The Political Economy of European Monetary Union

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Department of Economics

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1 Introduction

Europe is on the brink of a great economic and political experiment. Next year, European leaders are expected to choose the first members of the European Central Bank (or ECB). The ECB would issue a single currency for Europe, the Euro. That new currency would be unique. It would replace the fiat currencies previously issued by nation states, and would not itself be issued by a nation state. Monetary history shows that in the past one currency meant one country. The EMU project challenges that historical relationship. It aims to replace "one country, one currency" by "one market, one money".

The fact that European Monetary Union (EMU) will be something new does not, of course, mean that it cannot succeed. But it does mean that it must be prepared extremely carefully. Next year sees not only the creation of the European Central Bank; it is also the fiftieth anniversary of the birth of the Deutschmark, one of the world's most successful currencies. It will disappear to be replaced by the Euro. But 1998 is also another anniversary. For it will be five hundred years since, here in Florence itself, Savonarola, who started the bonfires of the vanities to expose the complacency and decadence of the establishment, was himself hanged and burned. It is unlikely that Brussels would treat even the most extreme opponents of monetary union as the Florentine establishment did Savonarola and his supporters. But Savonarola's name lives on and in that there is a lesson. In the long run, the success of monetary union will depend on the extent to which the project can be understood by, and appeal to, the people, rather than the political classes, of Europe. And that will depend in large part upon the economic consequences of monetary union, as well as its political repercussions.

I chose the title of this lecture - the political economy of EMU - to emphasis that the economic and political aspects of monetary union are inextricably linked. This fact has made rational discussion of the case for and against monetary union in Europe difficult. It would be hard to deny that much of the driving force for monetary union has been political. And that has led the more extreme camps - both for and against - to ignore the economics and focus on the political aspects of monetary union. On the one hand, there are those who believe that monetary union cannot work without unacceptable changes to the constitutional arrangements of the European Union and the resulting loss of national sovereignty. And, on the other hand, there are those who

believe that monetary union will be the driving force towards a Federal European Union.

Both camps make important points. It is undeniable that monetary union implies sharing important political decisions. As Gordon Brown, the British Chancellor of the Exchequer, said in his statement to the House of Commons on 27 October,

"It must be clearly recognised that to share a common monetary policy with other states represents a major pooling of economic sovereignty".

But the Chancellor went on to point out that, although an important factor in any country's decision to join monetary union, the constitutional issue is not necessarily an overriding one. If the economic benefits are clear and substantial then sharing economic decision-making may be in the mutual interest of all.

From the opposite perspective, it is easy to understand why the visionaries look to European Union as a way of re-establishing its political and cultural leadership in the world. The first half of the twentieth century was a disaster for Europe. As the late Isaiah Berlin began his 1959 essay on European Unity:

"it is by now a melancholy commonplace that no century has seen so much remorseless and continued slaughter of human beings by one another as our own"

A century ago British academics looked to Europe for new ideas and intellectual debate. Reading European works in their original language was part of their normal professional activity. The great Cambridge economist, Alfred Marshall, (incidentally the son of a Bank of England employee), studied German philosophers and economists and believed it was important to read the works in the original and not in translation.

Times have changed. Gone are the days when languages are part of economics training and when individual European states can compete with each other for influence around the world. Europe is much smaller economically, politically and demographically, compared with the rest of the world, than it was at the start of the century. Perhaps the most vivid illustration of the changing role of Europe can be seen by redrawing the maps of the world to which we have become used.

Chart 1 shows how the main continents can be represented as coloured blocks. The area of those blocks is proportional to their land mass. But for some purposes it is useful to see the relative "sizes" of continents in terms of a metric other than area. Chart 2 shows the continents scaled by their populations in 1996. Europe now seems a little larger, and the potential importance of Asia is clearly evident. Moving on, we can scale the sizes of continents by their relative GDP in 1996, compared at purchasing

power parity values. This comparison, as Chart 3 shows, puts Europe squarely back at the centre of the world and its importance as an economic block becomes apparent. But, and this is behind the fears of some of the visionaries, what of the future? The OECD has made some brave guesses at what the future growth rates of different countries might be. They distinguish between two main possibilities - a "low growth" and a "high growth" scenario. In the former, illustrated in Chart 4, looking fifty years head, Europe is distinctly smaller than it is at present. The rise of Asia and the former Soviet block can clearly be seen in this chart. Chart 5 looks at the relative sizes of continents in the OECD's "high growth" scenario. Europe becomes even smaller, and Asia larger. Finally, if one wishes to look at a naive projection based simply on extrapolating growth rates over the past decade to the next fifty years, Europe is even less significant in the world economy than in the two OECD growth scenarios. This is shown in Chart 6.

So it is understandable that the visionaries believe that only a European Union will exert economic and political influence in the future, and that there could be no more powerful symbol of the required integration than a single currency.

Any overall assessment of monetary union must include the political benefits and costs - the benefits, as seen by some, in terms of closer integration, and the costs, seen by others, as a loss of national sovereignty. But whatever view one may take of the balance of the political case for monetary union, the economic costs and benefits certainly affect the equation. On the one hand, a significant positive economic benefit from monetary union might justify the pooling of economic sovereignty implied by monetary union. In this view, the 64,000 Euro question is whether monetary union would bring significant net economic benefits. On the other hand, whatever the political attractions of monetary union, if the design and timing of monetary union are faulty, then the economics could derail the enterprise altogether. At any point, monetary union among a large group of nation states would be a gamble. Of course, all great historic steps forward are gambles. But not all gambles result in historic steps forward. There is little point entering a marriage if divorce is just around the corner.

For monetary union is a marriage; a commitment to share our economic lives, and face shocks - both symmetric and asymmetric - together. The attractions of marriage were described at the beginning of the century by Mrs Patrick Campbell - the well known actress and friend of George Bernard Shaw. Marriage, she said, 'is the result of the longing for the deep, deep peace of the double bed after the hurly-burly of the chaise longue'. Anyone who has experienced the hurly-burly of the Exchange Rate Mechanism will understand the desire among Europeans for the deep peace of monetary union.

Questions of compatibility can be left to the partners themselves. But monetary union, like marriage, is an institution that affects all of us. It matters that it works because divorce, not mentioned at all in the Maastricht Treaty, would be costly, not just to the partners directly involved, but also to all of their friends. For many relatives the excitement surrounding a marriage ends on the wedding day. But the process of learning to live together and making it work starts, not ends, on the wedding day. Amid all the discussion of which countries will meet the convergence criteria, it is important to remember that 1 January 1999 is the beginning and not the end of the process. Convergence is not a hurdle which, once you have cleared it, means that you live happily ever after. Convergence is making a success of the union day by day, and so it starts, not finishes, on 1 January 1999.

The timetable for monetary union means that the key decisions on the initial members, and the choice of parities at which currencies will be irrevocably locked, will be taken under the British presidency in the first half of next year. Even if not a bride on this occasion, the UK will surely play the role of the best man, organising the ceremony and ensuring that the principals turn up on time.

How, then, can we tilt the odds in favour of a successful monetary union and against ultimate divorce? The simple answer is by joining such a union only under the right conditions, operating it in the most efficient way, and agreeing procedures for making joint decisions. Let me expand on this theme. I shall do so by structuring the remainder of my lecture around three questions. First, what are the principal economic costs and benefits of a single currency? Second, how should the European Central Bank set the single interest rate that will apply throughout Europe? Third, will new institutional arrangements be necessary for the countries in the monetary union to make joint decisions?

2 The cost-benefit analysis of a single currency

It may seem rather late in the day to conduct a cost-benefit analysis of entry into the European Monetary Union. But if there is to be any serious attempt to explain to the people of Europe the consequences of monetary union and the potential net benefits flowing from it, it is important to identify the key elements in a cost-benefit analysis. It is well known that any economic cost-benefit analysis of a particular reform usually leads to the answer that the net benefit or cost is equal to one half of one percent of GDP. Such estimates are typical of the conventional static analysis of economic policy. But the most important consequences of monetary union are those that will have dynamic effects on output and not simply conventional static welfare gains. If we restrict our attention to these aspects of monetary union, then I would identify one potential benefit and one potential cost as the most important elements in an economic appraisal of monetary union.

The potential benefit is the impact of trade on growth resulting from the greater exploitation of the single market made possible by a single currency. The potential cost is the impact on employment and investment of more pronounced business cycles which are the consequence of interest rates set in the interests of the monetary union as a whole and which may be inappropriate for any one member country. I shall discuss these in turn.

In principle, there is no reason why real exchange rates should be more volatile in a world of floating exchange rates than in a monetary union. Real exchange rates reflect, as their name implies, underlying real factors. Why should they depend on a particular method of achieving nominal adjustment - changes in nominal exchange rates, on the one hand, and changes in domestic wages and prices on the other? But there is overwhelming evidence that in floating exchange rate regimes, for whatever reason, real exchange rates are more volatile. Such instability of real exchange rates will surely hinder trade to some extent. How much is open to dispute, but the direction of the effect is clear.

The interesting aspect of this is that recent research on economic growth suggests that trade, in its broadest sense, can raise economic growth. International openness to trade in goods and services, movement of factors of production and ideas, may influence the rate of innovation or the rate at which new technologies are adopted. In all these ways, trade can raise the rate of economic growth. One argument along these lines has been advanced by Grossman and Helpman (1991). They explored the relationship between openness and the rate of innovation in advanced economies. They argued that openness and trade raise the rate of innovation by increasing market size and hence the incentive to engage in research and development. Market size also increased the productivity of research by facilitating the diffusion of ideas among researchers.

Some recent work by James Proudman and Stephen Redding (1998) at the Bank of England has provided persuasive empirical evidence that greater international openness is closely associated with higher productivity growth, both across countries and across sectors within the United Kingdom. Though the interactions between openness and trade and growth are complex, the UK evidence suggests that openness raises the rate of productivity growth by increasing the speed of productivity convergence with what is known, in the jargon, as the technological leader, but which in practice means the US and Japan.

It would be foolish to pretend that the existence and size of these growth effects are at all certain. How far the ability to exploit more successfully a single market raises growth is unclear. And economists have a duty to make clear what they do not know

as well as what they do know. But, at least in qualitative terms, the impact of the greater ability to exploit the single market provided by a single currency is surely the most important potential benefit of a monetary union. Other effects, such as the reduction in transactions costs pale into insignificance in comparison. It is difficult to believe that the United States would have achieved the same degree of economic integration that we see today in the absence of a single currency.

Equally, of all the potential costs one stands out as the most serious. That is the cost of adopting an interest rate which, although well suited to the needs of the monetary union as a whole, may be wrong for one or more countries. The result is more volatile business cycles than would be the case with a domestic monetary policy.

When central banks set monetary policy - in terms of either short-term interest rates or the rate of monetary growth - there are two distinct components to that policy. The first is an inflation target, whether explicit or implicit. It is the rate of inflation that the central bank would like to see in the absence of any unexpected shock to the economy. The second component to monetary policy is a discretionary response to economic shocks that hit the economy. With lags between changes in interest rates and their effect on inflation, the central bank may well choose to deviate from the inflation target in the short run in order to prevent those shocks from creating excessive volatility in output and employment. That can be done without prejudice to the achievement of the inflation target in the medium term. So provided countries agree on their choice of inflation target, there will be convergence of interest rates in the medium and long term. But if countries experienced different economic shocks, their central banks might choose different levels of short-term interest rates. A union between two central banks is clearly easier if their preferred levels of interest rates move in tandem. That is more likely to be the case if the countries experience similar patterns of economic shocks. Convergence in this deeper sense is an important ingredient of the success of a monetary union.

The main factors that would generate differences in preferred levels of interest rates are well known: the degree of symmetry, or lack of it, in the shocks affecting the different economies, the extent to which those economies respond differently to changes in short-term interest rates, and the relative weights policy makers attach to the trade-off between the volatility of inflation and the volatility of output.

When such differences exist, there will be more pronounced business cycle volatility following entry into a monetary union. What is less clear, however, is how costly this instability is likely to be. It is possible to calibrate conventional models of monetary policy to produce plausible estimates of the cost of greater volatility. Those estimates produce the usual result that the cost of loss of monetary sovereignty is around one

half of one percent of GDP. But that conclusion is inadequate. It reflects the phenomenon discussed by Robert Lucas in his book on business cycles in which he demonstrated the difficulty of generating, within conventional economic models, any substantial costs from business cycle volatility (Lucas 1987). And yet, as he pointed out, not only politicians but voters as well, feel that business cycle fluctuations impose real costs. Standard economic models are not well suited to explaining why stability is valued. Related to this general failing of conventional models is the equity premium puzzle, popularised by Mehra and Prescott (1985). It is difficult to explain why such a high risk premium is required to hold equities given their estimated risk. More recent research emphasises the weight households place on changes in consumption over time, rather than simply the level of consumption. Such preferences make it easier to understand why volatility is costly, and why risk premia are high. As economists, we are just beginning to understand more about the costs of business cycle fluctuations. As with the impact of trade on growth, there is enormous uncertainty about the magnitude of such effects. But for countries which have benefited from the ability to deviate from the level of interest, and hence exchange, rates in neighbouring countries, the costs of giving up monetary policy sovereignty may be substantial.

There are two related points which I would like to make at this juncture. First, although the existence of asymmetric shocks may appear to be disadvantageous from the point of view of monetary union, they do have one advantage. If all shocks were symmetric across countries, then there would be a synchronised business cycle in Europe. That would minimise the tension between the preferred level of interest rates in different parts of Europe. But it would create more volatile business cycles for Europe as a whole. In turn, that would require larger changes in interest rates between the peak and trough of the cycle, and consequently, larger changes in the exchange rate between the Euro and both the Dollar and the Yen than exists at present between the average of European currencies, on the one hand, and both the Dollar and the Yen on the other. Second, monetary union as such will not solve the unemployment problem in Europe. That is surely the most important economic problem facing us at present with over 18 million unemployed people in the European Union today. Unless there are significant new initiatives to increase the employability of European labour forces, it is difficult to see substantial improvement on the horizon. Neither monetary policy - which will be devoted to price stability - nor fiscal policy - which will be constrained by the Growth and Stability pact - offer any short term prospect of a significant reduction in unemployment.

Chart 1: Continental land masses

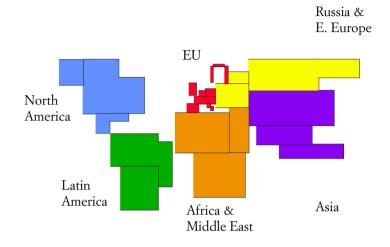


Chart 2: Scaled by 1996 population

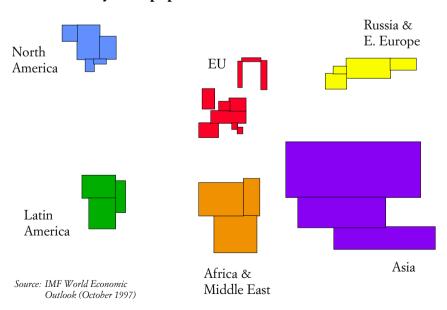


Chart 3: Scaled by 1996 GDP (at PPP)

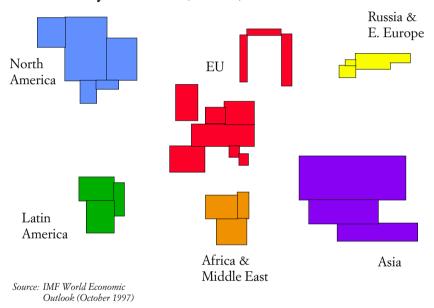


Chart 4: Scaled by projected GDP in 2046 (OECD 'Low growth scenario')

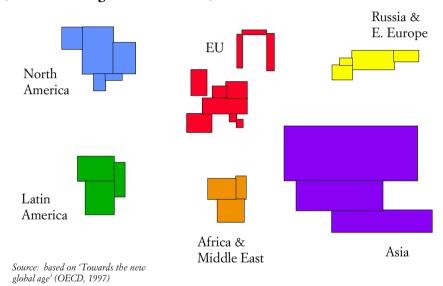


Chart 5: Scaled by projected growth in 2046 (OECD 'High growth scenario')

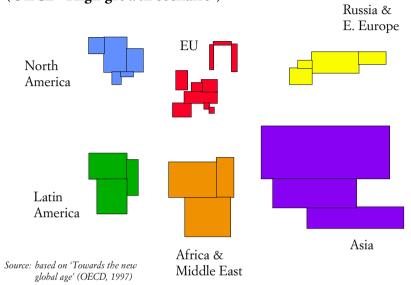
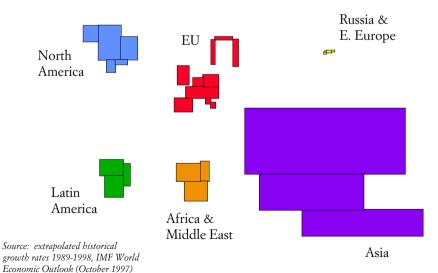


Chart 6: Scaled by projected growth in 2046 ('Naive growth scenario')



3 Monetary Policy in Stage 3

My second question is how should the European Central Bank set interest rates? There is a vast economic literature on the appropriate intermediate target for monetary policy. But, in practical terms, the choice facing the European Central Bank comes down to a question of how much weight to put on an aggregate monetary target and how much on an explicit inflation target. The relative merits of monetary and inflation targets have been the subject of much academic study in recent years with a number of countries having introduced, rather successfully in my view, an inflation target as the framework for monetary policy. But I want to comment on this issue tonight for another reason. The choice between monetary and inflation targets illustrates the delicate balance between economic and political factors in the design of monetary policy. I shall argue that the difference between the two targets is, in terms of pure monetary policy, much less than is sometimes supposed. But the two approaches to monetary policy have been associated with two different visions of the relationship between government and central bank. Monetary targets stress the complete independence of the central bank. To use the jargon, the central bank has both goal and instrument independence. In other words, it can choose both the operating objective of monetary policy as well as setting interest rates to achieve that objective. In contrast, countries with inflation targets have generally distinguished between the two types of independence with the government setting the inflation target and the central bank instructed to set interest rates in order to achieve that target. These two different approaches have evolved out of the differing historical experiences of the countries which have adopted monetary and inflation targets, respectively.

Let me first demonstrate why the economic difference between a monetary and an inflation target is a question more of practice than of principle. As I described earlier, monetary policy has two components. The first is a medium-term target for inflation and the second is a discretionary response, period by period, to economic shocks. When I introduced this idea, I focused on the second element, namely a central bank's discretionary response to shocks. Here I want to concentrate on the first. Any monetary policy, and any central bank, contains an inflation target. It may be explicit or it may it implicit, but it is there. An explicit inflation target regime allows the central bank to use a much wider range of information than purely the monetary aggregates in judging the future course of inflation. From that point of view, an inflation target seems inherently superior. But, of course, in practice central banks with monetary targets look at other information also. Where money velocity appears predictable a monetary target is a perfectly acceptable framework within which to implement and explain monetary policy. Where it is unstable and unpredictable, as has been the case in many, if not most, developed countries, then an inflation target framework is superior either to the use of misleading monetary aggregates or to pure discretion. And I see advantages in making explicit the price stability objective of the European Central Bank

At the start of monetary union, there is likely to be a good deal of uncertainty about the behaviour of the monetary aggregates. It would be desirable, therefore, for the ECB to use both an inflation and a monetary target in the public explanation of its monetary policy.

What distinguishes an inflation target from a monetary target regime most clearly is the emphasis the former places on transparency and accountability. Countries with inflation targets place great weight on the need for transparency, to improve the efficiency of monetary policy, and for accountability of the central bank. Only a sufficient degree of transparency and accountability provides the legitimacy for independence of the central bank. In other countries, any suggestion that the government should be involved in the setting of the objective of the central bank raises fears of political involvement. Given the experience of hyper-inflation, it is understandable that the German public feels it is more important to give both goal and instrument independence to the Bundesbank than to give their elected government a say in setting the inflation target. And it is that tradition which has been embodied in the Maastricht Treaty which makes no provision for any political input into the choice of the target itself. The European Central Bank will have both goal and instrument independence.

Transparency and accountability will be crucial to the creation of support for the new European Central Bank, and promoting its acceptability and legitimacy. In the early years of its existence, the European Central Bank will require a good deal of support from politicians around Europe if it is not to be made the scapegoat for every economic failing, including many that have nothing to do with monetary union. It would do well to take the lead itself in promoting transparency and accountability.

The choice between monetary and inflation targets is relevant also to another consequence of monetary union. The inflation objective of the ECB - whether expressed as a formal inflation target or as an informal objective of price stability - will be defined in terms of the price level in the monetary union as a whole. The monetary union cannot guarantee that the inflation performance will be the same in each member country. There will continue to be changes in real exchange rates between different countries and regions of the monetary union, and, with an irrevocably fixed exchange rate, such changes can occur only by changes in relative inflation rates within the union. These changes may, of course, not be large. And they occur already within each of our own countries. The inflation rate in Bologna may well differ from that in Bari. But we do not notice this because statistics are not published. Even in the monetary union between Belgium and Luxembourg there have been periods in which inflation dif-

fered significantly (that is, by several percentage points) between the two countries, even though since 1971 the average inflation rate has differed by no more than a quarter of one percent a year.

But there is one possible cause of changes in real exchange rates that is relevant to the future development of the monetary union. Those countries which are "catching-up" the productivity levels of their neighbours, and hence are experiencing faster productivity growth in the tradable sector relative to that in the non-tradable sector, will have a faster rate of increase in the prices of domestic goods and services. That is because, although the inflation rate for traded goods and services will be the same throughout the monetary union, the rate of price increases for non-tradables will be higher in those countries catching up than in the more developed areas. This is the well-known Balassa-Samuelson result. Hence, even within the monetary union, there will be some difference in inflation rates between countries. When thinking of possible future members, especially those from Eastern Europe, it is important that convergence is assessed in terms of inflation in the tradable goods sector. A slightly higher inflation rate overall may not be a consequence of monetary laxity, but simply the consequences of fixed exchange rates between their currencies and the Euro.

4 Institutional implications of monetary union

There has been much discussion recently about the need for a monetary union to make joint collective decisions about matters other than interest rates. Unfortunately, that discussion has tended to focus on procedure rather than substance. There have been excited press reports about a Euro Council that would meet prior to the ECOFIN meetings of finance ministers to discuss issues of direct relevance to the members of the monetary union. Informal discussions among the members of a monetary union are both inevitable and desirable. Indeed, an informal group of this kind would resemble the Florentine tradition of the pratica, an ad hoc discussion among representative citizens which was used, in fact, to debate the future of Savonarola. The problem arises because there could be a significant difference between the membership of the European Union and membership of the monetary union for a sustained period. Given the possibility of expansion of the European Union, membership of the two unions may not be identical for some considerable time. The Maastricht Treaty makes clear that decision-taking powers are reserved to ECOFIN. But it also states that there are many issues on which voting at ECOFIN will be restricted to the members of the monetary union. So it is natural that those members will want to have informal discussions with each other. It should also be natural for those same members to have informal discussions with the potential "ins" of the monetary union in future.

The immediate implication of monetary union is that a wide range of decisions which are now taken within a country will instead be taken *jointly* by a group of countries. That is overwhelmingly the most important political feature of EMU - both within Europe and between the European union, on the one hand, and the rest of the world, on the other. If successful, it would represent a major change in the way we view the role of nations in the international monetary system.

The key question is how will separate countries take joint decisions on a wide range of economic issues. I shall identify three of these - (i) monetary and exchange rate policy; (ii) fiscal policy; and (iii) representation of the monetary union and its member countries at international level.

First, on monetary and exchange rate policy the Maastricht Treaty is very clear. Article 109 describes the allocation of responsibilities between the ECB and the political authorities. The first paragraph of Article 109 makes clear that as far as formal exchange rate arrangements between the Euro and non-community currencies are concerned, the responsibility lies with the political authorities. On less formal arrangements, paragraph two gives the European Council - the politicians - the right to 'formulate general orientations for exchange rate policy', providing that these are 'without prejudice to the primary objective of the ECB to maintain price stability'. So on informal target zones for exchange rates, the ECB would have a veto unless such arrangements were embodied in a formal target. It follows that the governments of the member countries would need to reach agreement on these matters outside of the meetings of the independent ECB. It is hard to see how an informal Euro Council for those countries in the monetary union can be avoided. Somehow commentators have been confused by the idea of such a forum. Its role is *not* to provide a political input into monetary policy; it is to provide a forum for the 'ins' to reach agreement on all those issues which are not the responsibility of the ECB.

Second, discussions on the fiscal policy of the ins and the implementation of the Stability and Growth pact will also require some sort of Euro Council. The imposition of fines on countries which have breached the pact will surely be discussed informally before a formal vote is cast. And the fiscal stance of the monetary union as a whole would affect the monetary and fiscal policy mix, and hence the level of the exchange rate of the Euro. That would be of direct interest to other countries, especially those in the G7. The monetary union will have to express views on both monetary and exchange rate policy to member countries of the IMF. That brings me directly to the final issue.

Third, how will the monetary union be represented at international level? Undoubtedly, there are many answers to the question of how the monetary union will

be represented. There has also been discussion of whether the G7 would contract, at least when discussing macroeconomic issues, to a G3 the US, Japan and Europe. As the Deputy Secretary of the US Treasury, Larry Summers, said on 21 October in testimony to the Senate Budget Committee,

"EMU will raise issues for the future evolution of the G7, and the nature of Europe's participation in international organisations such as the International Monetary Fund. We look forward to engaging with the EU on these matters next year after the selection of the first members."

So the Americans at least are contemplating changes to the architecture of the international economy following monetary union. How far this will require changes to the formal structure of meetings is unclear. Recent developments mean that we now have many groups of a Gx, where x is almost any integer between unity and 181. The real issue is less the form than the substance of getting agreement among the member countries of a monetary union on a common view across a range of issues. That is why so many of the 'ins' versus 'outs' issues are, at heart, not a question of an exchange rate mechanism for the 'outs' but of the governance of the monetary union as a whole.

What does all this mean for the prospective partners in a monetary union? The vital thing is to find a partner who will be by your side when that asymmetric shock comes along. That is known, in the technical literature, as sustainable convergence. If we are to meet fifty years from now to celebrate the golden wedding of EMU, it will be because Europe will have succeeded in making joint decisions, not just at central bank level where the mechanism (the ECB) is clearly specified, but also among finance ministries, where it is not.

5 Conclusions

The theme of my lecture has been that the economics must be right if the politics is to work. But it is also true that where there is a political will there is an economic way. That is why Europe has moved from the original conception of a monetary union to its present position on the brink of a great experiment. In the enthusiasm for this venture, it is vital to remember that choosing the best economic route minimises the strain on the collective political will to make a success of monetary union.

Public attention is focused on the day-to-day battle of countries to meet the convergence criteria - rather like the fluctuating fortunes of football clubs moving in and out of the relegation zone. That is a short-sighted view for what should be the creation of a new European institution. The important question is not who will or will not be relegated this year, but how will monetary union operate?

I have tonight tried to ask three questions. First, can we identify the principal costs and benefits of monetary union? I argued that the dynamic effect of trade on growth and the cost of greater business cycle volatility are the two key issues. We know remarkably little about the magnitude of either. On the verge of monetary union that is an uncomfortable position. Second, should the European Central Bank focus on monetary or inflation targets? I discussed the economic choice between these two. and suggested that a key issue was the degree of transparency and accountability of the European Central Bank. The relationship between central bank and government is a subtle one, and in no two countries is it the same. In some countries, the explicitly non-political nature of an independent central bank provides comfort from the fear of political interference. In others, the delegation of decisions on interest rates to an independent central bank is regarded as an appropriate separation between the technical implementation of monetary policy by qualified experts and the choice of the objective of monetary policy by a democratically elected government. One of the great uncertainties of monetary union is how the relationship between the European Central Bank and the member governments will develop and evolve over time. How will we obtain convergence of our rather different "monetary cultures"? Third, how will a wide range of economic decisions be taken jointly? At the outset, it is the determination to make a success of this joint venture that is most important. Informal discussions will take place in a variety of settings. But over time, new institutional arrangements will evolve and develop. And these are unlikely to be restricted to Europe itself. There are likely to be consequences for the international for in which economic policy is discussed.

The most successful examples of European integration have been where policies have run with, not counter to, the grain of the economic argument. Integration works when it happens naturally not when it is ordered from above. For example, in the recent Euro 96 Football Championships, the BBC chose Beethoven and German television the British pop group Oasis, as the composers of their respective theme tunes. Whether this represents convergence of musical taste, I do not know but it was more successful than the competition for the design of the Euro Banknotes which imposed, as a requirement, that no design should identify any person or place that could be connected with any one country, and hence, in practice with Europe itself. Economic integration in Europe has been most successful when led by the market rather than by administrative fiat.

Whatever happens next year, this is surely an historic moment on which we shall all look back in old age as others in later generations will do when writing their PhD theses about the events of the 1990s. We can only hope that in future we shall not look back with regret. And in five hundred years time we must hope for a successful

anniversary, not a commemoration of the bonfires of the vanities of European monetary officials and politicians.

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