Monetary Arrangements in the European Common Market*

Introduction

The Jamaica Agreement essentially grants every country the freedom to determine — and to modify — its own exchange rate system. It thus confirms a situation characterised by a wide variety of national arrangements, which include pegging currency values to the SDR or to a major currency as well as joint and individual floating.

This situation has given rise to considerable uncertainty as regards trade and capital transactions. Uncertainties are aggravated by exchange rate fluctuations that much exceed in amplitude variations in purchasing power relationships. An example is provided by the relationship of the French franc and the U.S. dollar. The average monthly exchange rate between the two currencies declined from 5.51 in December 1971 to 4.10 in June 1973, increased to 5.30 in January 1974, fell to 4.04 in June 1975, and rose again to 4.92 in August 1976, while the purchasing power ratio between the franc and the dollar hardly varied by more than 3 per cent. More recently, the value of the Italian lira and the British pound in terms of SDRs fell by 17.6 per cent and 17.0 per cent, respectively, over a three month period. The wide variability of exchange rates may be explained by short-term inelasticities in trade, leading to perverse

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1 The relevant periods are December 1973 to March 1975 for the lira and February 1976 to May 1976 for the pound.
changes in the trade balance; by speculative capital movements and by expectations as regards inflation rates that may be self-fulfilling and give rise to cumulative movements in exchange rates and in domestic prices. Action taken by a country that intends to derive advantages in export markets by accelerating a decline, or resisting an increase, in the value of its currency may also contribute to exchange rate variability.

The increased instability of foreign trade and payments associated with present exchange rate arrangements has been widely criticized, and suggestions have been made for measures to be taken to reduce its amplitude. At the same time, given the differing interest of the individual countries and the varying importance of foreign trade in their national economies, the chances for an international agreement on such measures are slim, at least for some time to come. There is a greater chance for reaching an agreement on measures aimed at reducing instability within a group of countries which carry out much of their trade with each other and whose domestic economic activities are intimately linked by their mutual trade. These conditions are fulfilled in the European Common Market where intra-area trade accounts for more than one-half of total trade and, in view of the elimination of internal tariffs, domestic activities and intra-area trade are closely interconnected.

Greater stability in financial arrangements among the EEC countries would reduce uncertainty in their mutual trade and investment and contribute to harmonious economic development in the European area. But, establishing an area of greater stability is also in the interest of other nations, and especially African and Middle Eastern countries that carry out a large part of their foreign trade with Western Europe.

The high, and rising, degree of economic interdependence of the EEC countries further points to the Common Market increasingly assuming the characteristics of an optimum currency area. However, experience has confirmed the views that the integration of national monetary and fiscal policies is a precondition for currency unification. In the absence of policy integration, currency unification remains a distant goal. Yet, in view of the advantages of optimum currency areas, this goal should be considered in devising measures to be applied in the more immediate future.

The objectives of lessening uncertainty in trade and payments within the European area and strengthening the European integration process can be served in a variety of ways. Alternative solutions include adopting a market-oriented, or a policy-oriented approach, when the former would give emphasis to the establishment of a parallel currency and the latter would concentrate on the coordination of the economic policies of the member countries. Given the constraints under which the countries of the European Common Market operate, an intermediate solution is proposed here. This would entail adopting a three-pronged approach to include establishing rules for exchange rate adjustment; making steps for harmonizing national economic policies; and creating a parallel currency, the Euroa. As it will become apparent, actions in these three areas are interdependent and would reinforce each other.

I. Exchange Rate Adjustments in the European Area

Since the publication of the Werner Report in October 1970, discussions on monetary arrangements in the European Common Market have largely focused on the snake, an arrangement under which participating countries agree to maintain their exchange rates within a band of 21/4 per cent around the central cross-rates. While originally intended as an instrument of monetary integration through a gradual narrowing of fluctuations among the currencies of the EEC member countries, the snake has in fact become a device for the joint floating of certain EEC and non-EEC currencies. At present, the snake combines the German mark and the currencies of several smaller countries whose economies are closely linked. Apart from small adjustments, since the establishment of the snake in April 1972 parity has been maintained between the German mark and the currencies of the Benelux countries that carry out about two-fifths of their trade with Germany and with each other. After a temporary absence, Denmark has also rejoined the snake, although the proportion of its trade with Germany and the Benelux countries is somewhat smaller. Finally, Norway and Sweden, who also carry out a substantial proportion of trade with the EEC countries, have joined the snake although they are not members of the Common
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2 Cf. e.g., the essays by Edward M. Breisteny, Richard N. Cooper, Philip Dean, Charles F. Kindler, Peter Mathies, Robert W. Rodis, Robert Tepper, and Jose Villaric, in "Reflections on Jamaica", Essays in International Finance, No. 275, International Finance Section, Department of Economics, Princeton University, April 1978.

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I. Exchange Rate Adjustments in the European Area

Since the publication of the Werner Report in October 1970, discussions on monetary arrangements in the European Common Market have largely focused on the snake, an arrangement under which participating countries agree to maintain their exchange rates within a band of 2 1/2 per cent around the central cross-rates. While originally intended as an instrument of monetary integration through a gradual narrowing of fluctuations among the currencies of the EEC member countries, the snake has in fact become a device for the joint floating of certain EEC and non-EEC currencies. At present, the snake combines the German mark and the currencies of several smaller countries whose economies are closely linked. Apart from small adjustments, since the establishment of the snake in April 1972 parity has been maintained between the German mark and the currencies of the Benelux countries that carry out about two-fifths of their trade with Germany and with each other. After a temporary absence, Denmark has also rejoined the snake, although the proportion of its trade with Germany and the Benelux countries is somewhat smaller. Finally, Norway and Sweden, who also carry out a substantial proportion of their trade with the EEC countries, have joined the snake although they are not members of the Common
Market. In turn, among the larger countries, Italy and the United Kingdom left the snare soon after its establishment while France was absent between January 1974 and July 1975, and left the snare again in March 1976. A lower degree of dependence on intra-EC trade, divergences in economic performance, and differences in national economic policies have often been invoked to explain these developments. Another important factor has been the strict conditions imposed on the participating countries by the arrangements under which the snare has operated.

The resulting divergence in the national economies of countries inside and outside the snare would be aggravated if actions aimed at furthering monetary integration were limited to countries participating in the snare. Such a two-tier system would further contribute to divergences in policies, with adverse effects on the individual countries.

At the same time, given the interdependence of the national economies of the Common Market countries, actions taken in regard to the exchange rate by any of them will necessarily affect all others. Recognizing this interdependence makes adjustments in exchange rates, whether in the form of changing the central rate or through floating, a matter of common concern. Accordingly, there is need for agreement on rules to be applied in regard to exchange rate adjustments.

It is suggested here that countries establish a "target zone" for their currencies, agreed upon jointly with the other member countries. The target zone would be reviewed periodically and adjustments made when conditions so require. Such adjustments would take place in small steps, in the form of a "crawling zone", rather than in large jumps. The target zone would be initially set in terms of effective exchange rates, i.e., with respect to average changes in currency values weighted by trade shares. Eventually, however, the target zone should be defined in relation to the average movement of the participating currencies by linking it to the proposed parallel currency, the Eura (see Section III below). Also, initially the countries would not have the obligation to stay within their target zone, but would be expected to refrain from domestic policies and interventions in foreign exchange markets that would accelerate movements bringing their currency values outside the zone. In turn, they would be permitted to accentuate changes that bring their currency back to the target zone and will have in this the support of the other participating countries.

The establishment of a target zone and acting according to the described rules would be a condition for having access to financing from the European Monetary Co-operation Fund and benefitting from the support of the other member countries. At the same time, in order to make lending by the European Monetary Co-operation Fund a credible instrument to induce countries to behave according to the agreed upon rules, it would be necessary to increase the credit facilities of the Fund. Lack of access to the Fund would not be a deterrent, however, to excessive devaluation or to a country refraining from valuation. It is hoped that in such instances the consensus of opinion within the Common Market would be sufficient to induce the country in question to take appropriate action. Should this not be the case, the country could be obliged to lend its excess accumulation of member country currencies to the European Monetary Co-operation Fund. In extreme cases, the other member countries may also consider invoking escape clauses under the Rome Treaty.

Agreement on the establishment and the modification of target zones should be based on a thorough review of the situation in the individual countries at the Community level. This is preferable to relying on automatic rules based on a particular quantitative indicator. Thus, it would be inappropriate to use reserve changes as the only indicator as it has been suggested. For one thing, reserve changes may be the result of temporary variations in the capital account; for another, there is a danger that even small variations in reserves would lead to speculative flows that would, in turn, trigger an exchange rate adjustment. Nor can one rely solely on indices of relative costs and prices that are subject to statistical problems and take no account of changes in service items, such as tourism, and in the capital account.

The proposed arrangements are compatible with some countries taking stricter obligations, such as maintaining present exchange rate margins in the framework of the snare. Enlarging these margins would not be desirable, since it would reduce stability in transactions among the countries in question. However exchange rate
changes and temporary floating would be allowed. At the same
time, the smaller countries would have a common target zone.

While permitting a choice among alternative arrangements, the
application of the proposed rules would lead to greater stability
in exchange markets among Community currencies. At the same
time, consultations cannot be limited to actions concerning exchange
rates. In fact, taking account of its effects on the national economies
of the partner countries, reliance on exchange rate adjustment may
often appear to be less desirable than changes in domestic policies
or financing the deficit.

Recognizing the interaction of policy measures that may be
used in the event of disequilibria would, in turn, require making
leading by the European Monetary Co-operation Fund contingent
on agreement on the measures to be taken in a particular situation.
This, indeed, appears to be necessary in order to induce surplus
countries to agree to a substantial increase in the size of the Fund
that would be needed to make possible the operation of the proposed
rules on exchange rate adjustment.

At a subsequent stage, member countries would assume the obli-
gations to take appropriate policy measures aimed at remaining
within the target zone. Eventually, the scope of common decision-
making would also be increased and, if and when conditions warrant,
the target zones would be narrowed.

II. Steps Towards Policy Coordination

Thus far, we have considered the need for coordinated action
to deal with disequilibria as they arise. While such coordination
would have an ex post character, the objective of avoiding the
emergence of disequilibria would call for ex ante coordination. The
necessity of ex ante policy coordination also follows from the inter-
dependence of the national economic policies of the EEC countries.
This fact is well-understood by the smaller member countries but
it is only beginning to be recognized by the larger countries. Yet,
the difference between the two groups of countries relates more to
the speed of adjustment than to the ultimate effects of the policies
applied.

The smaller countries have long recognized the limitations
economic interdependence imposes on their scope of action. For
one thing, the effectiveness of monetary and fiscal policies is severely
circumscribed by the spillover in the form of higher imports and
lower exports. For another, exchange rate changes will have
immediate effects on domestic prices. Thus, for the smaller countries,
purchasing power parity relationships hold even in the short run;
domestic prices and exchange rates will adjust in a parallel fashion,
irrespective of whether the initial change originated in domestic
policies or in exchange rate adjustments.

The larger countries are less exposed to foreign trade, and hence
experience a smaller spillover in the form of imports and exports
following the application of expansionary policies, as well as smaller
changes in domestic prices following an exchange rate adjustment.
However, the greater freedom of action of the larger countries
should not be overstated. This is because, with the increased inter-
dependence of the national economies of the EEC countries, the
length of the period of adjustment is shortening and, in the absence
of barriers to intra-area trade, the indirect effects of actions taken
by the larger countries reduce the effectiveness of these actions.

Thus, expansionary policies will have a limited impact on
domestic activity, even in the case of the larger countries. And,
while a devaluation can be used to correct the resulting balance-of-
payments disequilibrium, this will further exacerbate the inflationary
repercussions of the expansion. At the end, real economic variables
may have been little affected while the country has set in motion
an inflationary spiral that is difficult to control.

For similar reasons, under free trade and capital mobility, over-
devaluation or the failure to revalue would not have lasting effects
on the level of domestic economic activity because of imported
inflation. At the same time, temporary benefits to one country
involve losses to its partners. Now, since any country can play the
game, it is in the interest of all member countries to agree on policy
coordination in order to avoid temporary resource shifts and the
creation of inflationary pressures that are not easily reversible.

In the context of medium-term programming over the last
decade emphasis was given to agreeing on targets for economic
growth, unemployment, and inflation in the Common Market
countries without however providing for the coordination of policy
measures necessary to attain these objectives. Thus, target setting has
become an empty exercise as demonstrated by persistent deviations
from the targets. A more appropriate approach is to agree on targets for policy measures. In this connection, the question arises whether kind of policies need to be coordinated. Extreme solutions derive from "monetarist" and "fiscalist" approaches.

While criticizing the policy-coordination approach, the authors of the All Saints' Day Manifesto, published in the November 1, 1975 issue of the *Economist*, effectively call for the coordination of monetary policies by proposing that national governments adopt non-inflationary monetary targets. This recommendation appears to be based on the premise that one can rely on monetary policy alone and that inflation could be eliminated forever at a relatively moderate cost. By contrast, the new Cambridge School claims primacy for fiscal policies and suggests that government budgetary deficits are fully translated into balance-of-payments deficits. This presumes that the private savings-and-investment balance is not affected by fiscal policy and assigns a passive role to monetary policy.

The All Saints' Day Manifesto represents an extreme version of monetarist views. Thus, while the claim that maintaining unemployment at its "natural" level is compatible with any rate of inflation originated with U.S. monetarists, they do recognize that adjustment to a zero rate of inflation is a long process which would involve a considerable economic cost. Nor can it be assumed that adjustment to a zero rate of inflation would proceed smoothly, without being disturbed by internal or external shocks. Political developments in France and Italy and the drought in the summer of 1976 provide examples of internal shocks. In turn, the oil crisis, the U.S. recession, and the sudden increase of import demand for food on the part of the communist parties have originated outside of the Community. Such shocks, whether internal or external, interfere with the adjustment process or disturb an equilibrium once established. Thus, rather than the postulated once-for-all adjustment to price stability, policies would need to be adopted to deal with recurrent shocks.


6 Note further that the experience with hyperinflation cited by Parkin (Monnet. Fonds, "Monetary Union and Stabilisation Policy in the European Community", in this Review, September 1976) is irrelevant in this context, since monetary reform following a hyperinflation involves correcting the disruptions that hardly exist in the present situation.

Singleminded persistence in pursuing the objective of a zero rate of inflation would, then, involve a cost in the form of unemployment and the underutilization of resources whenever a particular shock has had inflationary repercussions.

At the same time, apart from their being subject to different internal shocks, external shocks will have different effects on the individual member countries, depending on their economic structure, the bargaining power of various economic agents, and the political decision-making process. The balance of payments effects of the oil crisis, for example, varied from country to country, depending on their reliance on imported oil, and policy reactions to this shock in the form of oil price adjustments and oil conservation measures also varied.

Also, reliance on monetary policy alone would effectively mean using a single instrument to pursue several, in part, conflicting objectives, such as price stability and full employment. And the monetarist approach assumes that a budgetary deficit will affect economic activity to its full extent if financed through money creation and will have no effect at all if financed through borrowing in financial markets.

By contrast, according to the new Cambridge school, a government budgetary deficit will have identical effects on the savings-investment process and on the balance of payments, irrespective of the mode of financing. This approach attributes a passive behaviour to private investors who are assumed to make their savings and investment decisions independently of the government deficit. Nor would these decisions be affected by changes in economic variables the budget deficit would engender. In assuming the irrelevance of government borrowing for private investment and savings decisions, the Cambridge approach neglects the possibility of "crowding out" private investors. It also disregards the effects of changes in the trade balance on the budget balance and fails to take account of monetary variables.

Nor can one assume that in the absence of money creation changes in public and private spending will be fully offsetting as presumed by the monetarist approach. At any rate, the monetarist approach takes an essentially long-run view, while for policy-making the medium-run is relevant. In fact, in the presence of continuing shocks, one cannot even speak of a long-run adjustment process, but rather of a succession of medium-runs.
Although empirical evidence is far from conclusive, it would appear that in the medium-run both monetary and fiscal policies matter. And while they are not necessarily equally suitable to pursue particular objectives, monetary and fiscal policies are complementary in their economic effects.

These considerations point to the need for the coordination of monetary and fiscal policies in the European Common Market. Coordination would take the form of agreeing on targets for the relevant policy measures, such as the rate of monetary expansion, the size of the deficit in the public sector, and the method of financing this deficit. As suggested in the Marjolin report, there is also need for coordinating the monetary measures used in carrying out particular policies.9

Given differences in the economic structure of the individual countries, however, it would be inappropriate to aim at identical policy targets. Also, the targets should be determined in terms of a range rather than a single figure. With the judicious choice of the targets, then, the scope for conflict in the determination of exchange rates may be reduced and advances can be made in the process of European economic integration.

Establishing and implementing targets for monetary and fiscal policies should be made a precondition for lending by the European Monetary Cooperation Fund and for mutual support by the EEC member countries. At the same time, it would be desirable to increase the relative importance of long-term credits. Long-term credits would contribute to more rapid economic growth in the Common Market by accelerating the structural transformation of the national economies of the member countries; they are also necessary to remedy structural imbalances in the Common Market countries that may be intensified as a result of the coordination of monetary, fiscal and exchange rate policies. While the increased application of struct-

7 In experimenting with several macro-models in a recent paper Modigliani and Ando have found that in the United States over a 2-3 year horizon economic activity is affected by monetary policy, accompanied by a neutral fiscal stance as well as by fiscal policy, combined with neutrality in the monetary field. In fact, the effects of fiscal policy appeared to be somewhat greater. FRA~O MODIGLIANI AND ALFRED ANDO, "Impacts of Fiscal Action on Aggregate Income: The Monetarist Controversy — The Theory and the Evidence", 1975, n. 6.


tural policy measures, in particular regional policy, becomes necessary to offset the possible adverse effects of the coordination of monetary, fiscal and exchange rate policies, financing structural transformation from Community funds should be made contingent on the coordination of these policies. In this way, a quid pro quo is created in the application of measures that further economic integration in the Community.

III. Establishing a Parallel Currency, the Europa

Progress towards European integration would also require a unified capital market on a scale that can finance European industry. Such financing is especially necessary in the technologically sophisticated industries, such as aircraft, computer, and electronics, where its absence has been one of the obstacles to the development of European transnational firms that could fully utilize economies of scale and effectively compete with their American counterparts. Denominating capital market transactions in terms of a parallel currency unit, the Europa, would serve the objective of establishing a unified capital market that would have a breadth national capital markets do not possess. It would thus permit achieving economies of scale in financial transactions, leading to a reduction in differences between interest rates paid by borrowers and received by lenders, and contribute to greater competition and efficiency in financial markets. The Europa would also offer an alternative to the U.S. dollar whose use in transactions among the Common Market countries has been objected on several grounds. Apart from the seignorage accruing to the issuer, the objections pertain to the use of the currency of a non-member country accounting for only one-sixteenth of Common Market trade in intra-EEC transactions; the impact of fluctuations in its value vis-a-vis member country currencies on these transactions; and the resulting effects of United States monetary policy on the national economies of the member countries.

The Europa would further offer advantages in denominating trade transactions among the Common Market countries as well as with countries that have strong trade ties with the Community. The increased use of the Europa in financial and in trade transactions, in turn, would make it attractive for use as a unit of account by
transnational corporations that carry out the bulk of their activities in the European area.

The Europa could be employed as a unit of account in capital market transactions, in trade transactions, in the operations of transnational corporations, and in transactions between member country governments and with the Community without it being a means of payment. Such an alternative would, however, involve additional transaction costs associated with conversion into national currencies and it would not permit holding working balances in terms of the Europa, although this is desirable for carrying out international trade denominated in Europas. Further advantages can be derived therefore if the Europa is used as a means of payments. Using the Europa as a means of payments would also be necessary for it becoming an intervention and reserve currency. The performance of these functions would, in turn, require devising rules on the issue of the Europa, with attention given to the need to maintain equilibrium in foreign exchange markets.

Initially, issuing the Europa as a parallel currency would involve exchanging national currency reserves for Europas in a proportion and according a timing to be agreed upon. This could take place in the framework of the European Monetary Cooperation Fund that would thus assume certain central banking functions. At the same time, increasing the resources of the Fund would make it possible to perform the functions described in connection with exchange rate adjustments.

The Europa would also eventually become a numéraire in which exchange rates of member country currencies are defined. It would finally provide the basis for the establishment of a common European currency if and when the necessary political and economic conditions are fulfilled.

In short, the Europa would serve a variety of functions in the private and in the public domain: (a) it would be used as a contractual unit of account, a means of settlement, and a medium for holding working balances in private international transactions, capital and current; (b) it would be used in transactions between member country governments and the Community; (c) it would become a reserve and an intervention currency; and (d) it would serve as a numéraire in defining national exchange rates.

In order to appropriately fulfill these functions, the Europa should conform to certain criteria: it should be attractive for current and capital transactions; its use should discourage speculation; and it should be acceptable to national governments and to Common Market institutions. These criteria will be employed in evaluating alternative definitions below.

The authors of the All Saints' Day Manifesto proposed the launching of a parallel European money of constant purchasing power that would circulate along with the existing national currencies. While such a fully-indexed currency would be attractive to lenders, it would be unattractive to borrowers. Also, it would be unacceptable to national governments as they would run the risk of wholesale shifts from national currencies to the Europa whenever real interest rates on obligations denominated in national currencies became negative. Negative real interest rates were often observed in the past and may also recur in the future, especially in regard to short-term securities the market for which is greatly affected by the state of the business cycle and by monetary policy. In the event of negative real interest rates on short-term securities denominated in national currencies, large shifts out of these currencies could be avoided only if the nominal interest rate on the Europa was negative, which is hardly practicable. Nor do financial markets require obligations to be fully or even partially indexed. In the United States even the few bonds with variable interest rates issued during the period of rapid inflation in 1974-75 lost their attraction since no new issue has been floated. Also, maturities have been lengthening in the Euro-dollar market. Bonds exceeding a maturity of 10 years were sold in early 1976 and it has been reported that a 15 year bond is now feasible. At any rate, indexing and the introduction of Europa are independent from each other and serve different objectives. Thus, purely on the basis of Ockham's razor principle, one should not burden the launching of the Europa with the extraneous requirement of indexing that would also encounter practical difficulties in the choice of the appropriate index number.

An alternative solution would be to link the Europa to the strongest Community currency. Under one variant, the value of the Europa would change parallel with the strongest currency ab initio (i.e. from the time of the Europa's establishment). This alternative is open to the objection that at any point of time the value of the Europa would be determined by past changes in the values of national currencies. Also, there would be a risk of speculation whenever a national currency would be expected to appreciate vis-à-vis the
strongest currency *ab initio*, and hence the Europa. Last but not least, this alternative would be identified in the public mind as linking the Europa to the German mark, given the fact that Germany has had the lowest rate of inflation and it is likely to continue to do so for some time to come.

Linking the Europa to the strongest currency *pro tempore* would eliminate the risk of speculation as the value of the Europa would always rise in proportion with that of the currency (currencies) which appreciate or appreciate the most at any particular point of time. And the cumulative change in the value of the Europa would not be equal to any single member currency, unless that currency was not depreciated. This has not been the case in recent past and cannot be expected to occur in the future. In this connection, the experience of the past few years is of interest. If we take December 1971 as a basis and adjust the hypothetical European parallel currency in quarterly intervals in proportion with the appreciation of whichever currency appreciated the most during that quarterly interval, by August 1976 its value would have increased by 43.6 per cent as compared to the SDR and 42.4 per cent as compared to the U.S. dollar while the relevant figures are 22.0 and 29.3 per cent for the German mark and 62.6 and 62.4 per cent for the French franc. The results were due to the fact that the French franc appreciated vis-à-vis the German mark between December 1971 and the first quarter of 1972, the second and third quarters of 1974, and again between the fourth quarter of 1974 and the second quarter of 1975, and it depreciated in the remaining periods.

The continuation of these tendencies would make the value of the Europa to increase relative to all EEC currencies and, most likely, against any other. It has been suggested that in this respect we would return to a situation existing in earlier times when national currencies were used as a reserve currency over time vis-à-vis an international or parallel currency. This international currency was first gold, subsequently the pound sterling, and until recently the U.S. dollar. There is an important difference, however, between the two cases. While the earlier predominance of international currencies was the result of the free play of market forces, the value of the Europa would have to be maintained artificially so as to avoid speculation vis-à-vis the strongest currency. Such support would entail the Community providing Europas to all members in exchange for national currencies and bearing the burden of the exchange rate risk. Also, it would be difficult to establish forward markets in the Europa so defined which is necessary for the functioning of capital markets.

Similar objections apply to introducing asymmetry in formulations based on a basket of currencies and linking the value of the Europa to currencies that adopt narrower margins vis-à-vis each other. In the first case, the value of the average currency basket would change when a participating currency appreciates but would not decrease when a participating currency depreciates. In turn, under the second formulation, used today by the Kreditbank, that is by the largest issuer of bonds denominated in terms of a composite unit, would in practice mean linking the value of the Europa to the snake currencies.

This conclusion follows since, in defining depreciation and appreciation in relative terms, asymmetrical adjustments in the value of the currency basket would make it equivalent to the strongest currency *pro tempore*, since at any point of time the value of the basket would change in the same proportion as the currency which appreciates or depreciates the most. At the same time, any other definition of depreciation and appreciation would introduce an element of arbitrariness. In turn, as we have seen, the snake presently consists of the German mark and the currencies of small countries linked to it. Thus, albeit to a lesser extent, this alternative is open to objections evoked in connection with the strongest currency *ab initio* formula.

Another alternative, put forward by Robert Triffin, would involve defining the Europa as equivalent, at any point of time, to whichever currency has remained the most stable in terms of a weighted average of all member currencies. A similar formulation underlie the European Payments Union unit of account and the European unit of account originally used by the Kreditbank of Luxembourg to denominate bond issue, both of which reflect Triffin's contribution. The choice of the stabilest currency would appear to avoid fluctuations in the value of the Europa resulting from changes in a single currency which is out of line with others. This is not necessarily the case, however. With the depreciation of the British pound and the Italian lira in the first half of 1976, for example, the currencies of the countries participating in the snake would have
provided the basis for determining the value of the Europa until the floating of the French franc, when the latter became the “center of gravity” between the snake currencies on one hand and the depreciating pound and the lira on the other.

Thus, changes in the value of a single currency may affect the value of the Europa under this definition since, with the average changing, there may be a shift from one currency to another in terms of stability vis-à-vis this average. The possibility of such shifts, in turn, would create uncertainty in financial markets. At the same time, the formula of the stabilest currency may not be easily comprehensible to the public.

The simplest solution would seem to be to define the Europa as a weighted average of the currencies of the EEC member countries. This is the formula utilized by the official European Unit of Account, with weights assigned to the currencies of the individual EEC countries on the basis of their gross national products and external trade as of June 28, 1974. The weights have been changed subsequently in accordance with the appreciation and the depreciation of the constituent currencies, resulting in an increase (decrease) in the share of appreciating (depreciating) currencies in the currency basket. The European Unit of Account offers advantages for trade transactions among the Common Market countries as it provides a pivot for national currencies. But, with inflation rates differing among the member countries, the dispersion of currency values around the EUA is bound to increase. It has been suggested that this fact would reduce the attractiveness of the European Unit of Account as a store of value in favor of the stronger currencies and explains the relative lack of success in capital markets of bond issues using the basket formula. Also, surplus countries may be reluctant to lend in terms of a unit that has a tendency to depreciate in terms of their own currencies. Finally, it is feared that there is a danger of speculative flights from the Europa.

It may be assumed, however, that differences in changes of currency values over time would be offset by interest rate differentials. Thus, interest rates on obligations denominated in terms of the Europa would tend to be lower than on obligations denominated in national currencies that tend to depreciate relative to the Europa and higher than for currencies that tend to appreciate. Furthermore while speculation may be possible for short-term funds denominated in Europas, this will hardly be the case for long-term funds. And, there is no reason to assume that the possibility of speculation would increase due to the introduction of the Europa. At the same time, emphasis should be given to the need for the acceptance of the Europa in the financial markets that can alone ensure its widespread use. This objective can be furthered by modifying legislation so as to admit the holding of obligations denominated in the Europa in portfolios of banks and insurance companies.

Conclusions

In this paper, proposals have been made for the adoption of a three-pronged approach to lessening uncertainty in trade and payments and to strengthening the European integration process. The proposals include establishing rules for exchange rate adjustments; harmonizing national economic policies; and creating a parallel currency, the Europa.

It has been suggested that countries establish a “target zone” for their currencies agreed upon jointly at the Community level. At the same time, countries should undertake obligations to refrain from domestic policies and interventions in foreign exchange markets that would accelerate movements bringing their currency values outside the zone. Agreements on target zones would be based on a thorough review of the situation in the individual countries. Also, establishing and maintaining a target zone would be a condition for access to financing from the European Monetary Cooperation Fund and support from other member countries, while surplus countries would be required to contributere their excess accumulation to the Fund.

Conclusions would need to extend to the policy measures that may be used in the event of balance-of-payments disequilibria and to the ex ante coordination of monetary and fiscal policies. In particular, there is need to agree upon targets for the relevant policy measures, such as the rate of monetary expansion and the deficit in the public budget.

At the same time, coordinating monetary, fiscal and exchange rate policies may intensify structural imbalances within the Common Market. In order to ensure the equitable distribution of the fruits of economic progress, there is need for structural policies, in particular regional policy, in order to ensure the desired convergence. This would require the increased financing of structural transformation in
the member countries, which, in turn, should be made dependent on
the coordination of monetary and fiscal policies.

Progress towards European integration would also require a
unified capital market on a scale that can assure financing European
industry, in particular in the technologically sophisticated sector. This
objective would be served by establishing a parallel currency unit, the
Europa. This unit would also be used in trade and financial trans-
actions and would eventually provide a numéraire to define the target
zones for the exchange rates of the individual currencies.

After a review of various alternatives, it has been recommended
that the Europa be defined as a weighted average of the currencies
of the member countries on the basis of the formula utilized by the
official European Unit of Account. At the same time, in order to
increase the acceptability of the Europa by financial markets, national
legislation should be modified to admit the holding of obligations
denominated in the Europa in the portfolios of banks and insurance
companies.

Washington                Bela Balassa

World Inflation, the Developing
Countries, and “An Integrated Programme
for Commodities”

I. The Concept of World Inflation

It has been known for hundreds of years that inflation is inevitably
associated with excessive expansion of the money supply — inflation
is always and everywhere a monetary phenomenon. Unfortunately
for the public understanding of the subject, for at least as many
centuries (over two thousand years) as we have had experience of
inflation, there have been those in authority who have believed that
in their particular case the laws of economics have been repealed,
or at least suspended in their favour. And there have always been
those among the educated public who trust mistakenly to their own
common sense of the world around them, and see the explanation of
inflation in the fact that someone somewhere is anti-socially raising
prices or wages, and the solution to inflation in the fallacious belief
that if only that someone were stopped from selfishly and greedily
raising prices or wages, the inflation would go away. Thus understand-
ing of the recent and current world inflation has been clouded and
confused by the assertion that inflation is due to the irresponsibility
of trade unions, or the profit-seeking greed of monopolists, or to the
rising prices of food demanded by selfish farmers, or to the monop-
olistic raising of the price of oil by the O.P.E.C. countries. None of
these arguments is correct, because they all refer to changes on relative
prices — the price of one good in terms of others, a problem of “real”
or “barter” economics — whereas inflation is a matter of the prices
of all goods rising in terms of money — a problem of monetary
economics. But they all have great psychological attraction to the
politicians and their officials, because they give these people an excuse
for collecting their pay-cheques without doing the job they are being