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INTERNATIONAL COSTS AND BENEFITS FROM EMU

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ABSTRACT

In this paper we examine the international implications of monetary union in the European Community (EMU), and the associated international costs and benefits. We consider prospective changes in international institutions, the potential role of the ecu as an international currency, and the implications of EMU for the international coordination of monetary and fiscal policies.

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The costs and benefits to the Community as a whole from the process of European economic and monetary union (EMU) will inevitably be affected by developments in the rest of the world. These are largely external to the process itself. In addition, costs and benefits will also depend on the reactions of non-Europeans and international institutions to the international consequences of EMU. Thus to assess such costs and benefits requires taking a view on the current and prospective state of the international monetary system and the process of policy coordination among the industrial economies.

The factors that must be considered are both institutional and analytical. To evaluate the former, one must look at the nature of international institutions and their prospective changes. The analytical issues can be put conveniently into three categories. The first has to do with international money, in its unit of account, means of payment and store of value functions. The second has to do with the nature of the exchange rate regime between the European Currency Unit (ecu)<sup>1</sup> and the other major currencies. The third has to do with the coordination of monetary and fiscal policies worldwide and the international adjustment process. This categorization corresponds closely to the three main aspects of any international monetary system, namely the reserve regime, the exchange rate regime and the adjustment obligations.

Our paper is therefore structured as follows: In section I we examine alternative scenarios for the shape of international monetary institutions following the establishment of EMU. We suggest that the major impact will be on the G-7 meetings of finance ministers and central bank governors and the annual G-7 summits. The

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<sup>1</sup>Throughout this paper we use 'ecu' to denote whatever will be the common currency used in the final stage of EMU, though it may well not be constructed or defined like the current ecu, and may indeed take a different name.

prospective changes may strengthen the bargaining power of the Europeans in monetary negotiations and are likely to have a small positive impact on other economic negotiations. The impact of EMU on the functioning of other institutions is likely to be minimal, with the exception of the International Monetary Fund and the Bank for International Settlements.

In section II we concentrate on the reserve regime and vehicle currency issues, looking at the potential international role of the ecu and the associated costs and benefits for Europe. We cannot see any significant costs, but we suggest that the potential benefits are also unlikely to be very high in the short run. The establishment of major international reserve and vehicle currencies is a very slow process, unless there are large shocks that cause significant disruption in the world monetary and trading system. History and hysteresis dominate. Although the ecu will be a much stronger contender for eventually usurping the dollar's role in the international monetary system than even the Deutschemark of a unified Germany, it is unlikely that the change in its status and role with EMU will prove to be the palace coup that overturns the dollar as the main international reserve and vehicle currency. The main potential benefit from European monetary unification is therefore likely to come from the partial substitution of ecu for dollar reserves in the portfolios of European central banks; the potential costs and benefits that might arise from the ecu taking a reserve role outside the Community are unlikely to be realized soon.

In section III, we look at international exchange rate regimes and the monetary and fiscal coordination process. EMU will reduce some of the uncertainties that impede policy coordination, clearly a benefit. By creating more symmetry in the global process of policy coordination among industrial countries, it will increase the need for (benefits from) explicit coordination. But it is likely to make international coordination of fiscal policy even more difficult and thereby to increase the burden on monetary policy coordination. Finally, EMU will have a wide range of effects on the politics of economic policy coordination. There are likely to be clear benefits to the Community from its

greater "weight" as a single economic player and its enhanced ability to trade off macroeconomic policy commitments against policies on issues such as trade, agriculture, and the environment.

## I. EUROPEAN MONETARY UNION AND INTERNATIONAL INSTITUTIONS

The main institutions related to the process of macroeconomic policy coordination and surveillance are the IMF, the OECD, the BIS, the annual G-7 political summits, and the G-7 meetings of finance ministers and central bank governors. How might these institutions adapt to EMU, and what are the likely costs and benefits for Europe? International institutions have a variety of functions. These include the gathering and exchange of information, the setting of standards and guidelines, the creation, policing and enforcement of binding rules, and the redistribution of resources.

Since at least 1985, the key institution in the process of monetary and fiscal policy coordination is the G-7 group of finance ministers and central bank governors. Also important are its various "ad hoc sub-committees", e.g., G-3 agreements between the US, Japan and West Germany. The G-7 economic summits, instituted in 1975, are also of paramount importance, as they must endorse some of the important agreements of finance ministers and central bankers. The OECD serves mainly as a vehicle for consultation and the setting of standards and guidelines. It is thus confined mainly to two of the potential functions of international institutions referred to above. On the other hand, the IMF has activities that cover all functions. It is charged with the task of coordinating the financing and adjustment of external imbalances and dealing with international debt (together with the World Bank), and is the main international organization involved in international monetary issues. The BIS mainly serves as a forum for central bank governors in the G-10 countries plus Switzerland to meet independently of finance ministers, partly to coordinate monetary policies, partly to deal with regulatory issues.

Stage I of the EMU process will not create any new European institutions, as it consists of the participation of all EC countries in the Exchange Rate Mechanism (ERM) of the EMS and the liberalization of capital markets. It is thus unlikely that it will generate any pressure for the adaptation of international institutions. It may however increase the role of the BIS, as it is likely that the liberalization of capital markets will make speculative attacks on European currencies more likely, and central bank consultations in these episodes will not be limited to intra-EC discussions.

Stage II envisages the creation of the European System of Central Banks (ESCB), and a commitment to fixed exchange rates. As is recognized by many, stage II is likely to be a short step to full monetary union. In any case, stage II will require a common European response to international macroeconomic developments. This need will of course be even more urgent with full EMU. With its associated reduction of monetary sovereignty for individual economies, EMU will in all probability put significant pressure on the current G-7 process. The pressure is likely to come from non-participants in this process who, having relinquished their monetary sovereignty, may want a bigger say on the international monetary relations of the Community. Such pressure, and the expected refusal of the current summiteers to expand membership, may be a source of friction in the normal operation of the Community and other institutions.

### *I.1 The G-7 Summits*

Such frictions have often arisen in connection with the G-7 summits. As Putnam and Bayne (1987) suggest, "The summits were always bound to arouse anxiety and suspicion among those who were left out. These feelings were keenest among those just outside the circle, whose right to participate, on grounds of economic weight or international influence, seemed only slightly less than those inside" (p. 148-9). One of

the major causes of frictions concerned the role of the EC. Although the four largest member states participate in the G-7 summits, smaller countries often take exception to that. As Putnam and Bayne (1987) report, there was concern that "The Community is ... put on one side and the Four will act more and more like a directorate" (p. 151). Although there was an initial attempt to prevent the repetition of the Rambouillet summit on these grounds, the position that was finally adopted was to insist that the President of the European Commission must always be present at the summit, as well as the leader of the country holding the presidency of the Council of Ministers at the time of the summit. This principle was conceded in part for the first London summit of May 1977. Since then, "Commission participation in the summit and its preparations was extended to cover all the economic items, not just those within Community competence" (ibid p.151). In fact, from 1977 to 1981 a meeting of the European Council was always held shortly before the economic summit. "Although no formal mandate was given to those Community members attending the summit, common positions agreed at the European Council – on North-South matters in 1977, on economic policy in 1978, on energy in 1979 – were carried forward to the summit and exercised a considerable influence on the outcome" (ibid p. 152). Since 1981, however, there has been no formal linking of the European Council with the G-7 summits. This may have reflected the change of direction of the summits (less oriented towards specific results), and the lack of European initiatives in the first half of the eighties.

EMU is unlikely to affect the G-7 summits of heads of states, but it will certainly have implications for the G-7 finance ministers and central bank governors meetings. Since 1985, these have taken over many of the functions of the heads of states summits on economic policy matters. There are at least two ways in which the G-7 finance ministers summit may change in stage II and beyond. It may simply be reduced to a G-3 summit. Although one may assume that the President of the ESCB would act as the European central bank governor in such a G-3 meeting, it is unclear who would be the finance minister representing the Community. Without other major changes in

political institutions, the relevant EC commissioner would not carry as much political clout as the US and Japanese finance ministers. On the other hand, to opt for the finance minister of the country chairing the European Council would create high turnover, which is bound to affect adversely the influence of Europeans on proceedings and decisions. Such an option may therefore be harmful to Europe. The second alternative is for the current G-7 meetings to carry on as now, but with three central bank governors instead of seven. This latter alternative seems more likely, although there will still be more need for the four European finance ministers to coordinate their positions and clear important decisions with the rest of the EC finance ministers. This alternative is likely to be a continuous source of dissatisfaction in the rest of Europe at being excluded from the international coordination process and to result in increased demands for wider participation. Such feelings were certainly there when the G-7 summits were initiated and are likely to strengthen with the process of European economic unification. One solution to this problem could be for the finance minister of the country that presides in the European Council also to take part in the G-7 meetings of finance ministers. The same could apply for the summit meetings.<sup>2</sup>

## I.2 *The IMF*

In regard to the IMF, the two main issues are Article IV consultations and quota obligations with their associated voting rights. It is not clear at this stage how these two issues would be resolved. The alternative solutions to the problem of Article IV consultations are not likely to result in any significant costs or benefits for the Community. If EMU results in the establishment of Community "Article IV"-type consultations between the European Central Bank and the finance ministries of the

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<sup>2</sup>He may of course already be there. In the past three years, the choice of June (1988), July (1989, 1990) for the summit has ensured that the country presiding in the EC at the time has been a member of the G-7.



Community members, then IMF consultations may become redundant. A single Community consultation could replace the twelve existing ones. More formal consultations between national governments and the European Central Bank may become necessary in any case, especially if EMU involves fiscal targets for the member countries. The cost of replacing IMF consultations by Community consultations is unlikely to be high.

The IMF quotas and consequent voting rights of the EC countries might well be unaffected by EMU, since the general principle hitherto has been that separate quotas are associated with politically independent nations. That status might be considered unaltered by EMU alone. We should however consider the possible consequences of intra-EC institutional changes that might go so far as to raise this issue.

Table 1  
IMF Quotas  
% of Total

USA	19.14
UK	6.63
W. Germany	5.79
France	4.81
Japan	4.53
Total EEC	28.22

Source: IMF 1989 Annual Report

If the EC quota were to be calculated by simply aggregating the current quotas of the Community countries, this would make the Community the largest shareholder of the Fund (see Table 1), even ignoring any eventual consequences of German reunification. Currently, the combined votes of the EC countries exceed those of the United States, and Japan together. The sum of the quotas of the EC countries already give the Community a veto for many important decisions that require an 85% majority,

if these votes are cast jointly. The USA also possesses such a veto.<sup>3</sup>

In the case of a recalculation, it is unlikely that the EC quota would be the sum of the current ones, as intra-Community trade would in all probability be excluded. Such an exclusion would give the Community a much lower quota, and associated voting rights, than a simple addition. It is estimated that intra-Community trade accounts for a little less than 50% of the external trade of Community countries. Even if the quotas of the EC countries were adjusted to exclude such trade fully, the total quota of the EEC would still exceed 15%, giving it a blocking veto for the decisions that require a 85% majority.<sup>4</sup>

In any case, the issue of IMF quotas is politically complex irrespective of EMU, as is illustrated by current discussions about the increase in the quota of Japan and the relative positions of the UK and France. EMU will add to the complications, as will the question of quotas for Eastern European countries. We cannot speculate on the outcome, and the consequences may depend less on numerical voting power than on the weight of the EC as a unitary actor, as opposed to the current separate influence exerted by Germany, the UK, France, Italy and other members of the Twelve.

### 1.3 *The BIS and the OECD*

Institutions such as the BIS will also be affected by EMU, although it is again unclear in what direction, since we still have no precise specification of ESCB or the eventual European Central Bank. Currently the BIS is acting as host to the embryonic ESCB; eventually its role will diminish as the European Central Bank becomes fully

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<sup>3</sup>Note, however, that the "constituency system" for the Executive Board suggests that normally the EC votes could not be cast jointly, as some of the EC members belong to constituencies with non-EC countries.

<sup>4</sup>Quotas are in principle calculated according to formulae in which several variables enter: GDP, reserves, average current payments and receipts and the variability of current receipts. As is clear from the extended negotiations about quota reallocations still under way, there is substantial scope for "paying due regard to all aspects and functions of quotas in the Fund" (from an IMF document).

autonomous. In any case, BIS changes are unlikely to have an important bearing on the international coordination process. Changes in the role of the OECD, and that of the EC countries in it, are not predictable either. However, they are unlikely to involve significant costs or benefits.

To conclude, the main question mark over the functioning of the current international economic institutions concerns the current G-7 finance ministers and central bank governors meetings, the G-7 political summits and the IMF. The technical issue of substituting the chairman of the ESCB or eventually the governor of the European Central Bank for the current four European central bank governors in G-7 meetings appears straightforward. This may alleviate the coordination problems occasionally besetting EC countries in this forum, and may result in a more effective pursuit of Community goals. What is likely to be less straightforward is the reaction of the increasingly aware smaller European countries to summits that include only the four largest countries of Europe. This could possibly be resolved by an agreement of the G-7 to include the President of the European Council in the political summits (in addition to the President of the Commission) and his finance minister in the finance ministers' meetings.

We see it less likely that the G-7 process will be transformed into a G-3 process, although if it were, European bargaining power would increase. The costs from international institutional changes are therefore likely to be small and transitory. The benefits from the better coordination of European positions in these meetings may be greater than these costs, irrespective of whether we have G-7 or G-3 summits. We shall have more to say on these costs and benefits in the section below on the international coordination of macroeconomic policies. Additional small net benefits for Europe could stem from the possible amalgamation of IMF quotas and voting rights of the Community countries, although it is still unclear what the outcome is likely to be.

## II. THE INTERNATIONAL ROLE OF THE ECU

Whether the European currency (ecu) in Stage III is likely to become a major international currency will depend on several factors. The emergence of major international currencies is a process that is driven by fundamentals, such as the reduction in transaction costs and the economies of scale associated with monetary exchange. Such fundamentals depend on the importance of the issuing economy for international trade and investment, but history and hysteresis are very significant too.

For example, sterling remained the major international currency long after London lost its position as the most important financial center in the world. The dollar did not fully emerge as the principal international currency until after World War II. In addition, it took the major shocks of world wars to weaken the hold of sterling in the international economy and strengthen the role of the dollar. It is also worth noting that the dollar's importance in the world economy was hardly affected by the breakdown of the Bretton Woods system of fixed exchange rates and the demonetization of gold.

Is it likely that the ecu will emerge as a serious contender for the dollar in its unit of account, means of payment and store of value roles in international trade and finance? In such a case, will the EC benefit or lose from issuing a major international currency?

To answer the first question, one must look first at the fundamentals. What is it that makes some currencies assume a pivotal role in the international monetary system?

### II.1 *The Means of Payment Function*

Let us first start with the means of payment function of international money, as many seem to think that this function is instrumental in the emergence of international currencies. According to Cohen (1971), "An international economy with only national

moneys is like a barter economy. ... Transactions costs are high because of the practical problem of achieving the required double coincidence of wants in the foreign exchange market. However, as in a barter economy, transactions costs can be substantially diminished for an individual if he adapts his own currency mix to that of other individuals, holding for specific use as international exchange intermediaries inventories of the most widely demanded foreign currencies. These are of course the currencies of the countries that are predominant in world trade – the countries that account for the largest proportion of international transactions" (p. 25–26). To assess the potential role of the ecu we must look to demand for means of international payments by official bodies and by the private sector.

We begin with the demand by official bodies. As Krugman (1984) among others suggests, "Probably the most important reason for holding reserves in dollars is that the dollar is an intervention currency" (p. 273). The reduced need for exchange market intervention in dollars by EC central banks that will follow establishment of EMU will entail a decline in the importance of the dollar as an international means of payment. However, this does not make the ecu a major reserve currency outside the EC, unless foreign exchange intervention by non-EC countries is also in ecu.

Table 2 presents data on the composition of official international reserves.

Table 2  
% Share of National Currencies in Foreign Exchange Reserves  
All Countries

	1973	1976	1978	1980	1982	1984	1986	1988
US Dollar	84.5	86.7	82.8	68.6	70.5	69.4	66.0	63.3
Pound Sterling	5.9	2.1	1.6	2.9	2.4	3.0	2.8	3.1
Deutsche Mark	6.7	7.3	10.1	14.9	12.3	12.3	14.9	16.2
French Franc	1.2	1.0	1.0	1.7	1.2	1.0	1.2	1.7
Swiss Franc	1.4	1.6	2.1	3.2	2.8	2.1	1.9	1.5
Dutch Guilder	0.4	0.5	0.5	1.3	1.1	0.8	1.1	1.1
Japanese Yen	...	1.2	1.9	4.3	4.7	5.6	7.6	7.2
Major EEC Curr.	14.2	10.9	13.2	20.8	17.0	17.1	20.0	22.1

Source: IMF

The share of the US dollar in official reserves, although declining, is overwhelmingly higher than the share of any other single currency. In fact it is higher than the combined share of all other currencies taken together. The share of major European currencies shows a slow increase, especially since the depreciation of the dollar in 1985 and 1986. It is important to note that these trends are not simply the outcome of revaluations following changes in exchange rates, but also the result of diversification away from the dollar (IMF Annual Report 1989, p.53).

The data in Table 2 probably overstate the position of the dollar, as (after 1978) they add to the SDR value of dollar holdings the SDR value of ecus issued against dollars. If these ecus are treated separately, the share of the dollar for 1988 falls to 54.5% of the total, and the share of the major European currencies to 20.6%.

Table 3 contains a breakdown of the composition of foreign exchange reserves for industrial economies and LDCs. It suggests a much larger trend decline in the share of US dollars for the industrial economies than for LDCs. In addition, the LDCs seem to have diversified towards the Japanese yen rather than European currencies.

Table 3  
% Share of National Currencies in Foreign Exchange Reserves  
DCs and LDCs treated separately

	Indust. Economies			LDCs		
	1980	1984	1988	1980	1984	1988
US Dollar	77.6	73.6	67.4	59.8	64.9	53.9
Pound Sterling	0.7	1.6	1.9	5.0	4.4	5.7
Deutsche Mark	14.3	14.8	18.3	15.5	9.7	11.9
French Franc	0.5	0.4	1.6	2.9	1.7	1.9
Swiss Franc	1.7	1.4	1.0	4.7	2.8	2.6
Dutch Guilder	0.7	0.6	1.1	1.9	0.9	1.0
Japanese Yen	3.3	6.3	6.4	5.3	5.0	9.0
Unspecified	1.2	1.2	2.3	4.9	10.6	14.1
Major EEC Curr.	16.2	17.4	22.9	25.3	16.7	20.5

Source: IMF

The trend decline in the share of dollar reserves in the portfolios of central banks of industrial economies is likely to be reinforced as a result of the process of EMU, since

European central banks will stop intervening in dollars to support their currencies. The ecu may also become a substitute for dollars in the portfolios of non-EEC central banks that decide to peg their exchange rate to the ecu. For example, the EFTA countries appear to be pegging to the EMS already (see below), although officially they are either floating or pegging to a basket of currencies (Gylfason 1990 discusses the exchange rate policies of the Nordic countries). In addition, liberalization in Eastern Europe may proceed to the point where these countries contemplate full convertibility. That would increase their demand for reserves in which the ecu is likely to occupy an important position.<sup>5</sup>

Thus, EMU is likely to result in substitution of ecu for dollars. The extent of this potential substitution will be limited by hysteresis, but it could gather pace if the dollar enters a prolonged period of weakness. One cannot rule out a prolonged weakness of the dollar, especially if there is loss of confidence because of a failure to correct global current account imbalances and the growth of US debt. The position of the ecu may also be strengthened if there is an overall increase in the demand for reserves by central banks. Since 1985 official circles have been much more positive towards exchange rate management, whether through *ad hoc* macroeconomic policy coordination, or through some rule based system. One expects an increase in the demand for reserves when there is a commitment to defend the exchange rate (see Dooley et al 1989. Black 1985, however, suggests that the evidence on that is mixed).

We next turn to the means of payment function of international money as it applies to the private sector. Note that whereas international transactions in goods markets are arranged between importers and exporters, eventual payment is intermediated through commercial banks. Thus, what one should look for are the "thickness" externalities that cause dealers to prefer indirect exchanges through a vehicle currency to direct exchanges of one currency for another. These externalities

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<sup>5</sup>Poland introduced convertibility of the zloty in trade transactions on 1st January 1990, with an adjustable peg for the exchange rate, but it pegged against the dollar.

have to do with the problem of double coincidence of wants that money is supposed to be solving. If there are many dealers prepared to exchange dollars, then a dealer wishing to exchange pesetas for drachmas may find it less costly to go through two exchanges, one of pesetas for dollars and one of dollars for pesetas, than to try to find a dealer holding drachmas who wants to exchange them for pesetas. A vehicle currency may emerge in the interbank market even in the absence of direct use of the currency by importers and exporters.<sup>6</sup>

In a recent article on turnover in the foreign exchange market, the Banca d' Italia *Economic Bulletin* reports on a survey of 21 countries in April 1989. Europe accounted for 50% of the volume of transactions, of which half was in London. The dollar still accounts for 45% of total turnover; the Deutschemark and yen together for slightly over 25%. In Italy (a useful 'representative' case), the dollar and DM account for 39% and 32% of non-lira turnover respectively, and for 54% and 24% of lira turnover. In the forward market the dollar accounts for 40% of transactions against other foreign currencies and 97% of transactions against lire.

The market for ecu will be thicker than the market for any of the current EC currencies, making it more likely that the ecu will emerge as a medium of exchange in interbank markets. Thus, the fundamentals point towards a potentially large utilization of ecu in interbank markets. If this process starts, it will be self-sustained, because of the externalities involved. However, it is also worth noting that despite the fundamentals, hysteresis plays a large role in the adoption of a currency as an international means of payment. To paraphrase Newlyn (1962), international money "falls within that perplexing but fascinating group of phenomena ... affected by

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<sup>6</sup>There is a theoretical literature investigating the emergence of media of exchange when there are more than two traders. Excellent examples are the models of Jones (1976) and more recently Kiyotaki and Wright (1989). Typically such models have a multiplicity of equilibria. For example, in the Kiyotaki and Wright model there are equilibria with one money, but also equilibria with more than one. What this model would imply for the problem at hand is that the ecu may fail to dent the dollar's position in interbank markets, although one cannot discount the possibility that its importance in trading in Europe and its periphery is such as to make it emerge as a significant regional (secondary) reserve currency.



self-justifying beliefs. If the members of a community think that money will be generally acceptable, then it will be; otherwise not" (p.2).

For both the interbank market and the non-bank private sector the ecu will not be adopted unless banking in it is a cheap as the alternatives. Whether this will be the case will depend on the success of financial deregulation in bringing down the cost of banking in the EC.

## II.2 *The Unit of Account Function*

We can next turn to the unit of account role of international money. This is closely linked to the means of payments role for national economies, although less so in the international monetary system. The unit of account role for an international currency depends first on whether importers and exporters invoice in that particular currency. Black (1985) presents evidence that whereas European firms invoice a very large proportion of their exports in their own currency, the proportion of their imports that is invoiced in other currencies, and especially dollars, is quite significant. On the other hand, Japanese firms invoice mainly in dollars, while more than 70% of LDC exports, 95% of OPEC exports and 85% of Latin American exports are invoiced in dollars.

EMU will result in increased invoicing in ecu by EC firms. It is also quite possible that the economies of scale created by the substitution of a number of European currencies by a single one will induce firms from other areas that trade mainly with the EC to start invoicing in ecu. This may include the EFTA countries, many Middle Eastern and Mediterranean economies, as well as the newly liberalizing economies of Eastern Europe. It may also include Japanese and US firms, as they may also be able to benefit from such economies of scale. To the extent that trade relations become concentrated in regional blocs (e.g. Europe-Africa, Japan-Asia, US-Latin America), we might expect multiple vehicle cum unit-of-account currencies. But insofar as trade is

uniformly distributed geographically and fully multilateral, there will still be powerful forces behind the use of a single dominant currency for these roles. In the latter case inertia will favour the dollar. For example, it seems unlikely that the OPEC countries will switch from dollar to ecu invoicing in the short to medium term.

The second aspect of the unit of account role of an international currency is related to whether there are countries that peg their own currency against it. Table 4 reports the number of countries that peg their exchange rate to the US dollar and other currencies. This is also a reflection of the importance of a currency as an international unit of account. Of the 55 countries that either peg their currency or maintain limited flexibility against a single other currency (all these are LDCs), 36 do so against the US dollar.

Table 4  
Exchange Rate Arrangements, March 31, 1989  
Number of Countries that Peg against a Single Currency

<hr/> Fixed Peg	
US \$	32
French Franc	14
Other	5
<hr/> Limited Flexibility	
US\$	4

Source: IMF 1989

What is revealed by Table 4, and the data on invoicing of exports and imports, is that the ecu will have a long way to go before it becomes a major international unit of account. A number of factors will affect its prospects. One is the momentous changes in Eastern Europe. The East European economies will necessarily have closer trade and financial links with Western Europe than with the United States or Japan. This makes it far more likely that both their firms and their central banks will use the ecu as a unit of account.<sup>7</sup> The process will also depend on the stability of exchange rates between the

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<sup>7</sup>However, this tendency will not be unopposed, either at the micro or at the

dollar, the yen and the ecu. If there is no prompt tackling of the global current account imbalances between Europe, Japan and the USA, it is quite possible that the US dollar will depreciate significantly against the yen and european currencies. Such dollar weakness may improve the chances of the ecu (and the yen) to substitute for the dollar as an international unit of account.

Table 5  
Exchange Rates Against the Deutschemark

		1978	1982	1984	1986	1987	1988	1989
	Currency							
EEC								
France	Franc	2.25	2.70	3.07	3.20	3.34	3.39	3.39
Italy	Lira	423	557	617	687	722	741	729
UK	Pound	0.26	0.24	0.26	0.32	0.34	0.32	0.35
Belgium	Franc	15.7	18.8	20.3	20.6	20.8	20.9	21.0
Denmark	Krone	2.75	3.43	3.64	3.73	3.81	3.83	3.89
Greece	Drachma	18.3	27.4	39.5	64.4	75.2	80.6	86.2
Ireland	Pound	0.26	0.29	0.32	0.34	0.37	0.37	0.37
Netherlands	Guilder	1.08	1.10	1.13	1.13	1.13	1.13	1.13
Portugal	Escudo	21.9	32.3	51.3	68.4	78.3	81.9	83.5
Spain	Peseta	38.2	45.3	56.6	64.6	68.7	66.3	62.9
EFTA								
Austria	Schilling	7.24	7.03	7.03	7.03	7.03	7.03	7.04
Finland	Markka	2.05	1.98	2.11	2.34	2.45	2.38	2.28
Norway	Krone	2.61	2.65	2.87	3.41	3.75	3.71	3.66
Sweden	Krona	2.25	2.58	2.91	3.29	3.53	3.49	3.42
Switzerland	Franc	0.89	0.84	0.83	0.83	0.83	0.83	0.87
USA	Dollar	0.50	0.41	0.35	0.46	0.56	0.57	0.53
Japan	Yen	104	103	84	78	80	73	73
NICS								
Singapore	Dollar	1.13	0.88	0.75	1.01	1.17	1.15	1.03
Taiwan	Dollar	18.5	16.1	13.9	17.5	17.7	16.2	13.9
S. Korea	Won	241	301	284	407	459	416	354
Hong-Kong	Dollar	2.33	2.50	2.75	3.60	4.34	4.45	4.25

The exchange rates are annual averages. Source: OECD *Economic Outlook* (December 1989).

international macro level. A symbolic example is the reported resistance from the United States to the use of the ecu as unit of account for fixing the quotas of the new European Bank for Reconstruction and Development.

Table 5, which reports exchange rates against the Deutschemark for a number of currencies, shows a tendency for the EFTA currencies to fluctuate less against the Deutschemark than against the US dollar. Compare for example their behaviour during the period of the dollar's rise to that of the currencies of the Asian NICs. Whereas the currencies of the NICs rose together with the dollar in the 1981-84 period (with the exception of the Hong-Kong dollar which is more linked to sterling), the EFTA currencies were more linked to the Deutschemark. In addition, since 1987 when re-alignments in the EMS stopped, the EFTA currencies shadow the EMS quite closely (especially the Swiss franc and Austrian Schilling). Thus, exchange rate developments in the 1980s suggest that the ecu may be an important unit of account for other economies with strong links with the EC, such as the current EFTA currencies (see Gylfason 1990 for the Nordic countries).

Traditionally, the means of payment (international reserve) and unit of account (vehicle currency) functions of money go hand in hand. This was the case with sterling during the gold standard, and with the dollar during the Bretton Woods system and beyond. It is very likely that the ecu will eventually become a far more important unit of account and means of payments than any of the current european currencies. But this process will be slow. Although the fundamentals look right, hysteresis is very important in such processes. Much will depend on whether the dollar displays weakness because of the persistence of global imbalances, as well as on the attitudes of traders in the inter-bank markets, the Japanese and the LDCs. In any case, the ecu is very likely to displace the US dollar in Europe and its immediate periphery, and thus to become an extremely important regional means of payment and unit of account.

### II.3 *The Store of Value Function*

The final issue related to the fundamentals of whether the ecu will become an important international currency has to do with the willingness of private investors to

hold ecu assets. Some of the factors that affect the international investor also affect central banks, although central banks have an additional transactions motive as they have to intervene in support of their currencies.

As in the case of central bank reserves, US dollar bonds make up a significant proportion of the international bond market. Table 6 contains some selected data.

Table 6  
Currency Structure of the International Bond Market  
Total Stocks, end of year.

	1982		1988		1989	
	bn US\$	%	bn US\$	%	bn US\$	%
Total	259.1		1085.4		1175.7	
US Dollar		56.1		43.3		45.8
Swiss Franc		16.4		12.8		11.2
Japanese Yen		6.4		12.2		10.4
Deutsche Mark		12.1		9.6		7.5
Sterling		1.8		6.7		6.1
Ecu		1.2		4.3		3.9

Source: BIS 1990

The data suggest a small decline of the role of the US dollar since the early 1980s, and a slight increase in the share of EC currencies, from 15.1% in 1982 to 17.5% in 1989. However, it is worth noting that the slight dollar retreat has been accompanied by a sharp rise in the share of Japanese yen denominated bonds.

Clearly the fundamentals are related to risk and return. A number of developments may work in the ecu's favour in the medium term. First we may witness a diminution of the so-called "safe haven" motive for dollar holdings. If detente between East and West and the liberalization of the East European economies prove durable, Europe may eventually seem a much safer "haven" than previously. This, together with the liberalization of financial markets in the EC, could increase the attractiveness of ecu-denominated assets. The second factor at work may be the anti-inflationary

reputation of the Bundesbank, if it can credibly be transferred to the ESCB, and eventually the European Central Bank. It goes without saying that there is a downside. If liberalization in Eastern Europe and detente were to stall or be reversed, it will be that much more difficult for ecu assets to displace dollar assets in international portfolios.

At this stage, the uncertainties involved are reflected clearly by the December 1989 OECD *Economic Outlook*. "Over a longer period, portfolio diversification considerations point to some factors that could continue to favour the dollar, but others that are unfavourable. On balance, the unfavourable factors could be the stronger" (p. 44). Among such factors the OECD suggests that "The growing importance of the ECU in financial transactions – notably bond issuance – combined with the creation of the EC single market and progress toward some form of monetary union in Europe, could over the longer-term result in a significant erosion of the status of the dollar as "the" international currency" (p.44-5). On the other hand, the "thickness externalities" discussed above in respect of trade are not absent from financial transactions. Here, however, worldwide financial integration and globalization seem inexorable, in contrast to the possibility of regional trading blocks. Thus, financial globalization may favour the continued dominance of the dollar.

#### II.4 *Transitional Issues*

It is worth considering in somewhat more detail the process by which the ecu could become a major international currency. For this to happen there must be a demand for ecu from the rest of the world, but there must also be a matching supply. Given that one expects a fall in demand for dollar reserves in the EC, ecu will only be accumulated in the rest of world if there is a series of balance of payments deficits in the EC, financed by either ecu denominated bonds or currency. Whether the deficits are due to the current or capital account matters only insofar as current account deficits are

usually seen as a sign of weakness, and may undermine the credibility of the European Central Bank. If past trends and current fiscal policies are maintained, however, only a sharp fall in private savings (a possible consequence of financial deregulation) could lead to the EC running significant current account deficits. Table 7 reports current accounts as a percentage of GNP/GDP for the EC, Japan and the USA.

Table 7  
Current Balances of EEC, Japan and the USA  
% of GNP/GDP

	1971	1976	1981	1986	1987	1988	1989	1990	1991
EEC	0.8	-0.6	-0.7	1.4	0.9	0.3	0.1	0.2	0.2
Japan	2.5	0.7	0.4	4.4	3.6	2.8	2.2	2.1	2.2
USA	-0.1	0.2	0.3	-3.1	-3.2	-2.6	-2.3	-2.1	-2.1

Source: OECD *Economic Outlook* (December 1989)

The data and the estimates and projections of the OECD for 1989–1991 suggest that the EC will continue with small current account surpluses. Thus, assuming there is a demand for ecu outside the EC, a buildup of ecu balances would require significant private and official capital outflows. If the EC becomes an important capital exporter to the rest of the world, then the ecu may eventually become a widely held international currency. It was exactly this process that led to the establishment of the international role of sterling in the 19th century and the role of the dollar after World War I. The US current account deficits of the 1960s undermined the dollar's role, and the same is true for the current account deficits of the 1980s. However, because of the substantial hysteresis involved in the process, the dollar still retains the prime position in the international monetary system.

What also has to be considered in assessing the prospects of the ecu as an international currency is the willingness of the Europeans to allow it to become one. There may be resistance on the part of the European Central Bank to the widespread

international use of the ecu because of a perceived burden of acting as an international lender of last resort. Note that the post-war prohibition on the part of the UK of the use of sterling balances for third country credits may have been a stimulus to the growth of the Euromarkets, and that the Bundesbank was reluctant to have the DM used as an intervention currency in the EMS because this would have led to increased external influences on domestic monetary policy.

If the European Central Bank pursues the opposite route of actively promoting the international use of the ecu, one cannot discount the possibility of a tug of war between the ecu, the incumbent (the dollar) and the major other contender (the yen) for international monetary supremacy. This could be a dangerous development. One might draw this lesson from the interwar experience of the rivalry between sterling and the dollar, with the French franc in the sidelines (Eichengreen 1987). Even without such a potential rivalry, if EMU results in large-scale substitution of ecu for dollar balances, the tendency for ecu appreciation vis-a-vis the dollar may be a cause for concern. There may well be an increased need for better monetary policy coordination at the international level to cope with such an eventuality. This danger, and the growing dissatisfaction with the current international monetary system, raise the possibility that in the medium run we shall see a strengthening of the SDR as both an international unit of account and an international reserve asset. Such a development was likely even before EMU was on the cards. EMU may increase its likelihood.

## II.5 *Costs and Benefits*

In the light of the above, the major short term international benefits for Europe from the creation of EMU are likely to come from the substitution of ecu for dollar assets in European portfolios. This will be because the need for intervention (traditionally conducted in dollars) by European central banks will be eliminated. Therefore, the required dollar reserves of the European Central Bank, or even the ESCB



in the second stage of the Delors plan, will be far smaller than the current European dollar reserves. The reduction of demand for dollars is likely to be significant within Europe in general, as the proportion of intra-European trade is very high, and likely to grow even more with the 1992 programme.

Whether the European money (ecu) in Stage III is likely to become a major international reserve or vehicle currency internationally will depend on several factors which were analysed in some detail. These include the possibility that the East European economies and the EFTA countries will use the ecu as a unit of account and a medium of exchange, the likelihood that the ecu will be used increasingly in the interbank market, and the likely reduction of European risks following disarmament and the developments in Eastern Europe.

Although the fundamentals point towards a possibly significant role for the ecu in the international monetary system, it is nevertheless worth noting that the emergence of major international vehicle and reserve currencies is a very slow process. It is driven by fundamentals, but history and hysteresis are very important. We find it unlikely that the ecu will be a serious contender for the position of the dollar in goods and asset trade that does not involve Europe and its immediate periphery. This opinion is based on our assessment of the fundamentals and on hysteresis. On the other hand, the ecu will substitute for the dollar in intra-European trade and investment.

In the light of the above, what are the likely cost and benefits for Europe? The costs lie partly in the lender of last resort function of the Central Bank issuing a leading world currency. Such costs are currently shared between the IMF, the Federal Reserve Board, the Bank of Japan and the Bundesbank. We do not envisage that EMU will upset the current sharing of responsibilities, apart from substituting the ESCB for the Bundesbank in this role. Thus, it is unlikely that there will be additional costs on that score for the EC as a whole.

The ecu foreign exchange market will be thicker than the markets of individual EC currencies. Thick markets are inherently less volatile than thin markets, but they

are also harder to control by official intervention. Even if volatility were to increase, the however, costs may be very small. For example, Baxter and Stockman (1989) failed to find any real effects from the higher volatility of real exchange rates under flexible exchange rate regimes, although Kenen and Rodrik (1986) and Pereké and Steinherr (1989) have done so.

We finally come to the question of international seigniorage. If the ecu were to become a major international currency, there would be possibilities of raising seigniorage from the rest of the world. What would be the quantitative significance of such seigniorage? A comparison with other international currencies may be instructive. Cohen (1971) estimated that the seigniorage extracted from the fact that sterling was still a major regional currency in the 1950s and 1960s was almost zero. On the other hand, recent estimates by the Fed put the stock of dollar notes and coins held outside the United States at about \$130 bn. With treasury bill rates of the order of 8% per annum, this amounts to around \$10bn per annum, which is equal to about 0.2% of the 1988 US GNP. Corresponding numbers for the EC would be substantially lower. If they were to rise to one-fifth of the dollar seigniorage (say \$2bn), then international seigniorage would amount to about 0.05% of EC GNP. Even that figure may be optimistic in the short to medium run.

### III. THE EMU, INTERNATIONAL EXCHANGE RATE REGIMES AND THE COORDINATION OF MACROECONOMIC POLICIES

A number of issues arise in this connection. These include both technical and more fundamental questions relating to macroeconomic policy coordination and the stability of the international monetary system.

### III.1 *Exchange Market Intervention*

The most prominent of the technical questions relate to the nature of exchange market intervention in stages II and III. Who will intervene to influence the external value of the ecu vis-à-vis the dollar and the yen in stage II? In what currency will this intervention take place? How is the ESCB going to coordinate intervention? In whose debt will open market operations be conducted? Some of these questions also arise for stage III of full monetary union, although it is then clear that intervention will be decided by the European central bank.

The problem of coordinating exchange market intervention in stage II of the Delors plan is unlikely to create any major additional costs for Europe. This problem has been successfully tackled at the intra-EC level in the current EMS, where there have been substantial periods without realignments of central parities. Detailed technical consultations will be necessary to formulate operating rules, and some internal (distributional) conflicts may arise, but these can be resolved. The more difficult problem may be to agree, both internally and with the US and Japan, on the desired range for the value of the ecu and the macroeconomic policy mix needed to sustain it.

This brings us directly to international macroeconomic policy coordination. There are several types of uncertainty that constitute obstacles to successful coordination (see Frankel 1988). The players may have incomplete or inaccurate knowledge of the initial position – the state of their own economies and those of other players. We may expect EMU and the associated development of intra-EC surveillance to improve this knowledge. Similarly, it should improve our understanding of the behaviour of the aggregate EC economy, thus reducing uncertainty about the effects of policies (model uncertainty). On the other hand, it may be more difficult for the Community as a whole to agree on the weights to assign to target variables than for the individual major EC economies that now participate in G-7 coordination. Without formal modelling,

however, it is hard to say a priori whether coordination is easier with seven players having relatively well-defined objectives than with four, of whom one then speaks with somewhat less clarity. At this stage of our knowledge it is unlikely that we could obtain analytical results for such a problem. Nor is it clear whether the need for (benefit from) coordination is greater or smaller: there is no such need with only one agent, nor with an infinite number of atomistic agents. However, we know very little about how the costs of coordination failures vary between these two extremes.

### III.2 *Monetary Policy Coordination and the International Monetary System*

An important set of issues relates to analytical aspects of the international coordination of monetary policies. Is the reduction in the number of major players in the international monetary arena likely to make coordination of monetary policies easier? Will EMU promote greater exchange rate instability worldwide, i.e., between a European currency and the dollar and yen? Some of the relevant factors can be examined with the help of three-country models. A major prior question is whether the US currently acts as a Stackelberg leader vis-a-vis the G-7. If so, the emergence of another major player (in fact two – the EC and Japan) will transform the nature of the game.

For example, Giavazzi and Giovannini (1989) suggest that more symmetry may generate instability in the international monetary system. If one economy is much larger and more closed than the others, it may be quite happy to act as a Stackelberg leader, using the money supply as its monetary policy instrument, without regard for its nominal exchange rate. One may then have an equilibrium in which the large economy sets its money supply, while the small economies intervene to affect their nominal exchange rates. However, if another major player were to emerge, in the absence of full cooperation, the greater symmetry may lead to instability. Both economies will have an incentive to try to use exchange rate policy, as their bilateral exchange rate vis-a-vis

the other large country matters more, and in such a case instability will arise. Thus, in the presence of large shocks we may see both economies trying to manipulate their exchange rates, i.e. use beggar-thy-neighbour monetary policies, in which case there is a reversion to flexible exchange rates. As the authors put it, "when the size of the  $N$ th country is much larger than that of the other country (or countries), so that bilateral exchange-rate fluctuations do not significantly affect the  $N$ th country's output and real income, a regime of managed rates does not display the instability that characterizes the symmetric case" (p. 208). These results suggest that the greater symmetry that EMU will imply for the international monetary system may result in a reversion to flexible exchange rates internationally.

Our view is that such a conclusion is unwarranted in the circumstances. The international monetary system today is not as asymmetric as (say) the classical gold standard or Bretton Woods. The leadership of the United States has been significantly eroded, and Japan and Germany have emerged as major players (see Group of Thirty 1988).<sup>8</sup> Thus, EMU will not result in a qualitative switch from an asymmetric to a symmetric system, as the current system is already symmetric in many ways. In fact, the current arrangements, especially after the meetings at the Plaza in September 1985, can be interpreted as cooperative management of exchange rates and world monetary policy by the G-7. For example, Funabashi (1988) in his wide-ranging assessment of the process from the Plaza to the Louvre suggests that "One of the achievements of the Plaza strategy was to force consensus despite the existence of ideological obstacles" (p. 229). To the extent that the current international monetary system is already symmetric and cooperative in the setting of monetary policies, there is little scope for EMU to destabilize it. In fact, Germany and France in the Plaza to the Louvre process clearly had the concerns of the EMS in mind. According to Funabashi "as the EMS

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<sup>8</sup>In any case, there is a lot of confusion about the definition of leadership in a repeated game. Stackelberg leadership is not an appropriate concept, and even the less precise notion of asymmetry may no longer be appropriate.

factor was vital to the West German Plaza strategy, so it was to that of the French. The Germans sought to avoid a painful schism within the EMS that a free fall of the dollar might cause, while the French wanted to keep the West Germans from taking over the EMS" (p. 125).

Thus, the shift to a more symmetric system as a result of EMU will not be substantial. The current system already seems to be characterized by some cooperative determination of monetary policies with exchange rate targets, although it may be second-best in that there is little use of fiscal policies for stabilization purposes (Alogoskoufis 1989). In fact, in many ways the system resembles the blueprint of Williamson and Miller (1987), although there is the important difference that the central parities that constitute the targets of the monetary authorities of the G-7 are not publicly announced (see Miller, Eichengreen and Portes 1989 for theoretical and empirical investigations of alternative blueprints).

In conclusion, EMU is unlikely to undermine the evolution of the international monetary system towards greater nominal exchange rate stability between the dollar, the yen and European currencies. Monetary policies are already being determined in a coordinated manner, and this looks likely to continue insofar as there is no clear "hegemon" in the system. If anything, more symmetry among the players is likely to increase the need for (benefits from) coordination. An EC currency can unilaterally peg to the Deutschmark (accepting EMS discipline), but the ecu cannot unilaterally peg to the dollar or yen – close and reciprocal monetary policy coordination will be required to maintain exchange rate stability (see Portes 1989).

There must be clear responsibilities for ecu exchange rate policy. There are two aspects, namely the choice of international monetary regime and the implementation of the exchange rate policy. Given the policy regime, the implementation of exchange rate policy will naturally be in the domain of the European Central Bank. However, finance ministers, both in the European Council and the G-7, will ultimately decide the Community's views on the choice of regime and will also be involved in issues such as

(for example) the determination of target zones.

### III.3 *Coordination of Fiscal Policies*

Issues relating to the international coordination of fiscal policies and the adjustment of external imbalances should also be considered. Recent discussions of blueprints for international monetary reform and their associated assignment rules provide an appropriate context.

Nation states will remain sovereign even under EMU. Under the most probable institutional scenarios examined in section I, and unless the provisions envisaged in the Delors Report are adopted in their most extreme form, it is unlikely that the nature of the fiscal coordination game will change significantly. But fiscal outcomes will condition the Community-wide monetary policy. In addition, without independent national monetary policies, there will be more pressure in individual countries to use fiscal policy for domestic stabilization, as well as incentives to consider incomes policies. On the other hand, EC-level taxation and expenditure cannot be expected to grow markedly relative to national budgets, nor to become significantly more amenable to use as tools of discretionary stabilization policy.

On balance, therefore, EMU is likely to make international coordination of fiscal policies more difficult and increase the burden on monetary policy coordination. This could be counted as a significant cost if it were thought that fiscal policy coordination has played or could otherwise in future play an important positive role in maintaining global stability and growth. This does not seem to have been the case in recent years, and indeed fiscal policy is seen as the Achilles heel of the current international monetary system. Both the IMF and the OECD highlight the medium-term dangers from the lack of coordination of fiscal policies worldwide. For example the October 1989 IMF *World Economic Outlook* suggests that "The prospect of sizable and persistent current account imbalances among the three largest industrial economies continues to cloud the

medium-term outlook" (p. 1). It then proceeds to discuss the reasons for these imbalances, giving emphasis on fiscal policies. On the other hand, the December 1989 *OECD Economic Outlook* suggests that "Full implementation of fiscal policy commitments and closer co-operation in dealing with systemic financial market issues would further domestic objectives, while at the same time it would reduce the burden on monetary policy in achieving exchange rate objectives" (p. xv).

There are a number of ways in which EMU may help this process. The first has to do with the rules envisaged in the Delors Report for limits on national budget deficits. It now seems unlikely that such precise limits will be applied, but EMU may well result in more fiscal policy coordination within Europe. On the other hand, to the extent that European fiscal policies are coordinated, the EC may have more bargaining power in international institutions like the G-7, to avoid a repetition of the outcomes of the early 1980s, when disagreements among the Europeans weakened pressure on the US administration to consider the international repercussions of its macroeconomic policy mix. For example, Putnam and Bayne (1987) suggest that since 1981 "the non-American summit participants would be unanimous in complaining about US interest rates, the budget deficit and the strength of the dollar, at least until the dollar turned down in 1985. But there was less unanimity about causes and cures. The simplest remedy, which appealed to the French Socialists, would be for the Americans to loosen their monetary policy. However, the other governments were committed to the path of monetary rectitude embarked upon after the second oil shock, and they were uneasy about recommending the opposite course to the Americans. ... Thus, ... the Americans mostly temporized. 'Wait a while', was their message in Ottawa; 'Let's study it', the approach in Versailles; 'Our boom will solve it', the line in Williamsburg; and 'After our elections', the promise at London II. Serious action on the dollar and the budget deficit had to wait till 1985" (p. 127-8).

The question of whether EMU would increase potential coordination gains for the rest of the world and therefore induce the US to be more cooperative does not admit an



easy answer. The available empirical evidence does not suggest that it would. For example, as Currie *et al* (1989) report in their recent survey (p. 26), the US benefits from coordination in empirical studies appear to be half as large as the benefits for Europe, irrespective of whether one examines coordination between the US and Germany or between the US and the EC.

Economic policy coordination is ultimately and essentially political. Distributional issues must be resolved by a political process, both among countries in the EC and between the Community and its partners. Even if policy coordination is expected to bring gains, it will not be implemented unless there is some *ex ante* understanding about the distribution of such gains. The bargaining necessary to reach such an understanding will be easier for the Community as a unit *vis-a-vis* the US and Japan than for the four major EC countries acting individually in the G-7. On the other hand, *ex post* verification of compliance with an agreement on policies and enforcement of sanctions for non-compliance may be harder for the US and Japan *vis-a-vis* the EC than in dealing with individual countries. And it will take some time for the EC to establish the credibility in implementing policy commitments that some of its major member countries currently possess.

This political balance is therefore mixed. It swings significantly towards the benefits side, however, when we take into account the greater geopolitical "weight" of the EC as a single economic player and its enhanced ability to trade off macroeconomic policy changes against other policies in areas such as trade, agriculture, and the environment. This may well be a major consideration for EC leaders. The Single European Market programme, moves towards EMU, and the 1989 revolution in Eastern Europe have stimulated a reassessment of Europe's role. Many Europeans still perceive significant asymmetries in the operation of the international economic system and find any remaining US leadership unacceptable. They believe that EMU will bring about greater symmetry, and that belief may be partly self-fulfilling, whatever the costs and benefits.

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