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Possible Sources of Statistical Discrepancies in International Accounts: Lessons from the U.S. Experience

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Balance of Payments and related International Investment Position accounting relies on two identities: First, the balance on the current account is by definition identical to financial account transactions plus the balance on the capital account:

Balance on the Current Account

$$= \text{Net Financial Account Transactions} + \text{Balance on the Capital Account}$$

In flow terms, a statistical discrepancy arises when this identity is not met. For the United States, where transactions in the capital account balance are minor, the statistical discrepancy arises either from errors or missed transactions in measuring current account transactions or in measuring financial account transactions.

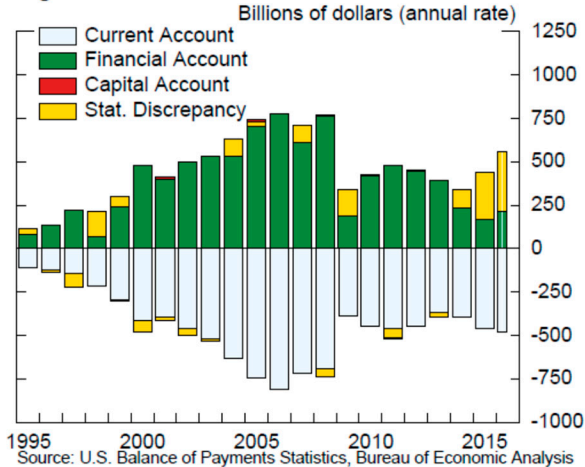
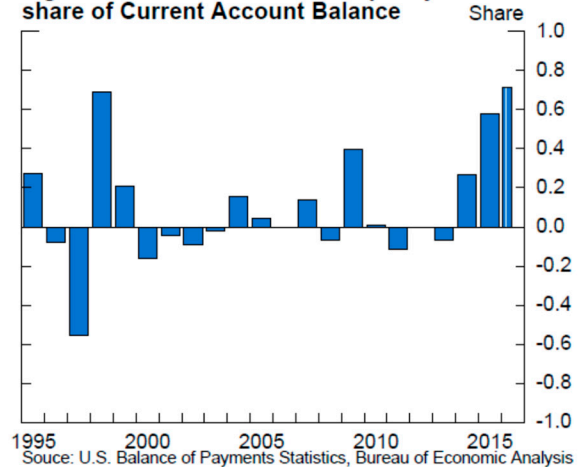
Second, in terms of positions, the change in the international investment position for any cross border asset or liability can be decomposed into financial account transactions + valuation changes on underlying assets or liabilities + plus other changes (typically arising from changes in coverage).

Change in International Investment Position

$$= \text{Financial Flows} + \text{Valuation Changes} + \text{Other Changes in Volume}$$

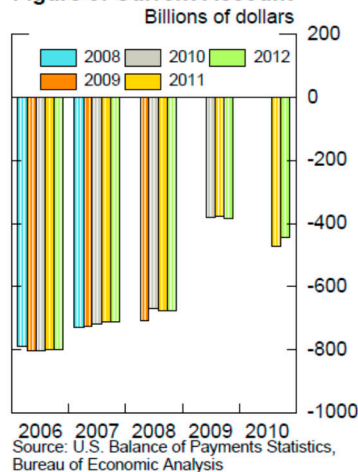
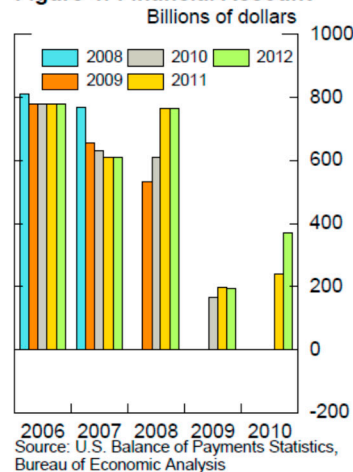
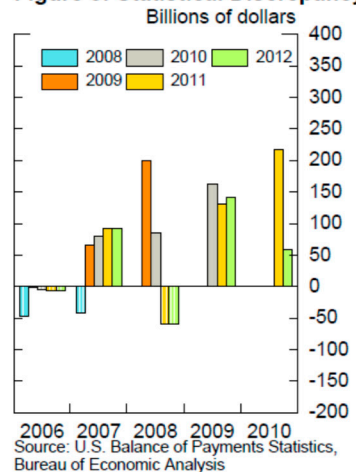
There is no explicit role for a statistical discrepancy in the decomposition of changes in the investment position, because for the most part data underlying the estimates are not coming from two different sources (transactions in goods and services, and transactions in financial instruments) that are supposed to be in balance. Nonetheless, data compilers may exercise a degree of judgement in deciding how to decompose changes in position between transactions, valuation, and other changes. The potential for mismeasurement from an incorrect decomposition can be especially problematic when valuation changes are large and dominate the change in position. While such errors in valuation estimates can give rise to incorrectly recorded flows that in turn can result in a larger statistical discrepancy than in fact actually exists, it may also be the case that miscalculations between valuation and flows may disguise a growing true statistical discrepancy.

Since mid-2014, the U.S. statistical discrepancy stands out in both dollar terms (figure 1) and as a share of the current account balance (figure 2). Although the U.S. discrepancy can arise from unrecorded transactions in either the current account or the financial account, our prior experience suggests that large changes in the discrepancy most often result from missed financial account transactions. In part, the potential for errors in the financial account reflects the magnitude of U.S. cross-border financial positions: U.S. assets abroad are roughly \$23 trillion, while foreign assets in the U.S. are roughly \$29 trillion.

Figure 1: U.S. International Transactions**Figure 2: U.S. Statistical Discrepancy as share of Current Account Balance**

Historically, large discrepancies have often been associated with periods of financial turbulence, which can result in transactions flowing through nonstandard channels that fall outside of normal reporting.¹ The large statistical discrepancies in 1997-1998 arose during the onset of the Asian debt crisis, the Russian financial crisis, and the collapse of Long-Term Capital Management. The sizable discrepancy in 2009 coincides with the global financial crisis. Figures 3-5 illustrate the annual revisions to the U.S. current account balance, net financial account transactions, and the statistical discrepancy over the period 2006-2011. While revisions to the current account balance occurred each year, the magnitude of the revisions were much larger for net financial flows, and contributed much more to the changing evolution of the statistical discrepancy.

Evolution of Components of the Balance of Payments as Measured over Time

Figure 3: Current Account**Figure 4: Financial Account****Figure 5: Statistical Discrepancy**

¹See the discussion “The Statistical Discrepancy in Periods of Economic Turbulence” in the Survey of Current Business (Bureau of Economic Analysis), July 2009 http://www.bea.gov/scb/pdf/2009/07%20July/0709_ita-annual.pdf

The more recent growing discrepancy is somewhat puzzling in that it does not seem to be associated with financial turbulence. Moreover, the fact that the U.S. discrepancy has been persistently sizable, indicating substantial unrecorded inflows of \$80 billion or more for multiple quarters, is concerning. One-time discrepancies – even large discrepancies – can arise from differences in the timing of the various transactions as recorded in the current account and the corresponding financial flows as recorded in the financial account, and are less indicative of missed transactions if on an annual basis they are smoothed out. But the recent sustained nature of the U.S. statistical discrepancy suggests a change whereby we are systematically missing financial inflows to the United States.

In practice, mismeasurement in all types of U.S. financial flows (direct investment, portfolio investment, other investment, and derivatives transactions) can and likely do contribute to the U.S. statistical discrepancy. The most likely sources of error in financial account transactions arise from (1) mismeasurement of reported transactions and misallocation of changes in holdings into valuation changes and financial flows as noted above and (2) missed transactions, potentially because of new participants and new activities. These missed financial flows in turn can arise from activities that (a) are under the scope of our current reporting systems, are not well covered or reported, but should be and (b) activities that occur outside of scope of current reporting.

Section 2 below briefly reviews the reporting systems for measuring U.S. cross-border financial flows. Section 3 evaluates possible sources of error in these systems for their potential contributions to the more recent increase in the statistical discrepancy, and discusses some potential remedies.

2. The reporting systems for collecting information on U.S. international financial transactions

The U.S. international accounts are published by the Bureau of Economic Analysis of the U.S. Department of Commerce. However, the responsibilities for the various data collection systems that underlie the U.S. financial account transactions and the international investment position are shared among the Bureau of Economic Analysis (BEA), the U.S. Department of the Treasury, and the Federal Reserve System.

Direct Investment claims, liabilities, and related transactions are collected by the BEA. Direct investment data are collected through quarterly and annual surveys of U.S. direct investment activity abroad and quarterly and annual surveys of foreign direct investment activity in the United States.

Information on *portfolio investment* (positions and transactions in securities), “*other*” investment (primarily bank-reported claims and liabilities), and *derivatives* investment are collected through the Treasury International Capital System (TIC) under the authority of the Treasury Department with operational oversight provided by the Federal Reserve System.

Portfolio investment data are collected in three major reports:

(1) Annual surveys (as of end-June for portfolio liabilities and end-December for portfolio claims), collect information on cross border securities holdings.² These surveys are collected at the underlying security level, which allows for detailed analysis on the type of security, issuer, maturity, and currency.

(2) Since December 2011, these security-level data have been supplemented by monthly aggregate reporting on cross-border holdings of long-term U.S. and foreign securities on the TIC form SLT. The SLT collects information on cross-border holdings from largely the same set of respondents as the annual surveys, but only by broad security type, and by country of foreign owner (for U.S. securities) or foreign issuer (for foreign securities).

(3) The final piece of information on portfolio investment is monthly reporting on cross-border transactions in U.S. and foreign long-term securities on the form TIC S. The TIC S data are reported primarily by U.S. broker-dealers, who report gross monthly cross-border purchases and sales. Data are reported by the country of first cross-border counterparty.

“*Other*” investment is collected primarily from the TIC B forms, which measure claims and liabilities positions of U.S.-resident banks and other financial institutions, reported at the end of month or quarter. Additional reporting of cross-border claims on and liabilities to unaffiliated foreigners by non-financial institutions are collected on the CQ forms. The TIC B forms were originally designed to cover cross-border positions of U.S. banks. But as nonbank financial institutions have become increasingly important in cross-border activities, there have been several adjustments to reporting requirements, with reporting expanded to cover bank holding companies and securities brokers and dealers who typically have large intra-office positions as well as sizable positions in the form of cross-border deposits and repurchase/resale activity. Additional changes were made in 2013 to fold in reporting of positions of all other types of nonbank financial institutions to the “B” forms.

Gross positive fair values, gross negative fair values, and net settlements (transactions) data for *derivatives* are collected quarterly on the TIC D form and have been included in the U.S. financial accounts since 2005.

In practice, drawing clear distinctions between what is reportable as direct investment versus portfolio or “*other*” investment can be challenging, given the evolving nature of financial market participants and their cross-border activity. Financial innovation can also lead to problems in correctly measuring financial transactions when the nature of transactions falls into such grey areas. For example, the decision to expand reporting by nonbank financial institutions on the TIC “B” forms to capture both their positions with unaffiliated foreigners as well as their intracompany transactions was taken because of concerns that financial transactions of these types of entities were not well measured by direct investment reporting: their financial transactions in general are more akin to types of flows and positions reported by banks and thus

² Portfolio investment surveys have been annual for liabilities since June 2002, and annual for claims since December 2003. Previously, liabilities surveys had been collected roughly every five years beginning in 1974, and periodically for U.S. claims beginning in December 1994.

more easily identified and reported on “banking” report forms than on direct investment report forms.

Similarly, certain types of managed funds with limited numbers of investors may satisfy definitions of direct investment in terms of individual ownership and voting shares, but their activities are more like portfolio investment in terms of the investments they undertake. A recent clarification in reporting instructions to go into effect in 2017 now requires such managed funds to report all such investments on the TIC forms and not as direct investment.³

Reporting systems typically evolve to account for new types of activity, and often in response to concerns about missed transactions or positions, but they necessarily do so with a lag. It takes time to clarify or rewrite instructions and publicize the new reporting requirements. Moreover, confidentiality restrictions imposed on the BEA and on the Federal Reserve System and the Treasury for the underlying data collected under their respective authorities can make it difficult to determine whether individual reporters are filing correctly. Active communication between the BEA, the Federal Reserve System, and the Treasury is important for assessing completeness and accuracy of data reporting.

3. Possible sources of the current U.S. statistical discrepancy

3.1. Misallocation of changes in holdings into flows and valuation changes

As noted above, misallocation of estimated changes in asset holdings in the international investment position into flows and valuation changes can be a source of mismeasurement for financial account transactions. Given the size and composition of U.S. cross-border assets and liabilities, changes in valuation arising from price changes and exchange rate changes can be significant and indeed can dwarf estimated transactions (figures 6 and 7).

Decomposition of Changes to U.S. Assets and Liabilities

Figure 6: U.S. Foreign Assets

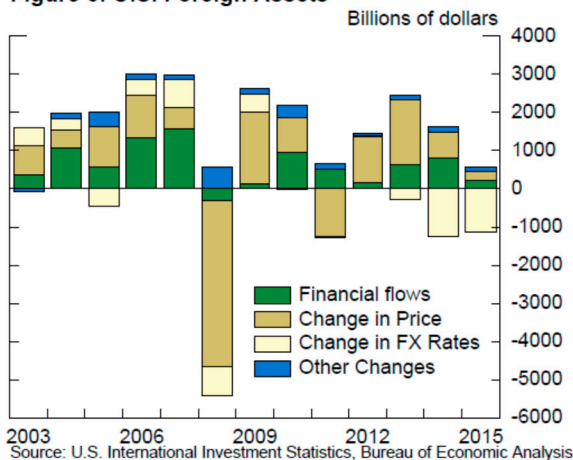
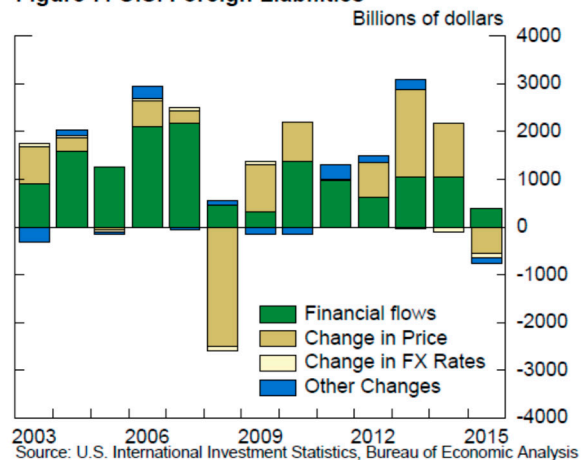


Figure 7: U.S. Foreign Liabilities



³ Details are available on the BEA website at <http://www.bea.gov/surveys/privatefunds/>.

In large part, these valuation and exchange rate changes reflect the sizable U.S. cross-border investments that are held in the form of portfolio equity, which can experience particularly large price swings: Foreign holdings of U.S. equity at end-2015 amounted to \$6.2 trillion. U.S. holdings of foreign equity were \$6.8 trillion. Valuation changes for direct investment assets and liabilities when recorded at market value can also contribute to the sizable overall valuation gains and losses.

However, our ability to correctly decompose annual changes in holdings into transactions and valuation change is imperfect. For portfolio investment, where valuation changes are especially important, the security-level annual surveys allow us to compare holdings and calculate actual price changes on individual securities held both years. However, this procedure has the drawback of only being available for this kind of analysis once a year, with a lag of roughly 8-10 months from the survey date. Moreover, these calculations only help identify price changes for securities held in the same quantities over both years: it is not possible to tell at what price securities were sold if they are no longer held or are held in smaller quantities, nor is it possible to tell at what price newly-acquired securities were bought.

Thus, for decomposing changes in portfolio positions, U.S. compilers rely on information from the more-timely, aggregate TIC form SLT, combined with estimates of valuation changes derived from price indexes, and data on transactions as reported on the TIC form S. Estimates of the decomposition between valuation change and net purchases are then compared with results from the surveys once they become available. Here too, though, we run into difficulty: in principle, changes in holdings should be neatly decomposed into reported transactions, estimated valuation changes, and known changes in coverage. However, as documented by Bertaut and Judson (2014)⁴, this exercise often generates a large unexplained residual. For instance, in the latest report on foreign holdings of U.S. securities as of June 2015⁵ found that foreign holdings of U.S. corporate bonds increased by considerably more than can be explained by reported TIC-S transactions and estimates of valuation change. Similarly, the report on U.S. holdings of foreign securities as of December 2014⁶ found U.S. holdings of foreign equity to have increased by much more than accounted for by valuation estimates and recorded purchases of foreign equity.

A potential problem in correctly measuring U.S. cross-border securities transactions is the sheer magnitude of transactions: as reported on the TIC S, gross cross-border trading in U.S. securities has grown to volumes of roughly \$5 trillion per month, whereas net monthly transactions are on the order of \$30 billion. A small percentage error in either gross purchases or sales could markedly change the measure of net transactions as recorded on the TIC S. But for this to be a source of the more recent persistent discrepancy, the size and direction of such potential errors would have to have changed to systematically understate recorded inflows.

⁴ Bertaut, Carol C., and Ruth A. Judson (2014). "[Estimating U.S. Cross-Border Securities Positions: New Data and New Methods](#)," International Finance Discussion Papers 1113. Board of Governors of the Federal Reserve System (U.S.).

⁵ See "Foreign Portfolio Holdings of U.S. Securities as of June 30, 2015", <http://ticdata.treasury.gov/Publish/shl2015r.pdf>

⁶ See "U.S. Portfolio Holdings of Foreign Securities as of December 31, 2014", http://ticdata.treasury.gov/Publish/shc2014_report.pdf

Could errors in our valuation estimates be the source of the increased statistical discrepancy? Internal analysis suggests that U.S. cross-border holdings are reasonably well represented by broad indexes such as the MSCI for holdings of equity (the largest source of valuation changes), and thus U.S. compilers tend to interpret residuals or “gaps” arising from the decomposition exercise as more likely arising from missed transactions on the TIC S than from errors in valuation. Accordingly, flows as reported by the BEA in the U.S. financial account are typically considerably larger than reported in the TIC S (table 1).

	BEA				TIC S*			
	2012	2013	2014	2015	2012	2013	2014	2015
Foreign acquisitions of long-term U.S. securities								
Total	729	464	677	206	405	40	324	216
Equity	239	-63	154	-178	112	111	183	109
Long-term debt	490	526	523	384	293	-71	141	107
U.S. acquisitions of long-term foreign securities								
Total	257	433	571	111	36	260	1	-48
Equity	104	287	432	203	56	214	133	228
Long-term debt	153	145	140	-91	-20	47	-132	-276

*Adjusted for estimates of stock swaps and ABS repayment flows

Moreover, for valuation to be the source of the more recent persistent statistical discrepancies, we would have to be making new errors in our valuation estimates, so that we are now systematically understating net financial inflows, either by overestimating the contribution of valuation to increases in liabilities and thus underestimating foreign acquisitions of U.S. assets, or underestimating the contribution of valuation to increases in claims and thus overestimating U.S. acquisitions of foreign assets. With the composition of assets and liabilities in terms of the mix of instruments held generally evolving relatively slowly, it is difficult to imagine how mismeasurement of valuation change could be a substantially bigger factor now. Nonetheless, with valuation changes typically playing a large role in changes in U.S. cross-border portfolio investment, evaluating our methodologies for changes in holdings trends and other areas for improvement is an ongoing exercise.

3.2 Securities lending, repurchase agreements, and short sales

Other challenges in reconciling securities transactions and positions that may be especially problematic for cross-border holdings of Treasury securities and for equity are caused by repurchase and securities lending agreements, and the fact that the U.S. reporting system does not account for short positions in securities. As noted in the most recent report on foreign holdings of U.S. securities, the TIC system follows international standards and treats repurchase and securities lending agreements as collateralized loans, with lenders (or their custodians) instructed to report securities involved in such agreements as continuously held by the lender, and borrowers (or their custodians) instructed not to report them as holdings of the borrower. In

practice, however, reporting entities may not always have sufficient information to report as intended. Custodians may not always be able to distinguish securities transferred in or out through repurchase and lending activity from those originating from outright purchases and sales.

A further challenge is that a security borrower (the legal owner) has the right to resell a borrowed security. If a U.S. resident borrows a U.S. security from a foreign entity and subsequently sells the security to another foreign resident, this can result in two different foreign residents reporting as holding the same U.S. security. In this case, reporting is correct according to the instructions, but it can lead to the overstatement of certain statistics, such as the percentage of U.S. Treasury securities that is foreign-owned.

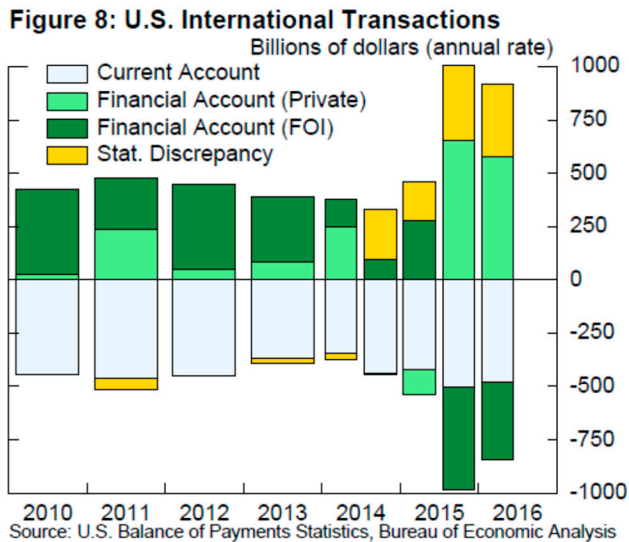
Finally, securities lending and short sales can introduce a wedge between reported securities transactions and changes in reported positions. For example, if a foreigner borrows a Treasury security from a U.S. resident and then sells the security to a U.S. resident, the transaction reporting system will (correctly) register this transaction as a foreign sale to a U.S. resident. However, the position reporting system will show no net change in foreign holdings of U.S. Treasuries, because the short position of the foreign borrower is not recorded. Thus, there will be a wedge between reported net transactions and the change in reported positions, even after adjusting for valuation changes.

Repurchase agreements, securities lending, and short sales can certainly complicate the reconciliation between changes in holdings and the contributions attributable to financial flows and valuation effects. Large residuals (gaps or wedges) between changes in holdings adjusted for valuation and recorded transactions can be indicative of these activities. However, gaps as measured by Bertaut-Judson for Treasuries overall and for Treasuries held by the Cayman Islands – a financial center where we believe considerable securities lending and repurchase activity occurs – were actually substantially larger in 2013 than in last two years: Bertaut-Judson estimates indicate a “gap” of \$120 billion for Treasuries in the Cayman Islands in 2013, but only about \$30 billion in each of 2014 and 2015. Thus, while repurchase agreements, securities lending, and short sales activity all are factors that make it difficult for reporters to correctly determine actual purchases or sales from repurchase or securities lending activity, and also make it difficult to reconcile estimated flows and positions, it is not clear that an *increase* in this activity is the primary source of the increasing discrepancy over the past couple years.

3.3 Changing nature of financial participants and/or instruments

A plausible explanation instead for the growing discrepancy is that inflows are now missed because there has been a shift in the composition of investors and/or instruments in recent years from activity that is (reasonably) well measured by the U.S. reporting systems to activity that is not well captured. Figure 8 shows one of the starkest changes in U.S. financial account transactions in recent years: through 2013, a very sizable portion of net inflows to the U.S. could be attributed to net purchases of U.S. securities by foreign official investors. These inflows were largely in the form of net purchases of Treasury securities, and primarily reflected the investment of U.S.-dollar denominated foreign exchange reserves. Net purchases of U.S. securities by

official investors slowed markedly in 2014, and turned to net sales in the second half of 2015 and in the first half of this year.



Purchases of Treasuries by official investors are transactions that most likely are relatively easily reported in the TIC system, with purchases reported by broker-dealers on the TIC S and with the resulting increased holdings reported on the TIC SLT and in the annual liabilities survey.⁷ With the current account deficit little changed and foreign official purchases turning to net sales, net financing flows to the U.S. must necessarily increasingly be coming from private investors. However, these activities are more difficult to measure when they occur through means that are not well tracked in either the TIC system or in direct investment reporting. Although our financial accounts do indicate sizable net private inflows in the second half of 2015 and so far in 2016 (largely in the form of foreign private purchases of U.S. securities), these recorded inflows have not been sufficient to offset the outflows from official investors.

3.4 Financial innovation as a source of the growing discrepancy

Financial innovation can give rise to financial flows that are not well covered in the financial accounts. For example, in the lead-up to the financial crisis, it became evident that cross-border transactions in asset-backed securities were increasingly important in U.S. cross-border securities holdings, both in terms of foreign holdings of U.S. securitized products as well as U.S. holdings of foreign-issued products, but that purchases of such securities were apparently underreported in the transactions data. Additionally, the BEA determined that intercompany debt flows between U.S.-parent financial entities and their offshore special purpose vehicles (SPVs) set up to issue such debt were not reported in their direct investment data. Revisions to the financial transactions accounts to pick up the flows associated with these activities were largely

⁷ Even if foreign official investors acquire U.S. securities through foreign intermediaries and then entrust their holdings to foreign custodians, the TIC system typically can record the increase in foreign ownership, as the U.S. sub-custodian will note the increase in holdings at the foreign custodian. However, the increase in holdings will likely be attributed to foreign private investors rather than official investors.

responsible for the changes in the recorded financial flows and the statistical discrepancy noted in charts 3-5 above.⁸

A similar situation appears to be arising currently with increased issuance of collateralized loan obligations (CLOs) and U.S. investor ownership of these instruments. Issuance of CLOs has grown markedly in recent years, with the majority issued via SPVs in the Cayman Islands. Our annual surveys of U.S. holdings of foreign securities do not explicitly identify U.S. ownership of foreign-issued CLOs, but we do track U.S. holdings of ABS, and after a steady decline in ABS ownership since the financial crisis, we saw a sizable jump in holdings of Cayman-issued ABS in 2014. Because the annual survey data are collected at the underlying security level, we were able to determine that increases in U.S. holdings of newly-issued Cayman Islands ABS were dominated by CLOs.⁹

Preliminary investigation into the structure of CLO issuance indicates that U.S. syndicated loans that underlie many Cayman-issued CLOs should be reported as custody liabilities to the Caymans on the U.S. B-forms. However, it appears that such liabilities are not being correctly reported. This omission is likely an important factor behind the recent increase in the U.S. statistical discrepancy, because we have captured financial outflows through increased U.S. investment abroad via the ownership of Cayman-issued CLOs, but not the inflows associated with the growing U.S. liabilities to foreigners arising from the CLO creation. We are currently working to improve coverage and reporting of this item.

More generally, the TIC system is not set up to explicitly track cross-border purchases or sales of loans. To the extent that U.S. loans sold to foreigners continue to be serviced by U.S. trustees or other U.S.-based financial entities, the TIC reporting system should still be able to capture such activity, as loan servicers should report the loan values as custody liabilities. However, this remains an area for further investigation, as our experience with the loans underlying CLOs indicates that reporting may be incomplete. Moreover, we do not have a good mechanism at present for distinguishing valuation changes from financial flows when the level of loans outstanding changes from month to month. Accurately measuring flows related to cross-border transactions in loans may be a source of error, but likely affects both claims and liabilities.

3.5 Transactions that occur outside of the scope of the reporting systems

Identifying cross-border transactions that occur outside of the scope of U.S. reporting systems is more difficult, but one notable form of financial transactions and cross-border positions not captured in the U.S. accounts is investment in residential real estate, both foreign investment into

⁸ See the discussion “Annual Revision of the U.S. International Accounts, 1974–2007”, Survey of Current Business, July 2008 http://www.bea.gov/scb/pdf/2008/07%20July/0708_international.pdf

⁹ See “U.S. Portfolio Holdings of Foreign Securities as of December 31, 2014”, http://ticdata.treasury.gov/Publish/shc2014_report.pdf

the U.S. as well as U.S. investment abroad. Curcuru et al. (2008)¹⁰ suggest that at least from 1990 through 2007, foreign acquisitions of U.S. residential real estate exceeded U.S. acquisitions of foreign real estate, with net inflows reaching \$25-\$30 billion per year by 2007. More recent estimates from the National Association of Realtors indicate that this trend likely continues, with foreign purchases of U.S. residential real estate by non-resident investors increasing to about \$44 billion in 12 months ending in March 2016, though these figures indicate a slight slowdown from \$54 billion the previous year and from \$47 billion in 2014.¹¹

The report notes an increasing share of purchases from Chinese residents, and further indicates that an overwhelming majority (73%) of non-resident purchases are all-cash transactions. Taken together, the evidence suggests that foreign investment in U.S. residential real estate likely contributes to the U.S. statistical discrepancy in the form of unrecorded inflows, and may be part of the increase in the discrepancy more recently, but is unlikely to fully account for the recent under-counting of financial inflows.

Conclusion

Tracking the financial flows that “finance” the U.S. current account balance is challenging, given the magnitude of U.S. cross border assets and liabilities. Nonetheless, the recent size of the U.S. statistical discrepancy indicates room for improvement in our financial accounting. Prior experience in producing the balance of payments accounts leads us to believe that the recent sizable and persistent statistical discrepancies most likely reflect missed net financial inflows to the United States. A further challenge for the U.S. is that given the magnitude of U.S. cross-border positions, annual valuation changes on U.S. assets and liabilities can dwarf financial flows, and thus even relatively small errors in estimating such valuation changes can leave an imprint in terms of miss-measured flows. Our overall assessment, however, is that the recent increase in statistical discrepancy most likely is the result of a shift in the sources of net financial inflows, from easier-to-measure purchases of securities by foreign official investors to activities across a range of instruments and by a range of private investors that in totality are more difficult to track.

Because the U.S. financial system is often at the center of financial innovation, a lesson for us is to look for emerging trends in types of instruments issued and held by U.S. or foreign investors. This may be especially relevant when they have an apparent off-shore SPV nature that may be generating a “missing link” in terms of balance of payments reporting. The bulk of our holdings of foreign ABS are issued in the Caribbean by SPVs that typically that have a U.S. connection, but the nature of that connection can differ from instrument to instrument depending on the structure of the SPV, which have different implications for reporting responsibilities. Similar

10 Curcuru, Stephanie E., Charles P. Thomas, and Frank E. Warnock, “Current Account Sustainability and Relative Reliability”, NBER International Seminar on Macroeconomics 2008 (University of Chicago Press, 2008), <http://www.nber.org/chapters/c8232.pdf>

¹¹ See the report “2016 Profile of International Activity in U.S. Residential Real Estate” https://www.scribd.com/document/317600531/2016-Profile-of-International-Home-Buying-Activity#download&from_embed

situations may arise for other countries with regard to other “offshore” financial centers that issue ABS or other types of structured products, such as the Channel Islands and Ireland.

Similarly, changes in the types of participants investors involved in U.S. cross-border financial transactions can contribute to missed transactions. Increased activity by managed funds and other types of non-bank financial intermediaries may result in transactions that are not picked up by reporting systems because these participants are not part of existing reporting panels. Even when new participants are detected, it takes time to revise or clarify reporting responsibilities and to fold reporting by new intermediaries into the reporting systems.

Comparing our financial flows and our cross-border positions with those of the major counterparty countries to our financial transactions can also be helpful in detecting potential sources of error in our respective accounts. Ongoing work of the international statistical community in promoting consistent data reporting and encouraging data sharing when possible should help with this exercise.

Carol Bertaut
Division of International Finance
Board of Governors of the Federal Reserve System
October 16, 2016

Questions to the Committee:

1. What is the experience of other countries in determining the decomposition of changes in financial positions into flows and valuation changes? What methodologies do compilers use to assess valuation changes? Can this be a source of error in reported transactions?
2. What is the experience of other countries in identifying and tracking the various reporting responsibilities related to offshore issuance of securities? Are there other types of new instruments or intermediaries that fall into “grey areas” of reporting responsibilities?
3. How important is cross-border investment in residential real estate? What methods can be used to track reliable estimates of residential real estate investment?