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A. SUMMARY

In setting out to construct a comprehensive record of the network of international transactions of all types for a number of years, we had in mind three objectives. The statistical objective was to show what was involved in constructing such a record from different national sources and to consider whether or not it was sufficiently reliable to be useful. Such a record had never been prepared before, and once we had it our second objective was to observe the nature of international economic relationships during the period —the size, composition, and geographic structure of trading, the pattern of financial interrelationships, and the character and extent of multilateralism. Our third objective was to employ the record to test hypotheses about the behavior of the world economy. This volume has dealt primarily with the first of these objectives, in a limited way with the second, and not at all with the third.

Our work on the 1950-54 period demonstrates that, with considerable adjustment and supplementation, it is possible to construct from available materials a usable annual record of current and financial transactions between world areas. Measures of interarea merchandise trade have long been available, but for the first time we have compiled a consistent set of measures for interarea services transactions of different types, net unilateral transfers, and capital and gold flows. And from these measures we have also derived the net multilateral settlements by which a particular country or area used surpluses from all transactions (including transactions in liquid capital and gold) with one group of partners to settle deficits from transactions with its other partners—the element of multilateralism in world trade and payments. These measures add to our knowledge of the nature and extent of specialization in international trade and finance.

A comprehensive, world-wide, double-entry rec-

ord is more than the sum of its parts. It is a record in which paired entries from both sides in principle should agree and can be compared to reveal deficiencies in the record. By auditing preliminary trial-run tabulations we have been led to make adjustments providing greater consistency between partner records and to prepare accounts for transactions of certain entities (e.g., International Organizations and some shipping fleets) which no reporting country included among its residents and for nonreporting countries (e.g., a number of oil-source countries). We have also used the two-valued record to elaborate certain consolidated area groupings and to derive estimates of transactions with partners which not all countries distinguished in official published accounts. By this means we have obtained world-wide totals for partner transactions with the U.S., the U.K., and Continental OEEC countries to compare with totals with the world carried in accounts constructed for those areas. The two-valued feature of the record also has been used to examine the possibility of improving accounts further: an effort to allocate unallocated transactions on the basis of internal evidence in the world-wide matrix indicated that divergence would very likely be reduced if all transactions were properly allocated by partner area. We have also studied divergences between paired entries in the record to provide one indication of the uncertainty attaching to the compilations.

Not all errors and omissions will be revealed by a comparison of the credit and debit entries for a given interarea transaction. We know that our record is deficient because it omits transactions between East and West Germany, between Spain and Spanish possessions, between the Soviet Bloc and non-Bloc countries except merchandise and gold, and between France and Portugal and their Own Currency Areas except merchandise and transportation. Because of

such omissions from both sides of the record, it probably understates total world trade and particularly services.

Despite these and other weaknesses, paired entries in the matrix of gross goods and services transactions seem to agree well enough to reveal the basic structure of interarea trading. However, lack of information about trade conducted through middlemen (estimated at about 15 per cent of world trade) makes it difficult to adjust the record to a consistent purchase-sales basis, thereby understating the degree of concentration of trade between the economic centers (U.S., U.K., and Continental Western Europe) and the associated peripheral areas. Inadequacies in reporting which were of secondary importance in measuring the direction of gross trade were found to be of major importance in measuring trade balances and multilateral settlements between world areas. In general, only the order of magnitude of net transactions between world areas and year-to-year changes in balances could be measured; sometimes only the direction (sign) could be known.

The pattern of divergence between credit and debit measures of transactions has provided considerable insight into the nature of error in the accounts. Thus, unaccounted net capital and gold flows (transactions reported from the credit but not the debit side) equaled half the additions recorded to official reserves outside the U.S. in the period 1950-54. The pattern of error in the accounts indicated that, especially in times of political or currency crises, substantial foreign exchange earnings (apparently realized in good part on services account) moved into hidden capital and gold holdings. This result carries implications important for the interpretation of international financial crises in the postwar era. Moreover, it suggests not only that the financial problems of governments are made more difficult in times of stress by the flight of capital but also that recovery from financial difficulties may be eased by the cessation of these drains once confidence is restored. Corrective action may therefore sometimes overshoot the mark.

Net services transactions and financial flows between world areas were seen to be large in relation to net merchandise transactions, and measures of the pattern of multilateralism based on merchandise trade only were found to be seriously misleading. This study has thus aimed at going beyond the well-

known Network study of the League of Nations.1 which was largely concerned with merchandise trade balances. The pattern of net multilateral settlements -after allowing for all exchanges of currently produced goods, unilateral transfers, and assets (including large accumulations by Western Europe of liquid dollar assets and gold)—proved to be nicely symmetrical in the early 1950's. Each center—the U.S., the U.K., and Continental Western Europe ran a surplus with the peripheral area composed of countries trading principally with it and a deficit with the other peripheral areas. Balances to be settled multilaterally among centers and among peripheral areas ran from the Western Hemisphere center (or peripheral area) to the sterling center (or peripheral area) on to the Continental center (or Other Eastern Hemisphere) and back to the Western Hemisphere center or peripheral area.2

Particular attention has been paid in this analysis to the matrix of multilateral settlements. As the residual account of bilateral balances, the matrix necessarily reflects all of the errors in accounting for transactions of other types between areas. Apart from error, it has the analytical meaning of representing the element of circularity in the trade and payments relations among areas.

The interarea balances offset by multilateral settlements are to be distinguished from the usual concept of bilateral payments balance in that the latter are met both by flows of reserve assets (liquid capital and gold) and by the residual multilateral settlements. The interrelations between payments balances, the flow of reserve assets, and multilateral settlements in transactions with the U.S. and the U.K. could be examined from the accounts of those reserve centers, and it was found that payments balances of the two centers with peripheral areas were predominantly met by multilateral settlements. A large part of what each peripheral area earned from or paid to the U.S. or the U.K. to meet its payments balance was linked, through multilateral settlements, to its payments position with other areas. Peripheral areas trading principally with the U.S. or the U.K. transferred receipts from other areas to the reserve centers in excess of their need to meet their payments deficits with these centers, banking reserves with them in 1950-54.

¹ The Network of World Trade, Geneva, 1942.

 $^{^2\,\}mbox{See}$ Chart 5 (panel vii), Chart 7, Part D, and Tables A-4 and B-28.

Two groups, Other Countries and the Continent, had payments surpluses with the U.S., attributable largely to unilateral transfers from the U.S., and in each case used the surplus to accumulate reserve assets from the U.S. The group Other Countries also used part of the surplus to meet payments deficits with areas other than the U.S. and the U.K., whereas the Continent used earnings from other areas to accumulate reserve assets in the U.S. in excess of its payments surplus. Every other area accumulated reserves from the two centers, altogether in an amount less than the aid extended by the two centers to the rest of the world. The U.S. and the U.K. thus "gave away" their payments deficit and the corresponding accumulation of liquid assets by the other areas. The U.K.'s ability to do this was made possible by U.S. aid received.

In the period the U.S. and the U.K. were both in the position of lending and investing at long term while incurring short-term liabilities.

Payments balances among the U.S., the U.K., and Canada and among the U.K., Continental OEEC countries, and the Rest of the Sterling Area were clearly interrelated through multilateral settlements. These eddies in the circular flow of multilateral settlements linking bilateral payments balances contribute to an understanding of a number of policies and practices of governments at the time. The first triangular flow involving Canada was directly related to the way in which U.S. aid to the U.K. was administered. The second involving the Rest of the Sterling Area was a feature of international economic life which affected the structure of the clearing arrange-

ment established under the European Payments Union.

In other ways, too, the record of multilateral settlements sheds light on the nature of existing economic interdependence of world areas. The Continental countries which later formed the Common Market, those which later joined the U.K. in the European Free Trade Area, and the Sterling Area were linked in the period just prior to the crystallization of the Common Market and the European Free Trade Area arrangements in a circular flow of multilateral settlements in which the Sterling Area earned from the Common Market countries, the latter from the Continental European Free Trade Area members, and they in turn from the Sterling Area. Another significant eddy in the circular flow was the triangular relationship observable in the Soviet Bloc account in which earnings from the U.K. covered payments to the Rest of the Sterling Area. A considerable offsetting of balances to be settled with partner areas by economic centers and the peripheral areas with which they were affiliated economically was observable; amounts to be settled between currency areas were thus greatly reduced.

The multilateral settlements matrix in Appendix B provides an indication of the amount of such settlements between areas in the early 1950's. Over the five years they came to about \$35 billion, about 9 per cent of gross interarea trade in goods and services and would have been \$5 billion larger if measured so as to exclude intertemporal offsetting. They would have been larger still if country-to-country setttlements could be measured.

B. THE U.S. DEFICIT AND MULTILATERAL PAYMENTS

In the years following World War II problems of imbalance in international payments were widespread and exchange control was rampant and discriminatory. Imbalances in one country's accounts provoked imbalances in those of others. Thus, some Latin American countries experienced payments difficulties not because their over-all accounts were in deficit but because their deficits were with the U.S. and needed to be met in dollars, and their surpluses were in currencies which the debtor country would not convert.

Government policy-makers in the early postwar years would have been helped greatly in grappling

with these problems if they had been able to assess alternative policies in the light of the kind of record of transactions between world areas presented in this book. As it was, decisions had to be taken in the light of the partial information supplied for particular situations—for example, the balance-of-payments position of a single country seeking financial assistance.

For a time in the mid-1950's the prospect of realizing the convertibility of European currencies led to the belief that the problem of payments imbalance, as a general phenomenon, was on its way out. Once

convertibility was established, it no longer seemed necessary to be concerned with regional elaborations of payments accounts. To the extent that imbalance was created by the discrimination in previous exchange controls and was relieved by the removal of discrimination after the introduction of a wider measure of currency convertibility, this has been the case. Interregional payments relations remain significant, however, for a wider, seemingly chronic, and everchanging problem of maintaining international financial balance. Trade and payments relations between world areas are asymmetrical, and therapeutic measures bear differently on different areas as they ramify out through a world-wide network of interarea relationships.

The concern of the Western world in the early 1960's has been largely focused on the dollar. The postwar dollar shortage has been succeeded by the U.S. balance-of-payments deficit as the subject absorbing the interest of policy-makers, economists, bankers, and others. Yet, with all that has been written on this problem, there is still inadequate attention given to the world-wide pattern of trade and payments relationships within which the U.S. position has deteriorated. It is important to assess the differential impact on the several parts of the world of different measures to rectify the imbalance. For this reason the effort of the Brookings Institution to evaluate the future prospects of the U.S. balance of payments in the context of a three-area trading model of the world economy is to be welcomed.3

Even now the United States may not give due regard to the interregional aspects of international payments relations. Shortly after requesting in 1963 legislative approval of an interest equalization tax on foreign security sales in the United States, the Treasury was led by the adverse impact of its proposal upon Canada to make provision for exceptions, and the impact on Japan threatened for a time to be equally alarming. Without debating the merits of the tax as a means of easing the U.S. payments position, we can say that the incident points to the necessity of recognizing the differential impact of measures to influence the flow of international transactions on different areas and hence back on the U.S. itself.

It may be that the payments problem of the United States as it appears in the early 1960's will be solved or eased by actions on the part of Western European countries to liberalize restrictive arrangements affecting trade and capital movements and to assume a greater share of the common burdens of mutual security and world development. If, however, the United States has to rely more on unilateral measures to strengthen its balance of payments, these will most likely curb the flow of dollars to the rest of the world, since expenditures can be more easily reduced unilaterally than earnings increased. In that event, it would be desirable to minimize the adverse impact of such an action, both on the world economy in general and back on the United States itself. In principle, this objective could be sought either (1) by selecting measures which, by their nature, impinge more on Western European countries accumulating reserves than on other countries or (2) by applying measures in a discriminatory manner so as to produce this result. Opportunities for action of the first type are obviously limited and could conflict with other policy objectives—for example, the withdrawal of U.S. troops from Europe but not from other areas. There may also be little scope for action of the second type, since measures discriminating against Western Europe could easily invite, and be nullified by, retaliatory action. This would almost certainly be true of any action, and especially any discriminatory action, impeding imports by the United States from Western Europe. It is interesting to note, at the same time, that the interest equalization tax mentioned above, even though discriminating in favor of less-developed countries and Canada, did not arouse opposition from official circles in Western Europe.

The need to develop analyses and to frame policies with an eye to the evolving pattern of transactions between areas is suggested by the changes in the pattern which are evident in the regional distribution of U.S. balance-of-payments statistics. Chart 8

foreign aid agency. As it has sought to assess the impact of assistance on the U. S. payments position, it has found it necessary to recognize different "feedback ratios" expressing the proportions of U.S. aid to foreign countries which will ultimately be spent in the U.S. (ihid., appendix to Chapter 4, based on a memorandum by Whitney Hicks). This particular approach seems too conservative in assuming that Western Europe would spend no incremental exchange earnings, but the effort to analyze the effect within the context of a world-wide trading system is a long step forward.

[&]quot;Walter S. Salant, et al., The United States Balance of Payments in 1968, Washington, 1963. For reasons noted in Chapter 5, Section C-6, the three-area model of the U.S., Western Europe, and third areas is inadequate.

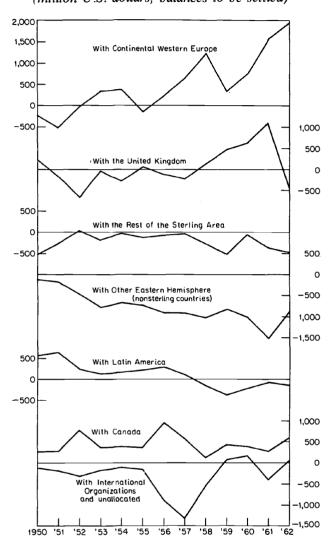
⁴ Interregional aspects of the balance-of-payments problem have been given some recognition by the U. S.

CHART 8

Multilateral Settlements of the U.S. with Partner

Areas, 1950–62

(million U.S. dollars; balances to be settled)



SOURCE: Balance of Payments, Statistical Supplement (1963); Survey of Current Business, March 1963; and correspondence with Office of Business Economics.

shows net multilateral settlements of the U.S. with six foreign areas over the period 1950-62. These are net receipts from, or net payments to, each area by the U.S. after allowing for all bilateral transactions, including transfers of gold and liquid dollar balances, with the area concerned. (The figures plotted are balances to be settled and are opposite in sign to the entries for multilateral settlements in the official U.S. payments statement.) As a broad gen-

eralization, the U.S. has tended in recent years to receive increasingly large net settlements from Continental Western Europe and (except in 1962) from the U.K., and to make increasingly large net settlements to non-European areas. The main exceptions to this generalization are Canada and (perhaps) the Rest of the Sterling Area which, as far as these data permit conclusions, show little change over the period in their position in international settlements.

Some of the factors underlying these shifts emerge from the more detailed figures in Table 16 on U.S. transactions with Western Europe (combining Continental Western Europe and the U.K.) and with all other countries taken as an entity. It will be noted that in 1950-55 the U.S. paid out enough funds, including government aid, to Western Europe to permit that area to add \$1 billion annually, on the average, to its gold and liquid dollar holdings 5 and still leave a small remainder for other uses. By 1958-59 economic aid extended by the United States to Western Europe was sharply reduced, but its direct balance with that area became even more adverse with the shrinkage of the U.S. surplus on goods and services and the rise in its military expenditures. At the same time, Western Europe's acquisitions of gold and dollar balances from the U.S. became so large as to point to additional dollar receipts of something like \$1 billion annually from other sources. By 1961-62 the U.S. had greatly strengthened its trade position once more and achieved a surplus on goods and services transactions with Western Europe much larger than in 1950-55. In addition, the U.S. government obtained large special receipts, chiefly advance debt repayments, from Western Europe. These gains were offset in considerable part by a rise in the flow of private capital to that area, but not enough to prevent the emergence of a substantial surplus for the United States. Despite this shift in the balance, Western Europe continued to add, though less rapidly than in 1958-59, to its gold and dollar holdings, but now with dollar receipts from other sources on the order of \$2 billion annually.

These developments in U.S. payments relations with Western European countries were related to

⁵ This analysis is based entirely on what can be observed from U.S. balance-of-payments statistics and does not take account of changes in other countries' gold holdings out of new gold production, Soviet gold sales, or private hoarding or dishoarding. It should also be noted that the division of items between I-A and I-B, or II-A and II-B, in Table 16 corresponds to official U.S. balance-of-payments practice.

TABLE 16

Bilateral Balances and Multilateral Settlements in the U.S.

Balance of Payments, 1950–62

(annual averages, million U.S. dollars)

		1950-55	1958-59	1961-62			
1.	Western Europe						
	A. U.S. gold sales and increase in liquid						
	liabilities to the area, net	1,029	2,546	1,134			
	B. U.S. bilateral balance on other recorded transactions with the area	-1,202	-1,500	946			
	Goods and services, excl. military, net	1,475	573	2,538			
	Military expenditures, net	-917	-1,590	-1.158			
	Remittances and pensions, net	-239	-343	-258			
	Private capital, net	20	-79	-981			
	U.S. govt. capital and grants, excl.	20	• • •	,02			
	special receipts, net	-1,542	-278	-228			
	U.S. govt. special receipts, net	-,-	217	1,033			
	C. Area's dollar receipts from other		,	-,,,,,			
	sources (A + B)b	173	1,046	2,080			
II.	Other Countries		·	•			
	A. U.S. gold sales and increase in liquid						
	liabilities to the area, net	601	1,090	1,152			
	B. U.S. bilateral balance on other recorded	302	-,	-,			
	transactions with the area	-773	-2,585	-2,177			
	Goods and services, excl. military, net	2,326	3,567	5,257			
	Military expenditures, net	-901	-1,379	-1,312			
	Remittances and pensions, net	-318	-413	-463			
	Private capital, net	-916	-2,133	-2,432			
	U.S. govt. capital and grants, excl.		-				
	special receipts, net	-964	-2,227	-3,357			
	U.S. govt. special receipts, net ^a	-		130			
	C. Area's dollar receipts from other						
	sources (A + B) D	172	-1,495	-1,025			
III.	Unrecorded receipts or payments in U.S.						
	global balance of payments (IC + IIC						
	with signs reversed) ^C	345	449	-1,055			

SOURCE: Balance of Payments, Statistical Supplement to the Survey of Current Business, rev. ed., Washington, 1963; Survey of Current Business, June 1964.

^a Special receipts are somewhat more comprehensive here than in *Survey of Current Business*, June 1964, p. 10, Table 1, due to lack of geographic detail for items on latter basis.

b This is the U.S. total bilateral balance to be settled with the area and equals the entry in the U.S. payments statement for multilateral settlements and error with the partner area but is opposite in sign; it corresponds to the plotting in Chart 8.

^c This is the entry in the column for all areas in the U.S. payments statement for multilateral settlements and error with the sign given in the official account.

the growing deficit in its transactions with non-European countries. This deficit reached its maximum in 1958-59, when the U.S. position vis-à-vis Western Europe was also most unfavorable, but remained almost as large in 1961-62 and was then almost three times as large as it had been in 1950-55. On goods and services only, the U.S. showed a large and growing surplus in transactions with non-European countries. But this result was outweighed by, and partly attributable to, the great increase since the early 1950's in net payments by the U.S. to these countries on other recorded transactions—government economic aid, private investment, and military expenditures. Only part of the estimated balance in favor of non-European countries in recent years has been settled by additions to their gold and dollar holdings. Half of the balance in 1961-62, and considerably more than half in 1958-59, was used for multilateral settlements, presumably in a triangular flow from the U.S. to third areas to Western Europe and then back for the European purchase of reserve assets from the U.S.

The data reproduced in Table 16 do not permit a precise estimate of the amount of dollar settlements received by Western Europe from other areas. On the basis of recorded transactions with Western European countries, these settlements appear to have averaged \$450 million less in 1958-59, but close to \$1 billion more in 1961-62, than would appear from recorded transactions with non-European countries (compare lines I-C and II-C of Table 16).6 On either basis, however, it is clear that, in contrast to 1950-55, by 1961-62 Western Europe's gains of gold and liquid dollars from the U.S. were no longer attributable to its direct bilateral balance with this country, but rather to the settlements which it received from other areas and which were made possible by the rise in the U.S. deficit with these other areas.7

⁶ These differences, it will be noted, relate to the residual entry for unreported transactions in the U.S. global balance of payments (line III) and to the switch in this residual from a positive item in 1958-59, indicative of net unexplained receipts, to a negative item in 1961-62, indicative of net unexplained payments. This shift was a progressive swing of \$2 billion over the years 1957-62, with the change in direction coming in 1960. It seems to have reflected a decline in the preference previously enjoyed by the dollar over other currencies.

⁷ Events in 1963 and 1964 do not alter this conclusion. The regionally elaborated payments accounts of the U.S. for these years, given in the June 1964 and March 1965 issues of the Survey of Current Business, show that Western Europe continued to accumulate gold and liquid dollar

The data presented in Table 16 can be further broken down to show U.S. transactions with each of the areas distinguished in Chart 8. What is seriously lacking at present, however, is information on the nature of the shifts which have occurred in transactions between these areas, particularly between the various non-European areas, on the one hand, and Continental Western Europe and the U.K., on the other. One can, of course, construct the merchandise account fairly well from published trade statistics and can examine, for instance, the extent to which Western Europe's net settlements from other areas may be attributable to a superior performance in merchandise export competition with the U.S. But one would also need to be able to construct for each area the whole current account in its regional dimensions and to measure the net flow of resources between areas; to obtain regionally elaborated data on the flows of government grants and credits for both donor and recipient countries; to build up similar two-valued records of private capital movements and develop them in appropriate detail by types of transaction; to integrate these various components of the accounts into a full matrix of international settlements; to consider the mutual consistency of the estimates and examine them, as we have tried to do here, for evidences of the drain of resources into flight capital and gold hoards; and to study the records year by year to see what changes have occurred in the pattern of transactions and in the ways countries react to each other.

As matters stand, we have to study international economic and monetary problems and address ourselves to major policy issues without these tools of analysis. The main elements concerning the United States are available, thanks to the full regional detail in which its balance-of-payments estimates are presented. But matching detail for other countries, even the most important ones, is frequently not available or not even compiled.

This book testifies that it is not necessary to remain in such ignorance. With sufficient effort, it is possible to measure the changing trade and payments relations among all world areas with tolerable accuracy.

assets in large amounts primarily through multilateral settlements rather than on bilateral account with the U.S. U.S. multilateral settlements with Western Europe continued in 1963 and 1964 at about the 1962 level and were associated with mixed developments in U.S. multilateral settlements with peripheral areas and International Organizations.

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