U.S. balance of payments:

Alternate methods of measurement

Earlier this year a report was published which among other things recommended a change in the method of computing the surplus or deficit in the United States balance of payments.1 The report. the findings and recommendations of which are now being reviewed by government officials, was the product of a 2-year study conducted by a group of prominent economists appointed by the director of the Bureau of the Budget and headed by E. M. Bernstein. The economists were charged with the task of examining the quality of U.S. balance of payments statistics and of making recommendations for their improvement. The scope of the Bernstein committee's examination was also to include an evaluation of various methods of measuring the U.S. international payments position - a project which led eventually to the recommendation for a change in computational method.

In choosing among the various methods, the Bernstein committee faced an analytical problem rather than a problem in accounting. What the surplus or deficit should, in fact, measure may differ among individuals at any one time and also may change over time as circumstances are altered and shifts occur in the nature of the particular problem being analyzed. The need for a broad and flexible approach to the problem of measuring the surplus or deficit led the committee to warn of the inadequacy of any one method of measurement. Nevertheless, the committee felt that the need to find an over-all summary indicator which would serve as a starting point for analysis and as

a guide to policy making was strong enough to warrant the selection of one method.

The change proposed by the committee is of interest because, rightly or wrongly, the balance on international transactions however computed is often the main indicator employed to gauge the strength of the dollar in international trade and finance. Not surprisingly, this indicator also has significantly influenced domestic and international economic policies. The large and chronic U.S. "deficits" incurred over the last seven years have generally served to undermine confidence abroad in the continuing soundness of the dollar despite assurances that the dollar would not be devalued. Likewise, during this period, various balance of payments programs intended to reduce or eliminate the "deficit" have been set in motion by U.S. Government policymakers - programs which have influenced to a greater or lesser degree U.S. monetary and fiscal policies as well as economic and political policies regarding foreign aid and military commitments abroad.

It is the purpose of this article briefly to compare the method of measuring the U.S. balance of payments position as recommended by the Bernstein committee — termed the "official settlements" balance — with the method presently used by the Department of Commerce and which generally appears in official government publications — the "regular transactions" balance.

A problem of allocation

A popular misconception concerning the balance on international transactions is that it is determined automatically from the balance of payments statistics. This is not altogether true. Before the balance can be determined one vital intermediate

¹Bureau of the Budget, The Balance of Payments Statistics of the United States — A Review and Appraisal. Superintendent of Documents, U.S. Government Printing Office, Washington, D.C.

step must be taken — that of separating the balance of payments categories into two groups. Because double entry accounting principles are followed in recording international transactions, the aggregate total of all categories showing net credit balances will equal the aggregate total of all categories showing net debit balances; and, as a result, the net balance of all categories, combined, will always be zero — what may be termed the "neutral" concept (see table). To appraise the

over-all position, one must separate these categories into two groups and derive a net debit balance as the summation of the one group, which will be matched by a net credit balance of the same absolute magnitude as the summation of the other group. In the first group are placed all categories which are regarded as "causing" the surplus or deficit. In the terminology of balance of payments accounting these categories are placed "above the line" (column 1 in the table). In the second group,

UNITED STATES BALANCE OF PAYMENTS, 1964, ALTERNATIVE METHODS OF MEASUREMENT

(- Debit) (+ Credit) (millions of dollars)

		Neutral Concept	Regular Transactions Concept		Official Settlements Concept	
			Column 1	Column 2	Column t	Column 2
i.	Excess of exports over imports of goods and services	+8,560	+8,560		+ 8,560	
2.	Remittances and pensions	839	— 839		839	
3.	U.S. Government grants and loans (net of scheduled					
	repayments)	3,636	3,636		3,636	
4.	Miscellaneous long-term U.S. Government liabilities	+ 207	+ 207	•	+ 3	+ 204
5.	Increase in U.S. private investment:					
	a. long-term	4,351	4 ,351		4,351	
	b. short-term	2,111	2,111		2,111	
6.	Increase in foreign private investment (other than that appearing as item 9b):					
	a. long-term	+ 110	+ 110		+ 110	
	b. short-term	+ 115	+ 115		+ 115	
7.	Errors and unrecorded transactions	1,161	-1,161		1,161	
8.	Special government transactions:					
	 Advance on U.S. military exports 	+ 222	ĺ	+ 222	+ 222	
	b. Advance on repayments on U.S. Government loans c. Sale (— redemption) of U.S. Government	+ 122		+ 122		+ 122
	non-marketable non-convertible securities	36		36	+ 30	66
9.	Changes in liquid reserves and liabilities: a. Increase in liquid claims of foreign official					
	monetary institutions b. Increase in liquid claims of foreign commercial	+1,073		+1,073		+1,073
	banks, international non-monetary institutions,					
	and other private foreigners	+1,554		+1,554	+1,554	
	c. Decrease in U.S. monetary assets	+ 171		+ 171		+ 171
To	tal	0	3,106	+3,106	—I,504	+1,504

Column 1 ("above the line"): items which "cause" the "surplus" (+) or "deficit" (-). Column 2 ("below the line"): items which "finance" the "surplus" (-) or "deficit" (+).

"below the line" (column 2 in the table), are placed the remaining categories which are interpreted as indicating how the balance was "financed."

With categories grouped in this manner it can be seen that the nature and size of the international transactions balance is entirely one of allocation. The transfer of a category from one group (column) to another changes the magnitude of the balance and possibly even its nature (i.e., deficit to a surplus or vice-versa); yet, there has been no change in the underlying statistical data.

The controversy which has arisen over the question of how to measure the international transactions balance, for the most part, is associated with the decision as to which of the two groups the various categories belong — whether a particular category, such as the outflow of U.S. capital abroad, for example, "causes" a deficit and therefore should be placed "above the line" (column 1) or is the means of "financing" a surplus and thus should be placed "below the line" (column 2).

A common characteristic of all methods of measuring the surplus or deficit which have been proposed at one time or other is that each method is based on a theoretical framework that attempts to answer two questions: "What is the most satisfactory definition of the U.S. international payments position?" and "What combination of balance of payments categories can best reflect the changes in this position?"

The present method

The present method—the "regular transactions" balance—is based on the concept that a change in international "liquidity" is the most useful indicator of a shift in the U.S. balance of payments. The concept stems from the belief that the use of the dollar for monetary and reserve purposes abroad is based on a promise to exchange dollars for gold at a fixed price and on the confidence that this country will continue to be able to do so. But a continued rise in foreign holdings of liquid claims against the U.S. relative to U.S. gold holdings and liquid claims against other countries

would very likely impair that confidence, the loss of which might not only raise the demand for U.S. gold but also would reduce the amount of international monetary reserves available for transacting world commerce.²

The categories which are deemed to most adequately measure the changes which have taken place during the statement period in the U.S. "liquidity" position are placed "below the line" thereby indicating how the items "above the line" were "financed." Items "below the line" are listed under item 9 in the table. The asset side (item 9c) includes the changes in gold, official holdings of currencies of certain strong countries, and the virtually automatic drawing rights of the U.S. against the International Monetary Fund. The liability side (items 9a and 9b) includes changes in all foreign-held liquid claims against the U.S. These claims generally take the form of demand deposits in U.S. commercial banks, marketable and nonmarketable convertible U.S. Government obligations, and other short-term investments.

In 1964, as may be observed from the table, earnings from exports of goods and services exceeded payments for imports by \$8.6 billion. These net earnings, however, were more than offset by expenditures representing primarily U.S. Government foreign aid and loans (\$3.6 billion) and U.S. private long-term (\$4.4 billion) and short-term (\$2.1 billion) investments abroad. The excess of expenditures over receipts — the "deficit" totaled \$3.1 billion. The "deficit" was financed primarily by a \$0.2 billion decline in monetary reserve assets and an increase in foreign official (\$1.1 billion) and private (\$1.6 billion) liquid claims on the United States - the combined total of these representing a decline in the nation's "liquidity" position.

International monetary reserves, as commonly defined, include gold held by monetary authorities as well as foreign holdings of dollars and sterling. When foreign-held dollars are exchanged for U.S.-owned gold, the aggregate amount of gold does not change, but the amount of foreign-held dollars does. The latter amount falls thereby reducing the overall quantity of reserves available for settling international transactions.

It can be observed, however, that changes in the "liquidity" categories did not account for the entire "financing" of the 1964 "deficit." Certain types of U.S. Government transactions (item 8) which ordinarily would have appeared "above the line" according to a strict "liquidity" concept are believed to have been undertaken according to the "regular transactions" concept for the express purpose of reducing the size of the "deficit." This is presumed to have occurred in three types of transactions: (1) where foreign governments have prepaid U.S. delivery of military exports, (2) where foreign governments have paid installments on long-term loans before actual due date, and (3) where foreign governments have purchased nonmarketable nonconvertible U.S. Government securities. The rationale: Each step is considered to have been a deliberate measure urged upon foreign governments temporarily to prevent a further deterioration in the "liquidity" position of the U.S. Each step, if it had not been taken, would likely have increased short-term claims against the U.S. or gold outflow. Thus, these special government transactions were placed "below the line."

The committee's recommendation

The method proposed in the report by the Bernstein committee - the "official settlements" balance - gauges the change in the international payments position of the U.S. in terms of the extent to which treasuries and central banks have had to act in either supplying dollars to those in the foreign private sector desiring larger balances or in taking dollars from those desiring smaller balances. It is this type of transaction which according to the committee should indicate to the U.S. monetary authority that its ability to abide by its promise to exchange dollars for gold has either been strengthened or has deteriorated, and it is this change in ability that the balance on international transactions should measure. In performing this function monetary authorities gain or lose reserve assets and increase or decrease liabilities to other monetary authorities. The net change in a country's reserve assets plus the net change in that country's liabilities to other monetary authorities measures the total change in its international payments balance.

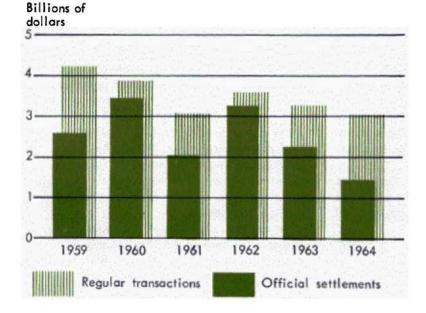
With respect to the placing of balance of payments categories "above the line" or "below the line" the proposed method differs in three principal respects from the present method:

- 1. Changes in liquid claims on the United States by foreigners other than official monetary authorities are placed "above the line" (item 9b). The rationale behind this is that foreign banks and businesses are presumed to undertake international transactions with the profit motive in mind. If they increase the amount of their holdings of dollars or short-term dollar investments, it is either because they need them for conducting financial transactions or as a profitable outlet for investments. Thus, these holdings are comparable to, and should be classified in the same way as U.S. short-term investments abroad "above the line."
- 2. The two methods differ in their treatment of a 1964 transaction in which the government of Canada acquired \$204 million of medium-term nonmarketable, nonconvertible U.S. Government securities in connection with a Columbia river development project. The present method placed it "above the line" because it fit neither the "liquid" concept nor was deemed to have been undertaken in order to reduce the size of the U.S. "deficit"; and, in addition, Canada did not place these among its reserve assets. The Bernstein method places this transaction "below the line" since it makes no distinction as to "liquidity" but only as between private versus official holders. If the purchase of these securities had not taken place, the rationale says, Canada's liquid dollar claims would, as a consequence, be that much larger.
- 3. Advances on military exports (item 8a) are placed "above the line." The reasoning: prepayments were made by foreign governmental agencies rather than by monetary authorities and, therefore, under the concept governing the Bernstein method, constitute foreign investment. This

transaction is considered no different from the prepayments which are connected with commercial exports. When the goods, whether commercial or military, are exported, there will be a corresponding reduction of foreign investment.

As may be observed from the chart, covering the 6-year period from 1959 to 1964, the U.S. incurred balance of payments "deficits" in every year whether computed by the present or by the proposed method. In each year, however, the present method showed a larger "deficit." According to the present method, the annual "deficit" during these six years averaged \$3.5 billion, \$1 billion higher than the "deficit" measured according to the proposed Bernstein committee method. Part of the reason for this is quite obvious when the growth of short-term claims of foreign commercial banks on the U.S. (the main reconciling category [see table, 9b]) is considered. During this 6-year period this category averaged an increase of nearly \$600 million annually to account for somewhat

U.S. balance of payments, 1959-64, alternative measures of the deficit



more than one-half of the average difference between the two methods.

The salient arguments

The arguments for making the proposed change as well as for maintaining the status quo are numerous. Some flavor of the controversy is indicated by a presentation of what appear to be some of the more salient points, pro-"Bernstein" and pro-"status quo":

• Those in favor of the proposed method argue that its use would constitute a more realistic reflection of the role played by the dollar in international trade and finance. This argument proceeds from the theory that foreign banks and business firms have deliberately increased their holdings of dollar demand deposits and other liquid claims because they are needed to carry on the increased volume of transactions called for by an expanding world economy. The proposed method recognizes this intention by calling these accumu-

lations "foreign investments in the U.S." and by placing them "above the line." In this way a zero deficit can be consistent with the continued need for and growth of dollars in the hands of private foreigners.

Under the current method accumulation of these dollars in the hands of foreigners are placed "below the line." A zero deficit, therefore, cannot occur simultaneously with an increase in dollar-holdings abroad unless there is an offsetting increase in U.S.-owned reserves. Supporters of the present method point out that although private foreign holders of dollar balances may need dollars for commercial purposes; nevertheless, the accumulation of dollars, especially at the rapid rate at which this

has occurred in some recent years, poses a threat to the continued confidence in the dollar. And, say the supporters of the current method, the deficit should reflect this.

• Those in favor of the proposed method argue that its adoption would eliminate the lack of symmetry which now exists in the present method with respect to the treatment of domestic and foreign short-term investments. As presently handled a rise in U.S. private short-term investments abroad is placed "above the line" (increasing the deficit) while an increase in most foreign private shortterm investments in the U.S. instead of also being placed "above the line" (and reducing the deficit) is placed "below the line" (as a category which explains how the deficit was "financed"). Thus a common type of transaction such as a U.S. and a foreign bank placing deposits of identical amounts in each other's bank for the convenience of customers would, of itself, add to a deficit in the U.S. balance of payments. The proposed method would place all private short-term transactions "above the line."

Backers of the present method however, readily admit such inconsistencies in structure. Their justification for the current asymmetrical treatment, though, rests in the belief that foreign official monetary authorities have a degree of control over foreign assets held by their own citizens—control which greatly exceeds that which U.S. monetary authorities exert over U.S. residents. U.S. authorities, thus, cannot count on privately held foreign assets to come to the rescue of the dollar; but a foreign government, trying in a similar situation to gain support for its currency, could.³

A further argument in support of the current asymmetrical treatment stems from the belief that U.S. short-term claims, to a great extent, are held

³Early in 1965 the Voluntary Credit Restraint Program was inaugurated in an effort to slow down the pace of U.S. investments abroad and thereby to reduce the size of the "deficit." The relatively high degree of success with which this program has met raises some doubts as to the soundness of this position.

against countries whose currencies may not be acceptable in settling international transactions, whereas this nation is pledged to honor all dollar claims which may be presented at the established gold exchange price.

• An objection to the Bernstein method has been voiced on the grounds that changes in short-term claims of foreign commercial banks are often greatly influenced by central bank policies and therefore should remain as a category financing the "deficit" ("below the line") as is done at present rather than as is done according to the Bernstein method — "above the line." This argument attacks the most quantitatively significant category receiving different treatment as between the two methods from the vantage point of assuming, for the purpose of the argument, the validity of the "official settlements" concept.

Current method advocates argue that the influence of a central bank over the transactions of private commercial banks in the realm of liquid dollar claims is substantial in cases where a central bank either owns the commercial banks in a country or where it greatly influences them by means of exchange controls and directives. Another means that central banks have of influencing commercial bank behavior is through forward exchange operations. Often a foreign central bank or a national treasury will induce commercial banks to hold liquid dollar assets by offering the local currency at a favorable price in exchange for dollars at a future date. Forward commitments of this type have been entered into relatively heavily from time to time by the U.S. Treasury as well as by foreign central banks. This step has the effect of delaying a flow of dollars from foreign private banks to foreign central banks thereby postponing a deterioration of the "deficit" as measured by "official settlements."

In rebuttal, advocates of the Bernstein method discount the importance, quantitatively, of the situations involving direct controls. With respect to forward exchange operations, however, they acknowledge the influence over a short period of time

of such actions to delay the liquidation of private dollar claims. They maintain, however, that the massive buildup in short-term foreign bank dollar claims during the past six years was due principally to a genuine inflow of foreign capital such as that occasioned by the need for dollar working balances in U.S. banks. Forward exchange transactions have not played as significant a role in this long-term growth and since the two factors cannot be separated, it is more correct to place this category "above the line."

Not a mechanical problem

The arguments presented point to the conclu-

sion, a point which was emphatically made in the report of the Bernstein committee and recognized by the House Congressional sub-committee on Economic Statistics which recently went on record as recommending publishing of the two methods side-by-side, that no one method or balance of payments figure will adequately serve to represent the current position of the U.S., the extent of needed remedial measures, or the types of governmental corrective measures which should be imposed. The problem of measuring the surplus or deficit, then, is one which calls for the application of analytical techniques rather than the use of mechanical procedures alone.



Most of the area's economic indicators at midyear continued at the high levels set in late spring. Nonagricultural employment in all district states has been high and unemployment as a percentage of the labor force has been lower in the district than in the nation. Retail sales, as measured by department store sales, have remained high. Throughout July farm prices continued at favorable levels relative to a year earlier.

Personal incomes at mid-year continued to expand from month- and year-earlier levels. Another sector which has shown improvement is construction. According to district building permit data, the amount of residential building is expanding. Much of the activity is concentrated in the erection of apartments: the number of units authorized during June was up 40 per cent from a year earlier while the number of single houses was up less than 2 per cent.

A marked expansion has also taken place in the building of stores and other retail outlets. In the first six months of this year, the dollar amount on contracts awarded was up 75 per cent from the comparable 1964 figure. Factory construction, which rose sharply in 1964, has continued at a high level this year.

Industrial production, as measured by industrial use of electric power, dipped slightly from the high rate of expansion which took place during the winter and spring, but is still averaging about 6 per cent over the year-earlier level.

The improved level of prices received by farm-

ers was bolstered principally by livestock prices. Beef cattle prices received by farmers in the district in mid-July averaged about \$3 per cwt. above those of mid-July 1964; hog prices, \$7 to \$8. Milk prices also strengthened between mid-June and mid-July, and were also up from year-earlier levels.

Total deposits at district member banks were down \$33 million during July, considerably less than a year earlier but about the same as the average decline for the month in the past five years. The drop in total deposits consisted of a \$64 million fall in demand deposits, a little more than usual; and a \$31 million rise in time deposits, a little stronger than what ordinarily occurs.

Since the first of the year the change in deposits at district banks has been little different than the changes recorded during comparable periods in the two previous years.

The following selected topics describe particular aspects of the district's current economic scene:

District credit pattern mixed

The usual mid-summer slump in outstanding loans was again in evidence during July at weekly reporting city banks, though not at non-weekly reporting country banks where expansion continued as in every preceding month except January at a relatively substantial clip.

Outstanding loans at Ninth district city banks, after swinging sharply upward during June, dropped approximately \$8 million during July, slightly more than the decline that usually develops at that time of year. The drop in total loans was spread among virtually all categories — business loans, security loans, and loans to nonbank financial institutions registered a "seasonal" decline, while "all other loans" (the largest component of which is consumer installment credit) showed a somewhat larger than usual drop-off. The only category to mark a gain was that of real

estate loans, a development that apparently reflects added strength in construction activity.

Investments at city banks, in part because of an outflow of deposits, declined \$6 million during July, about the same as in past years. The combined effect of the change in loans and security holdings was a reduction in total city bank credit of \$14 million.

Loans at country member banks continued to show substantial strength during July. They increased \$15 million, a gain that contrasts rather sharply with July 1964's decline of \$15 million and the average July drop during the past five years of \$9 million. Investments, on the other hand, fell \$1 million; ordinarily, they register a small increase during July.

Cattle feeding continues below 1964

District cattle feeders continue to operate at levels under those of a year earlier. In the four full district states there were just under 750,000 head on feed at the beginning of July, 3 per cent short of the total of a year ago. The district count compares with a 9 per cent gain in the number of cattle on feed throughout the 32 major livestock feeding states. Montana, while accounting for relatively few cattle in feed lots, was the only district state to show a gain over the year earlier with a 16 per cent increase in the head count. Cattle on feed in Minnesota were off 3 per cent from July 1, 1964; and in South Dakota, 4 per cent.

TABLE 1 — CATTLE AND CALVES ON FEED, BY QUARTERS

	(thousands of he	ad)	
	July I	April I	July 1
	1964	1965	1965
Minnesota	371	451	360
North Dakota	96	116	90
South Dakota	255	332	245
Montana	44	71	51
Total	766	970	746
32 States	6,914	8,450	7,531

The total number of animals placed on feed during the second quarter was up 2 per cent in the district from that period of a year earlier, a gain much smaller than the 24 per cent increase in feed lot placements experienced throughout the 32-state cattle feeding area. The lag in district placements presumably reflects feed shortages in some areas, particularly South Dakota where second quarter placements were off 13 per cent. Producers in Minnesota and Montana appeared to be more able to take advantage of the current favorable price prospects and increased second quarter placements by 18 and 40 per cent respectively. The second quarter movement into North Dakota feed lots was off 10 per cent from the previous year.

Some of the beef cattle price advance of last spring was offset by a considerable decline in district marketings. During the April through June period, marketings were down 14 per cent from a year earlier with declines ranging from 32 per cent in North Dakota to 16 per cent in Minnesota, and to 7 and 6 per cent respectively in South Dakota and Montana. These figures again compare unfavorably with those for the 32-state area where total marketings were off only 2 per cent from the second quarter of 1964. The income effect of higher prices was further depressed by a marked decline in the average weight of cattle marketed. For all U.S. cattle slaughtered during June, the average weight per head was 1,052

pounds, down 31 pounds from the June 1964 figure. Cattle marketed during June in Minnesota were down 31 pounds per head and 60 pounds per head in South Dakota.

The district's 1965 calf crop is estimated at 5.7 million head, up 3 per cent from 1964 and well over the 5-million-head average of the 1959-63 period. Some of the concern over the calf crop, due to the severity of the past winter, was dispelled as each district state except Minnesota recorded record numbers. That the winter took its toll, however, is evidenced in the decline from previous years in the percentage of calves born to cows and heifers two years old and older. That figure declined from 92 per cent in 1964 to 90 per cent in 1965 in Montana, and from 93 per cent to 89 per cent in South Dakota. Over-all, the 1965 calf crop in the U.S. is virtually unchanged from that of 1964.

TABLE 2 -- CALVES BORN BEFORE JUNE 1
AND THE NUMBER EXPECTED AFTER JUNE 1

(thousands of head)							
	1959-63 average	1964	1965	1965 as a % of 1964			
Minnesota	1,590	1,700	1,651	97			
North Dakota	891	1,021	1,050	103			
South Dakota	1,458	1,653	1,762	107			
Montana	1,109	1,252	1,314	105			
Total	5,048	5,626	5,777	103			
48 States	40,193	42,919	43,049	100			



1. Soil improvement center established

The Northern Plains Soil and Water Research Center was opened at Sidney, Montana in June. Administrated by the Northern Plains Branch of the Soil and Water Conservation Division, Agricultural Research Service, U.S. Department of Agriculture, the center will research soil and water conservation practices in an area comprising 70 million acres in eastern Montana and parts of North Dakota, South Dakota, and Wvoming.

2. Modernization underway at Rolla plant

Construction is underway on an \$800,000 modernization and expansion program of Turtle Mountain Plant at Rolla, North Dakota. The installation, operated by Bulova Watch Company for the General Services Administration, is the nation's lone producer of jewel bearings for use in military timing devices.

3. Refinery completes expansion program

Northwestern Refining Company has completed expansion of its refinery at St. Paul Park, Minnesota, at a cost of more than \$1 million. The new facilities raise the refinery's daily crude capacity from 16,000 barrels to 26,000 barrels. The work, done over a period of two years, included modification of the catalytic cracking unit, addition of an alkylation unit, and new storage tanks.

4. Contracts let for pipeline

Northern Natural Gas Company has awarded contracts for construction of a 270-mile pipeline on the Upper Peninsula. The main pipeline will be laid from Carlton, Minnesota, through Negaunee and Ishpeming, Michigan, to Marquette. A branch line to the Keweenaw peninsula is scheduled for next spring. Six iron ore plants operated by Cleveland-Cliffs Iron Company in Marquette County will begin using natural gas in 1965 as well as the Michigan cities.