

U.S. International Transactions, Revised Estimates for 1984-93

By Christopher L. Bach

AS IS customary each June, the estimates of U.S. international transactions have been revised to incorporate methodological and statistical changes. This year, like last year, a number of improvements have been implemented as part of a multiyear effort by the Bureau of Economic Analysis (BEA) to address gaps in the coverage of transactions. Many of these gaps have arisen because of the dynamic nature of the international financial markets, and the extensive methodological changes made this year reflect BEA's efforts to keep pace with the rapid growth, innovation, and change in the markets that have been so evident in recent years. The improvements to address these gaps in coverage respond to a number of suggestions by working groups at the International Monetary Fund (IMF) and the National Academy of Sciences.

The largest revisions this year are in the capital accounts, where greatly expanded use is made of counterpart data. The most important of the counterpart data used this year are those compiled by the Bank for International Settlements (BIS) on banks' claims and liabilities with non-banks in other reporting countries. Because these counterpart data are much more comprehensive in coverage than the U.S. source data, they have been substituted into the U.S. accounts. The use of the BIS data had been suggested earlier by statistical working groups at the IMF as a potential means of correcting the underreporting, or

nonreporting, of direct transactions between domestic residents and foreign banks. However, it has not been until this year that U.S. compilers and BIS statisticians have been fully successful in resolving the many issues of comparability between the BIS data and data included elsewhere in the U.S. accounts.

As a result of the substitution of counterpart data, capital outflows and capital inflows have been raised by very substantial amounts for 1984-93. Cumulative capital outflows added to the accounts totaled \$98.6 billion for this period, and cumulative capital inflows totaled \$115.9 billion. The capital accounts now reflect economic developments during these years much better than before. The effect on outstanding positions is also substantial. For 1993, on both a current-cost basis and a market-value basis, U.S. assets abroad were revised up \$137.6 billion as a result of the substitution of counterpart data, and foreign assets in the United States were revised up \$121.9 billion.

Revisions to the current account for 1984-92 were relatively small (table 1). However, sizable revisions occurred to portfolio income as a result of the substitution of counterpart data in the capital accounts. For many years, the revisions to income receipts and payments were close to offsetting; in general, slightly more income payments were added to the accounts than income receipts. For 1993, revisions to the current

Table 1.—Revisions in the Current-Account Estimates

(Millions of dollars)

	Exports of goods, services, and income			Imports of goods, services, and income			Unilateral transfers			Balance on current account		
	Previous	Revised	Amount of revision	Previous	Revised	Amount of revision	Previous	Revised	Amount of revision	Previous	Revised	Amount of revision
1984	389,942	394,961	5,019	-469,658	-474,122	-4,464	-20,612	-20,612	.....	-100,328	-99,773	555
1985	378,301	381,572	3,271	-479,221	-483,994	-4,773	-22,950	-22,950	.....	-123,870	-125,372	-1,502
1986	396,976	400,337	3,361	-523,004	-527,363	-4,359	-24,176	-24,176	.....	-150,203	-151,201	-998
1987	443,152	447,262	4,110	-587,408	-591,307	-3,899	-23,052	-23,052	.....	-167,308	-167,097	211
1988	552,491	557,630	5,139	-654,694	-660,847	-6,153	-24,965	-24,977	-12	-127,168	-128,194	-1,026
1989	633,859	641,471	7,612	-709,391	-718,157	-8,766	-26,092	-26,134	-42	-101,624	-102,820	-1,196
1990	688,806	696,841	8,035	-746,839	-754,926	-8,087	-33,827	-33,663	164	-91,861	-91,748	113
1991	708,489	717,041	8,552	-723,388	-730,680	-7,292	6,575	6,687	112	-8,324	-6,952	1,372
1992	730,460	731,373	913	-763,965	-767,217	-3,252	-32,895	-32,042	853	-66,400	-67,886	-1,486
1993	753,898	755,533	1,635	-830,631	-827,312	3,319	-32,509	-32,117	392	-109,242	-103,896	5,346

account were large; in addition to the revisions related to the substitution of counterpart data, sizable revisions were made to other private service receipts and payments and to direct investment income receipts and payments.

Major sources of revisions

The major sources of revisions to the U.S. international transactions accounts are highlighted in the following paragraphs. The changes to the income and capital accounts are summarized in table 2.

- *Merchandise trade.*—Updated seasonal adjustment factors, developed jointly by BEA and the Bureau of the Census and based on updated source data, are incorporated into the quarterly estimates of merchandise trade. In addition, changes in the harmonized classification system, upon which BEA's end-use categories are based, have changed the commodity composition of merchandise exports and imports.
- *Portfolio investment income receipts.*—Banks' income receipts are reduced to reflect a movement away from interest charges on

Table 2.—Major Sources of Revisions, 1984–93

(Millions of dollars)

(Credits +; debits -) ¹	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Transactions:										
Other private income receipts (line 13):										
Revised	68,267	57,631	53,596	55,848	70,275	91,496	91,048	76,766	57,447	51,272
Changes to bank income					-188	-795	-1,214	-1,610	-1,765	-2,745
Changes to nonbank income	5,019	3,271	3,361	4,110	5,285	8,408	10,750	8,899	5,674	4,559
Revisions due to updated source data					42			-30	-149	-69
Previous	63,248	54,360	50,235	51,738	65,136	83,883	81,512	69,507	53,687	49,527
Other private income payments (line 27):										
Revised	-44,158	-42,745	-47,412	-57,659	-72,398	-93,987	-95,661	-83,796	-67,253	-63,239
Changes to dividends		-52	-191	-413	-510	-791	-769	-861	-946	-1,063
Changes to bank income					154	307	455	613	782	937
Changes to bank custody income			617	1,456	2,115	3,325	4,376	3,511	1,873	1,997
Changes to nonbank income	-4,464	-4,721	-4,785	-4,942	-7,912	-11,608	-12,617	-11,454	-7,470	-6,337
Revisions due to updated source data								-29	90	-228
Previous	-39,694	-37,972	-43,053	-53,760	-66,245	-85,220	-87,106	-75,576	-61,582	-58,545
U.S. government income payments (line 28):										
Revised							-41,042	-41,529	-40,480	-41,561
Changes to government payments							-265	160	699	649
Revisions due to updated source data										-319
Previous							-40,777	-41,689	-41,179	-41,891
U.S. nonbanking concerns' claims on unaffiliated foreigners (line 46):										
Revised	533	-10,342	-21,773	-7,046	-21,193	-27,646	-27,824	11,097	45	-598
Changes to financial claims	-5,263	-4,536	-13,558	-10,188	-7,757	-39,376	-23,802	9,471	-3,896	302
Revisions due to updated source data		-2		-1	-180	-37	411	-306	-610	752
Previous	5,796	-5,804	-8,215	3,143	-13,256	11,767	-4,433	1,932	4,551	-1,652
U.S. nonbanking concerns' liabilities to unaffiliated foreigners (line 60):										
Revised	16,626	9,851	3,325	18,364	32,893	22,086	45,133	-3,115	13,573	14,282
Changes to financial liabilities	12,094	10,229	6,048	15,552	27,175	16,542	37,599	-3,966	11,912	6,705
Revisions due to updated source data	-172	-12	-82	-51	92	-21	1	1,550	920	-729
Previous	4,704	-366	-2,641	2,863	5,626	5,565	7,533	-699	741	8,306
U.S. liabilities reported by U.S. banks (line 61):										
Revised			76,737	86,537	63,744	51,780	-3,824	3,994	15,461	18,452
Changes to bank custody liabilities			-3,046	-2,489	-6,491	-11,602	-20,194	15,365	-2,918	7,370
Revisions due to updated source data									-230	-1,126
Previous			79,783	89,026	70,235	63,382	16,370	-11,371	18,609	12,208
Positions (at yearend):										
U.S. claims on unaffiliated foreigners reported by U.S. nonbanking concerns:										
Revised	130,138	141,872	167,392	177,368	197,757	234,307	265,315	256,295	253,870	254,502
Changes to financial claims	37,277	42,298	56,670	67,787	75,570	120,420	144,983	137,549	140,979	137,625
Revisions due to updated source data								176	1,199	1,199
Previous	92,861	99,574	110,722	109,581	122,187	113,887	120,332	118,570	111,692	115,678
U.S. liabilities to unaffiliated foreigners reported by U.S. nonbanking concerns:										
Revised	77,415	86,993	90,703	110,187	144,548	167,093	213,406	208,908	220,692	233,299
Changes to financial liabilities	46,391	57,535	63,801	80,369	109,545	126,544	165,400	161,887	172,429	178,752
Revisions due to updated source data								927	2,012	2,012
Previous	31,024	29,458	26,902	29,818	35,003	40,549	48,006	46,094	46,251	52,535
U.S. custody liabilities reported by U.S. banks:										
Revised			19,573	20,358	21,275	21,242	18,801	19,479	22,993	34,871
Changes to bank custody liabilities			-21,062	-23,567	-30,067	-41,650	-61,839	-46,494	-49,413	-56,888
Revisions due to updated source data									69	
Previous			40,635	43,925	51,342	62,892	80,640	65,973	72,337	91,759

NOTE.—Line references are to table 1 of "U.S. International Transactions, First Quarter 1994," in this issue of the SURVEY OF CURRENT BUSINESS.

1. Credits +: An increase in U.S. receipts and U.S. liabilities, or a decrease in U.S. payments

and U.S. claims. Debits -: An increase in U.S. payments and U.S. claims, or a decrease in U.S. receipts and U.S. liabilities.

certain interoffice account balances and to reflect the application of shorter term (and therefore lower) interest rates to certain other account balances. Nonbanks' income receipts are raised because larger outstanding claims on foreign banks are now used in the position estimates as a result of the substitution of counterpart data.

- *Portfolio investment income payments.*—Like banks' income receipts, banks' income payments are reduced to reflect the movement away from interest charges on certain interoffice account balances. Nonbanks' income payments are raised because larger outstanding liabilities to foreign banks are now used in the position estimates as a result of the substitution of counterpart data.

In addition, and also to reflect changed market conditions, dividend payments on foreign holdings of U.S. stocks are raised as a result of the application of a slightly higher average dividend rate; interest payments on U.S. Government securities are reduced as a result of the application of more representative and lower interest rates; and income payments on U.S. banks' custody holdings are reduced to parallel revisions made in the position estimates that eliminate duplication in the recording of transactions.

- *U.S. nonbanks' claims and liabilities.*—New estimates, based on counterpart data, are introduced to more completely record changes in U.S. nonbanking concerns' claims on and liabilities to foreign banks.

Merchandise trade

Estimates of merchandise trade were revised for 1991–93. For both exports and imports, quarterly seasonally adjusted series were revised, based on updated seasonal and trading-day factors developed jointly by BEA and the Census Bureau. The revised data for 1993 published by BEA are identical with those published by the Census Bureau (on a balance of payments basis); small differences arise in earlier years because BEA retabulates adjustments for timing over a longer time period than does the Census Bureau.

Estimates of merchandise trade by principal end-use category were also revised for 1991–93 to reflect the reclassification of harmonized system (HS) commodity classification codes, from which BEA's end-use data are developed. The HS codes were reclassified as a result of research by the Bureau of Labor Statistics to rebase its

price statistics to the year 1990 and as a result of BEA's reclassification to provide symmetrical classification of commodities for both exports and imports. For exports, the results for 1993 were to lower by \$1.2 billion the value of commodities classified as capital goods, and to raise by \$1.0 billion the value of commodities classified as consumer goods. The effects on other export end-use categories were small. For imports, the value of industrial supplies and materials was raised \$0.6 billion, and the value of consumer goods was lowered \$0.3 billion. The effects on other import end-use categories were small. The revisions affect only the distribution of merchandise across end-use categories; total exports and imports are unaffected.

Services

Other private service receipts.—For 1993, a new estimate was developed to measure more completely expenditures in the U.S. economy of foreign embassies and consular offices. For foreign embassies and consular offices in Washington, DC, source data were obtained for the number of diplomatic and nondiplomatic staff; for wages, salaries, and other benefits paid to employees; and for operating expenditures of embassies and consular offices. The empirical relationships, developed from both actual and estimated source data, were also used, after adjustment, to estimate local expenditures of embassies and offices outside the Washington,

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DC area, including the United Nations. A similar approach, also based on actual and estimated source data, was used to estimate local expenditures of international organizations, such as the World Bank, the Inter-American Development Bank, and the International Monetary Fund. The new expenditure estimate was \$0.6 billion higher than the old one for 1993, the first year for which a new estimate was made.

Portfolio investment income

Bank income receipts.—Bank income receipts were reduced for 1993 and revised back to 1988 to reflect the fact that in recent years, banks do not charge their own foreign offices interest on certain classes of interoffice account balances, whereas in earlier years, market practices were such that interest was charged. In response to this change in market conditions, BEA no longer estimates interest receipts on these account balances. The change in treatment is made to both receipts and payments, but the impact is to lower receipts more than payments because of the larger outstanding asset positions to which interest rates were applied. For 1993, the result was to reduce bank income receipts \$1.1 billion.

In addition, on other classes of bank accounts, short-term Eurodollar rates more appropriately reflect recent banking practices than the prime rate used in previous calculations; consequently, Eurodollar rates are substituted into the calculation. The result was to reduce bank income receipts \$1.6 billion for 1993.

Nonbank income receipts.—As a result of the substitution of BIS counterpart data for U.S. nonbank financial claims on foreign banks, income receipts were raised for 1984–93. For 1984, the addition to receipts was \$5.0 billion; the additions increased to \$10.8 billion for 1990 before declining to \$4.6 billion for 1993. Additions were largest for 1989–91, when claims increased especially rapidly in response to strong expansion in both industrial and developing countries, and when interest rates rose rapidly in response to increases in the demand for funds and to rising inflation. For 1992–93, additions were smaller, as the growth in outstanding claims leveled and as interest rates fell sharply.

Additions to nonbank income receipts were generally smaller than additions to nonbank income payments because of the smaller outstanding asset positions to which interest rates were applied, and because the asset positions and related income receipts had already been partially

adjusted for lack of coverage by the revisions of the last 2 years.

Dividend payments.—Stock dividends paid to foreigners were raised for 1989–93 and revised back to 1985 as a result of the application of a higher average dividend rate to outstanding foreign holdings. The rate now applied is the dividend rate for the Standard and Poor's 500 stock index, which is believed to be reflective of the current composition of foreign holdings. Previously, a slightly lower rate, appropriate for a more restricted composition of holdings, was applied. Dividend payments were raised \$1.1 billion for 1993.

Bank income payments on own account.—Like bank income receipts, bank income payments were reduced for 1993 and revised back to 1988 to reflect the fact that in recent years, banks do not charge their own foreign offices interest on certain classes of interoffice account balances, whereas in earlier years, market practices were such that interest was charged. In response to this change in market conditions, BEA no longer estimates interest payments on these account balances. The change in treatment is made to both payments and receipts, but the impact is to lower payments less than receipts because of the smaller outstanding liability positions to which interest rates were applied. For 1993, the result was to reduce bank income payments on own account \$0.9 billion.

Bank income payments on custody liabilities.—Because the new estimates of nonbank liabilities and nonbank income payments include some transactions already in the banking accounts, the bank capital and related bank income transactions are removed from the accounts for 1986–93 to avoid double counting. The removal is necessary because a large portion of banks' custody transactions is for nonbanks. Reductions to income payments were largest in 1989–91, when liability positions were substantially reduced and when interest rates rose strongly; reductions to positions for 1992–93 were also large, but interest rates fell sharply. For 1993, bank income payments on custody liabilities were reduced \$2.0 billion.

Nonbank income payments.—As a result of the substitution of BIS counterpart data for U.S. nonbank financial liabilities to foreign banks, income payments were raised for 1984–93. For 1984, the addition to payments was \$4.5 billion; additions increased to \$12.6 billion for 1990, before de-

clining to \$6.3 billion for 1993. Additions were largest for 1988–91, when liabilities increased especially rapidly in response to strong expansion in both industrial and developing countries, and when interest rates rose rapidly in response to increases in the demand for funds and to rising inflation. For 1992–93, additions were smaller, as the growth in outstanding liabilities slowed and as interest rates fell sharply.

Additions to nonbank income payments were generally larger than additions to nonbank income receipts because of the larger outstanding liability positions to which interest rates were applied, and because asset positions and related income receipts had already been partially adjusted for lack of coverage by the revisions of the last 2 years.

The BIS data also suggest that short-term Eurodollar rates are more appropriate to apply to outstanding liability positions than the long-term rates used in the previous methodology; thus, a substitution has been made. The substitution, which also brings rates applied to liabilities in line with rates applied to claims, lowered nonbank income payments.

U.S. Government income payments.—Interest paid on foreign holdings of U.S. Government agency bonds was lowered for 1990–93 for two reasons that reflect changed market conditions. First, the interest rate applied to outstanding positions was changed to a mortgage rate because in recent years, most agency bonds are collateralized mortgage obligations. Second, a large portion of these obligations is relatively short term, with rates that are tied to Eurodollar rates; therefore, short-term Eurodollar rates were introduced into the calculation. The result of both changes was to lower interest payments \$0.6 billion for 1993.

U.S. nonbanking concerns' claims on and liabilities to unaffiliated foreigners

Background.—Over the past several years, compilers in leading countries, statistical working groups at the IMF, and statisticians at the Bank for International Settlements (BIS) have all noted deficiencies in the coverage of capital transactions. Current reporting systems incompletely record such transactions or fail to record them at all, leading to large distortions in individual country presentations and to significant difficulties in making country comparisons. The shortcomings are in large part due to the rapid integration of capital markets and the rise in direct transactions that bypass existing data collection systems. The

integration of capital markets has resulted in a sharp rise in the volume of direct financial transactions between U.S. nonbank companies (and individuals) and foreign banks. The U.S. system for tracking international nonbanking transactions was designed for a time when the bulk of such transactions flowed through U.S. banks and other large, established financial institutions and when only the very largest U.S. companies conducted direct transactions with foreign banks. The sharp rise in direct transactions by a wide range of nonbank companies has meant that a large volume of transactions are missed by the existing reporting system, though they are captured in foreign banks' data that are reported to central banks and to the BIS.

Three years ago, BEA began the process of substituting this foreign banking data for U.S. source data to address the gaps in coverage arising from these direct transactions between U.S. nonbank residents and foreign banks. This has proved to be a highly efficient use of resources, particularly when the data was, for the most part, already being collected by foreign central banks and statistical authorities. Initial efforts led to work with compilers under the auspices of the International Monetary Fund, who examined issues of measurement and international comparability. Later efforts focused on work with compilers in leading countries to conform their data to consistent concepts and definitions and to establish data comparability so as to permit expanded use of counterpart data by the United States and other countries. Over the last 2 years, bilateral data from Canada and the United Kingdom, as well as supplemental data from the U.S. Federal Reserve Board, were first substituted into the U.S. accounts; then, additional bilateral data from the Netherlands, Germany, Italy, and France were substituted. The third and final phase, which has been largely completed with this year's revisions, was to work with statisticians at the U.S. Federal Reserve Board and the BIS to examine the comprehensive data they compile.

As a result of this research, BEA is substituting into the accounts a large part of the data compiled by the BIS on foreign banks' transactions with U.S. nonbanks. The substitution removes significant gaps in coverage from the U.S. accounts and now presents a picture of nonbanking activity that broadly parallels the picture of banking activity over the past decade. Specific details for both U.S. nonbanking concerns' claims and liabilities are presented in the following paragraphs.

Claims on unaffiliated foreigners.—This year, BEA has been able to expand significantly its use of foreign source data by substituting counterpart data for an additional 10 European countries plus the Caribbean and Asian banking (financial) centers covered by the BIS reporting system; these data provide a measure of foreign banks' liabilities to U.S. nonbanking concerns. The BIS data have substantially more complete coverage than the bilateral substitutions made to date, and in addition, they incorporate recent improvements made by the U.S. Federal Reserve Board in the reporting of transactions of foreign-owned banks resident in the Caribbean Islands.

BEA has made this substitution after extensive consultations with statisticians in foreign countries and at the BIS, who confirmed that securities transactions and banking transactions could be separately identified in the BIS data so as to avoid an overlap with transactions reported elsewhere in the U.S. accounts. Where these criteria could not be met, as was the case for Japan, the BIS data were not used.

The impact of this substitution on the U.S. accounts is dramatic. Prior to making any substitutions into the accounts, U.S. source data recorded U.S. nonbank financial claims on foreigners at \$35.1 billion at yearend 1983, rising to \$42.6 billion at yearend 1993. As a result of the bilateral substitutions made over the last 2 years, nonbank claims were raised to \$76.1 billion at yearend 1983, then rose to \$115.7 billion at yearend 1993. With this year's substitution of the BIS data, nonbank claims were raised to \$131.3 billion at yearend 1983 and now rise to \$254.5 billion at yearend 1993.

The growth indicated by the revised estimates more correctly reflects the rapid expansion of nonbank activity that has occurred over the past decade, particularly through Caribbean banking (financial) centers and, very recently, through the Asian banking (financial) centers. At the end of 1993, U.S. nonbank claims on Caribbean banks accounted for \$124.2 billion of the \$254.5 billion in total outstanding claims, and nonbank claims on Asian banks accounted for \$10.0 billion. Growth was most rapid in 1988–90, but has leveled off since then.

The new position data, when converted into flows, indicate that substantially more capital outflows occurred in 1986, and during the period of rapid expansion in economic activity in 1988–90, than was previously shown in the accounts. For 1988–90, this pattern is consistent with the economic expansion of the industrial

and developing countries and the accompanying rises in the demand for credit, in interest rates, in inflation, and in the financing of large acquisitions by multinational corporations. The strong expansion in the financial activity of nonbanks now broadly parallels the expansion of bank activity recorded in the accounts for the same period. The limited increase in capital outflows of nonbanks for 1991–93 is indicative of the major deceleration of economic activity worldwide and is now broadly consistent with the significant retrenchment of U.S. bank lending and the reduction in banking activity recorded in the accounts in this period.

Related revisions in interest receipts are discussed in the section on portfolio income. The largest additions to interest receipts occur in 1989–91, when both the outstanding positions and the short-term Eurodollar interest rates applied to them rose rapidly. In 1992–93, the outstanding positions changed little and interest rates dropped precipitously, resulting in smaller, but still substantial, additions to interest receipts; the additions were the result of the larger outstanding asset positions now used in the calculation.

Liabilities to unaffiliated foreigners.—Until now, BEA has not been able to substitute BIS data for claims reported by foreign banks, largely because the BIS data did not successfully separate securities transactions from banking transactions. This difficulty remains with much of the claims data reported by foreign banks to the BIS, and BIS statisticians are working with statistical officials in the reporting countries to separate the two types of transactions. However, for banks' claims reported in the Caribbean and Asian offshore banking (financial) centers, BEA discussions with international banking experts at the Federal Reserve Board and the BIS have confirmed that commingling of securities and banking transactions is insignificant. Furthermore, bilateral data obtained from the Bank of England also permits the separation of banking and securities transactions. Therefore, BIS data on bank claims for these offshore banking (financial) centers, as well as bilateral data from the Bank of England, have been substituted into the U.S. accounts.

The impact of this substitution on the U.S. accounts is dramatic. Prior to making any substitutions into the accounts, U.S. source data recorded U.S. nonbank financial liabilities to foreigners at \$26.9 billion at yearend 1983, rising to \$54.5 billion at yearend 1993. With this year's substitution of the BIS data, nonbank liabilities

were raised to \$61.7 billion at yearend 1983 and now rise to \$233.3 billion at yearend 1993.

The growth indicated by the revised estimates more correctly reflects the rapid expansion of nonbank activity that has occurred over the past decade, particularly through Caribbean banking (financial) centers and, very recently, through the Asian banking (financial) centers. At the end of 1993, U.S. nonbank financial liabilities to Caribbean banks accounted for \$136.2 billion of the \$233.3 billion in total outstanding liabilities, and nonbank liabilities to Asian banks accounted for \$15.5 billion. Growth was most rapid in 1988–90, but was only moderate in 1991–93.

In a manner parallel to that for nonbank claims, the new position data for nonbank liabilities, when converted into flows, indicate that substantially more capital inflows occurred during the period of rapid expansion in economic activity in 1987–90, and in 1992–93, than was previously shown in the accounts. For 1987–90, this pattern is consistent with the expansion of the major industrial economies and the accompanying rises in the demand for credit, in interest rates, in inflation, and in the financing of large acquisitions by multinational corporations. The increase in the financial activity of nonbanks now broadly parallels the expansion of bank activity recorded in the accounts for the same period. The somewhat larger inflows now recorded in the accounts for

1992–93 are loosely related to the pickup in the U.S. economy and the accompanying increase in the demand for funds and are broadly consistent with the modest pickup in inflows through banks.

Related revisions in interest payments are discussed in the section on portfolio income. The largest additions to interest payments occur in 1989–91, when both the outstanding positions and the short-term Eurodollar interest rates applied to them rose rapidly. In 1992–93, the outstanding positions increased slowly and interest rates dropped precipitously, resulting in smaller, but still substantial, additions to interest payments; the additions were the result of the larger liability positions now used in the calculation.

U.S. banks' custody liabilities

The substitution of BIS data and Bank of England data for U.S. nonbanking concerns' liabilities to foreign banks necessitates the removal of certain custody transactions conducted by U.S. banks for U.S. nonbanks in order to avoid double counting these transactions. Therefore, for 1986–93, banks' capital positions were lowered, and capital flows and related income estimates were adjusted. Revisions to capital flows were largest for 1988–90, when net capital inflows were removed from the accounts, and for 1991 and 1993, when net capital inflows were added to the accounts. 