

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, to prepare statistics for the financial account. This article 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 of transactions in portfolio investment assets and liabilities (equity and debt securities). Table 2 presents statistics of transactions in other investment assets and liabilities (currency, deposits, loans, insurance technical reserves, trade credit and advances, and allocations of special drawing rights (only included in liabilities)).

Aligning with balance-of-payments concepts. Changes in 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 of other investment assets and liabilities. In order to impute balance of payments transactions from the reported quarterly changes in holdings, BEA 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, 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. 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 (table 1, line 4). Transactions and positions in reserve assets are reported 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 reclassifies transactions in short-term securities and negotiable certificates of deposit of any maturity from other investment to 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. Although the TIC system covers the other investment assets and liabilities of most U.S. companies, certain U.S. financial intermediaries that are not banks, securities brokers, bank holding companies, or financial holding companies report their holdings of debt with affiliates on BEA surveys of direct investment rather than to the TIC system. Their transactions are added as financial intermediaries (table 2, lines 9 and 21). U.S. transactions in other investment of U.S. nonbanking concerns are particularly difficult to measure.

BEA closes gaps in the coverage of U.S. nonbanking concerns' claims and liabilities by using partner country counterparty claims and liabilities provided by foreign banking authorities. These transactions are added as supplemental source data (table 2, lines 10 and 22). Finally, BEA collects and adds 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 (table 2, lines 12 and 24).

Beginning with the June 2013 release of the international transactions accounts, 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 Form Aggregate Holdings of Long-Term Securities by U.S. and Foreign Residents (SLT).¹ In previous years, BEA featured data from the TIC Form Purchases and Sales of Long-term Securities by Foreign-Residents (S).

The differences in coverage between BEA statistics based on the SLT and the previously featured TIC measures of transactions derived from the Form 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 Form S are shown in lines 11, 22, and 33. The difference between the BEA statistics and the Form S net transactions are shown in lines 12, 23, and 34. Before the SLT data were incorporated in June 2013, BEA used annual TIC holdings data to improve the statistics based on Form S transactions data and presented these coverage adjustments in table 1 in this article in previous years. Using annual TIC holdings data to improve the statistics based on the Form S meant that full coverage adjust-

ments would be applied with a lag of up to two years after preliminary statistics were published by BEA.

For 2013, the coverage differences between the transactions as reported in the Form S and BEA statistics based on the SLT are large. For U.S. portfolio assets, there is a difference of \$224.3 billion in U.S. net acquisitions between the \$220.9 billion in U.S. net acquisitions reported through the Form S and the BEA statistic of \$445.2 billion in U.S. net acquisitions of foreign stocks and bonds based on the SLT (table 1, lines 8, 11, and 12). Because of the timeliness of the SLT, BEA has been able to compile quarterly transactions statistics for 2013 that are consistent with U.S. holdings of foreign securities during 2013 and 2014 rather than wait for the release of annual data for 2013, which will not be final until October 31, 2014. If BEA relied only on the annual data, the \$224.4 billion in revisions to annual 2013 financial flows would not have been reported until the release of the ITAs in June 2015.

For the net U.S. incurrence of U.S. liabilities, the 2013 coverage difference resulting from the use of SLT data is \$357.9 billion (table 1, line 23) largely reflecting the \$364.0 billion coverage difference for U.S. Treasury securities (line 34). Similar to the case with the U.S. assets, if BEA relied only on annual data, much of this difference would otherwise not be captured and reported until the release of the ITAs in June 2015.

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 (-).	2011 ^r	2012 ^r	2013 ^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	6,656,601	6,466,323	7,570,680
2	Total claims (foreign stocks and bonds held by U.S. residents) outstanding, end of year, TIC ¹	6,466,323	7,570,680	8,753,628
3	Change in claims, TIC (line 2 – line 1)	-190,278	1,104,357	1,182,948
4	<i>Minus:</i> Changes in foreign stocks and bonds held as reserve assets	-65	-1,502	-2,035
5	<i>Minus:</i> Changes in value caused by price changes	-618,288	807,753	960,123
6	<i>Minus:</i> Changes in value caused by exchange-rate changes	-11,097	-13,039	-236,254
7	<i>Minus:</i> Changes in value caused by other changes in volume and value n.i.e.	294,494	63,300	15,909
8	Equals: Net U.S. acquisition of foreign stocks and bonds, ITAs	144,678	247,845	445,205
9	Plus: Net U.S. acquisition of foreign short-term securities and negotiable certificates of deposit of any maturity, ITAs	-59,313	-8,072	44,672
10	Equals: Net U.S. acquisition of portfolio investment assets, ITA table 1.1, line 21	85,365	239,773	489,877
11	Net U.S. acquisition of foreign stocks and bonds, TIC ²	124,327	21,205	220,920
12	Coverage difference for net U.S. acquisition of foreign stocks and bonds, ITAs less TIC (line 8 less line 11)	20,351	226,640	224,285
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	10,941,372	11,808,301	13,123,893
14	Total liabilities (U.S. stocks and bonds held by foreign residents) outstanding, end of year, TIC ¹	11,808,301	13,123,893	14,598,978
15	Change in liabilities, TIC (line 14 – line 13)	866,929	1,315,592	1,475,085
16	<i>Minus:</i> Changes in value caused by price changes	161,351	471,038	928,157
17	<i>Minus:</i> Changes in value caused by exchange-rate changes	-1,675	-1,664	-26,315
18	<i>Minus:</i> Changes in value caused by other changes in volume and value n.i.e.	306,730	117,395	131,866
19	Equals: Net U.S. incurrence of portfolio liabilities through U.S. stocks and bonds, ITAs	400,523	728,823	441,377
20	Plus: Net U.S. incurrence of portfolio liabilities through U.S. short-term securities and negotiable certificates of deposit of any maturity, ITAs	-88,897	18,173	49,566
21	Equals: Net U.S. incurrence of portfolio investment liabilities, ITA table 1.1, line 26	311,626	746,996	490,943
22	Net U.S. incurrence of portfolio liabilities through U.S. stocks and bonds, TIC ²	493,375	635,190	83,452
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)	-92,852	93,633	357,925
Net U.S. incurrence of portfolio investment liabilities through U.S. Treasury securities ³				
24	Total liabilities (U.S. Treasury bonds held by foreign residents) outstanding, beginning of year, TIC ¹	3,748,544	4,356,681	4,909,828
25	Total liabilities (U.S. Treasury bonds held by foreign residents) outstanding, end of year, TIC ¹	4,356,681	4,909,828	5,108,856
26	Change in liabilities, TIC (line 25 – line 24)	608,137	553,147	199,028
27	<i>Minus:</i> Changes in value caused by price changes	166,826	-22,619	-221,130
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.	23,427	0	13,282
30	Equals: Net U.S. incurrence of portfolio liabilities through U.S. Treasury bonds, ITAs	417,884	575,766	406,876
31	Plus: Net U.S. incurrence of portfolio liabilities through short-term U.S. Treasury securities, ITAs	-62,607	13,981	24,382
32	Equals: Net U.S. incurrence of portfolio investment liabilities through U.S. Treasury securities, ITA table 1.1, part of line 26	355,277	589,747	431,258
33	Net U.S. incurrence of portfolio liabilities through U.S. Treasury bonds, TIC ²	432,571	416,444	42,877
34	Coverage difference for net U.S. incurrence of portfolio liabilities through U.S. Treasury bonds, ITAs less TIC (line 30 less line 33)	-14,687	159,322	363,999

1. Beginning with TIC data for holdings of securities as of December 2011, data are as reported in Aggregate Holdings of Long-Term Securities by U.S. and Foreign Residents, TIC Form SLT. Data for holdings of claims at yearend before December 2011 are as reported in the Report of U.S. Ownership of Foreign Securities, TIC Form SHC/SHCA. Data for holdings of liabilities at yearend before December 2011 are estimated from Foreign Residents Holdings of U.S. Securities, TIC Form SHL/SHLA, which is reported annually as of June 30.

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. These statistics are 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 (-).	2011 ^r	2012 ^r	2013 ^p
Net U.S. acquisition of other investment assets				
1	Total claims outstanding, beginning of year, TIC ¹	4,634,089	4,367,649	3,941,667
2	Total claims outstanding, end of year, TIC ¹	4,367,649	3,941,667	3,592,249
3	Change in claims, TIC (line 2 – line 1)	-266,440	-425,982	-349,418
4	<i>Minus:</i> Direct investment	-13,287	-1,200	2,052
5	<i>Plus:</i> Foreign commercial paper coverage adjustments	18,310	5,578	22,429
6	<i>Minus:</i> Net U.S. acquisition of foreign short-term securities and negotiable certificates of deposit of any maturity, ITAs	-59,313	-8,072	44,672
7	<i>Minus:</i> Changes in value caused by exchange-rate changes.....	-1,433	-773	-6,092
8	<i>Minus:</i> Changes in value caused by other changes in volume and value n.i.e.....	-30,608	-6,598	-59,564
9	<i>Plus:</i> Financial intermediaries' accounts ²	-5,435	-16,392	-31,508
10	<i>Plus:</i> Supplemental source data ³	-68	57,132	92,270
11	Equals: Net U.S. acquisition of other investment assets, excluding U.S. central bank and general government assets	-148,992	-363,021	-247,295
12	<i>Plus:</i> Net U.S. acquisition of other investment assets by the U.S. central bank and general government.....	103,665	-85,331	-2,965
13	Equals: Net U.S. acquisition of other investment assets, ITAs (table 1.1, line 22)	-45,327	-448,352	-250,260
Net U.S. incurrence of other investment liabilities				
14	Total liabilities outstanding, beginning of year, TIC ¹	4,691,406	4,991,383	4,619,622
15	Total liabilities outstanding, end of year, TIC ¹	4,991,383	4,619,622	4,832,658
16	Change in liabilities, TIC (line 15 – line 14)	299,977	-371,761	213,036
17	<i>Minus:</i> Direct investment	12,696	3,999	736
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	-88,897	18,173	49,566
19	<i>Minus:</i> Changes in value caused by exchange-rate changes.....	-3,696	1,043	-2,958
20	<i>Minus:</i> Changes in value caused by other changes in volume and value n.i.e.....	32,629	-2,702	-84,194
21	<i>Plus:</i> Financial intermediaries' accounts ²	-6,655	1,572	-2,671
22	<i>Plus:</i> Supplemental source data ³	3,498	-37,652	-63,458
23	Equals: Net U.S. incurrence of other investment liabilities, excluding liabilities of general government and liabilities from U.S. currency held abroad	344,088	-428,354	183,757
24	<i>Plus:</i> Net U.S. incurrence of other investment liabilities by general government and liabilities from U.S. currency held abroad.....	63,948	65,555	47,996
25	Equals: Net U.S. incurrence of other investment liabilities, ITAs (table 1.1, line 27)	408,036	-362,799	231,753

1. TIC data are as reported 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.

2. Financial intermediaries' accounts represent transactions between firms in a direct investment

relationship (that is, between U.S. parents and their foreign affiliates or between U.S. affiliates and their foreign parent groups), where both the U.S. and the foreign firm are classified in a finance industry, but the firms are neither banks nor securities brokers.

3. Includes supplemental transactions from the Bank of England, the Deutsche Bundesbank, the Bank for International Settlements, and the Federal Reserve Board.