

How BEA Aligns and Augments Source Data From the U.S. Treasury Department for Inclusion in the International Transactions Accounts

Like most of the U.S. economic accounts produced by the Bureau of Economic Analysis (BEA), the statistics on financial-account transactions in the international transactions accounts (ITAs) are based largely on source data collected by other federal government agencies—in this case, by the Treasury International Capital (TIC) reporting system of the U.S. Department of the Treasury. BEA makes adjustments to align the data with balance-of-payments concepts and to close gaps in coverage in preparing statistics for the financial account. This report explains these adjustments to help data users reconcile BEA's financial-account statistics with the TIC data that are available to the public on the [Treasury Department's TIC Web site](#) and in the *Treasury Bulletin*.

The relationships between the statistics in the ITAs that are prepared by BEA and the data from the TIC reporting system are shown in tables 1 and 2, which identify the numerous adjustments that BEA makes to the TIC source data. Table 1 presents statistics on transactions in portfolio investment assets and liabilities (equity and debt securities). Table 2 presents statistics on transactions in other investment assets and liabilities (currency, deposits, loans, insurance technical reserves, trade credit and advances, and allocations of special drawing rights (which are only included in liabilities)).

Aligning with balance-of-payments concepts. Holdings of U.S. assets and liabilities reported in the TIC system are the basis of BEA statistics on portfolio investment and are the largest component of BEA statistics on other investment assets and liabilities. In order to impute balance-of-payments transactions from the reported holdings, BEA computes the quarterly changes in holdings and removes changes in holdings that do not result from transactions. As explained in greater detail in *U.S. International Economic Accounts: Concepts and Methods*, BEA removes changes in the value of holdings due to (1) changes in prices, (2) changes in exchange rates, and (3) changes caused by other changes in volume and value (table 1, lines 5–7, 16–18, and 27–29, and table 2, lines 7, 8, 19, and 20).

BEA also aligns the TIC data with balance-of-payments concepts by removing changes in holdings that are

already counted in other data sources for direct investment and reserve assets. For example, TIC balances that are reported by U.S. banks and securities brokers (table 2) also include some claims on, and liabilities to, unincorporated branches by parent companies that are included in BEA's direct investment surveys as direct investment equity. Changes in balances covered in BEA's direct investment surveys are removed (table 2, lines 4 and 17). Foreign securities held as U.S. reserve assets are reported in TIC surveys of U.S. holdings of foreign securities with portfolio investment; changes in these reserve holdings are removed from portfolio investment (table 1, line 4). Transactions and positions in reserve assets are provided to BEA by the Federal Reserve Board.

In addition to removing changes in claims and liabilities that should be excluded from portfolio investment or other investment, BEA also separates transactions in short-term securities and negotiable certificates of deposit of any maturity from other investment and records them in portfolio investment (table 1, lines 9 and 20 and table 2, lines 6 and 18). The holdings of these types of portfolio investment are collected in the TIC system with other investment instruments, such as loans and deposits.

Closing gaps in coverage. Not all U.S. holdings of other investment are captured by the TIC reporting system. BEA closes gaps in the coverage of U.S. nonbanking concerns' claims and liabilities by supplementing TIC data with (1) estimates of U.S. claims based on data provided by the Depository Trust and Clearing Corporation and (2) estimates of U.S. nonbanks' claims on, and liabilities to, foreign banks based on partner country counterparty data from foreign banking authorities (table 2, lines 10 and 22).

BEA also includes intercompany debt of selected financial intermediaries reported on BEA surveys of direct investment in other investment for periods before 2014. Before 2014, U.S. financial intermediaries that were not banks, securities brokers, or financial holding companies reported their debt with affiliated financial intermediaries on BEA surveys of direct investment rather than to the TIC system. These transactions were added to

the TIC data for other investment (table 2, lines 9 and 21). Beginning in 2014, the TIC system expanded to cover all transactions of financial intermediaries, eliminating the need to add the transactions from BEA surveys of direct investment. Finally, BEA includes transactions in the other investment claims and liabilities of the U.S. central bank sector (the U.S. Federal Reserve System) and the U.S. general government that are not included in the TIC data, using data provided by the U.S. Federal Reserve System, the U.S. Department of Defense, and other U.S. government agencies (table 2, lines 12 and 24).

Beginning with the June 2013 release of the ITAs, BEA closed a gap in the coverage of portfolio investment by incorporating new monthly data on cross-border holdings of U.S. and foreign long-term securities. These data are now collected by the Treasury Department and the Federal Reserve Board on the TIC survey Aggregate Holdings of Long-Term Securities by U.S. and Foreign

Residents (SLT).¹ In previous years, BEA used data from the TIC survey Purchases and Sales of Long-Term Securities by Foreign-Residents (S) as a primary source for portfolio estimates.

The differences in coverage between BEA statistics based on the SLT and TIC measures of transactions derived from the survey S are presented in table 1. BEA statistics on long-term U.S. and foreign securities based on the SLT are shown in table 1, lines 8, 19, and 30. U.S. net acquisitions of long-term assets or U.S. net incurrence of long-term liabilities based on the survey S are shown in lines 11, 22, and 33. The difference between the BEA statistics and the survey S net transactions are shown in lines 12, 23, and 34.

1. For more information, see Barbara H. Berman and Jeffrey R. Bogen, “Annual Revision of the U.S. International Transactions Accounts,” SURVEY OF CURRENT BUSINESS 93 (July 2013): 48.

Tables 1 and 2 follow.

Table 1. Relation of Transactions in Portfolio Investment Assets and Liabilities in the U.S. International Transactions Accounts (ITAs) to Treasury International Capital (TIC) Reporting System Data

[Millions of dollars]

Line	Net increase in assets or liabilities (+); net decrease in assets or liabilities (-)	2012 ^r	2013 ^r	2014 ^p
Net U.S. acquisition of portfolio investment assets				
1	Total claims (foreign stocks and bonds held by U.S. residents) outstanding, beginning of year, TIC ¹	6,632,206	7,701,547	8,841,015
2	Total claims (foreign stocks and bonds held by U.S. residents) outstanding, end of year, TIC ¹	7,701,547	8,841,015	9,207,769
3	Change in claims, TIC (line 2 – line 1)	1,069,341	1,139,468	366,754
4	<i>Minus:</i> Changes in foreign stocks and bonds held as reserve assets.....	-1,502	-2,035	1,339
5	<i>Minus:</i> Changes in value caused by price changes.....	837,325	987,150	621,937
6	<i>Minus:</i> Changes in value caused by exchange-rate changes.....	-24,666	-212,765	-819,263
7	<i>Minus:</i> Changes in value caused by other changes in volume and value n.i.e.....	11,337	-62,656	39,629
8	Equals: Net U.S. acquisition of foreign stocks and bonds, ITAs	246,847	429,774	523,112
9	Plus: Net U.S. acquisition of foreign short-term securities and negotiable certificates of deposit of any maturity, ITAs	-8,084	46,463	14,946
10	Equals: Net U.S. acquisition of portfolio investment assets, ITA table 1.1, line 21	238,763	476,237	538,058
11	Net U.S. acquisition of foreign stocks and bonds, TIC ²	21,205	220,954	-29,499
12	Coverage difference for net U.S. acquisition of foreign stocks and bonds, ITAs less TIC (line 8 less line 11).....	225,642	208,820	552,611
Net U.S. incurrence of portfolio investment liabilities				
13	Total liabilities (U.S. stocks and bonds held by foreign residents) outstanding, beginning of year, TIC ¹	11,861,747	13,218,220	14,723,621
14	Total liabilities (U.S. stocks and bonds held by foreign residents) outstanding, end of year, TIC ¹	13,218,220	14,723,621	16,023,082
15	Change in liabilities, TIC (line 14 – line 13)	1,356,473	1,505,401	1,299,461
16	<i>Minus:</i> Changes in value caused by price changes.....	471,068	952,738	736,659
17	<i>Minus:</i> Changes in value caused by exchange-rate changes.....	-1,708	-23,433	-59,383
18	<i>Minus:</i> Changes in value caused by other changes in volume and value n.i.e.....	158,285	122,357	-57,843
19	Equals: Net U.S. incurrence of portfolio liabilities through U.S. stocks and bonds, ITAs	728,828	453,739	680,028
20	Plus: Net U.S. incurrence of portfolio liabilities through U.S. short-term securities and negotiable certificates of deposit of any maturity, ITAs	18,160	48,236	25,002
21	Equals: Net U.S. incurrence of portfolio investment liabilities, ITA table 1.1, line 26	746,988	501,975	705,030
22	Net U.S. incurrence of portfolio liabilities through U.S. stocks and bonds, TIC ²	634,119	79,442	249,317
23	Coverage difference for net U.S. incurrence of portfolio liabilities through U.S. stocks and bonds, ITAs less TIC (line 19 less line 22).....	94,709	374,297	430,711
Net U.S. incurrence of portfolio investment liabilities through U.S. Treasury securities³				
24	Total liabilities (U.S. Treasury bonds held by foreign residents) outstanding, beginning of year, TIC ¹	4,356,681	4,909,828	5,107,089
25	Total liabilities (U.S. Treasury bonds held by foreign residents) outstanding, end of year, TIC ¹	4,909,828	5,107,089	5,484,398
26	Change in liabilities, TIC (line 25 – line 24)	553,147	197,261	377,309
27	<i>Minus:</i> Changes in value caused by price changes.....	-22,619	-215,861	94,022
28	<i>Minus:</i> Changes in value caused by exchange-rate changes.....	0	0	0
29	<i>Minus:</i> Changes in value caused by other changes in volume and value n.i.e.....	0	11,494	-47,418
30	Equals: Net U.S. incurrence of portfolio liabilities through U.S. Treasury bonds, ITAs	575,766	401,628	330,705
31	Plus: Net U.S. incurrence of portfolio liabilities through short-term U.S. Treasury securities, ITAs	13,981	23,307	-13,325
32	Equals: Net U.S. incurrence of portfolio investment liabilities through U.S. Treasury securities, ITA table 1.1, part of line 26	589,747	424,935	317,380
33	Net U.S. incurrence of portfolio liabilities through U.S. Treasury bonds, TIC ²	416,444	40,878	165,517
34	Coverage difference for net U.S. incurrence of portfolio liabilities through U.S. Treasury bonds, ITAs less TIC (line 30 less line 33).....	159,322	360,750	165,188

^p Preliminary

^r Revised

1. TIC data are as reported in the monthly TIC survey of Aggregate Holdings of Long-Term Securities by U.S. and Foreign Residents (SLT). BEA uses the SLT and the TIC annual and benchmark surveys: Report of U.S. Ownership of Foreign Securities, including Selected Money Market Instruments (SHC(A)) and Foreign-residents' Holdings of U.S. Securities, including Selected Money Market Instruments (SHL(A)) to compile the ITAs and the U.S. international investment position.

2. TIC data for net U.S. acquisition of portfolio assets (line 11) and net U.S. incurrence of portfolio liabilities (lines 22 and 33) are based on Purchases and Sales of Long-term Securities by Foreign-Residents, TIC Form S.

3. The net U.S. incurrence of portfolio investment liabilities through U.S. Treasury securities is included in lines 13–23. The analysis for U.S. Treasury securities is provided separately in lines 24–34 because of the interest in this market by users of BEA data.

Table 2. Relation of Transactions in Other Investment Assets and Liabilities in the U.S. International Transactions Accounts (ITAs) to Treasury International Capital (TIC) Reporting System Data
[Millions of dollars]

Line	Net increase in assets or liabilities (+); net decrease in assets or liabilities (-).	2012 ^r	2013 ^r	2014 ^p
Net U.S. acquisition of other investment assets				
1	Total claims outstanding, beginning of year, TIC ¹	4,367,649	3,940,416	3,914,224
2	Total claims outstanding, end of year, TIC ¹	3,940,416	3,914,224	3,860,188
3	Change in claims, TIC (A2 – A1)	-427,233	-26,192	-54,036
4	<i>Minus:</i> Direct investment	1,936	18,166	-2,525
5	<i>Plus:</i> Foreign commercial paper coverage adjustments	5,577	24,003	754
6	<i>Minus:</i> Net U.S. acquisition of foreign short-term securities and negotiable certificates of deposit of any maturity, ITAs	-8,084	46,463	14,946
7	<i>Minus:</i> Changes in value caused by exchange rate changes	-3,916	-10,262	-15,418
8	<i>Minus:</i> Changes in value caused by other changes in volume and value n.i.e.	-6,602	210,662	-6,800
9	<i>Plus:</i> Financial intermediaries' accounts	-6,946	-7,202	0
10	<i>Plus:</i> Supplemental source data	43,544	48,960	-63,265
11	Equals: Net U.S. acquisition of other investment assets, excluding U.S. central bank and general government assets	-368,393	-225,460	-106,750
12	<i>Plus:</i> Net U.S. acquisition of other investment assets by the U.S. central bank and general government	-85,331	-2,966	7,230
13	Equals: Net U.S. acquisition of other investment assets, ITAs (table 1.1, line 22)	-453,724	-228,426	-99,520
Net U.S. incurrence of other investment liabilities				
14	Total liabilities outstanding, beginning of year, TIC ¹	4,991,383	4,619,217	5,141,482
15	Total liabilities outstanding, end of year, TIC ¹	4,619,217	5,141,482	5,180,163
16	Change in liabilities, TIC (B2 – B1)	-372,166	522,265	38,681
17	<i>Minus:</i> Direct investment	16,130	7,122	1,747
18	<i>Minus:</i> Net U.S. incurrence of portfolio investment liabilities through U.S. short-term securities and negotiable certificates of deposit of any maturity, ITAs	18,160	48,236	25,002
19	<i>Minus:</i> Changes in value caused by exchange rate changes	-1,452	-3,435	-31,600
20	<i>Minus:</i> Changes in value caused by other changes in volume and value n.i.e.	-16,435	179,784	0
21	<i>Plus:</i> Financial intermediaries' accounts	1,615	-8,569	0
22	<i>Plus:</i> Supplemental source data	-41,892	-77,266	21,176
23	Equals: Net U.S. incurrence of other investment liabilities, excluding liabilities of general government and liabilities from U.S. currency held abroad	-428,847	204,722	64,709
24	<i>Plus:</i> Net U.S. incurrence of other investment liabilities by general government and liabilities from U.S. currency held abroad	65,569	48,099	75,850
25	Equals: Net U.S. incurrence of other investment liabilities, ITAs (table 1.1, line 27)	-363,278	252,821	140,559

p Preliminary

r Revised

1. TIC data are as reported by in the TIC B and C forms. The TIC B forms (BC, BL-1, BL-2, BQ-1,

and BQ-2) are reports by financial institutions of liabilities to, and claims on, foreign residents by U.S. residents. The TIC C forms (CQ-1 and CQ-2) are reports of liabilities to and claims on unaffiliated foreign residents by U.S. resident non-financial institutions.