

Western European Inflation and the Reserve Currencies (*)

1. On September 21, 1931 I followed, from the visitors' gallery, the discussion in the House of Commons on the suspension of the gold standard. The depreciation had been forced upon Britain by the combined effects of the withdrawal of deposits held in London and the freezing of bank loans to Germany. In the House, the Labour opposition speakers attacked the two largest holders of gold, France and America, and charged the City and the Bank of England with mismanagement of the nation's finances. They pointed to the existence of a basic conflict between the pursuit of the national interest and the City's role as banker to the world. The suspension of the gold standard was coupled with an Economy Bill. The Labour speakers characterized depreciation and the Economy Bill as a desperate attempt by the ruling class to save capitalism from collapse, and one that would inflict much hardship upon the workers.

I also remember that the expectation was voiced in the press and elsewhere that, by freeing itself of the heavy burden of defending sterling, Britain would experience, as one Member of Parliament put it, an electric recovery. In fact the role of shaping economic developments during the thirties was taken over by political rather than monetary factors, leading to a new armed confrontation which placed upon Britain's shoulders the more real burden of a vast and unfunded foreign debt. The defence of sterling under the post-war conditions thus created was marked by two limited retreats, the continental currencies hardening after the precipitous falls of the war years.

2. My chosen task to-day is to try and establish to what extent and in what ways British monetary policies, and those of the other, main reserve currency country, have interacted with ours on the

(*) A text read and discussed at Chatham House, London, in February 1968.

Continent. By "ours" I mean mainly the policies of the European Economic Community, with occasional references to other countries of importance in monetary affairs, more specially Switzerland and Sweden. I shall, moreover, confine my analysis to the years following the return to convertibility; starting with 1959 and ending generally with 1966. The main reason for stopping at 1966 is that the statistical information on which my review will be largely based is not yet available for 1967. The data which I shall derive from that information would not be significantly changed by the inclusion of 1967 — although future data are certainly going to be affected by the monetary drama which started in its fourth quarter and is still being acted.

I am unable to formulate and present an accurate description of all the varying opinions that have been expressed on the nature of the monetary impulses emanating from or transmitted to the reserve currency countries, more especially the United States. From my own knowledge, however, I would tend to distinguish two extreme lines of thought, which are so far removed the one from the other as to leave a very wide field of opinion in between.

At one extreme, there is a school of thought which maintains that the reserve currency countries have been exporting inflation. At the other extreme, it is claimed that they have been importing, if not actual deflation, at least certain deflationary impulses from the non-reserve currency countries, mainly those in continental Western Europe. The evidence might show that the same kind of impulses emanated from both sets of countries, and that the difference between them was only one of degree.

3. The view that finds readier acceptance on the Continent is, of course, the first — namely that inflation was propagated from the reserve currency countries. In my little world of central bankers, this approach has been chiefly elaborated by Dr. Holtrop, the former President of the BIS and the Netherlands Bank. I have specially in mind the masterly analysis contained in the general survey which opens the Report of the Netherlands Bank for 1965. In Dr. Holtrop's words: "Monetary policy will become ineffective if limitation of domestic spending leads to a surplus in the balance of payments"; in this case "the supplying of domestic liquidity is in fact taken over by foreign countries". Turning to developments in the area of the European Economic Community during the three

years 1963 to 1965, he remarked that for the Community as a whole there had "clearly been monetary inflation as well as wage and price inflation, which were not accompanied by a balance of payments deficit". "The absence of any deficit points to the operation of continued inflationary influences emanating from transactions with other countries". He indicated that creation of domestic liquidity in the reserve currency countries took place "at a pace which exceeded the growth rate of the national product. In both countries this process was accompanied by persistent balance of payments deficits, through which the monetary consequences of their excessive liquidity creation were partly exported to other countries".

4. On the other side lie the views that the present working of the international monetary system has compelled the reserve currency countries to slow down growth unduly, or that it has forced them into a deficit. I shall give a few instances of such lines of reasoning.

In the conclusions to the report prepared by Walter Salant, Emile Despres and others on *The United States Balance of Payments in 1968* (which was published by the Brookings Institution in 1963), it is argued that, under fixed exchange rates, and given the present level of external reserves, balance of payments considerations have led to the adoption by the United States of undesirable policies, by putting it under stricter constraints than the basic one of balancing over a reasonable number of years domestic uses for consumption and investment plus, possibly, structural capital exports with the resources generated at high activity levels.

"Balance of payments considerations have played an important role in failure to achieve the Employment Act's objective of maximum production and employment. The expansionary fiscal policy needed to restore high employment has been delayed and made more difficult to achieve by fears that expansion would make the balance of payments worse. The lowering of interest rates to levels which promote high domestic investment and growth has been inhibited by apprehension about capital outflow".

And again —

"The great danger of a system of fixed exchange rates operated with the existing and foreseeable level of reserves is that it does not

permit deficits to be financed long enough to make the kind of adjustments that are most often needed. Deflationary measures, the classical means of improving the balance of payments, cut employment and real incomes — effects which are neither politically feasible nor economically desirable in a modern industrial country. In the United States, large absolute reductions in real income cause only small decreases in imports, and these decreases are partly offset by decreases in exports, so that very substantial declines in total production and income are necessary to induce relatively small improvements in the net balance of payments. Furthermore, higher interest rates, while discouraging domestic investment, may not be effective in attracting capital to a weak currency when strong currencies are available”.

In his book on *Europe and the dollar*, Kindleberger puts forward the view that the deficit in the United States balance of payments is not unlike the imbalance found when one measures the average maturity of a bank's liabilities against that of its assets, which is, as a rule, longer. When the position is seen in this light, the United States deficit is merely equal to its gold losses, the foreign accumulation of dollar holdings being simply the result of financial intermediation. This thesis was also proposed to the readers of *The Economist* in February 1966 by Kindleberger, Despres and Walter Salant together. Kindleberger argues that the general public in continental Western Europe, and especially in Germany, has a high propensity for maintaining its financial assets in liquid form, chiefly as deposits with the commercial and savings banks; this generates a tendency for the banks to stay liquid with their central bank, and for the latter to stay liquid with the rest of the world. At the same time such attitudes force up long-term interest rates. Thus, given free capital flows, equilibrium between Western Europe and the United States is attained by the United States borrowing short from Europe and lending — or investing — long there.

The view that the operation of the international monetary system to-day is such as to force the reserve currency countries into a liquidity deficit has been vigorously expressed by the economic adviser to the BIS, Dr. Milton Gilbert. Speaking in Washington quite recently, he argued that the inadequate supply of new monetary gold pushes the residual seller of gold, namely the United States, into deficit. In his words —

“The United States situation must be seen in the context of the state of the international system as a whole. In 1966 and 1967 the flow of gold into total monetary reserves has been negative; private demand in the market took more than the new supplies in the market. A negative increment to gold reserves means that some country, or countries, has to be in deficit”.

“As the dollar is the reserve and intervention currency of the system, the need for fairly substantial gross deficits in the system inevitably backs up on the United States”.

“The underlying factor behind the disequilibrium of the United States balance of payments and the decline of its gold reserves over most of the past seventeen years has been the shortage of new monetary gold”.

“The United States is the residual country in the system: it is the residual buyer and seller of gold and the residual recipient of the system's deficit”.

In Dr. Gilbert's view, the United Kingdom also suffers, and in a similar way, from the tightness of international liquidity. Such tightness, besides its impact on the United States, tends to exert pressure —

“against any currency with a somewhat unfavorable position in the structure of exchange rates. The United Kingdom was, in part, a victim of this situation. The condition of the system demands sacrificial victims. And it will continue to do so until a reasonable growth of reserves has been put on some sort of sound basis”.

5. In trying to form a considered opinion of one's own one comes up against many obstacles.

A quantitative assessment of some of the factors involved is made difficult by inadequacy of statistical information. This is the case, for instance, in regard to the distribution of ownership of financial assets.

There is also, at a higher level in the process of understanding, the difficulty of distinguishing cause from effect in the interplay of so many factors, in that similar effects may derive from different causes or sets of causes. To give an illustration, we may observe creeping inflation in a country which has a balance of payments surplus, and infer that it has been importing inflation. But factors of a purely domestic nature, such as wage movements that were sufficient by themselves to generate inflationary pressure, may have been at work. As Dr. Holtrop put it in the survey I previously quoted, the concepts of income inflation, demand inflation and

monetary inflation all make sense. But the relationships from which they are derived "establish a link not between causes and effects, but between certain phenomena and the related preconditions".

One feature common to most of the years and countries under review was excess demand — namely a situation in which aggregate monetary demand was not entirely matched by the flow of goods from production, valued at constant prices and generated at high employment levels. Such excess demand will show up in a price rise and/or a deficit in the current account of the balance of payments.

In a group of countries highly integrated by trade, and maintaining fixed exchange rates, aggregate monetary demand may be equal to the flow of real resources for the group as a whole, though not for each country individually — excess demand in some countries being offset by a deficiency of demand in others. Under these conditions, foreign payment deficits would emerge in some countries and would be matched by equivalent surpluses in others; prices would neither rise nor fall.

Or aggregate monetary demand for the group may be excessive. If, measured in terms of the national product, the excess were the same in all countries, prices would rise across the board and no individual imbalances would emerge in foreign payments.

Or, again, the degree of excess demand may differ from country to country. Then the general price increase would be accompanied by foreign imbalances, through which the pressure upon prices, generated with unequal force in the individual domestic markets, would be evenly distributed over the whole area, and make national price movements converge towards a common trend.

6. I shall approach my problem by a factual analysis conducted in the light of the foregoing distinctions.

There has been a state of excess demand in Great Britain, where for the 9 years 1959-1967 the current balance of payments deficits amounted to some 850 million pounds (0.3 per cent of GNP) and the implicit price deflator increased by roughly one-third. No allowance that might be made for the slack generated in the restrictive phases of stop-go policies would be so great as to reverse this conclusion, more especially in the last 4 years, in which the foreign deficit has been concentrated.

The picture for the United States is different. Price inflation was little more than half that in the United Kingdom (17 as against

31 per cent) and the current account of the balance of payments showed, for the 9 years, a surplus of close on 40 billion dollars, namely 0.7 per cent of GNP. However, the United States' performance has deteriorated since 1964 — the price rise has accelerated and the foreign surplus shrunk.

An immediate inference from these figures is that the United Kingdom may be held liable for having exported inflation on two counts — it drew resources from the rest of the world to the amount of the current deficit (which, however, was caused to a considerable extent by overseas defence expenditure) and it inflated the credit base in the rest of the world through the monetary financing of its deficit by way of borrowing from the International Monetary Fund and from foreign central banks, or by the actual surrender of gold. The United States, on the contrary, has generated two opposing effects — through the current surplus, it has provided resources to the rest of the world, reducing *pro tanto* the possible inflationary gaps there; but, through the overall deficit, arising out of government transactions and capital flows, it has also inflated the monetary base in the surplus countries.

Since the British current account deficit was only a small fraction of the American surplus, the two reserve currency countries, taken together, have been net suppliers of real resources to the rest of the world; they have thereby contributed towards moderating inflationary pressures in the domestic economies of their trade partners taken as a whole. Their contribution has been equal to the purchasing power absorbed by the net real resources provided. However, through the overall deficits in their balances of payments, they have also inflated the external reserve assets and thereby the liquidity of the rest of the world. Although in absolute terms the overall deficit of the two countries combined was smaller than their current account surplus, the expansionary influence may well have been the dominant one, since it acted with greater intensity through the deposit multiplier.

In order to clarify this point, I shall first look briefly at the trends in the supply of money and quasi-money in the surplus countries, and ascertain whether and to what extent they chose to offset the expansionary effect of their foreign payments.

7. Since the surplus countries cannot be treated as a single entity, it is prudent to go through the national figures before using averages. They show that the expansion in liquidity was without

exception much greater than that in the national products at constant prices. In fact, during the eight years 1959 to 1966, money and quasi-money increased in Belgium-Luxembourg at an annual rate of close to 8 per cent, while the national product at constant prices expanded yearly by 4.5 per cent. For the Netherlands, the corresponding figures were 9.2 and 5.3; for France, 13.2 and 5.2; for Germany, 12.5 and 5.3 and for Italy, 14.4 and 5.5. These ratios cluster around weighted average values of 12.8 and 5.3 per cent for the group of five.

Similar relationships applied elsewhere on the Continent. In Switzerland, the rate of expansion for money and quasi-money was 10.3 per cent, that for the national product 5.3; in Sweden, the two rates were 7.5 and 4.6 respectively.

The growth in the national products was obtained by full or near-full utilization of capacity in all the countries concerned, except for short periods of restriction following investment booms or wage explosions.

This being so, it can safely be inferred from the figures that no serious constraint was put upon the expansion of production from the side of the provision of liquidity (1).

8. The next query in the study of interactions between national monetary trends concerns the respective roles of the domestic and the foreign components in generating this ample supply of liquidity.

The most convenient source is to my knowledge the statistical bulletin of the International Monetary Fund, which gives a breakdown for each country of its central bank's assets, as well as a monetary survey of both central bank and commercial bank assets and liabilities.

For continental Western Europe, one is struck by the large role which gold and foreign exchange reserves have played during recent years in the expansion of central bank assets forming the monetary base. In the smaller countries (Belgium, the Netherlands, Switzerland and Sweden) practically the whole expansion in the monetary base since the introduction of convertibility has been due to the foreign component. Central bank claims on the government have not changed much in Belgium and Sweden; they are insignificant

(1) The supply of liquidity was kept more strictly in line with the flow of real resources in the two reserve currency countries, the rates of expansion being 3.5 for both series in the United Kingdom; 6.0 and 4.8 in the United States.

in the Netherlands and Switzerland. Central bank claims on the private sector (mainly the banks) are unimportant in all four countries.

In the bigger countries (France, Germany and Italy) the expansion in the foreign component was accompanied by a growth in one or both the domestic components, namely claims on government and claims on the private sector. The Banque de France expanded its credit to the government; the Banca d'Italia and the Bundesbank increased both their claims on the government and those on the private sector.

This summary review reveals that the big countries, far from offsetting the expansionary effect of the foreign component, added to it by augmenting central bank credit to domestic borrowers, while the small countries accepted such expansion in the monetary base as was generated by their foreign surpluses without significantly adding to or subtracting from it. In two of them the central banks had actually no domestic assets to subtract from. This is not to say that they were entirely passive — for instance, they used from time to time ceilings on bank loans to residents in such a way as to contain the volume of credit that might have been created for domestic use on the banks' expanding liquidity base, and to return part of this liquidity to the international market.

Restriction through the use of compulsory reserve requirements and similar devices was in several countries impeded by lack of legislative power or of previous experience.

9. The factors mentioned so far, namely asset structure and institutional limitations to the implementation of restrictive policies, would not have really prevented the adoption of a more severe policy line if in the judgment of the monetary authorities the situation had called for it. The process by which the range of policy tools available to the central banks has been enriched in recent years might have been advanced in time. The acceptance of the expansionary effect of the foreign surplus must be explained by more basic reasons.

Growth requires the central bank to supply the amount of liquidity that will sustain it. Convertibility, and the expansion in foreign trade associated with growth, require it to increase its external reserve assets in relation to domestic liquidity (some of which may at any time be turned into demand for foreign exchange) and other relevant yardsticks, such as the freedom of foreign transactions.

For both requirements to be met, some of the additional liquidity must flow from the external component, i.e. from the accretion of external reserve assets. Policy actions will be directed at keeping the long run development of such assets on the resulting trend line.

Deviations from the trend would by themselves cause corresponding fluctuations in the overall provision of liquidity; to maintain the smooth development of the latter the central bank will as a rule take action to offset the effect of the foreign component by moving contrariwise the flow of liquidity from changes in its domestic assets.

These were the criteria that actually guided the continental countries in adopting two distinct policy lines, one for the long and the other for the short run. Conditions prevailing elsewhere (described below) enabled them to obtain the long run expansion in foreign assets while allowing monetary demand to expand fast. For the short run, they applied (with certain exceptions) the policy of keeping the expansion of liquidity on an even keel, by offsetting the changes in the flow from the external source; an action which is neatly shown by correlation analysis. This general statement is merely a first approximation to the description of the policies that were actually pursued, to which I shall return in a while.

10. The two reserve currency countries followed during the fifties and sixties a more risky course, by practising the offset policy beyond the time limit of the short run. In the case of the United States, the persistent drain on domestic liquidity exerted by the adverse balance of payments has been modified by the return flow of dollars deposited with American commercial banks; for the rest it has been offset by various actions on the part of the monetary authorities, mainly open market transactions and reductions in reserve requirements.

In addition to offsetting the drain on domestic liquidity due to their foreign payments positions, the two countries have added to total liquidity to finance domestic expansion (cf. footnote to point 7).

The length of time during which the two reserve currency countries could follow this dangerous course was due in part to factors that were independent of the attitudes of the authorities in the surplus countries, such as the large gold stock of the United States, the large and repeated use of Fund resources by Britain, and

the position of the dollar and the pound as trading currencies, which in an expanding world will tend to augment the dollar and sterling balances of non-official holders.

11. A closer look at the attitudes of the authorities in the surplus countries themselves reveals that their motivations may have changed with the progress of time, and that our 9 year span should be divided into at least two sub-periods of unequal length, the first of which roughly embraces the three years following convertibility, namely 1959-1961.

In the surplus countries there has existed, for most of the years under review, a conflict between the objective of price stability and that of balance of payments equilibrium. By concentrating on the objective of price stability, and containing domestic demand accordingly, the monetary authorities would have got an unwanted expansion in the foreign surplus. By inflating demand to absorb the surplus entirely, they would have pushed up prices further. The German and Dutch revaluations of March 1961 were, of course, timid attempts to find a way out of the dilemma, or at least to reduce its importance — floating exchange rates, though much in favour in academic circles, being inconsonant with both the Bretton Woods agreements and the Rome Treaty.

On the whole, the monetary authorities accepted the constraint of fixed exchange rates, which had given rise to the dilemma, and proceeded within the existing system to choose a path which reflected their ranking of objectives in order of importance. I have no doubts that, in the present climate of opinion, growth is accepted by central banks as the ultimate objective and that other policy aims get their ranking largely as being instrumental to growth. This is notably so of price stability except possibly in one or two countries which are more inflation-conscious. The adequacy of foreign exchange reserves is measured by the same standard, since the stock of reserves is held to be adequate when it gives time for the adjustment process to bring foreign payments back into balance without the economy going through a recession. The optimum reserve level for a country will, of course, be influenced, much as it is for a bank or a business firm, by price expectations, rates of return and spendability; and, in the case of the major reserve holders at least, it will also be affected by the wish to make the international monetary system work, as it is, or, possibly, to change it.

Actual situations and developments will depart more significantly from certain norms than from others, in ever-changing patterns to which the responses of the monetary authorities will constantly be adjusted. It is in view of such change that I suggested earlier the division of the years under review into two sub-periods.

12. In the years 1959 and 1960 the balance of payments deficit of the United States was very large; in fact, the deterioration dates from 1958, when a massive deficit appeared all of a sudden. The United Kingdom also had large deficits in both years. In the Western world, 1959 was a year of incipient recovery from the recession of 1958. In continental Western Europe, the recovery proceeded in a climate of price stability, which slowly worsened through 1960 and 1961. One simple manner of assessing the role played in the deterioration by inflationary impulses coming from abroad is to compare the price increase with the external current account surplus.

For the EEC countries taken as a whole, prices rose in 1959 by 2.5 per cent; the current account surplus was also 2.5 per cent of the combined national products. If domestically generated demand had not been supplemented by foreign demand, and assuming other things to have remained equal, prices in those countries would have kept stable; such rise as occurred may be entirely imputed to net foreign demand. Foreign demand, however, deserves to be put in a better light than this for the role it played in leading, or accelerating, the recovery.

For 1960, the price increase in the five monetary areas combined was 2.7 per cent and the current account surplus 2.1. Three-quarters of the excess of monetary demand evidenced by the price rise were therefore of foreign origin.

In 1961, the price rise accelerated to 3.6 and the current account surplus shrank to 1.5. The two opposite changes point to a swell in domestic demand, partly based on the liquidity generated by the persistent foreign surplus, the expansionary effect of foreign demand shifting from the current absorption of real resources to the cumulative creation of liquidity. For the three years taken as a whole, the annual foreign surplus of the EEC countries was 2.0 per cent of GNP and the price increase 2.9.

To evaluate how the liquidity supply will be affected by the current account surplus and how in its turn it will affect the growth

of the national product at current prices, one has to introduce the relevant multipliers, namely the ratio of the money supply to central bank assets and the ratio of the national product to the money supply; or briefly the product of the two, namely the ratio of the national product to central bank assets. Using 1965 data for ten Western European countries (the five monetary areas in the EEC, three Scandinavian countries, Switzerland and Austria) the ratio of the national product to central bank assets is found to range from 4 in Switzerland to 9 in Germany and Sweden, with an unweighted average of 7.

When this multiplier is applied to the foreign surplus, it appears that a surplus equal to 2 per cent of the national product will, in the absence of compensatory action by the central bank, finance an expansion of the national product by 14 per cent, which perforce will be to a large extent inflationary (except possibly in Japan). A surplus of around 0.7 per cent of the national product is sufficient, as a source of liquidity, to match the growth rates in real terms with which we are familiar, which are in the region of 4 to 5 per cent.

In the cases of Germany and the Netherlands the current account surplus for the three years — expressed, I repeat, in terms of the national product — was greater than the price increase. Such a relationship indicates that the flow of domestic monetary demand was kept slightly smaller than that of newly produced goods and services. Whether this was done in an effort by the authorities of the two countries to offset the inflationary impulses coming from abroad or was unintentional, I am unable to say. But price stability must have ranked high among policy aims in Germany and the Netherlands, if their next reaction was that of revaluing.

13. In 1962 the pace of inflation quickened further in continental Western Europe; it continued to be sustained in the following years, at least until 1966, and widespread, since the price rise was nowhere below $3\frac{1}{2}$ per cent per annum. In the group of ten countries mentioned before, it averaged 4.2 per cent, against 2.8 during the previous three years. EEC countries did not fare better than the others in the group.

But the price rise has not been uniform in time, nor have the changes in its pace been simultaneous all over Western Europe.

These differences suggest that the movement of prices was to a large extent governed by changes of domestic origin in the volume of demand. We are all familiar with the process of overheating, in which an expansion in investment demand or in government consumption leads to a wage explosion followed by a downward adjustment. Memorable experiences were those of Italy in 1963-1964, the Netherlands and Germany in 1964-1966. Further evidence of the large role played by domestic factors is provided by the changes in the foreign balance and in the distribution of the national product.

The average current account surplus of the EEC countries — in the 5 years from 1962 to 1966 — fell to 0.7 per cent of their combined national products. The change from previous experience was specially striking in the Netherlands, where in the 5 years the price rise was close to 6 per cent while the current account surplus shrank to vanishing point. In Sweden and Switzerland the current balance became negative.

Such current surpluses as were left accounted for a fraction only of the further improvement in the foreign exchange position of Western European countries. To a larger extent the improvement was due to long-term capital inflow from the United States. In the final analysis the capital inflow did not provide the recipient countries with additional real resources, except for the importation of new technologies and entrepreneurship which was associated with it. For the rest, it merely implied an acquisition of short-term claims on the capital exporting country, against the surrender to it of long-term financial assets, and/or the acquisition by it of the control over part of the productive equipment of the Western European countries.

These movements in prices and the foreign balance took place while production expanded satisfactorily thanks to high employment levels and to large productivity gains. A very fast rate of expansion in the volume of domestic demand was therefore forthcoming to match the additional supply, to bring about a shift in the use of the national product towards domestic consumption and investment, and to speed up the price rise.

If the inflationary process had been mainly caused by foreign demand it would probably have induced an expansion of profit margins. The national accounts of the Western European countries do not show such a change in income shares. The reverse seems to be true: prices increased faster at times when income distribution shifted in favour of labour, and the balance of payments deteriorated.

Western European countries from time to time fell victims to this condition of wage push.

14. While domestic factors played the chief role in causing expansion and its overspill into inflation, the international environment, marked by creeping inflation and the United States deficit, acted as a condition furthering the process, and that in several ways. When the forces that will start the boom are gathering, a strong external monetary position acts as an encouragement to the authorities to let investment grow and as an inducement to wage concessions. In the stage of readjustment, the country merely has to slow down the pace of its inflation rather than deflate absolutely, and is helped by strong external demand in shifting resources to exports.

The continuance of the external deficit in the reserve currency countries, under conditions of creeping inflation elsewhere, was by itself sufficient to keep the inflation going. It was neither expected nor desired by the reserve currency countries that their trade partners in Western Europe would prevent the importation of inflation by more restrictive monetary policies and larger surpluses or by appreciating their currencies. Both courses of action are utterly disliked by the surplus countries themselves. It was therefore a practical certainty for the authorities in the reserve currency countries that their persistent deficits, whether on current or capital account, would make some inflation unavoidable in the surplus countries.

In this sense, the deficits were a *sufficient* condition for inflation in Western Europe — a conclusion that does not in itself squarely place the responsibility for Western European inflation on the reserve currency countries, since they were not a *necessary* condition.

To repeat, the continuous improvement in the external monetary position of Western European countries was a condition which favoured the choice of the expansionary options whenever an alternative between expansion and restriction was suggested by other policy criteria. But the factors of a domestic nature which even in the absence of a foreign surplus made for inflation in a country like Britain were not absent in continental Western Europe, and from time to time came to the fore as inflation leaders.

If this conclusion is correct, the hoped-for return of the reserve currency countries to external balance, while making for an easier assessment of responsibilities, will not by itself slow down dramatically the pace of inflation in Western Europe.

15. Having granted this, I am not ready to subscribe to the conclusions reached by Kindleberger or by Gilbert.

The position of the United States, as a long-term lender and short-term borrower, was maintained thanks to the pursuit on the part of the American monetary authorities of a policy aimed at allowing short-term interest rates to rise while keeping down those for long-term finance. They were moderately successful, but the provision of liquidity through the massive purchase of government securities by the Federal Reserve System was an essential part of their strategy. From 1959 to 1967, the public increased its holdings of currency, demand and time deposits at commercial banks from 206 to 365 billion dollars. Public debt increased over the same period by 62 billion dollars (from 283 to 345), of which 10 billion only was bought by individuals, 29 by commercial banks and other institutions, and the residual 23 by the Federal Reserve System. The Federal's holdings now include a substantial proportion of intermediate-term securities. The whole 159 billion expansion in the money supply has been based on these purchases and on the reductions in reserve requirements, while the gold stock has contracted by 8 billion dollars. Yet, the average maturity of the public debt, which had shortened from approximately 9 years in 1949 to 5 in 1958, has declined further to 4 years, and the rates for Aaa corporate bonds have risen from 3.80 to 5.50; those for 3 to 5-year government securities from 2.90 to 5.10 (5.70 in December). Of late, the United States has become borrower at both the short and the long-term ends of the spectrum. When policy actions of a monetary or administrative nature are so dominant in shaping external money flows as they have been on both sides of the Atlantic, but more specially in the United States, and produce such drastic changes in their volume and direction, one has to plough very deep indeed to discover underlying layers of propensities.

As to Gilbert's contention that the international monetary system works in such a way as to squeeze gold and dollars out of the reserve currency countries, the proof might have been found in the size of the current account surpluses and in the extent to which the volume of domestic monetary demand was depressed to produce them. But it has been shown that since 1962 current account surpluses in Western Europe have been small, employment levels high, and the price rise sustained. To put it in a slightly different way, it is not proved that the policies of the Western European countries were in any signifi-

cant measure oriented to the obtainment of foreign surpluses, since these came about without other accepted policy aims being sacrificed.

The actual ranking of objectives will be pragmatically tested in the same way as the conclusion to point 14 — i.e., by the reaction of the surplus countries to the desired new situation in which the United States will not generate additional reserves. If my assessment of motivations is correct, the countries on the Continent will probably continue to take the expansionary options and stand ready to incur foreign deficits.

16. This is a conclusion for the next few years. For the long run, opinion seems to be divided between those who favour the mechanistic approach of the gold price to the problem of expanding international liquidity, and those who would rely on reserve creation through the agency of the International Monetary Fund. The experience of the past decade seems to suggest that the greatest potentialities for financing foreign imbalances lie elsewhere, namely in the international monetary market.

The link between current account imbalances and the need for official finance is through the items of net long-term and net short-term capital movements. To the extent that the two flows are of a stabilizing nature, they will act as buffers, cushioning the impact of current imbalances on official reserves.

Extensive statistical evidence kindly collected for the present occasion by my former associates in research points to the following tentative conclusions. Long-term capital flows between developed countries have increased the need for official financing, since the surplus countries in Western Europe have been net recipients of long-term capital. Short-term flows tend to be destabilizing when the expectation of alterations in exchange parities sets in, and the United Kingdom has unfortunately provided repeated evidence of this; but, in contrast to long-term flows, for most countries and most of the time during the period under review they acted in an equilibrating way, partly because the central banks have promoted the right sort of flows, by varying the supply of foreign exchange to the market and by general regulatory action. A gradual refinement in their operational techniques has secured improving results. The size of the short-term flows has been increasing over time in relation to that of the deficits, and in recent years the flows have been more of a stabilizing nature than previously.

Italian banks possibly provided the first notable instance of the great potentialities of the international monetary market by borrowing from it in 1963 more than one billion dollars. In 1966-1967 American banks borrowed close to 3 billion dollars. To give a few more instances — the German and Dutch current account deficits during 1964-1965 were largely financed through the market. Italy in 1965-1966 and Germany in 1967 returned to the market part of the inflow of foreign exchange from their current surpluses. In the case of Japan, the impact of alternating foreign surpluses and deficits on the movement of official reserves has been greatly reduced by the short-term flows.

17. The international money market is thus acquiring the character of a market in reserve money, in the larger sense that money flows take over in part the function performed by official reserves and in the stricter sense that official foreign exchange is channelled to it in various ways — through transactions of the central bank in each country with its own commercial banks, through the deposits which central banks hold at the BIS and through direct placements by the central banks themselves.

An international market for reserve money fulfils the function of collectively assessing the creditworthiness of individual banks and countries, and meeting their needs, with greater flexibility than institutions like the Monetary Fund where available facilities are somewhat rigidly linked to individual quotas. Accordingly, the market reduces more effectively the need for owned reserves. Moreover, the amount of funds coming to the market will be related to the size of the imbalances which arise in international trade, in a mutual adjustment between sources and uses.

18. A question which comes to one's mind is whether it will be possible for the market to develop further once the foreign payments of the United States have been brought back into balance.

Imbalances in foreign payments will continue to arise outside the United States; they will be financed out of the existing stock of reserves or, let us assume, out of short-term borrowing in New York. The surplus countries will be in a position to return to the market the foreign exchange accruing to them; the market will use it partly to finance new imbalances and partly to expand its liquidity, which, let us assume again, will take the form of deposits

with New York banks. In the final analysis, the market may develop to the measure of the imbalances which arise outside the United States, the relationship between such imbalances, the uses of funds by the market and the sources of funds being reminiscent of that between the demand for bank loans, the volume of credit and deposits.

The analogy with the operation of a banking system goes further, in that the financial intermediaries which act in the international money market need to maintain an amount of liquid holdings related to the volume of the deposits they receive. At times when their liquidity was low they would abstain from granting new loans, and the resulting upward movement in interest rates would push the banks of the deficit countries to borrow marginally in New York. When the funds from this source finally enter the market, they will as a rule be deposited in New York in order to build up the depleted liquidity.

Under the assumptions made, the system will develop its dollar liquidity by American banks lending short as much as they borrow short. Under the balance of payments presentations used outside the United States, the two flows are treated in the same way and would offset each other in terms of balance of payments results.

19. Be that as it may, it is perhaps not totally unrealistic to envisage as from now foreign exchange policies under which the financial intermediaries that are active in the international money market might dispense with building up their dollar liquidity.

The $\frac{3}{4}$ of 1 per cent fluctuation which is now permitted on both sides of exchange parities serves no meaningful economic purpose. The freedom to adjust the peg itself has practically been renounced within the European Economic Community, since alterations in the exchange parities between the currencies of the group would disrupt the system of farm price regulation ruling within it. The day may not be far off when, through international agreement, or the emergence of new rules of conduct, parity changes will be practically ruled out over a wider area, and when the central banks will decide currently to buy and sell foreign exchange at par. Under these conditions, the operative liquidity ratio for banks that are active in the international market would be a single one, namely that between total liquid holdings and total liabilities, irrespective of the currencies in which holdings and liabilities were expressed.

20. Perhaps I am outlining a state of affairs which reflects my intellectual preferences rather than the realities to be of a reasonably near future. But the recent trends in the international money and capital market I have briefly described hold out a real promise for a new and better approach to the problem of international payments to which we ought not to be blind.

Floating exchange rates are often advocated as a radical means of reducing or eliminating foreign imbalances. The flexibility of the rates implies a rigidity in a more fundamental sense, in that it takes away the buffer provided by expansion and contraction in foreign exchange holdings and therefore requires a country to balance resources with uses in the short as well as in the long run.

The alternative approach, which increases flexibility in this more basic sense and furthers international economic integration, lies in adopting policies that will promote offsetting flows of funds. It is with these objectives in view that I have stressed the merits of an exchange structure of almost absolute rigidity.

Even if a new exchange policy of the kind I have sketched does not materialise, we shall in all probability benefit all the same from a further development of the international money and capital market. The role of the City of London in such a market may well turn out to be comparable, in dignity and importance, with its ancient one of world reserve centre.

Rome.

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