

ESSAYS IN INTERNATIONAL FINANCE

No. 46, May 1965

BALANCE-OF-PAYMENTS DEFICITS
AND THE
INTERNATIONAL MARKET
FOR LIQUIDITY

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DEPARTMENT OF ECONOMICS

PRINCETON UNIVERSITY

Princeton, New Jersey

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BALANCE-OF-PAYMENTS DEFICITS AND THE INTERNATIONAL MARKET FOR LIQUIDITY

Ambiguity and confusion abound over the international payments position. President Johnson's balance-of-payments message, for example, devotes the first half to stating how strong the dollar is, and the second to proposals for correcting its weaknesses. Economists have been using the term "crisis" to describe the situation for at least six years, during which world trade has expanded virtually continuously. The balance of payments of the United States is puzzlingly in continuous massive deficit, but the foreign-exchange market for the dollar, with sporadic speculative exceptions, evinces no particular sign of weakness. The French, and to a lesser extent the European Economic Community as a whole, express irritation over both the duration and extent of the deficit, and the strength of American corporations, banks and other financial institutions. German opinion is unclear whether capital is scarce or abundant in that country, and whether, accordingly, the long-run normal capital flow should be outward to finance long-term foreign investment, or inward to finance the still large backlog of housing demand.

This paper contends that much of the confusion arises from a mistaken definition of balance-of-payments disequilibrium. It holds that there is no objective problem of the strength or weakness of the dollar, but a possibility of a subjective problem arising and growing by reason of faulty economic analysis, stemming from this definition. Moreover, the change in definition of a deficit proposed by the Bernstein Review Committee for Balance of Payments Statistics,¹ and referred to in the President's balance-of-payments message of February 10, 1965, effects no distinct improvement.

The difficulty arises from confusion between capital movements for

¹ See Edward M. Bernstein, *The Balance of Payments Statistics of the United States: A Review and Appraisal* (special report prepared for the Bureau of the Budget; published in Washington, April 29, 1965).

the purpose of transferring real assets and those which have the purpose of and serve to accommodate national liquidity preferences.

I ignore President deGaulle's animadversions on the subject of gold. The analysis does, however, expose the error in the thinking on international payments of Jacques Rueff, whose thought formed the (distorted) basis of deGaulle's statement.

Definitions

The Department of Commerce or Walther Lederer definition of balance-of-payments deficit, as is well known, is the loss of gold plus the increase in certain liabilities to foreigners: specifically—all short-term liabilities and all United States government bonds and notes, including the non-marketable issues payable in dollars and foreign currencies (the so-called Roosa bonds). In some definitions, prepayments of intergovernmental indebtedness are added. On this basis, the President's balance-of-payments message stated that the deficit amounted to \$3.6 billion in 1962, \$3.3 billion in 1963, and \$3.0 billion in 1964.

The basis for this definition has been explained at length.² It rests not on the solvency of the United States in international transactions but on its liquidity. Net worth can increase from year to year with a deficit, as the current account of the balance of payments, less transfers, is positive, but falls short of the long-term capital outflow and the increase in United States short-term claims on foreigners. It is assumed that the country might be called upon to pay off all its short-term liabilities to foreigners, without being able to draw on any of its short-term claims.

The difficulties with this definition have been widely noted.³ It is

² See, for example, Walther Lederer, *The Balance on Foreign Transactions: Problems of Definition and Measurement*, Special Papers in International Economics, no. 5. (International Finance Section, Princeton University, September 1963); and by the same author, "The Balance of United States Payments: A Statement of the Problem," in S. E. Harris, ed., *The Dollar in Crisis* (New York: Harcourt Brace and World, 1961), pp. 114-136.

Throughout the discussion below, the appropriate treatment of "errors and omissions" is ignored, as if all payments were known, rather than estimated by imperfect techniques.

³ See, for example, Hal B. Lary, *Problems of the United States as World Trader and Banker* (Princeton, N.J.: Princeton University Press, 1963); Robert Triffin, "The Presentation of U.S. Balance of Payments Statistics," in American Statistical Association, 1961 *Proceedings* of the Business and Economics Statistics Section (Washington, 1962), pp. 51-57; and Walter Gardner, "An Exchange-Market Analysis of the U.S. Balance of Payments," *International Monetary Fund Staff Papers* (May 1961), pp. 195-211.

asymmetrical. When banks in two countries buy foreign deposits, each in the other, to acquire an inventory of foreign exchange (perhaps each entering into a contract with the other to sell the foreign-currency assets forward), both countries are in deficit, despite the fact that there has been no capital movement. It draws far too sharp a distinction between United States assets and liabilities. Some claims of the United States on Europe and Japan are highly liquid or transferable to another holder without substantial loss, whereas some minimum amount of working balances in dollars held by the countries of the "dollar bloc," will be held through thick and thin. Where a claim and a liability are closely associated, in particular, it is offensive to common sense to assume that one is a highly flighty and skittish balance likely to be withdrawn, while the other is a turgid frozen asset, which cannot be drawn upon to meet the withdrawal. When an American corporation puts a deposit, for example, in the New York branch of a Canadian bank, which in turn invests the proceeds in the New York call-money market, the United States balance of payments is in deficit on the Lederer definition, despite the fact that there has been no impact on the foreign-exchange market—the funds never having left downtown Manhattan—and that only under the most unlikely circumstances would the Canadian bank go short of dollars by the amount of the deposit, i.e., use the deposit to buy foreign exchange. The pinnacle of absurdity is reached in the case of Japan, where New York banks making short-term loans to that country require borrowers to maintain minimum balances. The deposit puts the United States balance of payments into deficit, while the asset that gave rise to the claim against this country is ignored.

The revision of the Department of Commerce definition, set out in the Bernstein Committee report, continues to ignore assets. The distinction is drawn merely between official short-term claims on the United States and unofficial claims. The deficit is now defined as losses of gold and increases in short-term official claims. It is assumed that private holders of dollars can be disregarded, because they have voluntarily chosen to lend to the United States at short term. By contrast, official dollar holders are considered to be lending to the United States under duress, or at least are much more nervous and more desirous of converting their dollars into foreign currencies or gold than private holders. The Bernstein Committee is understood to have made no change in the treatment of United States claims on foreign countries. These are still regarded as unavailable to meet withdrawals of foreign dollars from the

United States, except, of course, for official United States holdings of foreign exchange which are the equivalent of gold.

This definition has the benefit of reducing the stated deficits of the years 1962, 1963, and 1964. Instead of \$3.6 billion, \$3.3 billion, and \$3.0 billion, respectively, they are \$3.3 billion, \$2.3 billion, and \$1.3 billion, as the President's balance-of-payments message stated. But this virtue is unaccompanied by others. Over a long period, since 1959, the two definitions produce roughly the same order of magnitude of deficit. Theoretically, the distinction between private and official holdings is not a sharp one. From time to time privately held dollars are dumped on the market and must be bought by foreign central banks. Or the Bank of Italy will seek to mop up excess domestic liquidity by selling dollars to the commercial banks under repurchase agreements which remove the exchange risk. While it is true that a good many European central banks have been inching up in their proportions of gold to total reserves, as nervousness over the international monetary mechanism has been maintained at a high level, the holdings of other countries are both substantial and steady. It might be well to make a distinction between the dollars held by the monetary authorities in Canada, Japan, Mexico, Venezuela, etc., on the one hand—which may be said to be in a "dollar bloc"—and those of France, the Netherlands, Spain and Switzerland—which deal only in or are moving rapidly toward gold—with Germany, Italy and Belgium somewhere between. In any event, the distinction between private and official holders is overdrawn. The numbers may be comforting in the short run, but the theory is erroneous.

These remarks about the definition used by the Bernstein balance-of-payments committee have been written without benefit of having seen the report. Publication is hung up for reasons which, rumor has it, stem from the strenuous objections of the Department of Commerce, and the threatened resignation of Department of Commerce officials, if the report is allowed to appear. On the basis of my analysis, the Department of Commerce definition should be discarded, and those who are committed to it must yield intellectual positions or remove themselves. But the Bernstein definition between official and private dollar liabilities of the United States is not the appropriate replacement.

Long-Term Borrowing for Liquidity

Where these definitions go wrong is in assuming that international lending by the United States, at short-term and long, should be trans-

ferred in real goods and services. This is perhaps true of lending under present conditions to the less developed countries, which are interested in real assets, and not in balancing their portfolios among real and monetary assets, nor, within the monetary category, in balancing assets by maturity. But much, perhaps most, of the lending by the United States to Europe, and perhaps a third to a half of United States lending to Canada and Japan, serve an altogether different purpose: they are intended in an over-all economic sense to provide liquidity. The United States is not engaged in exchanging real goods for long-term securities, but short-term monetary liabilities for long-term monetary claims. The country, of course, is not the decision-making unit, and no conscious national portfolio-balancing decision is made. But the effect of private and public decisions is the same. Foreign countries as a whole must be added to domestic institutions as financial intermediaries.

Postulate a country like Germany with a high rate of saving and a high rate of investment. Suppose that the *ex ante* rates of saving and investment will produce an equilibrium rate of national income, which would mean, provided that capital markets were isolated, that the balance of payments was in equilibrium. In the well-known formula developed by Sidney S. Alexander, the foreign balance of a country is necessarily equal to its national product minus its domestic "absorption" of goods and services. From this equation, or rather identity, it follows that the foreign balance must be zero if and when the sum of domestically absorbed goods and services is exactly equal to the total national product.

If the savers happen to have high liquidity preference, and the investors insist on long-term obligations—the capital markets still being isolated—one will find a very high long-term rate of interest and a low short-term rate. Time deposits will yield a low return because they are abundant; bonds will have low prices because the demand for them is far to the left.

Assume then convertibility, and connect up this capital market roughly, if not perfectly, with that in a country where liquidity preference is much lower. Investors who prefer their liabilities funded at long term will borrow abroad. Savers who lose outlets for their savings domestically have no alternative but to lend abroad. The households which save are unlikely themselves to maintain time deposits in New York banks, but the effect is the same. If the savings are maintained with banks, the banks may hold foreign deposits. Or, if the banks are

uninterested themselves in holding foreign assets, the liquid assets held against their quick liabilities to savers must be supplied by the government or central bank, which in turn must hold the foreign assets. The financial authorities may choose to fund these assets into long-term claims on abroad. In either event there will result a long-term private inflow into the country and a long- or short-term capital outflow by the authorities. But the country has a surplus in its balance of payments in no meaningful sense.

The counterpart in the long-term lender is equally not a deficit. A country with low liquidity preference finds it profitable to exchange types of assets with a country with high liquidity preference when *ex ante* savings equals *ex ante* domestic investment in each country.

The result of connecting up European and American money and capital markets in this way can be illustrated schematically. Figure 1 shows solid lines which suggest the structures of interest rates with markets separated. The United States, with low liquidity preference, has short-term rates almost as high as long-term; Europe, with a strong demand for liquidity on the part of savers and a desire of borrowers to fund obligations, has a much steeper profile of rates. When the two markets are joined, assuming perfect mobility of capital, the two structures become identical—the dotted lines. The European structure changes more than the American, in the schematic diagram, because the United States market is larger. Arrows suggest the direction of capital movement—the upward arrows representing lending, which tightens the local market, and the downward borrowing, which lowers rates. The diagram, it should be emphasized, is highly stylized: in the real world, money and capital markets are not perfect and the arrows signify directions of movement, not discrete distances.

Observe that the distinction between official and private holdings of foreign claims in the country with high liquidity preference is a detail of no objective consequence, and one which should not make any considerable difference in the interpretation of the balance-of-payments position. The distinction between private and official institutions in the country with low liquidity preference may be equally or more significant. If this country lends long and borrows short, it makes a difference for monetary policy whether the short lending is to the central bank or to the commercial banks. Member-bank reserves are reduced, of course, when the proceeds of long-term loans in the capital market finally come

to rest as deposits with the central bank. But on balance-of-payments grounds, the distinction is of no interest.

Examples of Long-Term Loans for Liquidity

Professor Triffin's criticism of the gold-exchange standard is that reserves can be added only by new gold production, which is inadequate in some sense which need not be made precise, and through deficits of the reserve-currency countries. Deficits pile up as reserves expand, and ultimately undermine the value of the reserve currency. The system is thus self-destructive.

The point that reserves under the gold-exchange standard can be created only by newly mined (or dishoarded) gold and deficits is formally correct on the definition of deficits propounded both by the Department of Commerce (Walther Lederer) and by the Bernstein balance-of-payments committee. The attempt has been made, however, to show that these definitions were not very helpful—and in fact have been harmful. Some examples of reserve creation through long-term loans may serve to illustrate how these definitions have led to and sustained confusion in this area.

First, take the case of currency swaps between central banks. This device has been used by the United States Treasury, under the leadership of former Under Secretary of the Treasury for Monetary Affairs, Robert V. Roosa, as one of the perimeter defenses. As has been mentioned, the exchange of short-term capital assets between two countries can put both in "deficit," as the increase in liabilities is counted but the offsetting increase in claims is not. The slight redefinition of the balance-of-payments deficit to include monetary authorities' holdings of foreign exchange with gold means that outright, irreversible swaps now create reserves without deficits, but when only gold and short-term liabilities were counted, reserves were created by "deficits" which were not deficits in a significant sense.

Where swaps are undertaken when a currency is under pressure, and one country sells its foreign exchange in the market, while the other holds its foreign exchange, there is of course a real deficit. The liability remains, but the asset is sold. The United States Treasury devised currency swaps mostly as a way to acquire foreign exchange needed to meet a run. But these swaps can take place any time, among two- or multiple-currency centers, to create instant reserves without deficits, except as some irrelevant definition may decree.

Second, consider stabilization loans. The distinction between a stabilization loan and an ordinary loan is, or should be, that under ordinary circumstances a country borrows from abroad to acquire real assets, whereas a stabilization loan is contracted to raise permanently the level of foreign-exchange reserves. The hope of retaining the proceeds of the loan is not always realized, as the Anglo-American Financial Agreement of 1946 demonstrates. But countries do, from time to time, borrow long and lend short, for stabilization purposes, without the borrowers having a surplus or the lenders a deficit, except under the Department of Commerce and Bernstein definitions.

Third, take the question of the reserves of the British Commonwealth, the sterling balances held in London. In the early 1950s there was controversy over whether it was fitting for rich Britain to borrow from the poor colonies and ex-colonies through the mechanism of the sterling-area and colonial sterling balances in London. It was alleged in a series of claims, and denied, that Britain exploited these colonies by borrowing from them.⁴ Balance-of-payments issues were not in the forefront of discussion at the time, and the question did not arise whether Britain had a deficit, and the colonies surpluses, when sterling balances increased. Concern was with the stocks, not the flows.

It was not of course appropriate to regard simply the gross sterling balances of the colonies in London. There were many offsets to these sums, in bank loans, commercial indebtedness, and especially bond issues in London. The claim that countries that had 100 per cent reserves for their domestic money supply, as did many of the colonies, had to achieve an export surplus to add to their local money was wrong. Money could be expanded through long-term borrowing. Sometimes colonial borrowing in London resulted in a transitional increase in the money supply as the government sold the proceeds of the loan to the Currency Board against local means of payment; when local expenditure spilled over into import surplus the money supply was drawn down again, and the increase in claims on London spent to pay for the additional imports. This is the transfer mechanism at work. But money could be acquired through long-term borrowing to finance export projects, the output of which offset rising imports. The balance of payments did not turn adverse; the increase in money supply became part of the long-run struc-

⁴ See, for example, Ida Greaves, "*The Colonial Sterling Balances*," Essays in International Finance, No. 20 (International Finance Section, Princeton University, 1954), and the discussion in the *Economic Journal* for 1953-55 among Greaves, Hazlewood, Niculescu, King.

ture; and the colony borrowed long and lent short to match British borrowing short and lending long. On Department of Commerce terms there was a colonial surplus and a British deficit. On any sensible basis, the balance of payments remained in equilibrium. The colonies acquired liquidity, and paid for it with the difference between the return on short-term assets and the coupon on long-term bonds. Since in London the spread between long and short rates was narrow, the liquidity was acquired cheaply.

Fourth, let us return to the case of two countries, Germany and the United States, with high and low liquidity preference, respectively. Just as the colonies did not lend to Britain by holding sterling, so Germany does not finance the United States. It is claimed, for example, that Europe finances American direct investments in Europe, and it could be held that European holders of dollar balances financed the \$940 million increase in long-term U.S. bank claims on foreigners in 1964. But it can equally well be put the other way: American direct investment financed European holdings of dollars, or long-term bank loans by the United States made possible the liquidity of European money markets.

Direct investment raises another point on which the Department of Commerce statistics are grossly misleading. When Europeans think of direct investment, they inevitably have in mind the large United States corporations with enormous amounts of capital which built efficient factories and make life difficult for their competitors. They fail to realize that the Department of Commerce estimates include inter-company balances in direct investment, and that some of the rise in direct investment in recent years represents nothing more than dollar balances left on deposit in the Euro-dollar market by the European subsidiaries of American corporations to earn $\frac{1}{4}$ per cent more return than would be possible through time deposits in New York. The counterpart to Euro-dollar deposits in London by U.S. firms takes two forms. In one case, the London bank holds short-term assets in New York. The balance of payments shows a deficit on the Commerce (but not the Bernstein) definition. The Euro-dollar balance (direct investment) is ignored, but the London claim on New York is counted. In effect, however, the London bank could be regarded as part of the New York market (like the Canadian bank already discussed). There is no effect on the exchange market, current or potential, since the liability and the claim are linked.

In the other case, the dollar funds are lent by the New York bank to

a European borrower. Here it is necessary to pierce the corporate and banking veils and see what is really happening. Corporation X in the United States has dollars in London, which a London bank (possibly of American ownership) lends to a European borrower, for three, six, or maybe as much as nine months. The European borrower may be expecting a devaluation of the dollar—going short—and if his borrowing is matched by his central bank acquiring dollars, the private short position is matched by a public long one. But suppose foreign-exchange rate changes are far from his mind. His motivation is only that he can borrow more cheaply from the Euro-dollar market, and for longer periods, than he can from his local European bank. In this circumstance it is true that the European central bank finances “direct investment,” in the form of dollar balances held abroad, but direct investment equally finances European liquidity.

In fact, however, we do not know how much of the slowly rising direct investment in Europe takes the form of dollar balances and how much is the acquisition of real assets. Many of the real assets, such as those to be represented by the new General Motors plant in Antwerp, involve no capital movement at all. General Motors will finance the entire project through Belgian banks, thus subtracting liquidity from the Belgian money market. It does this largely because of misguided United States concern about the United States balance of payments. But if General Motors tightens up European money markets this may put pressure on local borrowers to turn to the Euro-dollar market, which in turn will raise the demand for United States loans. The United States success in frustrating General Motors using United States funds for European investment—assuming that the company would have borrowed in the cheapest market rather than be concerned about exchange risks—may merely drive some other borrower there.

For another example, consider Dallas. Happily for our peace of mind, we have no data showing the balance of payments between the Dallas, or 11th, Federal Reserve District and the rest of the United States. But my intuition tells me that if we had such data they would show that Dallas was in surplus and the remaining eleven districts in deficit, on the Department of Commerce definition; that, while Dallas floated many security issues in New York in order to acquire real assets, it also borrowed for liquidity purposes. As its real assets mounted, portfolio balancing required an increase in money assets, and this demand was met by “foreign loans.” If the figures were before us, there is every

likelihood that the eleven districts would seek to cut Federal spending in the Dallas district, to limit or tie transfers, and to adopt voluntary restrictions on capital movements to the area.

Canada is a foreign country but it is also regarded as the 13th Federal Reserve district. Canada has been borrowing heavily in the United States and its claims on the United States banking system have been rising as well. It is significant that the interest-equalization tax and the Gore amendment were not applied to Canadian transactions, as our monetary authorities instinctively understood that the Department of Commerce approach (and the Bernstein) made no sense in this area. What I have been suggesting above is that Europe is or was in process of becoming the 14th Federal Reserve district.

Finally there is Williamson's interpretation⁵ of the 19th century balance-of-payments experience of the United States. His findings are opposed to the classic view of capital transfer, in which capital movements are transferred between countries first in gold and then in goods, the goods-flow real transfer reversing the monetary transfer. As he sees it, cyclical expansion in the United States (of the Kuznets variety) attracts goods and money (gold), which are both paid for in securities. In separate but linked markets, the excess demands for goods and money are matched by an excess supply of securities. Classic transfer theory (and the Commerce definition of balance-of-payments equilibrium) assumes that there are only two markets to be cleared in equilibrium, those for goods and those for securities. But modern monetary theory underlines the need for balanced portfolios in both the lending and the borrowing country. In one case real assets, in the other case securities, are balanced with money. In equilibrium, the United States borrowed through the sale of securities partly to acquire real assets, partly to increase its liquidity.

If only two markets have excess demand or supply, these need not be those for goods and securities. It is possible—the point of this paper—that they are the markets for securities on the one hand, and money on the other.

The International Market for Liquidity

Again take two money-and-capital markets with different liquidity preferences and join them together. The market with high liquidity

⁵ Jeffrey G. Williamson, *American Growth and the Balance of Payments, 1820-1913* (Chapel Hill: University of North Carolina Press, 1964).

preference will borrow long and lend short. The market with low liquidity preference will lend long and borrow short. Under the prevailing definitions, past and current, both countries are in disequilibrium, the one with a surplus, the other with a deficit. Does this make sense? The temptation is to answer no. But the temptation must be postponed until we consider the consequence of the two countries swapping loans to bring their interest-rate schedules into line.

In the country with low liquidity preference, which we can call America, short rates fall and long rates rise. In the other country, Germany, short rates rise, long rates fall. If the two countries have strong reasons for preventing these changes, there is something to be said for trying to keep the two markets separate, and to adopt a monetary policy, including a policy regarding long-term interest rates, which suits local conditions. On this score, the United States justifies low long-term rates, for fear of deflation, and Germany high long-term rates for fear of inflation. There are a number of reasons why one might resist allowing the long-term rate to be affected by foreign conditions. The demand for investment might be judged elastic with respect to interest-rate decreases, as is claimed in Germany (the real Germany). Or one may fear deflation, worry that investment is interest-elastic in the United States, or merely be unwilling to risk the chance that investment might decline if the long-term interest rate were to rise. Or one may insist on a particular mix of fiscal and monetary policy not for stability, but for growth, as does Franco Modigliani. If international money-and-capital markets are joined, and a single interest-rate structure obtains internationally, internal stability can be achieved only by fiscal policy, or by persuading international monetary authorities to adopt that set of interest rates which fits the national needs.

Another possibility is that monetary policy has only a very small role to play in domestic economic stability, and to give it up to international influences is not to lose much internally, and to gain in the international sphere. To achieve this gain, of course, it is necessary to change the definition of balance-of-payments disequilibrium.

Take America and Germany with joined money-and-capital markets. The position is akin to international trade between two countries with identical endowments, but different tastes. Equality of prices gives each a chance to benefit: Germany to satisfy its demand for liquidity (plus high investment in illiquid form), and the United States its demand for a return on financial investments. When cloth is traded for wheat

and the price of each commodity is the same in both trading countries, the trade can be regarded as unbalanced only if the imports of one commodity are taken as a payment but exports of the other commodity are not regarded as a receipt.

Separating the Markets

When savings equals domestic investment in two countries, but liquidity preferences differ, so that with joined money-and-capital markets one borrows long and lends short (and vice versa for the other), there is a temptation under the Department of Commerce (and Bernstein) definitions to try to separate the money and capital markets again. This is what the United States and Europe are now trying to do, after having spent the years from World War II to 1958 in attempting to restore convertibility.

There are essentially three ways to separate the money and capital markets of the developed world: tax policy, foreign-exchange control, and exchange-rate policy. We may use as illustrations of these devices respectively the interest-equalization tax, voluntary restrictions on foreign lending, and exchange depreciation.

The interest-equalization tax has hardly been very successful. The direct issue of foreign dollar bonds for foreign account (outside of Canada and Japan, which were excepted) has declined, but foreign long-term lending by banks has increased, as well as foreign dollar bonds issued in London. Money is fungible, and to close one outlet is to increase the flow through another. New long-term lending in debt form by the United States actually increased in 1964, despite the interest-equalization tax, as increases in security loans for Canada and new bank long-term lending (of almost \$1 billion) more than offset the decline in new foreign dollar bonds sold by European borrowers in New York. When and if the Gore amendment closes off this last outlet (long-term bank loans), there will still be the possibility of developing the Euro-dollar market for bonds as well as for short loans. This is said to have some \$5 to \$8 billion churning about in it. It is possible that continental and United States capital markets could maintain no direct contact with each other, but have their interest-rate schedules equalized via the European market for dollars and dollar bonds. Still another interesting possibility is European borrowing by way of Canada: the Canadian insurance company borrows from New York and the Canadian bank lends to Europe.

Many observers believe that unit-of-account bonds will replace dollar bonds as an international device for providing long-term funds. Since their start in 1964, \$70 million of these bonds have been issued. But foreign dollar bonds are a much more important financing vehicle. Since the interest-equalization tax was announced, it has financed \$400 million to September 1964.⁶

An interesting point is that Europeans not only borrow in dollar bonds; they also lend through them.⁷ Long-term capital markets are so thin in Europe (outside of Switzerland and the Netherlands) that European investors are prepared to take a lower rate of interest to have bonds which are traded in a wider market, and therefore present less risk of fluctuation. Whether the foreign dollar-bond market in London can grow to the size of the 1962-63 foreign bond market in New York is an open question, though the chances are slim. Much depends upon whether the Euro-dollar market is fed from United States corporate funds. Here is where the United States government is applying foreign-exchange control, in the guise of voluntary restrictions on capital outflows, and exhortations to bring overseas funds home.

What will be the result if United States foreign-exchange control is successful? To believe that one can contain the market in one respect without producing side results is to adopt a partial-equilibrium form of analysis, and to be naive. When United States corporations return Euro-dollar funds to the United States, there are, again, two possibilities. On the one hand, the counterpart can be a reduction in United States liabilities to foreigners; the Chase Manhattan in New York has the deposits instead of the Chase Bank, London. The internal international deposit is cancelled. Nothing has happened. The Department of Commerce rejoices over the reduction of its deficit, but this is trivial. Suppose, however, that the Chase Manhattan branch in London calls a Euro-dollar loan to a European borrower. Rates of interest in Europe rise. It may be that investment is interest-elastic and investment declines. United States exchange control puts pressure on European investment, stability, and growth. This is the opposite of the European expansion which the surplus calls for, and it is action calculated to improve the

⁶ See "Perspectives on the New York Market: 'Capital Market Aspects,'" Remarks by Nathaniel Samuel, National Industrial Conference Board, October 14, 1964.

⁷ See my "European Economic Integration and the Development of a Single Financial Center for Long-Term Capital," *Weltwirtschaftliches Archiv* (June 1963), pp. 189-210.

European balance of payments in real terms, and hurt the United States balance.

Foreign-exchange control has an ugly sound in the United States today, but it is hard to avoid the term. The fact that it is voluntary means that it will either fail completely or it will have to be applied with legal sanctions. The voluntary sanctions applied by the Department of State on oil shipments to Italy during the Ethiopian campaign failed: the five major companies refrained from shipping oil, but thousands of small firms sprang into being practically overnight and delivered to Mussolini all the petroleum products he needed.⁸ The prospect of restrictions is said to have produced a massive outflow of capital from the United States during the final quarter of 1964, and a still larger one in the first half of the first quarter of 1965, prior to the message of February 10. If the major corporations dealing in foreign trade are asked to improve their balance-of-payments contribution by 5 per cent a year, there is no guarantee, although perhaps little likelihood, that the Euro-dollar market cannot be fed by a flow of funds from small corporations, individuals, etc.

Varying exchange rates may separate international money markets. They failed to do so in the Canadian case: the flexible exchange rate of Canada from 1950 to 1961 managed to produce a stabilizing movement of short-term capital, but the system broke down because the exchange rate was ignored by long-term investors. They held the view that the Canadian dollar could not get very far from the United States dollar over the lifetime of a 15- to 20-year investment, so that a one per cent differential in interest rates could not be discouraged by exchange risk. The opinion exists that foreigners are borrowing in the United States and in the Euro-dollar market, as already mentioned, because they believe the dollar is weak and want to go short of it. But foreigners are also investing in United States bonds, so that the long-term capital market may choose to ignore the exchange rate. If the dollar is weak today, as I do not believe, there is an excellent chance that it will be as strong as the French franc, the Swiss franc, the guilder and the lira five years from now—if not the strong German mark and the weak pound sterling—so that it makes no sense to make a long-term bet either way. The exchange-rate pattern is not likely to be changed

⁸ See Herbert Feis, *Seen from E. A.: Three International Episodes* (New York: Knopf, 1947), Episode No. 3, pp. 193-276.

much, and over the long run the exchange-rate differential becomes less important than the interest-rate spread.

Moreover, changing exchange rates threaten the possibility of destabilizing short-term speculation. They need not; and the Canadian case is reassuring at short-term if not at long. But is the risk worth taking for the possible gain in freedom to use another weapon internally—monetary policy—when the evidence to confirm its importance is cloudy? World trade and payments have done brilliantly in the last fifteen years. United States internal policy has been successful since the tax cut. It would be not only United States trade and payments that would be jeopardized by the risk of changing the slowly solidifying structure of fixed rates, but the trade and payments of many countries of the world. Rather than embark on the dubious proposition of altering the exchange-rate structure, I would recommend keeping it and changing our attitude toward international capital movements.

One recommendation for United States action continuously comes forward from bankers in the United States and from all segments of economic and financial opinion in Europe: it is that the United States should raise interest rates. The weakness of this policy, and of monetary policy generally when liquidity preferences in the markets differ sharply, is readily seen in the present analysis. It can happen that when tastes and endowments are identical in two markets, incorrect pricing in one of them will lead to trade which is not called for on economic grounds. It is possible that such is the case between New York and European money and capital markets, but the likelihood is not high. And if tastes do differ, changing prices in one market to align them with those abroad is a disequilibrium measure which will not succeed.

Monetary policy is more readily applied at the short than at the long end of the market. Raising rates in New York will therefore narrow the spread between long- and short-term rates, a spread which is already too narrow in relation to liquidity preferences abroad. What is needed is not Operation Twist, to raise short rates without disturbing long, for the sake of stimulating long-term investment and employment, but Operation Reverse Twist, lowering the short rate and raising the long, or at least raising the long more than the short.

To permit New York and European money and capital markets to coalesce does mean the international determination of monetary policy. Some of the remoter sections of the capital market, as for example mortgage rates, may continue only tangentially linked, as the mortgage

markets in the United States differ regionally. The surrender of some measure of economic sovereignty is not, however, cause for despair. Already exchange rates, commercial policy, and mechanisms for support in time of speculative crisis are internationally determined. In a small world, neighbors have to shape domestic policies in the light of what is going on next door. But if and when such underlying phenomena as liquidity preferences differ, it is not enough merely to change prices to match those abroad.

Europe's Gripes

I have tried to make clear that much of European impatience with the United States balance-of-payments deficit, its cause and its duration, is misguided. It is not, as many Europeans think, that we are wantonly buying up European plant and equipment and paying for them with funny money, the dollar. For the most part, we are providing Europe with liquidity it cannot or will not provide for itself.⁹ It is true that there is some United States direct investment in plant and equipment, including some bought with dollars, like the minority stock of Ford in Dagenham in 1960. But British reserves are not mounting, and the Ford purchase enabled sellers of Ford stock to undertake investment in new corporations.

Most of the unhappiness is based on rising nationalism, a phenomenon which has little to do with economics, like the Swiss closing the frontier to Italian workers, the Greeks cutting off the outflow of workers, and the United States threatening to tax tourists going to Europe. It is highly significant, however, that in the two leading cases in France—General Electric's purchase of Machines Bull, and the Libby-McNeil-Libby investment in canning in the Rhone valley—the French authorities first stopped the investment and then backed down and, after face-saving gestures, allowed it in. It was reported by the *New York Times*, in February 1965, that the French had hoped to attract to Strasbourg the General Motors plant which finally settled in Antwerp. These Amer-

⁹ I discuss elsewhere, later, the possibility that high long-term interest rates in, say, Germany are the result of monopolistic practices in capital markets and particularly the control of the bankers over lending and security issues. The rising anti-Americanism of the leading German banker, Hermann Abs, as American capital penetrates Germany and lowers interest rates, is perhaps significant. Herr Abs seems to object to American direct investment in Germany because it has access to its own sources of capital (when, of course, it does not seek to borrow locally). This reason may be real, in contrast to the French stated objection to American investment that it escapes the discipline of the Plan, which relies on control of French capital allocation.

ican firms, whether financed from New York or locally in Europe, have technological and productivity contributions to make in Europe, which when pointed out overwhelm nationalistic and prestigious sentiments. The opposition to direct investment has little to do with concern over balance-of-payments equilibrium. It can make a contribution to breaking bottlenecks which foster monopoly profits. But it is a convenient lightning rod to attract irritation.

Balance-of-Payments Equilibrium When Liquidity Preferences Differ

An appropriate definition of balance-of-payments equilibrium when considerable differences exist in the liquidity preferences of the countries concerned can be developed by a sequence of slight modifications of the various arrangements of accounts that are implied in each of the definitions discussed. If errors and omissions be ignored, foreign investment, necessarily equivalent to the current-account balance, that is, to exports of goods and services less imports of goods and services, can be divided into long-term capital flows, short-term capital flows, and gold flows:

$$\begin{array}{r}
 (1) \quad \text{Exports of goods and services} \\
 \text{less Imports of goods and services} \\
 \hline
 \text{equals Net outflow of long-term capital} \\
 \text{plus Net outflow of short-term capital} \\
 \text{plus Net inflow of gold.}
 \end{array}$$

If we transpose the movements of long-term capital above the line and find that both the three items above the line and the two remaining items below the line add up to zero, we arrive at the equilibrium condition formulated by Ragnar Nurkse for "basic balance":

$$\begin{array}{r}
 (2) \quad \text{Exports of goods and services} \\
 \text{less Imports of goods and services} \\
 \text{less Net outflow of long-term capital} \\
 \hline
 \text{equals Zero} \\
 \hline
 \text{equals Net inflow (outflow) of short-term capital} \\
 \text{plus Net outflow (inflow) of gold.}
 \end{array}$$

The Department of Commerce is not content with this and, in order to emphasize implications for changes in the international "liquidity" of the United States, divides short-term capital into two parts, depending on whether the movement takes the form of changes in assets or in

liabilities. It regards movements of short-term capital through changes in foreign assets as the equivalent of movements of long-term capital—transactions that call for a real transfer through a current-account surplus or deficit. Accordingly, the arrangements of accounts in the statistics of the Commerce Department place flows of short-term capital that take the form of increases or decreases in the holdings of liquid foreign assets above the line. The equilibrium condition then looks as follows:

$$\begin{array}{r}
 (3) \quad \text{Exports of goods and services} \\
 \textit{less} \text{ Imports of goods and services} \\
 \textit{less} \text{ Net outflow of long-term capital} \\
 \textit{less} \text{ Net outflow of short-term capital through} \\
 \quad \text{increase in foreign assets} \\
 \hline
 \textit{equals} \text{ Zero} \\
 \hline
 \textit{equals} \text{ Net inflow (outflow) of short-term capital through} \\
 \quad \text{increase (decrease) in foreign liabilities} \\
 \textit{plus} \text{ Net outflow (inflow) of gold.}
 \end{array}$$

It is implicitly assumed that changes in liquid short-term assets abroad represents movements of real capital which ought to be transferred through the current account, whereas changes in foreign liabilities are merely balancing items, like gold. There is general agreement that capital should flow from countries where its marginal physical product is relatively low to countries where its real return is higher. The definition of "balance" that is used by the Department of Commerce evidently implies a rough approximation, associating all changes in the holdings of foreign short-term assets with real capital movements, and changes in liquid liabilities to foreigners with balancing or financing transactions. One may modify this, however, by drawing another distinction, namely, between short-term capital flows called for by differences in the relative scarcity of capital in different countries and short-term capital flows of a balancing type. A more general, though less operational, view of the equilibrium condition then will take the following form:

$$\begin{array}{r}
 (3a) \quad \text{Exports of goods and services} \\
 \textit{less} \text{ Imports of goods and services} \\
 \textit{less} \text{ Net outflow of long-term capital} \\
 \textit{less} \text{ Net outflow of short-term capital} \\
 \quad \text{induced by differences in capital scarcity} \\
 \hline
 \end{array}$$

equals Zero

equals Net inflow (outflow) of short-term capital of
a balancing type
plus Net outflow (inflow) of gold.

This arrangement would be used, for example, if because of the greater marginal product of capital at home than abroad, the United States finances both its exports and its imports, and holds claims on foreign importers among its assets while financing domestic importers.

The Bernstein Committee's disagreement with the Department of Commerce turns on the fact that the latter treats liabilities to private foreigners and to foreign official holders of dollars alike in regarding changes in both these liabilities as short-term capital movements of the balancing type. The Bernstein Committee wants to treat liquid liabilities to private foreigners differently from liquid liabilities to official foreign creditors, and thus implicitly proposes the following arrangement as indicative of equilibrium:

(4) Exports of goods and services
less Imports of goods and services
less Net outflow of long-term capital
less Net outflow of short-term capital
induced by differences in capital scarcity
plus Net inflow of short-term capital through
increase in liabilities to private foreign creditors

equals Zero

equals Net inflow (outflow) of short-term capital through
increase (decrease) of liabilities to official
foreign creditors
plus Net outflow (inflow) of gold.

This is unsatisfactory for several reasons. To begin with, movements of short-term capital induced by differences in relative capital scarcity are not even roughly equivalent to movements in short-term capital through changes in holdings of short-term foreign assets, and movements of short-term capital of the balancing type are far from being the same as movements of short-term capital through changes in liquid liabilities; even if these items were equivalent, the division of changes in liabilities between those to private creditors and those to official

creditors is almost meaningless. Most important, however, we find it necessary to divide flows of long-term capital as well as flows of short-term capital. Long-term capital flows may either be induced by differences in the relative scarcity of capital or they may serve to accommodate national liquidity preference. The most appropriate definition of balance-of-payments equilibrium is then depicted by the following arrangement of items :

$$\begin{array}{l}
 (5) \quad \text{Exports of goods and services} \\
 \text{less Imports of goods and services} \\
 \text{less Net outflow of long-term capital} \\
 \quad \text{induced by differences in capital scarcity} \\
 \text{less Net outflow of short-term capital} \\
 \quad \text{induced by differences in capital scarcity} \\
 \hline
 \text{equals Zero} \\
 \hline
 \text{equals Net outflow (inflow) of long-term capital} \\
 \quad \text{induced by differences in national liquidity} \\
 \quad \text{preference} \\
 \text{less Net inflow (outflow) of short-term capital} \\
 \quad \text{induced by differences in national liquidity} \\
 \quad \text{preference} \\
 \text{less Net outflow (inflow) of gold}
 \end{array}$$

The theory is simple. The problem arises in trying to divide short-term capital and long-term capital into their components. I see no easy rule of thumb. The Department of Commerce distinction between assets and liabilities in short-term capital is misleading. The Bernstein Committee's distinction between private and official movements through liabilities fails to help. What is called for is rather art than science, the banker's act of distinguishing between assets and liabilities by the mean of the probability distribution of the date on which they are likely to require payment. The functions are non-linear. It is absurd, up to a certain point, for a bank to be said to be in deficit when it makes a loan and writes a deposit on its books (the Commerce definition); but beyond a certain point, the idea ceases to be misleading and is a touchstone of great operational significance. It is a paradox that the premature adoption of the Department of Commerce definition shifts the point at which it would otherwise apply.

The distinction in the long-term capital field is even more difficult

to draw than in the short-term. What long-term capital movements should serve to transfer real assets, and what are merely to trade internationally in liquidity? One possibility might seem to be by geographical region. United States long-term capital exports to the less developed countries should be transferred; some considerable part, at least, of those to Europe (and Japan?) are transactions in the liquidity market. But this is obviously wanting, if it be recalled that the British colonies under the sterling-exchange standard were interested in borrowing long and lending short.

Another clue may be found in the question whether the capital moves in the same direction or contrary to the movement of short-term capital. When long- and short-term capital move together, it is useful to have them transferred through the current account, since both seem to reflect the lower marginal product of capital at home than abroad. When they move oppositely, however, there is reason to suspect international trade in liquidity. But this is unsatisfactory. It ignores the kink. Below a certain point—which shifts with time, the unfolding of events, and opinion—lending long and borrowing short, or vice versa, is merely trading in liquidity. Beyond it, the long lender is overdoing it and the short lender has the right to become increasingly nervous.

There is, then, in my judgment, no rule of thumb by which balance-of-payments equilibrium can be turned over either to the clerical staff or to the econometricians. It remains an art. Rules of thumb breed confusion and uncertainty. They shift the inflection point. They occasion trouble.

In my judgment, further, in case anyone cares, the dollar is strong today, not weak, in an objective sense, and it is important that subjective appraisals discard the terrifying definitions we have allowed to creep into the discussion, and recognize this fact. Objective circumstances of strength can be turned into chaos by subjective judgments. The need is far more for central-banker and money-market education than it is for voluntary restrictions, higher rates of interest, or new interferences through tax or exchange policy.

The Outlook

The Brookings Institution is being proved right in its forecast of the current account. Slowly, but surely, the current account of the United States has improved from \$150 million in 1959 to over \$6 billion in 1964. On any sophisticated view that looks ahead, it is the French franc,

the Swiss franc, and the Dutch guilder that threaten weakness ahead, not the dollar.

In a sense, the years since 1961 or 1962 have been abnormal. Until that time, rapid growth took place in Europe without an increase in wages, as extra supplies of labor were mopped up. When labor became more difficult to obtain, and Mediterranean workers failed to provide the correct mix of skills, wages rose, and growth slowed down. Wages rose more than prices, and profits were squeezed. But the response to the profit squeeze was not reduced investment, as in a Keynesian system, but the Schumpeterian one of increasing investment to cut costs and maintain profit margins. The reduction in corporate profits led to pressure on weak capital markets, which spilled over to the United States because of convertibility established in 1958. Partly there was a need for real assets; but with the real assets came a need for greater liquidity, as corporations wanted to balance their portfolios of real assets with money, and to fund their obligations on a longer basis than could be provided by the liquidity preference of savers.

High investment, however, is unlikely to survive along with low profits. In the long run, the Keynesian relation is likely to prevail. Growth is likely to slow down still further, as investment declines. American balance-of-payments measures, by restricting investment and cutting down long-term lending, will accelerate the decline. If the decline becomes cumulative, Europe is likely to develop a real balance-of-payments surplus vis-à-vis the United States in place of the current phoney one, a surplus achieved at the cost of a fall in output and imports.

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