

U.S. International Transactions, Revised Estimates for 1986–95

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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 coverage of transactions. These gaps and plans to fill them were outlined by BEA in its Mid-Decade Strategic Plan for improving BEA's economic accounts (see the [February](#) and [April 1995](#) and [June 1996](#) issues of the SURVEY OF CURRENT BUSINESS). The improvements also address various gaps noted by the International Monetary Fund, the National Academy of Sciences, and the General Accounting Office.¹ In large part, these gaps have arisen because of the dynamic nature of international markets. The major improvements this year respond to rapid changes in both the services markets and the capital markets.

- In the services markets, improved estimates of financial services are introduced that both expand coverage and better measure previously covered services. The estimates better capture the diversity of transactions in financial services and more accurately portray the key role of U.S. institutions in cross-border trade in financial services. Estimates are revised for 1992–95.
- In the capital markets, a survey of selected short-term assets reported by U.S. banks has led to improved coverage of bank- and nonbank-reported capital transactions and related income flows. Estimates are revised for 1994–95.

- For net private remittances, improved estimates of personal remittances of the foreign-born population of the United States are based on key new source data that have recently become available. The new source data permit a refinement of previous estimates for earlier years and lead to more sizable revisions for recent years. Estimates are revised for 1986–95.

In addition to these improvements, incorporation of updated and revised source data led to substantial revisions to travel. Estimates of travel receipts for 1994 were revised as a result of a major correction in source data received from the Immigration and Naturalization Service; revisions were also made to the estimates for 1995. Revisions to capital inflows for foreign direct investment in the United States were also large in 1995, reflecting the incorporation of data from late reports.

Table 1 presents a summary of revisions from all sources. Table 2 presents detail on revisions due to new source data and methodologies.

Revisions resulting from updated seasonal adjustment factors were an additional source of change to the quarterly estimates. For accounts other than goods, revisions due to updated sea-

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The revised estimates of the direct investment accounts were prepared under the general direction of Betty Barker and David Belli; Jeffrey Lowe oversaw the revisions, with the assistance of other staff in the International Investment Division.

1. *Report on the World Current Account Discrepancy* (Washington, DC: International Monetary Fund, September 1987).

Report on the Measurement of International Capital Flows (Washington, DC: International Monetary Fund, September 1992).

Behind the Numbers: U.S. Trade in the World Economy (Washington, DC: National Research Council, 1992).

Following the Money: U.S. Finance in the World Economy (Washington, DC: National Research Council, 1994).

Measuring U.S.-Canada Trade: Shifting Trade Winds May Threaten Recent Progress (Washington, DC: General Accounting Office, January 1994).

Economic Statistics: Status Report on the Initiative to Improve Economic Statistics (Washington, DC: General Accounting Office, July 1995).

sonal factors were small in comparison with revisions due to the introduction of new methodologies or to the incorporation of newly available or updated source data. For series that were substantially revised as a result of new methodologies or source data, seasonal adjustment factors were reestimated from the point at which the revisions begin. For goods, the application of updated seasonal adjustment factors accounted for most of the quarterly revisions for 1993–95, but revisions were also made to reflect the incorporation of corrections to the source data, the retabulation of data to incorporate timing adjustments, and revisions to some balance-of-payments adjustments to the Census-basis data.

Financial services

BEA is introducing an improved measure of receipts and payments on financial services to replace the previous measure, which was incomplete.

The new estimates are based on BEA's first Benchmark Survey of Financial Services Transactions Between U.S. Financial Services Providers and Unaffiliated Foreign Persons. This survey, which covers 1994, provides more complete coverage of financial services transactions, adding coverage for nearly a dozen new types of services. It also provides information that permits BEA to measure more accurately those financial services

previously estimated by indirect methods in the accounts.

The services newly covered are financial management services, financial advisory and custody services, credit card services, securities lending services, foreign exchange brokerage services, and several other miscellaneous services (such as asset pricing services, mutual fund exit fees and load charges, funds transfer charges, and securities settlement and transfer charges)—services in which there has been an explosion of transactions in recent years as a result of the globalization of financial transactions.

The services previously covered by indirect methods of estimation for which survey-based estimates are now available include explicit fees paid and received for trading in outstanding stocks, futures traded on U.S. exchanges, private securities placements, underwriting services, and credit-related services (such as standby letters of credit). Fees paid and received on trading in outstanding bonds will continue to be estimated by BEA using indirect methods of estimation because, unlike all of the above services, explicit fees on bond trades are not separately identifiable and, consequently, cannot be reported on the survey questionnaire. Instead, bond fees are based on a bid-ask spread that BEA estimates, based on capital transactions data from the Treasury Department and on information obtained from market participants.

Table 1.—Revisions to the Current-Account Estimates

(Millions of dollars; quarterly data are seasonally adjusted)

	Exports of goods, services, and income			Imports of goods, services, and income			Unilateral transfers			Balance on current account		
	Previous	Revised	Revision	Previous	Revised	Revision	Previous	Revised	Revision	Previous	Revised	Revision
1986	401,843	401,258	-585	-528,513	-528,513	-24,189	-24,833	-644	-150,859	-152,088	-1,229
1987	449,514	449,292	-222	-592,745	-592,745	-23,107	-23,939	-832	-166,338	-167,392	-1,054
1988	560,426	560,233	-193	-662,487	-662,403	84	-25,023	-26,266	-1,243	-127,083	-128,436	-1,353
1989	642,025	641,659	-366	-719,758	-719,539	219	-26,106	-27,696	-1,590	-103,839	-105,575	-1,736
1990	697,426	697,083	-343	-756,694	-756,522	172	-33,393	-35,219	-1,826	-92,661	-94,657	-1,996
1991	718,194	717,726	-468	-732,486	-731,753	733	6,869	4,510	-2,359	-7,424	-9,518	-2,094
1992	737,394	736,704	-690	-766,796	-763,773	3,023	-32,148	-35,514	-3,366	-61,549	-62,583	-1,034
1993	763,826	762,851	-975	-829,668	-825,147	4,521	-34,084	-37,640	-3,556	-99,925	-99,936	-11
1994	838,820	840,006	1,186	-954,304	-948,544	5,760	-35,761	-39,866	-4,105	-151,245	-148,405	2,840
1995	965,008	969,189	4,181	-1,087,828	-1,082,268	5,559	-30,095	-35,075	-4,980	-152,915	-148,154	4,760
1992: I	183,312	183,103	-209	-183,420	-183,077	343	-6,881	-7,680	-799	-6,989	-7,654	-665
II	184,496	184,312	-184	-192,263	-191,127	1,136	-7,746	-8,580	-834	-15,513	-15,395	118
III	183,222	183,063	-159	-192,980	-192,693	287	-7,030	-7,871	-841	-16,788	-17,501	-713
IV	186,367	186,226	-141	-198,133	-196,875	1,258	-10,491	-11,383	-892	-22,257	-22,032	225
1993: I	187,428	187,026	-402	-197,290	-196,816	474	-7,521	-8,380	-859	-17,383	-18,170	-787
II	191,023	190,582	-441	-207,751	-206,269	1,482	-7,609	-8,533	-924	-24,337	-24,220	117
III	188,544	188,218	-326	-207,342	-206,420	922	-8,234	-9,215	-981	-27,032	-27,417	-385
IV	196,834	197,027	193	-217,288	-215,643	1,645	-10,722	-11,513	-791	-31,176	-30,129	1,047
1994: I	197,173	197,420	247	-220,073	-218,959	1,114	-7,371	-8,169	-798	-30,271	-29,708	563
II	204,161	204,809	648	-233,369	-231,327	2,042	-8,778	-9,507	-729	-37,986	-36,025	1,961
III	214,305	214,287	-18	-245,645	-244,323	1,322	-8,374	-9,975	-1,601	-39,714	-40,011	-297
IV	223,180	223,494	314	-255,218	-253,934	1,284	-11,239	-12,215	-976	-43,277	-42,655	622
1995: I	232,581	233,086	505	-263,515	-263,501	14	-7,520	-8,639	-1,119	-38,454	-39,054	-600
II	239,760	241,497	1,737	-275,785	-274,183	1,602	-7,117	-8,290	-1,173	-43,142	-40,976	2,166
III	242,255	244,479	2,224	-274,725	-273,175	1,550	-7,780	-8,992	-1,212	-40,250	-37,688	2,562
IV	250,412	250,128	-284	-273,808	-271,409	2,399	-7,677	-9,154	-1,477	-31,073	-30,435	638

The survey results and discussions with market participants have greatly increased BEA's understanding of current market practices. First, the survey and discussions indicated that there was duplication in coverage between transactions with unaffiliated foreigners (estimated by indirect methods) and transactions with affiliated foreigners, because a much larger share of transactions takes place through affiliated networks than was recognized by the indirect methods. These transactions were already included in BEA's quarterly and annual direct investment surveys of affiliated services transactions. Second, the survey results and discussions indicated that transactions in-

creasingly took place at wholesale, rather than at retail, fee rates or, in some cases, even below wholesale fee rates. The indirect methods of estimation made some, but insufficient, allowance for these pricing differences. Third, for those transactions that take place through affiliated networks, the intracompany charge can differ significantly from the retail or wholesale fee, often simply reflecting the amount that affiliates agree to reimburse each other for the provision of financial services. In addition, intracompany charges for the provision of financial services are often combined indistinguishably with other intracompany charges and therefore cannot be

Table 2.—Revisions Due to New Source Data and Methodologies, 1986–95

(Millions of dollars)

(Credits +; debits -) ¹	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
Other private services receipts (line 9):										
Revised	26,929	28,466	30,618	36,084	39,193	46,598	49,291	53,436	59,071	61,724
Changes due to new financial services estimates							-1,450	-1,607	-1,336	-1,564
Revisions due to updated source data	-585	-222	-194	-366	-342	-172	-256	-58	1,385	800
Previous	27,514	28,688	30,812	36,450	39,535	46,770	50,997	55,101	59,022	62,488
Other private income receipts (line 13):										
Revised							60,020	53,332	68,946	89,064
Changes due to new financial services estimates							621	771	1,178	2,296
Changes due to SSFFA									2,255	1,643
Revisions due to updated source data									-322	-386
Previous							59,399	52,561	65,835	85,511
Other private services payments (line 23):										
Revised							-23,687	-27,897	-30,980	-33,970
Changes due to new financial services estimates							2,534	4,187	5,224	5,236
Revisions due to updated source data							-7	-85	-599	-1,058
Previous							-26,214	-31,999	-35,605	-38,148
Other private income payments (line 27):										
Revised			-72,314	-93,768	-95,489	-83,063	-67,054	-63,041	-77,614	-97,977
Changes due to new financial services estimates							-1	-2	13	15
Changes due to bond interest income			84	219	172	733	496	398	456	-67
Revisions due to updated source data									-832	1,437
Previous			-72,398	-93,987	-95,661	-83,796	-67,549	-63,437	-77,251	-99,362
Private remittances and other transfers (line 32):										
Revised	-10,578	-11,222	-13,020	-14,041	-14,602	-15,920	-15,696	-16,736	-19,506	-20,696
Changes due to immigrants' remittances	-452	-623	-1,011	-1,343	-1,560	-2,056	-2,312	-2,954	-3,663	-4,485
Revisions due to updated source data							-54	206	-143	-257
Previous	-10,126	-10,599	-12,009	-12,698	-13,042	-13,864	-13,330	-13,988	-15,700	-15,954
Foreign securities (line 45):										
Revised							-49,166	-146,253	-60,270	-98,960
Changes due to new financial services estimates							-2,751	-4,446	-4,550	-4,580
Revisions due to updated source data									-5,921	-611
Previous							-46,415	-141,807	-49,799	-93,769
U.S. nonbanking concerns' claims on unaffiliated foreigners (line 46):										
Revised									-32,804	-34,219
Changes due to SSFFA									1,335	-2,115
Revisions due to updated source data									-1,518	2,532
Previous									-32,621	-34,636
U.S. banks' claims on unaffiliated foreigners (line 47):										
Revised									-8,161	-69,146
Changes due to SSFFA and revisions due to updated source data									-9,076	-10,142
Previous									915	-59,004
U.S. Treasury securities (line 58):										
Revised							37,131	24,381	34,225	99,340
Changes due to new financial services estimates							274	318	256	283
Revisions due to updated source data									158	-24
Previous							36,857	24,063	33,811	99,081
U.S. securities, other than U.S. Treasury securities (line 59):										
Revised							30,043	80,092	57,006	95,268
Changes due to new financial services estimates							176	228	97	-34
Revisions due to updated source data									-1,716	726
Previous							29,867	79,864	58,625	94,576

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.

NOTE.—Line references are to table 1 of "U.S. International Transactions, First Quarter 1996," in this issue of the SURVEY OF CURRENT BUSINESS.

SSFFA Survey of Selected Foreign Financial Assets held by U.S. residents as of March 31, 1994, conducted by the Federal Reserve Bank of New York and the U.S. Department of the Treasury

reported separately to BEA. Fourth, for transactions that take place through affiliated networks, financial intermediaries often bill each other low amounts because they perform fewer services for one another than they typically perform for retail customers.

The revised estimates for 1994 present a much different statistical picture of financial services with unaffiliated foreigners than the previous estimates. For the newly covered services, \$2.9 billion in receipts and \$0.6 billion in payments were added to the accounts. For the previously covered services, receipts were reduced to \$2.7 billion from \$7.1 billion, and payments were reduced to \$1.0 billion from \$6.7 billion. In total, financial services receipts are now \$5.6 billion, and payments, \$1.6 billion. Other financial services transactions—those that occur through affiliated networks—are recorded as intracompany charges in the direct investment services accounts and are not separately identifiable.

The annual survey results are extrapolated forward by the same activity variables used previously; these extrapolations will be replaced each year with annual sample survey results, which will be routinely included in the revisions to the international accounts published in July. Revisions are carried back to 1992, the year in which BEA's monthly series on services begins. Source data and assumptions do not permit reliable estimation prior to that year.

Adjustments are made to capital flows for foreign securities, U.S. Treasury securities, and U.S. securities other than U.S. Treasury securities to incorporate the new, and lower, charges; the result is to increase capital flows for most series because, previously, too large a deduction for financial services fees was made from the gross transactions data. In addition, the result is to raise the outstanding positions for most series; because portfolio income estimates are based in part on the position estimates, the effect of the revisions is to raise both income receipts and income payments.

Survey of Selected Foreign Financial Assets

The Survey of Selected Foreign Financial Assets was developed by the Federal Reserve Bank of New York and the U.S. Department of the Treasury, with assistance from BEA. A primary purpose of the survey was to collect data on certain types of financial claims on foreigners that could be used to assess the coverage of the same type of claims on the Treasury Department's international capital surveys; the Treasury surveys

are the basis for many of the portfolio capital estimates in BEA's international accounts.

The survey results were also intended as a check on BEA's current methodology for adjusting the Treasury Department's estimates of commercial paper placed in the United States by foreigners; as a check on BEA's current methodology that substitutes Bank for International Settlements (BIS) source data for Treasury Department source data on U.S. nonbank claims for selected countries; and to provide a breakdown of financial claims by type that could be used to improve BEA's methodology for estimating income earned on U.S. bank claims.

The survey collected data on selected U.S. financial claims on foreigners as of March 31, 1994. This date was chosen to coincide with that of Treasury Department's benchmark survey of U.S. holdings of foreign stocks and bonds, for which results are not yet available.

U.S. banks' claims.—Survey results indicated an understatement of outstanding U.S. bank-reported claims of \$45.5 billion, compared with estimates in BEA's international investment position. Consequently, BEA has raised its position estimate for March 1994 and has recalculated quarterly flows beginning with the first quarter of 1994. Much of the undercoverage was in the category of short-term assets held on behalf of U.S. banks' domestic customers. The Treasury Department has taken actions to eliminate the undercoverage from its ongoing surveys. However, for the category of placements of commercial paper in U.S. markets by foreigners, some undercoverage appears to remain; therefore, when undercoverage is evident, BEA will continue to substitute its estimates of commercial paper placements (based on data from market sources) for the Treasury Department data. For 1995, changes in U.S. bank-reported claims increased \$10.1 billion more than previously estimated, as a result of improved coverage as well as updated source data; the two effects cannot be separately identified.

U.S. nonbanks' claims.—On the basis of the survey results, BEA reevaluated its substitution of BIS source data for Treasury Department data on U.S. nonbank-reported claims. Examination of the two sets of data showed that double counting of U.S. banks' domestic customers' claims is likely for Canada and Germany. Therefore, the BIS source data for those countries were adjusted to remove duplication that arose as a result of improved Treasury Department

source data. Revisions to the quarterly flows were made beginning with the first quarter of 1994. For 1995, changes in U.S. nonbank-reported claims increased \$2.1 billion more than previously estimated.

Income receipts on banks' and nonbanks' claims.—"Other" private interest receipts were revised upward to reflect the adjusted positions of banks' and nonbanks' claims. In addition, the survey provided critical information on the composition of bank assets (not previously available) that permitted BEA to adjust its estimates of bank income to reflect current market conditions. Interest receipts for 1994-95 were revised upward; for 1995, receipts were raised \$1.6 billion.

Private remittances

Improved estimates of personal remittances of the foreign-born population of the United States are introduced for 1986-95. BEA is able to improve the accuracy of these measures, which it introduced 4 years ago, with updated data from the 1990 Census of Population, from 1990-94 immigration data from the Immigration and Naturalization Service (INS), from Census Bureau estimates on the annual flow of undocumented aliens, and from newly available 1994 estimates of the foreign-born population from the Census Bureau's Current Population Survey. As with the previous estimates, a simulation model based on family status, age, and length of U.S. residency projects demographic changes in the size and composition of the foreign-born population. Census Bureau records also provide income levels for the foreign-born population, arrayed by family status and duration of U.S. residency.

These data are combined with data on dollar remittances of the foreign-born population from a 1991 sample survey of legalized aliens that was conducted by the U.S. Department of Labor and that was recently made available. The sample survey contained the same questions and surveyed the same respondents as a previous sample survey conducted by INS in 1987. The data from the 1991 survey confirmed the major conclusions of the 1987 survey. The data show that the proportion of income remitted is significantly higher for persons from developing countries than from developed countries, that the proportion of income remitted is highest in the initial years of residency in the United States and drops sharply thereafter, and that the proportion of income remitted is

higher for single foreign-born persons than for married foreign-born persons.

Outward personal remittances of the foreign-born population in the United States were \$11.8 billion in 1995, \$4.5 billion higher than the previous estimate for 1995. Projections in the earlier estimates for both the foreign-born population and income of the foreign-born population proved too conservative.

The improved estimates do not cover inward remittances to the foreign-born population or transfers of assets into or out of the country at the time of migration, all of which should in principle be included in the accounts. Source data are not available to prepare such estimates.

Interest payments on foreign holdings of U.S. bonds

Interest payments on foreign holdings of U.S. bonds have been revised for 1988-95 to incorporate a new estimating methodology. Previously, estimates of interest payments exhibited excessive quarter-to-quarter volatility and were overstated for 1994 and earlier years, primarily because they were based on a cumulated income stream to which changes in income transactions from two quarters earlier were applied.

The new method substantially improves the quality of the estimates because it uses an estimate of outstanding bonds in the derivation of income payments; the position estimates of outstanding bonds can now be compared directly with benchmark survey data obtained from the Treasury Department, which was not possible previously. The new estimates of income are also superior because they are on an accrual basis, because they better capture the effect of redemptions, and because they utilize more up-to-date and comprehensive information on bond yields.

The improved income estimates are derived by multiplying an average market yield on the current portfolio by the position estimate of outstanding bonds for the current period. The position estimate is based on data obtained from the Treasury Department's Foreign Portfolio Investment Survey as of December 31, 1989. This benchmark survey is conducted every 5 years and also provides a geographic distribution of bond holdings.

The new methodology resulted in little change in income payments on U.S. bonds for 1995; for 1988-94, income payments were reduced.