Triffin, "The Private Use of the ECU," in San Paola Bank, Thema, Economic and Financial Papers, 1980, p. 26.

Chapter Four

THE EMS AND OPTIMUM CURRENCY AREAS

The EMS has been able to survive the past four years (March 1979 - March 1983) but not without a great deal of difficulties and tensions. The ECU's role as a parallel currency has been somewhat limited and it has not been accepted as an intra-EEC international medimum of exchange. The fundamental issue, therefore, in this chapter is to assess the role of the EMS. Has it fulfilled a function or should it be completely scrapped?

In order to assess it, is necessary to look at its past performance and match this with the goals it had set out to achieve. Has it been successful, and if not, what have been the major obstacles in its way? Finally, even if its performance has not been all that it should have, can the EMS be seen as a useful tool of reference for a future regional currency area, and perhaps model for monetary stability?

Performance and Problems

The EMS had been created primarily in order to create a "zone of monetary stability." Stability would be brought about by the reduction in inflation rates, the convergence of economic

performances and the reduction in the fluctuation of exchange rates. If successful, the EMS would help liberalize capital mobility and allocate greater micro-economic efficiency in the EEC markets.

A glance at the leading economic indicators would show that this has not been the case. The Consumer Price Index indicetas that there has been a notable increase in consumer prices and therefore in inflation.

Table 1

Consumer Prices
(1975 = 100)

	1979	1980	1981	1982	March 1983	12-month rate of change
France	144.8	164,5	186.5	208.6	207.4	9.0
Germany	115.9	122.3	129.5	136.4	138.9	3.5
Italy	178.0	215.7	257.8	300.5	333.7	16.1
NL	125.6	133.8	142.8	151.2	153.7	2.7
U.K.	165.0	196.5	218.8	237.7	243.2	4.6

Source: OECD Main Economic Indicators, December 1982 and May 1983

The notable exception of the EEC countries has been the United Kingdom, the member state that has not fixed its exchange rates. By March 1983 the United Kingdom's annual inflation rate had dropped to 4.6%, the lowest level in fifteen years. [1] It was calculated that the United Kingdom's inflation

rate in February 1983 of 5.3% was lower than the 5.7% inflation rate of the developed world and well below the average for Europe which was 7.5%. [2] It is true that the successful decrease in the British inflation rate (which is, however, expected to rise to about 6% by the end of this year) has been achieved at the considerable cost of unemployment.

This has taken place through the choice of stringent internal policies rather than exchange rate movements, but, on the other hand, one cannot ignore that exchange rate movements admittedly helped the deflationary appreciation of the pound. However, the EMS countries have also experienced increases in the unemployment rate.

Table 2

UNEMPLOYMENT
(% of total labor force)

	1979	1980	1981	1982	March 1983
France	5.9	6.3	7.3	8.0	8.0
Germany	3.2	3.0	4.4	6.1	7.7
Italy	7.5	7.4	8.3	8.9	-
Netherland	4.2	4.9	7.5	9.8	13.5
U.K	5.5	7.1	11.0	12.8	13.9

Source: OECD Main Economic Indicators, December 1982 and May 1983

It must be noted that while all the EMS countries

experienced rising unemployment it took place at a slower rate than Britain. In December of 1982, the averge unemployment rate in the OECD was of 8.9% of the work force with the U.K. hitting the 12.9% point. [3] The U.K. resulted as being the third highest in terms of unemployment rates of the main OECD countries after Spain (16.6%) and Belgium (14.3%). [4]

The costs of implementing a severe and contractionary policy within the United Kingdom have been extremely high in term of unemployment, yet it has been highly successful in reducing inflation. On the other hand, member states of the EMS have not been able to significantly reduce their inflation rates, while unemployment rates have continued to steadily if slowly, rise.

At first sight, this would seem to suggest that the EMS has failed to discourage domestic inflation in its member states' countries. Yet, this is not quite true. The U.K. had chosen not to be tied to a monetary arrangement such as the EMS that limited its policy movements -- yet those same limitations helped curb a tendentially inflationary socialist policy in France.

The reasons for this cannot be simply attributed to the failure or success of the flexible exchange rates system in the first case and the fixed exchange rate arrangement in the second. First, Europe and the industrialized world was to experience another oil shock in 1979, which was to put it back

into a recession such as that of 1974-75. Second, and most important, the management of the dollar had changed hands; the appointment of Volker as head of the Federal Reserve and the subsequent election of Ronald Reagan to the American presidency was to signal the beginning of a new dollar era. This era was characterized by renewed dollar strength, high interest rates and extremely contractionary domestic policies (with the exception of high military spending). The new Reagan dollar policy was new only in the direction it took, it was still the same inasmuch as the American monetary authorities authorities were unconcerned with the harsh concequences this policy would have on its allies in Western Europe.

The high interest rate-dollar policy obliged the Europen countries to raise their interest rates, thereby reducing investment opportunities within their nations at a time when stagnation was setting in. The result has been, in fact, a period of full-fledged stagnation. This event was one, not the only, reason for which the Community member-states and particularly the EMS partners were not successful in achieving a high degree of economic convergence.

Table 3

Convergence and Divergence, EEC [10]

	GDP per cap. coefficient of variation + PPPS	GDP per cap. coefficient of variation + Exchange Rates	Inflation standard deviation *	Net government borrowing standard deviation *
1961-70	15.4	21.5	1.5	1.7
1971-80	13.8	29.1	3.7	3.5
1980	14.2	26.2	5.2	3.9
1981	14.4	23.8	4.7	5.3
1982	14.5	24.1	4.1	4.8
1983	14.9	23.7	3.4	4.8

+ Standard deviation divided by mean.
* Root of sum of squares of deviation from EEC average

Source: EEC Commission, Reprinted in The Financial Times Monday, May 9, 1983, p.3.

However, the degree of inflation and economic divergence should not be overstated. While there is no doubt that the years 1979-1982 saw the rise of inflation rates and unemployment, with increasing divergence, 1983 forecasts predict a slower pace of inflation rates, gradual easing up of unemployment (if not much) and the beginning of closer convergence. The above table, in fact, indicates a decrease in the period 1982-83 in the inflation standard deviation and in the variations of exchange rates. It must be noted, of course, that 1983 indicators are simply estimimates and that economists are simply predicting an upward trend in terms of these estimates. It may turn out to be a "false dawn," but in the meanwhile it is taken as the probable prospect for Western economies.

Five leading German economic research institutes (Munich, Berlin, Hamburg, Kiel and Essen) expected the German inflation rate to fall by an average of 3% in 1983 after a 5.3% rate in 1982. [5] They also predict an increase in domestic spending and an increased demand for capital goods. [6] American economic reports also argue that the world has finally started an economic recovery. If this is so, then one could argue that the EMS has survived the hardest economic period.

So far, the EMS has not been able to guarantee complete or even a large degree of exchange rate stability. There have been seven realignments within the EMS since its inception in 1979, and the last one on March 21st, 1983, has been particularly large. The 1983 realignment almost provoked the disintegration of the EMS as the French franc was put under heavy pressure to devalue further than the French national authorities wished. This realignment will be discussed in further detail below as a crucial indicator of how the EMS has survived so far, despite the many obstacles, due to political commitment and desire to pursue a "fixed" type of exchange rate regime.

Table 4

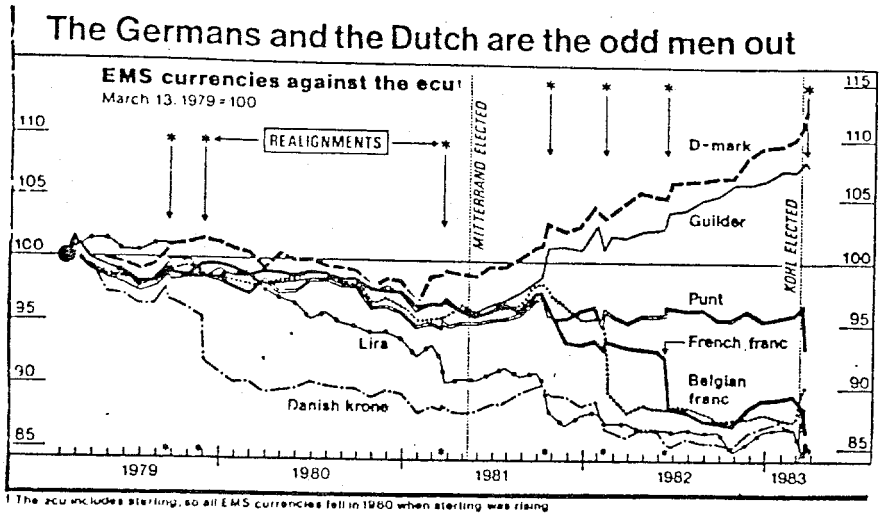
Exchange Rates *

	1979	1980	1981	1982	March 1983
France	4.253	4.220	5.435	6.572	7.001
Germany	1.831	1.815	2.260	2.247	2.408
Italy	831	855	1137	1353	1426
NL	2.005	1.986	2.495	2.670	2.683
U.K.	0.471	0.430	0.493	0.571	0.671

* Exchange rates calculated as national currency units per U.S. dollar.

Source: OECD Main Economic Indicators, December 1982 and May 1983.

The above table indicates the fluctuations the EMS currencies have undergone in the 1979-83 period. The national currencies have been far from stable or fixed, and the graph below indicates the movements of the EMS currencies against the ECU. The movement in the EMS currencies would in itself not constitute such an enormous problem if the ECU were used widely as the parallel currency, but, as has been pointed out in the previous chapter, the ECU has not been widespread in EEC trade and financial transactions. Therefore, the relative stability of the ECU has not been exploited.



Source: The Economist, March 26, 1983

The EMS has not, in the final analysis, been able to reduce inflation rates, to stabilize the exchange rate and to increase the economic convergence of the EEC nation states. Why has it not been successful? There have been major obstacles in its way. These obstacles have been of both a political and an economic nature. First, there have been major political changes within the EEC, particularly the election of Mitterrand in 1981 and the election of Kohl in 1983. The election of a socialist government was to mean a radical change in French domestic monetary policies. It also meant a change in the Franco-German rapport. Whereas Giscard d'Estaing and Schmidt had seen eye-to-eye on both internal and EEC monetary policies, the Mitterrand government had pledged itself to expansionary monetary policies in order to reduce unemployment. This led to higher inflation. In addition, the election of a socialist government in France was to give rise to major tensions between domestic policies and EMS participation. This is not to say that Mitterrand opposed a

fixed exchange rate regime. On the contrary, even after the March 1983 French franc devaluation and EMS realignment, Mitterrand has become the most vocal of European leaders advocating a gixed exchange rate regime. [7] At the recent OECD annual meeting in Paris in May 1983, Mitterrand called for the creation of a new Bretton Woods facsimile. [8] M. Pierre Mauroy, French Prime Minister, has re-affirmed the government's position in calling for a "concerted demand management to support recovery." [9] He further argued that "only the co-ordination of economic policies in favour of a recovery , a re-ordering of the international monetary system and a rapid conversion of the major economies towards a comparable degree of openness, can contribute, by their contrived action, to forestall protectionist temptations and favour a renewed growth in world trade." [10]

The implication of this statement are extremely interesting for various reasons. First of all, the French socialist government is now committing itself to an anti-inflationary policy, and is "ready to tighten the screws to achieve goals of the stabilization policy" announced after the devaluation of the Franc in March 1983. [11] M. Mauroy has pledged the government to reducing thi inflation rate to 8% from the current one of 10%. The tightening of the screws has given rise to two things: one the imposition of capital controls and the reduction of the proposed public expenditure. The

restrictions on capital controls and the domestic economy have not been established in order to reduce inflation but as a consequence of the large capital outflows that were occurring in France, signalling the weakness of the franc. The capital control restrictions imposed after the March devaluation were symptomatic of the problem of aligning political and economic policies with those required to maintain stability under a fixed exchange rate regime. That is, socialist policies gave rise to such a lack of confidence, rising inflation rates and consequently, franc devaluation that it could have caused the dropping out of France from the EMS. What the last realignment has done is to force Mitterrand to change his policies. That is, in committing himself to anti-inflationary policies, he was forced somewhat to reduce his projected massive public expenditure, at the cost of unemployment. The EMS has been a major force in constraining socialist policies in France and in changing their direction.

Another implication of Mitterrand's and Mauroy's positions has been that, despite the tensions a fixed exchange rate arrangement such as the EMS can create to domestic internal policies, there still remains a deep desire to pursue convergent, stable economic policies with other member satates. France has, so far, passed the hardest test in the EMS and has given proof of its political commitment to the arrangement notwithstanding the high costs it has involved. This point is not to be taken lightly, particularly in the later discussion of

the EMS as a viable approach to the establishment of an optimum currency area.

Meanwhile, Germany experienced a change in political direction in 1983. The election of Chancellor Kohl in that country signalled a swing to more conservative and pro-American policies. It has also increased the disparity in view between Paris and Bonn. While Paris and Bonn had held a more cohesive view of American policy under d'Estaing and Schmidt, now Mitterrand still retains a defensive stance vis-a-vis the U.S., while Kohl is interested in promoting closer coordination of German and U.S. interest. This is not to say that Mitterrand has a strictly anti-American policy; he has in fact called upon the U.S. to help reform the monetary system. It is that Mitterrand believes in a distinction between French (and European) interests and those of the U.S.

This Paris-Bonn tension is linked to a second important problem of the EMS. The EMS was set up to achieve some form of autonomy from the dollar. This has not been the case. On the contrary, dollar policies have had even more of an impact on European currencies, interest rates and economic performances than before. The main problem has been that the EMS has not attempted to resolve the U.S.-European tension. The approach the EMS should take is to strengthen the European monetary arrangement through cooperation with the U.S. Perhaps Chancellor Kohl's policy of closer coordination with the U.S. is not a bad

one, but the fundamental problem, and it is political, has been and is that the United States has refused to consider its allies as important partners in economic stability. Reaganomics has been primarily interested in resolving domestic problems at the cost of crippling the Western European economies. This means that there is an increased need for economic coordination, not only within the EMS but also with the U.S. This has remained a blind spot, particularly in the case of the U.S. After Mitterrand's call for international monetary coordination, the American response was unambiguous. In no way would the United States consider fixing its exchange rates or change its present domestic policy. The loudest objector to the French proposal has been George Schultz who is distinctly commited to the present international monetary "disorder." [12]

This U.S.-EEC conflictual relationship in the monetary arena will continue to persist in the near future, and as long as it does,the EMS will not be given its full chance to develop in a regional optimum currency area. As long as EMS countries have to compete with the U.S. in terms of interest rates and exchange rates, major obstacles such as economic divergence and capital controls will not be easily resolved.

However, a fundamental paradox exist her: when the dollar is weak, political motivation for the EMS is stronger, yet the EMS parities become harder to maintain. When the dollar is stronger, the original political rationale disappears, but

technical operations become easier.

The increasing strength of the dollar in the past four years has been a factor in reducing tensions between the DM and the weaker EMS currencis. In the snake, this tension had led to the downfall of the arrangement. In the EMS the appreciation of the dollar relative to the DM has reduced these tensions. As Triffin [13] pointed out, a strengthening of the DM could lead to renewed tensions within the EMS and the eventual erosion of cooperative relationships.

In this way, it seems that the EMS cannot win either way. However, the fundamental problem lies with the ECU. There is an absolute need for the ECU to be promoted as a parallel currency. Unless it becomes a common and acceptable medium of exchange at both the private and official level within the EEC, the EMS has limited prospects in developing in a full-fledged currency area, least of all an optimum currency area. Again, however, the case against the ECU should not be overstated. Presently, the ECU has been slow to develop but it still has expanded its role as a parallel currency within the EEC. The trend may have been slow, but that does not negate its continued development and increased use. The main factor is the time dimension.

If the EMS is to be seen as a long-term venture, then one could predict a brighter future for the ECU as a parallel currency. It could be argued that if present American dollar

policy persists in its course then the European nations may make a greater effort towards pushing the ECU. However, this remains to be seen.

The EMS, though not completely successful, has slower down the inflationary and the unemployment trends. A concerted action on the part of the members has not eliminated the problem, but it has brought it under some control.

NOTES TO CHAPTER FOUR

1) The Financial Times, April 23, 1983.

2) Ibid.

3) The Financial Times, May 8, 1983.

4) Ibid.

5) The Financial Times, May 3, 1983.

6) Ibid.

7) The Financial Times, May 8, 1983.

8) Ibid.

9) The Financial Times, May 11, 1983.

10) Ibid.

11) Ibid.

12) The Financial Times, May 11, 1983.

13) Robert Triffin, The World Monetary Scandal: Sources and Cures? Off-print from "Experience and Problems of the International Monetary System." Economic Notes by Monte dei Pacshi di Siena, No. 2, 1982, p. 9.

CONCLUSION

Future Prospects for an Optimum Currency Area

Ultimately, the EMS performance is to be linked with its potentilal in developing an optimum currency area. If the EMS is a currency area as under the ECU and a "fixed" parity arrangement, will it be able to become an optimum currency area?

First, I will just briefly mention the conditions for optimality here again. There are: labor and capital mobility, high degree of economic openness, the lack of money illusion, policy integration and the same propensities to inflate.

Capital and labor mobility are far from complete within the EEC. Labor mobility is restricted itself by the costs that individuals sustain by uprooting themselves from their native birthplace and migrating to culturally and linguistically different areas. Apart from this, however, it can be argued that labor mobility is free as much as it could be within the EEC. The real problem lies with capital mobility. Capital mobility does not exist within the EEC and the EMS. Italy and France have stringent exchange and capital controls. Italy has had them ever since the early seventies while France imposed them at the end of March 1983. The capital mobility restriction

constitutes a major obstacle in the development of an optimum currency area.

A fixed exchange rate regime effectively poses a problem: is capital mobility compatible with fixed exchange rates? Capital mobility may be compatible only in the case of strong economies. However, economies that do not have relatively strong positions are more vulnerable to capital outflows, which affect their balance of payments. Capital mobility within an exchange rate union also implies that there must be some kind of political homogeneity or effective reduction of ideological biases. That is, in order to discourage capital outflows, a nation must pursue conservative economic policies so as to maintain confidence in the national currency. The French example stands as proof of what the EMS may do in aligning economic policies. The choice for Mitterrand was either to opt out of the EMS and continue to pursue its expansionary policies, abusing of a flexible exchange rate tool, or curb public expenditure, shift the focus from unemployment to reducing inflation and remain within the EMS. [1] Therefore, if political ideological differences start to dictate economic policies, it seems difficult that capital mobility will ever be implemented. This does indeed constitute a major hurdle in the path of development of the EMS. The EMS could help promote the trend of distinguishing between political rhetoric and economic reality.

The EEC countries and particularly the EMS partners are

highly open economies. Clearly, the degree of openness varies relative to each other but the proportion of exports and imports to GDP is high enough in all these nations to consider them open.

Table 5

Ratio of Exports to GDP

	1973	1974	1975	1976	1977	1978	1979	1980	1981
Belgium	48.8	52.6	45.7	48.2	47.3	46.1	50.6	54.3	58.0
Denmark	21.7	24.2	23.1	21.9	21.6	21.0	22.6	25.5	27.9
France	14.6	17.4	15.6	16.3	16.9	16.7	17.5	17.8	18.6
Germany	19.4	23.4	21.4	22.9	22.8	22.1	22.6	23.5	25.6
Italy	14.5	17.9	18.1	19.9	21.0	21.4	22.2	19.7	21.6
NL	39.8	46.2	42.2	44.1	39.0	36.4	40.6	44.1	49.1
U.K.	17.3	20.2	19.2	20.9	23.2	21.5	21.1	21.0	--

Source: IMF - International Financial Statistics: Supplement on trade statistics, 1982, N.4.

Table 6

Ratio of Imports to GDP

	1973	1974	1975	1976	1977	1978	1979	1980	1981
Belgium	48.0	55.5	48.9	52.2	50.9	49.9	54.7	60.3	64.7
Denmark	27.2	31.2	27.6	29.9	28.5	26.5	28.3	29.1	30.4
France	15.0	19.9	15.9	18.4	18.4	17.2	18.6	20.7	21.1
Germany	15.8	18.2	17.8	19.8	19.6	18.9	21.0	22.9	23.8
Italy	18.1	24.1	20.0	23.2	22.3	21.5	23.9	25.2	26.0
NL	40.4	47.5	42.8	44.5	41.0	39.1	43.4	46.5	48.0
U.K.	22.0	28.3	22.9	24.9	25.2	24.0	24.4	22.2	--

Source: IMF - International Financial Statistics: Supplement on trade statistics, 1982, N.4.

The above tables summarize the openness of these European economies and indicate not only their degree of openness but also the trend towards increasing openness. In this sense, the West European economies can be said to fit within McKinnon's openness criteria and that if the present trends continue, will become even more open. In addition, and linked to the openness, these economies possess very little or no money illusion. Price-wage mechanism in each economy have to different degrees guaranteed that money illusion be reduced to a minimum. These economies are so open that nationals are not unaware of the impact a change in exchange rates will have on real wages and on the prices of goods. The lack of money illusion implies that flexible exchange rates connot substitute for real wage changes. In this way, the EEC nations also fit the bill for McKinnon's criteria.

On the other hand, the EEC does not possess two main variables: the same propensity to inflate and policy integration. Table 1, presented above, showed how the EC nations have diverged in their inflation rates. In February 1983, the inflation rates of the major Western European economies were as follows: [2]

France : 9.2%
Germany : 3.7%
Italy : 16.1%
U.K. : 5.3%

This divergence in inflation rates remains a hurdle the

EEC countries need to overcome if they intend to pursue a course of monetary stabilization through the EMS. The EMS is a help in promoting convergence, inasmuch as it slows the speed of the process of inflation. It may be necessayry for certain countries such as Germany to inflate further with other countries, such as Italy, deflating, in order to meet somewhere in between the two extreme inflation rates. While it is desirable that the high inflation rate of Italy be brough down, it certainly is not an enticing prospect for Germany to inflate its economy. Germany has always been committed to anti-inflationary policies and is extremely unwilling to inflate to any possible degree. However, it seems that a drastic reduction in inflation rates would also require a drastic political and structural change within certain economies, so drastic in fact, that these changes may be impossible to implement. As long as inflation rates diverge, policy coordination will be difficult. With the added burden of changing political regimes within these democratic societies, it may be a while before the optimal political and economic formula arises that will permit policy integration.

In this way, the EMS has to be seen as a stepping stone towards achieving some economic convergence. The policy coordination is not only based on economic convergence of certain economic indicators, but rather expressly calls for a political commitment and will. The March 1983 EMS realignment had set the stage for a breakdown of the system but due to French willingness and, to a degree, to German collaboration,

the EMS survived. It survived because, at the moment there seems to have been no other alternative to the flexible exchange rate system. There is no other international response to exchange rate "laissez-faire" because the United States has adamantly refused to form an arrangement that may stabilize monetary affairs. The EMS, as a limited regional experiment at stabilizing exchange rates, is to be seen under two aspects: 1) as an attempt to coordinate further European intra-relationships in the monetary arena; and 2) as a potential model for future international monetary developments.

In the final analysis, the EMS has not been the total failure that many economists believe it to be. [3] It has not succeeded in the past four years to achieve all the goals it had set out to, but on the other hand, it has been able to keep the EMS partners together and to promote somewhat the use of the ECU. Four years of EMS is a long time if one thinks of the duration of the snake of the mid-seventies, yet it is not very much if one thinks of the time lags inherent in reducing inflation, increasing economic performance (through increased investment, output and demand) and reducing the high short-term trend of unemployment.

In the final analysis, the EMS can play a vital role in creating an optimum currency area through its political influence. The EMS, and in much the same way, an optimum currency area, find their existence justified by political

motivation. It is therefore possible to exploit those same motivations to achieve some form of economic regulation and conformity within the EEC. This is particularly important in relation to the survival of the monetary system and in relation to overcoming the dollar-EMS paradox.

As long as the ECU is not exploited, exchange rate movements against the dollar remain of primary importance and impact. The impact is felt in terms of both petrol prices and international transactions based on the dollar as medium of exchange. Of course, a question that remains unanswered in this case is whether the dollar policy would have had an even greater effect without the EMS, and whether the impact of the dollar on European economies, interest rates and economic performances is not perhaps to be attributed to world economic conditions rather than the EMS.

Indicators and a survey of the trends would seem to suggest that the EMS has insulated somewhat European economies from the dollar policy. The EMS must, however, insulate itself further by exploiting the ECU in private markets. In the end, monetary affairs are regulated by monetary diplomacy -- this diplomacy entails economic theory, econometric analyses, technical complications, psychological forces and political negotiations. The success or failure of the EMS in the present monetary system is therefore, subject to changes in any of these factors.

NOTES TO CONCLUSION

1) The Economist, March 21, 1983.

2) The Financial Times, April 23, 1983.

3) See Roland Vaubel, "Real Exchange-Rate Changes in the European Community: A New Approach to the Determination of Optimum Currency Areas," Journal of International Economics, Vol. 8, no. 2, May 1978, pp. 319-339; Pieter Korteweg, The European Monetary System - Will It Really Bring More Monetary Stability for Europe? (Rotterdam: Institute for Economic Research, Erasmus University, 1979).

BIBLIOGRAPHY

Aschheim Joseph and Y.S. Park. Artificial Currency Units: The Formation of Functional Currency Areas. Princeton, N.J.: Princeton University, International Finance Section, Department of Economics, Essays in International Finance, No. 114, April 1976.

Banca d'Italia. Seminar on the Indicator of Divergence in the European Monetary System. Papers by L. Spaventa, J.J. Rey and S. Rossi, January 1982.

Basevi, G., W. Kohl with Spiros Papas and J. McDonald. The Political Economy of the European Monetary System. A Conference Report. Bologna: The Johns Hopkins University Bologna Center, Research Institute, Occasional Papers, No. 31, June 1980.

Bond, Marion. Exchange Rates, Inflation and Vicious Circles. IMF Staff Papers, Vol. 27, No. 4, December 1980.

Coffey, Peter. Europe and Money. London: The MacMillan Press Ltd., 1977.

Commission of European Communities. OPTICA Report 1975. II/909/75-F.

Commission of European Communities. OPTICA Report 1976. II/855/76.

Cooper, Richard N., ed. The International Monetary System under Flexible Exchange Rates: Global, Regional and National Essays in Honor of Robert Triffin. Cambridge, Mass.: Ballinger, 1982.

Corden, Warner Max. Inflation, Exchange Rates, and the World Economy: Lectures on International Monetary Economics. Second Edition. Chicago: Chicago University Press, 1981.

Corden, W.M. Monetary Integration. Princeton, N.J.: Princeton University, International Finance, Department of Economics, Essays in International Finance, No. 93, April 1972.

de Ceco, Marcello. "Optimum Currency Areas and European Monetary Integration," Journal of World Trade Law, Vol. 8, No. 5, Sept/Oct. 1974, pp. 463-474.

The Economist, March 21, 1983.

El-Agraa, A.M., ed. The Economics of the European Community. Oxford: Philip Allan Publishers, 1980.

European Communities. European Economic and Monetary Union. Luxembourg, 1979.

European Economic Community. Texts Concerning the EMS. Brussels: EEC, 1979.

The Financial Times, January - May 1983.

Fratianni, M. and T. Peeters, eds. One Money for Europe. London: The MacMillan Press, 1978.

Gleske, Leonard. The European Monetary System - Present Situation and Future Prospects. Florence: The European University Institute, The University European Institute Working papers, No. 5, November 1981.

Goldstein, Morris. Have Flexible Exchange Rates Handicapped Macroeconomic Policy? Princeton, N.J.: Princeton University Press, Special Papers in International Economics, No. 14, June 1980.

Grubel, Herbert G. "The Theory of Optimum Currency Areas" Canadian Journal of Economics, Vol. 3, May 1970, pp. 318-324.

Halm, G.N. The "Band" Proposals: The Limits of Permissible Exchange Rate Variations. Princeton, N.J.: Princeton University, International Finance Section, Department of Economics, Special Papers in International Economics, No. 6, 1965.

Ingram, J.C. The Case for European Monetary Integration. Princeton, N.J.: Princeton University, International Finance Section, Department of Economics, Essays in International Finance, No. 98, April 1973.

Istituto Bancario San Paolo di Torino. ECU Newsletter, No. 1, February 1982.

Istituto Bancario San Paola di Torino. ECU Newsletter, No. 2, July 1982.

Istituto Bancario San Paola di Torino. ECU Newsletter, No. 3, Nov. 1982.

Istituto Bancario San Paola di Torino. ECU Newsletter, No. 4, Feb. 1983.

Istituto Bancario San Paola di Torino. Thema. San Paola Bank Economic and Financial Papers, 1980.

Johnson, Harry G. and Alexander F. Swoboda, eds. The Economics of Common Currencies. London: George Allen Unwin Ltd., 1973.

Korteweg, Pieter. The European Monetary System - Will it Really Bring More Monetary Stability for Europe?. Rotterdam: Institue for Economic Research, Erasmus University, 1979.

Krause, L.B. European Economic Integration and the United

States. Washington, D.C.: The Brookings Institution, 1968.

Krause, L.B. and W.S. Salant, eds. European Monetary Unification and its Meaning for the United States. Washington, D.C.: Brookings Institution, 1973.

Krauss, Melvyn B., ed. The Economics of Integration. London: George Allen Unwin Ltd., 1973.

Kruse, D.C. Monetary Integration in Western Europe - EMU, EMS and Beyond. London: Butterworth, 1980.

Laidler, David. "Monetarism: An Interpretation and an Assessment," The Economic Journal, Vol. 91, No. 361, March 1981.

Ludlow, Peter. The Making of the European Monetary System: A Case Study of Politics in the EC. London: Butterworth Scientific, 1982.

Ludlow, Peter. The Political and Diplomatic Origins of the European Monetary System, July 1977 - March 1979. Bologna: The Bologna Center Research Institute, June 1980.

Magnifico, Giovanni. European Monetary Unification for Balanced Growth: A New Approach. Princeton, N.J.: Princeton University, International Finance Secton, Department of Economics, Essays in International Finance No. 88,

1971.

McKinnon, Ronald I. "Optimum Currency Areas," American Economic Review, Vol. 53, September 1963 pp. 716-25.

Masera, R.S. L'Unificazione monetaria e lo sme. Bolona: Il Mulino, 1980.

Meade, J.E. "The Balance-of-Payments Problems of a European Free-Trade Area, " Economic Journal, Vol. 67, September 1957, pp. 379-96.

Monte dei Paschi di Siena. The Santa Colomba Conclusions 1975; Meeting on Optimum Currency Areas and National Policies Mix. Siena: Monte dei Paschi di Siena Bank, 1975.

Mundell, Robert A. International Economics. New York: The MacMillan Company, 1968.

Mundell, Robert A. The International Monetary System: Conflict and Reform. Montreal: Planning Assocition of Canada, 1964.

Mundell, Robert A. "A Theory of Optimum Currency Areas," American Economic Review, Vol. 51, Sept. 1961, pp. 657-65.

Mundell, Robert and A.K. Swoboda. Monetary Problems of the International Economy. Chicago: The University of

Chicago Press, 1969.

OECD. Macroeconomic Indicators. Department of Economics and Statistics. Paris, 1983.

OECD Economic Surveys. (1978-1983) Germany

France

Italy

Netherlands

United Kingdom

Onida, F. The Theory and Policy of Optimum Currency Areas - Implications for the European Monetary Union. London: Suerf, 1972.

Presley, J.R. and C.E.J. Dennis. Currency Areas: Theory and Practice. London: MacMillan, 1976.

Salin, Pascal. European Monetary Unit: For Whose Benefit?. Brussels: Institutum Europaem and Ipswich Mass.: Ipswich Press, 1980.

Salvati, Michele. Alle origini dell 'inflazione italiana. Bologna: Il Mulino, 1980.

Sjaastad, Larry A. and Niels Thygesen. Exchange Rate Surveillance and European Currency Union: The Background Papers. Geneva: International Center for Monetary and Banking Studies, 1978.

Snider, Delbert A. Optimum Adjustment Processes and Currency Areas. Princeton, N.J.: Princeton University, International Finance Section, Department of Economics, Essays in International Finance, No. 62, Oct. 1967.

Spaventa, L. Italy Joins the EMS - A Political History. Bologna: The Johns Hopkins University Bologna Center, Research Institute, Occasional Paper, No. 32, June 1980.

Spinelli, F. Wage Inflation in Italy: A Re-Appraisal. Bance Nazionale del Lavoro Quarterly Review. No. 135, December 1980.

Thygesen, Niels. European Monetary System: The Major Issues After Bremen. Geneva: International Center for Monetary and Banking Studies, 1978.

Thygesen, Niels. "Inflation and Exchange Rates, Evidence and Policy Guidelines for the European Community," Journal of International Economics, Vol. 8, No. 2, 1978, pp. 301-317.

Tower, Edward and Thomas D. Willett. The Dynamics of International Adjustment and the Optimum Currency Area. Burnaby, B.C.: Simon Fraser University, Department of Economics and Commerce. Mimeo. 1975.

Tower, Edward and Thomas D. Willett. The Theory of Optimum

Currency Areas and Exchange Rate Flexibility. A More General Framework. Princeton, N.J.: Princeton University, International Finance Secton, Department of Economics, Special Papers in International Economics, No. 11, 1976.

Tresize, P.H., ed. The European Monetary System: Its Promise and Prospects. Washington, D.C.: The Brookings Institution, 1979.

Triffin, Robert. How to End the World "Infession ": Crisis Management or Fundamental Reforms?. Paper submitted to the opening conference of the Centre European Policiy Studies in Brussels, December 1982, p. 258. (mimeo)

Triffin, Robert. The World Monetary Scandal: Sources and Cures?. Off-print from "Experience and Problems of the International Monetary System. Economic Notes by Monte dei Paschi di Siena, No. 2, 1982, p. 9.

Vaubel, Roland. "Real Exchange-Rate Changes in the European Community: A New Approach to the Determination of Optimum Currency Areas," Journal of International Economics, Vol. 8, No. 2, May 1978, pp. 319-339.

Viner, Jacob. Problems of Monetary Control. Princeton, N.J.: Princeton University, International Finance Section,

Department of Economics, Essays in International Finance, No. 45, May 1964.

Yoshihede, Ishyama. The Theory of Optimum Currenecy Areas: A Survey. IMF Staff Papers, Vol. XXII, No. 2, July 1975.