Economic Adjustments Within the European Economic Community (*)

The European Economic Community seeks to combine a clearly defined, completely integrated economic union with a rather vaguely defined political union. How well such a combination can succeed remains to be seen. The E.E.C. may find itself drawn inexorably (once some point of no return is passed) down the road to federal union, a road already travelled by the United States.

One crucial issue is whether full economic union *itself* requires a federal state, with all the essential elements of political autonomy transferred from the nation members to the federal government; or whether economic union can exist with some significant elements of political and economic autonomy still left to the nation members. Crucial as it is, this issue has not been much discussed, except obliquely. Some observers, regarding the answer as self-evident, have argued that further movement toward economic union must await the development of a suitable degree of political union. The following quotation provides an example of this view (1):

> "[For monetary union]... there would have to be a common currency unit..., as well as an efficient money and capital market in that unitary currency... But the monetary union as between the member states, which is indispensable for such a unitary reserve currency, cannot be conceived until there is not only a common trade policy but also a common (or jointly and bindingly agreed) financial and budgetary policy, a common economic and cyclical policy and a common social and wage policy, that is a common

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(1) *Annual Report, 1962*, Deutsche Bundesbank, p. 37.

policy *tout court* — in a word until there is a Federal state with a European Parliament which has power to legislate for all the member states".

The first steps toward economic integration — those most clearly specified in the Treaty of Rome, such as elimination of internal tariffs, freedom of movement for labor and capital, and a common agricultural policy — lead inevitably to other, less clearly specified steps if economic integration is to have its intended effect. This is the reason why the issue stated above now demands discussion. To be specific, it is becoming evident that exchange-rate changes between E.E.C. currencies cannot be tolerated in full economic union. But a system of rigid exchange rates is tantamount to a common currency, and such full monetary union throws into question the ability of a single nation-member to set its own monetary and fiscal policy. This progression from economic integration to monetary union is emphasized by Pierre Uri (2):

> "The Common Market Commission... points out that any change in the exchange rate of one of the European currencies — after the integration of markets has been completed, and common prices established through a common agricultural policy — would entail intolerable disruptions. It is true that exchange rate adjustments are not excluded in the transitional period... Nevertheless, this large fact stands out strikingly:
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> *Full freedom in the movement of goods, capital, and men is equivalent to full monetary convertibility.*
>
> And this even bigger fact emerges:
>
> *Full convertibility, with fixed exchange rates, requires exactly the same conditions as a single currency.*
>
> The only difference is that separate treasuries and currency denominations would be maintained. Convertibility at fixed exchange rates constitutes *de facto* monetary union. The creation of a common currency, which would define monetary fusion, would only mean formal recognition of what had already come about".

(2) Pierre Uri, *Partnership for Progress* (New York: Harper and Row, 1963), p. 92. Italics in original.

We appear to have reached an impasse: (a) economic integration leads to monetary union, and (b) monetary union requires a full-blown federal state, but (c) the political conditions for a federal state do not exist. In this paper we shall argue that (a) is valid but (b) is not valid — or, at least, not inevitable.

Some economists have argued that a system of flexible exchange rates would be an ideal arrangement for the E.E.C. (3). Their arguments have force, but they seem to misconceive the nature of the economic integration being attempted. It is no longer feasible to imagine that member nations, having arduously negotiated agreements on tariff elimination, agricultural policy, and all the rest, will allow these agreements to be altered at a stroke by an exchange-rate change in one country. After all, we have long known that, under certain assumptions, exchange-rate depreciation can be shown to be identical in its economic effects to an ad valorem tax on imports and subsidy to exports. We cannot expect the politicians to be unaware of this identity. While it may be true that *any* kind of adjustment to correct a balance-of-payments deficit must be broadly similar to a tariff in economic effect, the fact remains that some adjustments emphasize the unity of the component member nations, others emphasize their separateness. Flexible exchange rates are most appropriate when labor and capital are immobile, internationally, but European economic integration aims to make labor and capital highly mobile among members. The correct analogy is with regions of a single nation, except that in the E.E.C. the member states will remain governmental entities with power to tax, spend, and formulate economic policy. In this situation, fixed exchange rates seem imperative, just as they do among regions of a single nation; the "optimum currency area" is the whole community (4).

We shall argue that, if exchange rate changes are ruled out, separate monetary policies are not possible in a community where capital movements are free. One response to recognition of this fact is to urge the need for restrictions on capital movements,

(3) J. E. Meade, "The Future of International Payments", *Three Banks Review*, June 1961; L. B. Yeager, "Exchange Rates within a Common Market", *Social Research*, Winter, 1958; F. Gehrels, "Monetary Systems for a Common Market", *Journal of Finance*, May 1959.

(4) R. A. Mundell, "A Theory of Optimum Currency Area", *American Economic Review*, Sept. 1961; R. I. McKinnon, "Optimum Currency Areas", *American Economic Review*, Sept. 1963; R.I. McKinnon, *Banca Nazionale del Lavoro Quarterly Review*, December 1963.

particularly on new issues and on operations of major financial institutions. If these can be kept under control, it is believed, separate monetary policies may still be possible. The urge for retention of separate national monetary policies springs largely from fear that otherwise the individual nation-member of E.E.C. will be unable to counter a fall in income and employment, or unable to restrain an economic boom. An important policy issue thus urgently needs discussion: Whether an integrated economic community will be able to regulate aggregate demand, despite the removal of monetary policy, at least as satisfactorily as under the pre-union system or some other feasible alternative.

In this paper we shall not debate the issue of fixed versus fluctuating exchange rates, nor shall we discuss political issues in the choice between federal and confederal union. Our purpose is the more limited one of examining the extent to which full economic union of the sort envisaged in the E.E.C. leaves scope for domestic autonomy in each member nation. In other words, we shall examine the ability of a member nation to pursue internal and external balance through the use of policy instruments remaining under its control. We should of course remember that it is difficult enough for any nation to achieve internal and external balance, and we must not set a higher standard for a member nation of the E.E.C. than can be attained by a separate nation.

Assumptions

The basic assumptions that we shall make are those stated or implied by the E.E.C. Commission in its *Action Programme of the Community for the Second Stage* (5), namely that:

1. Commodity trade barriers are completely eliminated for internal trade, with the possible exception of agriculture, thus allowing a "community price level" for traded goods to emerge.

2. All restrictions on internal capital movements are removed. Residents of the E.E.C. are free to buy and sell securities, to borrow and lend, and to move funds from one member country to another.

3. Individuals are free to move about and take employment wherever they wish.

(5) Brussels, Oct. 24, 1962.

4. Exchange rates among currencies of member nations are fixed, rigidly and permanently, at existing official par values. The Commission did not discuss the means through which permanently fixed exchange rates were to be achieved. To make our discussion more concrete, we shall tentatively suppose that each currency is declared to be legal tender in every member country, and that commercial banks in each country are required to pay checks drawn by their depositors in any currency demanded by the payee. (For example, if checks drawn on French banks are cleared through Italian banks, it is the responsibility of French banks to obtain Italian lira cover through use of their own resources. That is, French banks must have assets denominated in lira or readily saleable for lira).

The two remaining assumptions go beyond those stated or implied by the Commission.

5. Each member nation agrees to finance any excess of governmental expenditure over revenue through the sale of bonds and other securities at competitive prices and yields. That is, budget deficits are not to be financed through the creation of money, whether by currency issue or central bank credit.

6. We shall abstract from problems of balance between the E.E.C. and the rest of the world by treating the Community as a closed economy.

External Balance

Under these conditions, balance-of-payments deficits as usually defined would no longer exist between member countries. External balance would be continuously achieved through accommodating assets transfers made by banks and other financial institutions. Official exchange reserves might continue to serve a useful function in easing the shock of autonomous disturbances, but as the community capital markets became more perfect the need for official intervention would diminish. (We should emphasize that this discussion is concerned only with balance of payments among members of the integrated economy, not with the balance between the community and the rest of the world).

Interest rates would tend to be equalized in member nations. Fixed interest securities of similar quality and maturity would sell

at the same, or very nearly the same, yields in every nation. (However, yield variations could and would persist for "local" securities, just as promissory notes and mortgages yield different rates in different regions of the U.S.). Full confidence in the permanent rigidity of exchange rates, plus complete freedom of capital movements, would lead to capital transfers that would promptly erase interest differentials as they appeared. Securities possess in large measure the attributes required for a (nearly) perfect market: homogeneity (for a given issue), easy identification, low cost of transfer, durability, and widespread knowledge of quality and alternatives (especially in the managements of financial institutions, if not individuals).

For a "small" change in a nation's current-account balance, we may therefore conclude that the capital-account is perfectly elastic at the existing structure of interest rates. For a "large" change, the capital account is probably highly elastic, but a change in the community interest-rate structure may accompany the adjustment process (6).

Our assertion that balance-of-payments deficits *as usually defined* would not exist under the assumptions being made here may be readily accepted. In any case the matter has been discussed elsewhere, and we shall add only some brief remarks to indicate the nature of the mechanism that would operate to preserve external balance (7).

Case I. Suppose that, starting from an initial position of external and internal balance, French demand for Italian goods increases. Checks drawn on French banks by French importers come into the hands of Italian exporters. To cover their adverse clearing balances vis-à-vis Italian banks, French banks must either liquidate some of their lira assets or sell other assets for lira in community capital markets. The French current-account deficit

(6) Econometric studies of the interest-elasticity of international capital movements in recent years do not seem pertinent to this "conclusion", because the conditions we have specified for intra-union capital movements did not exist. A more appropriate calculation would be the interest-elasticity of capital movements among states in the United States.

(7) Cf. James C. Ingram, "State and Regional Payments Mechanisms", *Quarterly Journal of Economics*, November 1959, and *Regional Payments Mechanism: The Case of Puerto Rico* (Chapel Hill: University of North Carolina Press, 1962); R. A. Mundell, "Capital Mobility and Stabilization Policy Under Fixed and Flexible Exchange Rates", *Canadian Journal of Economics and Political Sciences*, November 1963.

will be financed by an accommodating private capital inflow (reduction in French claims on Italy or increase in rest-of-community — ROC — claims on France); neither central bank need become involved. Assets and liabilities of French banks decline; those of Italian banks rise. These changes are the direct result of the increased purchases of Italian goods by French residents. They do not involve changes in the foreign-exchange reserves of either central bank, nor do they set in motion any process of multiple contraction of the money supply in France or multiple expansion in Italy. To the extent that money income rises in Italy and falls in France as a result of this shift in the direction of expenditure, secondary effects will tend to offset and diminish the French current-account deficit and also the associated changes in bank assets and liabilities. That is, as Italy's income rises, her imports will also rise and exports may be diverted to domestic buyers. The opposite occurs in France. With all trade barriers abolished in the E.E.C., marginal propensities to import will tend to be large. The larger they are, the more the initial changes in bank assets and liabilities will be reversed by secondary effects. The effect of price changes is also toward reversal of the French current-account deficit, since Italian prices will tend to rise, French prices to fall.

So far, this adjustment process is very similar to the conventional modern account of adjustment under a fixed-exchange rate system, except that we have found no necessity for a *multiple* expansion and contraction of money supplies in the surplus and deficit countries, respectively, and we have therefore avoided much of the conventional reliance upon inflation in surplus countries and deflation in deficit countries in response to a disturbance. Much of the short-run adjustment can take the form of a shift of assets from French banks to Italian banks without effect on either country's "official" exchange reserves. With rigid exchange rates, a money-market asset in any currency is acceptable to commercial banks and other holders of such assets.

Admittedly, we have dealt only with the short-run, and we should indicate what would happen if Italians were to display a high marginal propensity to save, and if the French current account deficit continued, being only partly offset by the secondary effects mentioned above. In this event, assets and liabilities of Italian banks would continue to rise, those of French banks to fall. Deposits of Italian firms and individuals would rise, and at some point

the owners of these deposits would shift into other assets. Their purchase of domestic securities would tend to raise prices and lower yields, thus inducing some Italian asset-holders to shift into higher-yielding French (or other) securities, particularly fixed-interest securities. As we have mentioned, under our assumptions the yield variations of comparable fixed-interest securities in capital markets of member countries would be very small. Such shifts by Italian asset-holders from domestic to foreign securities constitute long-term capital movements which finance the continuing French current-account deficit. Analogous (opposite) changes are occurring in France. The fall in deposit holdings of French firms and individuals will disturb their portfolio balance and induce them to sell longer-term securities to replenish cash holdings. Their sales will tend to increase yields and induce foreign buyers to absorb them. Such equilibrating capital movements could finance a current-account deficit for a very long period of time, because the stock of wealth in any country is likely to be very large relative to a current-account deficit that could emerge *under our assumptions*. The deficit need not last forever, however, and indeed the mechanism we are describing contains elements that will tend to bring it to an end. As Italian wealth in the form of financial assets increases, the marginal propensity to save may decline. Further increments to income will go to increase current expenditure, and long-delayed "secondary effect" will tend to reduce and eventually eliminate Italy's current account surplus. Diminutions of wealth in France will have opposite effects, also equilibrating to the current account.

The crucial element in this adjustment process is the rigidity of exchange rates, which makes fixed-interest securities in any currency acceptable to wealth-holders in every country. Private portfolio capital movements, feared since the 1920's as a destabilizing menace, are converted into a powerful equilibrating force.

The price of this metamorphosis, and of the freedom from conventional balance-of-payments deficits that it brings, is that the nation members of our integrated community will have given up control over domestic monetary policy *in the sense* that they cannot set the structure of domestic interest rates at a level different from that prevailing in the community at large. Any attempt to do so would be defeated by arbitrage with other financial markets. Except for small deviations caused by friction, lack of knowledge, etc., and deviations representing variations in yields on

"local claims", a single nation must accept the interest-rate structure as externally determined. (However, as already mentioned, a single nation may be large enough to influence the community-wide structure of interest rates).

Before leaving this subject, perhaps we should comment on one other case of a disturbance to external balance. We shall again omit many details in the adjustment process, emphasizing only the chief forces at work.

Case II. Starting from a position of internal and external balance, suppose that Italian wages and prices rise faster than wages and prices in other member nations; Italian exports decline, imports rise, thus producing a current-account deficit. Italian banks would now have adverse clearing balances with banks in the rest of the community (ROC); to cover these adverse balances Italian banks would have to sell assets in ROC capital markets. Assets and liabilities of Italian banks would fall, those of ROC banks would rise. As before, secondary effects may counter-act part of this initial effect. The decline in Italian exports would mean a reduction in output and income, or a slackening in their growth; this effect, coupled with the decline in bank assets and liabilities (money supply), would tend to check the rise in wages and prices. The absence of internal trade barriers and the emergence of a community price level for traded good means that price increases in one country will quickly check exports (and increase imports) — i.e., foreign demand and supply are likely to be highly elastic.

If Italian wages and prices remain "out of line", external balance will be preserved as in the previous case. The decline in assets and liabilities of Italian banks will disturb the portfolio balance of wealth-holders, inducing them to sell longer-term securities to replenish cash holdings (deposits), thus raising yields of such securities and attracting buyers from ROC. Meanwhile, assets and liabilities of ROC banks would be rising, inducing some owners of bank deposits to shift toward other assets. Their purchase of domestic securities would lower yields and induce a shift into higher-yielding Italian fixed-interest securities. Eventually, as Italian wealth and income decline or stop growing, the level of current expenditure and hence imports will drop, heavy pressure to stop and even reverse the trend of prices and wages will be felt, and the current-account deficit will diminish. At the same time,

the accumulation of wealth in ROC will eventually lead to increases in current expenditure. These increases in demand may exceed the growth in productive capacity and therefore lead to inflation of prices and wages in ROC. Whether Italian inflation will in this way be exported to other member nations, or whether it will be checked by the impact in Italy itself of declining income and wealth cannot be determined in general. The outcome depends on relative size of the two regions, behavior of savers in each, institutional arrangements for setting wages and prices, and many other elusive factors. Regardless of the outcome in this respect, however, we may still conclude that external balance will be continuously maintained as long as our assumptions remain in force.

This second case has been discussed explicitly because it is the case always put forward by opponents of permanently fixed exchange rates. What is to happen, they ask, if wages and prices are pushed up excessively in one member country? The question is extremely pertinent, but the way it is put may load the dice. Under our assumptions, the answer is that the *attempt* to push up wages and prices in one country will set up strong pressures against further rises. Such pressures take the form of a fall in demand (home and foreign) for the output of the inflating country. The resulting current-account deficit will be financed by shifts in assets from banks and wealth-holders in the inflating country to banks and wealth-holders in ROC. Although the absolute deflationary pressure operating through a fall in "official exchange reserves" and the consequent necessity for a multiple contraction in the money supply are missing from our mechanism, we do find that pressure to end and even reverse the rise in wages and prices is present. Under our assumptions, no increase in money supply is permissible, unless financed by borrowing at competitive interest rates. There is simply no basis for wages and prices to get further "out of line". If it is *postulated* that militant unions or some form of institutional pricing do nevertheless bring about a further rise in the inflating country's wages and prices, then rising unemployment will be the result. The force of our assumptions is to prevent such divergent movements in wages and prices from ever occurring, or to stop them quickly when they begin. The loading of the dice occurs when it is assumed to begin with that excessive wage increases do in fact occur and continue. (An analogous loaded query is to ask how flexible exchange rates could work if labor

unions militantly demanded and got excessive increases in *real* wage rates. Every devaluation of the currency would simply be a signal to unions to demand further increases in money wages).

We conclude, therefore, that as long as our assumptions hold, external balance will be achieved. The real issue is whether nation-members retain effective weapons to use to achieve internal balance.

Internal Balance

Under financial integration, a nation must rely primarily on fiscal policy to regulate aggregate demand. If it wishes to expand aggregate demand in order to absorb idle resources or to combat a recession, it will be unable to use monetary policy in the traditional way. That is, it cannot reduce interest rates through use of conventional central bank powers. An attempt to do so would be thwarted by an outflow of capital as firms and individuals switched from domestic to foreign securities. (However, a "large" nation might affect the level of interest rates in the entire community).

The proper policy prescription for expanding aggregate demand in Country A would be to expand government expenditure, reduce taxes, or to use some combination of the two. The resulting increase in the budget deficit must be financed by the issue of securities saleable in community capital markets at prevailing interest rates. As aggregate demand increases in A, the current-account position may worsen as imports rise, but part of the increase in the stock of financial assets in A may then be transferred to ROC firms and individuals through the operation of capital markets in the manner already described. If ROC citizens choose not to increase their stock of wealth, then they must be expanding their current expenditures and A's current account will not remain in deficit. In this event the fiscal expansion in A will transmit an expansionary impulse to ROC, which might be objected to by surplus countries.

The sale of additional A-government securities may cause their prices to fall. This result is the more likely the larger A is, relative to ROC, and the larger the new issue relative to the total stock of securities. The fall in price (rise in yields) may also occur because the market considers A-securities to have deteriorated in quality. The necessity of paying higher rates of interest will of

course represent a burden on A's economy, and the increase in this burden will serve as a check on the use of deficit financing. However, as long as the stream of incremental outputs resulting from increased expenditure exceeds the additional interest cost, an expansionary fiscal policy will be profitable.

Provided that a member nation satisfies the community capital market that its debt obligations are sound and of high quality, it will be able to pursue an expansionary fiscal policy at rates of interest at or near those prevailing in the market.

It is in this context that our assumption (5) becomes crucial — namely, that member governments must agree to finance any budget deficit by the sale of securities at competitive rates of interest. Governments must accept this limit upon their power to create money, and they must manage their finances in such a way that market confidence in their securities is maintained (8).

Setting aside this question for the moment, what can we say about a nation's ability to achieve internal balance? Some scope for use of fiscal policy certainly exists. If domestic output responds readily to a rise in expenditure or a cut in taxes (i.e., if the multiplier is large), if productive ways can be found to increase expenditure, then the interest burden should not be too high a price to pay for the rise in income. If community capital markets evaluate the circumstances in this way, buyers should not lower the quality ratings they give to the securities of the nation concerned. Consequently, the interest rate it must pay need not rise very much. Domestic aggregate demand can then be expanded by the use of budget deficits financed by the sale of securities in community capital markets at competitive interest rates. As long as a nation satisfies market conditions with respect to the terms of a new issue, it can retain some control over the level of aggregate demand. It can undertake any program that it can finance in community capital markets.

Pursuit of an expansionary domestic policy by a given nation does therefore require, in a financially integrated community, that the nation submit itself to the discipline of community capital

(8) Individual states in the U.S. common market have of course surrendered entirely the power to create currency. While they retain some control over aggregate demand through fiscal policy, they must be careful to maintain the quality ratings of their debt securities by observing ratios of debt service to tax revenue, total debt to taxable basis of property and income, and the like.

markets insofar as the domestic program involves deficit financing. Just as the government of North Carolina, or any single state within the United States, must convince the New York capital market of its financial soundness (see note 8), so the government of a single nation must convince the community market. To the extent that confidence lessens, the interest rate the government must offer to persuade the market to take its bonds will rise. The higher interest rate on the government's securities would of course prevail at home as well as abroad — arbitrage at fixed exchange rates will guarantee that (9). A nation will have a strong incentive to design its domestic program in such a way as to avoid the necessity of paying a higher rate of interest. Indeed, it may be that a nation may sometimes have to tolerate a higher level of unemployment and a lower growth rate than it likes, just to escape the cost of higher interest.

Ultimately, it appears that the political acceptability of such a market-determined restraint must depend upon one's judgment about the efficiency of the capital market and its ability to make a correct evaluation of the prospects of a given nation, or of its budgetary plans. If the market evaluation is thought to be accurate, then the higher interest rates that may need to be paid by a given nation to finance its domestic expansion will be regarded as a proper measure of cost, and one may conclude that the higher interest burden is an appropriate charge to make against the nation concerned.

A further issue — one which has a clear analogue in the flexible exchange rate case — concerns the interest elasticity of demand for a given nation's securities. If a "very small" rise in the interest rate is sufficient to induce a "large" increase in purchases of such securities (i.e., elasticity of demand is "very large"), then adjustments will be quick and easy. On the other hand, if a rise in the interest yield must be large in order to evoke much response, the adjustment will be slower and more painful. In the worst case, if a rise in interest yields is regarded by the market as a harbinger of worse things to come, then the capital market may even be unstable in the relevant range of interest rates. Clearly

(9) The higher rate applies to securities of the government. It is conceivable that individual firms within the nation would continue to enjoy good credit rating and be able to sell bonds at yields lower than the government itself. Examples can be found in U. S. states.

this case is analogous to the much-discussed case of instability in the market for foreign exchange.

When interpreted in this way, part of the issue between fixed and flexible rates may be expressed in the question: which market is more responsive to small changes in price, the foreign-exchange market or the securities market? Or, as we may prefer to put it: which market do existing institutional arrangements and operating practices tend to make the more responsive? The answer to this question would require intensive descriptive analysis of institutions and practices; not much can be said a priori.

It is perfectly obvious, however, that a great many changes in the laws, institutions, operating practices, and procedures of regulatory agencies in member nations would be required to make capital movements free and as highly interest-elastic as our assumptions require. Action to assure perfect confidence in the permanent rigidity of exchange rates among member currencies would also be demanding. The incredulity one encounters in discussion of full economic integration is perhaps an expression of recognition of the enormous difficulty of creating the necessary environment. In this paper we are not primarily concerned with such pragmatic matters, but with the operation of such an economy if it is created, as seems to be the present objective of the E.E.C. Commission.

In any case, establishment of a close link between the stocks of wealth (especially negotiable financial claims) in the several member nations does seem to add much resiliency to the adjustment process. The stock of negotiable financial claims is, as it were, transformed into a foreign-exchange reserve. A nation's ability to tolerate a current-account deficit — but at a price — is greatly extended. Pressure to correct the current account itself is less acute. If sufficient pressure develops to stop the divergent movements in wages and prices, once they appear, it may be that long swings in national balances of payments can be waited out. Changes in *rates of growth* may be enough for equilibration, given the long breathing spells afforded by movements in the stocks of financial claims.

In a flexible-rate system with no capital movements, a disturbance of external balance, say an increase in military expenditures by Country A in Country B, must be corrected by shifts in the flow of current expenditure in A and B sufficient to produce an export balance in A equal to the new payment item. Whether the

necessary shifts in the direction of expenditure are stated in terms of elasticities or income changes does not matter for our present purposes. The point is that the exchange-rate change and its associated effects must alter the volume and direction of current expenditure in A and B in such a way that A's current exports exceed her current imports by an amount equal to the rise in A's military expenditures. Such an adjustment in the flow of current expenditures may be difficult to bring about, especially in the short run, because it requires changes in behavior which take considerable time to accomplish. Orders must be placed; information about relative price changes (via exchange rates or otherwise) must be transmitted to consumers, retailers, producers, etc.; resources must be shifted; and all these take time. The bulk of the adjustment must occur in switches to or from internationally traded goods, and these represent a declining percentage of gross national product. The result is that the current account is likely to be "sticky", as Keynes said.

In financial integration such an increase in military expenditure by Country A can be accommodated by shifts in *assets* between A and B, as well as by shifts in the direction of current expenditure. Both types of response can play a part in the adjustment process. The great advantages of utilizing asset shifts, especially in the short run, are apparent: first, the volume of financial assets capable of moving from A-holders to B-holders is very large — much larger than the current expenditure flows; second, financial assets are easily transferable (homogeneity, durability, low cost of transfer, etc.); third, information about relative price changes for financial assets can be obtained and acted upon much more quickly than for goods and services (i.e., financial markets are more nearly "perfect"), and fourth, choices of individuals as between consumption and saving are more easily satisfied. To elaborate this fourth reason, suppose the B-citizens whose incomes rise choose to save *all* of the increment at going prices. With flexible rates and no capital movements, A's exchange rate must depreciate until B-citizens are induced to shift from B-goods to A-goods (A-citizens make a similar shift) in sufficient amount to offset the military expenditure. Accompanying price changes may alter decisions to save in A and B, but balance-of-payment adjustment requires changes in *current* flows of expenditure equal to the disturbing item. But with financial integration, the desire of B-citizens to save could be

satisfied by acquisition of financial claims on A; expenditure flows *need* not be affected, although they would be to the extent that people chose to increase purchases of goods and services. (Parenthetically, we may note that the present system of fixed rates and restricted capital movement poses particular problems. If B-citizens desire to save but may not freely acquire A-assets, they then swap A-currency for domestic assets and the B central bank acquires A-currency or A-assets "involuntarily").

We should now comment briefly on the fiscal policy, internal balance aspects of the two cases discussed in Part I, above.

Case I. The assumed shift in demand from French to Italian goods would cause a decline or slower growth in income and employment in France. To counter this effect, the French government could reduce tax rates, increase expenditures, or both, financing the resulting budget deficit through the sale of government bonds. Such fiscal expansion would tend to worsen the current-account deficit, especially in the short run, but we still expect equilibrating capital movements to preserve external balance. In the longer run, fiscal expansion may help to reverse the current-account deficit if the expansion promotes efficiency or enlarges productive capacity in France (10). The object is not merely to expand aggregate money demand, but to increase *productive* expenditures. The task of fiscal policy is thus a difficult one. In view of the notorious inflexibility of fiscal policy, especially on the expenditures side, perhaps the best strategy is to fix the level of expenditures on the basis of strict productivity criteria, and then to vary the level of revenue to achieve the desired budgetary position. Alternatively, fiscal incentives to productive private investment might be used.

French expansion would spill over into ROC through the trade balance. If other member countries were at or near full employment, they might dislike the added stimulus to aggregate demand. If so, they could also use fiscal policy to maintain internal balance. By raising taxes, cutting expenditures, and running a budgetary surplus they could restrain the rise in aggregate demand.

(10) Such is the basis of the case made in the U.S. that a tax cut would tend to strengthen the U.S. balance of payments. *Economic Report of the President, 1964*, p. 130.

If their budget surplus were used to retire debt it would, by reducing the stock of securities, further induce ROC wealth-holders to acquire French securities — i.e., it would encourage an equilibrating capital flow. (Parenthetically, Germany's difficulties as a surplus country seem entirely due to the non-fulfilment of two of our assumptions. Heavy flows of funds into German bank deposits at zero or negative rates of interest occur because of the chance of appreciation of the Deutsche Mark, and the high long-term rates of interest in Germany can exist only because of imperfections in the capital markets in Germany and elsewhere).

Case II. Less scope for fiscal policy action exists in this difficult case. Rising wages and prices in Italy will tend to be checked, as we have seen, by the fall in exports and rise in imports. Finance of the resulting current-account deficit will add additional pressure to check the upward drift. Nevertheless, unemployment will probably increase as domestic output declines or slows its growth. If a budgetary stimulus were then used to expand aggregate demand, the danger is that it would also support or permit further upward pressure on wages and prices. Fiscal expansion could safely be attempted only if ways could be devised to utilize unemployed resources at (or below) existing wage rates and in activities that would increase productive efficiency. These are severe requirements to place on fiscal policy, but if they could be satisfied, fiscal expansion would both counteract the lapse from full employment and contribute to a long-run correction of the current-account deficit. The immediate effect would be to worsen the current-account deficit, however, but that could be financed by equilibrating capital flows.

Instead of trying to salvage a role for fiscal policy in this case, perhaps we stress the fact that wages and prices in the several member nations are linked very closely together in a fully integrated union. Wage differentials can exist between industries and between nations, just as interregional wage differentials have persisted for decades between north and south in the United States, but such differentials cannot exceed certain limits. Unless justified by changes in productivity, wages in one member nation cannot rise faster than in others — at least not for long. If wages do rise too

much, however, correction of the resulting imbalance can be slower and gentler than in the gold-standard stereotype. The adjustment process does not require a multiple contraction of the money supply, stemming from a decline in the reserve base in a fractional reserve system, with deflation of incomes and prices continuing until the current-account is forced back into balance. Instead, the current-account deficit will be covered by equilibrating capital flows; unemployment in export and import-competing industries will discourage further upward pressure on wages, and so will the decline in commercial bank assets and liabilities. Labor mobility will also provide some relief.

In such a fully integrated economy, the conditions necessary for a demand-pull inflation to get started in one nation member will not ordinarily exist. If a localized boom should begin, it would quickly spill over into the rest of the community and be dissipated. Free movement of labor, capital, and goods would facilitate that. Cost-push inflation — namely, wage pressure from militant unions — may seem a more serious threat. It should be evident, however, that in a given industry wage increases could not be much greater in one country than in another. Unions are likely to move toward community-wide wage bargaining, just as they have pushed for nationwide bargaining in the United States. Community-wide wage levels will emerge.

In these circumstances, when lapses from full employment occur in a member country, some scope for fiscal policy action will exist, as in Case I, above. A country in a position similar to that of the United States since 1958 — stable prices, wage increases less than elsewhere, and idle resources — could use fiscal expansion to restore internal balance.

Creation of Money

We have assumed that in financial integration a single nation's power to create money must be abridged. If it wishes to finance an excess of expenditures over current revenues, it must agree to obtain the necessary funds by selling securities in community capital markets at competitive interest rates. Without this restriction, a nation could finance its budget deficit by issuing currency (non-interest-bearing debt) which would be legal tender throughout the integrated community; thus the inflationary impact of currency issue would spread over the whole community instead of being concentrated in the issuing nation. A new issue of currency would, to the extent that it was redundant, flow into banks. As banks increased their loans, money income and expenditure would rise; rising imports would mean adverse clearing balances with ROC, which banks could cover by supplying the excess currency. (Alternatively, when banks first received the new currency, they might use it to buy securities in external capital markets). A small nation might, indeed, be able to finance its budget deficits in this way without causing undue strain, but every nation would be tempted to do the same thing, and a general limitation would be essential.

Similarly, a nation might try to finance its deficits through creation of central bank credit. Under the assumptions of financial integration, the accompanying increase in the money supply would tend to flow into ROC and impart an inflationary stimulus to the community economy. Each member nation would desire to furnish the community's money supply through currency issue and central bank credit (in order to obtain the benefit of "seigneurage"), and it is therefore essential that member nations agree to finance budget deficits through the sale of securities at competitive interest rates. Such an agreement must also place a limit on the power of a single nation to create central bank credit.

At first glance, this limitation may seem to be a serious abridgement of national autonomy. It may be argued, however, that in the present system of convertible currencies and fixed par values via the International Monetary Fund, Atlantic Community nations have already given up national autonomy over creation of currency and central bank credit. If a given nation were to finance budget deficits in this way in such a volume that it got "out of step" with the rest of the world, its currency would quickly come under pressure and it would be forced either to restrict the money supply or to devalue the currency. Even if the drastic step of devaluation were taken, the nation would not then be free to continue its expansionary course. To make the devaluation effective, it would be necessary to check the rise in domestic wages and prices and to give the financial markets reason to believe that no further devaluations would be necessary.

That nations with convertible currencies (11) and unitary official pars have relatively little scope for the use of monetary policy to expand aggregate demand may seem too obvious to require discussion. The inability of nations (notably the U.S.) to attack unemployment by expanding the money supply and reducing interest rates is well-known, as is the inability of Germany to tighten credit as a means of checking her domestic boom.

If nations accept our limitation on creation of money, some method must still be devised to regulate the community supply of money and the community-wide structure of interest rates. The easy way out would be to assume the existence of a supra-national central bank for the integrated community. The objectives, powers, and criteria for action of such an institution could be similar to those of a national central bank. Although European integration may ultimately produce such a bank, we shall set aside this solution for the present.

A second solution may be sought through coordination of policy by national central banks. Such coordination has already been used to a considerable extent, and useful techniques for consultation and mutual assistance have been devised. If capital markets were fully integrated, with capital movements equilibrating and interest rates equalized, central bank coordination could focus on the appropriate *level* of interest rates and supply of money. Distribution of the supply of money among nations could be left to the market and, to some extent, to fiscal policies of individual nations. Once it were decided that the money supply should be increased by a given amount, individual central banks could share in the expansion of bank reserves necessary to effect the desired increase. It would be necessary to agree on a formula for such sharing — perhaps a formula based on the ratio of each nation's money supply to the community total. (The chief purpose of such a formula is to permit nations to share equitably in the "seigneurage" involved in a rise in money supply).

For the community as a whole, the prime objectives of coordinated monetary policy would be the same as those of a single nation at present: price stability, full employment, and external balance. All the difficulties that nations have experienced in achieving and reconciling these objectives would continue to exist for the community, but no fresh difficulties would be created.

(11) Particularly those nations that have accepted Article VIII of the IMF Charter.

Disputes between member nations must of course be expected. If Country A has idle resources it is likely to urge expansion, while fully-employed Country B will oppose it. In such a case, overall expansion of the money supply would tend to cause prices to rise more rapidly in B than in A, thus reducing A's prices relative to B's and tending to improve A's current account balance. Such a conflict may also be solved, under financial integration, through the use of fiscal policy in underemployed Country A. If a budget deficit in A is financed by the sale of securities in community capital markets, funds will be attracted from B to A, community interest rates may rise somewhat, and Country B may feel some contractionary influences that will make her more willing to agree to a community-wide expansion of the money supply.

Nevertheless, conflicts among nation-members must be expected to be difficult to solve, and we have no neat formula to propose for reaching agreement. Perhaps some rules will emerge after a series of issues have been settled by ad hoc bargaining.

If this outcome seems too nebulous and the issue unsettled, we must remember that conflicts are settled in much the same way at the present time. Under the IMF system, when Country A combats domestic recession by expansionary monetary and fiscal policy, her balance-of-payments deficits may exceed her foreign-exchange-reserve — or threaten to do so, in the absence of international support. Atlantic community nations have developed numerous collaborative techniques for dealing with such situations — such as currency-swaps, short-term credits supplementary to IMF resources, advance repayments, and special controls on financial transactions. In addition, the full-employment surplus country (notably Germany) has been persuaded to accept some inflationary pressures in the interests of international equilibrium. Collaboration has been cumbersome and uneven, but it has worked remarkably well.

The task of collaboration should be easier under financial integration than in the IMF system for a single specific reason: under financial integration capital movements will tend to be equilibrating and thus to facilitate efforts of underemployed Country A to expand aggregate demand through the use of fiscal policy, while in the IMF system the weakness of a currency tends to cause outflows of capital which aggravate the problem. Even if outflows of capital

do not occur, the capital inflow in response to a vigorous use of fiscal policy in A is hampered in the IMF system by exchange controls, uncertainty about exchange rates, etc. With capital markets of the entire community open to it, a single country suffering from underemployment should be able to induce an inflow of capital to finance an expansion in output.

The highly tentative suggestion made above, that central banks might share the expansion of bank reserves through which an agreed increase in money supply is effected, should not be taken

SUPPLY OF MONEY, 1953 AND 1962 TABLE I

(billions of U.S. dollars)

	1953	1962	Percentage Increase
Belgium-Luxembourg	3.6	5.1	42%
Netherlands	2.2	3.6	64
France	13.3	26.7	105
Germany	5.6	14.5	159
Italy	6.0	16.5	175
Total E.E.C.	30.7	66.4	120 %
United Kingdom	22.7	26.3	16
United States	130.5	150.6	15
Canada	4.7	6.7	43
	157.9	183.6	16
Total Atlantic Community	188.6	250.0	33

1. Money supply here includes currency and demand deposits. Year-end figures are used.
2. Conversion to U.S. dollars is made at the year-end exchange rate.

Source: International Monetary Fund, *International Financial Statistics*, Supplement 1963-4.

to mean that we expect every nation's money supply to rise in the same proportion. Once the permissive increase in bank reserves is made, market forces will determine how much of the increment in money supply will "stick" in each nation. In the Federal Reserve System, for example, no matter which of the 12 Federal Reserve Banks buys U.S. securities to create additional bank reserves, the resulting increase in money supply is distributed among the states and regions by the capital market. As it happens, the structure of

financial markets is such that it is most convenient and efficient to handle open-market operations in the New York market, but each Federal Reserve Bank "participates" in the transactions in proportion to its assets. The effect on the actual money supplies of the states and regions varies widely and is regulated not by the Federal Reserve System but by market forces.

The money supplies of Atlantic Community nations have also risen in widely varying percentages in recent years. Table I contains data for 1953 and 1962 for the money supply (currency and demand deposits) expressed in terms of U.S. dollars. It can be seen that, while the money supply of E.E.C. nations rose 120 per cent in total, the rate of increase varied greatly among member nations, from 42 per cent in Belgium-Luxembourg to 175 per cent in Italy. In the U.S. and U.K. the money supply rose only 15 per cent and 16 per cent respectively. Such variations in national experience could continue to exist in a financially integrated world.

We also observe that the Atlantic Community money supply rose 33 per cent from 1953 to 1962. What determined this rate of increase? How was it decided? Although we have no answer to these questions, we may argue that determination of the rate of growth in money supply under financial integration should be no more difficult than it is under the present IMF system.

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