

ESSAYS IN INTERNATIONAL FINANCE

No. 123, August 1977

THE PRESENTATION OF THE
U.S. BALANCE OF PAYMENTS:
A SYMPOSIUM

ROBERT M. STERN, CHARLES F. SCHWARTZ, ROBERT TRIFFIN,
EDWARD M. BERNSTEIN, AND WALTHER LEDERER



INTERNATIONAL FINANCE SECTION

DEPARTMENT OF ECONOMICS

PRINCETON UNIVERSITY

Princeton, New Jersey

This is the one hundred and twenty-third number in the series ESSAYS IN INTERNATIONAL FINANCE, published from time to time by the International Finance Section of the Department of Economics of Princeton University.

This Essay is a collection of five brief papers commenting on the recent change in the presentation of the U.S. balance of payments and analytical issues arising from that change. The authors are introduced in the Foreword, which describes the origins of the Essay.

The Section sponsors the Essays in this series but takes no further responsibility for the opinions expressed in them. The writers are free to develop their topics as they wish.

PETER B. KENEN, *Director*
International Finance Section

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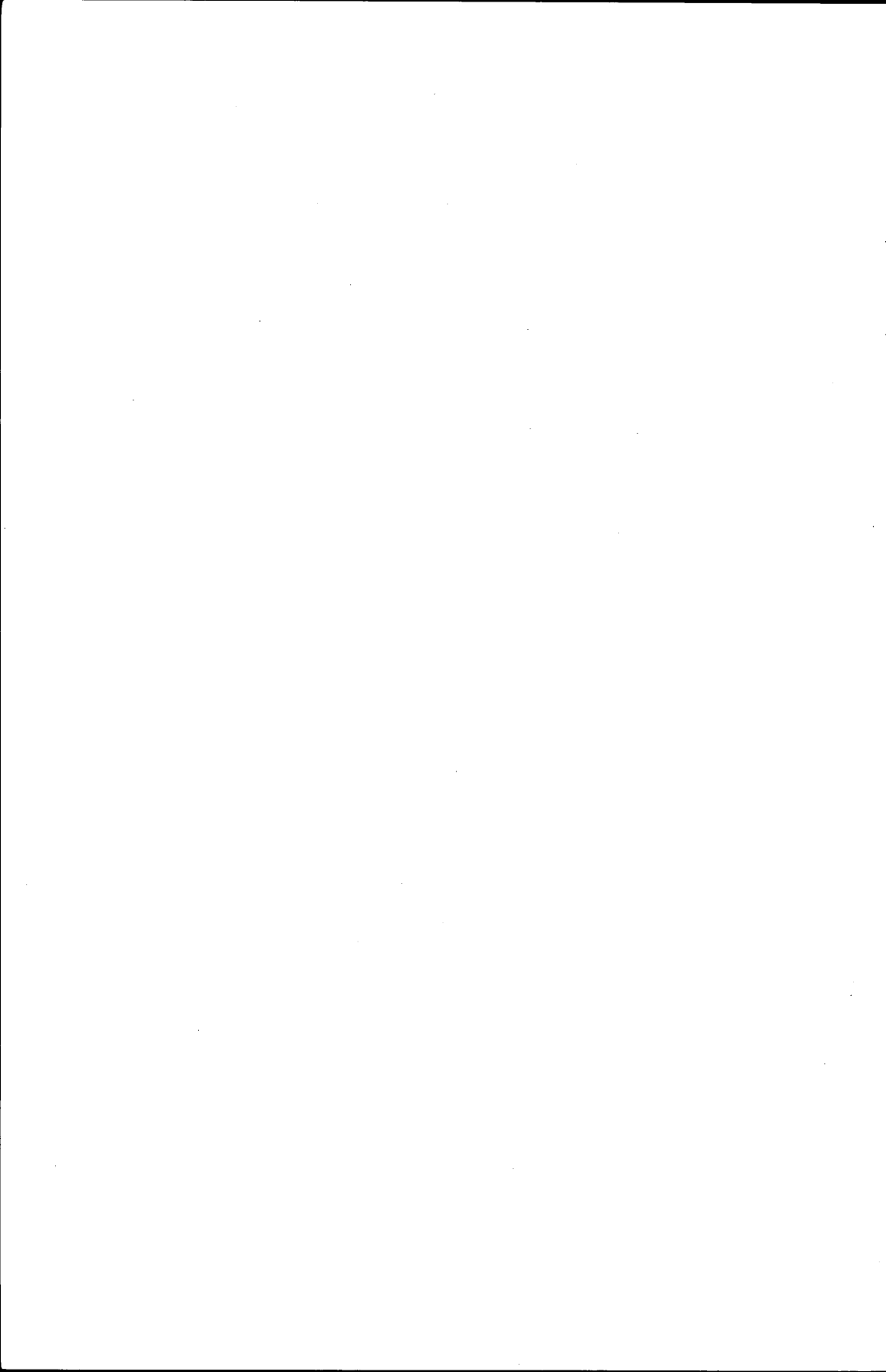
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FOREWORD

Early in the 1960s, soon after the U.S. balance of payments started to weaken, a debate began among economists and other users of the balance-of-payments statistics about the best way to measure the U.S. payments deficit. Few participants denied the existence of a deficit, but few were happy with the way in which it was defined in the balance-of-payments tables published by government agencies.

Responding to this controversy and to concerns about the quality of the data, the government appointed a panel of experts, the Review Committee for Balance of Payments Statistics, known more often as the Bernstein Committee after its Chairman, Edward M. Bernstein. After two years of meetings, the Review Committee issued a report recommending improvements in the quality of the trade and payments data, revisions in the presentation of the data, and the introduction of a new statistic, the balance on official reserve transactions or "official settlements" balance, to measure the overall surplus or deficit in the U.S. balance of payments. This last recommendation, along with several others, was accepted by the government, and the balance on official reserve transactions was introduced into the balance-of-payments accounts in June 1965.

In fewer than ten years, however, a new debate broke out. Users of balance-of-payments statistics in and out of government started to question the relevance of the official-settlements balance. This debate, like the earlier one, arose because of changes in the international monetary environment. With the advent of more flexible exchange rates, changes in official reserves and in reserve liabilities could no longer be taken to reflect mandatory intervention in the foreign-exchange markets, and the official-settlements balance could no longer be used to measure market pressures on exchange rates.

Responding to these new concerns, the government appointed another panel, the Advisory Committee on the Presentation of Balance of Payments Statistics, which issued its report in June 1976. It recommended against any attempt to identify an overall surplus or deficit in the balance of payments and, therefore, elimination of the official-settlements balance from the balance-of-payments tables, along with all other overall balances. In fact, it recommended that the terms "surplus" and "deficit" be deleted from official prose concerning the international transactions of the United States. With small exceptions and qualifications, the government accepted these recommendations.

This symposium is devoted to the issues raised by the Report of the Advisory Committee. Was it right to discontinue the publication of the official-settlements balance? What about other balances? When no balances are published, how should one begin to analyze the statistics on trade, services, and capital movements?

The contributors to this symposium include two members of the Advisory Committee, one who worked closely with the Committee, and two who have written extensively on the problems of measuring the balance of payments and international reserves. I have tried to arrange their contributions in the sequence that would be most helpful to readers who have not followed the intricate debate, beginning with those that introduce the basic issues and recommendations of the Advisory Committee and following with those that deal mainly with problems of analysis and interpretation arising from those recommendations.

The contributors, in order of appearance, are:

Robert M. Stern, Professor of Economics at the University of Michigan, who is the author of *The Balance of Payments: Theory and Economic Policy* has written extensively on international monetary problems, and has served as a consultant to several U.S. government agencies, including the Office of the Special Representative for Trade Negotiations and the Office of the Assistant Secretary of the Treasury for International Affairs.

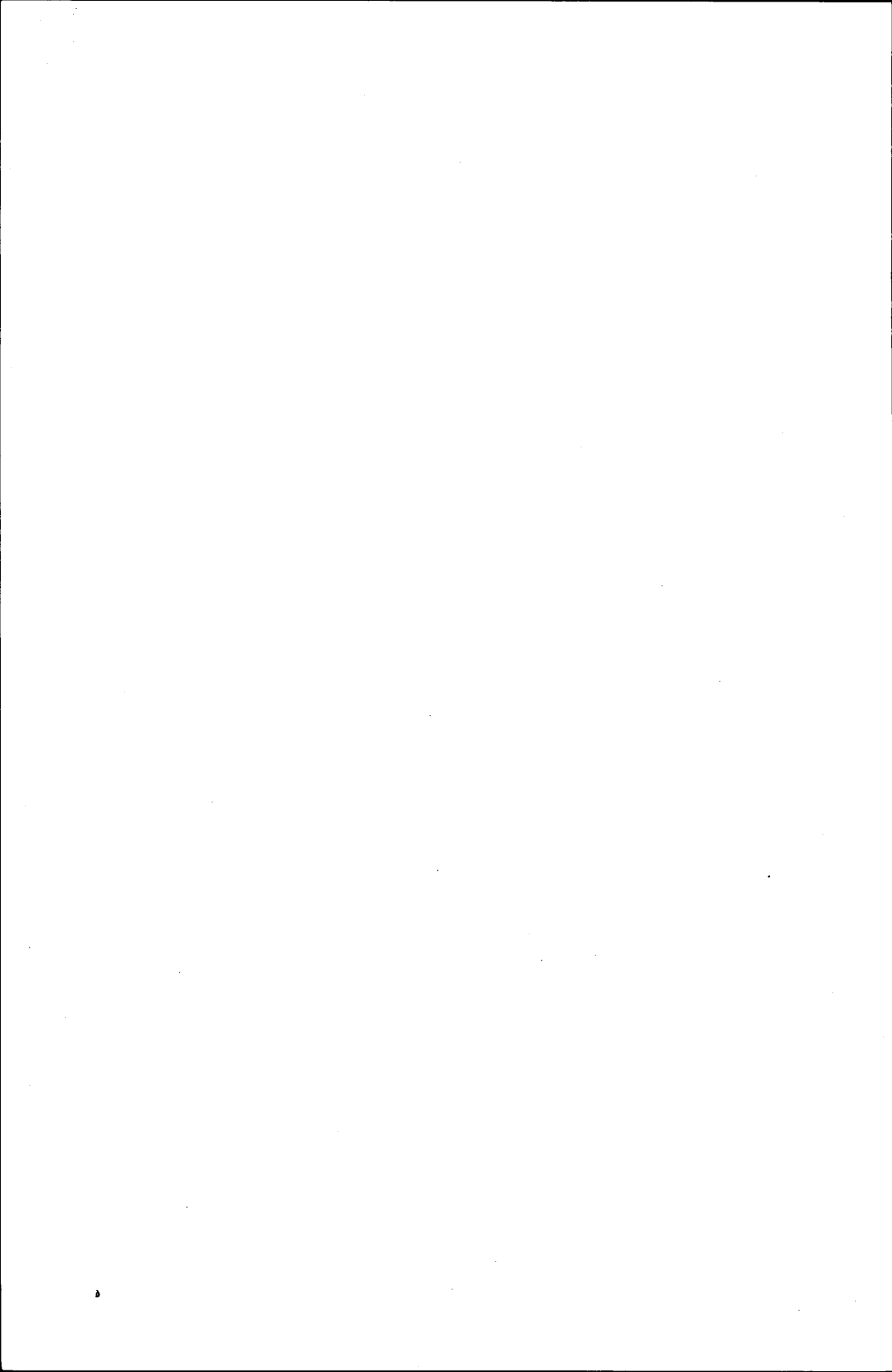
Charles F. Schwartz, Deputy Director of the Research Department of the International Monetary Fund, who was a member both of the Review Committee for Balance of Payments Statistics and of the Advisory Committee on the Presentation of Balance of Payments Statistics.

Robert Triffin, Frederick William Beinecke Professor of Economics at Yale University, who served on the staff of the International Monetary Fund from 1946 to 1949 and with the European Recovery Administration from 1949 to 1951, and has been a frequent contributor to the publications of the International Finance Section, most recently to *Reflections on Jamaica*, a symposium on reform of the international monetary system.

Edward M. Bernstein, President of E M B (Ltd.), who was Director of Research at the International Monetary Fund from 1946 to 1958, Chairman of the Review Committee for Balance of Payments Statistics, and a member of the Advisory Committee on the Presentation of Balance of Payments Statistics.

Walther Lederer, who was Chief of the Balance of Payments Division in the U.S. Department of Commerce from 1953 to 1969 and Senior Adviser for Balance of Payments Analysis and Projections at the U.S. Treasury from 1969 to 1976, and is now engaged in research and writing on the international accounts of the United States.

PETER B. KENEN



ROBERT M. STERN

Thanks to the efforts of the Advisory Committee, we now have a revised format for presenting the balance-of-payments statistics of the United States that more closely approximates the realities of managed floating than did the former presentation, which was devised for pegged exchange rates. In the discussion that follows, I shall first summarize what the Committee accomplished and then consider some issues of balance-of-payments analysis and policy suggested by the new presentation. I examine briefly thereafter the problems of international comparability and historical continuity of balance-of-payments statistics.

The New Format

For the benefit of the reader, the main features of the new format are summarized in Table 1 for calendar 1975. The line numbers refer to the more detailed table that was first published in revised form in the June 1976 issue of the *Survey of Current Business*. Comparable line numbers are also given for the old format, which was last published in the *Survey* for March 1976. It is evident that the new format is essentially a tabular listing of credits and debits with respect to goods, services, unilateral transfers, U.S. claims on and liabilities to foreigners, and a statistical discrepancy for unrecorded transactions that is required to equate total credits and debits. The line concordances between the new and old formats are unambiguous except for foreign official and other foreign assets in the United States. In the former case, the new format differentiates foreign official purchases of U.S. Treasury securities from purchases of securities issued by other U.S. government agencies. In the latter case, it differentiates between Treasury securities and other liabilities reported by U.S. banks.

The new presentation makes life easier by recognizing that, in principle, there can be no imbalances of payments under floating exchange rates. Users of the statistics and students will certainly be grateful for the changes, since they no longer need be concerned about the intricacies of defining and interpreting the various overall balances—the current and long-term capital, net liquidity, and official reserve transactions (ORT) balances—that used to appear. Gone also is the distinction in the capital account between liquid and nonliquid transactions, and an attempt is

now made to provide a more detailed and symmetrical treatment according to the type of transactor instead of the type of asset or liability.

Partial balances are shown as memorandum entries (lines 68-71) rather than being recorded in the table itself. The Advisory Committee actually recommended only the inclusion of the balance on goods and services and the balance on current account, since these balances have been identified traditionally and also are component entries in the national income and product accounts (with adjustments for special military transactions and interest-income payments to foreigners by the U.S. government). In their consideration of the Advisory Committee's recommendation, the Interagency Committee on Balance of Payments Statistics and the Office of Management and Budget decided that there was some merit in including as well the merchandise trade balance (line 68) and the balance on goods, services, and remittances (GSR) (line 70). The justification for including the trade balance was that it was conceptually clear and not seriously subject to misinterpretation by the public. In my view, however, the recording of the trade balance is a needless concession to the past and may quite possibly be misinterpreted. As I point out below, it would be more in keeping with the spirit of the new format to give publicity to exchange-rate changes rather than to any of the partial balances. Recording the balance on GSR was rationalized on the grounds that its use has the effect of including U.S. government grants (line 30) together with all other official and all private capital (lines 33-49) and thus supposedly furnishes a better measure than the balance on current account of the financing element in international transactions, especially for developing countries. Again, this is a rather outmoded conception because it is premised on the need to finance a payments imbalance and thus does not make allowance for the effects of floating.

The Advisory Committee apparently had the most difficulty in agreeing on whether to continue reporting the balance on ORT. Some members felt that it should be continued because it reflected official intervention in the foreign-exchange market, provided an indication of the possible impact on the U.S. monetary base, and met the need for a stable, overall point of reference for the description and analysis of the balance of payments. Those opposed to its continuation argued that the balance on ORT was much less relevant in a system of discretionary official intervention and was in any case an imperfect measure of such intervention, especially since it included changes in the international financial portfolios of the OPEC countries. Moreover, the balance on ORT was not coincident with a change in the U.S. monetary base to the extent that

TABLE 1
Summary of U.S. International Transactions for 1975
 (Billions of dollars)

New Format: Line		Old Format: Line	Credits (+)	Debits (-)
1	Exports of goods and services	1	148.4	
2	Merchandise, excluding military	2	107.1	
3-13	Services and other, including military	3-13	41.3	
14	Transfers under U.S. military grant programs	14	1.7	
15	Imports of goods and services	15		-132.1
16	Merchandise, excluding military	16		-98.2
17-27	Services and other, including military	17-27		-33.9
28	Transfers under U.S. military grant programs	28		-1.7
29	Unilateral transfers (excluding military)	29		-4.6
30	U.S. Government grants	30		-2.9
31	U.S. Government pensions and other transfers	31		-0.8
32	Private remittances and other transfers	32		-0.9
33	U.S. assets abroad, net (increase/capital outflow (-))			-31.1
34-38	U.S. official reserve assets, net	33,38,58		-0.6
39-42	U.S. Government assets, other, net	58-61		-3.5
43	U.S. private assets, net	34-37		-27.1
44	Direct investment abroad	38		-6.3
45	Foreign securities	39		-6.2
	Nonbank claims	40		
46	Long-term	44		-0.4
47	Short-term	45,46		-0.9
	Bank claims			
48	Long-term	41		-2.4
49	Short-term	42,43		-10.9
50	Foreign assets in the U.S., net (increase/capital inflow (+))		14.9	
51-57	Foreign official assets in the U.S., net	47		6.3
58	Other foreign assets in the U.S., net	48,50,55-57		8.5
59	Direct investments in the U.S.	—		2.4
60-61	U.S. Treasury and other U.S. securities	49		5.4
	Nonbank liabilities	48,50,54		
62	Long-term	51	0.3	
63	Short-term	52		-0.2
	Bank liabilities			
64	Long-term	53		-0.4
65	Short-term	54	1.0	
66	Allocation of special drawing rights	63		
67	Statistical discrepancy	64	4.6	
	Memoranda:			
68	Balance on merchandise trade (lines 2 and 16)	—		8.9
69	Balance on goods and services (lines 1 and 15) ^a	—		16.3
70	Balance on goods, services, and remittances (lines 69, 31, and 32)	—		14.6
71	Balance on current account (lines 69 and 29) ^b	—		11.7
	Transactions in official reserve assets:			
72	Increase (-) in U.S. official reserve assets (line 34)	—		-0.6
73	Increase (+) in foreign official assets in U.S. (line 51 less line 55)	—		4.6

^a Conceptually equal to net exports in the U.S. national income and product accounts.

^b Conceptually equal to net foreign investment in the U.S. national income and product accounts.

Source: Adapted from "Table 1.—U.S. International Transactions," *Survey of Current Business*, 56 (June 1976), pp. 32-33. The old format last appeared in the March 1976 *Survey*.

foreign official institutions dealt in U.S. Treasury obligations and interest-bearing bank deposits. In the final analysis, the drawbacks of presenting the balance on ORT or any other overall balances were judged by the Advisory Committee to outweigh the advantages. However, a compromise was reached by including the changes in U.S. and foreign official reserve assets as memorandum items (lines 72-73) and by quarterly publication in the *Survey of Current Business* of a table recording selected transactions with official agencies.

Analyzing the Balance of Payments

Under conditions of floating, the exchange rate itself becomes the focus in analyzing the balance of payments. Movements in the exchange rate will depend upon demand and supply conditions in the foreign-exchange market. These, in turn, are derived from the underlying changes in incomes, relative prices, rates of interest and profitability, and expectations that manifest themselves in exports and imports of goods and services and international capital movements. Intervention by the authorities in the foreign-exchange market will be reflected in variations in their international reserve assets and liabilities. The question then is how much information on these matters is provided in the revised presentation of balance-of-payments statistics.

Changes in exchange rates for the U.S. dollar are prominently displayed graphically and in tabular form in the official reports on U.S. international transactions published quarterly in the *Survey of Current Business*. The data are given in the form of indexes of the foreign-currency price of the U.S. dollar on a trade-weighted basis against 22 and 10 currencies and against the currencies of 8 major industrialized countries individually. Data on U.S. international transactions by geographic area are also published in the *Survey of Current Business*, in the same format as Table 1. It is thus possible, using the regularly published data, to identify in retrospect the changes in exchange rates and the associated changes in international trade and capital movements, both in the aggregate and with respect to the major countries and regions.

Questions do arise concerning the way in which the foregoing information should be released to the media, what the media will report to the public, and what the public may in turn conclude from the media report. The Advisory Committee was clear in its recommendation (p. 23)¹ that the first news release, available six weeks after the close of a

¹ Page numbers refer to the Advisory Committee Report as it appeared in the June 1976 *Survey of Current Business*.

quarter, should stress the principal developments that have occurred. It is my impression, however, based on admittedly casual evidence, that the data on U.S. merchandise trade and changes in the trade balance receive undue attention in the press. The public may well conclude that a trade deficit is bad and a surplus is good without really understanding how incomplete and possibly incorrect such a view may be in terms of the impacts on U.S. employment and output. It would be preferable instead to direct public attention to the current- and capital-account changes and especially to the changes that have taken place in the exchange rates for the U.S. dollar vis-à-vis the other major currencies.

Exchange-rate changes in themselves do not reveal everything that has happened, of course, especially insofar as exchange-market intervention may have been important. There is some aggregative information given in the quarterly reports in the *Survey of Current Business* relating to U.S. and foreign official reserve changes and the use of swap arrangements. But it is difficult to determine the extent and impact of intervention from these data. Here the analyst must rely particularly on the periodic reports of Treasury and Federal Reserve foreign-exchange operations published in the *Federal Reserve Bulletin*. But even these reports may be too highly aggregative, and, what is more important, they do not provide information on the intervention that foreign central banks undertake on their own. It is difficult, therefore, to assess the actual extent to which floating has been managed.

Analysts of the official balance-of-payment statistics may also feel hampered by the lack of other supporting detail, particularly with respect to international financial capital movements. The Advisory Committee recommended discontinuance of the distinction between liquid and non-liquid categories of asset claims and of liabilities to foreigners. A distinction is now made with respect to the short-term and long-term characteristics of nonbank and bank claims and liabilities. The Advisory Committee was aware that the classification according to term-to-maturity was rather arbitrary and therefore did not necessarily reflect accurately the economic motivations and behavior of the relevant transactors. Mention was made (p. 22) of the possibility of using bank or bank-reported transactions as a separate classification in the table in order to facilitate analysis of the effects of these transactions on exchange rates. Unfortunately, this classification could not be implemented because of deficiencies in the method of data collection. It is to be hoped that these and other deficiencies can be corrected to permit more effective analysis than is presently possible of the international financial behavior of the important bank, nonbank, and official transactors.

Maintenance of Analytical Neutrality

Granting that there will always be deficiencies in data collection, it is of interest to consider broadly the types of supporting data investigators might find useful for analytical purposes. In the United States and elsewhere, for example, there is a significant and growing interest in the monetary approach to the balance of payments and exchange-rate determination. In this connection, some consideration might have been given to including a measure of the effect on the monetary base of changes in U.S. and foreign official reserves. The Advisory Committee was apparently reluctant to make this and similar recommendations because (p. 20) “. . . the maintenance of analytical neutrality was viewed as very important, both for its own sake and for the purpose of maintaining a high degree of credibility for Federal statistics. The statistics should be presented in a way that does not imply unnecessary judgments about economic behavior or support for any particular economic theory.”

Later, in discussing the drawbacks of the balance on ORT, the Advisory Committee pointed out (p. 24) that there were now infrequent and limited effects on the U.S. money supply resulting from the acquisition or sale of dollars by foreign central banks in exchange for reserve assets, or from changes in official dollar balances held with Federal Reserve banks. Moreover, it stated that even if the U.S. monetary base were affected by these transactions, the Federal Reserve System could sterilize the impact through open-market operations. Whether or not sterilization can be successful is of course a central issue in the monetary approach to the balance of payments. It thus appears that the Advisory Committee was not neutral in this instance and that an empirical judgment was being made that the monetary effects of reserve changes were not of much consequence in the United States.

To gain further insight into this issue, we should note that the effect on the monetary base of changes in the U.S. balance of payments is calculated and reported by the Federal Reserve Bank of St. Louis in its quarterly *U.S. International Transactions and Currency Review*. It is noteworthy that the relevant data are not provided in the *Survey of Current Business* tables, but rather are taken from the *Federal Reserve Bulletin*. Beginning with the figure for “convertible foreign currencies” from the table on U.S. reserve assets (Table 3.12, p. A55 of the January 1977 issue of the *Federal Reserve Bulletin*), the Federal Reserve Bank of St. Louis adds any change in the “Special Drawing Rights certificate account” and deducts “deposits other than member bank reserves with

Federal Reserve Banks-foreign" (Table 1.11, p. A4). End-of-period data are taken for each quarter. These data are seasonally adjusted, and the final figures for the categories mentioned above are first differences of the adjusted data.

In an article by Donald S. Kemp ("U.S. International Trade and Financial Developments in 1976," *Review of the Federal Reserve Bank of St. Louis*, December 1976, p. 9), the monetary-base effect for 1975-I to 1976-III was reported as follows (in millions of dollars):

1975		1976	
I	42	I	580
II	-12	II	560
III	141	III	-381
IV	12		

Compared with the overall changes in the monetary base, the effects from 75-III to 76-II were (p. 10) 6.6, 0.6, 34.6, and 21.6 per cent of the total increase in the monetary base, while in 76-III there was a negative impact on the base amounting to 19.4 per cent of the total change. Without more information regarding the various influences on the monetary base, it is by no means clear how the foregoing calculations should be interpreted. Moreover, we do not know to what extent, if any, the foreign-sector impacts on the monetary base were taken explicitly into account by Federal Reserve officials in the implementation of U.S. monetary policy. The fact remains, however, that the analyst has to go to some length just to perform the necessary calculation. In addition, while the monetary-base effect is perceived to be small and of limited importance in the United States, this is not necessarily the case in other countries. To the extent that the revised presentation of the U.S. balance-of-payments statistics provides a model for other governments to follow, the official presentation of the monetary-base effect might therefore be worthwhile, as will be noted again below.

The monetary-base effect is only one example of supporting information that some investigators might find useful. Similar remarks could be made about data on prices, interest rates, and other phenomena. If one wishes to probe deeply into the behavior of the foreign sector in the United States and elsewhere, the official balance-of-payments statistics, supporting tables, and textual discussion furnish only the starting point.

A variety of other source materials will have to be consulted, and it is by no means clear even to the seasoned investigator where to begin and how reliable and comprehensive the available data may be.

The Advisory Committee may have considered it beyond their mandate to ask how useful the revised presentation of balance-of-payments statistics might be for analytical purposes. In my view, while the revisions in themselves are of great value, serious consideration should be given to the inclusion of even more supporting information. This would not necessarily have to be done in the individual quarterly reports in the *Survey of Current Business*. Rather, it might be possible to expand the annual *Survey* article that covers the entire calendar year. In this regard, some of the series for selected foreign countries currently reported by the Federal Reserve Bank of St. Louis in its *U.S. International Transactions and Currency Review* might be worth including. It would also be useful to include data in current and constant dollars for U.S. trade in total and for the major aggregates, plus some of the relevant information on the stocks of the important components of U.S. claims on and liabilities to foreigners. Judgment would obviously be required on exactly what supporting detail to include. But this should not be an overwhelming task, and it could be accomplished without taking sides on theoretical issues.

The International Comparability of the Balance-of-Payments Presentation

One result of carrying out the recommendations of the Advisory Committee has been to increase the differences between the ways in which the United States and the rest of the world measure and interpret statistics on the balance of payments. For example, in Table 2, I have summarized the presentations of the U.S. balance of payments for 1975 prepared by the International Monetary Fund (IMF), Organization for Economic Cooperation and Development (OECD), and Bank for International Settlements (BIS).

It should be evident that all three presentations are based on the premise that there is an overall balance-of-payments surplus or deficit that has been financed in some manner. According to the IMF presentation, the United States experienced a deficit of \$4.0 billion, which was financed by a net increase in liabilities to foreign official agencies. The OECD recorded a deficit of \$2.5 billion for the balance on official settlements, which is more or less equivalent to the balance on ORT and is similar in concept to the IMF formulation. In contrast, the BIS recorded

TABLE 2
Summary Presentations by International Organizations
of the U.S. Balance of Payments for 1975
(Billions of dollars)

IMF:		
Balance on:		
Trade	\$ 9.0	
Services and private transfers	<u>6.6</u>	
Current account		\$ 15.6
Capital-account balance ^a		<u>-19.6</u>
Total		- 4.0
Change in liabilities to foreign official agencies ^b		<u>4.6</u>
Balance financed by transactions in reserve assets (increase (-))		<u><u>- 0.6</u></u>
OECD:		
Balance on:		
Trade	9.0	
Services	<u>7.5</u>	
Goods and services		16.5
Private transfers, net	-1.0	
Official transfers, net	<u>-3.6</u>	- 4.6
Current balance		11.9
Long-term capital		<u>-10.5</u>
Basic balance		1.4
Nonmonetary short-term capital	-1.2	
Errors and omissions	<u>4.6</u>	3.4
Balance on nonmonetary transactions		4.8
Private monetary institutions short-term capital		<u>- 7.2</u>
Balance on official settlements		- 2.5
Total liabilities to foreign national official agencies		<u>3.1</u>
Change in reserve (increase (-))		<u><u>- 0.6</u></u>
BIS:		
Current balance		11.9
Capital balance		<u>- 7.1</u>
Overall balance		4.8
Adjustments		<u>- 0.1</u>
Adjusted overall balance (= total external monetary movements)		<u>4.6</u>
Official assets, net		- 3.0
Commercial banks, net		<u>7.6</u>

^a Equal to difference between the balance financed by transactions in reserve assets and the sum of the current-account balance and the change in liabilities to foreign official agencies.

^b Includes the use of IMF credit and liabilities of the borrowing country that are presumably treated as reserve assets by the creditor country.

Sources: Adapted from IMF, *Annual Report 1976*, Washington, Sept. 19, 1976; OECD, *Economic Surveys: United States*, Paris, July 1976; and BIS, *Forty-Sixth Annual Report*, Basel, June 14, 1976.

a surplus of \$4.6 billion, which is the net difference between the increase in liabilities to foreign official agencies and the increase in the assets of commercial banks.

Even if we disregard the differences in the three presentations, none of them is appropriate for a world in which exchange rates are floating, albeit in managed form. The same would be true for the balance-of-payments presentations of most other countries, which continue to be premised upon the Bretton Woods concept of obligatory exchange-rate pegging within narrow limits. Thus, the rest of the world, by its continued reliance upon outmoded balance-of-payments concepts, is apparently out of step with the United States. It is difficult to derive any clear interpretation of the overall balances that continue to be recorded and publicized without knowing the actual movement of a country's exchange rate and the volume of official intervention. Perhaps the revised presentation of U.S. international transactions and continuing improvements in supporting data will provide an incentive for international organizations and national governments to institute comparable changes that are more in tune with the realities of present-day foreign-exchange markets.

The Problem of Historical Continuity

Now that changes have been made in the presentation of the U.S. balance-of-payments statistics, one must ask whether and how to maintain continuity with earlier modes of presentation. What must be emphasized here, as the Advisory Committee pointed out, is that the presentation of data should be in accord with the institutional arrangements, analytical issues, and policy objectives that are most relevant for the international monetary circumstances at hand. Since the circumstances change over time, it will not be possible to maintain strict continuity in the measurement and interpretation of the data.

In this connection, it is noteworthy that the new presentation that was first reported in the June 1976 *Survey of Current Business* was extended backward on an annual basis to 1960 and on a quarterly basis to 1966. The result has been to expunge the various overall balances and some of the partial balances that were formerly reported. While these balances may have had their limitations, they nevertheless served some function in balance-of-payments analysis and policy in the past. It does not seem appropriate, therefore, to recast the official balance-of-payments statistics prior to 1971. To do so recalls the point made some years ago by Fritz

Machlup ("The Mysterious Numbers Game of Balance-of-Payments Statistics, in *International Payments, Debts, and Gold*, New York, Scribner, 1964, p. 145) that the continued reorganization and reinterpretation of U.S. balance-of-payments statistics in the course of about a decade turned a surplus of over \$5.0 billion for calendar year 1951 into a deficit of about \$1.0 billion.

To avoid a similar occurrence, it would be desirable to include a footnote in the current presentation of the data in the *Survey of Current Business* to indicate the time period for which this presentation is most relevant and to warn the reader of noncomparabilities with earlier data due to the changes that have occurred in the international monetary system. By the same token, historical statistics of U.S. international transactions should include explanatory footnotes calling attention to the particular international monetary circumstances of the period covered.

Conclusion

Now that the Advisory Committee's recommendations on balance-of-payments presentation have been implemented, more attention should be given to the development and periodic publication of additional supporting data that will aid in the analysis of changes in exchange rates and in the components of the current and capital accounts. It would be desirable, furthermore, for the major international organizations and national governments to reorganize their balance-of-payments presentations and analyses to accord more closely with the realities of floating exchange rates.

How long the revised presentation of U.S. balance-of-payments statistics will remain useful depends, of course, on whether and the extent to which floating is continued. Perhaps at some future time, if rates of inflation and of productivity change in the major industrialized countries are brought into closer harmony, it might be possible to reinstitute some type of obligatory exchange-rate pegging. Under such circumstances, something like the balance on ORT could be revived as an approximation of the official intervention required to keep exchange rates within specified limits. Thus, if international monetary circumstances change, it will be necessary to revise the format of the balance-of-payments presentation once again.

CHARLES F. SCHWARTZ

I welcome the opportunity afforded by this symposium to comment on the recent revision of the U.S. balance-of-payments tables. Since this revision reflected almost entirely the recommendations of the Advisory Committee on the Presentation of Balance of Payments Statistics, my contribution will provide a review of the Advisory Committee Report. This review will include a discussion of my belief that the Committee's work was incomplete in that it stopped short of providing an adequate framework of analysis.

Background Considerations

Before discussing the Advisory Committee Report, I should like to mention a few significant background developments that had considerable influence on the opinions I held upon becoming a member of the Committee.

First, I regarded one aspect of the 1965 Bernstein Committee Report as particularly noteworthy—its handling of the difficult question of identifying an overall surplus or deficit in the balance of payments. Admittedly, the Bernstein Committee was somewhat ambivalent on this score. On the one hand, after considering the main alternatives and rejecting both the "basic" transactions concept and the "liquidity" concept, the Committee recommended presentation of a single summary indicator of overall surplus or deficit: the "official settlements" balance. On the other hand, in statements with which I strongly agreed, the Committee emphasized that no single number could adequately describe the international position of the United States during any given period and that "the definition of an international surplus or deficit is an analytical problem rather than an accounting problem." While it considered the showing of an overall surplus or deficit "broadly useful as a starting point for analysis," the Committee went on to reject explicitly "the notion that as a practical matter people must view the balance-of-payments position in terms of a single summary concept, the surplus or deficit."

These two expressions of viewpoint—the recommendation of a single overall balance and the qualification of its significance—are perhaps not

The views expressed here are personal and should not be construed as those of the International Monetary Fund.

so contradictory as they seem. Rather, as demonstrated by the lengthy discussions of them in the Bernstein Committee, they reflect differences of emphasis with respect to an age-old dilemma in the balance-of-payments field: a presentation of the statistics without balances is not readily understood, but any particular balance can easily be misinterpreted or accorded undue significance.

The problem of presentation posed by this dilemma was more or less resolved for a while by the 1965 revision of the U.S. balance-of-payments tables that adopted the Bernstein Committee's recommendation of an official-settlements balance (which was termed the "official reserve transactions" balance) and retained the former liquidity balance. By 1971, however, the problem had surfaced again and the government introduced another revision of the official balance-of-payments tables because of "growing dissatisfaction" with the presentation and analysis focusing on those two balances. This time, it was affirmed that no single balance could adequately represent the underlying balance-of-payments position of the United States, and "a spectrum of balances" was substituted on the grounds that it would permit "a more accurate description of the evolving pressures on the dollar and of developments in the U.S. payments position. . . ."

Two of the overall balances included in this so-called "spectrum" were new; termed "central balances," they were adopted in an attempt to focus on underlying, long-term trends in the external position of the United States. One of the central balances was the balance on current account and long-term capital (a common version of the "basic" balance); the other was the net liquidity balance, which equaled the balance on current account and long-term capital plus flows of short-term nonliquid private capital, allocation of SDRs, and errors and omissions. The new "net liquidity balance" was similar to the liquidity balance that had been in use for some years; the differences need not concern us here.

The main significance of the 1971 revision in format was that it reflected an apparently strong desire within the government for a summary presentation of the U.S. balance of payments that would be much more "analytically oriented." The *Survey of Current Business* article of June 1971 presenting these revisions was commendably frank in pointing out—indeed emphasizing—the limitations of the various balances comprising the new analytic presentation. The *Survey* seemed particularly careful not to claim very much for the two central balances beyond their being "the best available."

The approach adopted in the 1971 changes in balance-of-payments

presentation was attractive, at least to me. But the attempt to achieve a more analytic presentation meant introducing a couple of overall balances (the so-called "central" ones) that are of questionable validity—balances that, in approximately the same forms, were rejected by both the Bernstein Committee and the recent Advisory Committee. The use of an increased number of less-adequate overall balances may not be an acceptable compromise in dealing with the issues under discussion.

Whatever its specific merits, the June 1971 revision was not relevant for long. The official U.S. balance-of-payments presentation was rendered less suitable by the advent of greater flexibility of exchange rates in March 1973, together with the accumulation of dollar balances by the major oil-exporting countries that followed the quadrupling of oil prices late in 1973. In particular, the significance of the balance on official reserve transactions as a measure of exchange-market pressure on the dollar was reduced considerably, even though—in view of the large amount of official intervention continuing in foreign-exchange markets—it was not destroyed.

The reduced significance of the balance on official reserve transactions was clear, in an extreme form, from the balance-of-payments results for 1974; it may be illustrated by reference to the problem of presentation encountered in the 1975 *Annual Report* of the International Monetary Fund. Previously, the *Annual Report* had shown the balances of payments of member countries on an official-settlements basis, which had the advantage, among others, of providing global symmetry in the definition (though not necessarily in the reporting) of capital flows. But in the 1975 Report the usual balance-of-payments summaries presented for the industrial countries for the years 1972-74 were modified to show a breakdown of the "overall balance" into two broad components: (1) changes in liabilities to foreign official agencies and (2) changes in reserve assets. The Report observed that a rise in obligations traditionally treated in the balance-of-payments statistics as official liabilities had been the principal means by which an \$8½ billion "overall deficit" of the United States was financed in 1974. It pointed out, however, that the \$10 billion rise in U.S. liabilities to foreign official agencies had been due to placements of funds in the United States by the major oil-exporting countries; that the greatly increased holdings of those countries might be viewed as having the character, at least in considerable part, of investments rather than of reserves; that these considerations, among others, created ambiguities of interpretation with respect to the conventional concept of the overall balance-of-payments deficit; that the payments balance of the United

States would show a small surplus instead of a deficit if oil-surplus funds invested in the United States were treated as capital inflows rather than as a means of financing; and that this treatment would be more consistent with the relatively stable behavior of the effective exchange rate for the U.S. dollar in 1974.

Against the background of these and other influences, I approached participation on the Advisory Committee with the following general views: overall and partial balances were necessary for description and analysis of the U.S. balance of payments, with any single overall measure warranting only limited emphasis; the basic balance and liquidity balance had not proved to be very useful; and, even though the relevance of the balance on official reserve transactions had been reduced, this or some similar measure was probably worth retaining as a reference point for analysis, in conjunction with supplementary information and such other overall measures as might be devised. From the standpoint of satisfying the needs of the international community, as well as those of domestic users, the challenge faced by the Advisory Committee was to adapt the presentation of the U.S. balance of payments to changed features of the international monetary situation—a challenge that, in my view, would not be met successfully if the solution agreed upon were to entail discontinuation of the balances and other traditional aids to analysis.

Broad Appraisal of the Committee's Report

While the establishment of an outside advisory group was undoubtedly both necessary and timely, its task was very difficult. For one thing, the Advisory Committee confronted the same set of issues on which the official experts (members of the Interagency Committee on Balance of Payments Statistics) had bogged down in disagreement. Further, it became apparent at the outset that the Advisory Committee itself was sharply divided on these issues inasmuch as the government, in the interest of objectivity, had selected for membership on the Committee persons who were known to hold divergent views.

In the circumstances, the report that emerged from the Advisory Committee's work was better than might have been expected. Although divided in their views, members of the Committee showed mutual respect as well as full awareness of the complex nature of the issues before them, and they endeavored to compromise their differences so as to come up with reasonable conclusions. Although I was not very happy with some of the Committee's recommendations, I would be unwilling to

assert that any important recommendation was patently unreasonable. The report of the Committee was one in which, like other members, I could generally concur without feeling a need to file a dissenting opinion.

The major question confronting the Advisory Committee was what to do about the various balances that had become features of the U.S. balance-of-payments presentation. As in the earlier debate among official experts within the government, some members of the Committee favored the abolition of all balances, whereas others argued that there was still a need for overall and/or partial balances (though not necessarily the traditional ones). The process by which Committee members reconciled these basic differences in viewpoint turned out to be a very satisfactory one, deserving of attention:

1. The Committee quickly decided to recommend eliminating two of the major overall balances: the net liquidity balance and the balance on current account and long-term capital. On the question of a continued need for the third major overall balance, the balance on official reserve transactions, the Committee was split irreconcilably. The debate was complicated by a consideration that worried even those members, myself included, who were inclined toward retention of this balance or some variant thereof. With the dropping of the other overall balances, more attention would inevitably be drawn to the balance on official reserve transactions at a time when its significance had unquestionably been reduced. It was generally agreed that retention of that balance would require, as a minimum, the inclusion of additional overall balances in order to forestall any possible impression that the U.S. balance-of-payments situation could be summed up by a single statistical series. However, very few suggestions for additional overall balances were offered, and none was found acceptable.

2. When attention turned to various partial balances, the majority of Committee members favored retention of two or three series relating to goods, services, and transfers, while other members wanted to drop these too. Among the majority, however, some of us were very uneasy about publishing partial balances in the absence of overall balances and warned that focus in the press and elsewhere might then concentrate on current transactions to the neglect of capital flows.

3. From this apparent impasse, the solution that finally emerged—to drop all balances from the body of the tables but to show some information of this type as memorandum items—was more or less acceptable from several standpoints: (a) Those who opposed the presentation of balances

could take satisfaction in the Committee's recommendation not to include them in the tables but only in memorandum items. (b) Those who favored the presentation of balances could argue that the intended de-emphasis of balances was a matter of degree and that, in any case, it would not be advisable to include in the body of the tables either a single overall balance or partial balances alone. (c) Most members felt that valuable information would be provided by the series to be shown as memorandum items: the balance on goods and services, the balance on current account, and the two summary items that comprise the financing of the balance on official reserve transactions (net changes in U.S. official reserve assets and in U.S. liabilities to foreign official agencies).

Recommendations of the Advisory Committee

The Advisory Committee Report listed ten principal recommendations. The first six were, by and large, an outgrowth of the conclusions reached by the Committee with respect to the treatment of overall and partial balances. This treatment is discussed below, following brief comments on recommendations 7 to 10.

The Committee's seventh recommendation was for the Department of Commerce to develop supplementary data on transactions in U.S. official reserves, foreign official assets in the United States, and U.S. and foreign drawings or repayments under mutual credit (swap) arrangements. Despite the difficulty of measuring official intervention, the Committee felt that such data could be helpful in distinguishing foreign official transactions made for investment purposes from those made to influence exchange-rate movements. Then, in the eighth recommendation, the Committee called for the preparation of supplementary data on changes in exchange rates.

Both of these recommendations were of obvious relevance and merit, and the Commerce Department is to be commended for the manner in which it has implemented them (as shown, for example, by tables and charts in the March 1977 *Survey of Current Business*). If anything, the Advisory Committee should have gone further in emphasizing the value of these two types of supplementary data. Also, the Committee might have pointed out the need to integrate the analysis of these data with the analysis of the transactions data provided in the new Table 1.

The ninth recommendation—that the words “surplus” and “deficit” be avoided insofar as possible—was well intentioned but of limited practical significance. The Commerce Department's writers of press releases and

Survey of Current Business articles clearly have tried to carry out this recommendation, but without much success. It is cumbersome, for example, to have to refer repeatedly to an "excess of imports over exports" instead of simply a "deficit." To be sure, as the Committee noted in its report, "surplus" and "deficit" can be misinterpreted to mean that the developments involved are "good" or "bad," but I believe the Committee's concern on this score was exaggerated. The problem is hardly of sufficient importance to have become the subject of a "principal" recommendation.

The Advisory Committee's final recommendation was that the Department of Commerce continue to publish data sufficiently detailed to permit users to calculate for themselves any of the traditional balances except those based on the distinction between liquid and nonliquid assets, which for statistical reasons cannot be made satisfactorily. This recommendation, agreed to by all Committee members, was clearly sensible.

Overall balances

The Committee recommended "strongly and unanimously" that the publication of the net liquidity balance be discontinued and that "the terminology associated with it be deleted entirely from the balance-of-payments accounts." The Committee concluded correctly that the required distinction between liquid and nonliquid instruments could not be made in practice and was "both fuzzy and misleading." It is to be hoped that the government's agreement with this conclusion will have finally marked the demise of the liquidity concept, which was retained in the accounts in 1965 over the objections of the Bernstein Committee and survived in another version as part of the 1971 revision of the balance-of-payments presentation.

The Committee was also right to recommend discontinuation of the balance on current account and long-term capital, on the grounds that this "basic" balance does not adequately indicate long-term trends in the balance of payments by segregating volatile capital flows and placing them below the line. This judgment was thus similar to the one reached by the Bernstein Committee.

The concept of basic balance, however, has prevailed for a long time and doubtless will continue to receive attention. Unfortunately, experience both in the United States and abroad demonstrates that it is not feasible to measure this concept by working with standard components of the balance of payments. The components do not differentiate between types of capital movements on the basis of volatility. Large

special transactions of a nonrecurring sort can appear anywhere in the accounts. Cyclical influences can seriously distort the movement of any "basic" measure. Finally, this measure is particularly affected by the treatment of net errors and omissions (now called "statistical discrepancy" in the U.S. accounts), since this residual item is usually composed of both stable and volatile items.

In light of such considerations, it is evident that any basic balance must be constructed by analytic methods rather than routinely derived by combining selected components from the balance-of-payments accounts. In the International Monetary Fund, the staff has been working to derive such a measure for each of the industrial countries by adjusting current-account balances for cyclical and other temporary factors and attempting to distinguish "normal" capital flows from those which constitute temporary balance-of-payments financing. Needless to say, all this work on "underlying payments," especially that relating to capital flows, is very difficult; it is still exploratory and tentative.

The third overall balance—the balance on official reserve transactions—received a great deal of attention from the Advisory Committee. This balance had been a feature of the U.S. balance-of-payments presentation for many years, so that a decision to discontinue it could not be taken lightly. Such a decision would be of great interest to the international community, as well as to domestic users, because of the large role of the United States in world payments. Moreover, the "official settlements" concept was widely used and well known internationally, having been employed in the Fund for many years to measure the overall payments position of member countries on a uniform basis.

The official-settlements balance—measured as the net sum (with sign reversed) of reserve assets and of liabilities judged to have some relevant analytic characteristic in common with reserves—is most meaningful for a country maintaining a fixed exchange rate. Its significance for the United States was therefore reduced by the move toward floating exchange rates with discretionary official intervention and by the change in the character of U.S. liabilities to foreign official agencies consequent upon the increase in the price of oil. Although it was tempting to adjust the balance on official reserve transactions to exclude the liabilities of the major oil-exporting countries, such an adjustment is more suitable for special analysis than for the construction of a formal statistical measure intended to maintain comparability over time.

Retention of the balance on official reserve transactions probably would have subjected it to additional strains. Careful analysis of the

significance of the figures from one quarter to the next would have been required, and some confusion on the part of the public inevitably would have resulted. In the circumstances, including the greater prominence that would be accorded this balance by dropping the other two overall balances, the decision taken by the Advisory Committee to drop the balance itself but to show the two financing items as memoranda was not unreasonable. Also important in this regard was the companion recommendation to provide supplementary information on transactions with foreign official agencies.

Partial balances

It may be recalled that the Advisory Committee recommended (1) publication of the balance on goods and services and the balance on current account as memorandum items and (2) deletion of the balance on merchandise trade and the balance on goods, services, and remittances. The government agreed with (1) but not with (2), the latter being the only recommendations of the Advisory Committee that were not accepted.

The publication of the balance on goods and services and the balance on current account was justified primarily on the basis of three related considerations: the linkage of these balances to other economic accounting systems, the economic significance of the concepts involved, and the widespread international use of these balances, especially the balance on current account.

The Advisory Committee's recommendation to drop the balance on merchandise trade was also relatively clear-cut. This balance is very narrow and partial, and the distinction it makes between goods and services is of limited economic significance. It receives sufficient attention and exposure as an independent series; including it in the quarterly balance-of-payments statement among the key series summarizing U.S. international transactions could at times mislead the public.

The balance on goods, services, and remittances has the advantage over the balance on current account that it avoids drawing the often-difficult distinction between government grants and government loans. Also, it is particularly relevant for analysis of the world payments situation and is used for this purpose by the International Monetary Fund, as pointed out in the Advisory Committee Report. However, the fact of overriding significance, in my opinion, is that this balance is essentially similar to the balance on goods and services, inasmuch as the difference between them—pensions, remittances, and some other transfers—is usually small and relatively stable for the United States.

Although the matter is not very important, I believe that the government should not have decided to publish these last two partial balances as memorandum items. The scope for public misinterpretation of the merchandise-trade balance may have been underestimated, and the extent to which publication of the balance on goods, services, and remittances would "facilitate international comparisons" may have been exaggerated. But questions such as these are admittedly subject to differing judgments. My main concern here is broader: deciding to publish these two balances, along with the balance on goods and services and the balance on current account, made for a clear overemphasis on nonfinancial items relative to capital flows among the summary series comprising the memorandum items.

Need for an Analytic Framework

One of the Advisory Committee's principal recommendations was to discontinue Table 1, the "analytic table." Although this particular table was no longer relevant in some important respects and should have been discontinued, the question arises as to how well the revised tables facilitate analysis and understanding of U.S. international transactions.

Neither the Advisory Committee nor the government attempted to provide a counterpart to the former Table 1. The revised presentations—both summary and detailed—are perfectly neutral, with the listing of debit and credit items balanced at the end of the table by a "statistical discrepancy." As for the memorandum entries, these consist of a scattering of de-emphasized balances and financing items and have not been designed as a "package" with an analytic purpose in mind. The Committee's general attitude is indicated by its statement that "a meaningful picture of U.S. international transactions can be obtained only from an analysis of information on several if not all of the categories of transactions . . .," and again that "analysis of U.S. international transactions is a complex matter which requires a consideration of all the constituent accounts. . . ."

Thus far, official analyses based on these new tables have not provided a comprehensive or incisive picture of the U.S. balance of payments. The basic fault lies not with the analysts but with the absence of an analytic framework. One unfortunate development is that the news media, and probably the general public as well, seem to be according the balance on current account, the best known of the surviving balances, a wider significance than this partial measure deserves; at the same time, they

appear to have difficulty assimilating information on other specific subjects, such as inflows and outflows of capital by type.

An analytic framework is necessary for sorting out the main features of U.S. external developments. One approach is suggested by the type of analysis included in the *Annual Report* of the International Monetary Fund for 1976 (pp. 13-16). For the United States and other major industrial countries, this analysis was based on two sets of data:

1. Balance-of-payments summaries for the years 1973-75 that contained four principal items: (a) balance on current account; (b) balance on capital account computed residually as the difference between (d) and the sum of (a) and (c); (c) change in liabilities to foreign official agencies; and (d) balance financed by transactions in reserve assets.
2. Indices of effective exchange rates (discussed and charted on pp. 28-31 of the *Annual Report*).

With the aid of such material, it is possible to concentrate on the interrelationships among key elements of the balance of payments and changes in exchange rates, as illustrated in the *Annual Report* by the brief discussions of industrial-country developments during 1975 and the first half of 1976. The same approach has often been used by the staff of the Fund in internal documents to analyze interactions between payments flows and exchange-market pressures.

Of the various data listed above as constituting a useful framework for analysis, all except a balance on capital account are already being published by the Department of Commerce. The requisite balance-of-payments series are included among the memorandum items, and relevant information on exchange rates and on transactions with foreign official agencies has been assembled in supplementary tables and charts. The regular tables, containing a wealth of detailed information, would permit analysis of the broad developments highlighted by the approach just described.

This approach, I must emphasize, is intended to provide a few "pegs" on which to base a meaningful and comprehensive analysis; it does not depend for its usefulness or validity on the recital of a whole series of balances. Admittedly, there would be some statistical problems in implementing the approach on a quarterly basis (e.g., in handling the "statistical discrepancy" or in integrating changes in exchange rates with balance-of-payments flows), but these problems should not prove insuperable. From our experience in the Fund with respect to the major

industrial countries, I can at least say that working with semiannual figures has given satisfactory results.

Current efforts to deal with the long-standing problem of defining and presenting the U.S. balance of payments would appear to have entered a transitional phase. In the process of eliminating the scheme of balances judged to be appropriate in earlier years, there may have been an over-reaction in the sense of a failure to appreciate fully the need for an adequate, albeit different, analytic framework and to provide for it. The task in this regard involves not only questions of arranging and presenting the balance-of-payments series but also broader, more systematic attempts to analyze them by reference to such factors as cyclical influences, changes in prices and costs, interest-rate differentials, and developments in the exchange markets. The efforts being made by the Commerce Department to move in the direction of broader analysis should certainly be encouraged.

Analysis of U.S. external developments—never easy under the par-value system—has become even more complex in the last few years. It is clearly the government's responsibility to provide maximum guidance and interpretation to users of the U.S. balance-of-payments statistics. How this responsibility will be understood and discharged remains to be seen. The only safe prediction is that the problems of defining and presenting the balance of payments will one day come under the review of yet another outside advisory committee and yet another symposium such as this.

ROBERT TRIFFIN

I welcome this opportunity to break the silence that has so far greeted the Advisory Committee Report that appeared in the June 1976 *Survey of Current Business*.

Brief Comments

Two totally different arguments are presented in this slender report (less than 10 pages, as against 194 pages in the 1965 Bernstein Committee Report) to justify the revolutionary recasting of the official balance-of-payments statistics of the *Survey of Current Business*.

The first argument, that a revision in the previous format was needed to reflect present-day conditions, is uncontroversial. A revision of the previous presentation was long overdue in view of major developments of vital significance for U.S. external transactions and those of foreign countries, particularly the suspension of convertibility of the dollar, the subsequent generalization of floating exchange rates throughout the world, and the enormous and persistent balance-of-payments disequilibria arising from the oil crisis, which could not be "corrected" for a long time without devastating consequences for the world economy. These developments undoubtedly justify a different interpretation of the broad balance-of-payments indicators previously regarded as significant for analysis and policy, and even a shift of emphasis from traditional indicators to new and different ones giving full recognition, for instance, to exchange-rate fluctuations and to the likely persistence of huge "recycling" capital flows that perform a useful "intermediation" role in the financing of unavoidable disequilibria.

The second line of argument stressed by the Advisory Committee, however, leads in a very different direction, advocating a "neutral" presentation of raw data so as to avoid any misinterpretation of official indicators that might encourage "preconceived and perhaps misleading conclusions as to their significance for the United States and other countries" (p. 18). Even the words "surplus" and "deficit" should be eschewed as far as possible, the Committee concludes, since they are often misinterpreted as having a "good" or "bad" connotation that may be inappropriate at times for analysis and policy (p. 20). All previously published "overall" and "net" balances are thus discarded, or—as an obvious compromise—downgraded to "memoranda" status at the bottom of the main table (Table 1 or 2) summarizing U.S. international transactions.

This is indeed a revolutionary change, unique in all balance-of-payments presentations over the years, in the United States and abroad. Avoiding the danger of misinterpretation is a poor excuse for avoiding any interpretation whatsoever. It abdicates the traditional responsibility of the official providers of statistics to disentangle from a welter of raw, detailed, and heterogeneous estimates broader and meaningful groups of transactions guiding the readers—the informed public as well as policy-makers—toward the major analytical and policy issues raised by the evolution of our external transactions.

This task is now left entirely to private volunteers, and made in fact more difficult for them than it was up to now. They will perform it rather haphazardly, with less expertise and familiarity with the data they must analyze than is available to the providers of those data. This may well invite more, rather than fewer, errors of interpretation. In any case, the public is entitled to know the interpretation given by official bureaucrats themselves to the estimates on which they base their advice to policy-makers.

A comparison of the periodic *Survey* articles and press reports on balance-of-payments developments before and since June 1976 clearly shows the cost of the new policy in terms of meaningful information to the public.

Among the slender merits of the new presentation, I would stress particularly the elimination of the “partial balances” based on the presumed maturity of capital assets and liabilities, that is, the “net liquidity balance” and the “balance on current account and long-term capital.” I have long refrained from using either of these two balances, primarily for the reasons discussed on pp. 21, 22, 25, and 26 of the Committee’s report. To put it briefly, these reasons are that some capital transactions statistically recorded as “nonliquid” or “long-term”—such as a fling on Wall Street—may be far more volatile in fact than others statistically recorded as “liquid” or “short-term”—such as international “working balances” held here as demand deposits and even possibly required by banks as a condition for lending to depositors.

I have long pointed out, in addition, that the so-called “basic” balance (i.e., the balance on current account and long-term capital), on which there has been growing emphasis in recent years, would yield identical conclusions from two radically different situations: (1) a large current-account surplus, financing and offset by large capital exports; and (2) a large current-account deficit, financed and offset by large capital imports. The first of these two situations should be deemed normal and desirable, as the second should be deemed abnormal and undesirable, for a rich and

highly capitalized country such as the United States; and the opposite would obviously be true for poor and undercapitalized developing countries.

I am particularly unhappy, on the other hand, with the elimination of the "official reserve transactions" (ORT) balance and, indeed, with the rejection of any "overall" balance whatsoever as a stable point of reference for description and analysis of the balance of payments. This was "the principal source of disagreement among the members of the Advisory Committee" and was accepted "only in the end . . . by a majority of [its] members" (see particularly pp. 21 and 25).

The arguments adduced by the Committee majority in favor of eliminating the ORT balance are as unconvincing to me as they were to the dissenting members.

One argument is that official interventions in the exchange markets have become discretionary rather than mandatory and that the accumulation of dollar balances by foreign central banks is no longer a "threat" to U.S. gold holdings and to our ability to preserve the convertibility of the dollar into gold. This is true, of course, yet fluctuations in foreign official dollar holdings are still largely influenced by interventions in the exchange market, not only by the more than fifty countries that continue to peg their currency—more or less precariously, as before—to the dollar, but by all other countries as well under the system of "managed" floating prevalent today. These interventions are officially reported to have reached last year overall amounts unprecedented in history.

A second argument is that changes in foreign official dollar holdings no longer reflect exchange-market pressures on the dollar. But the generalization of floating rates makes it more—rather than less—likely than before that any large increase in foreign dollar holdings is the harbinger of a depreciation of the dollar vis-à-vis other major currencies. What *is* true, of course, is that the dollar's strength or weakness may be reflected in contemporaneous exchange-rate fluctuations and that these may become a partial substitute for net reserve changes, or—alas—accentuate them even further by inducing bearish or bullish speculation on future changes in exchange rates. The Committee was therefore quite right in urging the publication of tables and charts on exchange rates (p. 20). Such information, however, should *supplement* but not dispense with equally relevant and useful information on the ORT balance, and particularly on the accumulation of U.S. liabilities to foreign monetary and—I would add—banking institutions.

A third argument is that changes in foreign official dollar holdings do

not affect the U.S. monetary base if, as is often the case, they are "sterilized" indirectly by Federal Reserve open-market operations, or directly by the decisions of foreign central banks to invest their dollar reserves in U.S. Treasury obligations and interest-bearing bank deposits rather than in deposits at Federal Reserve banks (pp. 21 and 24). Such sterilization, however, is certainly not new, and the very fact that it may be resorted to by the Federal Reserve in order to offset the impact of ORT surpluses or deficits upon the U.S. monetary base indicates that the ORT balance is of major concern for monetary management in the United States, just as it is for U.S. partner countries and for the world as a whole:

1. Net reserve losses of the United States (measured by the ORT balance) over the six years 1970-76 totaled nearly \$69 billion. In the absence of sterilization, their "primary" impact would have been nearly sufficient to wipe out U.S. outstanding issues of "high powered" reserve money at the beginning of this period (\$76 billion). This impact was far more than sterilized, however, by domestic credit expansion, which increased reserve-money liabilities by nearly 50 per cent (to \$112.6 billion at the end of 1975). Such sterilization and expansion were financially feasible because of the willingness of foreign monetary authorities to accept U.S. dollar liabilities in settlement. They were politically attractive, since they meant easing rather than tightening credit at home, but they also had the effect of frustrating classical pressures for balance-of-payments adjustment and perpetuating U.S. deficits.

2. This domestic sterilization and perpetuation of U.S. deficits continued to feed the expansion abroad of high-powered reserve money, which foreign countries found far more difficult financially and politically to sterilize in their own markets. How could their monetary authorities explain to their government, parliament, and public that drastic cuts in domestic credit were required to counteract the inflationary impact of the credit they extended to the United States—credit which, as de Gaulle repeatedly complained, helped to finance the escalation of the war in Southeast Asia and the take-over of foreign enterprises by American capital?

Nobody could deny that this mechanism played a major enabling role in the unleashing of the world inflation, suspension of the convertibility of the dollar, and the breakdown of the Bretton Woods system, well before the explosion of oil prices at the end of 1973.

In brief, the inflationary financing of nearly all of the huge U.S. ORT deficits by monetary expansion abroad and the sterilization of their primary

deflationary impact at home in no way reduces their significance for national and international monetary management. Much to the contrary!

It is true, of course, that such deficits are not necessarily and uniformly "bad." Analysts have repeatedly pointed out that in the 1950s they helped finance postwar reconstruction and redistribute U.S. excess reserves among reserve-short countries, to the mutual satisfaction of all. In the last two or three years, moreover, they have helped "recycle" OPEC surpluses and preserve essential oil flows, even though this placed upon the United States a disproportionate burden of political responsibility and financial risks that could have been more widely distributed if the international reserve system had been reformed along the lines previously advocated by the Committee of Twenty, after long and exhaustive negotiations.

In the meantime, we can draw some reassurance from the fact that the claims accumulated by some of the OPEC countries (particularly Saudi Arabia, Kuwait, and the United Arab Emirates) are unlikely to decrease substantially for a number of years. This does not mean, however, that these claims should be excluded from the calculation of reserves. There would be as strong a case for excluding German and Japanese reserves, which increased even more and nearly uninterruptedly from insignificant amounts at the end of the war to more than \$50 billion today. Arab funds, moreover, may be switched from one currency to another for political as well as financial reasons, causing monetary management problems for the countries concerned. Comprehensive estimates of U.S. reserve liabilities remain essential to the analysis of current developments, but they should of course be disaggregated between major reserve holders in order to throw as much light as possible on their presumptive stability or volatility.

I agree, therefore, with the dissenting members of the Committee who felt that the ORT balance—or some broader substitute, as I shall suggest below—should be retained as a useful starting point for balance-of-payments analysis and policy advice, and as highly significant for its impact upon the rest of the world as well as upon the United States. The elimination of all "overall balances" may avoid simplistic misinterpretations, but it certainly does not facilitate either analysis or policy.

Personal Suggestions

I would conclude that the detailed "neutral" presentation of Tables 1 and 2 of the Report should at least be supplemented by various summary tables, modified from time to time in the light of changing circumstances

and designed to highlight various problems deemed most relevant to *current* analysis and policies. These tables should be substituted for the present Summary Table A, which merely duplicates the main totals and subtotals of Tables 1 and 2.

Table I below is offered as just one of several analytical summaries that might serve such a purpose. It focuses primarily on the unique role of the dollar in the international monetary system—as the main currency

TABLE I
Summary of U.S. International Transactions: 1970-75
(Billions of dollars)

	Total 1970-75	1970	1971	1972	1973	1974	1975
I. Goods, services and remittances (II + III)	10.3	1.4	-1.9	-7.6	2.0	1.9	14.6
A. Net investment earnings	34.0	3.5	4.7	4.3	5.2	10.2	6.0
B. Other	-23.7	-2.1	-6.6	-11.9	-3.2	-8.4	8.6
II. Net capital flows, other than under III	50.9	4.9	18.6	4.7	5.8	7.9	9.0
A. U.S. capital outflows	84.9	9.7	20.6	10.7	14.7	13.4	15.8
1. Official grants and loans	27.0	3.3	3.9	3.7	4.6	5.1	6.4
2. Private and discrepancy	57.9	6.4	16.7	7.0	10.1	8.3	9.5
B. Foreign capital inflows (-)	-34.0	-4.8	-2.0	-6.1	-8.9	-5.5	-6.8
III. Financial intermediation and settlements (I - II)	-40.6	-3.5	-20.6	-12.3	-3.9	-6.0	5.6
A. U.S. assets	43.4	-1.5	0.6	3.5	5.8	20.9	14.1
1. Reported by banks	46.4	1.0	3.0	3.5	6.0	19.5	13.5
2. Monetary reserves	-3.0	-2.5	-2.3	—	-0.2	1.4	0.6
B. Foreign assets (-)	-84.0	-2.0	-21.2	-15.8	-9.6	-27.0	-8.5
1. Private holdings of	-16.1	6.2	6.9	-4.7	-4.5	-16.7	-3.3
a. Nonbanks	-6.0	-0.1	0.5	-0.9	-0.8	-2.7	-1.9
b. Commercial banks	-5.7	6.4	6.8	-3.7	-3.1	-12.6	0.5
c. International financial institutions	-4.4	0.1	-0.3	-0.1	-0.6	-1.4	-1.9
2. Monetary institutions	-68.0	-8.2	-28.1	-11.0	-5.1	-10.3	-5.2
a. SDR allocations	-2.3	-0.9	-0.7	-0.7	—	—	—
b. Other	-65.7	-7.4	-27.4	-10.3	-5.1	-10.3	-5.2

Notes:

1. Lines III.B.1.a, b, and c are from Table 9 (with reverse sign); all others are from Table 1.
2. Line I.A is the sum of lines 11, 12, 13, 25, 26, and 27 of Table 1.
3. Line II.A.1 is the sum (with reverse sign) of lines 30 and 39 of Table 1; line II.B is the sum (with reverse sign) of lines 55, 59, 61, 62, and 63, lines 60, 64, and 65 being shown on Line III.B.1.
4. Line III.B.2 is taken from line 73 of Table 1, with reverse sign.

Source: *Survey of Current Business*, June and December 1976, Tables 1 and 9 of article on U.S. International Transactions.

used for official interventions in the exchange market, for the accumulation of international working balances by private firms, particularly commercial banks abroad, and for the accumulation of monetary reserves by central banks and other monetary authorities the world over.

All transactions are regrouped under three broad categories only: the balance on goods, services, and remittances (GSR for short, on line I); the balance on financial intermediation and settlements transactions (FIS for short, on line III); and the net balance on all other capital flows (OCF for short, on line II). To provide further aid to most readers:

1. Estimates are shortened to billions of dollars only, with one decimal.
2. Cumulative totals (in column 1) summarize the structure of U.S. transactions over a period of several recent years.
3. Surpluses, increases in assets, and reductions in liabilities are shown without sign; deficits, losses of assets, and increases in liabilities are shown with a *minus* sign. This will be anathema to trained accountants but should be less confusing to other readers than the conventional *Survey* use of minus signs to denote increases in assets and decreases in liabilities. It should also facilitate comparison between balance-of-payments "flow" estimates and the "stock" estimates of the U.S. international investment position presented yearly in the *Survey*.

Line I retains the GSR balance in preference to the other two alternative "partial" balances mentioned below, primarily for the reasons of international comparability emphasized by the Office of Management and Budget on p. 27 of the *Survey* article. The "balance on goods and services" would have the disadvantage of excluding pensions and migrant workers' remittances, which should be regarded as payment for past and current services rather than grouped—as they now are in Tables 1 and 2 of the *Survey*—with foreign-aid grants under the "unilateral transfers" category. The "balance on current account" would have the advantage of reflecting changes in net financial claims on foreigners but the disadvantage of drawing a sharp distinction, more apparent than real, between foreign-aid *grants* and foreign-aid *loans* (see pp. 23-24 of the Report).

Lines I.A and I.B bring out an interesting distinction between our huge and growing earnings on past investments and our net deficits (except in 1975) on other current transactions. Over the five years 1970-74, these net deficits totaled more than \$32 billion, which is certainly an unacceptable performance for the richest and most highly capitalized country in the world today.

Line II records the net total of all capital flows other than the financial intermediation and settlements transactions recorded under line III. It shows them to be far less volatile than generally believed, growing relatively regularly by \$1 billion to \$2 billion yearly, except of course for the bearish speculation of the highly abnormal year 1971. This is particularly true of U.S. capital outflows (line II.A),¹ which have hovered for more than fifteen years at around 1 per cent of GNP, and within a range of from 0.92 per cent to 1.13 per cent in the six years recorded in the table, except again for 1.94 per cent in 1971. Fluctuations in foreign capital inflows (line II.B) are also relatively moderate, except again for their sharp drop (by more than a half) in 1971. These important regularities are lost when these capital flows are merged—as they are in the *Survey* totals—with some of the highly fluctuating intermediation and settlements transactions regrouped here under line III.

“Financial intermediation and settlements” transactions (recorded under line III) regroup with the ORT balance (lines III.A.2 and III.B.2) other private transactions—primarily by banks—reflecting the intermediation role of the dollar in international payments and the accumulation of “working balances” by foreigners.

In spite of dollar inconvertibility, official settlements between monetary authorities continue to be financed overwhelmingly by increases in liabilities² (\$68 billion, or 96 per cent, over the years 1970-75) rather than by losses of reserve assets (\$3 billion, or 4 per cent). End-of-year “stock” estimates—influenced by revaluation adjustments—show a near quadrupling of U.S. reserve liabilities, from \$17 billion at the end of 1969 to \$66.3 billion at the end of 1975, but only an insignificant change in U.S. reserve assets, from \$17 billion to \$16.2 billion.

Foreign claims reported by U.S. banks (line III.A.1) increased sharply from less than \$1 billion a year in 1970 to \$6 billion in 1973, but far more spectacularly still after the explosion of oil prices, to \$19.5 billion in 1974, \$13.5 billion in 1975, and, at an annual rate, \$15.6 billion in the first three quarters of 1976.

Line III.B reproduces numbers recorded in Table 9 of the *Survey*; it is the sum of assets held in the United States by foreign monetary institutions (line III.B.2) and those held by other foreigners in Treasury obligations and claims (mostly deposits) on U.S. banks (line III.B.1). This is

¹ Line II.A includes the “statistical discrepancy,” whose large fluctuations have repeatedly been ascribed by the *Survey* articles to unrecorded exports of U.S. capital.

² These include the “contingent” liabilities arising from SDR allocations, not included by the *Survey* in the ORT balance.

presumably a fair approximation to the use of the dollar as the main instrument for accumulating international reserves and working balances. Nearly two-thirds (64 per cent) of the assets shown on line III.B.1 were held by commercial banks at the end of 1975, 13 per cent by international financial institutions, and 23 per cent by other foreigners. Alternatively, the last might be excluded from line III liabilities, which would confine them to U.S. liabilities to monetary institutions, other international financial institutions, and commercial banks. Huge borrowings from commercial banks abroad far more than account for the temporary ORT surpluses of 1968-69, and later repayments for more than a third of the unprecedentedly huge ORT deficits of the years 1970-71.³

This summary table should, of course, be supplemented by two other closely related sets of information:

1. Bilateral and multilateral exchange-rate fluctuations with the main U.S. trading partners should be reported, along with the parallel evolution of competitive costs and interest rates.

2. Other banking and reserve transactions not included in Table 1 should be reported. These should include not only drawings and repayments under reciprocal credit arrangements, as suggested on page 20 of the Report, but also the major categories of assets and liabilities of foreign branches of U.S. banks. Their liabilities to foreigners have grown spectacularly from \$32 billion in 1969 to \$170 billion last October. Yearly and quarterly balance-of-payments "flow" estimates should usefully be supplemented by a summary table recording the evolution of indirect liabilities—those incurred through foreign branches of U.S. banks—as well as direct liabilities to foreign banks, and particularly to official institutions; and the latter estimates should be compared with the evolution of world foreign-exchange reserves published by the International Monetary Fund.

Table II assembles information of this sort, readily available from Federal Reserve and IMF publications, for the minimum time perspective

³ The Advisory Committee considered recommending such a bank-reported classification, and even combining it with reserve transactions as a broad measure of official actions undertaken through banks in addition to those conducted directly by official agencies. It rejected such an approach because "the present system of collecting data from banks commingles data on banks' transactions for their own account with those conducted for their customers" (p. 22). This seems to me most unconvincing, since banks' transactions—whether undertaken for their own account or for their customers—are all linked with the international role of the dollar in intermediation and settlements, crucially significant to monetary management here and abroad, and worth segregating from the other, far less volatile, capital transactions grouped here under line II.

that seems to me essential to interpret current, yearly, or quarterly developments. Particularly striking are (1) the near quintupling, over the short period of six years, of world foreign-exchange reserves (line IV); (2) the overwhelming share of U.S. liabilities (line IV.A.1) and other identifiable Eurodollar holdings (line IV.A.2) in this enormous rise; (3) the role of foreign branches of U.S. banks (line III.B) in the multiple increase of U.S. liabilities to foreign monetary and banking institutions, and particularly to the latter (line I.B).

TABLE II
Direct and Indirect Liabilities to Commercial Banks
and Foreign Monetary Institutions
and World Foreign-Exchange Reserves: 1969-75
(Billions of dollars)

	End of			1970-75 Increases in	
	1969	1972	1975	\$ Billions	% of Totals
I. Liabilities to commercial banks	32.2	62.6	129.5	97.3	100
A. Direct ^a	8.3	10.2	23.1	14.8	15
B. Of foreign branches of U.S. banks	23.8	52.3	106.4	82.5	85
II. Liabilities to foreign monetary institutions	17.9	69.9	103.5	85.6	100
A. Direct	16.0	61.5	80.7	64.7	76
B. Of foreign branches of U.S. banks	1.9	8.4	22.8	20.9	24
III. Total (I + II)	50.0	132.5	233.0	183.0	100
A. Direct	24.3	71.8	103.8	79.5	43
B. Of foreign branches of U.S. banks	25.7	60.7	129.1	103.4	57
IV. World foreign-exchange reserves	33.0	104.1	161.3	128.3	100
A. U.S. and Eurodollar liabilities	20.9	80.8	128.4	107.5	84
1. Line II above	17.9	69.9	103.5	85.6	67
2. Other identified Eurodollars	3.0	10.9	24.9	21.9	17
B. Other	12.1	23.2	32.9	20.8	16

^a Other than to foreign branches of U.S. banks, to avoid overlap with I.B.

Sources: *Federal Reserve Bulletin* tables on International Capital Transactions for lines I-III. *IMF Annual Report 1976*, Table 15, p. 38 for line IV.

Some disaggregation of these estimates by major areas and holding countries—such as provided in part in Table B, p. 49, of the December 1976 *Survey*—would be highly relevant to the analysis of current and prospective exchange-rate fluctuations of the dollar.

Summary and Conclusions

In brief, I would conclude:

1. The official presentation of balance-of-payments estimates should put as much stress on facilitating their interpretation for analysis and policy as on guarding against preconceptions and misinterpretations. The "neutral" presentation recommended by the Advisory Committee sacrifices too much of the first of these objectives to the second.

2. I welcome the elimination of "partial balances" based on the elusive measurement of the presumptive maturity of assets and liabilities, and particularly of the "basic balance" on current account and long-term capital.

3. The ORT balance should be enlarged, rather than dropped, to encompass the growing role of commercial banks as well as of the monetary authorities in the financing of balance-of-payments disequilibria. Highly volatile "financial intermediation and settlements transactions" should be segregated from other capital transactions that have grown in a far more regular and predictable way over a long period of years (except, for obvious reasons, in 1971).

Switches between the dollar holdings of central banks and commercial banks, initiated here or abroad, have at times played a large role in the U.S. ORT balance, particularly in 1968-69 and in 1970-71. Fluctuations in both are also of vital concern to monetary management here and abroad.

4. Yearly and quarterly "flows" in these monetary and banking accounts—including those of foreign branches of U.S. banks—should be viewed in a broader perspective, recording major long-term trends and changes in "stock" estimates of outstanding assets and liabilities, and relating them to the growth of world reserves. A disaggregation of U.S. monetary and banking liabilities among major holding countries and areas is also essential to the analysis of current and prospective fluctuations in the exchange rates of the dollar.

EDWARD M. BERNSTEIN

Since the Department of Commerce began to publish the balance of payments of the United States in 1923, its presentation has been frequently changed. Until the 1940s, the changes were mainly designed to provide more detailed information and to refine balance-of-payments concepts. After World War II, however, the presentation was revised a number of times to reflect what were regarded as major changes in the pattern of international payments and in the definition of the overall balance, which was intended to be a measure of the payments problem. The most recent change, in June 1976, was made in order to adapt the presentation to the fundamental change in the international monetary system as a result of the widespread floating of exchange rates.

There was nothing wrong with altering the presentation of the balance of payments to facilitate economic analysis or with changing the definition of the overall balance to emphasize what was regarded as the payments problem. The difficulty was that such ad hoc definitions of the surplus or deficit usually survived long after the problem they were assumed to measure had changed. That was why the Review Committee for Balance of Payments Statistics was appointed in 1963 to study the "adequacy of U.S. balance of payments statistics as a measure of the problem and a framework within which to consider policy alternatives." The Report of that Committee in April 1965 recommended a number of changes in the presentation, most notably the use of official reserve transactions as the measure of the overall balance.

In 1976, the Advisory Committee recommended major changes in the presentation of the balance of payments. The data on goods, services, and unilateral transfers continue to be presented in the same form as in the past. The capital accounts, however, were completely recast. They are now presented in two major categories—U.S. assets abroad and foreign assets in the United States. Both private and official capital, including transactions of the monetary authorities, are included in these two categories. Other changes were the elimination of the distinction between liquid and nonliquid assets, although the long-term and short-term classification of claims and liabilities was retained. More detail was added on the composition of foreign assets in the United States. Finally, overall balances were entirely omitted. Instead, memoranda show the balances on merchandise trade, on goods and services, on goods, services

and remittances, and on current account. Changes in U.S. official reserve assets and in the assets of foreign monetary authorities of a reserve character are also shown as memoranda, but without striking a balance.

The main reason for these far-reaching changes in the presentation of the balance of payments was that with a floating dollar no longer convertible into other reserve assets, overall balances do not have the same meaning or the same significance as in the past. The new presentation was intended to show the international transactions in a neutral form, that is, without preconceived views as to how to measure changes in the payments position. As the data are presented in even greater detail than in the past, it is possible to analyze the U.S. balance of payments or measure the U.S. payments position in whatever way one prefers. In fact, the new presentation is an invitation to do it yourself.

Official Reserve Transactions

It will be difficult for some economists, government officials, and businessmen to become accustomed to a presentation of U.S. international transactions without an overall balance, particularly one that stresses official reserve transactions. In one form or another, transactions in U.S. reserve assets and in U.S. liabilities to foreign monetary authorities have been components of the various overall balances that have traditionally been used to measure the payments position of the United States. For most countries, including some with floating exchange rates, changes in their reserves are still one of the more important aspects of their balance of payments. While it cannot be said that reserve transactions have no significance for the United States, they clearly do not have the same importance they had in the past, when the dollar had a fixed parity and foreign official holdings of dollars were convertible into gold and other reserve assets.

Under the Bretton Woods system it could be said that changes in U.S. reserve assets and reserve liabilities were the consequence of the U.S. payments position. In theory, the balance of payments of other countries with each other could not result in a change in the net reserve position of the United States. The dollar payments of deficit countries to surplus countries would not change U.S. reserve liabilities if the surplus countries retained the dollars. And if they converted the dollars into other reserve assets, U.S. reserve liabilities would decline, but that would be matched by a decline in U.S. reserve assets. Any change in the net reserve position was necessarily due to a surplus or deficit in the U.S. balance of payments measured by official reserve transactions. With floating exchange rates,

however, U.S. reserve assets or liabilities can change without the changes being directly related to U.S. international transactions in the ordinary sense.

In fact, the official reserve balance did not quite accomplish what it was intended to do. It did not result in precise symmetry between surpluses and deficits, even allowing for the growth of reserves in the form of gold and SDRs, because some countries held reserves through their own commercial banks or in the Eurodollar market. Nor was it true that the monetary authorities intervened in the exchange market only through official reserve transactions. Some countries entered the money and capital markets as borrowers, either through official agencies or through their commercial banks, with a view to balancing their payments without drawing down their reserves. The practice is more common now, even for high-income countries with fluctuating exchange rates. To the extent that the funds are borrowed in the United States or from foreign branches of U.S. banks that derive much of their funds from this country, the U.S. balance on official reserve transactions is the result not only of the U.S. payments position but also of that of other countries.

This is apparent in an analysis of the causes of changes in U.S. reserve assets and liabilities under the present exchange system. As the dollar is not convertible into other reserve assets, it would seem that there should be little change in U.S. reserve assets. Actually, U.S. reserves increased by about \$4.3 billion from the end of 1973 to the end of 1976. Virtually all of the increase was in the U.S. reserve position in the IMF and reflected net drawings of dollars by other members. Holdings of SDRs rose slightly as SDRs were used to purchase dollars from the United States. Holdings of foreign-exchange reserves fluctuated moderately during this period with little net change. Some of the dollars acquired from the increase in U.S. reserve assets were used to make payments to the United States. Some of the dollars may have been used in payments to other countries that added them to their reserves, so that U.S. reserve liabilities increased by a corresponding amount. Some of the dollars, however, were used to make payments to countries with floating currencies and were sold in the exchange market. To this extent, the increase in U.S. reserve assets reflected the payments positions of other countries rather than of the United States.

Over the same three years, U.S. liabilities included in the reserves of foreign monetary authorities increased by \$24.9 billion, nearly all to the oil-exporting countries. Changes in the dollar reserves of countries whose currencies are linked to the dollar are the result of their payments posi-

tions with the United States and with nondollar countries. When they have an overall surplus as a group, they build up their dollar reserves. To the extent that this surplus is with the United States, the increase in U.S. reserve liabilities reflects the payments position of this country with them. To the extent that it is with nondollar countries, the increase in U.S. reserve liabilities reflects the payments positions of other countries. Similarly, if U.S. reserve liabilities are decreased because of payments of other dollar countries to the United States, it is the result of the U.S. payments position with them. If the payments are to nondollar countries, however, the decline in U.S. reserve liabilities will be unrelated to the international transactions of the United States.

The operation of the European joint float (the snake) may also result in a reduction in U.S. reserve liabilities only indirectly related to the payments position of the United States. Under these arrangements, the exchange rates for the snake currencies are maintained within $2\frac{1}{4}$ per cent of their cross-rate parities. If one of these currencies falls to the bottom of the range, the monetary authorities of that country are required to support it. The support may take the form of the sale of dollars out of reserves. As there is no obligation on the part of the country whose currency is at the top of the range to intervene by buying dollars, the result will be a reduction in U.S. reserve liabilities. The use of dollar reserves to support a snake currency may have been due to payments to the United States, but it is more likely to be due to payments to other countries, particularly payments to other snake countries. To that extent, the reduction in U.S. reserve liabilities does not reflect the U.S. payments position, except as it is regarded as an outflow of capital.

A somewhat different problem is presented by the increase in U.S. liabilities to the oil-exporting countries. The United States and other oil-importing countries have large current-account deficits with these countries that have enabled the oil-exporting countries to build up their dollar reserves and other assets in the United States. The assets they acquire in this country may exceed or fall short of the current-account deficit of the United States with them. To the extent that they exceed the U.S. deficit with them, the resulting increase in their assets is the consequence of their transactions with other countries rather than with the United States. In fact, the U.S. money and capital markets may be financing part of these deficits by making loans to other oil-importing countries. The problem is further complicated by the highly arbitrary distinction between the dollar reserves and other assets of the oil-exporting countries. Even the dollar reserves of some of these countries are not true reserves

in that they are unlikely to be drawn down in the foreseeable future. In such a case, the increase in U.S. reserve liabilities is clearly a capital inflow.

While the new presentation of the balance of payments shows in the memoranda the changes in U.S. reserve assets and in liabilities of a reserve character, it does not strike a balance on official reserve transactions. The justification is that such transactions may have little to do with the U.S. payments position. Instead, reserve transactions are included in capital flows, because they have the same effect on exchange rates as other capital flows or current transactions. This results in the anomaly that an increase in U.S. reserve assets and a decrease in U.S. reserve liabilities, which in the past indicated an overall surplus, now contributes to a weakening of the dollar in the exchange market, regarded by some economists as an indication of deterioration in the U.S. payments position. One could learn to accept this if there were other reasons for regarding changes in dollar exchange rates as a measure of the U.S. payments position.

Exchange Rates and the Balance of Payments

The concept of a change in the exchange rate for the dollar is not a simple one, as there are many such rates, one for each currency for which dollars are bought and sold. The exchange rate for the dollar in each currency is determined by the supply of and demand for dollars in terms of that currency, including official intervention in supply and demand. The view that all these exchange rates can somehow be combined to measure an average depreciation or appreciation of the dollar is unwarranted. Even if a meaningful average could be determined, it would not mean that a change in such an average would be a measure of the change in the U.S. payments position.

Consider the U.S. balance of payments in 1974, 1975, and 1976 and its possible relation to the change in dollar exchange rates. The trade-weighted average of the exchange rates for the dollar in terms of the forty-six main trading partners of the United States did not change in 1974 (end of year to end of year), appreciated by 5.0 per cent in 1975, and appreciated by 3.4 per cent in 1976. In these same years, the trade balance shifted from a deficit of \$5.4 billion in 1974 to a surplus of \$9.0 billion in 1975 and a deficit of \$9.2 billion in 1976. If a trade-weighted average of the dollar exchange rates is taken for the currencies of the twenty-two other OECD countries, the dollar depreciated by 1.4 per cent

in 1974, appreciated by 5.1 per cent in 1975, and appreciated by 0.6 per cent in 1976. The service accounts, including investment income, showed an increase in receipts relative to payments in these years, so that the shift in the balance on current account was somewhat smaller, but still quite large. This is not a correlation that would justify the use of a change in the average appreciation or depreciation of the dollar as a measure of the change in the U.S. payments position.

One answer is that there was an offsetting shift in the capital accounts and that they also reflect the U.S. payments position. In the foreign-exchange market, capital flows, including official funds, have precisely the same effect on exchange rates as imports and exports of goods and services. There is no reason, therefore, for calculating the average change in the exchange rate for the dollar by weighting the rate for each currency by the bilateral trade of that country with the United States. The implication of such an average seems to be that the exchange rate for each currency is closely related to the bilateral trade with the United States, and a change in the dollar exchange rate is either a cause or a consequence of such trade. In fact, the United States is in competition for trade with Germany, Japan, and other industrial countries in all of the markets of the world, and such global trade affects the exchange rate for the dollar in terms of these currencies in the same way as the bilateral trade of these countries. The *Federal Reserve Bulletin* publishes an average of the exchange rates for the dollar weighted by the global trade of the Group of Ten and Switzerland. That is an improvement, but it does not allow for the effect of capital flows on the dollar exchange rates of the currencies of other financial centers.

More important, exchange rates by themselves are not necessarily the cause or consequence of a change in the U.S. payments position. Suppose, for example, that the dollar falls in terms of the D-mark because of a rise in U.S. prices and costs relative to those in Germany. If the depreciation occurs at a fairly regular rate and matches the change in relative prices and costs, there may be no change in the pattern of trade between the United States and Germany or in the trade of either country with the rest of the world arising from a change in their competitive position. Similarly, suppose that the dollar appreciates against sterling because of a rise in British prices and costs relative to those in the United States that matches the change in the exchange rate. That should of itself have little if any effect on U.S. trade with the United Kingdom or the competitive position of the two countries in trade with third countries.

In both cases, a change in exchange rates would have occurred that was not caused by the trade balance and had little effect on it.

Much the same analysis can be applied to capital flows. Suppose, for example, that money-market rates in the United States exceed those in Germany by the differential rate of inflation and by the expected depreciation of the dollar in terms of the D-mark. Capital flows between them would then be directed toward maintaining this differential in interest rates. If, under these conditions, the differential rate of inflation and the expected depreciation of the dollar relative to the D-mark were to change without a corresponding change in money-market rates, capital flows would be generated that would cause the exchange rate to move from the previous path and that would alter the structure of the balance of payments. But if interest rates were changed to match the change in the differential rate of inflation and the expected depreciation of the dollar, the capital flows would continue in their previous pattern. The dollar would then depreciate at a higher or lower rate without a change in the structure of the balance of payments.

This does not mean that changes in exchange rates cannot be the result of changes in the structure of the balance of payments. Under a system of fluctuating exchange rates, the international transactions of a country are in continuous balance, and that balance is maintained by the exchange market—in the short run through any necessary changes in capital flows, including official transactions, and with a lag through changes in the current account. If for some reason, such as a trend in reciprocal demand or the relative cyclical position, there were a change in the current account, the exchange rate would change to induce an offsetting capital inflow. Or if there were an autonomous change in some type of capital flow, the exchange rate would change to induce an equivalent and offsetting flow in some other type of capital. Such changes in exchange rates resulting from a change in the structure of the balance of payments, apart from those caused by differential rates of inflation, would be gradual and would reflect changes in the payments position.

When exchange-rate fluctuations are larger than those that would result from differential rates of inflation and autonomous changes in the structure of the balance of payments, it is because of speculation—that is, a change in the currency composition of assets and liabilities in anticipation of a change in exchange rates. The speculation may be against a currency that has been supported at too high a rate by intervention and may be helpful in establishing an exchange rate that is more ap-

appropriate to underlying economic conditions. The speculation may also be against a currency whose exchange rates are properly related to prices and costs and rates of interest and profits. It may be touched off by a decline in the trade balance, by a change in interest rates, or by a more-than-expected rise in prices and costs. The adjustment in exchange rates called for by such a change would be moderate. Once exchange rates begin to rise or fall, however, the fluctuations can become quite large. Each rise or fall can generate expectations of a further change until either the monetary authorities intervene to slow or halt the change or speculators recognize that the rate has reached a level where the risk of a reversal has become too great. In the meantime, the speculation will call forth offsetting capital flows, but only in response to relatively large changes in exchange rates.

Such large fluctuations in exchange rates of a speculative character will affect the structure of the balance of payments, although the effect may not be great because it is usually reversed in a relatively short time. They do indicate the difficulty of regarding changes in exchange rates as a measure of a change in the payments position. To a limited extent, changes in exchange rates can be an indication of a change in a country's payments position, but only if the exchange rates are first adjusted for changes in relative prices and costs and allowance is made for changes resulting from speculative capital flows.

Structure of the Balance of Payments

If the payments position of a country with a floating currency cannot be measured by the balance on official exchange transactions or by changes in exchange rates, how can it be measured? One answer is that there is no single precise measure of the payments position of a country like the United States, with its large and varied transactions on current account and its enormous capital inflow and outflow. An analysis of the balance of payments will show whether the structure is suited to the economy of the country; if the payments position must be measured, it should be by the departure of the balance of payments from an appropriate structure. Even then, it would be necessary to consider how the country's international transactions fit into a reasonably well-balanced pattern of payments for the world as a whole.

The structure of the balance of payments suited to a country is precisely the same with fluctuating exchange rates as with appropriate fixed parities. A country's trade in goods and services should be determined

by comparative costs, and its capital flows should be the result of relative rates of interest and profits. A country like the United States, in which savings tend to exceed domestic investment at a high level of output, should ordinarily have a surplus on current account and an equivalent net outflow of capital. With an appropriate parity, the international transactions of a country, excluding official reserve transactions, should be in approximate balance over a typical business cycle. Temporary departures from such a balance would be expected to be due mainly to differences in cyclical conditions at home and abroad. With fluctuating exchange rates, the international transactions of a country will be in continuous balance, including official transactions in capital flows. If exchange rates fluctuated only in response to differences in relative prices and costs and in rates of interest and profits, the structure of the balance of payments would tend to be suitable to the economy of a country, probably with somewhat less change in response to cyclical conditions at home and abroad.

The analysis of the payments position should therefore be directed initially to the change that has occurred in the structure of a country's balance of payments. The U.S. surplus on goods and services rose from \$3.6 billion in 1974 to \$16.3 billion in 1975 and then fell to \$4.4 billion in 1976. These large fluctuations obviously were of great importance to the U.S. economy. For convenience, their effect can be measured by the impact on output of the change of net exports of goods and services in the national accounts. Although there are conceptual differences between net exports in those accounts and the surplus on goods and services in the balance-of-payments accounts, they are not of great significance for this purpose, because the year-to-year changes were much the same over the past two years. In current dollars, net exports in the GNP accounts rose by \$13.0 billion in 1975 and fell by \$13.9 billion in 1976; in the balance-of-payments accounts, the surplus on goods and services rose by \$12.7 billion in 1975 and fell by \$11.9 billion in 1976.

The effect of the change in net exports on the growth of output is shown by the difference between the increase in the GNP and the increase in domestic demand (the GNP minus net exports of goods and services). In 1975, the GNP in current dollars increased by 7.3 per cent, while domestic demand increased by 6.4 per cent; in 1972 dollars, the GNP fell by 1.8 per cent and domestic demand fell by 2.8 per cent. The difference represents the extent to which the increase in net exports moderated the fall in real output. In 1976, however, the GNP in current dollars increased by 11.6 percent, while domestic demand increased by 12.6 per cent; in

1972 dollars, the GNP increased by 6.1 per cent and domestic demand increased by 6.8 per cent. Thus, the decline in net exports had a restraining effect on the growth of real output in 1976—by 0.7 per cent in 1972 dollars (see the accompanying table). The effect on real output would be even greater if measured in 1974 dollars, as the use of 1972 prices to weight the volume of exports and imports of goods and services in the GNP makes inadequate allowance for the sharp rise in import prices relative to export prices after 1972.

Gross National Product and Domestic Demand, 1974-76

	Billions of 1972 Dollars			Per Cent Change from Prior Year	
	1974	1975	1976	1975	1976
1. Gross national product	1,214.0	1,191.7	1,264.7	-1.8	6.1
2. Net exports of goods and services	16.5	22.6	16.0	—	—
3. Domestic demand (1 - 2)	1,197.5	1,169.1	1,248.7	-2.8	6.8

Because it affects the level of output, the balance on goods and services is a measure of the payments position of the United States. The change in the balance on current account was not much different (although one may question whether year-to-year changes in U.S. government grants constitute a change in the payments position). The change in either balance is thus a more meaningful measure of what happened to the U.S. payments position in 1976 than the change in the weighted average of exchange rates for the dollar, which appreciated slightly, or the deficit on official reserve transactions, which increased from \$4.6 billion to \$11.4 billion last year.

In suggesting that the balance on goods and services is a measure of the U.S. payments position, I do not intend to imply that the composition of receipts and payments for goods and services is not important. Even within the trade balance, it is significant how much of the increase in exports and imports was in primary products, which may fluctuate for cyclical reasons, and how much in manufactured products, which are more affected by other factors. Similarly, the changes in receipts and payments of investment income and of other services may indicate significant trends. These are questions better suited to an analysis of the long-run payments position than to the measurement of year-to-year changes. Much the same can be said of the capital accounts. The net inflow or outflow of capital, including official funds, is not an independent

measure of the payments position, as it must equal and offset the balance on current account. The magnitude and the composition of U.S. and foreign capital flows are important, however, because they may show the extent to which capital flows were determined by underlying economic factors or were induced by other factors, such as the payments position of the United States and other countries or anticipations of changes in exchange rates. These are all problems more suitable for analysis than for measurement.

One can be more positive about how to measure the change in the U.S. payments position than about how the U.S. balance of payments fits into an appropriate world pattern of payments. The changes that occur in a country's payments position may facilitate an adjustment to a better-balanced pattern of world payments or they may intensify the distortions that already exist. Such a judgment regarding the U.S. balance of payments is especially difficult to make under present conditions because of the enormous current-account surplus of the oil-exporting countries, which must be matched by the current-account deficits of all other countries. Under these circumstances, other countries will have to have a smaller surplus or a larger deficit on current account than they customarily had in the past. In a paper published in January 1974, I stated the problem in these terms:

The most constructive way to deal with the increase in payments for imported oil is for all countries to share equitably in the aggregate deficit with the oil-exporting countries. The concept of equitable sharing would mean that each country would somehow achieve a balance with the rest of the world, excluding the oil-exporting countries, that would be suitable to its payments position in the long run after the payments with the oil-exporting countries are balanced.

Even without trying to determine how much of the surplus of the oil-exporting countries should be borne by each large trading country, it can be said that the current-account surplus of the United States was too large in 1975. The shift last year, therefore, was broadly in the right direction, although probably too large and not entirely with the right countries. The increase in the U.S. trade deficit by \$7.0 billion with OPEC and by \$3.6 billion with Japan did not help restore a manageable pattern of world payments. Finally, the establishment of a better-balanced pattern of world payments is not a task for one country. Even under present conditions, the United States should be a contributor of real resources for foreign investment instead of running a deficit on current account.

Nor does the U.S. deficit fit into the concept of equitable sharing of the aggregate deficit with the oil-exporting countries when the next two largest trading countries have a sizable surplus on current account.

In spite of my emphasis on the balance on goods and services (or the current account), I do not intend to suggest here that it is the only measure of the payments position of the United States. What is needed now is much more analysis of the U.S. balance of payments and how it fits into the world pattern of payments under present conditions and with fluctuating exchange rates. Such analysis may indicate better ways of measuring the U.S. payments position. Very likely it will show that no single figure can measure the payments position of this country.

WALTHER LEDERER

The report of the Advisory Committee issued in June 1976 recommended that the Department of Commerce refrain from the use of overall balances in the publication and analysis of the international accounts of the United States. This recommendation was based on the finding that the overall balances, which were designed to focus attention on the obligatory exchange-market actions undertaken by the official agencies of the United States and other countries to maintain fixed exchange rates between the U.S. dollar and other currencies, lost their analytical function when this obligation was terminated. The absence of overall balances raised questions, however, concerning the significance of the statistics for the international accounts. How should they be used by officials who have to formulate and execute the country's economic policies and by private businesses that have to adjust their plans on the basis of anticipations of conditions and developments that may affect their costs, sales, and profits?

In the following paragraphs I attempt to show that, far from being reduced, the analytical value of the data on international transactions has been strongly enhanced by discontinuing their limited use to explain changes in official reserves. I suggest how the data can be used to explain the effects of the transactions on exchange rates and to sketch the many opportunities to analyze the impacts of international transactions on the domestic economy, which are considerably broader than is usually assumed.

General Considerations

Authorities of countries obliged to maintain the exchange rate of their currency within specified margins around fixed par values had to close gaps between the amounts of their currency offered to be purchased and the amounts offered to be sold at exchange rates within the permissible margins. They did so by purchasing or selling their currency in exchange for internationally acceptable monetary assets. To this end, they held such assets as reserves and attempted to supplement these reserves with borrowing facilities. Under such conditions, the focus of the analysis of the international accounts was centered on the changes during the period under review in the countries' reserves and in outstanding debts owed

(or guaranteed) by official agencies. Consequently, the balance of payments was defined as the balance on all other transactions—the balance that was offset (or “settled”) by the sales or purchases of internationally acceptable monetary assets. The analysis of the other transactions dealt mainly with their influence on the changes in the country’s net reserve position, asking in particular whether changes (or the absence of changes) in the net reserve position were due to temporary and self-reversing circumstances or reflected more deep-seated problems in the relationship between the economies of that and other countries.

While the changes in net reserve position may have been the usual concern of the analysis of international transactions under a fixed-exchange-rate regime, broader interest was focused on the consequences expected to result from an exhaustion of reserves and available borrowing facilities or, alternatively, from a build-up of reserves beyond reasonable estimates of future requirements.

A country that exhausts its reserve assets and its available borrowing facilities is not able to prevent a decline in its exchange rate and is exposed to the risk of rising prices for its imports and thus of rising prices in its entire economy. With a lower exchange rate, a country must increase the volume of its exports in order to acquire the same amount of imports, and thus at any given level of output will have a lower standard of living than before. It may also find it more difficult to borrow abroad, even over relatively short periods. A lack of reserves and borrowing facilities is likely to create difficulties in bridging timing differences between the country’s receipts and expenditures of foreign exchange, adding to uncertainties and risks in its domestic business operations. In the case of the United States, there was the additional concern that an exhaustion of reserves and the continuing excess of dollars offered for sale in the exchange markets over the amounts required by foreign countries would undermine the use of the dollar as an international reserve asset and medium of exchange and thus jeopardize the international monetary system.

An excessive build-up of reserves could increase a country’s domestic money supply, which could result in a rise in its price level or a sacrifice of opportunities to obtain more imports and higher real incomes or more remunerative investments abroad. However, if the build-up could not be sustained, the exchange rate would rise and the competitive position of the country would weaken.

In the absence of contractual obligations to keep the exchange rate of a currency stable relative to a par value and, indirectly, to other major

currencies, the concern underlying the analysis of the international accounts is not basically different. But instead of focusing primarily on changes in reserves, and only indirectly on the consequences of such changes, the interest in the international accounts is more directly related to effects on the exchange rates and on the domestic economy.

The Analysis of the Effects of the International Accounts on Changes in Exchange Rates

When gaps open up between the amounts of a currency offered to be sold and purchased at existing exchange rates, they induce changes in exchange-rate quotations. The gaps are closed when, in response to these changes, the amounts offered on both sides of the market are adjusted toward each other until they are equalized. The statistics for international transactions reflect the transactions *ex post*, that is, after the adjustments have been made. There can be no statistical information on intended transactions at exchange rates quoted in the previous period, and consequently it is not possible to measure the *ex ante* gaps that caused the shifts in the exchange rates during the period. Ideally, it should be possible to construct an econometric model that would provide estimates of international transactions under the assumption that exchange rates had remained unchanged and thereby provide estimates of the *ex ante* gaps. Except under unusual circumstances, however, the margins of uncertainty in such estimates are likely to be much larger than the computed *ex ante* gaps themselves.

A major complication in the analysis is that the exchange rate of the dollar is affected not only by transactions between U.S. and foreign residents but also by transactions that result in transfers of dollars among foreigners, who may have different preferences for holding dollar assets. Nevertheless, it may be worthwhile to examine the extent to which changes in the exchange rates of the dollar can be associated with the transactions recorded in the international accounts of the United States.

As a start, it is helpful to arrange the statistical data on U.S. international transactions in two columns. Column 1 would include those categories which showed an increase in the amounts of dollars offered to be sold (an increase in debits) or a decrease in the amounts of dollars offered to be purchased (a decrease in credits) and thus contributed to downward pressure on the exchange rate. Column 2 would include the categories which showed the opposite changes, a decrease in the amounts of dollars offered to be sold or an increase in the amounts of dollars

offered to be purchased, and thus contributed to upward pressure on the exchange rate. *Ex ante*, these pressures are rarely equal. The statistics, however, indicate transactions that occurred after these upward and downward pressures on the exchange rate were equalized by adjustments reflecting responses to changes in the exchange rates or to official actions. The totals of the two columns, including the changes in the statistical discrepancy, therefore have to be equal.

In both columns, transactions that are more likely to respond quickly to changes in exchange rates can be separated from those that require more time before changes appear in the statistical data. The former are likely to consist of capital transactions involving acquisitions and sales of dollars by foreigners or foreign currencies by U.S. residents in anticipation of future payments or receipts. These acquisitions or sales may be related to transactions in merchandise trade, services, or investments in real assets but may take place as soon as contracts or business plans are firmed up in order to minimize the risks to profits arising from exchange-rate variations. Acquisitions and sales of financial assets can be increased and reduced in response to the anticipated effects on these underlying transactions of the changes in the exchange rates quoted in the market, and decisions to change these financial transactions can be the major factor that closes the *ex ante* gaps. These capital transactions will involve changes in U.S. claims to the extent that foreign residents borrow or repay dollars by means of previously established credit lines and U.S. residents acquire or sell assets denominated in foreign currencies. They will involve changes in U.S. liabilities to the extent that foreign residents draw on or add to their assets in the United States and U.S. residents obtain or repay foreign-currency loans. Such transactions can be conducted by U.S. and foreign official organizations as well as by private banks and nonbank enterprises.

Most of the foreign transactions of U.S. business enterprises and most of their foreign claims and liabilities are denominated in U.S. dollars. This would suggest that, except when there are major disturbances in the foreign-exchange markets and dollars offered to be sold substantially exceed dollars offered to be purchased, the private transactions that close *ex ante* gaps are conducted by foreign residents attempting to acquire dollars to meet future obligations or to sell dollars they hold or expect to receive as payment on their claims. Official agencies of the United States purchase and sell foreign-currency assets in the exchange markets, but the amounts involved are much smaller than the purchases and sales of dollar assets by foreign official agencies.

There is no problem in arranging the data for current-account transactions in the two columns, one showing changes from the preceding period that added to the amounts of dollars sold (increases in debits) or reduced the amounts of dollars purchased (decreases in credits), and the other showing changes in the opposite direction. It is more difficult, however, to separate the data for capital transactions into these two columns. In some cases, such as trading in long-term securities, purchases and sales are closely related, so that it is more meaningful to use data on changes in net purchases (or sales) but to separate bonds from stocks. Likewise, it is not possible to obtain data on gross flows for transactions reported by banks or transactions reported by nonbank enterprises with nonaffiliated foreigners and (through intercompany accounts) with their foreign affiliates. One has to work with data on net flows derived from changes in the amounts of claims or liabilities outstanding at the ends of months or quarters. Even if it were possible to obtain data from banks on new loans and loan repayments or on new deposits and withdrawals, such data might not help in this analysis; bank loans and repayments reflect to a large extent renewals of revolving credits, which are frequently merely a formality, and deposit turnover reflects receipts and payments arising from other transactions, including transactions among foreigners themselves. Data derived from such gross flow figures would contribute less to an understanding of pressures in the exchange market than data reflecting decisions to increase or reduce outstanding U.S. assets abroad and foreign assets in the United States.

What I suggest then for such an analysis is largely a regrouping of the data that are currently published. Some additional data would be helpful and some would be necessary. It would be helpful if the data for direct-investment transactions reflected by changes in intercompany accounts, particularly their short-term components, were shown in the proposed tabulation separately from transactions in equity interests and long-term fixed-interest securities. It would be even more helpful if changes in intercompany accounts that represent conversions into equity interests or other long-term securities were separated from all other direct-investment transactions. If that could be done, the capital flows reported in the intercompany accounts would be more comparable to other short-term capital transactions reported by nonbank enterprises.

Equally important would be a separation of changes in liabilities to foreign official agencies to distinguish between countries that reduced their dollar holdings and countries that accumulated dollar assets.

In the absence of requirements that official agencies maintain the ex-

change rates of their currencies within specified margins around fixed par values, purchases or sales of dollars by foreign official agencies to support their own currencies can change the exchange rates of the dollar relative to currencies of other countries. Transactions in dollars by foreign official agencies add to either the amounts of dollars offered to be sold or the amounts offered to be purchased in the exchange market and have precisely the same effect on changes in the dollar exchange rate as transactions between private U.S. and foreign residents. They can, in principle, contribute either to opening or closing *ex ante* gaps.

The same applies to transactions by official agencies of the United States. Foreign countries may increase their dollar expenditures when they obtain dollars from the IMF or through swap operations with U.S. official agencies. In both instances, U.S. reserves increase, but when as a result of foreign expenditures the amounts of dollars offered to be sold exceed the amounts offered to be purchased, the exchange rate of the dollar can weaken against the currencies of other countries. Dollar transfers to other countries, whether from the IMF (and indirectly from the United States) or directly from the U.S. authorities, represent loans to other countries and are debit transactions like other government loans. In the case of swap transactions, they are short-term loans, usually with a maturity of less than six months. The analysis of the relationship between these transactions and changes in exchange rates would be easier if at least the major net transfers of dollars were shown separately by country.

If the U.S. authorities borrow foreign-currency assets either from the IMF or through swap transactions with the authorities of foreign countries, U.S. reserves of foreign-currency assets are increased initially. These transactions by themselves have no effect on the exchange market. If the U.S. authorities use the foreign-currency assets to purchase dollars in the exchange market, the exchange rate of the dollar is strengthened. If the borrowing and use of the foreign currencies occur within a single accounting period, column 2 would show the increase in the inflow of funds through borrowing (increase in credits), and column 1 would show the increase in the outflow of funds as foreign holdings of dollars or increases in such holdings are reduced (decrease in credits). As in the case of dollar transfers to foreign countries, the analysis would be easier if net borrowing were shown separately for each of the foreign currencies obtained or repaid.

When the exchange rates of the dollar are declining against the major foreign currencies, it must be assumed that, *ex ante*, the sum of the data in column 1 (categories that contributed to downward pressure on the

exchange rate) exceeded the sum of the data in column 2 (categories that contributed to upward pressure on the exchange rate). The adjustments of the transactions resulting from the decline in the exchange rate can show up as either a decline in the changes included in column 1 or an increase in the changes included in column 2. The adjustments will probably be in both columns, but the adjustments in column 2 will be more easily identified if they affect those private capital transactions that can respond quickly to changes in exchange rates. If official exchange-market transactions are undertaken to prevent or reduce a change in the exchange rates, they are also most likely to show up in column 2. If official agencies adopt other measures, such as those which raise or lower pressures in credit markets, it is more likely that the totals in column 1 would be reduced.

These perhaps oversimplified procedures may provide the initial approach to analyzing the relationship between changes in the exchange rates of the dollar and international transactions of the United States. Subsequently, the analyst would have to attempt to relate major changes in the less flexible transactions to cyclical and longer-run economic and other developments, both in the United States and abroad, and determine whether and to what extent the changes are relatively temporary and reversible. In the case of the more flexible capital transactions, particularly those which may have helped to close the *ex ante* gaps, it would be important to decide whether such transactions were likely to continue in the following accounting periods.

Although this type of analysis may not satisfy those who are looking for precise numbers to provide a "bottom line" for the international accounts, it can indicate the direction in which our economic relationships with other major countries have moved and provide some basis for identifying the underlying trends.

The Analysis of the Effects of International Transactions on the Domestic Economy

The incentives to analyze the effects of international transactions on the domestic economy are minimized by the way the international transactions are usually shown in the GNP tables. Their impact on GNP is measured by the size of, and the changes in, net exports of goods and services, including incomes on investments other than interest payments on government securities. This difference in the treatment of interest payments on foreign holdings of claims against banks and other private

enterprises and interest payments on foreign holdings of government securities means that the estimate of GNP would change when foreigners shifted their investments in the United States between private and government obligations. But even ignoring this problem, there are several major questions about the suitability of the net export figure as a basis for analysis.

1. Is the balance of exports and imports of goods and services the proper analytical concept for measuring the influence of international transactions on the domestic economy, or should exports and imports be considered separately? And should exports and imports be considered merely as aggregates or is more detail needed to analyze their respective impacts?

2. Should the impact of international transactions on the economy be analyzed only on the basis of transactions in goods and services, or is it more appropriate to evaluate the effects of all transactions by taking into consideration whether and how much they change the domestic money supply?

3. What is the impact on domestic prices and production of exchange-rate changes and, more generally, of changes in the prices paid for imports and obtained for exports?

4. What are the effects of international capital movements on the supply of funds available for domestic investments? This question applies not only to aggregate net capital flows but also to the various categories of capital transactions that may affect specific capital markets and thus the choice among real investments. It leads to further questions about the effect of international capital flows on cyclical developments and about their contribution to the expansion of productive facilities and thus to the long-term growth of the economy.

The direct impact on GNP

International transactions are included in the computations of GNP through the item "net purchases of goods and services by foreign residents." This is consistent with the accounting concept underlying the GNP measure, which is estimated by adding net purchases by consumers, business, governments, and foreigners. Nevertheless, this concept is quite inadequate and misleading as a basis for evaluating the importance of international transactions to the economy.

An example may illustrate the issue. Suppose the production of goods by Iceland consists entirely of catching fish. Suppose the fish are sold

abroad by the fishermen, who use the proceeds from the sales immediately to purchase goods abroad that they then carry back to their home country. The GNP of Iceland, if it is computed and published as in the United States, would always show net exports of zero, no matter how large or small the catch was or how much it was sold for. A rise in expenditures facilitated by higher proceeds from the sale of fish would show up as a rise in either consumer expenditures (to the extent that consumer goods were purchased abroad) or business expenditures (to the extent that capital goods were purchased). The estimate of GNP as a whole would be correct, but the rise in expenditures would be attributed to a spontaneous increase in either consumer expenditures or business investments, but not to the international transactions.

Changes in foreign purchases of domestic products can be as dynamic a factor for the domestic economy as changes in purchases by the various domestic sectors. In fact, exports of goods and services now account for about 10 per cent of the U.S. GNP, considerably more than purchases by the federal government and about as much as private non-residential fixed investment in structures and durable equipment. Some imported goods are needed to produce these exports, but the bulk of the imports is absorbed by purchasers of consumer goods or investment goods, and to some extent also by purchasers of services (e.g., fuels, which are included in the prices paid for transportation and housing). Since it may not be possible to deduct imports from each of these groups of purchases, it would be preferable to rearrange the GNP tables to show purchases by foreigners together with purchases by consumers, businesses, and governments, and then to deduct imports from the sum of these purchases. This procedure would also disclose better than the currently used tabulations the independent impacts of changes in imports, particularly when they grow at a different pace or change in a different direction than the total of gross purchases.

Even such a separation of export and import data in the GNP tabulations can give only a superficial impression of their impact on the economy. Obviously, it makes a difference whether changes in exports are concentrated in relatively abundant or scarce commodities. Likewise, it makes a difference whether changes in imports are concentrated in raw materials or other commodities required in domestic production and not available in sufficient volume from domestic sources at current prices or in products that are sold by competing domestic and foreign producers.

The impact on the money supply and the indirect impact on GNP

Perhaps the term "balance of payments" has stimulated the concept that international transactions are associated with movements of money, and that an imbalance in such movements causes the money stock available to domestic residents to rise or fall. A rise is often considered a favorable development, a fall an unfavorable development. The concept was originally based on the assumption that the same monetary medium is used in domestic and international transactions, but it was later extended by assuming that there is a close link between movements of the international monetary medium and of the domestic money supply. In either case, the link between the balance on international "payments" and the supply of money available to domestic residents was seen to be significant because of the influence of the domestic money supply on domestic business activity and incomes.

The concept that domestic business activity or GNP is related to the balance of international money flows or its counterpart, the balance on all international transactions other than net transfers of monetary assets, is much broader than the concept that only the balance on transactions in goods and services can influence GNP. Other international transactions, mainly transfers of capital, are accepted as having as much influence on GNP as direct purchases or sales of goods and services. The influence would be more indirect but could nevertheless affect any of the sectors of the economy—consumer expenditures, investments, government expenditures, and exports and imports of goods and services.

In the United States, international transactions can affect the domestic money supply only to the extent that they affect the reserves that the banking system holds with the Federal Reserve banks. These reserves can be affected only through changes in the Federal Reserve banks' own assets and liabilities. International transactions that have these effects consist of foreign official deposits in the Federal Reserve banks and changes in the Federal Reserve banks' foreign-currency assets and liabilities arising through swap operations with foreign central banks. These transactions were very small and subject only to short-term oscillations even when the exchange rate of the dollar was fixed, and they could easily be offset by open-market operations of the Federal Reserve System. Other official reserve transactions of the United States, particularly changes in the U.S. position in the IMF, are routed through Treasury accounts and thus become part of the large amount of Treasury transactions that determine the aggregate of Treasury obligations sold to the

public. Foreign official holdings of monetary dollar assets are almost entirely invested in Treasury or banking obligations and thus do not affect the reserves of the private banking system. These facts have not changed since the termination of the obligation to support the exchange rate of the dollar. Thus it would appear that there is little or no relationship between official reserve transactions and the domestic money supply, and that the impact of international transactions on the nominal size of GNP is close to zero.

There is a question, however, as to whether the impact of international transactions on the domestic economy can be judged on the basis of their near-zero impact on bank reserves. International transactions include bank lending to foreigners and repayments of previous loans and thus can have a direct influence on the money supply. Although, at any given level of bank reserves, changes in net foreign lending may be offset by opposite changes in domestic lending and investments, banks have some flexibility in the utilization of their reserves. Furthermore, at any given level of bank assets in the form of loans and investments, there is some flexibility in the relationship between the GNP and the size of the demand deposits created by bank loans and investments. Experience shows that the income or GNP velocity of circulation of money can change. The question arises, therefore, as to whether or under what circumstances international transactions can contribute to such changes. This question cannot be answered here, but, as an example, a rise in net capital inflows when domestic savings are ample to meet the requirements of potential investors may have a different influence on the velocity of circulation than when domestic capital markets are relatively strained.

The effects of exchange-rate changes

If a country's costs of production have been rising more than abroad, the rise in prices of finished goods and services affects not only domestic products but, by way of a decline in the exchange rate, imports as well. If the costs of production rise less than abroad, the benefits accrue not only to the purchasers of domestic products but also to the purchasers of imports. There is therefore no separate (or exogenous) impact of exchange-rate changes on domestic prices. The prices of imported goods are affected by the same basic developments as the prices of domestic products.

This relationship may be modified, however. If changes in a country's competitive position induce capital flows from the country where costs of production, measured in its own currency, are rising faster than else-

where to the country where costs of production, measured in its own currency, are rising relatively more slowly, the exchange rate is likely to change more than enough to compensate for the relative changes in the costs of production. The additional change in the exchange rate is likely to accentuate the rate of change in the relative price movements the country has already experienced. The additional exchange-rate change may also affect production, stimulating it in the country experiencing the additional decline in the exchange rate of its currency and retarding it in the country experiencing the upward push in its rate.

An analysis of the effects of international transactions during any particular period would have to consider the effects of such exchange-rate changes. What research has been done on the effects of changes in exchange rates has been based on the experience during the period when exchange-rate changes occurred in major separate steps and has reflected the average effects of such changes over the entire period. In any particular period, however, the constellation of exchange-rate changes may differ from these averages and thus may have different effects on the outputs and prices of individual commodities. Furthermore, the effects of major movements in exchange rates can extend over a considerable time, so that changes in domestic prices and production at any given time may reflect exchange-rate changes in prior periods. In addition, cyclical conditions and economic policies may influence not only the impact of exchange-rate changes when they occur but also their delayed effects.

Analysis of the effects of exchange-rate changes in a particular period thus is complicated by the lack of experiences that may provide some guide and, consequently, by the need for specific and often technical information about substitutability across commodities, about price and output changes in response to change in demand, and about other factors that influence the extent and timing of the effects. Nevertheless, an analysis of the effects of exchange-rate changes is crucial for understanding the influence of international transactions on the domestic economy, particularly on such indicators as GNP adjusted for price changes.

The impact of international capital transactions

Is the impact of capital transactions determined by the effects of the balance of all capital transactions on the domestic money supply or on the total amount of capital available to the economy, or should the composition of capital transactions also be taken into consideration? The answer hinges in part on the evaluation of the ease of communication between the markets for different categories of capital (such as fixed-interest

and equity capital and long- and short-term capital) and the time it takes for events in the market for one of the categories to be reflected in other markets. For instance, is the economy affected differently by an inflow of capital that results in purchases of Treasury bills than by a transfer of capital to an affiliate of a foreign company for the purpose of financing the purchase of new productive equipment and facilities? Purchases of Treasury bills presumably will influence their interest rates and may reduce purchases of such bills by banks and others, thus making capital available to other borrowers. In time, lower interest rates on short-term funds may affect rates for long-term funds, raise the values of bonds and stocks, and thus stimulate the issues of such securities and finally business expenditures for fixed investments. This chain of events requires time, however, and self-imposed or regulatory restrictions on institutional lending and investment activities may retard this process or divert some of the funds into other investments, such as the build-up of inventories or the construction of residential housing or public facilities.

The same types of question may be asked with respect to U.S. investments abroad. For instance, is there a difference in the impact on the domestic economy between capital outflows in the form of purchases of bonds issued for the construction of Canadian hydroelectric power plants that ultimately will sell part of their output to the United States and outflows, say, in the form of bank loans to Japan? Is it reasonable to assume that bank loans to Japan will ease the pressures on capital markets there and indirectly in other countries where the Canadian authorities could sell their bonds if sales in the United States had not been possible at the rates that actually occurred?

These are difficult questions, and the answers involve research in fields that lie partly outside the analysis of U.S. international transactions. As a first approach, it may be preferable to assume that the communication of pressures among capital markets within the domestic economy and among different countries is less than perfect, and that international capital movements may have a distinct effect on each of these markets before their impact spreads to others. This assumption leads to another question: To what extent, if any, have international capital flows in any given period either supplemented or competed with domestic capital in securities markets, in the markets for bank loans, in the disposition of financial resources generated within corporate organizations, or in the broad markets for short-term funds and investments? Under the assumption that financial resources are not perfectly fungible, developments in each of these markets can have a special bearing on certain categories of

real investments, so that capital movements, like merchandise trade, may affect not only the economy as a whole but also the distribution of investments and economic activity among sectors, income groups, and regions.

Conclusions

Even when it is conceptually inappropriate to evaluate the impact of the international accounts on the economy by means of overall balances, there is still a need for accurate information on, and penetrating analysis of, the country's international transactions. These transactions have major impacts not only directly on the domestic economy but also indirectly through their effect on the economies of other countries and the reflexes of these economies back on our own. Whether these complex impacts are considered favorable or unfavorable depends largely on judgments about whether they stimulate or retard the changes in the economy that are considered desirable. Such judgments may follow the basic analysis but are not a part of it. The absence of such judgments complicates the task of communicating the conclusions of the analysis to the public and to government officials. But the absence of overall evaluations also reduces the possibility that users of the analysis will accept them as comprehensive appraisals of the economic impact of international transactions and as single guides in the formulation of policies. Instead, the more inclusive analysis may direct users' attention to the specifics of a considerable variety of issues and force them to choose among policy goals and methods of reaching these goals.

An understanding of the many links between international transactions and the domestic economy will also help to dispel the notion, still widely held in the United States, that international transactions are only a small segment of its economy. Furthermore, it will contribute to the recognition that international reserves and the obligation to maintain fixed exchange rates are not required to provide the "discipline" in the management of the economy by governments and central banks that is necessary to maintain a balance between the availability of productive resources and the aggregate demand for goods and services, and between the availability of funds for investments and the incentives to use these funds within the domestic economy.

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