

## Annual Revision of the U.S. International Accounts, 1997–2006

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As is customary each June, the estimates of the U.S. international transactions and of the U.S. international investment position have been revised to incorporate statistical and methodological revisions, as well as changes in the level of detail presented in the tables. This year, the Bureau of Economic Analysis (BEA) has continued to address gaps in coverage. In large part, the gaps have arisen because of the dynamic nature of the international financial markets. The most significant revision this year was the incorporation of comprehensive estimates of transactions in financial derivatives for 2006. In addition, a new methodology was introduced for estimating interest received and paid on bonds for 2001–2006; this methodology improves the accuracy of the estimate and brings the estimation of interest more closely in line with the concepts used in the national income and product accounts and with international guidelines of the International Monetary Fund. Finally, the geographic detail of the accounts is presented in an expanded format for 1999–2004; the new estimates extend to these years the same format that was introduced last year for 2005–2006.

Other major revisions this year were as follows:

- Goods exports and goods imports end-use commodity classification codes were updated for 2004–2006 to incorporate revisions made by the World Customs Organization to the international Harmonized System of commodity classification codes.
- U.S. holdings and transactions in foreign bonds, stocks, and related interest and dividend receipts were revised for 2005–2006 to incorporate results of the U.S. Treasury Department's annual survey of securities claims for December 2005.
- Foreign holdings and transactions in U.S. corporate bonds, U.S. Treasury bonds, U.S. agency bonds, U.S. stocks, and related interest and dividend payments were revised to incorporate results from the U.S. Treasury Department's annual surveys of securities liabilities for June 2005 (revised) and for June 2006.
- The statistical adjustment for revaluing some goods imports of computer software from the value of the

medium to full value was updated for 1997–2006.

Estimates of the international transactions accounts were revised for 1997–2006, and estimates of the international investment position were revised for 2003–2005.

The improved statistical coverage and measurement in the accounts, new methodologies, and new presentation are discussed in the remainder of this article. In addition to these major changes, revisions to the accounts resulted from the incorporation of regularly available data from BEA's quarterly surveys, from the U.S. Treasury Department's and Federal Reserve System's monthly and quarterly surveys, and from other U.S. Government agencies and private sources. These revisions affected the estimates for 2003–2006.

For 2006, as a result of all the changes, the current-account deficit was reduced \$45.2 billion to \$811.5 billion (table 1). By account, \$0.6 billion was removed from goods exports, and \$1.7 billion was added to goods imports, resulting in a deficit that was \$2.3 billion higher than previously estimated. For services, \$9.5 billion was added to services exports, and \$0.4 billion was added to services imports, resulting in a surplus that was \$9.1 billion higher than previously estimated. For income, \$28.4 billion was added to income receipts, and \$15.5 billion was removed from income payments, resulting in a surplus that was \$43.9 billion higher than previously estimated. For net current unilateral transfers, \$5.5 billion in net transfers to foreign residents was added. Net financial account inflows (net acquisitions by foreign residents of assets in the United States less net acquisitions by U.S. residents of assets abroad) were revised up \$114.0 billion, to \$833.2 billion. Details on revisions to individual series are shown in table 2.

For 2005, as a result of all changes, the net international investment position with direct investment at current cost was revised to  $-\$2,238.4$  billion from  $-\$2,693.8$  billion: U.S. assets abroad were revised to \$11,576.3 billion from \$10,008.7 billion, and foreign assets in the United States were revised to \$13,814.7 billion from \$12,702.5 billion. Details on revisions to individual series are shown in table 3.

## Financial derivatives

The newly available comprehensive statistics on financial derivatives fill a major gap in coverage in the international accounts and capture an area of financial activity that has grown rapidly over the past decade to become an important part of global finance. The statistics are the result of many years of collaborative efforts among the U.S. Treasury Department, the Federal Reserve Board, the Federal Reserve Bank of New York, BEA, and private-sector financial market participants.<sup>1</sup>

The incorporation of the statistics on derivatives transactions resulted in U.S. net receipts (financial inflows) of \$28.8 billion in 2006. This represents 3.5 percent of the total net financial inflow to the United States in that year. The incorporation of the newly available statistics on derivatives positions resulted in the addition of \$1,237.6 billion to the value of U.S.-owned assets abroad at yearend 2006 and \$1,178.6 billion to the value of foreign-owned assets in the United States.

Financial derivatives are financial instruments whose value is derived from the value of underlying variables, such as interest rates, exchange rates, stock prices, commodity prices, credit quality, other financial derivatives, and many other variables. Changes in the value of financial derivatives are determined by changes in the value of their underlying variables. Until now, estimates of derivatives transactions in the international accounts have been limited to estimates of profits and losses of foreigners' trading of futures contracts on U.S. exchanges. While coverage of these futures contracts was believed to be complete, it excluded transactions of U.S. residents' trading of futures contracts on foreign exchanges and all activity in over-the-counter markets, either in the United States or abroad.

The accounts now include comprehensive coverage of derivatives transactions beginning with the first quarter of 2006 and derivatives positions beginning with yearend 2005. The previously published partial estimates of transactions are removed beginning with the first quarter of 2006 to avoid an overlap with the new source data but are retained for 1977–2005. Estimates of transactions for the current quarter will be incorporated into the accounts with a one-quarter lag.

Comprehensive data on financial derivatives eliminate a source of misstatement in the international accounts. In the transactions accounts, the absence of comprehensive statistics contributed to the statistical discrepancy because the funds that were received or paid on all derivatives contracts were recorded in the

accounts, but the derivatives transactions that gave rise to the funds received or paid were largely unrecorded. In the investment position accounts, U.S. holdings of assets abroad and foreign holdings of assets in the United States were understated as a result of the absence of data for holdings of derivatives contracts.

Comprehensive data on financial derivatives also provide more complete measures of U.S. international financial transactions and investment positions because derivatives can offset, augment, or substitute for transactions and positions in other financial instruments. One of the most important uses of financial derivatives is for hedging, or reducing the risk of, holdings of other financial instruments, such as stocks, bonds, and loans. Derivatives can also be used for speculative or investment purposes.

Comprehensive data on financial derivatives are collected in a new survey within the Treasury International Capital reporting system. Data are collected from U.S. banks, securities dealers, and other firms with worldwide holdings of financial derivatives, for their own and their customers' accounts combined, in excess of \$100 billion in notional value, which is the face value of underlying assets used to calculate a contract's cash flows. Trading in financial derivatives is highly concentrated among a small number of large firms. About 50 firms provide data each quarter to the Federal Reserve Bank of New York, which conducts the survey for the U.S. Treasury Department.

**Characteristics.** Financial derivatives are of two general types, forward-type derivatives and options. Forward-type derivatives include actual forward contracts as well as futures contracts and swaps. A forward contract is an agreement between parties to buy or sell an asset or its cash equivalent for a specified price at a specified future time; forward contracts have customized features and are settled at maturity. A futures contract is also an agreement to buy or sell an asset for a specified price at a specified future time. However, futures contracts differ from forward contracts in several respects, including that futures have standardized features and are settled on a daily basis, usually on public exchanges. A swap is an agreement between parties to exchange cash flows in the future according to a prearranged formula; in essence, a swap is a portfolio of forward contracts. An option gives the holder the right, but not the obligation, to buy or sell an underlying asset for a specified price by or on a specified date.

Financial derivatives are traded in both public exchange markets and private over-the-counter (OTC) markets. In public exchange markets, contracts with standardized features are traded, and the exchange clearinghouse becomes a counterparty to all

1. For a guide to the data by the Federal Reserve Board, see Stephanie E. Curcuro, "U.S. Cross-Border Derivatives Data: A User's Guide," *Federal Reserve Bulletin* (May 2007): A1–A16.

transactions. Futures contracts and options contracts with standardized features are usually traded on public exchanges. In OTC markets, contracts with customized features are arranged and generally settled directly between financial market participants without the involvement of a clearinghouse. Forwards, swaps, and customized options are usually arranged and traded in OTC markets.

**Presentation in the international accounts.** Transactions in financial derivatives between U.S. and foreign residents are presented in summary form in the financial account of the U.S. international transactions accounts (ITAs) (table A). Financial derivatives transactions resulted in U.S. net receipts (financial inflows) of \$28.8 billion in 2006. There was considerable variability in transactions over the four quarters of the year, including a shift to U.S. net payments in the fourth quarter (table A).

Transactions in financial derivatives consist of U.S. cash receipts and payments arising from the sale, purchase, or periodic settlement of derivatives contracts.<sup>2</sup> For forward-type contracts, cash receipts and payments usually do not occur at contract initiation because the initial value of contracts is usually zero. Cash receipts and payments occur to settle the value of forward contracts at maturity, to settle daily changes in the value of futures contracts, and to settle the value of swap contracts at specific points in time, including maturity or termination. For options, cash receipts and payments occur when premiums are received or paid at initiation or when in-the-money options are sold before expiration or settled at expiration in cash.

Transactions in financial derivatives are reported on a net basis, which means that the value of U.S. cash re-

ceipts less U.S. cash payments on contracts with positive fair values and negative fair values is reported as a single amount. Consequently, in the ITAs, derivatives transactions cannot be separated into transactions for U.S.-owned assets abroad and for foreign-owned assets in the United States, as can transactions for all other types of financial assets. Instead, derivatives transactions are presented as a net amount on a single line that is separate from lines for transactions for U.S.-owned assets abroad and for foreign-owned assets in the United States. (See also the box "Derivatives in the International Transactions Accounts.")

Positions in financial derivatives are presented in summary form in the U.S. international investment position (IIP) (table B). Positions are reported as the gross positive fair value of outstanding derivatives contracts, which is recorded as part of U.S.-owned assets abroad, and the gross negative fair value of outstanding derivatives contracts, which is recorded as part of foreign-owned assets in the United States.

The gross positive fair value of derivatives contracts to U.S. residents was \$1,237.6 billion at yearend 2006, or 9 percent of total U.S.-owned assets abroad. The gross negative fair value of contracts to U.S. residents was \$1,178.6 billion, or 7 percent of total foreign-owned assets in the United States. The net fair value of derivatives contracts was \$58.9 billion (table B). The U.S. net positive position in financial derivatives stands in contrast to the net negative positions in derivatives recorded by many other large countries that report data on derivatives transactions, including the United Kingdom, France, the Netherlands, Japan, and Italy.

The fair (or market) value of a derivatives contract is the amount for which the contract could be exchanged between willing parties. A derivatives contract between a U.S. and a foreign resident with a positive fair value represents the amount that the foreign

**Table A. Summary of U.S. International Transactions**

[Millions of dollars, quarters seasonally adjusted]

Line	(Credits +; debits -)	2006	2006				2007
			I	II	III	IV	I
<b>Current account</b>							
1	Exports of goods and services and income receipts .....	2,096,165	494,027	518,595	532,894	550,649	560,445
2	Imports of goods and services and income payments .....	-2,818,047	-673,277	-700,504	-726,352	-717,914	-726,878
3	Unilateral current transfers, net .....	-89,595	-21,360	-23,686	-23,877	-20,673	-26,148
<b>Capital account</b>							
4	Capital account transactions, net .....	-3,913	-1,724	-1,008	-545	-637	-559
<b>Financial account</b>							
5	U.S.-owned assets abroad, net (increase/financial outflow (-)) .....	-1,055,176	-344,032	-212,218	-209,898	-289,028	-420,786
6	Foreign-owned assets in the United States, net (increase/financial inflow (+)) .....	1,859,597	538,140	355,442	449,987	516,029	623,554
7	Financial derivatives, net .....	28,762	1,633	14,001	14,911	-1,783	n.a.
8	Statistical discrepancy (sum of above items with sign reversed) .....	-17,794	6,593	49,378	-37,121	-36,643	-9,629
<b>Memoranda:</b>							
9	Balance on current account (lines 1+2+3) .....	-811,477	-200,611	-205,595	-217,334	-187,938	-192,581
10	Net financial flows (lines 5+6+7) .....	833,183	195,741	157,225	255,000	225,218	202,768

2. Initial cash margin and collateral deposits on derivatives contracts are classified as banking transactions, specifically increases or decreases in brokerage balances, not as derivatives transactions.

resident would have to pay the U.S. resident if the contract was terminated. A contract with a negative fair value represents the amount that the U.S. resident

would have to pay to the foreign resident if the contract was terminated. A contract's fair value can be either computed using the quoted market price of the

**Table B. Summary of International Investment Position of the United States at Yearend, 2005 and 2006**

[Millions of dollars]

Line	Type of investment	Position, 2005	Changes in position in 2006				Total (a+b+c+d)	Position, 2006
			Attributable to					
			Financial flows (a)	Valuation adjustments				
				Price changes (b)	Exchange rate changes <sup>1</sup> (c)	Other changes <sup>2</sup> (d)		
1	<b>Net international investment position of the United States (lines 2+3)</b> .....	<b>-2,238,359</b>	<b>-833,183</b>	<b>347,585</b>	<b>220,653</b>	<b>-36,325</b>	<b>-301,270</b>	<b>-2,539,629</b>
2	Financial derivatives net (line 5 less line 15) <sup>3</sup> .....	57,915	-28,762	( <sup>4</sup> )	( <sup>4</sup> )	<sup>4</sup> 29,782	1,020	58,935
3	Net international investment position excluding financial derivatives (line 6 less line 16)	-2,296,274	-804,421	347,585	220,653	-66,107	-302,290	-2,598,564
4	<b>U.S.-owned assets abroad (lines 5+6)</b> .....	<b>11,576,336</b>	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	<b>2,178,654</b>	<b>13,754,990</b>
5	Financial derivatives, gross positive fair value.....	1,190,029	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	47,535	1,237,564
6	U.S.-owned assets abroad excluding financial derivatives (lines 7+8+9).....	10,386,307	1,055,176	675,909	268,603	131,431	2,131,119	12,517,426
7	U.S. official reserve assets.....	188,043	-2,374	31,123	3,092	-31	31,810	219,853
8	U.S. Government assets, other than official reserve assets.....	77,523	-5,346			12	-5,334	72,189
9	U.S. private assets.....	10,120,741	1,062,896	644,786	265,511	131,450	2,104,643	12,225,384
10	Direct investment at current cost.....	2,535,188	235,358	46,009	39,188	-124	320,431	2,855,619
11	Foreign securities.....	4,345,884	289,422	598,777	198,181	0	1,086,380	5,432,264
12	U.S. claims on unaffiliated foreigners reported by U.S. nonbanking concerns.....	734,034	83,531		13,075	17,824	114,430	848,464
13	U.S. claims reported by U.S. banks, not included elsewhere.....	2,505,635	454,585		15,067	113,750	583,402	3,089,037
14	<b>Foreign-owned assets in the United States (lines 15+16)</b> .....	<b>13,814,695</b>	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	<b>2,479,924</b>	<b>16,294,619</b>
15	Financial derivatives, gross negative fair value.....	1,132,114	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	46,515	1,178,629
16	Foreign-owned assets in the United States excluding financial derivatives (lines 17+18)	12,682,581	1,859,597	328,324	47,950	197,538	2,433,409	15,115,990
17	Foreign official assets in the United States.....	2,306,292	440,264	20,840		2,769	463,873	2,770,165
18	Other foreign assets.....	10,376,289	1,419,333	307,484	47,950	194,769	1,969,536	12,345,825
19	Direct investment at current cost.....	1,868,245	180,580	32,495	3,916	14,190	231,181	2,099,426
20	U.S. Treasury securities.....	643,793	-35,931	-9,233		-4,386	-49,550	594,243
21	U.S. securities other than U.S. Treasury securities.....	4,352,998	591,951	284,222	25,419	-26,054	875,538	5,228,536
22	U.S. currency.....	351,706	12,571			0	12,571	364,277
23	U.S. liabilities to unaffiliated foreigners reported by U.S. nonbanking concerns.....	557,840	235,769		9,605	-62,849	182,525	740,365
24	U.S. liabilities reported by U.S. banks, not included elsewhere.....	2,601,707	434,393		9,010	273,868	717,271	3,318,978

1. Represents gains or losses on foreign-currency-denominated assets and liabilities due to their revaluation at current exchange rates.

2. Includes changes in coverage, capital gains and losses of direct investment affiliates, and other adjustments to the value of assets and liabilities.

3. Financial flows and valuation adjustments for financial derivatives are available only on a net basis, which is shown on line 2; they are not separately available for gross positive fair values and gross negative fair values of financial derivatives. Consequently, columns (a) through (d) on lines 4, 5, 14, and 15 are not available.

4. Data are not separately available for the three types of valuation adjustments; therefore, the sum of all three types is shown in column (d). Price changes result from changes in the value of derivatives contracts due to changes in the value of their underlying assets or reference rates, which may arise from movements in interest rates, stock prices, commodity prices, or other variables. Exchange-rate changes result from the revaluation of foreign-currency-denominated derivatives contracts at current exchange rates. "Other changes" can result when data on investment positions that had accumulated in prior periods are covered by a new or more complete survey.

### Derivatives in the International Transactions Accounts

Derivatives do not fit neatly into the international transactions accounts for two reasons. The first is that, unlike financial instruments such as bonds and stocks, some derivatives contracts cannot be categorized solely as claims or liabilities. Clearly an option written by a U.S. resident and purchased by a foreign resident is a U.S. liability to foreigners, but the distinction is less clear for products such as swaps, forwards, and futures. Over the lives of these products, the fair market value may be positive at times and negative at times, and it may switch signs several times within a quarter. So these instruments are neither strictly claims, with consistently positive fair values and payments to the U.S. resident counterparty to the contract, nor strictly liabilities, with consistently negative fair values and payments from the U.S. resident counterparty.

The second reason that derivatives are not easily incorporated into the international transactions accounts is

the ambiguous status of the associated payments. The periodic payments on derivatives can be considered returns on invested capital, which are recorded in the current account; alternatively, they can be considered realized gains from changes in the contractual value, which are recorded in the financial account. Because the return from derivatives for many end users comes in the form of trading gains and losses, the International Monetary Fund has recommended that periodic payments on derivatives be recorded as financial account transactions.<sup>1</sup>

1. See Stephanie E. Curcuru, "U.S. Cross-Border Derivatives Data: A User's Guide," *Federal Reserve Bulletin* (May 2007; reprinted by permission): A10; Robert M. Heath, "The Statistical Measurement of Financial Derivatives" (IMF working paper 98/24, Washington, DC: International Monetary Fund, March 1998); *Financial Derivatives: A Supplement to the Balance of Payments Manual* (Washington, DC: International Monetary Fund, 2000).

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contract, or if a quoted market price is unavailable, it can be estimated using either a quoted market price of a similar contract or a valuation technique. Fair values are reported as of the close of business on the last business day of the quarter. The gross positive fair value of derivatives contracts is the total combined value of all contracts with a positive fair value, and the gross negative fair value is the total combined value of all contracts with a negative fair value.

The gross fair values of U.S. holdings of derivatives contracts are large, but they are somewhat smaller than the values of many other financial assets recorded in the IIP. For the years for which data are available, the gross positive and gross negative fair values of derivatives contracts are largely offsetting; as a result, derivatives accounted for only a small portion of the overall net position. Transactions involving derivatives contracts often have much larger percentage changes in value than those involving other financial instruments, and unlike other instruments, the values of derivatives contracts can change from positive to negative value, or vice versa.

The net fair value of derivatives contracts, net transactions, and net valuation adjustments—which are derived by subtracting net transactions from yearly changes in the net fair value of contracts—are also recorded in the IIP. Data are not separately available for the three types of valuation adjustments—price changes, exchange-rate changes, and “other” changes; therefore, the sum of all three types is recorded as “other” changes.

**Detailed estimates.** Detailed estimates of financial derivatives transactions are presented in table C. Table C presents transactions for (1) OTC contracts by major risk category—interest rate, exchange rate, and “other” risk, including changes in stock prices, commodity prices, credit quality, or any other underlying variable; (2) U.S. residents’ contracts on foreign exchanges and foreign residents’ contracts on U.S. exchanges; and (3) all contracts by country of residence of foreign counterparty. All contracts with foreign official institutions are presented as a memorandum item.

By type of market, transactions were evenly divided between those in OTC contracts and those in exchange-traded contracts for 2006, but there was considerable variability over the four quarters of the year (table C). Transactions in OTC contracts were \$14.6 billion for 2006, mostly consisting of \$11.2 billion in transactions in single-currency interest rate contracts. The value of OTC transactions by risk category varied considerably over the four quarters of the year. Transactions in exchange-traded contracts were \$14.2 billion for the year. Nearly three-fourths of the value was accounted for by U.S. residents’ transactions on for-

eign exchanges, mostly for own accounts. The value of U.S. residents’ transactions on foreign exchanges and foreign residents’ transactions on U.S. exchanges also varied considerably over the four quarters of the year.

By residence of foreign counterparty, transactions for the year were mostly with counterparties in Europe. On both an annual and a quarterly basis, transactions were mostly with counterparties in a few countries with large financial centers, including the United Kingdom, Switzerland, the Cayman Islands, Canada, Ireland, Australia, Germany, and Japan.

Detailed estimates of financial derivatives positions are presented in tables D and E. Table D presents gross positive and gross negative fair values of derivatives contracts in the same detail as that for transactions, with additional detail for types of OTC contracts—forwards, swaps, and options. Contracts with own foreign offices, with foreign official institutions, and contracts of U.S. depository institutions with foreigners are presented as memoranda. By type of market, the gross

**Table C. Transactions in Financial Derivatives**

[Millions of dollars]

Line	(Credits +; debits -)	2006	2006			
			I	II	III	IV
1	<b>Financial derivatives, net</b> .....	<b>28,762</b>	<b>1,633</b>	<b>14,001</b>	<b>14,911</b>	<b>-1,783</b>
	By type of contract:					
2	Over-the-counter contracts .....	14,553	-3,142	10,950	8,870	-2,125
3	Single-currency interest rate contracts .....	11,201	670	6,273	6,801	-2,543
4	Foreign exchange contracts .....	-211	741	-1,033	-61	142
5	Other contracts .....	3,563	-4,553	5,710	2,130	276
6	Exchange-traded contracts .....	14,209	4,775	3,051	6,041	342
7	U.S. residents' contracts on foreign exchanges	10,365	2,549	3,141	3,619	1,056
8	Own contracts .....	6,628	679	3,684	2,103	162
9	Customers' contracts .....	3,737	1,870	-543	1,516	894
10	Foreign residents' contracts on U.S. exchanges	3,844	2,226	-90	2,422	-714
	By area or country:					
11	Europe .....	19,855	-2,615	11,428	10,895	147
	Of which:					
12	European Union .....	n.a.	n.a.	10,166	6,734	2,068
	Of which:					
13	Euro area .....	9,158	3,675	4,590	3,380	-2,487
	Of which:					
14	Belgium .....	-315	-595	171	124	-15
15	France .....	759	813	450	66	-570
16	Germany .....	-687	2,422	-1,182	-412	-1,515
17	Ireland .....	4,415	391	2,741	943	340
18	Italy .....	215	-181	102	850	-556
19	Netherlands .....	1,914	573	288	614	439
20	United Kingdom .....	6,550	-7,103	6,045	3,186	4,422
21	Switzerland .....	4,849	557	1,659	4,004	-1,371
22	Canada .....	-4,507	-1,700	-1,309	-1,540	42
23	Caribbean financial centers .....	5,325	3,339	1,272	1,322	-608
24	Of which: Cayman Islands .....	4,840	2,812	1,056	1,677	-705
25	Latin America, excluding Caribbean financial centers .....	-1,464	565	-591	-69	-1,369
26	Asia .....	5,862	1,105	2,071	2,584	102
27	Of which: Japan .....	-346	257	742	-412	-933
28	Africa .....	610	146	151	70	243
29	Other .....	3,081	793	979	1,649	-340
	Of which:					
30	Australia .....	-2,505	689	-733	-813	-1,648
31	International and regional organizations .....	5,396	-32	1,734	2,491	1,203
	<b>Memorandum:</b>					
32	Contracts with foreign official institutions .....	2,120	1,203	399	307	211

positive and negative fair values of contracts were almost completely attributable to OTC contracts, mainly single-currency interest rate swaps. The gross fair values of exchange-traded contracts were small because changes in the value of these contracts are settled on a daily basis.

**Table D. Fair Value of Financial Derivatives by Type of Contract at Quarterend**  
[Millions of dollars]

Line		2005	2006			
		IV	I	II	III	IV
1	<b>Financial derivatives, net (line 17 less line 33)</b> .....	<b>57,915</b>	<b>66,356</b>	<b>67,749</b>	<b>60,003</b>	<b>58,935</b>
2	Over-the-counter contracts.....	54,693	63,513	65,767	57,837	56,198
3	Single-currency interest rate contracts .....	38,925	42,056	41,934	37,164	43,359
4	Forwards .....	-329	492	-4,337	-174	125
5	Swaps .....	23,498	25,397	33,016	18,019	23,988
6	Options.....	15,756	16,167	13,255	19,319	19,246
7	Foreign exchange contracts.....	14,956	14,859	16,818	16,885	25,441
8	Forwards .....	-1,912	-2,281	-4,838	-3,039	-2,135
9	Swaps .....	15,450	15,436	21,265	17,211	24,634
10	Options.....	1,418	1,704	2,191	2,713	2,942
11	Other contracts .....	812	6,598	5,215	3,788	-12,602
12	Exchange-traded contracts .....	3,222	2,843	1,982	2,166	2,737
13	U.S. residents' contracts on foreign exchanges.....	867	873	881	524	706
14	Own contracts .....	665	1,397	424	674	562
15	Customers' contracts .....	202	-524	457	-150	144
16	Foreign residents' contracts on U.S. exchanges.....	2,355	1,970	1,101	1,642	2,031
17	<b>Financial derivatives, gross positive fair value</b> .....	<b>1,190,029</b>	<b>1,189,856</b>	<b>1,295,787</b>	<b>1,193,764</b>	<b>1,237,564</b>
18	Over-the-counter contracts.....	1,171,172	1,168,623	1,270,474	1,172,655	1,211,924
19	Single-currency interest rate contracts .....	853,993	839,046	902,012	803,234	789,994
20	Forwards .....	1,132	2,353	5,240	1,688	1,747
21	Swaps .....	768,817	755,082	814,587	715,035	702,266
22	Options.....	84,044	81,611	82,185	86,511	85,981
23	Foreign exchange contracts.....	147,057	139,673	159,565	148,117	175,713
24	Forwards .....	37,635	31,316	40,094	33,783	44,928
25	Swaps .....	84,581	82,534	92,413	88,817	102,255
26	Options.....	24,841	25,823	27,058	25,517	28,530
27	Other contracts .....	170,122	189,904	208,897	221,304	246,217
28	Exchange-traded contracts .....	18,857	21,233	25,313	21,109	25,640
29	U.S. residents' contracts on foreign exchanges.....	7,139	7,442	9,197	7,364	7,471
30	Own contracts .....	3,557	4,378	5,587	4,571	4,589
31	Customers' contracts .....	3,582	3,064	3,610	2,793	2,882
32	Foreign residents' contracts on U.S. exchanges.....	11,718	13,791	16,116	13,745	18,169
33	<b>Financial derivatives, gross negative fair value</b> .....	<b>1,132,114</b>	<b>1,123,500</b>	<b>1,228,038</b>	<b>1,133,761</b>	<b>1,178,629</b>
34	Over-the-counter contracts.....	1,116,479	1,105,110	1,204,707	1,114,818	1,155,726
35	Single-currency interest rate contracts .....	815,068	796,990	860,078	766,070	746,635
36	Forwards .....	1,461	1,861	9,577	1,862	1,622
37	Swaps .....	745,319	729,685	781,571	697,016	678,278
38	Options.....	68,288	65,444	68,930	67,192	66,735
39	Foreign exchange contracts.....	132,101	124,814	140,947	131,232	150,272
40	Forwards .....	39,547	33,597	44,932	36,822	47,063
41	Swaps .....	69,131	67,098	71,148	71,606	77,621
42	Options.....	23,423	24,119	24,867	22,804	25,588
43	Other contracts .....	169,310	183,306	203,682	217,516	258,819
44	Exchange-traded contracts .....	15,635	18,390	23,331	18,943	22,903
45	U.S. residents' contracts on foreign exchanges.....	6,272	6,569	8,316	6,840	6,765
46	Own contracts .....	2,892	2,981	5,163	3,897	4,027
47	Customers' contracts .....	3,380	3,588	3,153	2,943	2,738
48	Foreign residents' contracts on U.S. exchanges.....	9,363	11,821	15,015	12,103	16,138
	<b>Memoranda:</b>					
	Net fair value of contracts:					
49	With own foreign offices .....	8,500	15,847	9,783	9,095	6,134
50	With foreign official institutions .....	-1,181	-328	-1,124	838	1,145
51	Between U.S. depository institutions and foreigners.....	18,758	19,121	24,042	13,722	18,456
	Gross positive fair value of contracts:					
52	With own foreign offices .....	290,693	282,355	275,427	277,396	318,987
53	With foreign official institutions .....	12,281	13,807	12,050	10,961	10,746
54	Between U.S. depository institutions and foreigners.....	353,435	405,034	492,290	414,977	415,979
	Gross negative fair value of contracts:					
55	With own foreign offices .....	282,193	266,508	265,644	268,301	312,853
56	With foreign official institutions .....	13,462	14,135	13,174	10,123	9,601
57	Between U.S. depository institutions and foreigners.....	334,677	385,913	468,248	401,255	397,523

Table E presents gross positive and gross negative fair values of derivatives contracts by location of foreign counterparty. More than 80 percent of the gross positive and gross negative fair values of contracts was with counterparties in Europe, mostly in the United Kingdom. Many of the world's largest

Table E. Fair Value of Financial Derivatives by Area or Country at Quarterend

[Millions of dollars]

Line		2005	2006			
			IV	I	II	III
1	<b>Financial derivatives, net (line 23 less line 45)</b> .....	<b>57,915</b>	<b>66,356</b>	<b>67,749</b>	<b>60,003</b>	<b>58,935</b>
2	Europe.....	47,116	52,804	58,443	47,330	52,329
	Of which:					
3	European Union.....	n.a.	n.a.	58,127	47,179	51,029
	Of which:					
4	Euro area.....	22,364	19,528	22,604	20,079	22,517
	Of which:					
5	Belgium.....	228	-192	583	193	590
6	France.....	5,139	4,195	4,846	4,124	5,813
7	Germany.....	10,426	11,452	14,794	10,442	11,887
8	Ireland.....	4,176	3,679	2,163	2,936	2,293
9	Italy.....	5,517	4,979	5,200	5,521	6,365
10	Netherlands.....	3,016	2,328	2,543	3,350	2,116
11	United Kingdom.....	27,043	32,751	34,262	28,036	28,875
12	Switzerland.....	-701	-820	-198	160	1,358
13	Canada.....	4,168	3,947	4,706	4,333	4,468
14	Caribbean financial centers.....	4,202	3,622	-1,688	3,569	-5,844
15	Of which: Cayman Islands.....	1,657	750	-2,321	1,424	-7,684
16	Latin America, excluding Caribbean financial centers.....	96	-543	453	1,024	1,047
17	Asia.....	2,302	4,634	2,863	2,635	4,785
18	Of which: Japan.....	1,137	2,714	612	810	1,507
19	Africa.....	577	781	978	1,133	932
20	Other.....	-546	1,111	1,994	-21	1,218
	Of which:					
21	Australia.....	2,105	2,426	2,823	1,814	2,925
22	International and regional organizations.....	-3,283	-1,544	-833	-2,121	-1,903
23	<b>Financial derivatives, gross positive fair value</b> .....	<b>1,190,029</b>	<b>1,189,856</b>	<b>1,295,787</b>	<b>1,193,764</b>	<b>1,237,564</b>
24	Europe.....	1,024,110	1,010,405	1,096,960	1,010,589	1,045,720
	Of which:					
25	European Union.....	n.a.	n.a.	1,063,177	979,354	1,013,071
	Of which:					
26	Euro area.....	280,163	269,204	288,038	263,663	308,976
	Of which:					
27	Belgium.....	11,616	9,557	8,904	9,726	9,881
28	France.....	77,606	80,335	81,038	73,689	72,559
29	Germany.....	101,760	94,527	102,194	94,658	97,243
30	Ireland.....	38,558	40,616	48,757	37,638	80,219
31	Italy.....	14,548	11,840	11,372	11,756	12,228
32	Netherlands.....	22,789	20,658	22,320	23,315	23,396
33	United Kingdom.....	707,004	704,349	767,553	709,960	697,207
34	Switzerland.....	27,298	26,429	30,254	27,953	29,412
35	Canada.....	33,094	30,560	34,436	32,727	31,527
36	Caribbean financial centers.....	55,117	56,788	61,897	60,267	67,156
37	Of which: Cayman Islands.....	41,723	43,424	47,725	45,692	49,661
38	Latin America, excluding Caribbean financial centers.....	10,593	10,031	10,501	13,623	14,346
39	Asia.....	49,018	61,204	69,307	56,816	58,723
40	Of which: Japan.....	33,410	42,915	46,666	36,415	39,075
41	Africa.....	3,590	3,762	3,824	3,730	3,085
42	Other.....	14,507	17,106	18,862	16,012	17,007
	Of which:					
43	Australia.....	9,663	12,801	14,180	12,198	13,369
44	International and regional organizations.....	3,087	3,276	4,134	3,113	2,713
45	<b>Financial derivatives, gross negative fair value</b> .....	<b>1,132,114</b>	<b>1,123,500</b>	<b>1,228,038</b>	<b>1,133,761</b>	<b>1,178,629</b>
46	Europe.....	976,994	957,601	1,038,517	963,259	993,391
	Of which:					
47	European Union.....	n.a.	n.a.	1,005,050	932,175	962,042
	Of which:					
48	Euro area.....	257,799	249,676	265,434	243,584	286,459
	Of which:					
49	Belgium.....	11,388	9,749	8,321	9,533	9,291
50	France.....	72,467	76,140	76,192	69,565	66,746
51	Germany.....	91,334	83,075	87,400	84,216	85,356
52	Ireland.....	34,382	36,937	46,594	34,702	77,926
53	Italy.....	9,031	6,861	6,172	6,235	5,863
54	Netherlands.....	19,773	18,330	19,777	19,965	21,280
55	United Kingdom.....	679,961	671,598	733,291	681,924	668,332
56	Switzerland.....	27,999	27,249	30,452	27,793	28,054
57	Canada.....	28,926	26,613	29,730	28,394	27,059
58	Caribbean financial centers.....	50,915	53,166	63,585	56,698	73,000
59	Of which: Cayman Islands.....	40,066	42,674	50,046	44,268	57,345
60	Latin America, excluding Caribbean financial centers.....	10,497	10,574	10,048	12,599	13,299
61	Asia.....	46,716	56,570	66,444	54,181	53,938
62	Of which: Japan.....	32,273	40,201	46,054	35,605	37,568
63	Africa.....	3,013	2,981	2,846	2,597	2,153
64	Other.....	15,053	15,995	16,868	16,033	15,789
	Of which:					
65	Australia.....	7,558	10,375	11,357	10,384	10,444
66	International and regional organizations.....	6,370	4,820	4,967	5,234	4,616

derivatives dealers maintain AAA credit rated foreign affiliates in the United Kingdom that are able to book large amounts of OTC derivatives contracts with affiliated and unaffiliated counterparties worldwide, thereby often serving to balance the global risk positions of those large dealers.

### Bond interest

BEA is changing its statistical methodology for estimating interest receipts and payments on long-term debt securities. The first change is to introduce into the estimating procedures for interest received or paid on foreign bonds, U.S. corporate bonds, and U.S. agency bonds a measure of yield, known as the *current yield*, that reflects only coupon interest flows. The measure of yield previously in the accounts, known as the *yield to maturity*, reflected both coupon interest flows and future gains or losses on securities on the assumption they were held to maturity. The shift to a measure of current yield now makes the measure of estimated interest on long-term debt securities consistent in concept to the measure used in the national income and product accounts and is consistent with the International Monetary Fund's guidelines for estimating interest on debt securities on a debtor basis, or the actual coupon payments made by debtors. Replacement of the previous method also removes from the estimate future capital gains and losses that were included implicitly by use of the yield to maturity. The new estimates provide a smoother flow of payments than the old series because these implicit future capital gains and losses have been removed.

The new method also incorporates yields that are based on information from the annual and benchmark surveys of cross-border investment conducted by the Treasury Department and the Federal Reserve System. Yields previously used were based on indexes of broad market baskets of securities that closely approximated the financial characteristics of cross-border holdings of securities, but the new yields are now drawn from the surveys themselves and provide more precise statistical measures of the financial characteristics of cross-border debt holdings. A sufficient number of annual and benchmark surveys were not available to use in the estimation of *current yields* the last time BEA reviewed its income methodology in 2004.

The second change is to refine BEA's statistical methodology for estimating coupon interest payments on U.S. Treasury bonds by replacing estimates based on the U.S. Treasury's *Monthly Statement of Public Debt (MSPD)* with estimates derived from annual and benchmark surveys conducted by the Treasury Department and the Federal Reserve System. BEA had intro-

duced estimates of coupon interest payments in 2004 based on the *MSPD*, but the estimation procedure required critical assumptions about both the maturity structure and the share of Treasury bonds outstanding that were held by foreigners. The availability of information from several cross-border surveys now provides a more precise statistical measure of coupon interest payments to foreigners and eliminates the need to make these critical assumptions. Thus, the estimate of interest paid to foreigners is significantly improved with the use of this new information.

**Measures of yield.** The measures of current yields that are introduced for foreign securities, U.S. corporate bonds, U.S. agency issues, and U.S. Treasury bonds are derived from the annual and benchmark surveys of cross-border investment conducted by the Treasury Department and Federal Reserve System. Current yields derived from the survey information are calculated as annual interest receipts or payments divided by the market value of associated securities holdings.

Annual interest receipts or payments used in the computation of current yields are derived by multiplying face values of securities held as reported in the surveys by the coupon rates on the securities, which are obtained from an outside data vendor. The computation is performed on a security-by-security basis, based on information obtained from custodians. The resulting interest receipts or payments are aggregated across all securities by the country of the foreign issuer. The market values of securities holdings are those reported in the surveys.

**Revisions.** Revisions generated by the changes in methodology start in 2002; thus, estimates from the first quarter of 2002 forward are on a different conceptual basis than those prior to that time. Source data are not available to make similar adjustments in earlier years. In order to minimize discontinuities, smoothing adjustments have been made to some of the estimates for 2001.

For foreign bonds, interest receipts are higher in every year than under the previous methodology, reflecting both higher yields and a composition of foreign holdings weighted more heavily toward emerging market countries than was included in the previously used general market indexes.

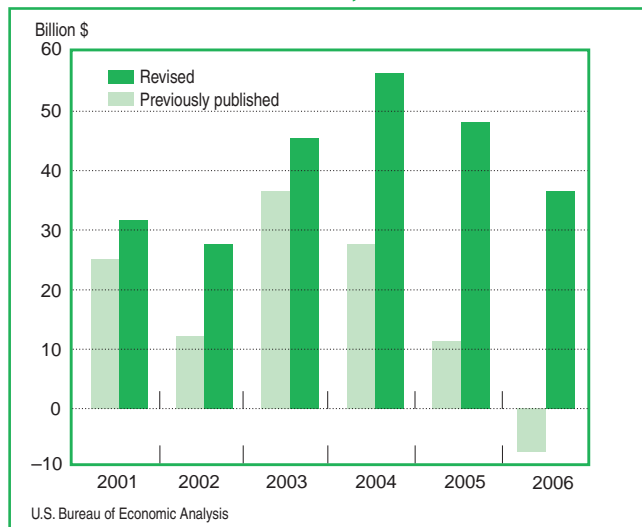
For U.S. corporate bonds and U.S. agency bonds, interest payments are higher in most years, largely reflecting the higher yields used in those years. The new yields do not drop in 2003 and rise more slowly in 2004–2006 than the previously used general market indexes of yields, partly because the implicit future capital gains and losses contained in the previous estimates have been eliminated.



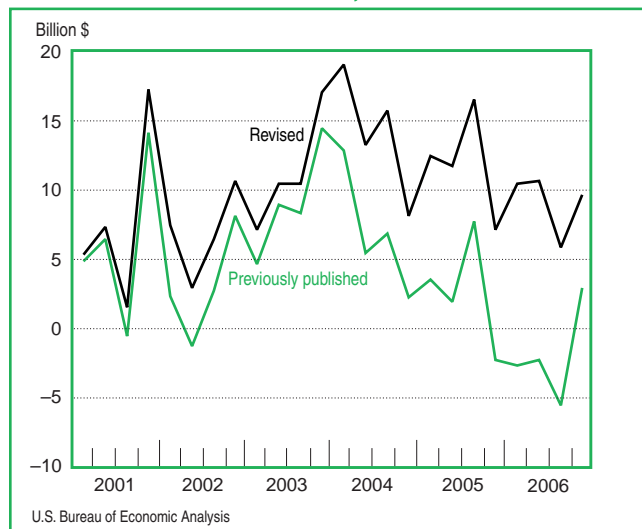
For U.S. Treasury bonds, interest payments are lower for every year, mostly because the maturity of holdings indicated by the annual surveys and benchmarks is shorter than the average maturities included in the *MSPD*.

When all the revisions are combined, the surplus on income is raised in 2001–2005, and the balance shifts from a deficit to a surplus in 2006, as receipts are raised and payments are lowered. The quarterly pattern of fluctuations in the balance is similar to that in the previously published estimates. While the impact on the balance is relatively large, the changes relative to total income receipts and total income payments are small. These results are summarized in table 2 (lines 15, 32, and 33), in tables F, G, and H, and in charts 1 and 2.

**Chart 1. Balance on Income, 2001–2006**



**Chart 2. Balance on Income, 2001:I–2006:IV**



**Geographic presentation**

In June 2006, the presentation of the accounts was greatly expanded to portray U.S. international transactions in substantially greater geographic detail. The updating of the geographic detail meant that a complete set of accounts was now presented quarterly for all countries that had substantial transactions in goods, services, income, or financial assets with the United States. The estimates began with 2005.

In June 2007, the expanded geographic detail for the accounts was extended back to estimates beginning with 1999. For 1999–2004, table 11 of the international transactions presentation now includes new detail for Belgium, France, Germany, Italy, Luxembourg, the Netherlands, Venezuela, and South Africa. Separate estimates are now available for the regions of Africa, for the Middle East, and for Asia and Pacific. Additional countries added to the South and Central America region are Argentina, Brazil, and Venezuela. Additional countries added to the Asia and Pacific region include China, Hong Kong, India, the Republic of Korea, Singapore, and Taiwan. Also, new country groupings are now presented within Europe and include first-time estimates for the euro area.

In addition, for the presentation of U.S. trade in goods in table 2, many additional countries have been added for 1999–2004. In Europe, Austria, Belgium, Finland, Greece, Ireland, Luxembourg, Norway, Portugal, Russia, Spain, Sweden, Switzerland, and Turkey are added. In South and Central America, Argentina, Chile, and Colombia are added; in Asia and Pacific, India, Indonesia, Malaysia, the Philippines, and Thailand are added; in the Middle East, Israel, and Saudi Arabia are added; and in Africa, Algeria, Nigeria, and South Africa are added.

**End-use commodity codes for goods exports and goods imports**

End-use commodity codes for goods exports and goods imports have been updated by BEA. These changes were made to achieve a consistent classification between exports and imports and to more appropriately group the commodities by their end-use characteristics. The changes were based on recommendations from BEA, the U.S. Census Bureau, and other Federal agencies. The changes also reflected the results of the work of the World Customs Organization (WCO) as part of its long-term program to review the nomenclature of the international Harmonized System (HS), from which the end-use classifications are derived. The last major set of WCO modifications to the HS was introduced in January 2002.

The revisions by the WCO included elimination of obsolete codes, the combination of existing codes, the

introduction of new more detailed codes within existing codes, the reassignment of commodities from one code to another, and the introduction of new commodity codes to keep pace with newly developed products.

The impact of this work on BEA's end-use codes, which are used in the international transactions accounts (ITAs) and the national income and product accounts (NIPAs), was small. Nearly all of the changes involved reclassifications within one-digit end-use commodity categories. Reclassifications across one-digit categories resulted in level changes of less than half of 1 percent in all instances; changes of this size did not disrupt the fourth-quarter to first-quarter movements by commodity in the ITAs or the NIPAs.

For exports at the one-digit end-use level, several categories of synthetic yarn and television accessories were reassigned from industrial supplies and materials to consumer goods because they were designated specifically for retail sale and considered as consumer goods, and plastic ladders were reassigned from capital goods to industrial supplies and materials, which is the location of aluminum ladders. The dollar magnitude of these changes was \$630 million for 2006. At the five-digit level, certain plastic articles were reassigned within industrial supplies and materials, and digital still image video cameras, which are now identified separately, were reassigned within consumer goods to be combined with other photographic equipment. The dollar magnitude of these changes was \$2.8 billion for 2004, \$3.0 billion for 2005, and \$3.3 billion for 2006.

For imports at the one-digit end-use level, several categories of synthetic yarn were reassigned from industrial supplies and materials to consumer goods, plastic ladders were reassigned from capital goods to industrial supplies and materials, and certain medical preparations were reassigned from industrial supplies and materials to consumer goods because they were considered final products (that is, drugs) rather than compounds used in further production. The dollar magnitude of these changes was \$132 million for 2006. At the five-digit level, digital still image video cameras were reassigned within consumer goods to be combined with other photographic equipment. The dollar magnitude of this change was \$5.1 billion for 2004, \$5.5 billion for 2005, and \$5.9 billion for 2006.

Newly introduced commodity codes included the separate identification of machinery used to produce semiconductors, which is included in capital goods; the separate identification of solid-state nonvolatile storage devices (such as flash memory), which are included in consumer goods; and as required by the Rotterdam Convention on the shipment of hazardous materials, the separate identification of hazardous

chemicals, including pesticides, which are included in industrial supplies and materials.

Historical data on the newly developed basis were incorporated in the international and national accounts for 2004–2006.

### Foreign securities

**Positions.** U.S. holdings of foreign securities (table 3, line 19) were revised up \$271.9 billion to \$4,345.9 billion for 2005 to incorporate the results of the December 2005 Treasury Department annual survey of securities claims and other updated source data. The annual survey results caused upward revisions to both bond and stock positions because the positions reported on the annual survey were higher than the previously published positions. Information from the annual survey was also used to adjust the weights used to estimate price changes. The position for foreign bonds was revised up \$24.4 billion because of the annual survey results and up \$16.2 billion because of updated source data. The position for foreign stocks was revised up \$230.6 billion because of the annual survey results and up \$0.6 billion because of updated source data.

**Transactions.** Transactions in foreign securities (table 2, line 52) were revised for 2005–2006 to incorporate updated monthly transactions data from the monthly Treasury International Capital (TIC) reporting system. Net U.S. purchases of foreign securities were revised up \$17.0 billion in 2005, \$16.5 billion in bonds and \$0.5 billion in stocks, and up \$11.7 billion in 2006, \$1.7 billion in bonds and \$10.0 billion in stocks.

**Income.** Income on foreign securities (table 2, part of line 15, and table F) was revised for 2001–2006 to incorporate the results of the December 2005 annual survey and other updated source data. The revisions to positions of foreign securities from the annual survey described above were carried through to the income

**Table F. Major Sources of Revision to Income Receipts on U.S. Holdings of Foreign Securities**

[Billions of dollars]

(Credits +; debits -)	2001	2002	2003	2004	2005	2006
<b>Interest on foreign bonds</b>						
Revised .....	34.5	41.0	46.7	50.9	56.1	60.9
Changes due to new bond interest methodology .....	2.5	10.6	17.8	14.1	10.4	4.3
Changes due to 2005 Treasury annual survey .....					1.1	2.3
Revisions due to updated source data .....					0.3	0.9
Previously published .....	32.0	30.4	28.8	36.8	44.2	53.4
<b>Dividends on foreign stocks</b>						
Revised .....	34.0	38.2	41.4	54.2	64.7	82.9
Changes due to 2005 Treasury annual survey .....					1.0	2.3
Revisions due to updated source data .....					0.0	0.6
Previously published .....	34.0	38.2	41.4	54.2	63.7	79.9

estimates, which were estimated by applying coupon and dividend yields to position estimates. Information from the annual survey was also used to adjust the weights for the yields. Income on foreign securities was revised up \$2.5 billion for 2005, \$1.4 billion for bond interest and \$1.0 billion for dividends, and up \$6.2 billion for 2006, \$3.2 billion for bond interest, and \$2.9 billion for dividends because of both the annual survey results and updated source data.

In addition, a new methodology was introduced for estimating interest received on bonds for 2001–2006. The methodology is discussed elsewhere in this article. Revisions attributable to that source raised income receipts on foreign bonds throughout 2001–2006.

### U.S. corporate bonds and stocks

**Positions.** Foreign holdings of U.S. corporate bonds and stocks (table 3, lines 33, part of line 38, and line 39) were revised down \$5.4 billion to \$4,137 billion for 2005 to incorporate the results of the June 2006 Treasury Department annual survey of securities liabilities and other updated source data. The annual survey results caused an upward revision to foreign official holdings of U.S. corporate bonds and stocks and a downward revision to private holdings of U.S. corporate bonds and stocks. (Annual liabilities surveys are conducted for each June and BEA's estimates of positions are for yearend. BEA estimates yearend positions using the June position data from the annual liabilities survey plus transactions data and estimates of valuation changes.)

For 2005, foreign official holdings of U.S. corporate bonds and stocks (table 3, line 33) were revised up \$12.1 billion because of the annual survey results and up \$0.4 billion because of updated source data. Private holdings of U.S. corporate bonds (table 3, part of line 38) were revised down \$13.6 billion because of the annual survey results and up \$1.3 billion because of updated source data. Private holdings of U.S. stocks (table 3, line 39) were revised down \$7.7 billion because of the annual survey results and up \$2.1 billion because of updated source data.

**Transactions.** Transactions in U.S. corporate bonds and stocks were revised for 2005 and 2006 to incorporate updated monthly TIC transactions data. Net foreign official purchases of U.S. corporate bonds and stocks (table 2, line 62) were revised up \$0.8 billion for 2005 and up \$0.5 billion for 2006. Net private foreign purchases of U.S. corporate bonds (table 2, part of line 66) were revised down \$3.7 billion for 2005 and up \$6.0 billion for 2006. Net private foreign purchases of U.S. corporate stocks (table 2, part of line 66) were revised up \$2.5 billion for 2005 and up \$28.7 billion for 2006.

**Income.** Income on U.S. corporate bonds and stocks (table 2, part of line 32, and table G) was revised for 2005–2006 to incorporate the results of the June 2006 annual survey and other updated source data.

For 2005, income on U.S. corporate bonds and stocks was revised down \$0.1 billion because of new survey results; revisions because of updated source data were negligible. For 2006, income on U.S. corporate bonds and stocks was revised down \$0.8 billion because of annual survey and up \$0.9 billion because of updated source data.

Income payments on U.S. corporate bonds were also revised because of the new methodology for estimating these payments. The methodology is discussed elsewhere in this article. Revisions attributable

**Table G. Major Sources of Revision to Income Payments on Foreign Holdings of U.S. Corporate Bonds and Stocks**

[Billions of dollars]

(Credits +; debits –)	2002	2003	2004	2005	2006
<b>Interest on U.S. corporate bonds</b>					
Revised.....	-55.7	-61.0	-71.5	-85.3	-105.2
Changes due to new bond interest methodology.....	3.2	-8.9	-7.0	-4.4	3.9
Changes due to 2006 Treasury annual survey.....				0.1	0.8
Revisions due to updated source data.....				0.0	-0.5
Previously published.....	-58.8	-52.0	-64.5	-81.0	-109.4
<b>Dividends on U.S. corporate stocks</b>					
Revised.....	-23.6	-25.7	-37.0	-38.1	-44.8
Changes due to 2006 Treasury annual survey.....				0.0	0.0
Revisions due to updated source data.....				0.0	-0.4
Previously published.....	-23.6	-25.7	-37.0	-38.1	-44.4

### Acknowledgments

The revised estimates were prepared under the general direction of Paul Farello with the assistance of Renee Sauers and Erin Whitaker.

John Rutter, Christopher Gohrband, and Douglas Weinberg prepared the new estimates of financial derivatives. The new estimates of interest income on bonds and the incorporation of the annual surveys of securities by the U.S. Treasury Department were prepared by Renee Sauers, Elena Nguyen, and Jessica Hanson, under the direction of Christopher Gohrband and Douglas Weinberg. The updated end-use commodity classifications for goods exports and goods imports were prepared by Mai-Chi Hoang, Christian Thieme, Marc Bouchard, Ben Kavanaugh, and John Rutter. John Rutter prepared the new estimates of revalued goods imports of computer software.

The combined staffs of the Balance of Payments Division and the International Investment Division prepared the estimates for the expanded geographic presentation of the accounts under the direction of Paul Farello.

to that source lowered income payments on U.S. corporate bonds in 2002 and 2006 and raised payments in 2003–2005.

### U.S. Treasury and agency bonds

**Positions.** Foreign holdings of U.S. Treasury bonds and of agency bonds were revised for 2004 and 2005 to incorporate the results of two Treasury Department surveys of securities liabilities—the June 2005 (revised) survey and the June 2006 annual survey—and other updated source data. Incorporation of the survey results led to a redistribution of Treasury and agency holdings from the private to the official sector. Changes resulting from updated source data were small by comparison to these redistributions.

For 2005, foreign official holdings of U.S. Treasury bonds (table 3, line 29) were revised up \$45.6 billion because of the annual survey results and up \$6.1 billion because of updated source data. The annual survey results were smoothed back into 2004, leading to an upward revision of \$10.7 billion. For 2005, foreign private holdings of U.S. Treasury bonds (table 3, line 36) were revised down \$49.9 billion because of the annual survey results and down \$11.2 billion because of updated source data. The annual survey results were smoothed back into 2004, leading to a downward revision of \$0.7 billion.

For 2005, foreign official holdings of agency bonds (table 3, line 30) were revised up \$23.8 billion because of the annual survey results and up \$0.2 billion because of updated source data. For 2005, foreign private holdings of agency bonds (table 1, part of line 38) were revised down \$16.9 billion because of the annual survey results and down \$2.8 billion because of updated source data.

**Transactions.** Transactions in U.S. Treasury bonds and in agency bonds were revised for 2004–2006 to incorporate results from the annual surveys and updated source data. The findings are similar to those for the position estimates; that is, the survey results indicate that net purchases reported in the monthly TIC data for private foreigners were too high, while the monthly TIC data for official foreigners were too low. BEA, using estimates provided by the Federal Reserve Board and estimates based on the survey results, has adjusted the transactions data to correct for the misclassification that can occur when foreign official transactions are mistakenly attributed to the private sector rather than to the official sector of the accounts.

Foreign official net purchases of Treasury bonds (table 2, line 58) were revised up \$9.9 billion for 2004, up \$41.1 billion for 2005, and up \$70.8 billion for 2006. Foreign private net purchases of Treasury bonds and notes (table 2, line 65) were revised down \$9.3 billion

for 2004, down \$67.2 billion for 2005, and were shifted \$65.3 billion to net sales for 2006.

Foreign official net purchases of agency bonds (table 2, line 59) were revised up \$15.8 billion for 2005 and up \$66.1 billion for 2006. Foreign private net purchases of agency bonds (table 2, part of line 66) were revised down \$22.6 billion for 2005 and down \$63.9 billion for 2006.

**Income.** Revisions to income payments on U.S. Treasury bonds and agency bonds (table 2, line 33, and table H) were small for 2004–2006 because the annual surveys and updated source data generated redistributions between the private and official accounts that largely offset each other. Income payments were revised little in 2004 and 2005 and were revised up \$0.3 billion in 2006.

**Table H. Major Sources of Revision to U.S. Government Income Payments**

[Billions of dollars]

(Credits +; debits –)	2001	2002	2003	2004	2005	2006
<b>Interest on U.S. Treasury bonds and notes</b>						
Revised .....	-49.1	-44.5	-43.7	-50.8	-59.7	-73.1
Changes due to new bond interest methodology .....	4.0	7.1	8.8	10.2	9.8	6.8
Changes due to 2005 (revised) and 2006 Treasury annual surveys .....				-0.1	0.0	0.1
Revisions due to updated source data .....					0.0	0.0
Previously published .....	-53.2	-51.6	-52.5	-61.0	-69.6	-79.9
<b>Interest on U.S. agency bonds</b>						
Revised .....	-21.5	-25.8	-26.8	-28.1	-36.4	-49.1
Changes due to new bond interest methodology .....		-5.4	-8.7	-4.2	-0.2	4.8
Changes due to 2006 Treasury annual survey .....					-0.1	-0.5
Revisions due to updated source data .....					0.1	0.1
Previously published .....	-21.5	-20.5	-18.1	-23.9	-36.2	-53.5

Income payments on U.S. Treasury bonds and agency bonds were also revised because of the new methodology for estimating these payments. The methodology is discussed elsewhere in this article. Revisions attributable to that source increased income payments on agency bonds for most years in 2001–2006 and decreased income payments on U.S. Treasury bonds throughout 2001–2006.

### Goods imports of computer software

The statistical adjustment for revaluing some goods imports of prepackaged general use computer software from medium to full value has been updated beginning with estimates for 1997. The adjustment is necessary because some values reported to U.S. Customs for these goods imports are reported at the value of the medium (compact discs or DVDs) on which the computer code is stored, rather than at their full value, which consists of both the value of the medium and the value of the content of the computer code contained on the medium. This update

expands the coverage of this adjustment and updates the measurement of the statistical relationship between the value of the medium and the value of the content.

The previous statistical adjustment revalued goods software imports containing only data and computer code without sound or image. Over the past decade, advances in technology have led to several newer types of goods software imports, primarily those containing sound and image and those interactive with computers. Coverage of these newer types of multimedia imports is now included in this statistical adjustment. Growth in these last two categories has increased considerably over the past decade and now accounts for most of the value of the adjustment. In addition, the new adjustment updates the statistical relationship between the value of the medium and the value of the content of the software. This update was necessary because of the much higher value of the content of newer

types of software content relative to the medium on which they were stored than for the early types of software content. Only goods imports reported at the value of the medium are revalued; some goods imports of software are already reported to U.S. Customs at full value.

As a result of the expansion in coverage and the re-measurement of the average unit market values applied to the quantities of software reported at the value of the medium, the upward adjustment increased from \$0.1 billion to \$0.7 billion for 1997, and by 2006, it increased from \$0.1 billion to \$3.5 billion. Table I below shows the total new estimated market value for computer software imports that have been adjusted to market value and the amounts of adjustment for 1997–2006. These adjustments to Census-basis goods imports appear in the standard presentation of the accounts in “Table 2a, U.S. Trade in Goods” under “Imports”, “Other adjustments, net” (line 15).

**Table I. Major Sources of Revision to Goods Imports**

[Billions of dollars]

(Credits +; debits -)	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
<b>Goods imports</b>										
Revised.....	-876.8	-918.6	-1,031.8	-1,226.7	-1,148.2	-1,167.4	-1,264.3	-1,477.1	-1,681.8	-1,861.4
Changes due to computer software.....	-0.6	-1.1	-1.5	-2.1	-2.1	-2.7	-3.7	-4.1	-4.1	-3.4
Revisions due to updated source data.....	0.3	-0.4	-0.3	-0.1	-0.3	0.1	0.1	-0.1	-0.3	1.7
Previously published.....	-876.5	-917.1	-1,030.0	-1,224.4	-1,145.9	-1,164.7	-1,260.7	-1,472.9	-1,677.4	-1,859.7

*Tables 1 through 3 follow.*



Table 2. Major Sources of Revisions, International Transactions Accounts, 1997–2006—Continues

[Millions of dollars]

(Credits +; debits -) <sup>1</sup>	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
<b>Current account</b>										
<b>Other private income receipts (line 15):</b>										
Revised.....	135,652	151,818	156,354	192,398	155,692	129,511	126,641	157,114	230,537	334,958
Amount of revision.....					2,546	10,563	17,839	14,301	12,900	14,162
Previously published.....	135,652	151,818	156,354	192,398	153,146	118,948	108,802	142,813	217,637	320,796
<i>Of which:</i>										
<b>Interest on foreign bonds:</b>										
Revised.....	31,108	35,498	37,459	37,943	34,541	40,987	46,687	50,861	56,074	60,897
Changes due to new bond interest methodology.....					2,546	10,563	17,839	14,077	10,426	4,326
Changes due to 2005 Treasury annual survey.....									1,127	2,290
Revisions due to updated source data.....									315	930
Previously published.....	31,108	35,498	37,459	37,943	31,995	30,424	28,848	36,784	44,206	53,351
<b>Dividends on foreign stocks:</b>										
Revised.....	24,589	26,507	29,950	33,295	33,970	38,248	41,432	54,164	64,721	82,851
Changes due to 2005 Treasury annual survey.....									1,048	2,328
Revisions due to updated source data.....									11	611
Previously published.....	24,589	26,507	29,950	33,295	33,970	38,248	41,432	54,164	63,662	79,912
<b>Goods imports (line 20):</b>										
Revised.....	-876,794	-918,637	-1,031,784	-1,226,684	-1,148,231	-1,167,377	-1,264,307	-1,477,094	-1,681,780	-1,861,380
Changes due to computer software.....	-586	-1,107	-1,488	-2,140	-2,064	-2,740	-3,685	-4,097	-4,149	-3,409
Revisions due to updated source data.....	262	-427	-316	-136	-267	83	95	-71	-260	1,684
Previously published.....	-876,470	-917,103	-1,029,980	-1,224,408	-1,145,900	-1,164,720	-1,260,717	-1,472,926	-1,677,371	-1,859,655
<b>Other private income payments (line 32):</b>										
Revised.....	-112,878	-127,988	-138,120	-180,918	-159,825	-127,012	-119,051	-154,485	-227,431	-334,645
Amount of revision.....						3,165	-8,926	-6,916	-3,819	-5,414
Previously published.....	-112,878	-127,988	-138,120	-180,918	-159,825	-130,177	-110,125	-147,569	-223,612	-329,231
<i>Of which:</i>										
<b>Interest on U.S. corporate bonds:</b>										
Revised.....	-28,169	-30,583	-40,239	-51,697	-55,114	-55,675	-60,974	-71,502	-85,303	-105,160
Changes due to new bond interest methodology.....						3,165	-8,926	-7,023	-4,408	3,889
Changes due to 2006 Treasury annual survey.....									105	834
Revisions due to updated source data.....									4	-478
Previously published.....	-28,169	-30,583	-40,239	-51,697	-55,114	-58,840	-52,048	-64,479	-81,004	-109,405
<b>Dividends on U.S. corporate stocks:</b>										
Revised.....	-13,976	-15,765	-17,058	-19,645	-21,129	-23,560	-25,661	-37,037	-38,083	-44,821
Changes due to 2006 Treasury annual survey.....									3	20
Revisions due to updated source data.....									-12	-410
Previously published.....	-13,976	-15,765	-17,058	-19,645	-21,129	-23,560	-25,661	-37,037	-38,074	-44,431
<b>U.S. Government income payments (line 33):</b>										
Revised.....	-81,701	-84,154	-80,525	-84,517	-78,381	-74,908	-73,834	-82,536	-103,874	-133,755
Amount of revision.....					4,045	1,734	37	5,938	9,685	11,315
Previously published.....	-81,701	-84,154	-80,525	-84,517	-82,426	-76,642	-73,871	-88,474	-113,559	-145,070
<i>Of which:</i>										
<b>Interest on U.S. Treasury bonds and notes:</b>										
Revised.....	-58,382	-62,817	-58,155	-53,929	-49,110	-44,541	-43,717	-50,785	-59,723	-73,115
Changes due to new bond interest methodology.....					4,045	7,095	8,756	10,222	9,842	6,757
Changes due to 2005 (revised) and 2006 Treasury annual surveys.....								-50	31	73
Revisions due to updated source data.....									36	-5
Previously published.....	-58,382	-62,817	-58,155	-53,929	-53,155	-51,636	-52,473	-60,957	-69,632	-79,940
<b>Interest on U.S. agency bonds:</b>										
Revised.....	-12,130	-12,193	-13,917	-20,336	-21,511	-25,849	-26,786	-28,137	-36,431	-49,108
Changes due to new bond interest methodology.....						-5,362	-8,720	-4,234	-229	4,812
Changes due to 2006 Treasury annual survey.....									-60	-470
Revisions due to updated source data.....									68	95
Previously published.....	-12,130	-12,193	-13,917	-20,336	-21,511	-20,487	-18,066	-23,903	-36,210	-53,545

See the footnotes and note at the end of the table.

Table 2. Major Sources of Revisions, International Transactions Accounts, 1997–2006—Table Ends

[Millions of dollars]

(Credits +; debits -) <sup>1</sup>	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
<b>Financial account</b>										
<b>U.S. private assets abroad</b>										
<b>Foreign securities (line 52):</b>										
Revised.....	-116,852	-130,204	-122,236	-127,908	-90,644	-48,568	-146,722	-146,549	-197,098	-289,422
Amount of revision.....									-16,973	-11,731
Previously published.....	-116,852	-130,204	-122,236	-127,908	-90,644	-48,568	-146,722	-146,549	-180,125	-277,691
<b>Foreign bonds:</b>										
Revised.....	-59,566	-28,842	-7,925	-21,194	18,475	-31,614	-28,719	-61,793	-54,497	-150,884
Revisions due to updated source data.....									-16,506	-1,714
Previously published.....	-59,566	-28,842	-7,925	-21,194	18,475	-31,614	-28,719	-61,793	-37,991	-149,170
<b>Foreign stocks:</b>										
Revised.....	-57,286	-101,362	-114,311	-106,714	-109,119	-16,954	-118,003	-84,756	-142,601	-138,538
Revisions due to updated source data.....									-467	-10,017
Previously published.....	-57,286	-101,362	-114,311	-106,714	-109,119	-16,954	-118,003	-84,756	-142,134	-128,521
<b>Foreign official assets in the United States</b>										
<b>U.S. Treasury securities (line 58):</b>										
Revised.....	-6,690	-9,921	12,177	-5,199	33,700	60,466	184,931	273,279	112,841	189,181
Changes to bonds and notes due to 2005 (revised) and 2006 Treasury annual surveys.....								9,941	31,706	65,702
Revisions due to updated source data.....									9,386	5,135
Previously published.....	-6,690	-9,921	12,177	-5,199	33,700	60,466	184,931	263,338	71,749	118,344
<b>Other (line 59):</b>										
Revised.....	4,529	6,332	20,350	40,909	20,920	30,505	39,943	41,662	100,493	191,553
Changes to agency bonds due to 2006 Treasury annual survey.....									16,915	61,518
Revisions due to updated source data.....									-1,123	4,585
Previously published.....	4,529	6,332	20,350	40,909	20,920	30,505	39,943	41,662	84,701	125,450
<b>Other foreign official assets (line 62):</b>										
Revised.....	-208	-3,487	915	3,127	5,726	3,616	5,275	13,703	20,095	34,357
Revisions to corporate bonds and stocks due to updated source data.....									837	465
Previously published.....	-208	-3,487	915	3,127	5,726	3,616	5,275	13,703	19,258	33,892
<b>Other foreign assets in the United States</b>										
<b>U.S. Treasury securities (line 65):</b>										
Revised.....	130,435	28,581	-44,497	-69,983	-14,378	100,403	91,455	93,608	132,300	-35,931
Changes to bonds and notes due to 2005 (revised) and 2006 Treasury annual surveys.....								-9,332	-32,293	-68,087
Revisions due to updated source data.....									-34,898	2,739
Previously published.....	130,435	28,581	-44,497	-69,983	-14,378	100,403	91,455	102,940	199,491	29,417
<b>U.S. securities other than U.S. Treasury securities (line 66):</b>										
Revised.....	161,409	156,315	298,834	459,889	393,885	283,299	220,705	381,493	450,386	591,951
Amount of revision.....									-23,754	-29,203
Previously published.....	161,409	156,315	298,834	459,889	393,885	283,299	220,705	381,493	474,140	621,154
<b>U.S. corporate bonds:</b>										
Revised.....	66,865	105,948	142,821	166,403	191,616	145,415	223,215	254,564	312,314	412,260
Revisions due to updated source data.....									-3,691	5,991
Previously published.....	66,865	105,948	142,821	166,403	191,616	145,415	223,215	254,564	316,005	406,269
<b>U.S. agency bonds:</b>										
Revised.....	25,784	4,720	43,096	100,994	82,769	81,832	-36,801	67,380	49,768	36,934
Changes due to 2006 Treasury annual survey.....									-18,326	-61,577
Revisions due to updated source data.....									-4,258	-2,357
Previously published.....	25,784	4,720	43,096	100,994	82,769	81,832	-36,801	67,380	72,352	100,868
<b>U.S. corporate stocks:</b>										
Revised.....	68,760	45,647	112,917	192,492	119,500	56,052	34,291	59,549	88,304	142,757
Revisions due to updated source data.....									2,521	28,740
Previously published.....	68,760	45,647	112,917	192,492	119,500	56,052	34,291	59,549	85,783	114,017
<b>U.S. liabilities to unaffiliated foreigners reported by U.S. nonbanking concerns (line 68):</b>										
Revised.....	116,518	23,140	76,247	170,672	66,110	95,871	96,526	93,522	31,804	235,769
Changes due to the removal of exchange-traded futures (financial derivatives) data.....										9,640
Revisions due to updated source data.....								272	1,699	49,620
Previously published.....	116,518	23,140	76,247	170,672	66,110	95,871	96,526	93,250	30,105	176,509
<b>Financial derivatives, net (line 70):</b>										
Revised.....										28,762
Changes due to new Treasury source data.....										( <sup>2</sup> )
Previously published.....										( <sup>2</sup> )

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.

2. Estimates were not previously published.

NOTE: Line numbers refer to table 1 in "U.S. International Transactions: First Quarter of 2007" in this issue of the SURVEY.



Table 3. Major Sources of Revisions, International Investment Position at Yearend, 2004–2006

[Millions of dollars]

	2004	2005	2006
<b>U.S. private assets</b>			
<b>Financial derivatives, gross positive fair value (line 5):</b>			
Revised .....		1,190,029	1,237,564
Changes due to new Treasury source data .....		( <sup>1</sup> )	( <sup>1</sup> )
Previously published .....		( <sup>1</sup> )	( <sup>1</sup> )
<b>Foreign securities (line 19):</b>			
Revised .....	3,553,387	4,345,884	5,432,264
Amount of revision .....		271,887	( <sup>1</sup> )
Previously published .....	3,553,387	4,073,997	( <sup>1</sup> )
<b>Foreign bonds (line 20):</b>			
Revised .....	992,969	1,028,179	1,180,758
Changes due to 2005 Treasury annual survey .....		24,416	( <sup>1</sup> )
Revisions due to updated source data .....		16,220	( <sup>1</sup> )
Previously published .....	992,969	987,543	( <sup>1</sup> )
<b>Foreign stocks (line 21):</b>			
Revised .....	2,560,418	3,317,705	4,251,506
Changes due to 2005 Treasury annual survey .....		230,605	( <sup>1</sup> )
Revisions due to updated source data .....		646	( <sup>1</sup> )
Previously published .....	2,560,418	3,086,454	( <sup>1</sup> )
<b>Foreign official assets in the United States</b>			
<b>Financial derivatives, gross negative fair value (line 25):</b>			
Revised .....		1,132,114	1,178,629
Changes due to new Treasury source data .....		( <sup>1</sup> )	( <sup>1</sup> )
Previously published .....		( <sup>1</sup> )	( <sup>1</sup> )
<b>U.S. Government securities (line 28):</b>			
Revised .....	1,509,986	1,725,193	2,104,696
Amount of revision .....		10,693	( <sup>1</sup> )
Previously published .....	1,499,293	1,649,397	( <sup>1</sup> )
<b>U.S. Treasury securities (line 29):</b>			
Revised .....	1,251,943	1,340,598	1,520,768
Changes to bonds and notes due to 2005 (revised) and 2006 Treasury annual surveys .....		10,693	( <sup>1</sup> )
Revisions due to updated source data .....		6,071	( <sup>1</sup> )
Previously published .....	1,241,250	1,288,881	( <sup>1</sup> )
<b>Other (line 30):</b>			
Revised .....	258,043	384,595	583,928
Changes to agency bonds due to 2006 Treasury annual survey .....		23,846	( <sup>1</sup> )
Revisions due to updated source data .....		233	( <sup>1</sup> )
Previously published .....	258,043	360,516	( <sup>1</sup> )
<b>Other foreign official assets (line 33):</b>			
Revised .....	215,239	268,586	349,783
Changes to corporate bonds and stocks due to 2006 Treasury annual survey .....		12,075	( <sup>1</sup> )
Revisions due to updated source data .....		447	( <sup>1</sup> )
Previously published .....	215,239	256,064	( <sup>1</sup> )
<b>Other foreign assets in the United States</b>			
<b>U.S. Treasury securities (line 36):</b>			
Revised .....	561,610	643,793	594,243
Changes to bonds and notes due to 2005 (revised) and 2006 Treasury annual surveys .....		-678	( <sup>1</sup> )
Revisions due to updated source data .....		-49,919	( <sup>1</sup> )
Previously published .....	562,288	704,875	( <sup>1</sup> )
<b>U.S. securities other than U.S. Treasury securities (line 37):</b>			
Revised .....	3,995,506	4,352,998	5,228,536
Amount of revision .....		-37,684	( <sup>1</sup> )
Previously published .....	3,995,506	4,390,682	( <sup>1</sup> )
<b>U.S. corporate bonds (part of line 38):</b>			
Revised .....	1,584,304	1,758,370	2,168,473
Changes due to 2006 Treasury annual survey .....		-13,628	( <sup>1</sup> )
Revisions due to updated source data .....		1,308	( <sup>1</sup> )
Previously published .....	1,584,304	1,770,690	( <sup>1</sup> )
<b>U.S. agency bonds (part of line 38):</b>			
Revised .....	450,845	484,765	521,343
Changes due to 2006 Treasury annual survey .....		-16,914	( <sup>1</sup> )
Revisions due to updated source data .....		-2,828	( <sup>1</sup> )
Previously published .....	450,845	504,507	( <sup>1</sup> )
<b>U.S. corporate stocks (line 39):</b>			
Revised .....	1,960,357	2,109,863	2,538,720
Changes due to 2006 Treasury annual survey .....		-7,701	( <sup>1</sup> )
Revisions due to updated source data .....		2,079	( <sup>1</sup> )
Previously published .....	1,960,357	2,115,485	( <sup>1</sup> )

1. Estimates were not previously published.

NOTE: Line numbers refer to table 1 in "The U.S. International Investment Position of the United States at Yearend 2006" in this issue of the SURVEY.