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How Do Economic Arguments Affect Political Decisions?

A Case Study of The United Kingdom
and European Monetary Integration

submitted by
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for the degree of
Master of Philosophy in M. E. P.

in
July 1999

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This thesis is submitted in part requirement for the Degree of Master of Philosophy in M. E. P. at the University of St. Andrews, Scotland, and is solely the work of the candidate. It has not been accepted in any previous application for any degree.

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I hereby declare that throughout the course of the candidate's research, the Senate Regulations have been fulfilled.

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Abstract

The traditional theory of optimum currency areas, pioneered by Mundell, suggests that a successful monetary union requires wage flexibility, factor mobility and/or a highly centralised union budget, because once countries have formed a monetary union, they cannot rely on the exchange rate instrument to offset the impacts of asymmetric shocks anymore. A number of economists have criticised this line of argument, and managed to add different viewpoints to it, if not invalidated it. Nominal exchange rate changes have turned out not to be able to alter the real exchange rates permanently, and the exchange rate instrument cannot be a policy tool which policymakers can use discretionarily and costlessly, contrary to the implicit assumption of the theory. On the other hand, a number of benefits from a monetary union have been identified, although most of them are difficult to quantify. The problem which the economists and, possibly politicians, involved in the debate on monetary union have faced, is the difficulty of precise assessments of the net overall costs/benefit of it.

The history of European monetary integration had been an uphill quest for more stable exchange rates within Europe, where political considerations tended to override economic evaluations which at first opposed European monetary integration and later suggested further and faster monetary integration. Therefore, there have been strong political

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initiatives whenever Europe stepped forwards towards a monetary union in Europe. The reason for this second division status of economics has been that, on the one hand, it has managed to present a range of empirical evidence which suggests the benefits from such monetary union, but on the other hand, it has almost proved that Europe as a whole is not an optimum currency area, i.e. economic arguments have never been decisive in any respect. Furthermore, economists could identify a number of defects in the Maastricht strategy, which is to bring Europe into a complete monetary union, and the rationales for these cannot be found anywhere but in political bargaining.

This friction between economic arguments and political considerations may have been most severe in the United Kingdom in this context. The Conservative governments never exposed themselves to the economic arguments because of their unyielding hostility to continental Europe. The weakness of economic rationales for EMU left the New Labour government, which may well be pro-European, only one political option of exploiting the economic arguments for its real economic motives and political objectives. Meanwhile, the economic arguments have become more and more in favour of monetary union in Europe from the British point of view.

It is concluded that when economic arguments are not conclusive, they are exposed to the danger of political exploitation, and to avoid this, it is essential to encourage multi-disciplinary debates. Economists always have difficulty discussing issues with politicians who demand clearcut answers, and the history of the United Kingdom and European monetary integration is a good example of this.

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Introduction

‘What is the proper role of an economist in a debate about such a politically charged decision as that of potential entry of the UK into EMU?’¹ The purpose of this paper is to examine how economic theories and considerations, and economists themselves have influenced the political decisions in the United Kingdom, in the context of European monetary integration in order to find a clue to answer the question of what is the proper role of an economist in a policy making process. This particular case has been selected by this author because, as widely maintained, it has been as much a political as it has an economic issue.

To begin with, economic costs and benefits for the country should be systematically analysed, since this makes it possible to evaluate whether and how political factors which decide the political outcomes have been influenced by economic factors. Therefore, the first and third chapters of this paper will be devoted to establishing a cost-benefit analysis of British ERM/EMU membership. Chapter 1 will deal with the theoretical framework for the cost-benefit analysis of a monetary union in general. Chapter 2 will examine the economic background and the history of European monetary integration which may have decided the political outcomes in Europe as a whole and in the United Kingdom in particular. This chapter will also clarify the economic analysis of European monetary

¹ Artis (1999)

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integration, which will be discussed in detail in the next chapter, Chapter 3. Then, with the findings from these chapters as background, the attention of the paper will be turned to the correlations between these economic arguments and the political considerations of British governments, in Chapter 4.

The conclusion will attempt to lay out the preconditions under which the economic arguments could or could not be reflected in the political decisions, and explicate the dynamics of the political exploitation of economics in conditions where the latter are not conclusive.

Chapter 1

The Economics of a Monetary Union

1.1 Concepts of a Monetary Union

The term 'monetary union' can mean both irrevocably fixed exchange rates allowing national monetary authorities of member countries to undertake the necessary monetary policies to maintain the exchange rates, and a common currency which is used throughout the union. While non-economists tend to think that a monetary union is the synonym of a common currency, the distinction between these two definitions is crucial for economic analysis of a monetary union, since they imply some different costs and benefits. For instance, the costs of introducing a common currency, such as the initial change in accounting units, cannot arise in the weak version of monetary union of irrevocably fixed exchange rates. It is also argued that most of the benefits of a monetary union could only be obtained in a system of a common currency, whereas the main cost of it, namely, the loss of the exchange rate as a policy instrument, would arise even in an irrevocably fixed exchange rate system.¹ Therefore, to evaluate whether forming a particular monetary union is beneficial for a particular country, we should distinguish the costs and benefits of the strong version of monetary union with a common currency from those of the other version. For this reason, the analyses of costs and benefits of monetary union in this chapter will mention the version(s) to which the costs or benefits are related,

¹ Gros and Thygesen (1998, p.264)

if necessary.

1.2 Costs of a Monetary Union

The major costs of a monetary union derive from the fact that when countries form a monetary union, the central banks of these countries lose the freedom to conduct their own national monetary policies. In other words, countries which join a monetary union cannot revalue or devalue their currencies, and determine the quantity of them in circulation. Therefore, a monetary union could entail a significant cost for its member countries, when they are hit by external shocks. This argument is known as the theory of optimum currency areas, pioneered by Mundell.² It has tended to lead to some scepticism about a monetary union. However, the validity of the theory has been questioned since it was introduced, especially in the context of the European Monetary Union by the proponents of EMU.³ In this section, the theory of optimum currency areas and the criticisms of it are discussed in detail.

There are also additional costs of a monetary union, although they are minor compared with the major costs described above. One of them can be the cost of the introduction of a common currency, which includes the initial change in accounting units and the cost of converting outstanding financial and other long-term contracts into the currency, and so forth.⁴ However, because of the empirical nature of these costs, they will be examined in Chapter 3, where the costs and benefits of European Monetary Union will be discussed.

² Mundell (1961, pp. 657-65)

³ See, for instance, Emerson, *et.al.* (1991).

⁴ Gros and Thygesen (1998, p. 299-300)

1.2.1 The Theory of Optimum Currency Areas

The theory of optimum currency areas was developed in order to decide what is the appropriate domain of a currency area within which exchange rates should be fixed.⁵ This question is crucial for countries which are going to form a monetary union, since if the union is not the appropriate domain of a currency area, a common currency, or even irrevocable fixed exchange rates could have serious counter-effects on the countries' economies. When Mundell wrote the article, 'A Theory of Optimum Currency Areas', there were a lot of debates between the proponents of fixed exchange rates and those of flexible exchange rates, and the article can be seen as his attempt to mediate between them. Mundell wrote that 'A system of flexible exchange rates is usually presented, by its proponents, as a device whereby depreciation can take the place of unemployment when the external balance is in deficit, and appreciation can replace inflation when it is in surplus.' Then, he came to the question of whether all existing national currencies should be flexible. As a result, he found that the optimum currency area is the region, not the country. He also concluded that if the national currency areas of countries which implement flexible exchange rates do not coincide with the optimal currency areas, the countries are likely to face balance-of-payment problems, by analysing cases of demand shifts in the flexible-exchange-rates world.⁶

To analyse his hypothesis, Mundell introduced a case in which the world consists of two countries, Canada and the United States, each of which has separate currencies, the continent is divided into two regions which do not correspond to national boundaries — the East, producing goods like cars, and the West, producing goods like lumber products, and the

⁵ Mundell (1961, pp. 657)

⁶ Mundell (1961, pp. 657)

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United States dollar fluctuates relative to the Canadian dollar. In the most favourable cases for the flexible exchange rate systems based on national currencies, consumers in those countries shift their preferences away from the products of one of the countries, say the United States, to the products of the other, say Canada, resulting in a series of well-known problems such as unemployment in the United States and inflationary pressure in Canada, and balance-of-payments deficit in the former country and balance-of-payment surplus in the latter one. Theoretically, the central banks of these countries can solve the problems without any significant difficulties by changing the exchange rate between the currencies of the countries. A depreciation by the central bank of the United States and/or an appreciation by that of Canada would correct the imbalance in the balance-of-payments, and reduce unemployment in the United States and inflationary pressure in Canada.

However, these policies cannot be applicable to the cases in which an increase in productivity in the automobile industry causes an excess demand for lumber products and an excess supply of cars, resulting in unemployment *in the East* and inflationary pressure *in the West*, and balance-of-payments deficit *in the East* and balance-of-payment surplus *in the West*. The central banks of the countries cannot solve the problems as efficiently as they can in the previous case. To reduce unemployment *in the East*, the central banks in both countries would have to expand the national money supplies, at the expense of more inflation *in the West*. Alternatively, inflation *in the West* could be avoided by tightening the national money supplies in both countries, at the expense of more unemployment *in the East*. In this case, he argued, it is impossible to avoid both unemployment and inflation simultaneously. 'The flexible exchange rate system [based on national currencies] does not serve to correct the balance-of-payments situation between the two regions'.⁷

⁷ Mundell (1961, pp. 660)

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The solution to the problem, which Mundell put forward was simple but highly suggestive. It was to relinquish the national currencies and to replace them with the regional currencies. If *Eastern* and *Western* dollars replace US and Canadian dollars, and if the *East-West* exchange rate is flexible, an excess demand for lumber products and an excess supply of cars do not necessarily result in the problem described above, because now the Eastern and Western central banks can correct the balance-of-payments disequilibrium by a depreciation and/or an appreciation. It follows that the optimum currency areas are the regions within each of which there is factor mobility and between which there is factor immobility.⁸

What implication does Mundell's theory have for the costs of a monetary union? Let us replace Canada and the United States in the above case with France and the United Kingdom, respectively, and suppose that demand shifts from the products of the United Kingdom to the products of France. This would lead to additional unemployment in the United Kingdom and inflationary pressure in France, and, to a deficit in the current account of the United Kingdom and a surplus in that of France. However, since each country has a separate currency, the authorities in both countries can solve these problems easily, at least in theory, by devaluing and/or revaluing their currencies. Devaluation of the pound sterling against the French franc increases the competitiveness of the products of the United Kingdom and decreases that of France. This in turn raises aggregate demand in the United Kingdom and reduces that in France. As a result, unemployment in the United Kingdom is relieved and inflation in France is prevented. At the same time, the deficit in the current account of the United Kingdom and the surplus of France would disappear.⁹

⁸ Mundell (1961, pp. 660)

⁹ De Grauwe (1997, p. 5-7)

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If the United Kingdom and France have formed a monetary union, in other words, they have relinquished the control over their exchange rates, they will face the same situation as the East and the West in Canada and the United States do in the above case. They cannot rely on exchange rates as a policy instrument anymore. As a result, both unemployment and inflation cannot be escaped simultaneously. In this sense, it can be argued that a monetary union has a significant cost for member countries.

However, Mundell's theory itself implies other possible solutions to these problems. Throughout his consideration of the theory of optimum currency areas, he assumed rigid wages, and implicitly defined a region in terms of internal factor mobility and external factor immobility. Therefore, the alternative solutions would be based on wage flexibility and factor mobility, more specifically, labour mobility.

If wages in the United Kingdom are flexible, unemployed workers in the United Kingdom will resume work at the lower wage levels. This in turn will make the products of the United Kingdom more competitive by shifting the aggregate supply curve downwards. In France the situation will be the reverse if wages in France are flexible. The products of France will become less competitive because the additional demand for labour will push up the wage rate resulting in an upwards shift of the aggregate supply curve. Therefore, if wages in both countries are flexible, the problems which the countries have in the above case will hardly happen.

Similarly, if mobility of labour in the United Kingdom is high enough, the British workers who are unemployed will move to France where there is the additional demand for labour. This movement of labour will solve all the problems: the unemployment problem in the United Kingdom will disappear, French workers won't be able to claim higher wage rates, and the current account deficit of the United Kingdom and the surplus of France will vanish since the values of domestic spending will come into line with the values of domestic output.

There is one more alternative solution to the preceding problems. It is

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called 'fiscal transfers'. It is that the French authorities increase taxes so as to reduce aggregate demand in France whereas the UK authorities decrease taxes so as to push up aggregate demand in the United Kingdom, and then tax revenues in France are transferred to the United Kingdom to finance these tax cuts. Although explicit fiscal transfers between member countries of a monetary union will be extremely difficult, implicit redistribution, similar to the implicit regional redistribution exercised within many countries, can be a reasonable option for a monetary union. A highly centralised government budget is the source of this implicit regional redistribution. In the countries where the governmental budgets are highly centralised, when output declines in a region, the tax revenue of the government from this region declines. At the same time, the social security system increases transfers to this region.¹⁰ Similarly, a monetary union which has a highly centralised budget and social security system may be able to rely on fiscal transfers to solve the preceding problems.

It can be concluded from the theory of optimum currency areas discussed so far that a monetary union has a significant cost for member countries if none of the following conditions is satisfied: (a) wages are flexible enough to lead to a new equilibrium, (b) labour is mobile enough to fulfil the excess demand for labour in other member countries, and (c) the union's budget is sufficiently centralised so that fiscal transfers between member countries can be organised.

1.2.2 The Occurrence of Asymmetric Demand Shocks and Other Forms of Asymmetric Disturbances

In the previous subsection, it is assumed that there is an exogenous

¹⁰ De Grauwe (1997, p. 5-10)

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downward shift in the demand schedule for the goods produced by the countries in question. However, in the real world, it is argued that it seems to be unreasonable to assume this kind of asymmetric shock without any further consideration.¹¹ The modern view of international trade stresses that the trade between industrialised countries consists of a two-way exchange of slightly differentiated goods, so that each country exports and imports very similar goods simultaneously. Therefore, 'it would ... be difficult to imagine a reason why there should be a shift in demand from, say, German cars, German investment goods, German chemicals, etc. to the French (or other) versions of these same products.'¹² It follows that demand shocks in a monetary union will tend to be more symmetric rather than asymmetric. On the other hand, Krugman argues that economic integration stimulated by a monetary union leads to regional concentration of industrial activities so as to profit from economies of scale. Therefore, sector-specific shocks will become country-specific shocks, i.e. asymmetric shocks.¹³ However, as De Grauwe argues, as monetary integration progresses, national borders will be less relevant as the boundaries of these concentration effects.¹⁴ There won't be a need to form boundaries along the borders, once the economic barriers have been removed as a result of economic integration. The issue may remain an empirical one. As far as European monetary integration is concerned, according to Artis and Zhang, the business cycles in European countries have become more correlated during the 1980s and 90s as the economies have become more integrated.¹⁵

There are other sources of asymmetric economic disturbances. External shocks that affect all member countries at the same time can have

¹¹ See, for instance, Gros and Thygesen Gros and Thygesen (1998, p. 271-5)

¹² Helg, *et al.* (1995)

¹³ Krugman (1991)

¹⁴ De Grauwe (1997, p23-4)

¹⁵ Artis and Zhang (1995)

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asymmetric impacts across the countries because of differences in their economic structures. It is obvious that countries are different from each other in a number of ways. So, if these differences which can bring about asymmetric disturbances are identified, it can be concluded that a monetary union has a significant cost for member countries in the form of the loss of the exchange rate as a policy instrument.

In a monetary union, where monetary policies are centralised, fiscal policies can be the major source of asymmetric shocks caused by national economic policies. However, the magnitude of these shocks cannot be underestimated, since in most industrialised countries spending and taxation by the national authorities amount to no less than a third, sometimes close to a half, of GDP, i.e. they can easily change the aggregate demand and supply curves of their countries by increasing/decreasing taxes or government spending. In this sense, the national fiscal policies can be a source of asymmetric economic disturbances which can be encountered by the exchange rate change instrument.

Another difference which can bring about asymmetric disturbances is that in national wage bargaining systems. In many countries, at least in the countries which are forming EMU, labour unions are one of the most influential actors in the wage bargaining process. Therefore, in these countries the flexibility of wage levels in the presence of shocks depends significantly on how labour unions react to the shocks. According to Bruno and Sachs, supply shocks have very different effects on national economies depending on the degree of centralisation of labour unions.¹⁶

In countries which have highly centralised labour unions, wage claims tend to be moderate because the unions know that they are influential enough to increase the aggregate price level. This increase in the price level will result in more inflation, so that real wages will not increase as much as nominal wages. Bruno and Sachs pointed out that when a supply

¹⁶ Bruno and Sachs (1985, Ch. 11)

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shock occurs, the loss in real wages due to the supply shock cannot be compensated by nominal wage increases.¹⁷

On the other hand, in countries which have less centralised labour unions, wage claims tend to escalate because they know that they have a marginal effect on the aggregate price level. In addition, there is a prisoners' dilemma situation, which can be described as follows. Each union knows that all other unions have incentives to claim higher nominal wages, and this situation will lead to more inflation so that real wages will not increase. However, it cannot reduce its wage claim because if it does so, the real wages of its members will decrease.

Calmfors and Driffill add another insight to Bruno and Sachs' model.¹⁸ According to them, the relationship between the degree of centralisation of labour unions and the aggregate wage level is not a linear one. In an extremely decentralised system, individual unions cannot react like those in the decentralised system of Bruno and Sachs' model. In such a system, excessive wage claims by individual unions will reduce the competitiveness of the firms on which the unions are based. This in turn will reduce the employment of the firms, i.e. the employment of members of the unions. Therefore, in countries which have extremely decentralised labour unions, wage claims tend to be moderate.

It follows that if countries which have different labour market institutions form a monetary union, and a shock which triggers wage increases occurs, the countries will have asymmetric impacts from the shock. Therefore, it can be concluded that a monetary union has a cost for member countries if they have very different labour market institutions.

¹⁷ Bruno and Sachs (1985, p. 232-40)

¹⁸ Calmfors and Driffill (1988)

1.2.3 Criticism of the Theory of Optimum Currency Areas

As mentioned earlier, the optimum currency areas approach has recently attracted much criticism. This criticism can be classified in two categories: theoretical arguments applicable to a monetary union in general, and empirical arguments focused on EMU. In this subsection, the former arguments are examined in detail whereas the latter ones will be dealt with in Chapter 3, where the economic aspects of EMU, as well as the political ones, will be discussed. The theoretical arguments against the optimum currency areas approach have been centred round two interrelated topics; the efficiency of nominal exchange rate changes to offset asymmetric shocks and the political implications of the exchange rate as a policy instrument. These arguments raise fundamental questions of the costs of a monetary union based on the optimum currency areas approach. If the evaluation of these arguments is positive, one can argue that the policy instrument that countries forming a monetary union lose is not useful at all, or even harmful, hence that the loss of it does not lead to any costs of forming the union, or even leads to extra gains.

The first arguments against the optimum currency areas approach insist that the nominal exchange rate is not an effective policy instrument to offset asymmetric shocks because they have only temporary effects. In other words, they argue that the nominal exchange rate changes can not permanently alter the real exchange rates. A series of empirical studies supports these arguments.¹⁹ Emerson *et al.* point out that the correlation between nominal exchange rate changes and real ones is strong in the short run, but weakens significantly over time.²⁰

¹⁹ See, for instance, Emerson, *et al.* (1991).

²⁰ Emerson, *et al.* (1991, p. 138-40)

The process of this weakening correlation can be explained as follows. On the one hand, the devaluation of its currency by a country which is hit by an asymmetric shock leads to the restoration of the aggregate demand in the country in the short run. On the other hand, however, it results in domestic price and cost increases which offset the initial favourable effects of it in the long run. The reason is that the devaluation of the currency raises the prices of imported goods. This in turn contributes to an increase in the costs of production in the country directly and via increases in the nominal wage levels. As a result, the competitiveness of the country restored by the devaluation tends to disappear over time.²¹ It follows that the nominal exchange rate changes are not effective in offsetting asymmetric shocks in the long run.

However, a devaluation does have a positive short-term effect by offsetting the initial disturbance. This can be demonstrated by comparing a devaluation and an expenditure-reducing policy, two possible policy options for policy makers of the country which is hit by a shock. The country can avoid the severe deflationary effects on domestic output during the transition by devaluing its currency, but has to accept some inflationary effects of the devaluation during the transition period. In contrast, the country can avoid inflation by reducing its government expenditure, but output declines during the transition period. Given that the degree of wage and price flexibility is limited, the latter policy, an expenditure-reducing policy, takes a longer time to be successful than the former.²² Therefore, it can be concluded that the loss of the exchange rate instrument is a cost of a monetary union, especially for those countries where wage and price flexibility is low. *epennos*

As may be obvious from what was said in the previous paragraphs, how weak/strong the correlation between the nominal and real exchange rate

²¹ De Grauwe (1997, p. 29-30)

²² Emerson, *et. al.* (1991, p. 138-40)

changes is depends on the openness of the economy of the country. This point was introduced by McKinnon to the optimum currency areas approach. He argues that in a highly open economy exchange rate changes are both less effective in offsetting external imbalance and more damaging to internal price-level stability than in a relatively closed economy.²³ It follows that for the highly open economy fixed exchange rates or a common currency would be optimal.

He arrived at this conclusion by comparing two extreme cases. In his first case, he assumes that tradable goods account for a large percentage of gross domestic consumption, say 90%, and non-tradable goods account for only a small percentage of it, say 10%. Then, if the domestic currency is devalued by 10%, the domestic money prices of the tradable goods will rise by 10%, leading to significant increases in production of the tradable goods and decreases in consumption of them. This in turn will improve the balance of payments. At the same time, however, this will bring about a significant increase in the general domestic price index, say 9%, causing a strong wage-price spiral. It follows that, in this case, the exchange rate changes to offset the impacts of the demand shifts for tradable goods are not compatible with internal price-level stability.²⁴

On the other hand, in his second case, the situation is reversed, resulting in the opposite conclusion. This time he assumes that tradable goods are only 10% of the gross domestic consumption, and non-tradable goods are 90% of it. The same devaluation of 10% will cause the domestic money prices of the tradable goods to rise by 10%, but the effect on the general domestic price index will be much less than in the preceding case, say 1%. In contrast, if the government attempted to reduce domestic demand to improve the balance of payments by contractionary monetary-fiscal policy, unemployment would be

²³ McKinnon (1963)

²⁴ McKinnon (1963, pp. 719-20)

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severe. The reason is that, due to the high percentage of non-tradable goods in gross domestic consumption, the impact of the reduction of expenditures will fall mainly on the extensive non-tradable goods industries.²⁵ It follows that, for the relatively closed economy, exchange rate changes are preferable as a policy instrument to monetary-fiscal policy for offsetting demand shocks for tradable goods.

It is concluded that for the same effect on output, the cost of the devaluation increases with the openness of the economy because of the higher price variability involved. Therefore, the cost of the loss of the exchange rate instrument decreases with the openness.

Game-theoretical studies brought a new type of criticism into the argument of a monetary union. The time-inconsistency literature, pioneered by Kydland and Prescott, introduced the idea that when the government chooses and implements particular policies, it plays games with the private sector, and vice versa.²⁶ It reasons that economic agents follow optimal strategies in response to the strategies of the government, and that these responses, in turn, influence the effectiveness of the policies. Barro and Gordon employed Kydland and Prescott's model in their study to analyse the problem of time-inconsistency of policy as a repeated monetary policy game.²⁷ They reason that the reputation which governments acquire in pursuing announced policies has a great impact on how effective these policies are. It follows that the exchange rate is not a policy instrument that governments can use freely in a discretionary way to offset asymmetric shocks, as the optimum currency areas approach assumes. In addition, these time-inconsistency arguments help us to identify one of the major benefits of a

²⁵ McKinnon (1963, pp. 720-1)

²⁶ Kydland and Prescott (1977)

²⁷ Barro and Gordon (1983)

monetary union, namely, credibility sharing. In this subsection, the theoretical framework of the arguments will be examined, followed by the explanation of its direct implication for the theory of optimum currency areas, while the benefit of a monetary union, which they imply, will be considered in Section 1.3 where benefits of a monetary union will be discussed.

Kydland and Prescott point out that even if policy makers possess information about the timing and magnitude of the effects of their actions, discretionary policies taken do not result in the social objective function being maximised. They argue that the existence of a time-inconsistency of policy faced by policy makers is the reason for this apparent paradox. They conclude that when expectations of economic agents are rational, the optimal control theory, 'an appropriate planning device for situations in which current outcomes and the movement of the system's state depend only upon current and past policy decisions and upon the current state', cannot be made applicable to economic planning.²⁸

First, they defined consistent policy as follows: supposing that $\pi = (\pi_1, \pi_2, \dots, \pi_T)$ is a sequence of policies for periods 1 to T and that $x = (x_1, x_2, \dots, x_T)$ is the corresponding sequence for economic agents' decisions, an agreed-upon social objective function is described as $S(x_1, \dots, x_T, \pi_1, \dots, \pi_T)$, further, the agents' decisions in period t are supposed to depend upon all policy decisions and their past decisions ($x_t = X_t(x_1, \dots, x_{t-1}, \pi_1, \dots, \pi_T)$, $t = 1, \dots, T$), then, a policy π is consistent if, for each time period t , π_t maximises the social objective function S , taking as given previous decisions, x_1, \dots, x_{t-1} , and assuming that future policy decisions (π_s for $s > t$) are similarly selected.²⁹

They, then demonstrated that consistent policy produces a sub-optimal outcome by using a two-period example. In the two-period example ($T = 2$),

²⁸ Kydland and Prescott (1977, pp. 474)

²⁹ Kydland and Prescott (1977, pp. 475)

π_2 has to maximise the social objective function $S(x_1, x_2, \pi_1, \pi_2)$, subject to $x_1 = X_1(\pi_1, \pi_2)$ and $x_2 = X_2(x_1, \pi_1, \pi_2)$. Assuming differentiability and an interior solution, it is necessary that

$$\frac{\partial S}{\partial x_2} \frac{\partial X_2}{\partial \pi_2} + \frac{\partial S}{\partial \pi_2} = 0$$

On the other hand, for the optimal decision, the first-order condition is

$$\frac{\partial S}{\partial x_2} \frac{\partial X_2}{\partial \pi_2} + \frac{\partial S}{\partial \pi_2} + \frac{\partial X_1}{\partial \pi_2} \left[\frac{\partial S}{\partial x_1} + \frac{\partial S}{\partial x_2} \frac{\partial X_2}{\partial x_1} \right] = 0$$

Therefore, only if either $\partial X_1/\partial \pi_2$ (the effect of π_2 upon x_1) is zero or $(\partial S/\partial x_1 + \partial S/\partial x_2 \partial X_2/\partial x_1)$ (the effect of changes in x_1 upon S both directly and indirectly through x_2) is zero would the consistent policy be optimal.³⁰ They argue that current decisions of economic agents depend upon expected future policy and these expectations are not invariant to the policy selected, and that if in each period the policy decision selected is the one which maximises the sum of the value of current outcomes, the policy selected will be consistent but sub-optimal.³¹

As was mentioned, Barro and Gordon analysed the problem of time-inconsistency in monetary policy as a repeated policy game, developing Kydland and Prescott's theory.³² Barro and Gordon showed that surprise inflation cannot arise systematically in equilibrium because people understand the policymakers' incentives to create it. Theoretically, in a discretionary regime, the monetary authority can print more money, hence

³⁰ Kydland and Prescott (1977, pp. 476)

³¹ Kydland and Prescott (1977, pp. 486)

³² Barro and Gordon (1983)

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create more inflation, than people expect. However, in the real world, once the authority has used the policy tool to expand economic activity and reduce the real value of the government's nominal liabilities, people adjust their inflationary expectations. As a result, the costs of inflation in the discretionary regime will be higher than in another regime which has monetary or price rules. Their argument implies that the reputation governments acquire in pursuing announced monetary policies has a significant impact on how these policies are effective.

The policymakers face a social loss function over output and inflation and are asked to minimise the welfare loss by solving this optimisation problem. In the analysis, it is assumed that the costs of inflation rise at an increasing rate with the realised inflation rate for period t , π_t , and that when the inflation rate π_t , exceeds the anticipated rate, π_t^e , some benefits, such as increases in real economic activity, decreases in the unemployment rate, increases in governmental revenues, and so forth, arise. From these, the policymakers' loss function for each period is given by

$$z_t = (a/2)(\pi_t)^2 - b(\pi_t - \pi_t^e) \quad \text{where } a, b > 0. \quad (1)$$

The first term expresses the costs of inflation while the second term stands for the benefits generated from surprise inflation. A quadratic form in the first term is used to show that the costs rise at an increasing rate with the inflation rate, π_t , and also that policymakers equally dislike deviations from their preferred inflation rate in either direction.³² The second term means that only unexpected inflation, $\pi_t - \pi_t^e$, is the source of the benefit from inflation, given that the benefit parameter, b_t , is positive.

Then, the policymakers' objective at date t is defined as minimisation of the expected present value of the costs, Z_t , expressed as follows;

³² Cobham (1998, p. 217)

$$Z_t = E \left[z_t + (1/(1+r_t))z_{t+1} + (1/(1+r_t)(1+r_{t+1}))z_{t+2} + \dots \right] \quad (2)$$

where r_t is the discount rate that applies between periods t and $t + 1$.

Based on these assumptions, they set out three different cases, namely discretionary policy, policy under a rule, and cheating, and examine the costs of inflation which these policies may impose on the economy respectively. They also assume that no one knows the benefits parameter, b , and the discount rate, r_t , when they act for period t .

In the first case, discretionary policy, the policymakers treat the current inflation expectation, π_t^e , and all future expectations, π_{i+1}^e for $i > 1$, as given when choosing the current inflation rate, π_t . Since future costs are independent of the policymakers' current actions, the only thing they have to consider in order to realise their objective, given in the equation (2), is to choose π_t which minimises the expected costs for the current period, Ez_t , in other words, minimises the cost function given in the equation (1).

From the equation (1),

$$\frac{\partial z_t}{\partial \pi_t} = a\pi_t - b \quad (3)$$

Therefore, the solution from minimising Ez_t is

$$\hat{\pi}_t = b/a \quad (\text{discretion}). \quad (4)$$

Given rational expectations, people calculate the policymakers' choice of inflation by solving out the policymakers' optimisation problem. In our present case, they can calculate it exactly, as

$$\pi_t^e = \hat{\pi}_t = b/a \quad (5)$$

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Since the benefit of surprise inflation is zero in equilibrium, the cost of inflation, z_t , depends only on π_t , so that it is

$$\hat{z}_t = (1/2)(b)^2/a \quad (\text{discretion}). \quad (6)$$

In the second case, policy under a rule, a rule for determining inflation is set in advance by the policymakers. The rule can relate π_t to variables which are available for the policymakers at date t . However, these variables are also known to the private agents. Therefore, the policymakers choose π_t and π_t^e together, subject to the condition that $\pi_t^e = \pi_t$. As a result, the solution for minimising z_t is,

$$\pi_t^* = 0 \quad (\text{rule}). \quad (7)$$

Then, the costs under the rule can be calculated as follows,

$$z_t^* = 0 \quad (\text{rule}). \quad (8)$$

Therefore, it can be said that the costs under a rule are lower than those under discretion.

$$\hat{z}_t = (1/2)(b)^2/a > z_t^* = 0 \quad (9)$$

The third case, cheating, is the situation where the policymakers renege on commitments to secure some benefits from cheating people, in particular, if people expect zero inflation. Assume that people have the inflationary expectation, $\pi_0^e = 0$, which is formed at the start of period t . If the policymakers treat this expectation as given, they choose the same π_t as the one under discretion to minimise z_t .

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$$\tilde{\pi}_t = b/a \quad (\text{cheating}). \quad (10)$$

Then, the costs under cheating can be calculated as follows,

$$\tilde{z}_t = -(1/2)(b)^2/a \quad (\text{cheating}). \quad (11)$$

Again, the costs under cheating are lower than those under a rule.

$$\hat{z}_t = (1/2)(b)^2/a > z_t^* = 0 > \tilde{z}_t = -(1/2)(b)^2/a \quad (12)$$

From equation (12), we can say that the rule is better than discretion, but, it is only a second-best solution. Cheating can deliver the best result. However, it should be noted that the cheating outcome is feasible only when people expect low inflation maintained by a rule.

However, in the real world, people cannot be systematically deceived into maintaining low inflationary expectations, once the policymakers cheat people. In other words, if the policymakers create a higher inflation than people expect today, then everyone raises their expectations of future inflation in some manner. Therefore, the cost of cheating today involves the increase of inflationary expectations in the future, leading to a discretionary situation, given the repeated nature of the game between the policymakers and the private agents.

Barro and Gordon, then turn to the best enforceable rule. According to them, a credible rule comes with some enforcement power that at least balances the temptation to cheat. The potential loss of reputation or credibility is suggested as the enforcement mechanism which is applicable to their model. In their model, cheating in the previous period generates an increase in inflationary expectations for the current period. The expectations

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mechanism is defined as follows,

$$\begin{aligned} &\text{if } \pi_{t-1} = \pi_{t-1}^e, \pi_t^e = \pi_t^* \quad \text{and} \\ &\text{if } \pi_{t-1} \neq \pi_{t-1}^e, \pi_t^e = \hat{\pi}_t. \end{aligned} \tag{13}$$

These equations show that if the real inflation rate for the previous period, $t-1$, accorded with the expected inflation rate, $\pi_{t-1} = \pi_{t-1}^e$, then people trust the government to perform according to the announced rule for the current period, t , $\pi_t^e = \pi_t^*$. However, if the government reneged on the rule in the previous period, leading to a departure from actual inflation rate from the expected one, $\pi_{t-1} \neq \pi_{t-1}^e$, then people do not trust the government to follow its rule this period, expecting a discretionary situation, $\pi_t^e = \hat{\pi}_t$. In other words, the government loses credibility.

On the other hand, the policymakers will follow the rule, $\pi_t^* = \pi$, during period t if the enforcement is at least as great as the temptation. Otherwise, they opt for cheating and suffer the consequences next period, $t+1$. In this context, the enforcement can be defined as the expected present value of the loss from cheating, which is the costs of cheating in the next period discounted by the factor $q_t=1/(1+r_t)$.

$$\text{enforcement} = E\left[q_t(\hat{z}_{t+1} - z_{t+1}^*)\right] = q_t(a/2)\left[(b/a)^2 - \pi^2\right]. \tag{14}$$

Similarly, the temptation to renege on the rule can be defined as the difference between the costs under the rule and those under cheating.

$$\text{temptation} = E(z_t^* - \tilde{z}_t) = (a/2)(b/a - \pi)^2. \tag{15}$$

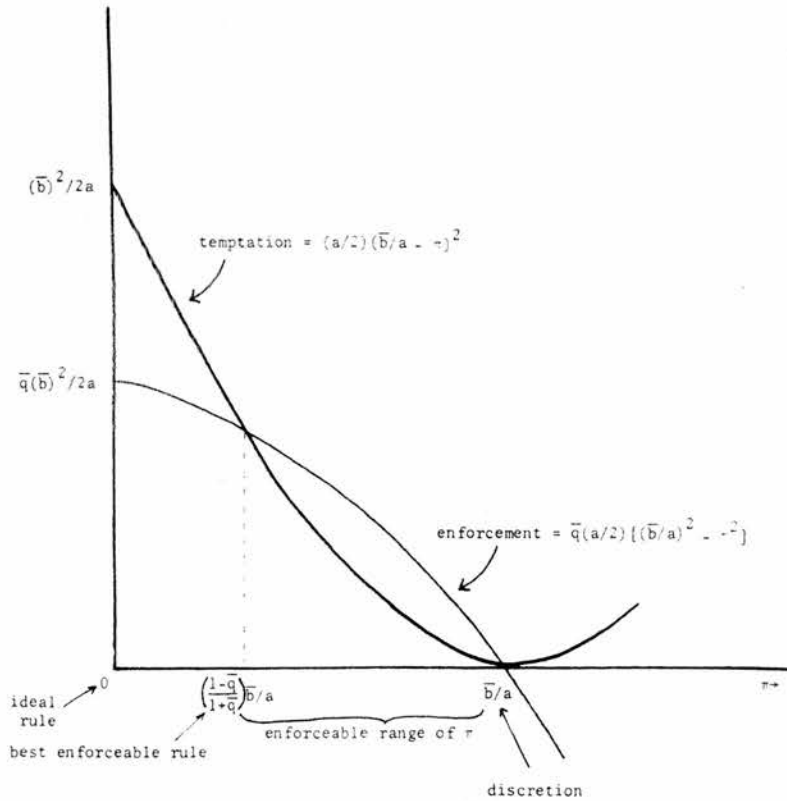
Under the ideal rule, $\pi = 0$, the temptation is $(1/2)(b)^2/a$, while the enforcement is $q_t(1/2)(b)^2/a$. Since $q_t < 1$, the temptation is strictly greater

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than the enforcement. Therefore, the ideal rule, $\pi = 0$, is not enforceable.

Figure 1.1 shows the enforceable range of rules, where temptation \leq enforcement.

Figure 1.1 Temptation and Enforcement



Source: Barro and Gordon (1983, pp. 112)

The figure can be interpreted as showing that the best enforceable rule is

$$\pi_t^* = (b/a)(1 - q_t)/(1 + q_t)$$

for which the expected cost is

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$$Ez_t^* = \left[\frac{1}{2} \left(\frac{b}{a} \right)^2 (1 - q_t) / (1 + q_t) \right]^2$$

The result of the analysis is that the best enforceable rule is a weighted average of the ideal rule and discretion, with the weights depending on the discount factor, q_t , hence the policymakers' discount rate, r_t .

Let's turn to the application of this time-inconsistency literature to the actual policies.³³ Here, the preference or policy of the monetary authorities about inflation and unemployment is used as the example. Of course, we can use the other sets of policies, such as those on exchange rates and output, which may look more appropriate in our context of costs of a monetary union. However, inflation and unemployment are chosen for two reasons; the set of inflation and unemployment is the most popular one to explain the concept of the time-inconsistency arguments, and it will be utilised when we discuss one of the benefits of a monetary union, credibility sharing. The result of the analysis, which will be conducted here, can easily be applied to the other policies because of its universal nature in terms of the incentive structure of policymakers.

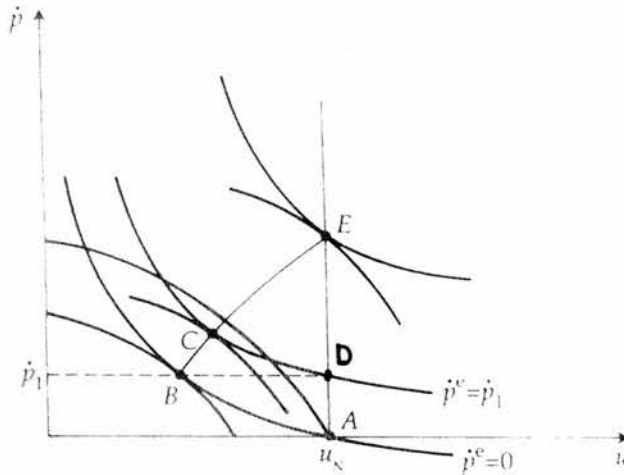
Figure 1.2 provides a simple application of the concept. The vertical axis measures inflation in terms of price, and the horizontal axis measures unemployment, while the vertical line represents the natural rate of unemployment, which is the collection of all points for which the actual inflation rate is equal to the expected rate; it therefore depicts the long-run vertical Phillips curve. The short-run Phillips curves for particular levels of expected inflation, $\dot{p}^e = 0, \dot{p}^e = \dot{p}_1, \dot{p}^e = \dot{p}_2$, are drawn here. At the same time, the preferences of the authority between inflation and unemployment are represented in the form of a map of indifference curves, where successively

³³ See, for instance, De Grauwe (1997, p. 39-45) and Cobham (1998, Ch. 16).

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larger distances from the origin indicate successively lower utility for the authority. Along any of these curves, inflation and unemployment change together in ways that just keep the utility unchanged.

Figure 1.2 The Equilibrium Inflation Rate



Source: De Grauwe (1997, p. 42)

Suppose, for a moment, that the authority announces that it will seek a zero inflation policy, and the private sector believes this announcement, hence $\dot{p}^e = 0$. If the authority actually implements the announcement, the economy moves to point A. However, it is now clear that the authority can do better than point A by letting the economy move to point B, which is on the same short-run Philips curve but on a lower indifference curve, to maximise its own utility. In other words, it has an incentive to renege on its promise to maintain a zero inflation policy. But, in this model, expectations are assumed to be rational, and this includes the private sector's rational expectations of the authority's incentives. The private sector, therefore, increase its expectations of inflation, resulting in the upwards shift of the short-run Philips curve to $\dot{p}^e = \dot{p}_1$, if the authority loses its reputation in seeking its announced policies, in the same way supposed in the original

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Barro and Gordon model (see equation 13). The authority also knows this. So, the authority will not necessarily succumb to its incentives to renege on its promise.

However, suppose now that the authority is sufficiently short-sighted, like the one supposed in the original Kydland and Prescott model, where it fails to take the consequences of the reactions of the private sector into account, perhaps because it consists of short-sighted politicians, who give a low weight to future losses, it would decide to cheat. The economy then moves to point B, as discussed above. This in turn lead to the upwards shift of the short-run Philips curve to $\dot{p}^e = \dot{p}_1$, again as discussed earlier. But, this process does not end here; given these new expectations of inflation, the same processes are repeated again and again until the economy reaches point E. Point E can be interpreted as the long-run equilibrium where the authority has no incentive to stimulate the economy and the private sector therefore believes that the economy will stay at that point, in other words, at that point 'temptation' is equal to 'enforcement' in the original Barro and Gordon model. It is also on the long-run vertical Phillips curve, i.e. at the natural rate of unemployment, so that the private sector's expectations are realised. It is obvious that point E is inferior for both the authority and the private sector to point A and D, because at these points unemployment is also at the natural rate but inflation is lower. In spite of this, point E is the only long-run equilibrium that can be achieved in a rational expectations model based on the assumption that the authority follows a discretionary policy, i.e. a policy to set the rate of inflation optimally each period given the prevailing expectations of the private sector.³⁴ In short, time-inconsistency happens when the policy to optimise the outcome in one time period is not the same as the policy to do so in the next period.³⁵

³⁴ De Grauwe (1997, p. 44-5)

³⁵ Cobham (1998, p. 216)

So, what implications does this time-consistency literature have for the costs of a monetary union? The exchange rate instrument (devaluation) is the policy tool by which the government can improve the balance of trade and the competitiveness of its economy by making exports cheaper abroad and imports more expensive at home, leading to (temporary) inflationary pressure at home due to the rise in import prices. It is easy to identify the same incentive structure in the policy as the inflation-unemployment preference analysis examined above. While the government has an incentive to create surprise devaluation, the economic agents know this and can adjust their exchange rate expectations once the government has lost its reputation for fulfilling its promises. Moreover, because of its (temporary) inflationary nature, the government can use the exchange rate instrument as the tool to create surprise inflation. However, this policy should follow exactly the same process described in the inflation-unemployment preference analysis above.

It follows that the exchange rate instrument (devaluation) is not a flexible policy instrument which can be used frequently, as Mundell and other supporters of the theory of optimal currency areas approach assume. Therefore, a devaluation cannot be used to offset every disturbance which occurs in a monetary union. However, it should be noted that the fact that such a policy instrument cannot be used in a discretionary way is not sufficient to abandon it because there is some empirical evidences that it can be used successfully; there were a number of examples of successful devaluations in the 1980s in Europe, such as the ones in Belgium in 1982 and in Denmark in the same year.³⁶ Therefore it should still be reasonable to maintain the argument that relinquishing the exchange rate instrument does imply a cost of a monetary union.

³⁶ De Grauwe (1997, p. 33)

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The criticisms against the optimal currency areas approach discussed in this subsection make the costs of a monetary union clearer. While the traditional theory tends to be too pessimistic about the possibility for forming a monetary union at a low cost, some of the criticisms even conclude that the loss of the exchange rate instrument does not lead to any costs. This conclusion may go too far. What we have found here is that the nominal exchange rate changes or depreciation/appreciation cannot permanently alter the real exchange rates, and that, contrary to the view of the traditional theory of optimal currency areas, the exchange rate instrument is not a policy tool which policymakers can use discretionarily and costlessly. These may seem to lead to the extreme conclusion above. However, we have also seen that a devaluation has a positive short-term effect on offsetting the impact of a disturbance, especially in the countries where wage and price flexibility is limited, that the cost of the loss of the exchange rate instrument decreases according to the openness of the economy, and that there have been some successful devaluations. Therefore, we should maintain the argument that relinquishing the exchange rate instrument does imply a cost for a monetary union under the conditions we have identified in Subsection 1.2.1.

1.2.4 Differences between Countries and the Costs of a Monetary Union

In Subsection 1.2.2, the differences in national fiscal policies and in labour markets between countries were discussed as a possible source of asymmetric shocks which can be offset by exchange rate changes. However, the asymmetric shocks are not the only sources of the costs of a monetary union. Some differences between countries can generate the costs through different mechanisms. In this subsection, the mechanisms through which differences in the ways in which the governments finance their budget deficits

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and in growth rates generate costs will be examined. It will follow that these differences can lead to additional costs for a monetary union.

Differences in fiscal systems of countries which form a monetary union bring about differences in the ways the governments of the countries finance their budget deficits. To maintain the long-run sustainability of national budgets, governments have to finance their budgetary debt by increasing taxes and/or issuing high-powered money (seigniorage). It is widely recognised that rational governments will combine these means of revenue so that the marginal cost of raising revenue is minimised, i.e. the marginal cost of raising revenue by increasing taxes is equal to that by seigniorage. It follows that countries which have well developed tax systems and are allergic to inflation will prefer to raise revenue by increasing taxes, whereas countries which have less developed tax systems and therefore find it more costly to increase taxes will prefer to raise revenue by seigniorage. This implies a cost of a monetary union because once countries with different fiscal systems form a low-inflation union, the countries with less developed tax systems will lose their preferred means of raising revenue (seigniorage) and will have to rely on a more costly means of raising revenue (increasing taxes). It follows that a monetary union can have an additional cost for member countries if they have very different fiscal systems and therefore very different preferences about means of raising revenue.

However, the empirical evidences suggest that the magnitude of the loss of seigniorage cannot be so important that it prevents a country which relies on it heavily from joining a low-inflation monetary union. For instance, in the case of a monetary union in Europe, the Southern European countries (Greece, Portugal, Italy and Spain), which have relied most on seigniorage in the member countries, would have to give up up to 2% of GDP in seigniorage revenue, if their inflation rates were to be brought down to that of Germany. It is also pointed out that since for Italy and Spain, most of these losses have

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already materialised with their disinflation processes, the remaining losses would be well below 1% of GDP.³⁷ Therefore, the additional cost generated by the differences in preferences about means of raising revenue can easily be overridden by the benefit from joining a low-inflation monetary union.

It is argued that differences in growth rates can also create a cost for a monetary union. It is obvious that some countries grow faster than others even in a group of countries which are forming a monetary union. The way in which the differences in growth rates lead to a cost can be presented by using the following simple example.³⁸

Suppose two countries, say Germany and Italy, with different growth rates, the former's GDP is growing at 3% per year, whereas the latter's at 5% per year. Suppose further that the income elasticity of Germany's imports from Italy, and vice versa, is equal to 1. The result is a trade balance problem for Italy because Italy's imports from Germany will grow at 5% per year, whereas Germany's imports from Italy, therefore Italy's exports to Germany, will grow at only 3% per year, i.e. there will be an imbalance of 2% of GDP in the faster-growing Italy's trade balance. In order to maintain its trade balance, Italy will have to reduce the price of its exports to Germany to ensure that the exports are absorbed in slower-growing Germany's market. Before forming a monetary union, there will be two options for Italy; a depreciation of its currency and a lower domestic price level. However, by forming the union, the Italian government will lose the first option and will have to follow deflationary policies. As a result, the growth process in Italy will be slowed down. It follows from what has been seen that a monetary union has a cost for the fast-growing country.

However, this popular view about differences in growth rates has recently

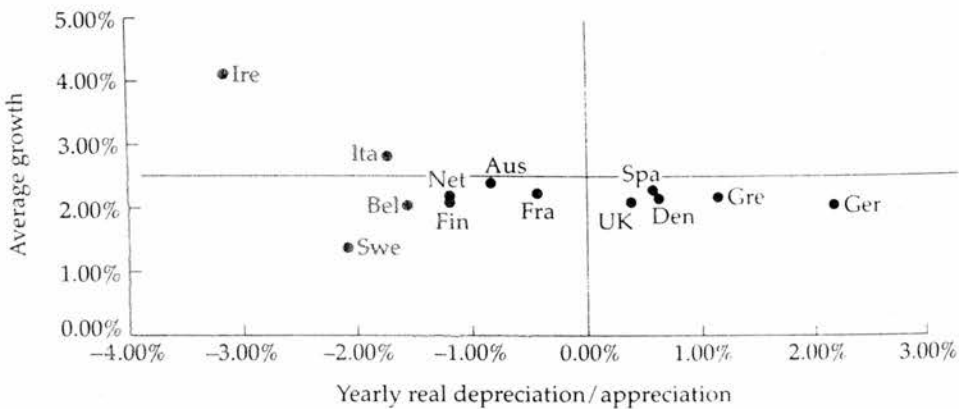
³⁷ Gros (1990)

³⁸ De Grauwe (1997, p. 16-7)

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attracted much criticism. First of all, empirical analyses do not support this traditional explanation. For instance, during 1976-95, some fast-growing EC countries appreciated their currencies, whereas other fast-growing EC countries depreciated their currencies. The same is true for the slow-growing EC countries. These are shown in figure 1.3 below.³⁹

Figure 1.3 Real Depreciation/Appreciation and Growth, 1976-95



Source: De Grauwe (1997, p. 28)

Krugman (1989) has developed a new approach to this topic. He questions the validity of the main assumption of the traditional views, that the income elasticities of goods exported by fast-growing countries are equal to those of goods imported by these countries. He argues that the way in which fast-growing countries expand their share of world markets is by expanding the range of goods that they produce, not by reducing the relative prices of their goods. By so doing, they make the aggregate demand curve shift outward. As a result, the income elasticities of their exports become higher (than those of slow-growing countries). On the other hand, the income elasticities of their imports are not affected by this growth process. It

³⁹ De Grauwe (1997, p. 27-8)

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follows that the income elasticities of their exports become higher than those of their imports. As a result, he concludes that differences in growth rates may not influence the economies of fast-growing countries.⁴³

Another reason why the traditional explanation of the cost of forming a monetary union imposed by the differences in growth rates is questionable, can be formed as follows. Fast-growing countries are the countries where capitalists can expect favourable returns on their investments since the productivity of capital in those countries is higher than that in slow-growing countries. Therefore, if countries which have different growth rates form a monetary union, there will be significant capital inflows to fast-growing countries from slow-growing countries which make it possible for the former to finance current account deficits without any need to devalue their currencies.⁴⁴

Several observations in the last few paragraphs have shown that the differences in growth rates between countries which form a monetary union are not necessarily to be seen as a source of another additional cost, although the traditional analyses of the correlation between the ratios of income elasticities and ratios of economic growth imply a cost of relinquishing the national currencies for fast-growing countries. It should also be borne in mind that a number of economists disagree with Krugman's explanation.⁴⁵

1.3 Benefits of a Monetary Union

It is obvious that we can conclude whether a monetary union would be

⁴³ Krugman (1989)

⁴⁴ De Grauwe (1997, p. 28-9)

⁴⁵ See, for instance, Gros and Thygesen (1998, p. 262)

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beneficial on economic grounds only after comparing the costs of the union with the benefits from it. Therefore, this section discusses the benefits of forming a monetary union. Traditional views regard the increased economic efficiency as the source of these benefits. The origins of the increases in economic efficiency can be found in two different aspects of forming a monetary union; the elimination of transaction costs and the elimination of risk in the uncertain exchange rates.⁴⁶ As was mentioned in Subsection 1.2.3, the time-inconsistency arguments made us identify another form of the benefit from a monetary union, namely credibility sharing. In this subsection, the benefits generated by increases in economic efficiency will be discussed first, followed by the benefit from credibility sharing.

The first and most obvious benefit of a monetary union is the elimination of the costs of exchanging one currency into the other caused by bid-ask spreads. We experience these costs for ourselves whenever we exchange one currency for another. Although, for banknotes, the bid-ask spread is often around 5%, and can be over 10% if one exchanges one minor currency into another minor one, the total gains in retail transactions of this kind cannot be so large. That is because retail transactions do not normally account for a large share of GDP. In the case of the EU, the potential gains in retail transactions will be about 8 billion ecu per annum, about one-eighth of 1% of EU GDP.⁴⁷ Even so, it is certainly a benefit which should be added to other benefits of a monetary union, and it is at least the most visible one.

There is another level at which the exchange-rate-related transaction costs are eliminated. It is the trade between countries which form a monetary union. The trade mostly involves the corporate sector.

⁴⁶ De Grauwe (1997, p. 52)

⁴⁷ Gros and Thygesen (1998, p. 289)

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Although the bid-ask spreads at the wholesale level are much smaller than those of retail transactions, the total gains can be much higher since it normally accounts for a major part of GDP. Again, in the EU, intra-EU trade in goods amounts to about 900 billion ecu, about 14% of EU GDP.⁴⁸

Recent research estimates that the transaction cost savings that can be expected from a common currency in the EU will be about 60 billion ecu per annum, about 1% of EU GDP, in total.⁴⁹

Another point to be noted here is that merely fixing exchange rates is not sufficient to realise these gains significantly. As long as national currencies remain in existence, even if the exchange rate is irrevocably fixed, doubts will continue to exist, in other words, the currencies will not be perfect substitutes. Therefore, there will be a need to convert one currency into another, hence transaction costs, since residents of each country prefer their home currency rather than foreign ones.⁵⁰ In addition, it is pointed out that exchange-rate variability has only a small impact on bid-ask spreads.⁵¹ This should mean that the elimination of exchange-rate variability will not reduce the spreads dramatically. It follows that only a common currency can realise totally the gains from the elimination of transaction costs.

There is also an indirect gain from the elimination of transaction costs, although it is difficult to quantify. It is a gain from the elimination of price discrimination between national markets. For consumers, it is inconvenient and difficult to compare prices in different currencies, even if exchange rates are fixed. This, in turn, allows firms to engage in price discrimination between national markets, and charge higher prices in the markets where demand is less elastic. Such price manipulation implies

⁴⁸ Gros and Thygesen (1998, p. 289)

⁴⁹ Gros and Thygesen (1998, p. 290-1)

⁵⁰ De Grauwe (1997, p. 53)

⁵¹ See, Hartmann (1996)

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losses of economic welfare since it conveys a wrong signal of demand for the good. Therefore, it can be said that the elimination of transaction costs can also benefit consumers through making price discrimination more difficult.

The gains from the elimination of risk in the uncertain exchange rates are less obvious and more difficult to quantify than those from the elimination of the exchange-rate-related transaction costs. Two of these gains will be discussed here; namely, the greater reliability of the price mechanism, and the increase in economic growth.

Exchange rate uncertainty introduces uncertainty about the future prices of goods and services. In capitalist economies, economic agents make their decisions concerning production, investment and consumption based on the information which is provided by the price mechanism. Therefore, if the mechanism becomes less reliable, the quality of these decisions will decline leading to large adjustment costs for them. For example, the US dollar appreciation during 1980-5, which was largely unpredicted and which went farther than the inflation differential between the United States and the other industrial countries, led to large changes in the profitability of US firms resulting in declines in output and firm closures. A few years later, the US dollar depreciated by more than was necessary to correct the appreciation of the first half of the 1980s. These large exchange rate movements led to large adjustment costs for the American economy.⁵² In this sense, the reduction of exchange rate uncertainty can benefit countries that form a monetary union by providing a more reliable price mechanism.

There is another mechanism which reduces the efficiency of the price mechanism. It results from the moral hazard problem and the adverse selection problem. The price uncertainty due to the uncertainty on the

⁵² De Grauwe (1997, p. 58)

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future exchange rate changes will increase the real interest rate, because it implies an increase in risk in investment. A higher interest rate, in turn, will lead to problems in selecting investment projects. The moral hazard problem is that the borrowers increase the riskiness of their investment projects because of the asymmetry of expected profits and losses: the borrowers get the extra profits when the project is successful whereas they only lose their share in the project when it turns out to be unsuccessful. With a higher interest rate this problem is intensified because the borrowers have an incentive to select more risky projects to protect their extra profits. Therefore, on average, investment projects will become riskier as the interest rate increases. On the other hand, the adverse selection problem is that the suppliers of low-risk investment projects will tend to be excluded from the credit market as the interest rate increases, because they will find it less attractive to borrow at the higher interest rate. As a result, on average, the riskiness of investment projects will increase.⁵³ It follows that the elimination of the uncertainty about the future exchange rate changes reduces the amount of risky projects, and is therefore a source of benefit for a monetary union by leading to a more efficient working of the price mechanism.

The neo-classical theory of growth argues that a monetary union will lead to an increase in economic growth. The increase in overall efficiency caused by a monetary union will be translated into an increase in the productivity of capital. This, in turn, will increase investment, hence lead to a higher capital stock, until the marginal productivity of capital has returned to its original level. Since the higher capital stock means more output per labour, this mechanism multiplies the output of the initial efficiency gains.⁵⁴ This neo-classical theory of growth can be illustrated

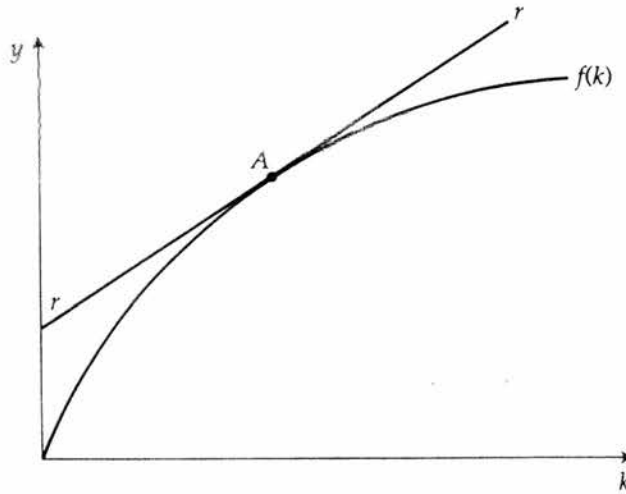
⁵³De Grauwe (1997, p. 57-9)

⁵⁴Gros and Thygesen (1998, p. 295)

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using Figure 1.4. The horizontal axis shows the capital stock per worker, while the vertical axis shows the output per worker. The line $f(k)$ is the production function: the convex shape implying diminishing marginal productivities. The equilibrium in this model is determined at the point of tangency between the production function and the straight line rr whose slope is given by the interest rate consumers use to discount future consumption.⁵⁵

Figure 1.4 The Long-Run Equilibrium in the Neo-Classical Growth Model



Source: De Grauwe (1997, p. 60)

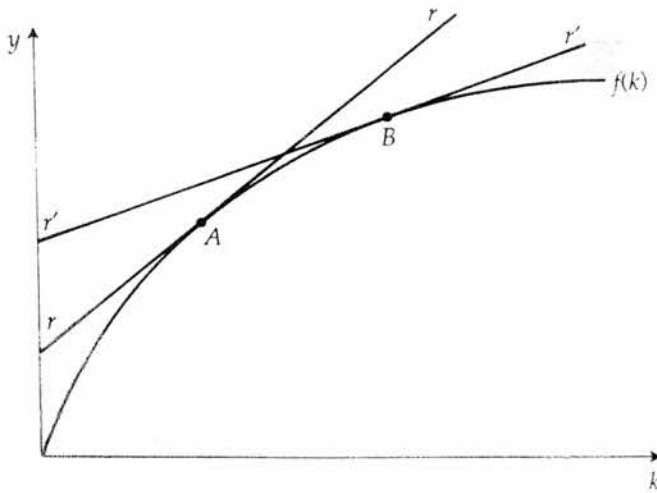
The growth effects of the elimination of risk in the uncertain exchange rates can be represented in Figure 1.5. It is assumed that the elimination of the exchange risk reduces the systemic risk so that the real interest rate declines, the rr line would become flatter ($r'r'$). As a result, the equilibrium moves from A to B . This will be followed by an accumulation of capital and an increase in the growth rate. However, the growth rate of output will soon return to the initial level because it is determined by the exogenous

⁵⁵ De Grauwe (1997, p. 60)

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technological progress. In other words, the reduction of the interest rate has only temporary effects on the growth rate.⁵⁶

Figure 1.5 Growth Effects of a Reduction in the Risk Premium



Source: De Grauwe (1997, p. 61)

Until recently, there was no adequate theoretical framework to explain continuing growth other than through exogenous technological progress. However, recently, this neo-classical growth model has been extended by introducing dynamic economies of scale.⁵⁷ These newer models stress the roles of the economies of scale and spillovers that arise in the accumulation of knowledge as the sources of continuing endogenous growth. Suppose a monetary union increases the overall level of productivity when the capital stock increases. The production function $f(k)$ shifts upward, say to $f'(k)$ (Figure 1.6), in other words, the economy is now on a higher growth path. The increase in the productivity may arise because, with a higher capital stock and output per worker, there are learning effects and additional knowledge is accumulated. This additional knowledge then increases the

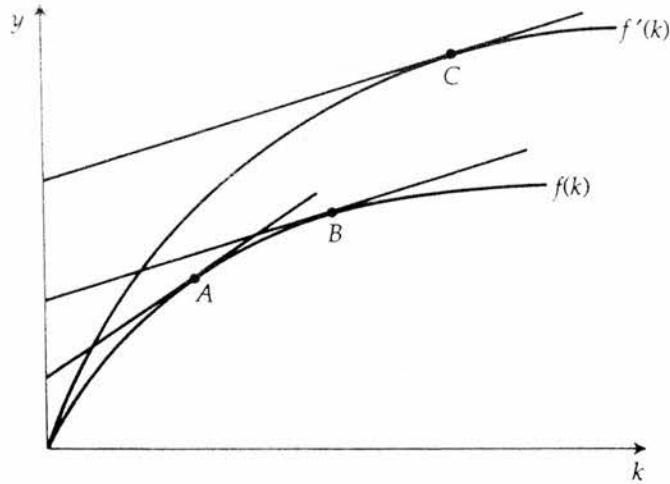
⁵⁶ Emerson, *et. at.* (1991, p. 81)

⁵⁷ See, for instance, Baldwin (1989, pp. 247-81)

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labour productivity in the next period. The point of tangency between the production function and the discount rate line will shift from A to C.⁵⁸

Figure 1.6 Endogenous Growth Model



Source: De Grauwe (1997, p. 62)

In this dynamic economies of scale model, a lowering of the interest rate via the elimination of risk in the uncertain exchange rates can likewise put the economy on a higher growth path. The reason is that because of the lower interest rate the economy accumulates more capital. This, in turn, increases the productivity of the capital stock per worker. As a result, the equilibrium moves from A to C via B (Figure 1.6), therefore, the economy will be on a higher growth path.⁵⁹

These analyses may sound very promising at first sight. However, they are far from the consensus amongst economists. For instance, it is argued that the welfare gains by the dynamic effect will not be as significant as the analyses predict, because the increase in the capital stock

⁵⁸ Emerson, *et. at.* (1991, p. 80)

⁵⁹ De Grauwe, *Economics, op. cit.*, p. 61-2.

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has to be paid for by a reduction in consumption. This is because in a competitive system the difference between the value of the consumption forgone and the additional output produced by the additional capital can not be so large.⁶⁰ The validity of the analyses is also questioned as follows. Since a lower risk due to a reduction of exchange rate variability can have a double effect from the reduction of the real interest rate and the reduction of the expected return of investment, it is theoretically difficult to decide whether the benefit from the former effect exceeds the costs of the latter one. Therefore, the dynamic efficiency gains should be evaluated empirically.⁶¹

Let's now turn to another form of the benefit from a monetary union, namely credibility sharing. It is widely accepted that while inflation is costly, disinflation is costly, too. For this reason, it is sometimes argued that the former should not be reduced, although the tone of the arguments differ from person to person. Macroeconomic theory identifies two reasons for the costs which arise from the latter; wage rigidity and lack of credibility in disinflationary policies. Wage rigidities can cause a short-run trade-off between inflation and output, i.e. disinflation can cause temporary losses of output, hence, unemployment. The lack of credibility can also lead to the same result. If the decline in inflation is not expected due to the lack of credibility, nominal interest rates remain high, with result that real interest rates are high because actual inflation is lower than the expected level. This in turn increases the burden of the budget deficit which might depress investment by the government.⁶² On the other hand, as was discussed in the previous subsection, the government cannot credibly announce a zero inflation policy, or any policy which aims to produce an inflation rate below the one realised at point E in Figure 1.2, due to the

⁶⁰ Gros and Thygesen (1998, p. 295)

⁶¹ For the more detail of the argument, see, De Grauwe (1997, p. 54-7)

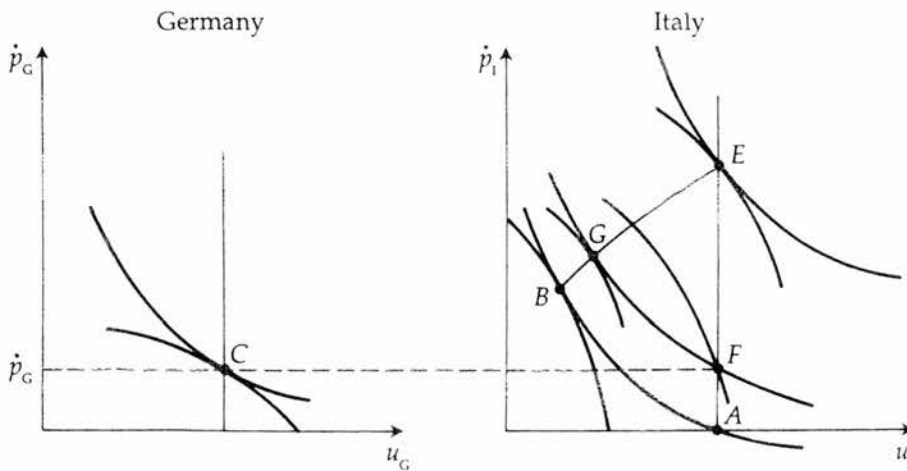
⁶² Emerson, *et. at.* (1991, p. 93-5)

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existence of time-inconsistency in these policies. It follows that the lack of credibility problem in the disinflation process cannot be easily solved by the country in question alone.

However, it is argued that the problem can be solved by forming a monetary union with (a) lower inflation country(ies).⁶³ This argument can be explained as follows. Suppose that there are two countries, say Germany and Italy, the former has the lower inflation rate than the latter (Figure 1.7).

Figure 1.7 Inflation Equilibrium in a Two-Country Model



Source: De Grauwe (1997, p. 45)

The latter's problem is that if its authorities were credible in pursuing announced disinflation policies, it could realise a lower inflation equilibrium than point E, with welfare gains. Then, suppose further that Italy announces that it will fix its exchange rate with the Deutschemark. Given the purchasing-power parity condition, the announcement leads to the inflation rate in Italy being fixed at the level in Germany, leading to significant welfare gains due to the lower inflation rate. The question here is whether the announcement by the Italian authorities can be more

⁶³ De Grauwe (1997, p. 45-7)

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credible than the announcement of lower inflation policies discussed above. By applying the time-inconsistency arguments to this situation, it can be said that merely announcing that it will fix its exchange rate with the Deutschemark, will be no more credible than announcing a lower inflation target, since there remains the same incentive for the authorities to create surprise inflation by surprise devaluation, and economic agents know this. To be more credible, the Italian authorities need hard evidence that they will never renege on their promise of fixing the exchange rates. The abolition of the Italian lira and the adoption of the Deutschemark as the national currency in Italy is one of the possibilities to acquire full credibility for the Italian authorities since once this has happened they cannot devalue their (new) currency (the Deutschemark). As a result, the horizontal line in Figure 1.6, which connects the inflation equilibrium in Germany with that in Italy becomes the credible inflation equilibrium in the latter, too. This process may be called *credibility borrowing* (by Italy from Germany).⁶⁴ While, technically, the irrevocably fixed exchange rates can have the same effect as the adoption of the Deutschemark, it is argued that the former is less credible than the latter because in the latter case, the Italian monetary authorities do not cease to exist, therefore the irrevocability of the arrangement can be questioned. It follows that anything less than the replacement of the Italian lira with the Deutschemark will face a credibility problem.

The magnitude of this credibility borrowing process may be reduced when these two countries form a monetary union which adopts a common currency. Throughout the analysis of the credibility borrowing process, it has been assumed that the central bank in Germany with 'hard-nosed' preferences about inflation remains unchanged. However, when they form a monetary union, there is no guarantee that the new central bank is as 'hard-nosed' about inflation as the central bank in Germany, since it is be

⁶⁴ Giavazzi and Pagano (1988)

represented by both the Italian and German authorities. If it turns out to be less 'hard-nosed', or even less credible, the new inflation equilibrium of the union is higher than the one which was realised in the previous case, \dot{P}_G . In this case, while Italy can still gain from the union, Germany can lose from it, leading to a lack of enthusiasm in the latter.⁶⁵ This situation may be called credibility sharing (between Italy and Germany). It follows that a central bank of a monetary union, which is in charge of monetary policies in the union, should be designed to be as 'hard-nosed' about inflation as the lower-inflation countries' own central banks, otherwise, these countries would refuse to join the union.

In this connection, it is often argued that a better solution to the time-inconsistency problem could be the institutional approach in which control over monetary policy is given to an institution which is separate from the government and which is given the primary task of keeping prices stable, i.e. an independent central bank.⁶⁶ Economists have attempted to measure the extent of central bank independence, by examining a range of factors from the government's influence over its decisions to the kind of credit facilities provided to the government by it. By using these measures, it has been found that there is an inverse relationship between central bank independence and inflation, but not between its independence and growth. These are compatible with the theoretical conclusion drawn from the time-inconsistency theory.⁶⁷ It follows that to design a central bank of a monetary union to be politically independent can be a solution of the problem which can be caused by the credibility sharing process.

In conclusion, first, a monetary union will have important benefits for member countries by eliminating the exchange-rate-related transaction

⁶⁵ De Grauwe (1997, p. 46-7)

⁶⁶ Neumann (1990)

⁶⁷ Cobham (1998, p. 219-22)

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costs, mainly in the trades between the countries. The elimination of the exchange-rate-related transaction costs will also bring about indirect gains by making price discrimination much more difficult, although these gains will be difficult to quantify. Secondly, we have also found that a monetary union will lead to a more efficient price mechanism, a more reliable one in terms of information which it provides to the economic agents, and to the reduction of the amount of risky projects through a reduction of the real interest rates, by eliminating the uncertainty about the future exchange rate changes. Thirdly, overall efficiency gains through the elimination of the exchange-rate-related transaction costs and risk in the uncertain exchange rates, can boost the economic growth of a monetary union, although the question of the significance of the dynamic efficiency gains is an empirical one. Finally, high inflation countries can benefit substantially from joining a monetary union with low inflation countries through the credibility borrowing process, while causing no or small welfare losses for their partners with low inflation rates. However, the total gains and losses are dependent on the credibility of the new monetary authorities which are in charge of price stability throughout the union.

1.4 Concluding Remarks

In this chapter, the costs and benefits of a monetary union have been discussed. The theory of optimum currency areas suggests that a monetary union has a significant cost for member countries when they are hit by asymmetric shocks, if wages are not flexible enough and labour is not mobile enough to lead to a new equilibrium, and the union's budget is not sufficiently centralised for fiscal transfers between member countries to be organised. It is the cost of relinquishing exchange rate changes as a policy instrument. Therefore, this cost arises even in an irrevocably fixed exchange rate system to a certain extent. Theoretical arguments against

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the theory of optimum currency areas have questioned the validity of the theory in two ways, by opposing the efficiency of nominal exchange rate changes to offset asymmetric shocks and pointing out the problems of the exchange rate as a policy instrument. However, they may contribute not to invalidating the theory but to making the cost of a monetary union suggested by the theory clearer. Thanks to these criticisms, we have found that nominal exchange rate changes cannot permanently alter the real exchange rates, that is the important assumption of the theory, but that a devaluation has a positive short-run effect in offsetting the impact of a disturbance. We have also found that the exchange rate instrument is not a policy tool which policymakers can use discretionarily and costlessly contrary to the implicit assumption of the theory. These arguments help us to be less pessimistic about the costs of a monetary union, if not totally optimistic. Despite this criticism the hard core of the optimum currency analysis still stands.⁶⁸

Differences in fiscal systems and in growth rates were discussed as possible sources of additional costs of a monetary union. Again, these costs can arise even in an irrevocably fixed exchange rate system to a certain extent, because in such a system member countries cannot issue high-powered money and depreciate their currencies freely. However, it should be noted that some economists argue that the differences between countries are not necessarily to be seen as a source of an additional cost of a monetary union, and that empirical analyses seem to support these arguments.

It has also been concluded that a monetary union has important benefits for member countries by eliminating the exchange-rate-related transaction costs. A monetary union also perhaps brings about indirect benefits in so far as price discrimination becomes more difficult, although these are difficult to quantify. These benefits can only be reaped in a

⁶⁸ De Grauwe (1997, p. 50)

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common currency system, because as long as national currencies remain in existence, even if the exchange rates are irrevocably fixed, the currencies cannot be perfect substitutes, hence the transaction costs cannot be totally eliminated.

On the other hand, there is a benefit of a monetary union which can be reaped even in an irrevocably fixed exchange rate system. It is the benefit from a more efficient price mechanism brought about by the elimination of the uncertainty about future exchange rate changes.

The neo-classical theory of growth has added an additional benefit to the traditional views of the benefits of a monetary union. It argues that overall efficiency gains due to a monetary union can boost the economic growth of the member countries of the union. Although the significance of these dynamic efficiency gains is not clear, they are benefits which can be expected more or less in both versions of a monetary union.

We have identified another benefit from forming a monetary union, which is the welfare gains for high inflation countries in terms of reduction of the costs of disinflation through the credibility sharing process. Again, it is a benefit which can be realised in full only when the union has a common currency.

To conclude this discussion on the costs and benefits of a monetary union, we have to compare the costs with the benefits in a synthetic way. However, as may be obvious from what have been found so far, the costs and benefits differ so much in their nature that they cannot be aggregated into simple numbers. It follows that no assessment of the net overall costs/benefits of a monetary union can be totally precise. Moreover, it has been pointed out that the assessment depends so much on what one assumes to be the alternative to the monetary union in question.⁶⁹ Therefore, it may be impossible to assess whether a monetary union is beneficial for member countries purely theoretically. In other words, the

⁶⁹ See, for instance, Gros and Thygesen (1998) and Emerson, *et. al.* (1991).

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question of whether a monetary union is beneficial can have its relevance only in the context of particular cases, such as EMU. We return to this issue in Chapter 3, where the costs and benefits of EMU will be examined in detail.

Chapter 2

The Progress towards European Monetary Integration

2.1 The Early History of European Monetary Integration

The initial movement towards European union started in 1944, when the governments of three European countries (Belgium, the Netherlands, and Luxembourg) signed a convention to form a customs union, to be known as Benelux. After the union actually came into operation in June 1948, there was a rapid expansion in international trade within the union, and Benelux turned out to be a great success. This, in turn, encouraged European countries to seek wider economic integration. At the same time, the Organisation for European Economic Cooperation (OEEC), renamed in 1960 the Organisation for Economic Cooperation and Development (OECD), was founded in 1948 to make effective use of the US aid to be provided under the Marshall Plan.

An improvement in the European economy by 1949 made the defect of bilateralism in the intra-European payment system obvious; namely, the lack of transferability of the bilateral balances. It was the problem that deficits with one country could not be offset with surpluses against another country because there was neither an official compensation mechanism nor foreign exchange markets, as European currencies were not convertible. As a result, the European Payments Union (EPU) was founded in 1950 to remove trade and exchange restrictions in Western Europe by providing the framework to promote convertibility of European currencies. Under this

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system, all bilateral deficits and surpluses were to be netted out into one overall net position each month. Then, the monthly net positions were cumulated over time and only the changes in the cumulative net position of each member country had to be settled in the end. Not only did all eighteen OEEC members participate in the EPU, but also, through the pound sterling and the French franc areas, it covered most of Africa and Asia.¹ At the beginning, it was intended that the EPU would exist until 1951, but it actually did until 1958, when it was finally dissolved by a unanimous agreement. In the light of its success, it can be said that European monetary integration really began with the EPU.

The Treaty of Rome, signed in 1957 and coming into operation in the next year, which established the European Economic Community (EEC) between the six European countries (France, Germany, Italy and the Benelux countries), became one of the most significant milestones in the overall process of European integration in the 1950s. The creation of a common market was the primary concern of the member countries, and prescribed in the Article 2, 'establishing a common market and progressively approximating the economic policies of Member States.'² The Paragraphs 103 to 107 say that each member state considers its conjunctural policy and exchange-rate policy a matter of common concern. However, the treaty does not commit the community to create a monetary union, although it is a necessary condition for the creation of a 'true' common market. This was perhaps because sovereignty over the exchange rate instrument was too important for Member States as a symbol of national sovereignty to be given up. It was also perhaps because the Bretton Woods system of fixed exchange rates did work sufficiently, although some argue that the system became really operational only after

¹ Gros and Thygesen (1998, p. 5-6)

² S. Nelson (1993, p. 2)

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the re-establishment of convertibility in 1958-9.³ It was the system, which consisted of the International Monetary Fund (IMF) and the system of fixed exchange rates which linked all currencies to the US dollar and the US dollar to gold, where changes in the parities were allowed when there were fundamental disequilibrium situations in the balance of payments, and temporary ones could be financed through the IMF.⁴

As a result, the real initiatives for monetary integration did not take place until the 1960s, when the international monetary system faced its fundamental problems. The problems became obvious in the mid-1960s, when the balance of payments deficit of the United States increased continuously, because the stability of the US dollar was a necessary condition for the operation of the Bretton Woods system by its nature. At the same time major European currencies were caught by speculative pressures, resulting in the devaluation of the pound sterling by 14.3% in 1967, and the devaluation of the French franc by 11.1% and the revaluation of the German mark by 9.3% in 1969. The ability of the United States to maintain the system was further undermined by these events. The need for monetary integration became evident to maintain the common market in Europe.

The first initiative towards a monetary union was launched by the Commission in the form of the 1969 Barre Plan 'on the Co-ordination of Economic Policies and Monetary Co-operation within the Community'. It called for more consultation and coordination on monetary and economic policies within the EEC, and proposed the creation of a short and medium term financial assistance programme. Although the focus of the plan was rather limited to the countermeasures for the problems, the European Council of December 1969, following the launch of the plan, went beyond it to call for the establishment of Economic and Monetary Union (EMU).

³ Gros and Thygesen (1998, p. 8-9)

⁴ Gros and Thygesen (1998, p. 8-9)

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Article 8 of the final communique indicates the intention of the community to proceed towards a monetary union, the details of which were to be decided during the course of 1970.

The Werner Committee, consisting of high-ranking national and EC officials and conducted under the chairmanship of Pierre Werner, then Prime Minister and Finance Minister of Luxembourg, produced a report that detailed how EMU could be established in stages by 1980. These stages involved fixing of exchange rates, irrevocable interconvertibility of EC currencies, and the introduction of an EC system of central banks, which would be in charge of the conduct of monetary policy. Although the report was remarkably specific with respect to the final objective of EMU, there was no consensus on the means and methods for achieving it. The lack of consensus took the form of a dispute between 'monetarists' and 'economists' about how best to proceed towards economic and monetary union. While the former, represented primarily by France, Belgium and Italy, emphasised the potential driving role of monetary integration, the latter, represented primarily by Germany and the Netherlands, argued that the irrevocable fixing of exchange rates and centralisation of monetary authority had to come at the end of a long period of convergence. The result was the principle of parallelism, parallel progress in the monetary and non-monetary (or economic) areas.

Although the final objective of EMU was unanimously signed by the Council of the Economics and Finance Ministers of the European Union (ECOFIN) in 1971, the Werner Report was hardly implemented at all. In its resolution, only the details of the first stage were outlined, while there was no binding commitment about how and when economic and monetary union should be established. One of the elements of the report which were implemented was narrowing the bilateral fluctuation margins between EC currencies. The six original member states agreed to reduce the margins by limiting the swings to a 2.25% band from April 1972. This agreement came to be known as the 'snake in the tunnel'. Only one week after the

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agreement came into force, Denmark and the United Kingdom, with Ireland as part of the pound sterling area, joined the 'snake', too. Then, within one month, Norway followed.

However, the 'snake' soon faced great difficulties. Within two months of its start, the pound sterling withdrew from the system after a foreign exchange crisis which brought the currency to the lower intervention point. Within one year two other currencies (the Danish krone and Italian lira) had withdrawn from it. After the major industrial countries agreed to let their currencies float against each other in March 1973, the tensions in the 'snake' intensified, the Bundesbank having to intervene substantially in favour of weaker currencies. France's second withdrawal in March 1976 left only countries with tight trade relations with West Germany in the system. In the mid-1970s, any hopes of seeking economic and monetary union seemed lost.

2.2 The European Monetary System(EMS)

2.2.1 The Creation of the EMS

The European Monetary System (EMS) was proposed at the European Council in Bremen in July 1978, established in a resolution at the European Council in Brussels in December 1978, and came into existence on 3 March 1979. The EMS can be seen not to have been as ambitious as the Werner Plan for EMU, because a full monetary union was not mentioned in the resolution. In short, 'the EMS ... was initially designed to stabilise exchange rates without, at the same time, requiring that international policy divergences be eliminated, either through the elimination of fiscal and monetary rules or by empowering the Community

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to coordinate national policies.⁵ The reason for the lack of their ambition to achieve a monetary union was because, since the EC member states at that time were divided into two groups in terms of their economic performances and exchange-rate regimes, it was unrealistic to plan an innovative regime to promote further monetary union, even if that were theoretically possible. Because of this lack of economic incentives, it is argued that the origins of the EMS are largely political considerations rather than economic ones.⁶

The initiative to progress towards the EMS actually came from the highest political level, in the form of a coordinated proposal from the President of France, Valery Giscard d'Estaing, and the German Federal Chancellor, Helmut Schmidt, and it was initially promoted outside the routine framework of the EC.⁷ The proposers of the EMS shared three political considerations; the strengthening of their domestic political positions during the winter of 1977-8, the concern that Italy was taking a dangerous way through the rise in influence of the Italian Communist Party, and the will to promote more independence from the United States of the Carter administration which could not stop the US dollar weakening. All these considerations could point in the same direction towards monetary union in Europe. This can be argued because while the first consideration could be interpreted as the indication that their policies towards a monetary union were supported by their electorates, the second one implied that Italy needed a more stable political position in Europe, and the third one suggested that a monetary union in Europe would give its member countries a form of protection from the effects of the US dollar.

The EMS consisted of two major features, the Exchange Rate Mechanism (ERM) and the European Currency Unit (ECU). All EC

⁵ Watson (1997, p. 39)

⁶ Watson (1997, p. 39)

⁷ Gros and Thygesen (1998, p. 35)

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member states, apart from the United Kingdom which remained outside the regime, linked their currencies to the ERM. The system could be called an 'adjustable peg' system, which allowed most member countries a 2.25% band around the central rate and Italy a band of 6% within which the exchange rates could fluctuate freely. When the limits of these bands were reached, the central banks of the currencies involved were to intervene so as to maintain the exchange rate within the bands. The central banks of the countries in question could draw on the Very-Short-Term Facility (VSTF) to issue the intervention currencies as required and be asked to repay credits only after sufficient time, normally at the end of the month of intervention plus 45 days. This made unlimited intervention commitments feasible if wanted. However, the 'marginal intervention' was not absolute, and countries were to be allowed to change the parity rates of their currencies (realignment) after consultation with the other member countries, although this was expected to be not frequent. A financing facility was also provided for countries to maintain their exchange rate within the bands in the face of temporary balance of payments problems.

The second major feature of the EMS was the existence of a special 'money', the ECU, which was defined as a basket of the currencies of the countries that were members of the EMS. The value of the ECU in terms of currency j (the ECU rate of currency j) was defined as follows:

$$ECU_j = \sum_{k=1}^{k=n} a_k S_{kj}$$

where a_k is the amount of currency k in the basket, and S_{kj} is the price of currency k in units of currency j (the bilateral exchange rate).⁸ The weights of currencies in the ECU were to be re-examined within six months of the

⁸ De Grauwe (1997, p. 88-91)

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entry into force of the system and thereafter every five years or on request, if the weight of any currency had changed by 25 %. The ECU was designed to be used as an instrument which would bring more symmetry into the system of interventions in the exchange markets. This can be said because an indicator of divergence was defined based on the ECU: if a currency's ECU rate diverged by more than 75 % of its permitted band of fluctuation, the country in question was supposed to 'correct the situation by adequate measures'. However, the divergence indicator was not used regularly in monitoring the EMS, mainly because the member countries used intra-marginal interventions well before the indicator reached the threshold of 75%. After the widening of the margins to 15%, the indicator became less relevant.⁹

The initial four-year period up until March 1983 proved very difficult for the EMS in a number of respects, both because of changes in the external economic environment, such as unprecedentedly high US interest rates and the 1979-80 oil shock, and because of divergence in national policies within the member states, notably between those of France and West Germany. As a result, during this period, there were frequent realignments, seven times altogether. However, it is argued that despite these difficulties, the first four years marked progress in some respects, and paved the way for the next stage: realignments became more visibly a joint responsibility; and the cumulatively large realignments were sufficient to prevent serious misalignments among the participants and, in some cases, to contribute to better equilibrium.¹⁰

⁹ Gros and Thygesen (1998, p. 65-7)

¹⁰ Gros and Thygesen (1998, p. 73)

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2.2.2 The EMS during the 1980s

The turning point for the system was the significant change in French domestic policy adopted in March 1983. At this point, a significant part of the French government found the membership of the EMS too constraining, and the proposals to leave the system and introduce temporary import restrictions had been prepared. However, Prime Minister Pierre Mauroy and Finance Minister Jacques Delors managed to persuade their colleagues and President Mitterrand that this strategy would be too risky and that it was preferable to engage once more in a domestic stabilisation effort. As a result, the government renounced the policy of attempted independent domestic expansion in favour of giving priority to reducing inflation, the credibility of which could be enhanced by holding firmly to the EMS. Following this change in French policy, although this resulted in a realignment which was comprehensive and involved all participating currencies, the EMS entered a period of more stability than at any time since its foundation; there were no realignments for over two years, and when one finally came, it involved only one currency (a devaluation of the Italian lira).¹¹

The emphasis during the period was increasingly on nominal convergence and coordination of monetary policies to underpin exchange-rate stability. The member states committed themselves more and more seriously to maintaining the exchange rates of their currencies within the band, using this policy stance as the rationale for pursuing domestic policies aimed at combating inflation. Because of this change of emphasis, it is even argued that the EMS was virtually transformed into a fixed exchange rate regime throughout the course of this period.¹²

In 1986, at the first Intergovernmental Conference, the Single European

¹¹ Gros and Thygesen (1998, p. 81-2)

¹² Watson (1997, p. 44)

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Act was signed, in which the final objective of a monetary union in Europe (EMU) was quoted. This was the first time that EMU had been explicitly confirmed as an objective of the EC since the Werner Report. However, despite this, it is argued that the act took a step back in terms of monetary integration. Any institutional change in monetary integration came to be the subject of the procedure stipulated in Article 236; that is, the ratification by national parliaments and/or referenda, i.e. it became more difficult to realise EMU in the near future. Moreover, while there was nothing new in the restatement of the objective, the act concentrated more on improving the existing mechanism to achieve a single market in goods and services by the end of 1992. As a result, any institutional developments in monetary integration could not be expected in the foreseeable future.

The realignment of January 1987 was the first of a new type, because it was caused by speculative actions in the currency markets when the US dollar resumed its decline, rather than by macroeconomic divergence among the member states. As a result, the Deutschmark and the Dutch guilder were revalued by 3% and so was the franc of the Belgian-Luxembourg Economic Union by 2% against the other three currencies.¹³

However, after this realignment, there were no further realignments for over five years until September 1992. This was remarkable, especially in the light of the fact that three additional currencies (the Spanish peseta, the pound sterling and the Portuguese escudo) joined during the period. Three factors are identified as the ones which could have contributed to this stability; a sufficient degree of convergence was maintained, monetary coordination was strengthened and exchange rates were defended by allowing them to fluctuate more widely than in the past, and EMU returned to the agenda. The third factor had its significance in terms of the incentives of the member states because it made the member states keen

¹³ Gros and Thygesen (1998, p. 83)

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to demonstrate that they were becoming ready to maintain more permanently fixed exchange rates. There was strong determination among the monetary authorities in the member states that they should not soon be seen again to be unable to cope efficiently with speculative pressures.

2.2.3 The Crises in the 1990s and the Break-up of the EMS

Tensions in the system grew from late 1989 as a result of policy conflicts caused by German reunification. After the Berlin Wall came down on 11 November 1989, West and East Germany formed a monetary union, German Economic and Monetary Union, on 1 July 1990, which was the starting date of the wider EMU project, too. Because of the union, massive fiscal transfers to the former East Germany became necessary, and government spending in Germany was increased significantly. The boom conditions led to prolonged inflationary pressure which was strongly resisted by the Bundesbank. As a result, interest rates were increased repeatedly until 1992 when the economies of most other member countries had already moved into the recession of 1992/3. In these circumstances the contractionary effects of the higher interest rates in Germany began to spread throughout the European economy as the other members were obliged to rise their interest rates too. The policy conflict became a common knowledge in early September 1992 after an informal ECOFIN meeting in Bath, in the UK, where the other eleven governments called on the German government to lower interest rates, or, at least, not to raise them, and the attempt was unsuccessful. As the news of the meeting spread, financial markets reacted strongly.

It is also pointed out that the perception that several important currencies were overvalued intensified the tensions. Spain and Italy, which moved to the narrower fluctuation band of 2.25% in January 1990, continued to have higher inflation rates than Germany. In addition, the

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United Kingdom had decided to join the EMS in October 1990 at a rate which many speculators found ambitious.

The difficulties of ratifying the Maastricht Treaty in the member states had not only political impacts but also economic impacts on the EMS through undermining the feasibility of EMU. The treaty was signed on 7 February 1992, requiring ratification in each member state. The Danish referendum of 2 June 1992 was the first attempt at ratification, however, a narrow majority against the treaty stimulated the opposition to it in other member states.

These factors made financial markets begin to ask who would be the first to drop out of the EMU process. At first, the Italian lira came under severe pressure falling below its EMS floor at times between 10 and 11 September 1992. On 14 September, the Bundesbank cut its interest rates by 0.5%. However, financial markets were not satisfied and both the lira and the pound sterling came under massive pressure in the following days. On 'Black Wednesday' (16 September), heavy interventions failed to lift sterling from its EMS floor. This was followed by the withdrawal of two major currencies from the EMS. In addition, some other currencies were devalued within half a year. Although the crisis seemed to become calm in the first quarter of 1993, it resumed in April 1993 resulting in further devaluations of the Spain peseta and Portuguese escudo in May 1993. Finally, in the course of July 1993, the French franc and the Danish krone repeatedly came under severe pressure. When it became apparent that the Bundesbank did not have the intention to cut its interest rates further until the end of the summer, the French and Belgian franc and krone fell below their EMS floor.

On 1 August, the fluctuation margins were widened from 2.25% to 15%. The decision was based on the following consideration; since the central rates were broadly appropriate, the only thing which had to be done was to increase uncertainty for the speculators by widening the fluctuation bands. Although, in a legal sense, the EMS continued to exist after the

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announcement of widening the margins, it could be seen that, with the margins of 15%, it moved closer to a flexible rates system. However, in practice, the member countries have not exploited the full flexibility of the wider bands, i.e. they have tried to keep their exchange rates informally within and narrower bands than the wider ones. For instance, the Netherlands maintained the original band, and some other member countries, like Belgium and Austria, kept their fluctuation bands with the Deutschmark within an informal narrow band.¹⁴ As a result, the period after 1993 is regarded as the one of reconsolidation and informal convergence in the monetary policy among the member countries.¹⁵

2.3 From the EMS to EMU

2.3.1 Towards Maastricht

As was mentioned in the previous section, in the mid-1980s, monetary union in Europe seemed to be too far away to be worth thinking about. The Single European Act did confirm EMU as an objective of the EC. However, the act could be seen as a step back in terms of monetary integration because it did not contain any practical strategies towards further monetary integration. In spite of this, it was soon realised that mere microeconomic integration being promoted under the name of economic integration, such as the removal of restrictions and quantitative barriers to trade, was not enough to reap the full benefits of the emerging Single Market. In other words, macroeconomic coordination and fixed exchange rates, or at least closer exchange rate realignment became more important in the perspective of economic integration. As a result, as the completion

¹⁴ De Grauwe (1997, p. 124)

¹⁵ Gros and Thygesen (1998, p. 103)

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of the Single Market approached, the pressure for monetary union became stronger throughout the course of the second half of the 1980s.¹⁶

It was against this background that the new initiatives to promote further monetary integration were presented by the governments of France, Italy and Germany. In a memorandum to ECOFIN of 1988, dated 8 January 1988, the French Finance Minister, Edouard Balladur, made it clear that the French recommendations went beyond a mere non-institutional reform of the existing EMS. He restated the French criticism of the asymmetrical nature of the system, in unusually strong language, and concluded that 'we must find a new system under which this problem cannot arise. rapid pursuit of the monetary construction of Europe is the only possible solution.'¹⁷ The Italian Minister of the Treasury, Giuliano Amato, responded to Balladur the next month by pointing out that the problem of the EMS was the German external surplus, which had become structural in a way that reduced the growth potential of her partners. Then he proposed a minimum degree of convergence in the sectors of taxation, supervision and other forms of regulation, and the creation of a recycling mechanism which could borrow funds on the market and reallocate them in such a way as to compensate the inflow and outflow within the system through the European Monetary Cooperation Fund (EMCF).¹⁸

Neither of these memoranda seemed to be a likely starting point for debate on a fundamental reform of the EMS because the implicit messages of them, the criticisms of German policies, were so strong that Germany was unlikely to respond favourably to them. However, most surprisingly, the German authorities responded favourably rather than defensively. The two major reasons why the German government did so are widely recognised; the vagueness of these memoranda in terms of institutional

¹⁶ Watson (1997, p. 51)

¹⁷ Balladur (1988)

¹⁸ Amato (1988)

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implications, which left room for German initiative and assertiveness, and the German desire to secure the adoption of the proposed directive on capital liberalisation in an irrevocable manner, which kept the door open to other areas as long as other countries would drop their objections to capital liberalisation.¹⁹ As a result, at the Hanover European Council of June 1988, a Committee for the Study of Economic and Monetary Union in the European Community (the 'Delors' Committee), chaired by the President of the EC Commission, Jacques Delors, consisting of the governors of the EC national central banks and three independent experts, was nominated to 'study and propose concrete stages leading towards [economic and monetary] union.'²⁰ The committee was asked to complete its task sufficiently well ahead of the meeting of the European Council which was to be held in Madrid at the end of June the next year.

The Delors Committee met eight times between September 1988 and April 1989. The report consisted of three chapters; a brief overview of the past record of economic and monetary integration in the European Community, a detailed analysis of the implications of the final stage of EMU, and proposals for the approach by stages with the detailed conditions that had to be met in order to establish economic and monetary union.

The Madrid European Council of June 1989 decided to start the first stage of EMU on 1 July 1990, and to convene an Intergovernmental Conference to consider the treaty changes necessary for moving beyond the stage, in accordance with the proposals of the report. However, the date(s) of the conference was not set since the Madrid Conclusions state that full and adequate preparations had to precede the setting of the date(s) because of the insistence of the British government. Then, a high-level group of

¹⁹ See, for instance, Gros and Thygesen (1998, p. 397-9)

²⁰ The conclusions of the presidency presented after the meeting of the European Council in Hanover, June 1988, excerpted in Gros and Thygesen (1998, p. 413)

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officials from national Ministries of Finance and Foreign Affairs was installed by the French presidency to prepare the questions for such a conference, resulting in a report, which was called the Guigou Report because the group had been chaired by Mme Elisabeth Guigou, by the end of October that year. The report raised the issues in the form of questions rather than answers because the phrase of 'full and adequate preparations' in the Madrid Conclusions was interpreted as the equivalent of formulating adequate questions rather than going into the substance of the answers to avoid unnecessary delay in the implementation of the Delors Report.²¹ Despite a strong but lone objection from the British government, the Intergovernmental Conference on EMU was finally opened in December that year in Rome to start discussing the amendment of the treaty, which would be necessary to implement the second and third stages of EMU. Then, the details of the amendment of the treaty were discussed during the course of 1991 until the signing of the Maastricht Treaty.

The fact that the debate on EMU moved so quickly after early 1988 may be surprising. It may be even more surprising given the explicit opposition of the British government. Although there was the common ground that institutional steps leading to a common currency and a European Central Bank were preferable, there were also fundamental differences in concerns of the major member states. While Germany insisted on the preservation of price stability, France and Italy were eager to participate in the monetary leadership of Europe which could undermine the credibility of the German monetary authority. It is argued that only after policymakers in countries other than Germany had realised the advantages of price stability, did they come to accept compromises with Germany.²² They came to accept that only the long-term institutional arrangements of EMU could provide a solid foundation for success. Two

²¹ Gros and Thygesen (1998, p. 406-7)

²² Gros and Thygesen (1998, p. 411)

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developments can be identified as the source of changes in this political priority. Firstly, there was the strong interest expressed by major European industrial enterprises in a single currency.²³ Secondly, the EC Commission had been trying to clarify the gains from EMU by conducting a detailed analysis focused on the superiority of a single currency over a system of national currencies with fixed exchange rates between them, which was published as the One Market, One Money report.²⁴

2.3.2 The Maastricht Treaty

In December 1991, the Maastricht European Council agreed on the treaty which would amend the Treaty of Rome, the Maastricht Treaty, formally known as the Treaty on European Union (the treaty was officially signed on 7 February 1992). In terms of economic and monetary union, the significant features of the treaty are the principles of gradualism and convergence: firstly, the transition towards EMU was divided into three stages extending over a period of many years, secondly, entry into the union was made conditional on satisfying convergence criteria.²⁵

The first stage, which had already started on 1 July 1990, was to last until 31 December 1993. During this stage, the member countries of the EMS were to abolish all remaining capital controls, and the degree of voluntary cooperation in monetary policies among the EMS central banks was to be strengthened, but realignments remained possible.

The second stage was to start on 1 January 1994, and to last until the

²³ A business survey undertaken for the European Commission by Ernst and Young, in Emerson, *et. al.* (1991)

²⁴ Emerson, *et. al.* (1991)

²⁵ For the details of the stages and criteria in this subsection, see *the Treaty on EU* and De Grauwe (1997, Ch. 6)

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starting date of the third stage, which would be decided based on the procedure explained below. During this stage, the European Monetary Institute, the precursor of the European Central Bank, was to be established to strengthen monetary cooperation between national central banks. It was to operate only during this period.

The third and final stage was to start at the end of 1996 if a majority of EMS countries had satisfied the convergence criteria, which will be explained below, by that time. Otherwise, it was to start at the latest on 1 January 1999 with those countries that have satisfied the criteria. In addition, the United Kingdom was given the right to opt out (and Denmark maintained the right to subject the agreement to a national referendum). At the start of this stage, the exchange rates between the currencies of the participants were to be irrevocably fixed, and the European Central Bank was to start to operate and issue the European currency.

The treaty lists four convergence criteria, namely inflation, fiscal performance, exchange rates, and interest rates (Article 109j). A country would be eligible for membership only if:²⁶

- for the preceding year, its average inflation rate had not been more than 1.5% higher than the average of the rates of the three best performing countries in the EMS;
- its government budget deficit was less than 3% of its GDP, and its stock of outstanding government debt was less than 60% of its GDP;
- it had not experienced a devaluation for at least two years preceding the entry to the union; and
- its average nominal long-term interest rate was not more than 2% higher than the average of the rates of the three best performing countries in terms of low inflation.

²⁶ De Grauwe (1997, p. 127)

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However, the treaty has escape clauses as far as the fiscal criteria are concerned. In the case that the government budget deficit exceeds the limit, the country can still be deemed to have fulfilled the criteria if this excess is temporary and exceptional, or alternatively, if it has been falling substantially and continuously in the time prior to that country's performance being examined. In the case that the government debt exceeds the limit, the excess should diminish sufficiently and approach the limit at a satisfactory pace. On the other hand, even if both the fiscal criteria are met, the Commission can still oppose the membership for any particular countries if it believes that there is a risk of future fiscal excesses. The Commission and the EMI were to make a report on the progress each country had made towards convergence, and to propose whether the country qualified to be a member of EMU. However, the final decision on the membership of EMU was to rest with the European Council.

2.3.3 After Maastricht

As is mentioned in the previous chapter, the ratification of the treaty was not a straightforward procedure for some Member States. Denmark was the first country which attempted ratification in a referendum on 2 June 1992, but the treaty was rejected by a narrow majority. This acted as a stimulus for the opponents of the treaty in other Member States. In France, the President announced a referendum on 20 September, and uncertainty about the outcome grew over the summer. When the date of the referendum was approaching, public opinion polls began to suggest that the treaty would be rejected by French voters, too.²⁷ In Britain, the House of Commons decided to postpone all further debate, which had proceeded enough to enable ratification before the summer, with the result that UK

²⁷ Watson (1997, p. 60-1)

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ratification took another thirteen months²⁸. Even in Germany, there were a significant number of opponents of the treaty, who feared that EMU would undermine monetary stability in the country and claimed that the treaty was in conflict with the German constitution.

In December 1995, at the Madrid European Council, it was decided that there was no majority of the member states to start the third stage of EMU at the end of 1996. In other words, the date for starting the stage was fixed at 1 January 1999. At the same meeting, additional agreements were also made with regard to the third stage of EMU. Firstly, the name of the new currency was decided as the 'euro'. Secondly, and more importantly, the timetable of the stage was decided in the form of three substages as follows:²⁹

- From 1 January 1999 until 31 December 2001, the national currencies will continue to be in circulation alongside the euro, albeit at irrevocably fixed exchange rates. However, commercial banks will use the euro for all their interbank dealings. Private individuals will have the choice of using their national currency or opening an account in euros. During this period the euro will not exist in the form of banknotes and coins. In addition, all transactions between the European Central Bank and the commercial banks will be in euros. Finally, new issues of government bonds will be made in euros and not in national currencies.
- During the period 1 January to 1 July 2002 the euro will replace the national currencies, which will lose their legal-tender status. Thus, during this period a monetary reform will be organised.
- From 1 July 2002 on, a true monetary union will come into existence in which the euro will be the single currency managed by one central bank, the European Central Bank.

²⁸ Gros and Thygesen (1998, p. 95)

²⁹ De Grauwe (1997, p. 128)

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It was also decided that the decisions about membership would be taken in early 1998 based on the economic performance of each country during 1997.

At the Dublin European Council of December 1996, a 'Pact for Stability and Growth' was adopted as a countermeasure for the perceived defect of the Maastricht Treaty, that once countries were admitted into EMU, the punishment for excessive government budget deficits vanishes, which might result in relaxations of their budgetary policies. It had been proposed by the German Minister of Finance, Theo Waigel, and agreed in principle at the Madrid European Council. Based on this pact, after the start of stage three, on 1 January 1999, the member countries of EMU that fail to meet the 3% budgetary deficit rule during a given period of time could be fined from 0.2 to 0.5% of its GDP. These fines will be applied after deliberation in the European Council, unless the excessive deficit is due to exceptional circumstances, such as a severe recession involving a drop of GDP of more than 2%. The economic implication of the pact will be discussed in Chapter 3, where the economics of the Maastricht strategy will be examined in detail.

Chapter 3

The Economics of EMU

3.1 Costs and Benefits of EMU

3.1.1 Costs of EMU

The traditional literature on the theory of optimum currency areas stresses that the exchange rate instrument is an indispensable policy tool when a country is hit by an asymmetric shock, if wages are not flexible, labour mobility is not high and it does not have effective alternative instruments, such as fiscal transfers from other countries. It is, however, possible to find a number of empirical studies on European monetary integration, which can form a whole series of counterarguments against each component of this argument. Among these studies, Emerson *et. al.*'s *One Market, One Money*, is perhaps the most influential and comprehensive.¹ Therefore, in this section, the costs of EMU will be critically evaluated mainly based on these empirical studies.

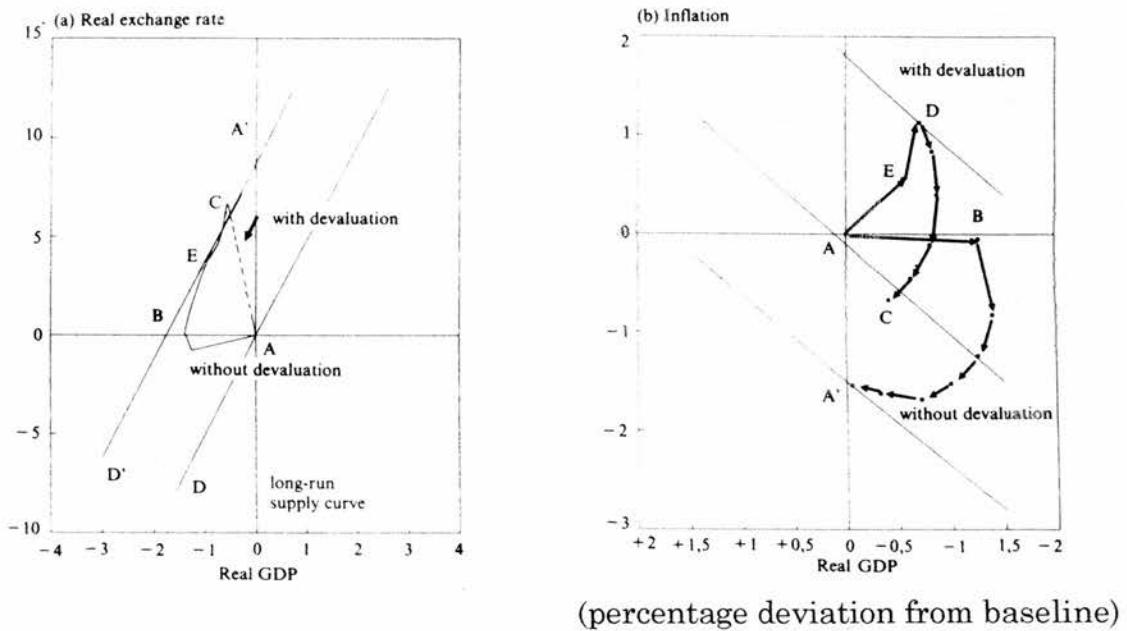
3.1.1.1 Effectiveness of Nominal Exchange Rate Changes in EMU

In Chapter 1, it was argued that nominal exchange rate changes can

¹ Emerson, *et. al.* (1991)

have only temporary effects on real exchange rates. The extent to which changes in nominal exchange rates led to changes in real exchange rates is analysed systematically by Emerson *et. al.* By conducting a so-called 'co-integration' test for nominal and real exchange rates, the study finds that, in Europe during the 1980s, the correlation between nominal and real exchange rates was strong in the short run, but weakened significantly over longer time spans.² It also demonstrates, by conducting model simulations based on the Quest model,³ that the exchange rate change instrument (a devaluation) has the benefit of not causing as much initial output loss as without it, however, the return to equilibrium takes longer and is accompanied by higher inflation.

Figure 3.1 (a), (b) Adjustment with and without Devaluation



Source: Emerson, *et. al.* (1991, p. 139)

² Emerson, *et. al.* (1991, Appendix 6.1)

³ Bekx, *et. al.* (1989)

In the model simulations, the impact of a permanent negative shock to exports of 5%, with and without a devaluation of 7.25%, was simulated. The results can be presented in the forms of graphs (Figure 3.1 (a), (b)). From these graphs, the following points can be concluded.

- The initial output loss without a devaluation is higher than with it, because it cushions the immediate output shock through altering real exchange rates in the short run.
- Without a devaluation, the return to equilibrium output is faster than with it because of the fact that the output gains from the devaluation increase the real wage above its equilibrium level.
- A devaluation can realise the 'soft landing' only at the expense of a higher inflation rate than in the situation without it.

From these findings, Emerson *et. al.* conclude that nominal exchange rate changes may have an impact on real exchange rates only for, say, two to five years, in the form of front-loading of the real exchange rates. This can reduce the initial output loss, but does not substitute for real wage adjustment. The latter, in turn, can even cause a prolonged underemployment situation. The upward shift of inflationary expectations is another disadvantage of a devaluation, which can also delay the disinflation process.⁴ These findings are entirely compatible with our discussion in Chapter 1.

3.1.1.2 Asymmetric Shocks in EMU

The fact that the traditional theory of optimum currency areas just assumes that there is an exogenous downward shift in the demand schedule

⁴ Emerson, *et. al.* (1991, p. 138-409)

for the goods exported by the country in question, as an example, without providing the rationale for this assumption, has been criticised in the context of EMU.⁵ Emerson *et. al.* point out that such asymmetric shocks in the EU, even though they exist, are likely to diminish with the disappearance of trade barriers through the completion of the internal market. As far as the EU is concerned, the trade between member countries is of the intra-industry type, where they export more or less the same products, a basket of goods coming from a number of different industries, not the type in which each country exports only one product (or one type of product). Therefore, the assumption on which the traditional theory of optimum currency areas is based is hardly appropriate to the EMU case, because there is no reason why industry-specific shocks (e.g., a shift in demand for cars) affect the entire economy of just one member country.

In contrast, Krugman argues that the complete disappearance of trade barriers through the completion of the internal market in the EU may lead to regional specialisation rather than a more uniform industrial structure, because certain types of industries would tend to concentrate in the small regions where the specialised skilled labour they require can be obtained most efficiently.⁶ This implies that EMU may increase the likelihood of asymmetric shocks which affect only certain regions. However, this can happen at the regional level and not the national level. Given that each member country has a number of regions which have different portfolios, the net impact of such regional shocks at the national level is unlikely to be as strong as the traditional theory of optimum currency areas assumes when it evaluates the costs of relinquishing the exchange rate change instrument.

There are other circumstances under which common shocks that affect all member countries at the same time can have an asymmetric impact.

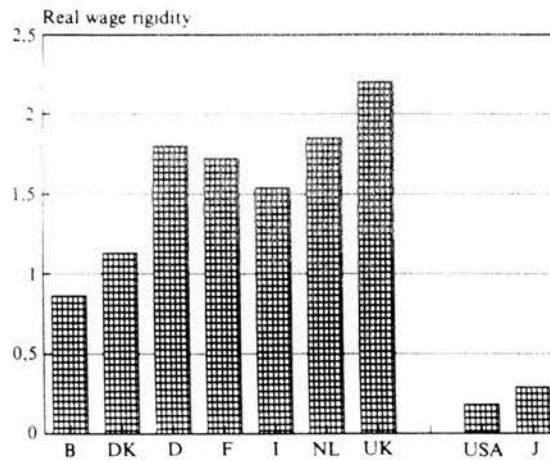
⁵ Gros and Thygesen (1998, p. 275)

⁶ Krugman (1991)

Emerson *et. al.* identify differences in economic structures, and those in economic behaviour.⁷ If the economic structures of member countries are different enough, a common shock will result in asymmetric impacts on their national economies by making them react differently. However, empirical studies suggest that this is not the case for the EU. Although the availability of primary energy production is regarded as one of the best examples of such asymmetric structures, the oil price shock of 1979-80 did not cause significant differences between oil/gas-producing countries and non-oil/gas-producing countries.⁸

On the other hand, differences in economic behaviour can be a source of asymmetric impacts. Of these differences, wage behaviour may be the most crucial one because of its central role in the determination of inflation, real exchange rates and unemployment.⁹ Emerson *et. al.* point out that although the real wage rigidities are more similar among member countries

Figure 3.2 Real Wage Rigidity



Source: Emerson, *et. al.* (1991, p. 145)

⁷ Emerson, *et. al.* (1991, Ch. 6)

⁸ Giavazzi and Giovannini (1987)

⁹ Emerson, *et. al.* (1991, p. 144)

than compared to the United States or Japan, there are significant divergences among them (Figure 3.2). The cause of these divergences, as was discussed in Chapter 1, can be attributed to the differences in the labour markets of these countries. Therefore, wage behaviour will remain a source of asymmetric impact unless it becomes more similar through, for instance, pan-European sectoral wage negotiations.

3.1.1.3 External Shocks and Unemployment in EMU

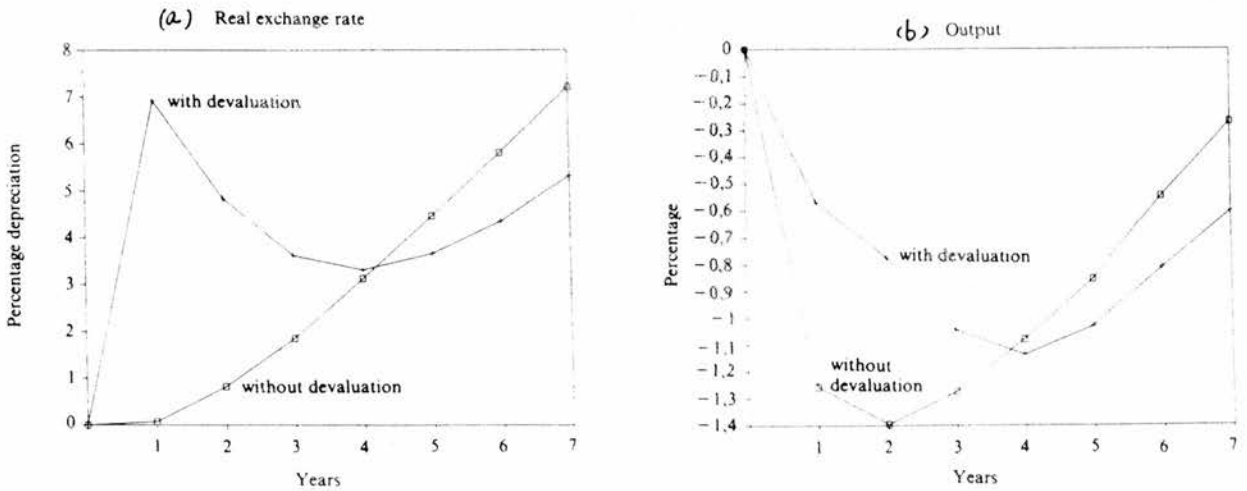
So far, we have argued that asymmetric shocks and common shocks that can have asymmetric impacts, of the kind which require exchange rate changes, will occur less frequently than the traditional theory of optimum currency areas presumes, as far as EMU is concerned. In addition, it has been argued that, in terms of the EU, there has not been a clear relationship between unemployment and external shocks such as export shocks, therefore the loss of the exchange rate change instrument will not be likely to make a considerable difference in this respect.¹⁰ Gros performs a number of causality tests to examine the hypothesis that export shocks lead to national unemployment rates. Even in the case of Belgium, which shows the strongest influence of exports on unemployment, the influence turns out to be marginal. In this case, an increase in exports of 5% is, on average, associated with a drop in the national unemployment rate of 0.4%. This correlation is not negligible but quite small. For other countries, the correlation between exports and unemployment is even smaller. These results are understandable, given the fact that the ratio of exports to GDP in most member countries is under 20%, in other words, domestic demand

¹⁰ Gros and Thygesen (1998, p. 271-80)

is four times more important than external demand.¹¹

Emerson *et. al.* perform simulations based on a large econometric model of the EU (the QUEST model) to calculate exactly the impact of a shock to export demand on output. The findings of the simulations of the impacts of a 5% drop in French export demand on output and the real exchange rate, with and without accompanying devaluation, are as follows. Without devaluation, output in France falls by 1.3% in the first year and returns to baseline only by year seven. In contrast, with a devaluation of 7%, although the initial fall in output is reduced significantly to 0.6%, the subsequent recovery is slower so that the total difference in present values of the GDP loss between these two cases during the first seven years is only 1.3% (Figure 3.3 (a), (b)).

Figure 3.3 (a), (b) Output and Real Exchange Rate Effects of an Export Demand Shock with and without Accompanying Devaluation Policy



Source: Emerson, *et. al.* (1991, p. 290)

This is because devaluation involves a trade-off between a speedier

¹¹ Gros (1996)

adjustment in the short run and delays in the medium-term adjustment, since the initial boost in output reduces real wage and real exchange rate adjustments. Suppose the standard Okun curve--type relationship, where the ratio of actual to potential real output generally rises by a greater percentage than the fall in unemployment, the loss of the exchange rate change instrument in the simulations can account for only a half of 1% increase in unemployment. These empirical studies may undermine the importance of the instrument, as far as EMU is concerned.

3.1.1.4 Labour Mobility and Fiscal Transfers in EMU

In the absence of the exchange rate change instrument, an asymmetric shock can be countered via two other adjustment mechanisms; lowering domestic prices through lowering wages (wage flexibility) and workers' leaving the country hit by the shock (international labour mobility). However, as was presented earlier (see Figure 3.2), the real wage rigidity among the member countries is significantly higher than that in the countries such as the United States or Japan. Moreover, according to Emerson et. al., although it is optimistic in this respect, the positive effects of EMU on wage flexibility are largely dependent on changes in the behaviour of economic agents determining and influencing wage behaviour.¹² In other words, an improvement of wage rigidity within EMU is not guaranteed. Therefore, we cannot count on this adjustment mechanism as the substitute for the exchange rate change instrument.

Labour mobility cannot be a sufficient substitute for the exchange rate change instrument, too, because, as is commonly accepted, labour mobility in the EU is very low, in absolute terms and compared to the United States. Given that cultural barriers and housing market rigidity, which are

¹² Emerson, et. al. (1991, p. 147-52)

regarded as important factors of low labour mobility, can change only slowly, the low labour mobility in the EU will not improve dramatically in the near future. In this connection, it is argued that the fact that interregional labour mobility has been as low as international labour mobility within the EU implies that labour mobility has not been important anyway in terms of offsetting asymmetric shocks.¹³ If it has been so, interregional labour mobility should have been high since there have not been interregional exchange rate changes which can offset the impacts of asymmetric shocks. However, empirical evidence for the EU countries and the United States suggests the contribution of labour mobility to adjustment to adverse shocks has been relatively small.¹⁴ This argument on the effectiveness of labour mobility for adjustment may play an important role in changing our views about future EMU, in which labour mobility won't improve in the short run whereas the exchange rate changes won't be available anymore to offset the impacts of asymmetric shocks, from more pessimistic to less pessimistic, even if not totally optimistic.

As was discussed in Chapter 1, given the fact that labour mobility within the EU is not and won't be high enough to offset asymmetric shocks, it may be desirable to have a significantly centralised EU budget in order to make automatic fiscal transfers possible. By analysing the effects of the US federal fiscal system in terms of offsetting the impacts of the state-specific asymmetric shocks, the MacDougall Report proposed an EC-wide unemployment benefit scheme. However, the proposal did not manage to acquire wide political support because of its politically controversial nature.¹⁵ This was the reason why Eichengreen suggested the EU to finance national unemployment insurance schemes and receive a

¹³ Gros and Thygesen (1998, p. 284)

¹⁴ See, for instance, Gros and Thygesen (1998, p. 285-6), Eichengreen (1993, p 130-63)

¹⁵ Gros and Thygesen (1998, p. 553)

corresponding contributions.¹⁶

However, this line of arguments has been criticised especially in the context of EMU. Gros and Thygesen argue that the proponents of this view misinterpreted the US case, because although the US federal fiscal systems did offset about 30-40% of the difference in the level of income per capita, this does not necessarily mean that these mechanisms have offset changes in income caused by shocks, and subsequent research did not confirm the latter. Moreover, the automatic stabilisation across states is accompanied by changes in the federal fiscal stance, which turns out to have a stronger impact on offsetting the shocks than the former.¹⁷ It follows that given that national fiscal policy will remain in the hands of national governments under EMU, the lack of an automatic stabilisation system through the significantly centralised EU budget will not entail costs for EMU as high as the traditional optimum currency area approach predicts.

3.1.1.5 The Cost of Introducing the Euro

The introduction of the euro will cause certain costs, although they will be minor compared to the main costs of EMU caused by the loss of the exchange rate change instrument. The main costs of the introduction of the euro will be generated by the initial change in accounting units and the cost of converting existing financial and other contracts into the euro. The introduction of a new accounting unit may take a long time. It is said that the re-denomination of the French franc of 1958, where two zeros were taken away from the existing franc, has not been completed yet in the sense that some people continue to use the old franc as a unit of account.¹⁸ Given

¹⁶ Gros and Thygesen (1998, p. 360-1)

¹⁷ Gros and Thygesen (1998, p. 361)

¹⁸ Gros and Thygesen (1998, p. 299)

the more complicated nature of the introduction of the euro, it can take a certain time to complete the process, although continuing to use the old unit of account will be extremely difficult compared to the French case because of the nature. Therefore, it can be possible to argue that it is an important cost of the euro that the residents in the countries which will adopt the euro will lose their accumulated experience with the price systems based on their national currencies for such a long time. However, judging from the fact that the euro will not come by surprise, most of this cost can be avoided by careful preparations for the date. Moreover, because this cost is of a once-and-for-all nature, it may be negligible in the long run compared to the major costs of the euro, and, more importantly, to the major benefits from it.

So far the costs of EMU have been discussed in the form of the verifications of the theoretical arguments in Chapter 1. As a result, it was found that the actual costs may be significantly lower than those expected on the basis of the traditional theory of optimum currency areas, taking the unique conditions of the EU into account. To evaluate net gains/losses from EMU, let's now turn to benefits of EMU.

3.1.2 Benefits of EMU

As was discussed in Chapter 1, two major sources of gains from monetary union are the elimination of exchange rate related transaction costs and the elimination of risk in the uncertain exchange rates. Therefore, the actual magnitudes of the benefits from them will be evaluated respectively.

3.1.2.1 The Elimination of Exchange Rate Related Transaction Costs

A recent study of intra-EU multi-currency management costs points out that the total gains from the elimination of exchange rate related transaction costs will amount to a little less than 60 billion ecu per annum, or 1% of the GDP of the EC12 (Table 3.1).¹⁹

Table 3.1. Foreign Exchange Management Costs for Intra-EU Transactions

	bn ecu p.a.
1. Transaction costs of interbank business	12.4
2. Transaction costs for non-banks	
2a. except for cash trade	28.0
2b. cash trade	8.0
3. Company-internal costs	8.8
Total costs for foreign exchange transactions (1+2a+2b+3)	57.2
Total costs in percent of the GDP of the EC12	0.95 (%)

Source: Dumke (1997)

'Company-internal costs', or 'in-house costs' arise because the non-financial corporate sector has to maintain separate foreign currency expertise. For instance, multi currencies render the treasury and accounting functions more complicated so that firms need to devote more personnel to these tasks, fragment cash management and thereby lead to company cash being poorly remunerated.²⁰

The results of the study appear to be rather higher than the estimation in Emerson *et. al.*'s *One Market, One Money*. The latter estimates the

¹⁹ Dumke (1997)

²⁰ Emerson, *et. al.* (1991, p. 67)

gains from the elimination of exchange rate related transaction costs with two different approaches, namely, banks' revenues from foreign exchange and firms' and households' costs of foreign exchange, and arrives at very similar figures in both approaches. With the first approach, the total transaction costs (in the banking sector) that can be saved by the euro are about 0.25% of the GDP of the Community: a little less than 5% of bank revenues come from foreign exchange activities between EU currencies, and the banking sector accounts for about 6% of the GDP of the Community. With the second approach, these costs are estimated to range from 0.17 to 0.27% of EU GDP. In-house costs should be added to these savings to calculate the total gains from the elimination of exchange rate related transaction costs, and they are estimated to amount to 0.1% of EU GDP. In addition, Emerson, *et. al.* identify another source of savings from the introduction of the euro. It is the cost and time spent in cross-border payments. It argues that the euro can make an important contribution to cutting the present expenses and delays associated with cross-border bank payments, and estimates the savings about 1.3 billion ecu per annum. As a result, it estimates the total savings will be around 0.3 to 0.4% of EU GDP.²¹ The considerable difference between these two studies can be attributed to some double counting in the former.²²

The elimination of price discrimination between national markets is another gain from the elimination of exchange rate related transaction costs, although indirect and difficult to quantify. There is considerable evidence that price discrimination is still widely practised in the EU. For instance, prices of the same automobiles are very different in EU countries (Table 3.2).

²¹ Emerson, *et. al.* (1991, p. 67)

²² Gros and Thygesen (1998, p. 289-92)

Table 3.2 Average Price Differentials (net of taxes) for the Same Automobiles in Europe, 1995

(cheapest country = 100)

Belgium	122
France	121
Germany	128
Ireland	112
Italy	100
Netherlands	121
Portugal	108
Spain	105
United Kingdom	120

Source: De Grauwe (1997, p. 54)

Of course, there are many other sources of transaction costs which can contribute to price discrimination, such as administrative regulations and different tax systems. Therefore, it cannot be argued that the elimination of exchange rate related transaction costs necessarily leads to the total elimination of price discrimination. Engel and Rogers analyse the factors which influence the price differentials of the same goods in different places by studying them in different cities in the United States and Canada. What they have found is as follows. Firstly, price differentials between Los Angeles and New York are larger than between Los Angeles and San Francisco. Secondly, those between Detroit and Windsor (they are facing each other with the border between them.) are of the same order of magnitude as those between Los Angeles and New York. In other words, crossing the US-Canada border is equivalent to travelling 2,500 miles within the United States. Again, crossing a border does not involve only exchange rate related transaction costs. However, they argue, the latter

are significant factors in explaining price differentials.²³

3.1.2.2 The Benefits from the Elimination of Risk in the Uncertain Exchange Rates

The suppression of exchange rate uncertainty can bring about economic welfare gains through increasing trade and investment, as discussed in Chapter 1. Theoretical literature on this idea points out that only when the risk caused by the exchange rate uncertainty cannot be hedged or priced in financial markets, does it have a negative impact on trade and investment. Therefore, if the risk could be hedged, the suppression of exchange rate uncertainty would be neutral or, some even argue that, it would have negative impacts on trade and investment.²⁴ Empirical studies on the influence of exchange rate uncertainty on trade support this theoretical argument. They do not find a strong correlation between them, although these empirical results are not conclusive.²⁵ As far as the European Union is concerned, there are only a limited number of empirical studies on the correlation.²⁶ Moreover, they find only a very weak correlation: the suppression of the intra-EMS exchange rate uncertainty of the early 1980s would have led to an increase in trade of less than 1%.

Given that there is no strong correlation between exchange rate variability and trade, it can be presumed that the former does not have a strong impact on employment and unemployment. However, it cannot be maintained as far as large EU countries are concerned: Gros and Thygesen

²³ Engel and Rogers (1995)

²⁴ See, for instance, Emerson, *et. al.* (1991, Ch. 3) and De Grauwe (1997, Ch. 3)

²⁵ See, for instance, Gros and Thygesen (1998, p. 280)

²⁶ For instance, Bini-Smaghi (1987) and De Grauwe (1987)

show that increases in short-run intra-EMS exchange rate variability have had significant impacts on unemployment and employment.²⁷ They point out that EMU or the elimination of intra-European exchange rate variability could reduce unemployment by about 1 percentage point in Germany in 1995, and the increase in exchange rate variability in 1995, which increased the standard deviation of the DM rate from 0.6 in 1994 to about 1.5 in 1995 (the exchange-rate variability of the DM was measured by taking for each year the standard deviation on the 12 month-to-month changes in the logarithm of the nominal exchange rate of the DM against the currencies of countries mentioned above (Belgium/Luxembourg, Denmark, France, Ireland, Italy, and the Netherlands)), lowered the rate of employment growth in 1996 by about 1.5 percentage points. The other major European countries except the UK show similar patterns to Germany. It follows that increases in the short-run intra-EMS exchange rate variability lead to more unemployment and less job creation, therefore the suppression of exchange rate uncertainty will result in macroeconomic welfare gains as far as EMU is concerned.

3.1.2.3 The Dynamic Efficiency Gains from EMU

Baldwin estimates that, after enough time has passed to allow the capital stock to adjust, the multiplier of the initial increase in efficiency is about 2, and about half of the dynamic gains should be realised in the first ten years.²⁸ Based on these, together with the estimation of the static gains from the 1992 programme by the Cecchini Report of between 2.5 and 6.5% of EU GDP, it can be estimated that the additional dynamic gains from EMU as a whole would also be between 2.5 and 6.5% of EU GDP, and

²⁷ Gros and Thygesen (1998, p. 282-3)

²⁸ Baldwin (1989)

the impact of the EMU on the growth rate of EU GDP would be 0.13 to 0.33 percentage points per annum for the first ten years. However, since the 1992 programme and a common currency are interlinked, and their effects reinforce each other mutually, it is very difficult to distinguish between the effects of the former and the latter. Even so, Gros and Thygesen apply Baldwin's multiplier to the calculation of the dynamic gains from the efficiency gains due to a common currency in Europe and estimate that it would be as high as 1% of EU GDP (based on the higher estimation of efficiency gains of a little less than 1% mentioned earlier).²⁹

It has been argued that an additional dynamic gain arises if EMU reduces the risk premium involved in investment through reducing uncertainty about exchange rates. However, the risk premium might be reduced not only through the suppression of exchange rate uncertainty, but also through a reduction of uncertainty about monetary policy when the national central banks cease to operate their own national monetary policies, and possibly through a more stable fiscal policy.³⁰ A reduction in the risk premium would stimulate investment and increase output over time in the way explained in Chapter 1. It is pointed out that a reduction in the risk premium of only 0.5% (say, from 5.0% to 4.5%) could raise EU GDP by (more than) 10% in the long run.³¹ This estimation can be presented as follows, using the most popular form of a production function,³²

$$F(k) = Ak^\alpha \tag{1}$$

where k is the per capita capital stock, α is the elasticity of output with respect to capital ($1 - \alpha$ is the share of labour in national income) and A is a

²⁹ Gros and Thygesen (1998, p. 295)

³⁰ Emerson, et. al. (1991, p. 82)

³¹ Baldwin (1989)

³² Gros and Thygesen (1998, p. 296)

productivity parameter. The long-run level of output is determined by the condition that the marginal product of capital is equal to the cost of capital, which is equal to the interest rate, r . Therefore, the steady-state capital stock \bar{k} is determined by the condition:

$$F'(\bar{k}) = \alpha A \bar{k}^{\alpha-1} = r \quad (2)$$

or

$$\bar{k} = (r/\alpha A)^{1/(\alpha-1)} \quad (3)$$

From this result, the steady-state level of output per capita, \bar{y} , can be calculated as follows:

$$\begin{aligned} \bar{y} = F(\bar{k}) &= A(r/\alpha A)^{\alpha/(\alpha-1)} \\ &= (r/\alpha)^{\alpha/(\alpha-1)} A^{1/(1-\alpha)} \end{aligned} \quad (4)$$

In this equation, $1/(1-\alpha)$ can be called the 'multiplier' of steady-state output with respect to a change in productivity, and Baldwin (1989) estimates that the value of it is about 2. Therefore, the elasticity of output with respect to capital, α , can be assumed to be equal to 0.5. Given this, the factor $\alpha/(\alpha-1)$ in the equation (4) is equal to -1, which in turn means that a 10% decrease in the interest rate, r , leads to more than 10% (to be precise, 100/9%) increase in output in the long run.

3.1.3 Concluding Remarks on Costs and Benefits of EMU

In this section, it has been found that the actual costs of EMU may be significantly lower than those expected on the basis of the traditional theory of optimum currency areas, given the unique conditions of the EU.

It has also been recognised that EMU will lead to significant gains in the form of transaction costs savings, the elimination of price discrimination, less unemployment through suppressing exchange rate uncertainty, and, perhaps most importantly, dynamic efficiency gains, although most of these are difficult to quantify.

So far, the costs and benefits of EMU have been discussed with regard to the EU as a whole. However, as is obvious, the EU does not constitute a homogeneous economic area. Therefore, the most important question for the decision to participate in EMU is how these costs and benefits will be distributed among member states. It follows that the cost-benefit analysis should be applied on a case-by-case basis to assess the economic arguments for and against EMU for any particular member country. It should be understandable that a detailed country-by-country assessment is beyond the scope of this writing. Therefore, instead of trying to conduct comprehensive country-by-country analysis, the question of what is the appropriate size of EMU will be discussed in the next section.

3.2 Is Europe an Optimum Currency Area?

Although the theory of optimum currency areas has recently attracted much criticism, some of which was discussed in Chapter 1, it remains the most popular starting point for considering whether to fix the exchange rate or form a monetary union. However, it has been difficult to move from theory to empirical analysis. Unlike the vast and well-developed literature on the theory and its criticism, there are only a few empirical studies which attempt to evaluate whether Europe is an optimum currency area or not.³³ Existing researches on what group of member countries

³³ For instance, De Grauwe and Vanhaverbeke (1993) and Bayoumi and Eichengreen (1997)

would constitute an optimum currency area tend to conclude that there is a core group of countries for which the costs of fixing the exchange rates are negligible, not providing much empirical analysis of the comparative prospects of each country, but only describing that their industrial structures are very similar and their economies usually move together. In most studies, it consists of France, Germany, Austria and the Benelux. Denmark and the UK are sometimes found to be members of this group, while Italy and Spain are often found to be outside of it.

Bayoumi and Eichengreen develop a procedure for applying the core implications of the theory of optimum currency areas to cross-country data and find that these implications are strongly supported by empirical data.³⁴ They argue that the relationship between the characteristics of countries and the observed behaviour of exchange rates seems stable enough to support simple forecasting.

The key to their approach to operationalising the theory is to analyse the determinants of nominal exchange rate variability. Therefore, they analyse annual data on bilateral exchange rates for industrial countries. While the theory points out five important characteristics which make stable exchange rates and a monetary union desirable — asymmetric shocks to output, trade linkages, the usefulness of money for transactions, labour mobility, and the extent of automatic stabilisers — they focus on the first three characteristics, because, they argue, the last two have not played a significant role in responding to asymmetric shocks across countries.³⁵ Output disturbances are measured as the standard deviation of the change in the logarithm of relative output in the two countries. The dissimilarity of the commodity composition of the exports of the two countries is included in their framework as a second proxy for asymmetric

³⁴ Bayoumi and Eichengreen (1997)

³⁵ Bayoumi and Eichengreen (1997, pp. 763)

shocks. The importance of trade linkages is measured by computing the average value of exports to the partner country, scaled by GDP, using data on bilateral trade for the two countries concerned. In addition, since small countries should benefit the most from the unit of account, means of payment, and store of value provided by a common currency, the benefits from it are measured by including the arithmetic average of the logarithm of real GDP in US dollars of the two countries as a measure of country size. From these, their estimating equation is as follows,

$$SD(e_{ij}) = \alpha + \beta_1 SD(\Delta y_i - \Delta y_j) + \beta_2 DISSIM_{ij} + \beta_3 TRADE_{ij} + \beta_4 SIZE_{ij} \quad ,$$

where $SD(e_{ij})$ is the standard deviation of the change in the logarithm of the end-year bilateral exchange rate between countries i and j , $SD(\Delta y_i - \Delta y_j)$ is the standard deviation of the difference in the logarithm of real output between i and j , $DISSIM_{ij}$ is the sum of the absolute differences in the shares of agricultural, mineral, and manufacturing trade in total merchandise trade, $TRADE_{ij}$ is the mean of the ratio of bilateral exports to domestic GDP for the two countries, and $SIZE_{ij}$ is the mean of the logarithm of the two GDPs measured in US dollars.³⁶ For 1983-92, estimation yielded as follows (with standard errors in parentheses),

$$SD(e_{ij}) = -0.09 + 1.46SD(\Delta y_i - \Delta y_j) + 0.022DISSIM_{ij} - 0.054TRADE_{ij} + 0.012SIZE_{ij}$$

(0.02)	(0.21)	(0.006)	(0.006)	(0.001)
--------	--------	---------	---------	---------

$n = 210, R_2 = 0.51, S.E. = 0.027.$

All four variables have the anticipated signs and coefficients that differ significantly from zero. Therefore, they conclude that the result supports the empirical implications of the theory of optimum currency areas.

³⁶ Bayoumi and Eichengreen (1997, pp. 764)

Table 3.3 OCA Indexes versus Germany, 1987, 1991 and 1995

	1987	1991	1995
France	0.068	0.067	0.074
Italy	0.070	0.065	0.069
UK	0.099	0.094	0.089
Austria	0.008	-0.004	0.008
Belgium	0.003	-0.008	0.013
Denmark	0.063	0.060	0.074
Finland	0.098	0.095	0.087
Greece	0.053	0.054	0.054
Ireland	0.043	0.036	0.021
Netherlands	0.003	-0.008	0.007
Norway	0.078	0.078	0.077
Portugal	0.068	0.066	0.062
Spain	0.088	0.082	0.073
Sweden	0.068	0.063	0.056
Switzerland	0.038	0.030	0.023

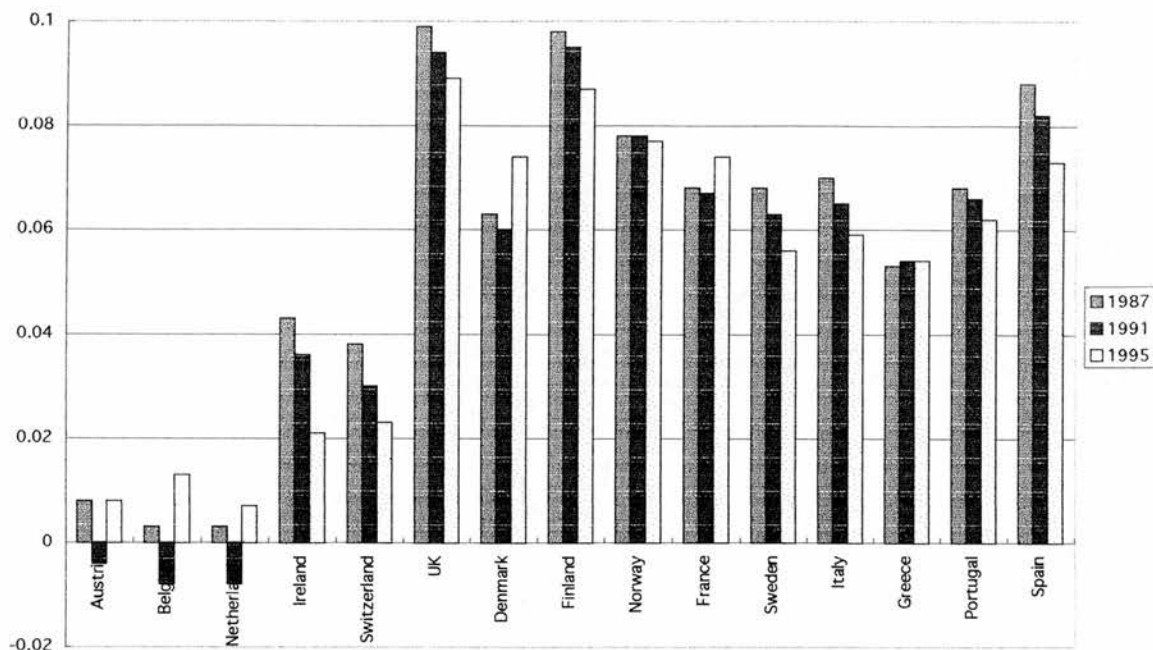
Source: Bayoumi and Eichengreen (1997, pp. 765)

Table 3.3 shows forecasts of the standard deviations of the logarithm of the nominal bilateral exchange rates predicted by the equation, which they refer to as the OCA index, vis-à-vis Germany in 1987, 1991 and 1995. Indices for bilateral rates against Germany are chosen because that country is widely viewed as the core member of EMU to which other potential participants need to converge.

From these results, they divide the countries into three groups (Figure 3.4). The first group consists of Austria, Belgium, the Netherlands, Ireland, and Switzerland, which have indices in 1995 under 0.025 (less than a standard error for the whole regression of 0.027). In the second group are the UK, Denmark, Finland, Norway and France, for which the OCA indices in 1995 are greater than 0.07, and they show little tendency to decline. The final group consists of the countries which are gradually converging toward EMU and/or have OCA indices of intermediate levels (not as high as those of the second group). It includes Sweden, Italy, Greece, Portugal and

Spain.

Figure 3.4 OCA Indexes versus Germany, 1987, 1991 and 1995



Data: Table 3.3

These findings are not surprising, coinciding with the popular views of the core-peripheral countries in EMU except the case of France, whose participation is widely regarded as essential to the political viability of EMU. In connection with this, they have also found that cross-country differences in the level of the OCA index are caused mainly by relative size of the economies and the importance of bilateral trades.³⁷ Therefore, the poor performance of France can be attributed to the fact that its economy is large and relatively closed. In other words, the bilateral trade as a share of GDP can not be very high in France, even through it trades a lot with Germany in absolute terms. It follows that the country's structural characteristics and cyclical performance are not consistent with bilateral

³⁷ Bayoumi and Eichengreen (1997, pp. 768)

exchange rate stability vis-à-vis Germany, hence the transition to EMU would be painful. This may support the popular view that the French incentives to EMU are driven by political rather than economic considerations.³⁸

There is another approach by which the member countries can be divided into groups. It is called cluster analysis, whose details will be explained in the next chapter, where we will attempt to place the United Kingdom into the economic map of Europe. The findings of the analyses are almost identical with those of OCA index above with the notable exception of the French case; in the former analysis, it is classified as member of the core group.³⁹

Gros and Thygesen use another approach to identify the appropriate member countries to EMU, although they admit that it cannot be decisive in any cases. Their approach focuses on six indicators from the optimum currency area approach to identify the appropriate size of EMU:⁴⁰

1. Trade structure similarity: correlation coefficient between the shares of about 70 products (at the 2-digit CN-level) in overall intra-European exports and in the exports of each EU member to other EU members (1992 data).
2. intra-industry trade: Grubel-Lloyd index on the basis of the 2-digit CN-level of trade structures. (This index is calculated as 1 minus the sum of the absolute value of net exports of each CN 2-digit sector over the sum of total exports and imports)(1992 data)
3. Real GDP growth correlation: correlation coefficient between real GDP growth in EU 12 and single EU members, 1980-93.

³⁸ Bayoumi and Eichengreen (1997, pp. 769)

³⁹ For further details, see Ch. 4 of this paper.

⁴⁰ Gros and Thygesen (1998, p. 301)

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4. Industrial growth correlation: same method as above.
5. Unemployment rate correlation: correlation coefficient between the unemployment rate of EU 12 and individual EU members, 1980-93.
6. Exports to EU 15 as a percentage of GDP.

Since it is difficult to decide what level of correlation is acceptable for EMU, they only provide rankings of EU members along these indicators (Table 3.4).

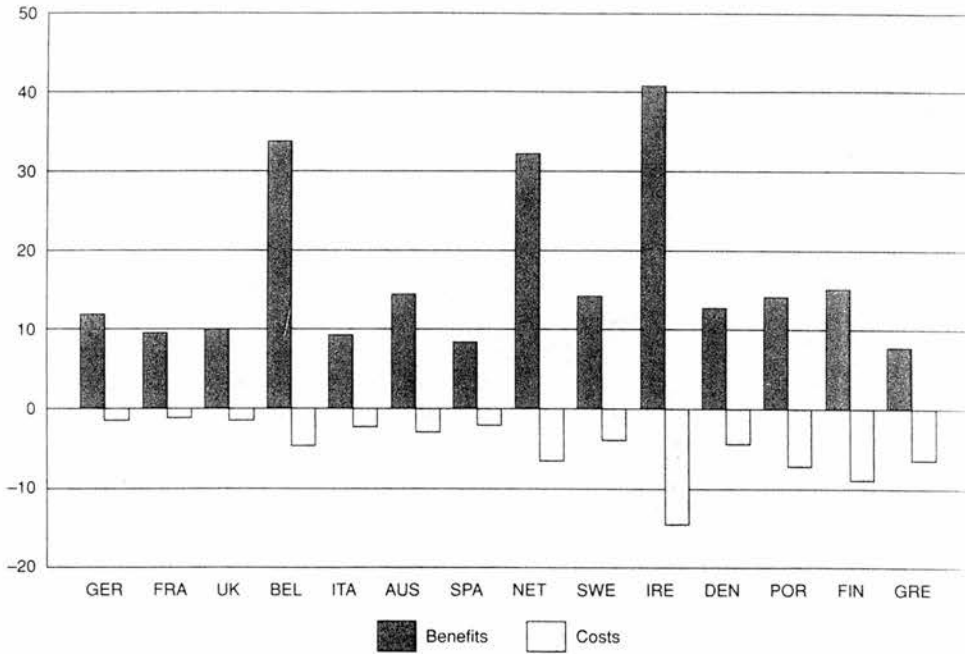
It is apparent from these findings that different indicators can give quite different results. Moreover, it is difficult to compare one indicator to the other because of the different natures of these indicators. Therefore, they attempt to operationalise these indicators by defining the benefits as exports to EU 15 as percentage of GDP and the costs as 1 minus the average trade structure similarity and intra-industrial trade, multiplied by exports to EU15 as percentage of GDP (Figure 3.5).

Table 3.4 Ranking of EU Members by OCA Indicators

	Trade structure similarity	Intra-industry trade	Real GDP growth correlation	Industrial growth correlation	Unemployment correlation	Exports to EU 15	Average ranking	Times in top 7
Austria	6	6	3	6	9	5	5.8	5
Belgium	4	2	6	1	8	2	3.8	5
Denmark	11	9	14	10	14	8	11.0	0
Finland	13	12	12	14	12	4	11.2	1
France	2	1	2	4	4	11	4.0	5
Germany	1	4	7	2	3	9	4.3	5
Greece	14	14	11	9	6	14	11.3	1
Ireland	10	11	13	11	2	1	8.0	2
Italy	5	10	4	5	7	12	7.2	4
Netherlands	8	5	5	7	10	3	6.3	4
Portugal	12	13	9	8	13	7	10.3	1
Spain	7	7	1	3	1	13	5.3	5
Sweden	9	8	8	13	11	6	9.2	1
UK	3	3	10	12	5	10	7.2	3

Source: Gros and Thygesen (1998, p.302)

Figure 3.5 Benefits and Costs of EMU



Source: Gros and Thygesen (1998, p.303)

The large countries of the so-called 'core' show substantial benefits with negligible costs. For two core countries which have very open economies, Belgium and the Netherlands, both benefits and costs are much higher than the other core countries, but the balances would remain positive. Ireland is the country which has both the highest benefits and the highest costs. However, they argue that, because of its rapid growth, it will align its trade structure with that of the EU and reduce the potential for external shocks without significant difficulties.⁴¹ As a result, Finland, Greece and Portugal are the only countries for which they have some doubt about whether EMU would be beneficial or not. Among them, Greece (and to a lesser extent Portugal) should have additional benefits in terms of the

⁴¹ Gros and Thygesen (1998, p. 309)

reduction of the costs of disinflation, which we have discussed in Chapter 1, while these additional benefits are less important for Finland because its inflation rate is already reasonably low. For Greece, the institutional guarantee of price stability and credibility brought about by EMU should be one of the main attractions of EMU because of the country's poor inflation track record. It follows that the pure cost-benefit analysis in terms of shocks and transaction costs might be less important than the additional benefits for it.

From these analyses, it can be concluded that the EU15 (EU as a whole) is not an optimum currency area. On the other hand, there is certainly a subset of EU countries which form an optimum currency area, which may include Germany, the Benelux countries, and, possibly, France. However, it should be noted that these do not mean that a subset of, say, 11 EU countries (these five countries + Austria, Ireland, Portugal, Spain, Italy and Finland, for instance) cannot be an optimum currency area, for which the economic costs of a monetary union are likely to be smaller than the benefits of it.

3.3 The Economics of the Maastricht Strategy

In spite of the fact that the theory of optimum currency areas underlines the importance of labour mobility, wage flexibility and fiscal transfers as the requirements for a successful monetary union, these conditions were not stressed in the Maastricht strategy on EMU. Instead, macroeconomic criteria, such as inflation, interest rates and budgetary policy, were chosen as convergence requirements prior to the entry into EMU. It is argued that the main reason for this was the fear that EMU would have an inflationary bias.⁴²

⁴² De Grauwe (1997, p. 129)

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Inflation can severely damage the economy or even lead to its total collapse. It may discourage saving by making the real value of money saved fall through time. Of course, interest rates tend to rise in order to compensate for it, but still there is a high degree of uncertainty in saving. If prices are not stable because of inflation, firms cannot properly make decisions on production and enter into long-term contracts, hence resources cannot be allocated efficiently in the economy through the price mechanism, leading to significant losses of social welfare. This point was discussed in Subsection 1.3, where we examined the benefits of a monetary union in detail, although our focus was the opposite process, which can be generated by forming a monetary union which results in a more reliable price mechanism, and hence welfare gains, through an increase in price stability. Moreover, we also know (see the same subsection above) that once an inflationary bias is established, disinflation becomes difficult and painful, and therefore can involve significant costs in the form of lost output and unemployment. This is partly because wage rigidities can cause a short-run trade-off between inflation and output, in other words, disinflation can cause decreases in output in the short-run due to wage rigidities. It is also partly because the authorities may have already lost their anti-inflationary credibility, which can influence how effective their disinflationary policies are, by letting the inflationary bias become established. With these considerations, the economic rationales of the Maastricht strategy, will be examined in this section. Our examination will focus on the convergence criteria of the strategy and the design of the European Central Bank, since they are the most important ingredients of the strategy, and the most controversial ones, too, among the politicians and economists who have taken part in the debate on EMU.

3.3.1 Inflation Convergence

The generally accepted logic of inflation convergence, as expounded in De Grauwe (1997),⁴³ can be summarised as follows: When two countries which have different inflation rates or preferences between inflation and unemployment form a monetary union, the low-inflation country always reduces its welfare, unless the union inflation rate will be maintained at the level prevailing in that country. This is because the common central bank is likely to reflect the average preferences of the participating countries, leading to a higher inflation rate than before in the low-inflation country. Therefore, the country does not join the union, unless it can impose conditions to make sure that the union's central bank should have the same preferences as its own central bank. In this connection, the institutional framework of the union's central bank may not be sufficient because, as long as it is composed of representatives of the participating countries, they may still have different preferences. Democratic decision making systems, such as majority voting in the executive board may make the average preferences the most likely outcomes (See Subsection 3.3.5, where the design of the European Central Bank will be discussed in detail). Therefore, to make sure that the union's inflation rate will be as low as in the low-inflation country, it wants to limit entry into the union to only those countries with the same preferences. According to the inflation convergence criterion, the member countries should prove their determination to keep a high degree of price stability by bringing down their inflation rates to the lowest levels among these countries. This disinflationary process may cause a temporary increase in unemployment, however, this, in turn, becomes hard evidence of their determination.

However, contrary to the intention of the inflation convergence criterion, as far as economics is concerned, there is no reason why a monetary union

⁴³ De Grauwe (1997, 129-31)

cannot work with the average inflation rate of the participating countries. In other words prior reduction of inflation is a necessary condition not for forming a monetary union but for forming one in which the inflationary pressure would not be as strong as it might otherwise be. Of course, a monetary union with lower inflation is better than one with higher inflation in many ways. However, the real problem here is that the low inflation countries do not want to join a monetary union which will have higher inflation rates. Based on these considerations, it is often argued that this convergence criterion was adopted in order to give an incentive to join EMU to the low-inflation country (more precisely, Germany).⁴⁴

The inflation convergence criterion has been criticised because the process of transition towards low inflation can be not only slow but also costly in terms of unemployment. Some economists even argue that the strategy can be risky, and in the end may fail to realise the low inflation required by the criterion.⁴⁵ The reasons can be explained as follows. If the country which has a higher inflation rate than that of the criterion, say the UK, decides to follow the Maastricht transition strategy, the UK government should bring the national inflation rate down. To this end, the government changes the priority it attaches to reducing the inflation rate at the expense of unemployment. However, the announcement of its new priority cannot be enough to make economic agents believe the seriousness of its intention, i.e. they believe the seriousness of the government only after they have observed the implementation of disinflationary policies through the fact that the government lets unemployment increase. This, in turn, leads to a gradual change in the expectations of economic agents, resulting in a downwards shift of the short-term Phillips curve. As was observed through the experiences of the Southern European countries

⁴⁴ De Grauwe (1997, p. 150)

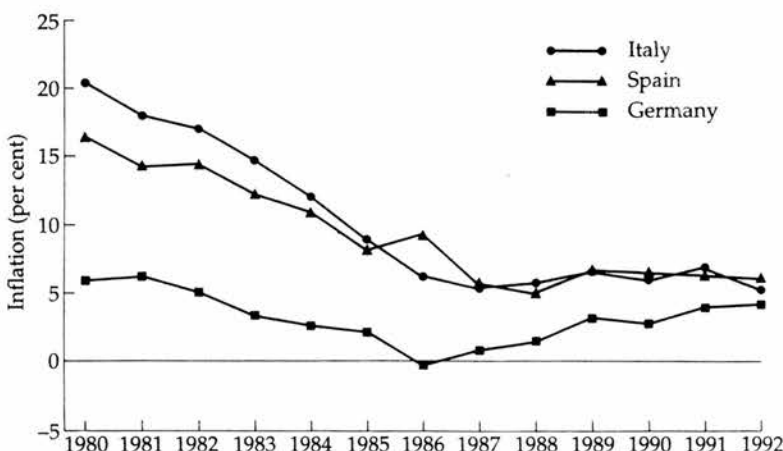
⁴⁵ See, for instance, De Grauwe (1997, p. 141)

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during the late 1980s, this process can be slow but still painful.⁴⁶ Moreover, it is unlikely that the UK government can convince economic agents fully that it has changed its priority, because, as was pointed out in Chapter 1, the reputation it has already acquired has a crucial impact on the effectiveness of its policy. As a result, it is most likely that the UK inflation rate will not be brought down to the level required by the criterion, but will hover above it. The differential in the inflation rates in two candidate countries will lead to a continuous loss of competitiveness of the high inflation country, resulting in the devaluation of its currency sooner or later. Given the non-devaluation requirement of the Maastricht strategy, the situation of the differential in the inflation rates cannot be sustainable for long.

The Italian lira and Spanish peseta crises of 1992 may be the most typical examples of this argument. Throughout the course of the 1980s, these two countries reduced their inflation rates considerably. However, they never managed to bring the rates to the German level, perhaps due to differences in the reputation of the monetary authorities in Italy and Spain compared to those in Germany in terms of their inflation preferences (Figure 3.6).

Figure 3.6 Inflation Rates of Italy, Spain and Germany

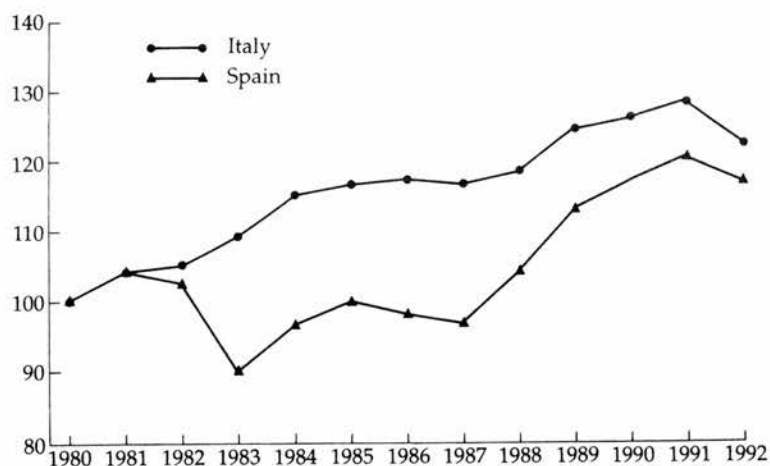


⁴⁶ Gros and Thygesen (1998, p. 137-41)

Source: De Grauwe (1997, p. 106)

As the inflation rates in Italy and Spain hovered above that in the Germany for many years, the price levels in Italy and Spain tended to diverge continuously the one in Germany (Figure 3.7).

Figure 3. 7 Price Levels in Italy and Spain relative to Germany
(in common currency)



Source: De Grauwe (1997, p. 107)

Since there were no realignments after 1987 in the EMS to compensate for these differentials in the price levels, the Italian and Spanish economies lost competitiveness continuously. In the end, in September 1992, this became unsustainable, with the result of the withdrawal of Italy from the EMS and the devaluation of the Spanish peseta by 5%.⁴⁷

From the preceding arguments and cases, it can be said that the strategy of gradual reduction of the inflation rate is a risky one. It could split up the EU by forcing some Southern European countries to be out of EMU. This, in turn, could undermine the reputation of the monetary authorities in these countries further, resulting in further difficulties to

⁴⁷ De Grauwe (1997, p. 106-7)

fulfil the inflation convergence criterion.

3.3.2 Budgetary Convergence

For traditional (Keynesian) macroeconomists and the proponents of the theory of optimum currency areas, the fiscal criteria, which restrict fiscal policy flexibility of national governments, cannot be justified. The reason is because, since the exchange rate instrument will be relinquished, fiscal policy is the only policy instrument left for national government to cope with asymmetric disturbances.

In contrast, arguments in favour of these criteria reason as follows. As was discussed in Chapter 1, governments have incentives to engineer surprise inflations. When the government debt to GDP ratio is high, the incentives become strong. However, once the government creates a surprise inflation, rational economic agents adjust their expectation of it, this, in turn, makes the systematic use of this policy impossible or at least quite costly in the long run. The problem here is that, given that the government consists of short-sighted politicians who give a low weight to future losses, there will always be such incentives. Therefore, when two countries which have different debt to GDP ratios form a monetary union, the country with a low debt to GDP ratio will face a partner who will have the incentive to create surprise inflation. It follows that the country with the low debt to GDP ratio will insist that its partner's ratio should be reduced to its own level prior to entry into the union. The country with the high debt to GDP ratio must reduce its government budget deficit to achieve this requirement. These were the origins of the budgetary convergence criteria.

Whereas the existence of the budgetary convergence criteria can be justified to a certain extent by the preceding argument, the numerical precision of the criteria has attracted much criticism. It is argued that the

debt to GDP ratio of 60% was chosen only because it was the average of the Member States in 1991, which was the latest data available at the time when the Maastricht treaty was drafted. In this case, there was no economic rationale for the numerical precision at all. Then, the deficit to GDP ratio of 3% can be shown to stabilise the government debt at 60%, given a nominal growth rate of GDP of 5%.⁴⁸

There have been more fundamental criticisms of these budgetary convergence criteria. One of them is the negative synergistic effect of the inflation and budgetary convergence criteria. It is argued that countries which implement restrictive budgetary policies to reduce government debt will find that it is extremely difficult to realise their objectives if at the same time they have to reduce their inflation rates, as is required by the treaty, but they do not acquire the credibility to pursue the policies.⁴⁹ This argument can be presented as follows starting from the well-known formula of the government budget constraint.

Whereas the government budget deficit consists of government spending (excluding interest payments on the government debt), G , and interest payments on the government debt, rB (r is the interest rate on the government debt, B) minus the tax revenue, T , it has to be financed by issuing the government debt, dB/dt , and/or by issuing high-powered money, dM/dt (M is high-powered money (monetary base)).

$$G - T + rB = dB/dt + dM/dt \quad (1)$$

Given the debt-to-GDP ratio, b , is written,

$$b = B/Y, \text{ where } Y \text{ is GDP,} \quad (2)$$

⁴⁸ De Grauwe (1997, p. 133)

⁴⁹ De Grauwe (1997, p. 142-4)

the change in the debt-to-GDP (per unit of time) can be defined as,

$$db/dt = (dB/dt) * 1/Y - (dY/dt) * B/Y^2. \quad (3)$$

Using (2), (3) can be re-written as,

$$dB/dt = (db/dt) * Y + (dY/dt) * b. \quad (4)$$

Substituting (4) into (1) yields

$$db/dt * Y = (G-T) + (rB - (dY/dt) * b) - dM/dt$$

$$\therefore db/dt = (G/Y - T/Y) + (r - (dY/dt) * 1/Y)b - dM/dt * 1/Y. \quad (5) \quad \because B/Y = b$$

The nominal growth rate of GDP, $dY/dt * 1/Y$, is the sum of the inflation rate, π , and the real growth rate of GDP, q . Therefore, (5) can be rewritten as follows,

$$db/dt = (G/Y - T/Y) + (r - (\pi + q))b - dM/dt * 1/Y. \quad (6)$$

Similarly, the nominal interest rate, r , can be divided into the expected inflation rate, π^e , and the real interest rate, ρ . Substituting these into (6) yields

$$db/dt = (G/Y - T/Y) + ((\rho - q) + (\pi^e - \pi))b - dM/dt * 1/Y. \quad (7)$$

In order to focus on the negative impact of inflation on the debt reduction process, suppose that the real growth rate of GDP, q , and monetary financing, dM/dt , are negligible, i.e. $q = 0$ and $dM/dt = 0$. It follows,

$$db/dt = (G/Y - T/Y) + (\rho + (\pi^e - \pi))b. \quad (8)$$

As is obvious from (8), only the unanticipated component of inflation, the differential between the expected inflation rate and the real inflation rate, $\pi^e - \pi$, affects the government budget constraint. When the real inflation rate is higher than the expected one, the debt-to-GDP ratio decreases, and vice versa.

If the countries which have unfavourable inflation reputations start disinflation policies, the nominal inflation rates will decline faster than the expected ones, resulting in a differential between the expected and real inflation rates, because the economic agents will not fully trust the announcements of the governments. It follows that disinflation policies in these countries will increase the government debt burden in the short term. In these cases, the governments will have to increase taxes or reduce spending just to prevent the debt-to-GDP ratio from increasing, not to reduce the ratio. Therefore, it can be concluded that there is a negative short-term synergistic effect between the inflation and budgetary convergence criteria.

3.3.3 No-Devaluation Requirement

The economic rationale of the no-devaluation requirement (criterion) appears to be straightforward. It does not allow countries to manipulate the exchange rates of their currencies so as to enter into the union at more favourable rates, which will increase the competitiveness of their economies. It also disciplines countries by forcing them to give external considerations the highest priority in national monetary policies. The fulfilment of the requirement will offer a prediction of acceptance of a common monetary policy in the final stage of EMU, although, as Kenen points out,⁵⁰ past

⁵⁰ Kenen (1995)

performance will not necessarily be a good guide to future behaviour in terms of governments.

However, the validity of the no-devaluation requirement was reduced significantly in August 1993 when the fluctuation margins of the EMS were widened from 2.25% to 15%. This is because of the way the requirement is stipulated in the treaty. It is worth citing it in full: '*the observance of the normal fluctuation margins provided for by the exchange-rate mechanism of the European Monetary System, for at least two years, without devaluing against the currency of any other member state* (Treaty on European Union, Article 109j)' As is obvious, there is an important ambiguity in the term 'normal'; whether it refers to what was normal at the time when the treaty was signed ($2 \times 2.25\%$) or it refers to the present situation ($2 \times 15\%$).

3.3.4 Interest Rate Convergence

The final criterion of the Maastricht strategy is the interest rate convergence. The justification of it seems to be, again, simple and straightforward. It is that an interest rate differential can lead to capital gains and losses at the time when the exchange rates are irrevocably fixed. For instance, suppose two countries which have different long-term bond rates fix the exchange rate of their currencies, it will suddenly be attractive for bondholders to arbitrage by selling low-yield bonds in the low long-term bond rate country and buying high-yield bonds in the other country, because there will be no exchange risk involved in these arbitrages.⁵¹ As a result, the prices of the low-yield bonds will drop and those of the high-yield bonds will rise until the returns on both bonds are equalised. The holders of the low-yield bonds (mainly economic agents in the low long-term bonds rate country) will make capital losses, and vice versa. As is obvious, these

⁵¹ Kenen (1995)

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capital losses and gains will increase as the interest differential gets larger. Therefore, the interest differential should be reduced prior to entry into the union.

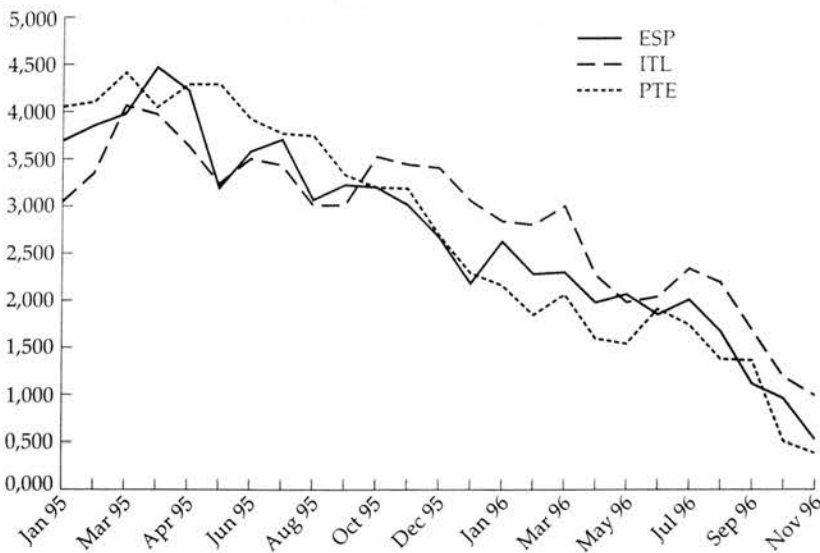
It is put forwards that this criterion has a self-fulfilling nature, therefore, it is not an appropriate criterion for selecting countries for EMU.⁵² In the cases of the countries which are strongly expected to be accepted as members of EMU, economic agents have enough reasons to believe that the long-term bond rate will be automatically equalised prior to the start of EMU. Their rational decisions bring the long-term bond rates down to the required level. This, in turn, validates the expectations of these countries being qualified. Therefore, this criterion will not be an obstacle as far as these countries are concerned. On the other hand, in the case of the countries which are not expected to be in EMU, economic agents have no reason to believe that the interest rates will be brought down. Therefore, the interest rates in these countries are likely to remain at the present level or can even rise above that level. This, in turn, leads to non-fulfilment of the criterion, which again validates the expectations.

Similarly to the inflation convergence criterion, the interest rate convergence criterion can have a negative impact on the government budgetary convergence. The self-fulfilling nature of the interest rate convergence criterion can aggravate the government budget deficit, hence the debt-to-GDP ratio. Because of this, if the economic agents believe that a country will not be qualified as a member of EMU, the long-term bond rate can increase. As is obvious from equation (8), this has the same effect as the unanticipated component of inflation on the government budget burden. However, given the self-fulfilling nature, the reverse can also be possible. The positive expectation of a country being admitted into EMU can reduce the interest rate, hence reduce the burden. This may have happened in Italy, Portugal and Spain during 1995-6, resulting in

⁵² Kenen (1995)

significant drops in the long-term interest rate and making budgetary convergence easier (Figure 3.8). These were brought about by the increasingly strong political commitments of the governments to joining EMU.

Figure 3.8 Spread of Long-Term Bond Rates between ESP, PTE, ITL and DM



Source: De Grauwe (1997, p. 145)

3.3.5 The Design of the European Central Bank

The strong asymmetry in incentives for high and low inflation countries to join a monetary union, discussed in Subsection 3.3.1, can partly be solved by the institutional approach in which control over monetary policy is given to an institution which is separated from the government and which is given the primary task of keeping prices stable (see Chapter 1). Therefore, to convince the low inflation country to join a monetary union, in this case, EMU, the European Central Bank should be as 'hard-nosed' about inflation as the low inflation countries' own central banks. In this respect, the Maastricht Treaty made it clear that the primary objective of the European

Central Bank should be the maintenance of price stability, in Article 105 (1). Moreover, as was discussed in Chapter 1, it has been found that there is an inverse relationship between central bank independence and inflation. Therefore, the treaty provided for the political independence of the European Central Bank in Article 107.

It is pointed out that these articles were carefully formulated so that the European Central Bank will be an institution akin to the Bundesbank, at least on paper.⁵³ Of course, it would be a mistake to attach exclusive importance to legal texts in evaluating the performances of central banks, since there are a number of national central banks which have no special emphasis on price stability in their statutory obligations and little formal political independence, but have performed well in terms of price stability. But, at least, 'the fact that the European Central Bank has incorporated the two principles that form the basis of the Bundesbank statutes may have convinced Germany to join EMU'.⁵⁴

The question that arises here is whether the primary objective of price stability and political independence are sufficient to guarantee the inflation proof European Central Bank.⁵⁵ Contrary to the assumption of the theoretical literature on central bank independence, such as Rogoff,⁵⁶ monetary policy does not operate in a vacuum, i.e. there is always an interaction between monetary and fiscal policy.⁵⁷ Two preconditions for realising a 'hard-nosed' central bank can be identified. The first one, which may be self-evident in the light of the time-inconsistency argument in Chapter 1, is that the commitment to its particular policy must itself be credible, otherwise it cannot acquire the reputation of 'hard-nosed' which

⁵³ Kenen (1995, p. 175)

⁵⁴ Kenen (1995, p. 175)

⁵⁵ Kenen (1995, p. 177)

⁵⁶ Rogoff (1985, pp. 1169-89)

⁵⁷ Artis and Winkler (1998, pp. 93)

has a crucial influence on how its policies are effective. The second precondition is that its monetary policy is supported by fiscal and wage policies, and the general public. It is argued that even independent central banks depend critically on the support from the latter, if they are to deliver low inflation at low costs.⁵⁸ Given that the European Central Bank could not start its operation with an already developed anti-inflation reputation, and there is no evidence of what Winkler called 'stability culture' within EMU,⁵⁹ it may be reasonable to be concerned about the likely performance of it, despite the primary objective of price stability and political independence given by the Maastricht Treaty. This consideration has influenced the debate on the economic rationales of the Pact for Stability and Growth, to which we now turn.

3.3.6 The Pact for Stability and Growth

In addition to the problems of the Maastricht strategy which have been discussed so far, a serious problem of the incentive structure of the strategy had been recognised in the context of game theory. It was that whereas until the start of EMU each country would have an incentive to pursue the Maastricht strategy, once it was qualified as a member of EMU, suddenly the incentive would disappear. This was because the countries would be rewarded for the painful policies of monetary and budgetary restriction in the form of membership of the union, whereas failure to fulfil the requirements of the treaty would result in punishment in the form of exclusion from it. However, once countries were admitted into it, suddenly the punishment would vanish, hence there would be no incentive to maintain restrictive budgetary policies. As a result, the Pact for Stability

⁵⁸ Eijffinger and De Haan (1996)

⁵⁹ Winkler (1996, pp. 1-28)

and Growth was adopted in order to maintain an incentive for fiscal discipline.

The pact consists of two European Council regulations, agreed in Dublin (December 1996) and Amsterdam (June 1997). The contents of it which are related to the excessive deficit can be summarised as follows.⁶⁰

- The reference value of a 3% deficit would constitute an absolute ceiling, except if the country concerned experiences a fall in GDP of over 2%.
- If a country is found (during the semi-annual evaluation performed by the Commission) to have a deficit in excess of 3% of GDP, it would have to make a non-interest-bearing deposit equivalent to 0.2% of GDP plus 0.1% for each point of the excess deficit. The variable part applies only for deficits up to 6% of GDP; the total is thus capped at 0.5% of GDP.
- The deposit will be returned as soon as the deficit goes below 3% ; if the excess deficit persists for over two years, the deposit becomes a fine.

The most compelling economic rationale for the pact may be to give an extra protection for the European Central Bank from pressure for an inflationary debt bailout. It may be presented as follows.⁶¹ When the government of an EMU country falls into excessive budgetary deficit, the economic agents fear modification/suspension of payment on its public debt. Therefore, they start to sell its bonds, leading to a sharp decline of their prices. As a result, while banks which hold those bonds lose a part of their capital, causing a run by depositors, bond markets in other EMU countries face adverse effects, as the investors in public debt of other EMU countries come to fear the next sudden rise in those countries' public debt. To prevent the collapse of the banking and financial system in EMU, the European Central Bank buys up the bonds of the government questioned.

⁶⁰ Gros and Thygesen (1998, p. 344)

⁶¹ Eichengreen and Wyplosz (1998, pp. 71-5)

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However, this, in turn, can give the governments of EMU countries an incentive to implement riskier policies in terms of their budgetary deficit, because the costs of the bank are paid by the residents of the EMU countries as a whole, not by those of the responsible country alone. This is one kind of externality caused by the government budgetary deficit.

There is another externality due to the budgetary deficit. This is the cross-border interest rate spillover generated by the excessive budgetary deficit of an EMU country. A country which falls into deficit will increase its reliance on the capital markets of the union. This, in turn, will increase the union interest rates as a whole, causing an extra burden on the government debts of other EMU countries, i.e. if the governments choose to stabilise their debt-to-GDP ratio, they will have to follow more restrictive fiscal policies.⁶²

The basics of these arguments based on the spillover effects of excessive budgetary deficits seemed to be enough for adopting the pact. However, these lines of arguments have been criticised severely.⁶³ Through arguing these externalities, it is implicitly assumed that the capital markets of the union do not work efficiently. If the markets work efficiently, the adverse effects of falls in the price of the bonds of one EMU country on other countries' bonds, and the overall increase in the union interest rates, will not happen. The markets will properly recognise that there is no risk of default in other EMU countries and no need to attach risk premiums to other countries' debt. In other words, EMU does not necessarily mean that the interest rates on member countries' bonds or those in the member countries' financial markets have to move together. If the markets work efficiently, there will be different interest rates reflecting the different risk premiums. Moreover, the Maastricht treaty already contains a no-bailout rule that prohibits the European Central Bank from

⁶² De Grauwe (1997, p. 198)

⁶³ Buiter and Kletzer (1990)

purchasing public debt directly from the issuer.

This is a powerful counter-argument against the pact. However, it is unlikely that the capital markets of the union will work completely efficiently. It is also unlikely that the no-bailout clause of the Maastricht Treaty will be implemented without any exceptions. As is obvious from the preceding discussion, when a debt crisis occurs in an EMU country, to bail out the government in crisis will be in the interest of the other member countries. Therefore, even if there is the no-bailout rule, it is politically difficult to implement it perfectly. They may very well decide to make an exception this time. The realisation of this incentive for the governments makes the markets work inefficiently in the sense we assumed above by undermining the mechanism of risk pricing. It follows that the pact can be justified in economic terms.

There is another criticism of the Pact for Stability and Growth, which is based on empirical studies and observations. It has to do with the enforceability of it. Past experience suggests that such rules to limit the size of government budget deficits and debts are very difficult to enforce. For instance, in 1986 the United States adopted the Gramm-Rudman legislation that set out explicit targets for the Federal budget deficit; if they were not met, government spending would automatically be cut by a given percentage so as to meet them. However, the legislation has been far from successful because the government used all kinds of techniques to circumvent it, such as putting some items off budget.⁶⁴ Another study also found that the US states which had constitutional limits on their budget deficits and/or debts tend to rely on the same techniques as the US Federal government. As a result, these rules have little impact on the real sizes of the states' budget deficits and debts.⁶⁵ Moreover, the countries which committed themselves to the Maastricht strategy themselves are criticised

⁶⁴ De Grauwe (1997, p. 199)

⁶⁵ von Hagen (1991)

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for window-dressing their government budgets, relying more and more on creative budgetary accounting to conceal their true debts and deficits.⁶⁶ Therefore, the rationale for the pact is highly questionable.

While most of the debate on the Stability Pact has been focused on fiscal arguments, some has pointed out that the main inspiration for the pact and the fiscal criteria of the Maastricht strategy has been to safeguard the credibility of monetary policy by avoiding an unbalanced policy-mix.⁶⁷ It is argued that, as was examined earlier in this section, central bank independence alone may not be sufficient for the credibility of monetary policy, but may require the support of fiscal discipline. 'Sound government finances are crucial to preserving stable economic conditions in the Member States and in the Community. They lessen the burden on monetary policy and contribute to low and stable inflation expectations such that interest can be expected to be low.'⁶⁸

The mechanism which can lead to an unbalanced policy mix can be presented as follows due to Artis and Winkler.⁶⁹ Figure 3.9 shows the simple illustration of monetary -fiscal policy interaction.

Figure 3.9 A Game of Chicken

		Fiscal Policy	
		tight	lax
Monetary Policy	tight	4, 2	-1, -1
	lax	0, 0	1, 3

⁶⁶ De Grauwe (1997, p. 146)

⁶⁷ Artis and Winkler (1998, pp. 87-98)

⁶⁸ Ecofin Report (1996, Annex 1, para. 18)

⁶⁹ Artis and Winkler (1998, pp. 93)

Source: Artis and Winkler (1998, pp. 93)

In the figure, payoffs are arbitrary and chosen to make them higher when both policies are balanced, and vice versa. In this game there are two Nash equilibria: the monetary authorities prefer the 'tight' equilibrium of the top-left column, fiscal authorities prefer the 'lax' one of bottom-right column. Note, also, that both authorities have an incentive to seek a balanced policy mix, since otherwise payoffs are much lower for both sides. It follows that both have an incentive to precommit in advance to force their preferences on their partners; faced with lax fiscal policy, monetary authorities will in the end be forced to accommodate, and vice versa.

However, during the period of confrontation, a leadership battle, where each side tries to secure its preferred equilibrium, can happen. And, as the episode of Reagonomics in the early 1980 demonstrates, conflicts between monetary and fiscal policy can be very costly. The interpretation of these considerations is that the Maastricht fiscal criteria and the Stability Pact are attempts to secure precommitment of the then future European Central Bank to prevent the worse of the two possible equilibria and to avoid costly leadership battles between monetary and fiscal policy. This consideration coincides with the Presidency conclusions of the Dublin summit quoted earlier.

3.3.7 Concluding Remarks of the Maastricht Strategy

So far in this section, the economics of the convergence criteria of the Maastricht strategy, the European Central Bank and the Pact for Stability and Growth has been examined. As a result, some dangers and contradictions they contain have become clearer. Firstly, the strategy of gradual reduction of the inflation rates can be risky or unsustainable for

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member countries which have high inflation rates. Secondly, a negative synergistic effect between the inflation and budgetary convergence criteria, which can put an extra burden on the shoulders of the countries with high inflation rates and large government budget deficits, has been identified. Thirdly, the self-fulfilling nature of the interest rate convergence criterion can also have a negative impact on the government budget deficits. All these findings imply that the strategy of gradualism chosen by the Maastricht strategy could backfire. Finally, whether the European Central Bank can fulfil its primary objective of price stability depends on the reputation it will acquire during its first period of operation. In this respect, the fiscal convergence criteria and the Stability Pacts have provided the favourable environment of a balanced policy mix.

Chapter 4

The Economics and Politics of European Monetary Integration: A Case Study of the United Kingdom

4.1 A Brief History of the British Commitment to European Monetary Integration

As was argued in Chapter 2, the real progress towards European monetary integration began with the European Payments Union (EPU) in 1950, which was founded in order to cope with trade and exchange restrictions in Western Europe due to the lack of convertibility of their currencies. The United Kingdom's attempt to solve its balance of payments problems began earlier than the EPU in 1947 when the UK authorities decided to re-establish the convertibility of the pound sterling. However, although it was supported by credit lines of about US \$5 billion, the authorities had to suspend convertibility after only seven weeks, because of the famous 'dollar gap'. Its mechanism can be described as follows. Because European currencies were not convertible, all European countries tried to earn surpluses in gold, the US dollar or any currency convertible into the US dollar. Therefore, if any individual European country had tried to make its currency convertible unilaterally, all other countries would have attempted to earn a surplus in their bilateral trade with it. It follows that any unilateral attempt to re-establish convertibility would have resulted in more serious balance of payments

difficulties for the country.¹ The UK's failure made it clear that a return to convertibility required a multilateral effort by European countries. As a result, all eighteen members of the Organisation for European Economic Cooperation (OEEC), including the United Kingdom, participated in the EPU.

The EPU was quite successful, and over time European exports to the United States increased faster than their imports from the country with the result that the dollar gap became less serious. As a result, a return to full convertibility became more feasible, and, by the mid-1950s, the United Kingdom argued for early convertibility with exchange rates allowed to fluctuate freely. However, since the dollar gap was still judged to be serious, the UK proposal was never seriously considered. Finally, the EPU was dissolved at the end of 1958, and the participating countries, including the United Kingdom, made their currencies convertible.²

While the dissolution of the EPU represented a loss to European monetary integration, the Treaty of Rome of 1957, which established the European Economic Community (EEC) in 1958, did not commit the community to create a monetary union. As a result, the real incentives for monetary integration did not take place until the late 1960s when a number of crises happened; the pound sterling was devalued by nearly 15% in 1967, followed by the devaluation of the French franc of about 11% and the revaluation of the Deutschemark of about 10% in 1969. Then, an initiative for a monetary union was launched in the form of the 1969 Barre Plan, followed by the Werner Report of 1970, whose objectives of a monetary union in Europe were finally confirmed by the ECOFIN Council of March 1971, resulting in the creation of the 'snake in the tunnel'. However, during the period between the dissolution of the EPU in 1958 and the creation of the 'snake', the United Kingdom did not commit itself to

¹ Gros and Thygesen (1998, p. 5)

² Gros and Thygesen (1998, p. 8)

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monetary integration in Europe, since these commitments and lack of commitments took place in the EEC and the United Kingdom was not a member of the community during the period.

The 'snake' came into operation on 24 April, 1972 among the six EC member countries. After only one week, on 1 May, the United Kingdom, together with Denmark and Ireland, which were due to accede to the EC the following January, joined the 'snake'. However, Anthony Barber, the then Chancellor of the Exchequer, managed to keep the pound sterling within the bands of 2.25% for only six weeks. The United Kingdom withdrew from the system on 23 June, after a short foreign exchange crisis which led the currency to its lower intervention point, leaving a legacy of scepticism towards fixed-but-adjustable exchange rate systems within the country.³ In the light of the expansion which later turned into the 'Barber boom', the government wanted to have the freedom to devalue the currency and reflate the economy.

The countermeasures of the Wilson administration to the first international oil-price shock of 1973-4 became the watershed between the United Kingdom and the other European countries. The British government increased its spending and borrowing in order to maintain the level of demand and employment. In contrast, the governments of the other industrial countries tended to react to higher oil costs by deflating their economies, although the timing of and willingness towards deflationary policy were different from country to country, e.g. while the German authorities implemented the policy very quickly, their counterparts in France and Italy were reluctant to do so for a while, and once they decided it, the actual countermeasures they took were less drastic than the German ones.⁴ As a result, Britain's current-account deficit increased sharply. In spite of that, the government could not prevent the recession,

³ Gros and Thygesen (1998, p. 15-7)

⁴ Stephens (1996, p. 3-4)

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however, the inflation rate increased rapidly too, resulting in the well-known 'stagflation' situation.

By late 1976, the government faced a full-scale sterling crisis. It was forced to ask for aid from and negotiate stabilisation programmes with the International Monetary Fund (IMF). Since the confidence of investors in the pound sterling needed to be restored, the IMF imposed sharp reductions in government spending and borrowing. This event was and perhaps still is seen as a political humiliation representing British economic failure and national decline. However, once the government obtained the aid from the IMF, the situation of the pound sterling was reversed, and it appreciated sharply.

The creation of the EMS was negotiated in the course of 1978. However, the United Kingdom did not participate actively in drafting it; the British representative in the three-man working party of personal representatives of Heads of State and Government only attended some initial meetings of the group.⁵ It is argued that this was because the British authorities favoured a globalist approach to dollar instability rather than the regional approach preferred by the French and German authorities leading to the proposal of the creation of the EMS.⁶ In other words, the then Western alliance between Western Europe and the United States was so important in the British point of view that the then British government could not leave the dollar on one side, or even imagine this. In April 1978, at the European Council meeting in Copenhagen, the then Prime Minister of the United Kingdom, James Callaghan, 'in reacting to [the idea of the creation of the EMS proposed by the German Chancellor, Schmidt,] concentrated on his fear that what was proposed might appear as anti-dollar and might therefore be divisive from an Atlantic point of view.'⁷

⁵ Gros and Thygesen (1998, p. 44-5)

⁶ Gros and Thygesen (1998,p. 44-5)

⁷ Zis (1999, p. 3)

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At the Brussels European Council of December 1978, six members of the nine then EC member states (Germany, France, The Netherlands, Belgium, Luxembourg and Denmark) agreed to join the EMS. The other two, Italy and Ireland, which initially reserved their position in Brussels, soon decided to join, leaving only the United Kingdom outside the ERM. Callaghan claimed that the ERM would place obligations on the government that might result in unnecessary deflation and unemployment.⁸ What he had in mind was that a fixed exchange rate system would impose a competitive penalty on an economy prone to inflationary shocks. And the history of the Labour governments of 1974-9 indicated the inflation prone nature of the British system.⁹ However, it must also be noted that there was considerable scepticism about the success of the EMS at that time. Zis concludes that 'the EMS was an unexpected success which, however, should have been anticipated.'¹⁰ As a result, the strategy Callaghan chose was more pragmatic than simply joining the EMS; while deciding not to join the ERM, he expressed Britain's readiness to join the pooling of currency reserves and medium-term credit facilities of the EMS.

When Mrs Thatcher entered Downing Street in May 1979, her government had the opportunity to reverse the Labour government's decision. However, it did not do so. Again, the United Kingdom remained outside the European Community's first division in terms of European monetary integration.¹¹ It took more than a decade for Mrs Thatcher to change her mind and join the ERM. The British government finally decided to join the mechanism in October 1990, after its anti-inflation strategy had been destroyed by the late 1980s boom, since the policy fulfilled the need for an anchor for monetary policy which would restore its

⁸ Stephens (1996, p. 5)

⁹ Artis (1990, pp. 287)

¹⁰ Zis (1999, p. 2)

¹¹ Stephens (1996, p. 6)

credibility.

By contrast with the long period of being outside the ERM, British ERM membership did not last long. When the policy conflict between Germany and the other member countries became apparent in September 1992 at an informal ECOFIN meeting in Bath in Britain, the financial markets began to ask who would be the first to drop out of the system. The Finnish markka had to abandon its ecu peg, and the lira and the peseta came under severe pressure. Then, the pound sterling and the French franc came under speculative attacks resulting in the withdrawal of the former from the system and the widening of the bands of fluctuations from +/- 2.25% to +/- 15%.

Meanwhile, the negotiation of the creation of EMU started in 1988, when the then French Finance Minister suggested the fundamental reform of the existing EMS, leading to the creation of the Delors Committee. When the committee prepared its report, known as the 'Delors Report', in April 1989 to an ECOFIN meeting, the British government opposed the arguments of the report unsuccessfully. For instance, the British government strongly opposed the need for a European central bank to operate a single monetary policy by proposing an evolutionary alternative approach to EMU through competition among currencies and national monetary policies.¹² In December 1991, the treaty, known as the Maastricht Treaty, which would amend the Treaty of Rome in order to create EMU, was finally agreed. The fact that the final agreement came in such a short period was surprising, given the explicit opposition of the British government. It is argued that it was a treaty that the government had not wanted, but which it could not avoid, because its continental partners were so determined to translate into a firm timetable the blueprint for a single currency set out by the Delors Report that they were

¹² HM Treasury (1989)

not willing to compromise with the United Kingdom.¹³

During the general election campaign of April-May 1997, the Labour party, which was expected to win the election, did not argue strongly for EMU, although by that time the party had acquired the reputation of being 'europhile' compared to the 'eurosceptic' Conservatives. However, after coming into office, the Chancellor made his preference for EMU membership explicit by announcing the 'Five Economic Tests', on which any decision about UK membership should be based, and stating that the government was in principle in favour of joining EMU. In early 1999, the Prime Minister, Tony Blair, announced a National Changeover Plan to prepare the introduction of the euro to the country after a 'yes' vote in a referendum, which would be held once the government had decided to join EMU. Judging from the markedly positive tone of the announcement and the fact that he deliberately announced it by himself, when he could have let the Chancellor of the Exchequer, Gordon Brown, do so, since these kinds of matters are within the latter's jurisdiction, it is argued that the Prime Minister has crossed the Rubicon.¹⁴

4.2 An Economic Analysis of the United Kingdom and European Monetary Integration

The issue of British entry into EMU has often been discussed in relation to the economic costs and benefits of entry, although this does not mean that the economic considerations are the most important to decide whether the country should join it or not. As Artis points out,¹⁵ if the purely economic evaluation is negative or uncertain, it can still be possible

¹³ Stephens (1996, p. 199)

¹⁴ Cobham and Macmillan (1999)

¹⁵ Artis (1999)

to find positive political benefits to justify entry into EMU, and vice versa. However, since economics itself provides a discipline-neutral framework for the cost-benefit analysis of entry into EMU, the economic considerations should be the most reasonable starting point for deciding whether to join it or not.

As has been discussed so far in this paper, the most important cost of a monetary union is caused by the loss of the exchange rate change instrument to offset the impacts of asymmetric shocks. Two different methods have been developed to identify such shocks in the context of European Monetary Integration. One of them, which was pioneered by Bayoumi and Eichengreen,¹⁶ attempts to isolate shocks from data on national output and inflation. The other, which was pioneered by Artis and Zhang,¹⁷ attempts to isolate the business cycle from its trend.

Bayoumi and Eichengreen calculate the extent to which German aggregate demand and supply shocks were correlated with those of the other EU economies using data from 1968 to 1988. This is based on the assumption that Germany should be regarded as the centre of EMU. The updated results of the calculation based on this method are shown in Table 4.1 and Figure 4.1.

From their findings, Bayoumi and Eichengreen argue that a core and a periphery can be identified; France, Denmark, Austria and Belgium are obviously in the core together with Germany, the Netherlands and Italy belong less obviously to the core, and the United Kingdom together with the Scandinavian and Iberian countries is in the periphery.¹⁸ This implies that if the United Kingdom had formed a monetary union with Germany, it could have faced significant costs.

¹⁶ Bayoumi and Eichengreen (1993)

¹⁷ Artis and Zhang (1997)

¹⁸ See Artis (1999, pp. 5).

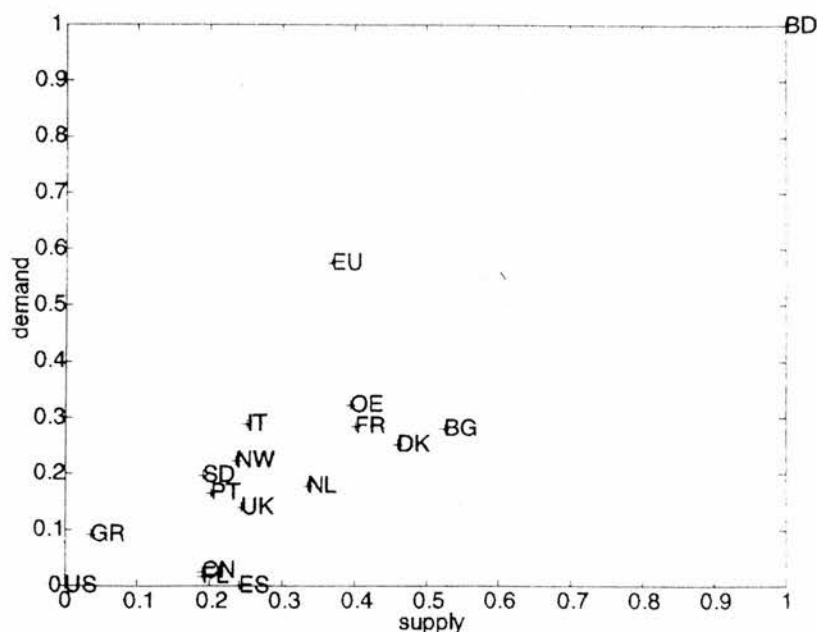
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Table 4.1 Shock Correlations with Germany, 1960-95

	Supply	Demand
EU15 (EU)	0.37	0.57
Germany (BD)	1	1
France (FR)	0.40	0.28
Denmark (DK)	0.46	0.25
UK	0.24	0.14
Italy (IT)	0.25	0.29
Netherlands (NL)	0.34	0.18
Belgium (BG)	0.53	0.28
Austria (OE)	0.39	0.32
Spain (ES)	0.24	-0.03
Portugal (PT)	0.20	0.16
Greece (GR)	0.04	0.09
US	-0.01	-0.22
Canada (CN)	0.19	0.03
Norway (NW)	0.24	0.22
Sweden (SD)	0.19	0.19
Finland (FL)	0.19	0.02

Source: Artis (1999, pp. 5)

Figure 4.1 Shock Correlations with Germany, 1960-95



Source: Artis (1999, pp. 6)

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The alternative approach, focusing on business cycle correlations, identifies the emergence of a European business cycle during the operation of the ERM, and the British business cycle has not coincided with it. Table 4.2 and Figure 4.2(a), (b) show the updated results of Artis and Zhang's work, conducted by Artis.¹⁹

From these results, it can be said that in the pre-ERM period, there were no particular patterns among the European economies in terms of cross-correlations with the German and US business cycles, some had stronger cross-correlations with the German cycle than that of the US, others vice versa. However, after the ERM, the cross-correlations of most ERM countries with Germany increased while those with the US decreased significantly, with the notable exception of the United Kingdom, whose cross-correlations with Germany fell sharply while those with the US remained strong.

Table 4.2 Correlations of Business Cycle Components with the German and US Cycles, 1965:5-1979:3 and 1979:4-1997:6

	Pre-ERM		ERM Period	
	Germany	USA	Germany	USA
Canada	0.51	0.86	0.26	0.92
France	0.65	0.72	0.69	0.34
Italy	0.37	0.58	0.43	0.30
Netherlands	0.79	0.43	0.48	0.31
Austria	0.63	0.44	0.73	0.22
Belgium	0.69	0.63	0.56	0.18
Spain	0.48	0.64	0.38	0.17
Portugal	0.41	0.52	0.30	-0.18
UK	0.64	0.75	0.16	0.35

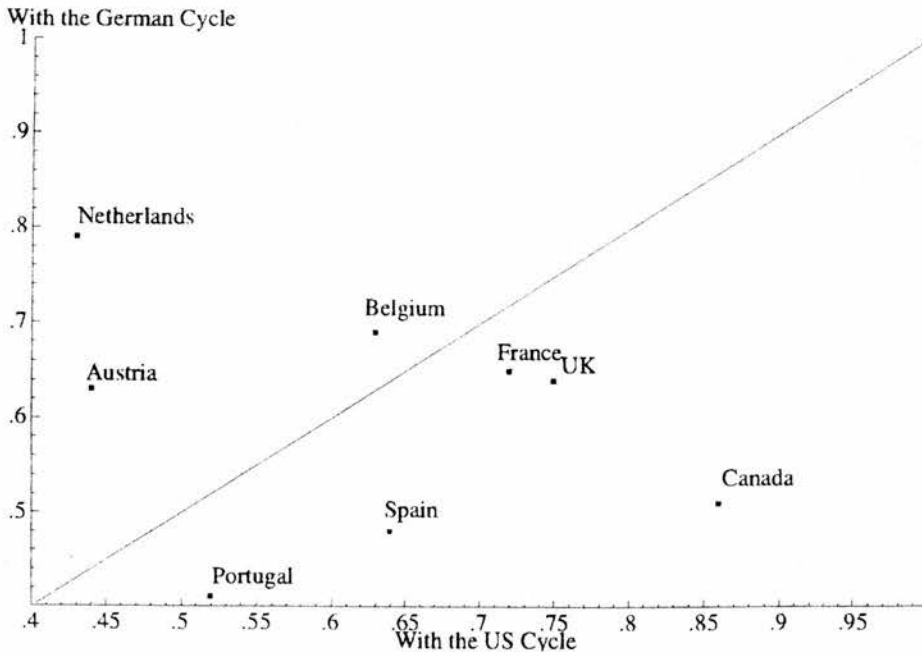
Source: Artis (1999, pp. 8)

¹⁹ Artis (1999, pp. 6-9)

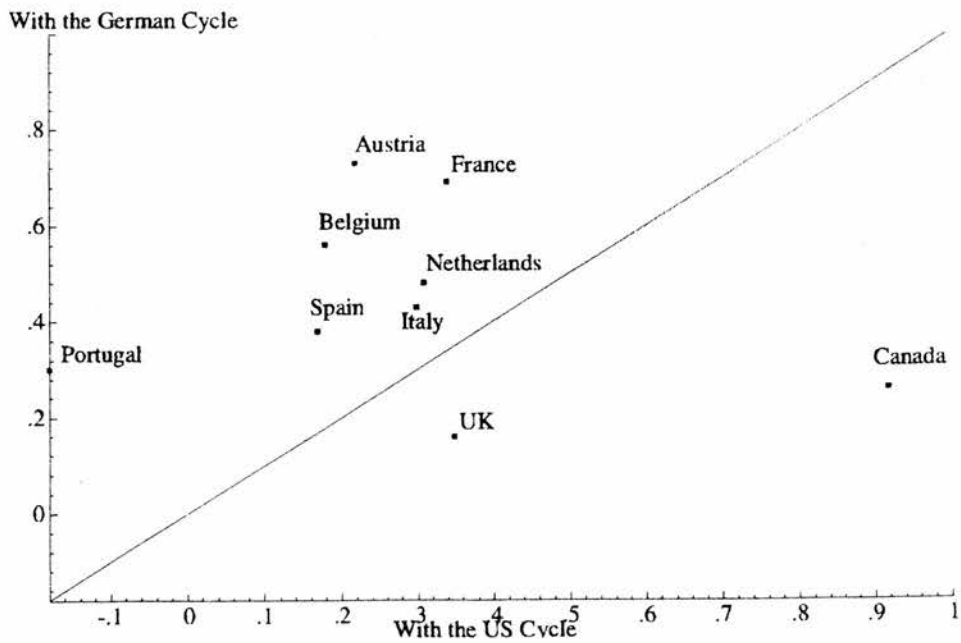
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Figure 4.2(a), (b) Correlations of Business Cycle Components

(a) 1965:5-1979:3



(b) 1979:4-1997:6



Source: Artis (1999, pp. 7,8)

Artis and Zhang attribute this partly to the non-participation of the United Kingdom in the ERM. Therefore, although this implies that joining EMU might cause significant costs to the country, it also suggests that if the country were to join, its business cycle might come to coincide with that of the rest of Europe.²⁰

Another technique employed by Bayoumi and Eichengreen, and Artis and Zhang is that of cluster analysis.^{21 22} In each case, Germany is regarded as the centre country; variables are measured with respect to it. The variables used are as follows; 1) the inflation rate differential, 2) the volatility of the real bilateral exchange rate, 3) the business cycle synchronisation, 4) the monetary policy synchronisation, 5) the labour market flexibility, 6) the bilateral trade intensity.²³ The cluster analysis used by Bayoumi and Eichengreen can be called hard clustering, where clusters of countries are formed progressively by minimising the distance between countries, and by repeating the minimisation after countries join to form a cluster. By following this procedure, the clusters of countries are obtained, in which the countries are like each other with respect to their relationship to Germany. The results obtained are shown in Table 4.3 and Figure 4.3.

²⁰ Cobham and Macmillan (1999)

²¹ Bayoumi and Eichengreen (1996)

²² Artis and Zhang (1998a, b)

²³ Artis (1999, pp. 9)

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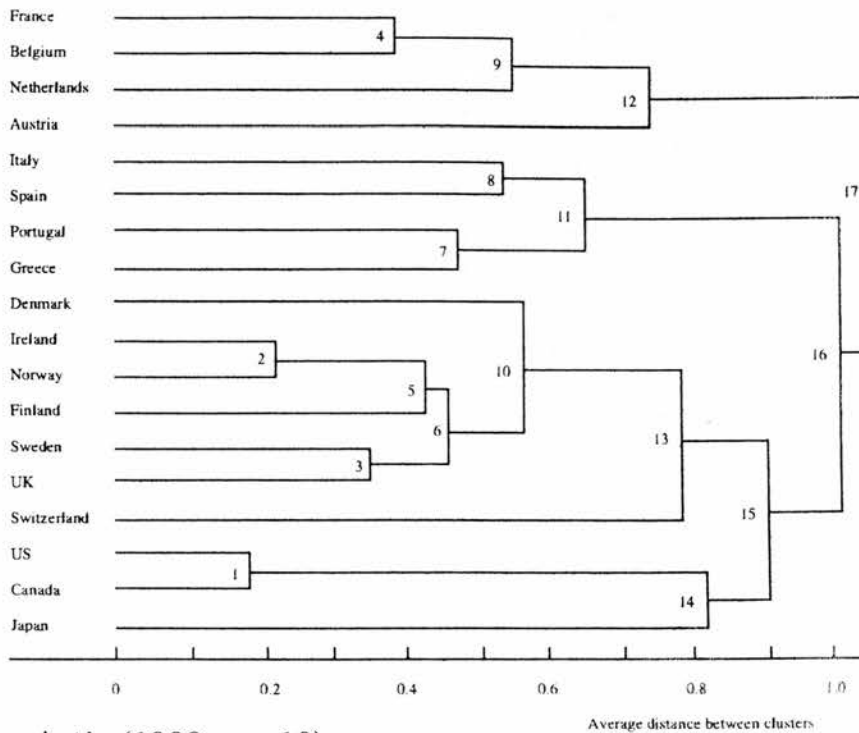
Table 4.3 Clusters Detected under Hard Clustering, 1979:4-1995: 10

1. Core Group:	(France, Netherlands, Belgium, Austria)	RMS: 0.56
2. Northern Periphery:	(Denmark, Ireland, Switzerland, Sweden, Norway, Finland, UK)	RMS: 0.81
3. Southern Periphery:	(Italy, Spain, Portugal, Greece)	RMS: 0.47
4. North America:	(USA, Canada)	RMS: 0.18
5. Japan:	(Japan)	

'RMS' is the root mean square measure of distance at which the clusters indicated are formed.

Source: Artis (1999, pp. 11)

Figure 4.3 Merging Process by Group Average Clustering



Source: Artis (1999, pp. 10)

This hard clustering cannot utilise all information obtained because of its method, every country is put into one of the clusters even if there are two possible choices. In contrast, soft or 'fuzzy' clustering employed by Artis

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and Zhang can overcome this problem; 'membership coefficients are calculated for each country showing how firmly it adheres to each of the clusters nominated.'²⁴ Table 4.4 shows the membership coefficients for the EU countries.

Table 4.4 Membership Coefficients Computed by Fuzzy Clustering, 1979: 4-1995: 10

	Group I (Core)	Group II (Northern)	Group III (Southern)
Belgium	87.9	6.1	6.0
Netherlands	87.3	7.0	5.7
Austria	66.7	16.2	17.1
France	62.7	19.9	17.4
Sweden	3.2	86.8	10.0
UK	5.3	82.9	11.8
Finland	6.1	82.5	11.4
Ireland	8.4	75.8	15.8
Denmark	22.8	58.7	18.5
Portugal	2.1	4.9	93.0
Greece	8.1	15.5	76.4
Italy	11.6	18.5	69.9
Spain	8.1	28.7	63.2

Source: Artis (1999, pp. 12)

The fuzzy clustering results are compatible with those of hard clustering. In both cases, the United Kingdom is outside of the core of EMU and in the 'Northern periphery' group, alongside the Scandinavian countries and Ireland.

All these preceding analyses suggest that the commitment to any kind of monetary integration in Europe, which could reduce the freedom of national monetary policy, would have caused certain costs to the United Kingdom, although, as was mentioned in Chapter 3, the significance of the

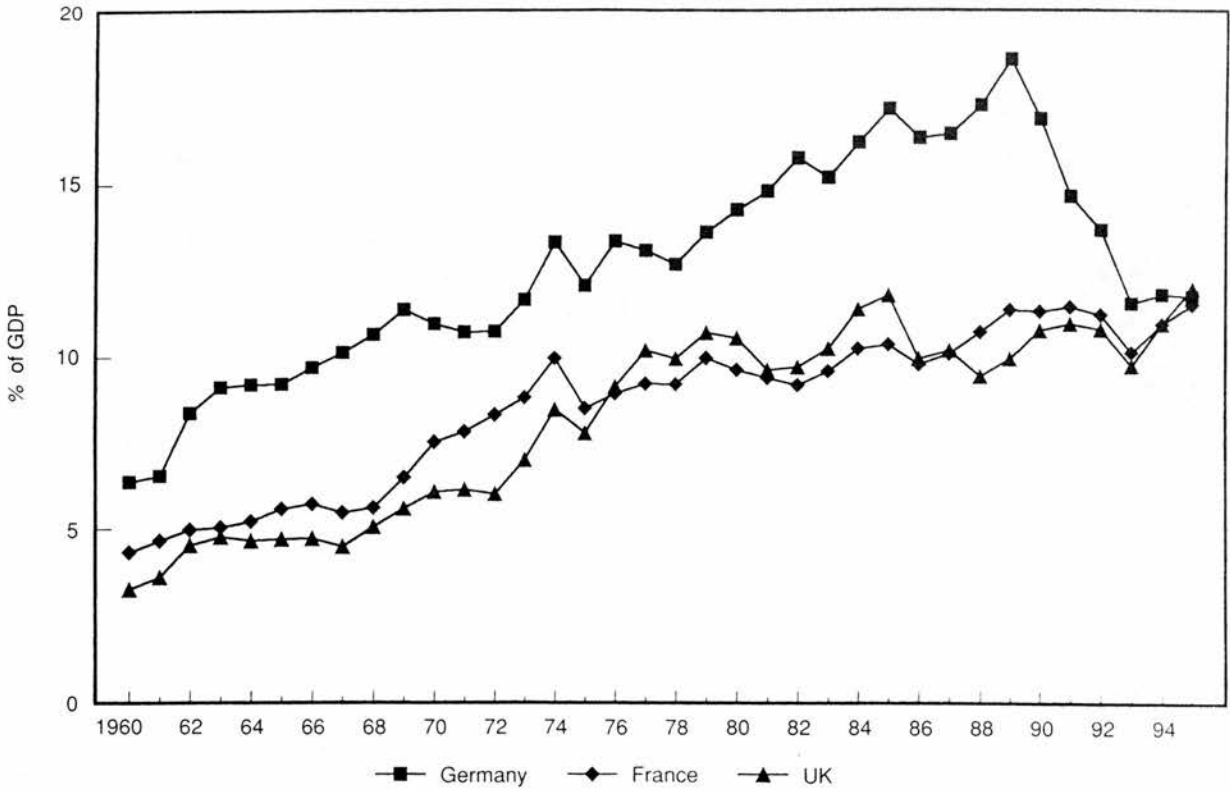
²⁴ Artis (1999, pp. 11)

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costs has been questioned in many ways, especially in the form of the critique of the effectiveness of the exchange rate change instrument to offset the impacts of asymmetric shocks. However, in order to consider the economic rationales of the strategies taken by the British governments, we need to consider whether these costs outweighed the economic benefits of these commitments.

The economic benefits of EMU for the United Kingdom are to be generated mainly by the elimination of exchange rate related transaction costs and the suppression of exchange rate uncertainty, and dynamic efficiency gains. Although the significance of the latter is difficult to quantify, proponents of British EMU membership believe that it will outweigh those from the other two. As was discussed in the previous chapter, the exchange rate related transaction costs savings would be no more than 1% of GDP, and can be harvested only after the introduction of a single currency. Therefore, the magnitude of these benefits will not be so significant, and should not have influenced the governments' strategies taken during the ERM period. The suppression of exchange rate uncertainty in the EU could have a positive impact on intra-Union trade. However, this trade has not been so important for the United Kingdom. Although intra-Union trade as a share of GDP has increased rather steadily in the country, it was less than that in Germany until the early 1990s (Figure 4.4). True, the trend of it has been similar to the one of France, which has been regarded as one of the driving forces behind the European Monetary Integration projects, together with Germany, however, as was mentioned in Chapter 3, the former's motives for the projects can be political rather than purely economic. By taking the sizes of the economies into account, Table 4.5 suggests that the benefits from EMU which will be realised in intra-Union trade will be in inverse proportion to the size of the economy.

Figure 4.4 Intra-EU Exports (Share of GDP at Market Prices)



Source: Gros and Thygesen (1998, p. 29)

Table 4.5 Intra-EU Exports and Imports of EU Countries (Share of GDP), 1995

	Exports	Imports
Ireland	45.2	28.9
Belgium	43.9	39.9
Netherlands	32.2	24.9
Sweden	20.5	17.4
Finland	18.0	13.9
Portugal	17.4	22.8
Austria	15.5	19.7
Denmark	15.4	15.7
UK	12.1	12.5
Italy	11.9	11.2
Spain	11.8	13.3
Germany	11.8	9.9
France	11.6	11.3
Greece	5.3	14.5

Source: De Grauwe (1997, p. 71)

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A conclusion can be drawn from this section: the economic benefits of monetary integration in Europe for the United Kingdom do not clearly outweigh the economic costs of it. In this sense, the strategies taken by the British governments can be justified in economic terms. However, it can also be argued that the country can join EMU at lower cost than expected, given that the structural differences between it and the other EU countries' economies can be attributed partly to the non-participation of it in the ERM, and that the importance of intra-EU trade for it is increasing. It is with these economic analyses in mind that we turn to an examination of the political factors which led the governments to their particular strategies.

4.3 The Conservative Governments and European Monetary Integration

It is widely argued that EMU is not a purely economic phenomenon which can be fully explained by economic rationales. Rather, the euro is as much a political as it is an economic project. Especially, as far as the United Kingdom is concerned, all decisions taken in the past have been influenced by political as well as economic considerations.²⁵ At the same time, some argue that the British attitude towards European monetary integration has represented a very particular sectional opinion rather than that of the whole country.²⁶ They tend to attribute the political outcomes partly to Mrs Thatcher's personal belief and hostility towards EU. For instance, Artis argues that the then British attitude represented only

²⁵ Curtice (1999)

²⁶ Artis (1990, p. 286)

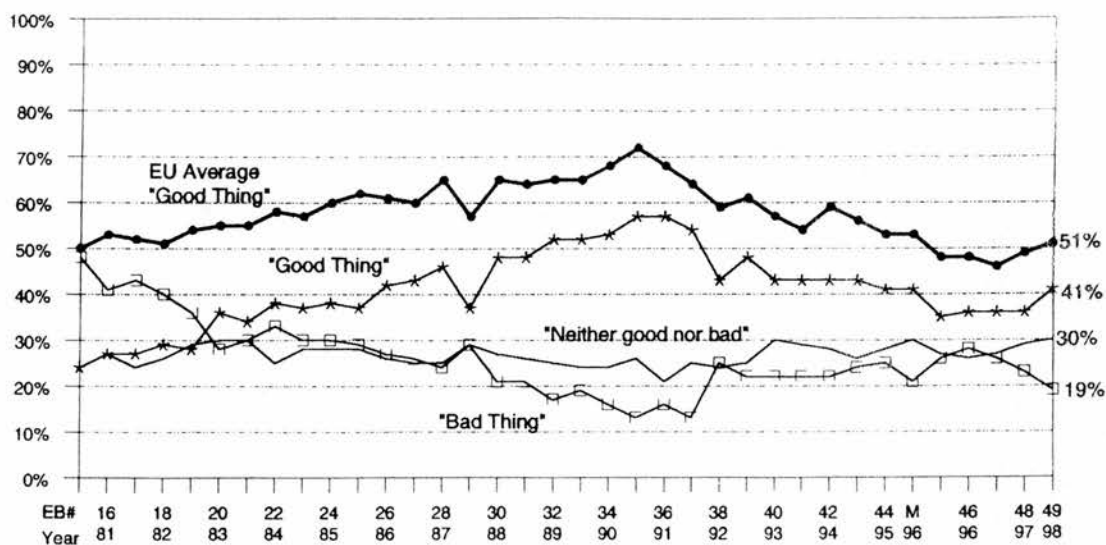
prime ministerial circles.²⁷ If this is true, to understand the politics of the Conservative governments' decisions related to European monetary integration, we have to have an overall picture of the opinions held by the public, the business sector and the politicians, with which the decisions can be compared, and consider the economic and political considerations about it in the Conservative governments. By so doing, the origin and meaning of the Conservative governments' strategy towards the EMS and EMU, 'when the time is ripe', will be revealed.

4.3.1 Public Opinion

Figure 4.5 illustrates the trend of British public opinion about British EU membership. From these data, it can be said that in the early 1980s when the first Thatcher administration operated its own monetary policy outside the ERM after having chosen not to join the system, the weight of public opinion against the EU exceeded that for the EU considerably, though the differential was decreasing sharply. Since then, support for the EU rose steadily, while opposition to it declined, leading to the former's dominant position in the second half of the 1980s onwards. The timing of the changeover coincides with the period when the Conservative government started to consider British EMS membership. The differential became largest in the early 1990s when the United Kingdom finally became a member of the EMS. However, after Black Wednesday, 16 September 1992, which forced the country to withdraw from the system, the trends of public opinion for and against the EU changed resulting in a smaller differential.

²⁷Artis (1999), see also Stephens (1996).

Figure 4.5 Support for British EU Membership, 1981-1998



Source: Curtice (1999)

As far as the euro is concerned, public opinion in the United Kingdom has been less sympathetic. SCPR's British Social Attitudes series, conducted in the spring of each year, provides a regular annual measure of public opinion about the euro since 1992. It has asked its respondents 'whether they favoured the introduction of the single currency either in replacement of or alongside the pound, or whether instead they favoured keeping the pound as the only currency in circulation in Britain.' The results are shown in Table 4.6.²⁸ It is apparent that there has been clear and consistent hostility towards the euro in Britain. More than half of respondents have always chosen 'keep the pound as the only currency for Britain', resulting in margins of around two to one against the replacement

²⁸ Curtice (1999)

of the pound by the euro.

Table 4.6 Public Attitudes towards a Single Currency

Here are three statements about the future of the pound in the European Union. Which comes closest to your view?

	(%)						
	1992	1993	1994	1995	1996	1997	1998
*Replace the pound by a single currency	21	14	17	18	13	17	18
*Use both the pound and a new European currency	21	17	18	18	16	17	22
*Keep the pound as the only currency for Britain	53	66	62	62	68	61	54

Source: Curtice (1999)

4.3.2 Business Opinion

There is another sector whose opinion can have a strong influence on governmental policies. That is the business sector. Its opinion about European monetary integration has been much more sympathetic than that of the general public. This is because of its expectation of economic benefits from integration, especially the benefits from the Single Market and those from exchange rate stability. It is reported that, today, the main employers' organisation claims that a large majority of businesses favour EMU entry, with anti-EMU pressure groups claiming totally opposite views.²⁹ It seems to be reasonable to assume that the larger, and more export-oriented businesses are, the more they tend to be in favour of

²⁹ Cobham and Macmillan (1999)

EMU. Given the fact that in general the larger businesses are, the more influential they are on governmental policies, the actual decisions taken by the Conservative governments on British EMS/EMU memberships cannot be fully explained by the so-called public choice approaches which attribute the political outcomes to the particular preferences of the influential sectors in the society.³⁰

In this connection, the City of London's interests can be one of the explaining factors. Its interests have traditionally favoured a minimum of regulation, therefore, the fear that EMU would impose such regulation can be a motive for opposing British EMU membership.³¹ Unfortunately, how strong its influence has been is difficult, if not impossible, to quantify, because the influence must have been exercised behind closed doors. However, the fact that the New Labour government's five economic tests include a reference to the City's interests may suggest that its influence has had a significant impact on the governments' policies, at least as far as EMU is concerned.

4.3.3 Opinion in the Parliamentary Conservative Party

The Conservative party has never been an advocate of European monetary integration, with a very few exceptions. Edward Heath was one of the exceptions in supporting the 'snake' in the early 1970s and taking the country into the then Common Market in 1973. However, much of the pro-Europeanism in the party that had brought these results had been based on enthusiasm for the expected economic benefits of the integration rather than a preference for closer political integration. On the other hand, at the heart of the party's hostility towards the EU has been a fear of the loss of

³⁰ Olson (1965)

³¹ Artis (1999)

national sovereignty. For instance, a content analysis of about 300 speeches taken from 10 days of debate in the House of Commons in July and October 1971 illustrates the perceptions and motives of the members of the party who debated British EC membership in the early 1970s (Table 4.7).³² Therefore, when European political integration became an integral part of the Brussels agenda on European monetary integration, Euro-scepticism became the major issue which induced a serious split within the party.

Table 4.7 % of Those in Each Category Mentioning Following Themes over 10 Days' Debate in House of Commons, July and October, 1971

1. Conservative - Pros	
Economic Growth	48.1
Avoiding isolation in world of blocs	30.7
Better to change EC from within	28.8
Commonwealth ties would be preserved	27.9
No loss of sovereignty on entry	26.9
Greater British influence in world	26.0
Strengthening European influence/defence	15.4
2. Conservative - Antis	
Loss of sovereignty	65.8
Importance of global free trade	23.7
Damage to Commonwealth	21.0

Source: Lord (1992, pp. 421)

The internal disputes in the Conservative party over policy towards Europe became most intense in the second half of the 1980s with particular ferocity in 1989-1990. For this reason, the succeeding discussion will focus

³² Lord (1992, pp. 420-1)

on the Thatcher administrations. Between 1986 and 1990, the number of resignations from the Thatcher cabinet rose steeply, with the majority of these associated with economic issues.³³ In 1989, the country lost the longest serving Chancellor of the Exchequer of the century (Lawson) and economic adviser to the Prime Minister (Walters). In 1990, trade and industry secretary (Ridley), the deputy prime minister (Howe) and prime minister and first lord of the Treasury (Thatcher) resigned. These exposed the divisions within the Conservative party to the general public, leading to the degradation of Thatcher's popularity in the country as well as her leadership within the party. This, in turn, finally cost her her premiership.

Although John Major managed to unite his party during the general election of 1992, and ratify the Maastricht Treaty, it is argued that the divisions over Europe within both cabinet and party continued. Even during the general election of 1997, around 190 Conservative candidates who had officially expressed their opposition to British EMU membership were identified, compared with only 57 who explicitly supported their government's strategy of 'wait and see'.³⁴

4.3.4 The Economic and Political Considerations within the Thatcher's Governments

So far, we have found that none of the opinions held by the public, the business sector and the politicians unequivocally supported British entry to the ERM and EMU. This may coincide with the economic cost-benefit analysis in the previous section; it has been difficult to be sure that British entry would be economically beneficial. Perhaps because of these, the Conservative party has never been an advocate of European monetary

³³ Oliver (1997, p. 108)

³⁴ Curtice (1999)

integration. However, the Conservative governments never ruled out the option of joining these projects later if they turned out to be in the line of British interests, too, by adopting the more sophisticated expression of the 'wait-and-see' strategy, 'when the time is ripe'. Was this merely a political insurance against these unexpected events, or were there further economic and/or political considerations behind it?

It is widely maintained that the economic considerations about British membership within the party, especially the Thatcher cabinets, changed during the course of the first half of the 1980s, with the decisive exception of Thatcher herself.³⁵ There may be no doubt about the fact that when the first Thatcher administration took office in 1979, the party believed that the ERM was not in the British interest in any respect, partly because the success of the system was not expected among policymakers, and even economists,³⁶ and partly because the fixed-exchange rate system did not coincide with the incoming government's determination to defeat inflation by imposing strict limits on the growth of the money supply. On the other hand, the origin of the 'when the time is ripe' strategy can be traced back to the party's manifesto for the European election in 1979, where it was expressed that 'we shall look for ways in which Britain can take her rightful place within it [the ERM].'³⁷ It follows that the strategy should have been constructed about as a form of the political insurance.

Later, economic discussion on the issue within the Conservative governments became lively, as the workability of and benefit from the system and the defects of their own approach to disinflation became clear. The discussion was highlighted by the famous dispute between the then Prime Minister, Margaret Thatcher, and her Chancellor of the Exchequer,

³⁵ This point was put forward by D. Cobham, in the discussion on this paper with this author.

³⁶ See Zis (1999).

³⁷ Conservative Party (1979)

Nigel Lawson. While she has never changed her belief that the system would not be in the British interest in economic terms as well as political ones, he came to prefer it, as the pound sterling fell against the US dollar (and DM). During the course of the first half of 1985, he tried to convince the Prime Minister and his other colleagues. Meanwhile, the British currency was reducing its value against the other major currencies, causing a sharp decline in the foreign exchange reserves, which could restrict the intervention by the Bank of England. By September 1985, the support to British entry from the Bank of England and the Treasury had become clear.³⁸

The first, and last, serious discussion of the Thatcher cabinet as to whether the country should join the ERM took place in November 1985.³⁹ By then, the time seemed to be 'ripe' for British entry: the pound sterling had risen against the US dollar and the Deutschemark, from US\$1.11 to US\$1.38, and from DM3.50 to DM3.92, respectively, and interest rates had fallen from 14% to 11.5%. The discussion between the Prime Minister and the Chancellor of the Exchequer was attended by six other members; Geoffrey Howe; Lord Whitelaw, the home secretary and deputy prime minister; Leon Brittan, the trade and industry secretary; John Biffen, the leader of the House of Commons; Norman Tebbit, the party chairman; and John Wakeham, the chief whip. Lawson managed to get strong support from his colleagues except Biffen, a convinced monetarist who believed in free-floating exchange rates. However, the Prime Minister was not convinced. 'She had resolved even before Lawson had spoken that she would not consent.'⁴⁰ The exchanges between her and Whitelaw after a vote on whether to enter the ERM are particularly revealing:

³⁸ Oliver (1997, p. 101)

³⁹ Stephens (1996, p. 45)

⁴⁰ Stephens (1996, p. 50)

Whitelaw: All seven of your advisers have voted 'aye'.

Thatcher: Yes. Ayes seven, noes one, the noes have it.⁴¹

It is pointed out that this would be the only occasion during her premiership when she would stand alone against explicit objections from her most senior ministers on such an important issue.⁴² The basis of her determination must not have been solely economic considerations because almost all her influential colleagues and the government officials, who shared the same scepticism about British membership, had been convinced by the same economic considerations. They could not be systematically deceived. It is pointed out that she was surrounded by her anti-fixed-exchange-rates monetarists, among whom Walters and Brian Griffiths (the head of the No. 10 policy unit) were most influential.⁴³ Especially from the time when she discovered Lawson had been shadowing the Deutschemark, she began to rely on Walters when she sought economic advice.⁴⁴

However, this account can explain only the second half of the story of Thatcher's opposition to the ERM, because Walters and Griffiths were chosen by her, not inherited by her from her predecessor. In other words, it may be reasonable to suppose that they were there because they could provide the economic rationales to the particular economic policies which coincided with her political belief, otherwise they would have lost their positions sooner or later. Suppose these were the truth, what could be the basis of her determination? In this connection, her autobiography is very suggestive. From it, two major factors can be identified: firstly, as a self-trained devout monetarist, she sincerely believed in free trade with floating exchange rates, secondly, she felt that the membership would lead to the

⁴¹ Keegan (1989, p. 181)

⁴² Stephens (1996, p.47)

⁴³ Stephens (1996, p. 47)

⁴⁴ Oliver (1997, p. 125)

loss of British sovereignty to Europe.⁴⁵

One commentator argues that the practical and economic objections were in one sense a cover for Thatcher's instincts which were against the ERM. Her fundamental objection was that 'she could not understand why the Bundesbank should be allowed to determine British monetary policy unless [the British authorities] had no faith in [their] own ability to control inflation.'⁴⁶ In this sense, for her, joining must have meant a British defeat at the hand of Continental Europe, which was the last thing she could afford in her premiership. She took office to revive the country and to restore its glory, after all.

Despite Thatcher's underlying belief, there is no evidence that the topic was discussed within her governments any further. This was because for those who were eager to join the ERM, the issue was a purely economic one. Among them the economic case for the ERM was obvious. The government's anti-inflation strategy had been destroyed during the course of the late 1980s. An alternative anchor for policy which could restore its credibility was needed, and they knew that the ERM could be the only choice.⁴⁷ As a result, she and they never argued on the same wavelength. For instance, while, for the former, the strategy of 'when the time is ripe' could mean not only the timing of joining, but also whether the United Kingdom should join at all, for the latter, it meant only the timing of joining. Therefore, it can be said that this formulation was political rhetoric which could cover the fundamental difference between the two views better than anything else.

In conclusion, although the opinions held by the public, the business sector and the politicians supported not joining the ERM and the economic

⁴⁵ Thatcher (1993)

⁴⁶ Stephens (1996, p. 50)

⁴⁷ Stephens (1996, p. 151)

considerations about the costs and benefits of it were not clearcut, the strong objection to it maintained by Thatcher did not come from these considerations but from her political instincts which were against joining. It is not unreasonable to assume that she knew how economically beneficial British ERM membership would be. However, the real problem was there had not been a possibility that the economic considerations would outweigh the political belief in her mind. In this sense, those who tried to persuade her had failed to find an appropriate strategy for the debate on the issue.

4.4 The New Labour Government and EMU

When the New Labour government took office in May 1997, the situation of the British economy in the EU had not changed so much; i.e. it still could not be classified as a member of the 'core' group of the EU economy by any optimum currency areas approach index (see section 4.2). On the other hand, it is widely maintained that the incoming government had changed the British attitude towards EMU fundamentally from a negative 'wait-and-see' strategy to a positive 'Getting Europe to Work' initiative. So, the question which should be addressed is what were the considerations which made the Labour party decide to seek EMU membership. To this end, firstly, the actual policies adopted by the Labour government will be examined, then the political considerations which underlie them will be discussed, and finally the strategy of the Labour government will be evaluated.

4.4.1 The Operational Independence of the Bank of England

The first (potential) measure of progress towards EMU membership undertaken by the New Labour government was the announcement of its

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intention to amend the Bank of England Act of 1946 to give the bank operational control of interest rates (operational independence).⁴⁸ Since 1992 when the United Kingdom withdrew from the ERM, the Bank of England had been given a significant power of giving formal advice on interest rates to the Chancellor of the Exchequer, who announced an inflation target and decided interest rates. After the government's new measures, the Monetary Policy Committee of the bank became responsible for interest rate decisions with reference to the inflation target set by the Chancellor of the Exchequer as before. This measure could be interpreted in two opposite ways; on the one hand, it could be the first step towards full central bank independence as required by the Maastricht Treaty, on the other hand, it could be evidence of the government's not having any intention to join EMU in the near future, because it clearly fell short of the requirement. For instance, if the United Kingdom wanted to be in EMU's first wave, it would have to amend the act again to realise full central bank independence. However, in the light of the following initiative of the 'five economic tests' announced by the government, the former interpretation may be closer to the truth; i.e. it did not consider membership in the very short term, say, at the start of EMU in 1999, and it chose a pragmatic strategy for full central bank independence, which can be called a 'gradual transformation'. In addition, it is argued that this change of the monetary regime has been leading the British economy closer cyclically to the continental economies, although this may not be because the Bank of England has been trying to facilitate the British entry to EMU but because of its effort to control inflation.⁴⁹ Whatever its intention was, thanks to this new monetary regime, the British business cycle may have moved, and will move, much closer to those of other member countries, resulting in a significant reduction in the costs of joining EMU, as predicted by the

⁴⁸ Pennant-Rea, *et. al.* (1997, p. 44)

⁴⁹ Cobham and Macmillan (1999)

optimum currency areas approach.

4.4.2 Five Economic Tests

In July 1997, the Chancellor of the Exchequer announced five economic tests that would have to be met before the United Kingdom would join EMU. The tests are as follows:⁵⁰

1. Are business cycles and economic structures compatible so that we and others could live comfortably with euro interest rates on a permanent basis?
2. If problems emerge is there sufficient flexibility to deal with them?
3. Would joining EMU create better conditions for firms making long-term decisions to invest in Britain?
4. What impact would entry into EMU have on the competitive position of the UK's financial services industry, particularly the City's wholesale markets?
5. In summary, will joining EMU promote higher growth, stability and a lasting increase in jobs?

The first two tests are clearly related to the optimum currency areas approach. The third and fifth tests seem to be to do with it, too, although, as Artis argues,⁵¹ there are no economic frameworks in which they can be answered separately from the first two tests. The fourth test is different from the other ones because it refers to the interest of a particular industry. The Chancellor of the Exchequer reasoned as follows. The financial services industry will be affected by EMU most profoundly and most

⁵⁰ HM Treasury (1997)

⁵¹ Artis (1999)

immediately, and it is the area where the country earns foreign currency (£ 23 billion in 1996) and has a competitive edge. So, it is important not to damage its competitiveness when the country joins EMU.⁵² Since, even so, the fact that only one sector of the whole economy is given such a sympathetic consideration can be highly controversial in political terms, an economist has argued that the test is the evidence that the City has been a determining factor in the British attitudes to EMU.⁵³

Except for the first test, which can be analysed objectively to a certain extent by observing business cycles and/or economic structures, the tests leave huge scope to the political decisions of the government by referring to unquantifiable criteria. For instance, in October 1997, the Chancellor of the Exchequer made a statement on EMU in the House of Commons, which made explicit the government's intention in principle to join it, but, at the same time, ruled out the possibility of British entry in 1999. At the same time, he released the Treasury's 1997 assessment of the tests which could not be regarded as objective in any sense. It pointed out that a serious divergence of business cycles existed. Moreover, as far as the fourth and fifth tests were concerned, there was no data at all. Still the Treasury's report came to the overall conclusion that the country 'needs both a period for preparation and a settled period of sustainable convergence.'⁵⁴ Not surprisingly, this conclusion was perfectly compatible with the political decision of the Labour government of preferring EMU membership in principle but not joining it at the start.

The tests have been strongly criticised because of the economically ambiguous nature of them described above.⁵⁵ As a result, it has been widely said that they were deliberately designed in such a broad and vague

⁵² HM Treasury (1997)

⁵³ Artis (1999)

⁵⁴ Brown (1997)

⁵⁵ Cobham and Macmillan (1999)

manner that when the day of the political decision to join EMU comes, the proponents of it will be able to declare that the conditions required by the tests have been fulfilled, while the opponents insist on the opposite.⁵⁶ The following quotation of one senior Treasury official fits into this argument well; 'the tests are there first to make membership possible and only second to make it plausible.'⁵⁷ In this connection, one commentator suggests that the ambiguous and relatively negative assesment of the current situation of the British economy can be a tactical consideration of the Labour government which will increase reliability of the future announcement of the fulfillment of the tests.⁵⁸

4.4.3 The Political Considerations within the Labour Government

If these economic rationalisations were driven by political considerations, what exactly were the latter? In this connection, the examination of the state of opinion in the Parliamentary Labour party may be suggestive. Although Labour has been regarded as less antagonistic to EMU than the Conservatives, consistently around one-fifth of the Labour MPs in the last parliament gave a sceptical response to questions about EMU: 24% said that it was not realisable, 21% agreed that the establishment of a single EU currency would signal the end of the United Kingdom as a sovereign nation, 16% said that EMU was not desirable, and no less than 42% agreed that Britain should never permit its monetary policy to be determined by an independent European Central Bank. It is

⁵⁶ Cobham and Macmillan (1999)

⁵⁷ Unnamed, quoted in Stephens (1999)

⁵⁸ This point was put forwards by D. Dobham in the discussion on this paper with this author.

also reported that while 76% of those who were elected in the general election of 1997 as Labour MPs agreed that the government should move towards EMU, 17% disagreed.⁵⁹ Together with the disputes in the Conservative party over the EMS and EMU, which were described in the previous section, this illustrates the view that 'Europe has proved capable of inducing more splits within Britain's two main political parties than any other issue.'⁶⁰

In the light of this state of opinion in the Parliamentary Labour party, it can be assumed that the initiatives had come from the leadership of the party. In this connection, it is pointed out that Tony Blair has set as one of the highest priorities of his premiership the need to restore British influence on European politics, and that he believes that this is impossible if the country remains outside of EMU. His reasoning can be summarised as follows: the further decline of British influence on European politics might start with exclusion from a new G3 meeting to discuss the world economy and macroeconomic policies, it would gradually extend to foreign policy and defence, as a result, over time its influence would be weaker across the range of European policies.⁶¹ The same concern is presented by Buiter that 'until the UK is a member of EMU, it will have generalised second fiddle status in the political concert of Europe. This loss of influence will extend well beyond the economic sphere.'⁶²

It follows that if the British political classes and general public accept such decline and second class status, the alternative strategy, the so-called Canada option, becomes a feasible option for the country. In this option, the country can enjoy a degree of independence in monetary policy, while being obliged often to accept the rules of EMU without having the

⁵⁹ Curtice (1999)

⁶⁰ Gamble (1998)

⁶¹ Stephens (1999)

⁶² Buiter (1998)

opportunity to intervene.⁶³ However, this scenario is not likely to happen, because the political elites of the country would find it impossible to accept. For them, 'the opportunity to dance on the world stage is still one of the more compelling motives for a career in politics.'⁶⁴

So, what is the relationship between these political considerations and the economic rationales for EMU membership in the Labour government? Since the official economic assessments or statements of the costs and benefits of membership published by the government are deeply based on the official tactical stance of it revealed in the assessment of the five economic tests mentioned above, they can be not only conclusive but also suggestive. As was put forward in Section 2.2, the positive political considerations of membership can outweigh the negative economic evaluation. However, as is obvious, this does not mean that if there are strong political motives to join EMU, the economic evaluation is necessarily negative. In this sense, it is reasonable to assume that Mr Blair and the other leaders of the Labour party believe that membership will be beneficial for the country in purely economic terms, too. If this has been the case, their problem has been the fact that they, or anyone, cannot prove their belief in the net economic gains. This can be restricting and may well influenced the strategy of the Labour government.

4.4.4 The Strategy of the Labour Government

Given the fact that the question of whether the United Kingdom should join EMU is not only an economic but also a political issue, the strategy of focusing on the economic cost-benefit arguments, chosen by Mr Blair, with the five economic tests as the yardsticks may look rather

⁶³ Artis (1999)

⁶⁴ Stephens (1999)

strange. According to the statements made by the government,⁶⁵ although there are some constitutional issues, a single currency is, in principle, an issue about the economic interests of the country. This contradiction between the Labour government's motives and strategy made one commentator conclude that Mr Blair chose this particular strategy because he believes that to limit the arguments within economic cost-benefit evaluation as much as he can will make it easier to win the public support in the referendum which will be held before the decision to enter by the government. He also argues that the government's strategy has been to encourage an air of inevitability about eventual participation.⁶⁶

The political calculation of the Labour government, which led it to choose this particular strategy, may be twofold. The first consideration is that although public opinion has been consistently against the euro, the opinion may not be as hard as it appears at first sight. For instance, an opinion poll reported that more than 80% of its respondents believed in September 1998 that the country will have joined the single currency in ten years' time. There has certainly been a kind of fatalism, an air of inevitability about British participation. In addition, there is evidence that this opposition is based on a very low level of understanding of the subject of its objection.⁶⁷ Therefore, it appears to be possible to change the opinion by making knowledge about the euro more widespread. The second consideration is that the Conservatives, on the other hand, will try to frame the arguments in political rather than economic terms and gain from that,⁶⁸ because by doing so, they can appeal to British nationalism by claiming that the EMU membership is the beginning of the end of the country as a sovereign state. Although this (possible) Conservatives'

⁶⁵ For instance, Brown (1997)

⁶⁶ Stephens (1999)

⁶⁷ Curtice (1999)

⁶⁸ Stephens (1999)

strategy ignores the long-term consequences of the country's losing influence in the international arena, it could be enough to keep the majority of voters to the 'no' side in the future referendum. It follows that the optimal strategy for the Labour government should have been, and the strategy actually chosen by it was, to frame the debate in economic terms by emphasising the economic benefits, while publicising information about the euro to make the British people understand it better and to encourage the air of inevitability.⁶⁹

From the preceding argument, it can be argued that since both economic and political rationales of the Labour government, which were the net economic gains and the maintenance of British influence in the international arena through joining EMU, could not be proved without any reasonable objections, the Labour government had to choose the battlefield based on a process of elimination, i.e. where there is no strong contender. In the political debate on EMU, it had to defeat British nationalism with the declining influence argument, and, as was pointed out, there had been a possibility of losing a close game. On the other hand, in the economic field, the opposition party does not have any weapons except the same analysis as the government's own, from which it can derive an opposite conclusion. Given that its calculation of public opinion is correct, and it can do all the preparations necessary as the government party, to win a 'yes' vote in the referendum cannot be so difficult, although perhaps the victory won't be an overwhelming one. This reasoning can also explain the reason why the Labour government had to prepare the vague five economic tests as the rationale of its decision to join EMU: the more precise its rationalisation becomes, the more the opposition party has chances to get points in a political mud-slinging contest by providing counter-arguments based on quantitative analyses.

⁶⁹ Stephens (1999)

4.5 Concluding Remarks of the Chapter

When we compare the strategies of the Conservatives and those of New Labour, it can be concluded that although the economic considerations have played significant roles in the decisions of the real policies on European monetary integration in both governments, they have never overridden the political motives in this context. While the Conservative governments had not tried to encourage, or rather had tried to avoid, the economic arguments due to their strong political hostility to continental Europe, the New Labour government is exploiting the arguments for its real economic motives, as well as for its political objectives. In this sense, European monetary integration has been and perhaps will be essentially and ultimately a political rather than an economic issue for the United Kingdom. It can also be concluded that if the Conservative governments were and are to be blamed for not telling their people half of the whole story, the economic costs and benefits, the current Labour government should be blamed for exactly the same reason, not letting its people pay their attention to the political costs and benefits. What has truly been needed must be to let the people know 'the trade-off between sovereignty and political influence or economic prosperity',⁷⁰ and make informed decisions on the issue. In order to realise this environment, it must be necessary to encourage multi-disciplinary debates on the issue, because this is the only way to have a whole, (relatively) objective, picture of the issue. Otherwise, the government and its opposition party will be able to continue to exploit the disciplines which are potentially supportive to their real interests at the expense of the British people and businesses.

⁷⁰ Stephens (1999)

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The purpose of this paper was to examine how economic theories and considerations and economists themselves have influenced the political outcomes in the context of European monetary integration, in order to find a clue to answer the question of what is the proper role of an economist in a policy making process. Although answers to this ultimate question cannot be conclusive in any case, it might have been helpful to understand how these economic factors have played their roles in political debates by examining an actual case, the United Kingdom and European monetary integration. The findings make us identify the dynamics of the exploitations of economics by politics, which can undermine the reputation of economics as an objective discipline. The economic problem which the economists and politicians involved in the debate on British ERM/EMU membership have faced, has been the fact that there is no overarching framework by which the costs and benefits of European monetary union can be evaluated, hence, no economic argument can be decisive. The lack of a framework does not necessarily mean that the economic theories in this area have not matured. A number of economists have dedicated their academic lives to this topic since Mundell first put forward the theory of optimum currency areas in 1961. The lack has been rather due to the fundamental differences in the natures of costs and benefits which a monetary union would generate.

The pessimistic conclusion about forming a monetary union at low cost

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put forward by the traditional optimum currency area approach has been significantly weakened but not completely reversed by the proponents of monetary integration. They have not only identified the conditions under which the cost would decrease or even disappear, but also questioned the basic assumption of the theory, the availability and costlessness of the exchange rate instrument as a policy tool to offset the impact of asymmetric economic disturbances, and they have managed to invalidate at least a part of the theory. Moreover, the proponents have advanced analyses on the benefits of a monetary union, which cover a whole area of economics, among which the dynamic efficiency gains suggested by the neo-classical growth theory are potentially the most important in magnitude, although the most difficult to predict quantitatively. When we come to attempt to compare the costs and benefits of a monetary union, the fundamental differences in the nature of each cost and benefit become our major obstacle. There is no overarching framework by which they can be compared in a systematic way. It follows that to establish a general theory of a monetary union can be one of the possibility of a breakthrough in this area for the economists who participate in the debate on this topic. Otherwise, the economic theory would not be an overwhelming factor in the debate on 'to join, or not join a monetary union'.

The history of European monetary integration was an uphill quest for more stable exchange rates within Europe until the launch of the EMU project. However, during the period, the 'unexpected' success of the EMS gave the member countries confidence in fixed exchange rate systems and they were disciplined through their participation in the project, though these factors did not apply in the case of the United Kingdom. These factor became the bases of the next step towards EMU. The Delors Report of 1989 successfully visualised a road to a complete monetary union in Europe by a step-by-step approach. This, together with the economic analyses on the benefits from the union and the Single Market Programme,

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which required at least stable exchange rates, managed to revive the enthusiasm for the union.

However, throughout the history, there have been political initiatives which brought Europe to the next stage, among which the coordinated proposal to found the EMS by the German Federal Chancellor, Helmut Schmidt, and the President of France, Valery Giscard d'Estaing, is the most well-known. On the other hand, the economic considerations have never headed the cast themselves or upstaged the political actors. In other words, the economic considerations have never been so overwhelming that they did not need political initiatives as a catalyst to bring about further monetary integration.

Once we have chosen an actual monetary union as a subject of the cost-benefit analysis, some of the costs and benefits become easier to quantify, although they are still not precise enough to allow us to draw any final conclusions of the analysis. In the case of European monetary union, the actual costs of forming a monetary union can be significantly lower than those expected on the basis of the traditional theory of optimum currency areas. In addition, it will lead to significant gains, too. Therefore, it is most probable that the monetary union will bring about net gains for the member countries. However, it has also been found that the EU as a whole does not constitute an optimum currency area; there has been a core group, which consists of France, Germany, Austria and the Benelux countries, and (a) periphery group(s), which consist(s) of the rest of the EU countries. Taking this into account, it can still be maintained that the monetary union will be beneficial in net terms for almost all countries, since even when the costs of it for a country are significantly high, and the conventional benefits can be lower than those, it is possible to identify special benefits from it for the country, which can outweigh the differential between the costs and the conventional benefits, such as the benefit from credibility borrowing for Greece.

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With these economic considerations, the policymakers in Europe may have decided to move towards EMU. However, the particular strategy chosen, known as the 'Maastricht strategy', contains some fundamental dangers and contradictions in economic terms, such as the risk from gradual convergence, and negative synergistic effects between the inflation and budgetary convergence criteria, and between the interest rate and budgetary ones. Moreover, whether the European Central Bank will manage to fulfil its primary objective of price stability depends on the reputation it will acquire during its first few years of operation, which is unclear, although the Stability Pacts will provide a favourable environment in this respect. It has been found that the contradictions in the strategy originated in the lack of incentives to join EMU for the low-inflation countries (more precisely, Germany). In this sense, the strategy chosen to realise the monetary union was sub-optimal in economic terms but coherent in the wider context.

Contrary to the history of monetary integration in Europe as a whole, that in the United Kingdom has been a series of confrontations with continental Europe. It coincides with the curious cycle of British European policy as a whole, identified by Artis, who in turn relies on Young (1998), as follows,¹

'New projects are viewed at first with something approaching disdain, as unworkable. But, if workable, they are seen as against the British interest and hence in the next phase there is an attempt to sabotage the initiative from within. Then, when the project finally comes to fruition, the UK first stands aside and only later participates.'

While the Conservative governments had tried to avoid the economic

¹ Artis (1999)

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arguments for monetary union due to their strong political hostility to continental Europe, the New Labour government is exploiting the arguments for its real economic motives and political objectives. It has been found that these strategies have been possible precisely because the economic analyses of the monetary union have never been conclusive. If the analyses have ever been so, and supported joining the monetary union, the Conservative government would not have managed to hide the fact due to their opposition, hence, the debate would have become the comparison between the economic benefits and the political costs. Similarly, the New Labour government would not have had to invent the economically vague five economic tests, or even would have moved towards an overall politico-economic debate on Europe.

It may be not so unreasonable to generalise the dynamics between economics and real politics from this, by claiming that when economic arguments are not conclusive, they are exposing themselves to the danger of political exploitation. In this connection, it has been argued in this paper that to avoid the danger, it is essential to encourage multi-disciplinary debates which make it possible to identify all the costs and benefits the topic involves, not only in economic terms but also in political terms. As far as EMU is concerned, what is needed is to let the people know the trade-off between the political influence and economic prosperity, and the conventional British identity. In this sense, any attempts by economists and political scientists to bring these two disciplines together are worth doing and should be encouraged. By arguing this, it is not suggested that economists are to be released from the burden of establishing a general theory of monetary union, which would provide overarching framework for the cost-benefit analysis of it. What has been argued in this paper reminds us of the following famous complaint from politicians, 'I'd like to have an economic adviser who has only one hand, because, if he/she has only one hand, he/she won't be able to use such a vexing phrase "on the one

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hand, ... but, on the other hand, ... !”² Economists always have difficulty discussing issues with politicians who demand clearcut answers, and the history of the United Kingdom and European monetary integration is a good example of this.

² Unknown

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