U.S. International Financial Flows and the U.S. Net Investment Position: New Perspectives Arising from New International Standards

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ABSTRACT

The recent global financial crisis was precipitated in part by an inadequate understanding of the size and scope of risks undertaken by financial market participants around the world. These events have drawn attention to gaps and limitations in aggregate statistics for financial flows and positions, particularly for the purpose of international comparisons. In addition, some economists believe that policy responses could have been better informed by traditional macroeconomic aggregate statistics that were better integrated with more detailed data on the composition of financial asset and liability flows. Recently updated international standards for international economic accounts show promise in this regard by placing greater emphasis on the measurement and presentation of financial flows and positions.

This paper describes plans by the U.S. Bureau of Economic Analysis (BEA) to restructure the financial account in the balance of payments (BOP) and the international investment position (IIP) in order to align their presentation and the concepts embodied within them more closely with international standards recommended in the 6th edition of the *Balance of Payments and International Investment Position Manual*, which was released in 2009. We then explain how the proposed new presentation differs from the current presentation and provide experimental statistics based on currently published statistics reorganized according to the new international guidelines.

We describe some of the benefits of the transformed U.S. BOP and IIP statistics. For example, specific information available in the new presentation could provide new indicators of leverage and exposure and more detailed data on revised valuation changes in the IIP will allow rates of return to be calculated for more meaningful categories of financial instruments. Statistics organized according to the new international guidelines will facilitate comparisons with the external financial flows and positions of other countries that follow these standards.

We also discuss plans to utilize potential new data sources to further enhance the international accounts statistics, and to prepare the U.S. IIP at a quarterly frequency, partly in response to recommendations recently proposed by the International Monetary Fund.

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Introduction

The recent global financial crisis was precipitated in part by an inadequate understanding by regulators and policy makers of the size and scope of risks undertaken by financial market participants around the world. These events have drawn attention to gaps and limitations in aggregate statistics for financial flows and positions, particularly for the purpose of international comparisons. Although data gaps are, as the International Monetary Fund (IMF) points out, "an inevitable consequence of the ongoing development of markets and institutions," they become more apparent when the "lack of timely, accurate information hinders the ability of policy makers and market participants to develop effective responses" (IMF, 2009, p. 4). In addition, some economists believe that policy responses could have been better informed by traditional macroeconomic aggregate statistics that were better integrated with more detailed data on the composition of financial asset and liability flows. With this in mind, several international organizations, including the IMF and the Organisation for Economic Co-operation and Development (OECD) have undertaken efforts to address data gaps in financial information and to improve the comparability of external account statistics across countries.

One recommendation that has been proposed as a means of closing some of the information gaps is the timely implementation of recently updated international standards for the international economic accounts, in particular, the 6th edition of the IMF's *Balance of Payments and International Investment Position Manual* (BPM6),[1] which was released in 2009. This latest revision was undertaken partly in response to the product innovation and rapid growth in financial markets since the standards were last updated in 1993. Extensive recommendations for the financial account and the greater prominence placed on the international investment position in BPM6 together increases the sophistication of the financial account exactly when a more informative set accounts is needed in the aftermath of the financial crisis.

[1] *Balance of Payments and International Investment Position Manual*, 6th ed. (Washington, DC: International Monetary Fund, 2009).

The U.S. Bureau of Economic Analysis (BEA) produces the U.S. balance of payments (BOP)[2] and the U.S. international investment position (IIP), as well as related statistics on direct investment and the operations of multinational companies. In compiling these statistics, BEA aims to align their structure, content, and presentation with the guidelines issued by international organizations. In this paper, we describe plans by BEA to restructure the financial account in the BOP and the IIP in order to align their presentation and the concepts embodied within them more closely with international standards recommended in BPM6.[3] BEA's new presentation will place greater emphasis on the composition of financial flows and positions in terms of functional categories such as direct investment and portfolio investment, the types of instruments and maturities that comprise investment within these categories, and on the broad sectors of both U.S. creditors and debtors. We also explain how the proposed new presentation differs from the current presentation and provide experimental statistics based on currently published statistics reorganized according to the new international guidelines.

We explain some of the benefits of the transformed U.S. BOP and IIP statistics in two additional sections on financial stability and cross-border rates of return on investment. In the section on financial stability, we identify specific information that would be available under the new standards that could provide new indicators of leverage and exposure. A build up of leverage, particularly in the financial sector, played an important role in the financial crisis, yet such developments are difficult to analyze given certain limitations in the existing macroeconomic data. The new presentation of the BOP and IIP can shed some light on these developments. In the section on rates of return on cross-border investment we show that the transformed BOP and IIP statistics can also provide better information on analytical issues addressed in the international economics literature. Because only limited information on time series for capital gains and losses have been available in the IIP, researchers have found it challenging to estimate rates of return on detailed cross-border investment positions using BEA statistics. Differences in assumptions have led to different conclusions. We present rates of return measures based

[2] The U.S. balance of payments accounts are also known as the U.S. international transactions accounts.
[3] BEA is also using the 4th edition of the OECD *Benchmark Definition of Foreign Direct Investment* (Paris: OECD, 2008), (BD4), as a source of guidance for the international accounts. BPM6 and BD4 are consistent in their approach to direct investment statistics.

on previously unpublished time series for capital gains for major types of investment to fill this information gap. The current presentation of the IIP also hinders computations of returns on investment for two important classes of instruments: U.S. long-term debt and U.S. equity owned by foreigners. We present data on these instruments that had previously been only partly available.[4] These results demonstrate that there are considerable gains from adopting the new presentation and providing more detailed data. The paper will conclude with a discussion of future developments that are planned for the international accounts and how these developments could increase the usefulness of the statistics.

A New Presentation of the Balance of Payments and International Investment Position

BEA described its plans and strategy for introducing BPM6 and making other improvements to the international economic accounts in a recent article in the *Survey of Current Business* (Howell and Yuskavage, 2010). One of the major improvements that BEA plans to introduce in the next few years is a reorganized presentation for the financial account of the BOP and the IIP to align them more closely with BPM6. A uniform classification of transactions and positions will replace the current presentation, which is a mix of classifications by domestic sector, by foreign sector, by reporting unit, and by instrument. The new presentation will allow for greater comparability between the U.S. accounts and those of most other countries that follow the international guidelines. Because the structure of the international accounts in BPM6 has been harmonized with the structure of the domestic accounts included in the 2008 update of the *System of National Accounts* (2008 SNA),[5] the new presentation will also improve their comparability with the U.S. National Income and Product Accounts (NIPAs) and the Flow of Funds accounts (FFAs) prepared by the Federal Reserve Board.

[4] In the IIP, foreign official holdings of U.S. long-term debt and equity are commingled in the current presentation and are not available separately to enable computation of total long-term debt and total equity.
[5] European Commission, International Monetary Fund, Organisation for Economic Co-operation and Development, United Nations, and World Bank, *System of National Accounts 2008* (New York: United Nations, 2009).

A prototype for the proposed new presentation of the financial account of the BOP is presented in table A (right panel), alongside the existing financial account presentation (left panel). In the new presentation, transactions are arranged first according to whether they represent a change in an asset or a liability position, and then according to four major functional categories: direct investment, portfolio investment, other investment, and reserve assets. Transactions in a fifth major functional category, financial derivatives, are shown on a net basis because the source data on the gross flows are not available.

These functional categories are intended to "facilitate analysis by distinguishing categories that exhibit different economic motivations and patterns of behavior" (BPM6, p. 99). They capture the diversity of situations, motivations, and behaviors at work in the financial world. Direct investment recognizes that enterprises seek profits through long-term influence or control of other enterprises. Portfolio investment captures the behavior of investors trading negotiable instruments and altering their portfolios to meet a variety of objectives ranging from capital preservation to aggressive growth. Other investment encompasses yet another distinct set of activities including the bank payments settlement system and financial intermediation through financial institutions that offer deposit and near-deposit investment instruments as well as credit via loans and similar instruments. Reserve assets are a unique category of assets controlled by monetary authorities and used to meet balance of payments financing needs and to implement exchange rate policies, and as such, are classified separately from assets held by other entities. Financial derivatives include a variety of instruments that are used to trade risk in financial markets.

Within each of the functional categories, transactions are further disaggregated according to instrument classification. For example, direct investment and portfolio investment transactions are separated into debt and equity components. Some information on transactions by sector and by original maturity is also provided within functional categories. This uniform presentation of changes in assets and liabilities is preferable to the existing structure of the U.S. financial account because it allows users to more easily compare similar transactions for assets and for liabilities. For example, one can readily compare statistics on foreign investment in U.S. portfolio securities with

those on U.S. investment in foreign portfolio securities to gain insight into the relative risk preferences of these investors. With the existing structure of the financial account, which arranges transactions according to the U.S. sector—for assets—and the sector of the foreign counterparty—for liabilities—and then by a mix of reporter types and instruments, these comparisons are much more difficult.

While most of the information on the new presentation (right side of table A) is not new, it is currently presented throughout various tables in a somewhat disjointed manner. In the new presentation, more detail is presented in the primary BOP table. Additional breakdowns by instrument, sector, and maturity will be provided by BEA in supplemental tables, organized by the functional categories and standard components of BPM6, so that users can drill down into the greater detail and compare asset and liability transactions by functional category, by instrument, and other characteristics. Some detail in the current presentation that is not found in BPM6, such as foreign official assets in the United States, will continue to be published in supplemental tables because it still has value to users.

In addition to the reorganization of financial account transactions, a new definition and presentation of direct investment is also introduced in the prototype BOP presentation. Historically, direct investment has been presented according to the "directional" principle—that is, according to the direction of the direct investment relationship, e.g., U.S. direct investment abroad and foreign direct investment in the United States—as recommended in previous international guidance. U.S. direct investment abroad in the BOP covered transactions related to U.S. parent companies' investment in their foreign affiliates as well as transactions related to foreign affiliates' debt investments in their U.S. parents. The latter—so-called "reverse investment"—was netted against the former.

In the prototype presentation, in contrast, direct investment is presented on an "asset/liability" basis, which is the basis recommended by the new standards.[6] In the "asset/liability" basis, debt claims and liabilities of related entities are not netted. Instead,

[6] The directional principle has not been entirely displaced by the asset/liability basis. For presentations of direct investment vis-à-vis a single partner country (bilateral statistics) the 4th edition of the OECD *Benchmark Definition of Foreign Direct Investment* (Paris: OECD, 2008), (BD4) recommends using the directional principle.

all debt claims of U.S. parents and U.S. affiliates on their foreign affiliated counterparties are reported gross under direct investment assets and all debt liabilities of U.S. parents and U.S. affiliates to their foreign affiliated counterparties are reported gross under direct investment liabilities. (Table A, lines 78-80 and 107-109) Although direct investment statistics on a directional basis are useful for understanding changes in foreign ownership and control, the presentation of direct investment on an asset/liability basis[7] is desirable in the BOP and IIP because it facilitates comparability between the international accounts and domestic financial and balance sheet statistics.

Several other changes to the presentation of the BOP are also illustrated in table A. Most notably, in the new presentation, the uniform use of negative signs for debit entries is eliminated. Previously, credits (such as a reduction in U.S. assets or an increase in U.S. liabilities) were presented as positive numbers, and debits (such as an increase in assets or a reduction in liabilities) were presented as negative numbers. This convention was a frequent source of confusion for users of the accounts. In the new presentation, positive numbers are used to represent increases in assets and liabilities, while negative numbers are used to represent decreases in assets and liabilities. This new signage convention simplifies relating transactions to corresponding changes in asset and liability positions in the IIP.

The prototype for the new IIP presentation, shown in table B (right panel) alongside the existing IIP presentation (left panel), uses the same functional categories introduced in the prototype BOP table and presents direct investment according to the asset/liability basis. The presentation of the IIP thus mirrors that of the financial account of the BOP.

Unlike the BOP, the existing presentation of the U.S. IIP does not include supplemental tables; therefore, much of the detail on instrument and maturity that is

[7] In the new presentation, direct investment statistics are presented on an asset/liability basis to the extent possible, given the available data. To achieve this, reverse intercompany debt transactions have been reclassified from a directional basis to an asset/liability basis. However, BEA's direct investment data collection system is not designed to capture reverse equity investment and it captures some, but not all, investments between certain related enterprises ("fellow enterprises") that BPM6 defines as direct investment; reverse equity investment transactions and some transactions among fellow enterprises are commingled in source data from the U.S. Department of the Treasury and cannot be separately identified. Therefore, the asset/liability basis can only be approximated using currently available source data. For further discussion, see Howell and Yuskavage (2010).

shown in the prototype table was not previously published. For example, details about short-term instruments, needed to construct portfolio investment according to international standards, are not provided in the current presentation. Although a knowledgeable user could derive some detail from other data tables published by BEA, that information is not always consistent with the valuation and other characteristics of the IIP statistics.[8] The new IIP presentation represents a significant improvement in the accessibility of these statistics because they are now provided in a consistent manner in one table.

In the IIP, direct investment is presented with equity valued at both current cost and market value; debt has the same valuation for both measures.[9] Unlike in the current presentation, the prototype IIP presentation shows the equity and debt components of direct investment separately. Previously this split was shown only in the annual direct investment tables (in the September issue of the *Survey of Current Business*) and only at historical cost. The introduction of this detail for the current cost and market value bases responds to frequent requests from customers.

Tables 1 and 2 present experimental statistics for the new presentation of the BOP[10] and the IIP based on currently published statistics reorganized according to the new international guidelines. These experimental statistics are intended to give a preliminary indication of the magnitude of the changes to the accounts and should not be viewed as official statistics from the international accounts. Although the structure of the

[8] For example, annual estimates of the equity and debt positions for direct investment are presented in an article in the September issue of the *Survey of Current Business* following the publication of the IIP in the July issue. However, these positions are valued at historical cost. Also, positions for certain bank-reported transactions are included in the existing BOP tables 10 and 11, but they are only shown for the most recent quarter.

[9] The current-cost and market-value methods are two methods used by BEA to revalue direct investment equity positions from historical-cost to current period prices. The current-cost method revalues parent companies' shares of their affiliates' investments in tangible assets—plant and equipment, land, and inventory—using a perpetual inventory model, general price indexes, and current replacement cost, respectively. The market-value method revalues historical cost direct investment equity positions to current period prices using the relationship between the book value and the current stock market price for portfolio investment securities. For more information, see J. Steven Landefeld and Ann M. Lawson, "Valuation of the U.S. Net International Investment Position," *Survey of Current Business* 71 (May 1991): 40-49.

[10] The BOP tables also reflect planned changes to the current and capital accounts. With the exception of changes to the primary income account (within the current account), which correspond to changes to the financial account, the changes to the current and capital accounts are outside the scope of this article and will not be discussed here.

accounts is substantially changed, the only statistical impact on aggregate statistics results from presenting direct investment on an asset/liability basis instead of on a directional basis.

On the new basis, gross direct investment assets and liabilities are both increased by equal amounts, with no effect on net direct investment. Similarly, the financial account aggregates "net acquisition of financial assets, excluding financial derivatives" and "net incurrence of liabilities, excluding financial derivatives" are increased by the same amounts, so net financial inflows are not affected. A similar impact occurs for income receipts and payments, as the income on direct investment is also reorganized according to the asset/liability principle. Table C is a prototype of a supplemental table on portfolio investment that could accompany the primary BOP table and that provides additional detail on U.S. transactions in foreign securities and foreign transactions in U.S. securities, by instrument, by maturity, and by sector.

Evaluating Financial Stability

Cross-border Leverage and Financial Stability

A build up in leverage (borrowed capital used to purchase assets), particularly across the financial sector, is often cited as one of the primary contributors to the financial crisis that began in 2007. A Government Accountability Office (GAO) report found that there was indeed a broad build up of leverage across U.S. financial institutions leading up to the financial crisis, followed by a rapid deleveraging once the crisis began (GAO 2009). While considerable research has focused on the impact of an increase in leverage on the domestic U.S. economy, relatively little research has focused on the cross-border perspective. Palumbo and Parker (2009) use the integrated macroeconomic accounts for the United States, which are derived from the National Income and Product Accounts and the Flow of Funds Accounts, to evaluate the build up of leverage, particularly in the household and financial sectors.

The U.S. international accounts are related to these accounts but are compiled from a cross-border perspective. While the Flow of Funds Accounts provide statistics for the financial account of the entire domestic economy, including the relationship of domestic sectors to the rest of the world, the international accounts provide more detailed

information on cross-border transactions and positions by type of investment, by instrument, and by maturity, which can also be useful in evaluating changes in leverage.

It is important to understand the limitations of macroeconomic accounts such as the BOP and IIP for the study of a concept like leverage which links two transactions: borrowing money and the acquisition of assets. The BOP and IIP rely on surveys that collect data on asset holdings at a point in time or in the case of monthly transactions in long-term securities, accumulated purchases and sales. These surveys are designed to minimize burden on reporters while building aggregate measures of asset holdings and transactions. Thus, linkage between transactions that is implied by the concept of leverage is not reported, because to do so would greatly increase reporting burden. Users and compilers of the BOP and the IIP can only identify leverage as a cause of changes in debt levels and asset holdings by applying additional anecdotal information in hindsight and with a relatively low level of precision, to interpret the reported data. The difficulty of making this kind of interpretation with measurable accuracy generally discourages statistical agencies from providing anything more than the facts that can be read directly from the statistics. The nature of the data as collected now, limit their usefulness as predictors of financial crises.

By applying ex-post analysis to the international accounts, it is possible to observe the apparent impact of the financial crisis of 2007-2009 on the financial account and the IIP. The new presentation makes it easier to analyze the impact by presenting transactions and positions by asset class. We examine the impact of the crisis on portfolio investment. Statistics on portfolio investment are presented with total equity and debt transactions and positions separately identified and with short-term and long-term debt shown together (table C).[11] An additional benefit of the new presentation is that it allows users to observe total foreign portfolio investment in U.S. securities in a single table; transactions of foreign official and private investors are combined. The transformed international accounts statistics can be used to observe the build up of debt positions associated with increased leverage employed by the financial sector—and the

[11] The existing presentation has table 8 that shows statistics for portfolio equity and long-term portfolio debt. Table 8 excludes short-term portfolio debt entirely. In the existing presentation, components of short-term portfolio debt are shown in tables 5, 9, 10, and 11. Table 8 shows long-term U.S. debt owned by foreign official agencies in memorandum lines separately from U.S. debt owned by private foreigners.

subsequent deleveraging—that have been described in the literature using statistics formulated following internationally accepted concepts and definitions.

Foreign portfolio holdings of U.S. securities increased steadily from 1990 through 2007. A large portion of foreign holdings of U.S. securities is investment in long-term U.S. Treasury securities by foreign official agencies. However, demand for other U.S. securities increased rapidly; in particular, the period of strong asset securitization from 2003-2007 led to an increase in demand for corporate securities, including asset-backed securities. During this time, foreign portfolio holdings of total U.S. securities increased 16 percent (chart 1),[12] holdings of U.S. equity securities increased 14 percent, holdings of U.S. Treasury debt securities increased 11 percent, and holdings of other U.S. debt securities increased 19 percent. U.S. demand for foreign securities also increased and U.S. investors became increasingly exposed across borders. From 2003 to 2007, U.S. portfolio holdings of foreign securities increased 17 percent (chart 1).

After steady net purchases of U.S. securities for many years, there was a substantial slowdown in net purchases and a decline in foreign holdings of U.S. securities in 2008 as foreign investors sought to reduce their exposure to riskier U.S. assets and the leverage-driven asset securitization process was mostly shutdown in the United States. While demand for both short- and long-term Treasury debt securities remained strong in 2008 due to their status as "safe haven" assets (table C, lines 21 and 31) and foreign purchases of U.S. equity securities slowed (line 11), foreign purchases of U.S. private debt securities, shifted to net sales starting in 2008 (lines 20, 24, & 34). This pattern of foreign net purchases of U.S. Treasury debt and U.S. equity securities and strong net sales of U.S. private debt continued through 2009. These statistics show how foreign investors' flight-to-safety interacted with a rapid deleveraging—or reduction in debt—in the U.S. private sector.

A similar development can be seen in the statistics on U.S. investment in foreign securities (table C, lines 1-9). In 2008, U.S. transactions in foreign securities shifted to net sales, as U.S. investors also sought to reduce their exposure to foreign assets. This was true particularly for foreign equities, which make up the majority of U.S. investors'

[12] Details on holdings of short-term securities, and therefore, total portfolio investment, are only available from 2003 onward, when the Treasury International Capital (TIC) reporting system was enhanced to collect detail on all short-term negotiable instruments separately from other types of claims and liabilities.

cross-border portfolios, but also for short-term and long-term foreign debt securities. It is also interesting that U.S. investment in foreign debt and equity bounced back in 2009, unlike foreign investment in private U.S. debt.

The international account statistics can also be used to analyze changes in the composition of the portfolios of U.S. and foreign investors. For example, Bertaut and Pounder (2009) use statistics from the international accounts—as well as underlying data from the Treasury International Capital (TIC) system, the main source data for U.S. cross-border portfolio investment and banking flows and positions—to evaluate the changes in composition of the portfolios of U.S. and foreign investors during the financial crisis. They find that a broad flight-to-safety reaction led to changes in the composition of securities purchased by both U.S. and foreign investors and that this increase in risk aversion led to a general reduction in exposure to foreign securities by U.S. residents.

The new symmetrical presentation of assets and liabilities in the financial account and the IIP makes it easier to observe the cross-border portfolios of U.S. and foreign investors over time and to examine how they responded to the financial crisis. For example, one can observe that while foreigners have traditionally held more of their portfolio in debt securities, U.S. investors hold a greater share of their foreign portfolios in equities. From 2003 to 2007, debt securities made up about 70 percent of foreign portfolio holdings of U.S. securities while they made up only about 30 percent of U.S. holdings of foreign securities (chart 2). In 2008, debt as a percentage of total portfolio investment increased for both U.S. and foreign investors, rising to nearly 80 percent of foreign investors' holdings of U.S. securities and nearly 40 percent of U.S. holdings of foreign securities. In the crisis, as over-leveraged financial institutions were seeking to reduce their debt, investors were fleeing falling equity markets and poorly performing lower-quality debt for better performing high-quality debt; generally debt issued by governments.

Sustainability of U.S. Debt

The fact that debt markets are global means that measures of cross-border transactions and holdings of debt are important to understanding the sustainability of debt burdens.

This is particularly relevant after the crisis of confidence in Greek sovereign debt. The increased "safe haven" demand for U.S. Treasury debt has recently driven Treasury bond prices up and yields down even as the U.S. government deficit rises to very high levels. Statistics from the transformed financial account and IIP presentation can be used to observe foreign investors' demand for U.S. debt. In the statistics by sector of U.S. issuer in table C, we can see a large increase in foreign purchases of short-term general government debt (U.S. Treasury bills) in 2008, as foreign investors exhibited flight-to-safety reactions to the crisis. Presenting this information on short-term debt by sector allows users to easily contrast these purchases with a decline in demand for short-term debt issued by other sectors.

Should interest rates rise in the future, the debt service of the United States has the potential to become much more expensive. The debt service could cut into U.S. expenditures for consumption, investment, and government services. With the U.S. government running unprecedented deficits, the level of U.S. government indebtedness could affect the ability of the government to maintain its current spending levels on other government services and cause investors to adjust their assessments of the sustainability of U.S. government debt and the debt of other U.S. sectors. Capital flows in U.S. portfolio securities are an indicator of investor confidence in the ability of the U.S. government and other U.S. sectors to service their debt.

To be effective indicators, it is important to have domestic and international statistics that are well-integrated by sector, not just for the general government sector, for which there is already a wealth of data, but for other sectors that may be more difficult to break out.[13] With integrated statistics by sector, users would be better able to assess the sustainability of debt burdens. For macroeconomic statistics to be helpful in the analysis of financial health and stability by sector, the National Income and Product Accounts, Flow of Funds Accounts, and the international accounts need common sector definitions and consistent coverage across the sectors of the economy. While this ideal may not be

[13] Palumbo and Parker (2009) in their review of the SNA as a framework for analyses of financial risks note that the currently available detail for sectors and for instruments "hides sectoral leverage." The additional degree of detail that could be helpful, such as additional breakdowns of non-bank financial companies into sub sectors goes beyond what is called for in BPM6 and would be challenging to collect and implement. However, additional detail could improve the utility of the statistics.

fully realized soon, moving towards the definitions and classifications recommended by the SNA and BPM6 is a step in the right direction.

Evaluating Rates of Return on Cross-border Investment

The new presentation of the U.S. BOP and IIP will facilitate analyses of cross-border investment by instrument, such as analyses of rates of return.

Research into rates of return on U.S. investment abroad and foreign investment in the United States from the available data has led to a range of conclusions. The focus of this research has been to measure and explain differentials in rates of return between U.S. investment abroad and foreign investment in the United States. Some researchers have found that the United States enjoys a significant advantage in investment returns, earning a differential of around 3 percent more per year on U.S. investment abroad than foreigners earn on their investments in the United States.[14] Curcuru, Dvorak, and Warnock (2008) find that the differential for 1990-2005 for all types of investment was about 1.0 percent[15], mainly attributable to the well-known differential in income yields on direct investment.[16]

The calculation of rates of return for components of the U.S. international investment position has been hindered by a lack of publicly available detail covering revised valuation adjustments for the components. Although BEA publishes detailed time-series statistics of investment positions and related financial transactions, BEA has not published detailed time series statistics of changes in investment value due to price changes, exchange rate changes, and other (statistical) changes; these are the valuation adjustments. We draw on unpublished revised valuation adjustment series in order to clarify the rates of return implied by BEA's investment position and income statistics.[17] Using these time series we compute our estimates for the total rate of return, the rate of return from income accrued, and the rate of return from capital gains. We exclude the

[14] Curcuru, Dvorak, and Warnock (2008) suggest that 3 percent is an average differential in returns found in three different articles.
[15] Rates of return cited from Curcuru, Dvorak, and Warnock (2008) refer to their "Original Series" from table III.
[16] BEA has discussed rates of return on direct investment in two articles in the *Survey of Current Business*: Landefeld, Lawson, and Weinberg (August 1992) and Mataloni (March 2000).
[17] Supplemental time series statistics of the IIP by major asset class including revised valuation adjustments are not yet available for this draft but will be made available.

"other changes" category of valuation changes from the measurement of capital gains to obtain accurate rates of return.

Our analysis presents U.S. liabilities by broad instrument category without division into foreign official assets and assets of other foreigners, consistent with the application of international standards to the IIP. This presentation of U.S. liabilities cannot be compiled from the existing presentation of the IIP with complete accuracy because portfolio investment in equity and long-term debt is commingled in foreign official holdings and long- and short-term debt are commingled for U.S. Treasury securities. We also address the impact on rates of return of "capital gains and losses" reported in direct investment as "other changes" in value.[18]

The calculation of capital gains is crucial to the differences in results in different studies of rates of return. Before turning to our findings on rates of return it is useful to describe our methodology for computing rates of return; the total rate of return and its two components, income return and capital gains return. The computation methodology is summarized in the following equations:

$$(1)\ RTOT_t = (INC_t + PRCHG_t + XRTCHG_t)/AVGPOS_t$$

$$(2)\ RINC_t = (INC_t)/AVGPOS_t$$

$$(3)\ RKG_t = (PRCHG_t + XRTCHG_t)/AVGPOS_t$$

where $RTOT_t$ is the total rate of return for year t, $RINC_t$ is the rate of return from income for year t, RKG_t is the rate of return from capital gains or losses for year t, INC_t is income for year t, $PRCHG_t$ is the change in the investment position caused by a change in price for year t, $XRTCHG_t$ is a change in the investment position caused by a change in exchange rates for year t, and $AVGPOS_t$ is the average investment position for year t,

[18]For many years, the footnote in table 1 of the international investment position article explaining other changes has included this phrase: "includes capital gains and losses of direct investment affiliates." References to the capital gains and losses named in this footnote will be enclosed in quotation marks in this paper to differentiate it from more comprehensive concepts of capital gains and losses.

computed by taking the average of the investment position for year t and the investment position for year t-1.

It is important to note that the "other changes" category of valuation changes is excluded from these rates of return. "Other changes" are changes in position that cannot be attributed to price changes, exchange rate changes, or financial flows. Often, "other changes" reflect changes in IIP positions from series breaks in the underlying data. For example, the introduction of new derivatives data caused "other changes" for U.S. assets abroad and foreign assets in the United States to be very large in 2005.

Considering that any revision of positions will automatically generate price and exchange rate changes in our methodologies, it is unlikely that significant price or exchange rate changes have been erroneously included in "other changes". It is far more likely that financial flows that could not be identified from revisions to position estimates have been commingled with statistical changes in the "other changes" category.

Because the "other changes" category of valuation adjustments is properly excluded from capital gains, measures of rates of return that are compiled assuming that all annual changes in the investment position that are not due to financial flows are capital gains, will overstate capital gains when "other changes" are positive and understate capital gains when "other changes" are negative. In published BEA aggregate time series for the IIP for the period 1989-2004, "other changes" for U.S. assets abroad are mainly positive and "other changes" for foreign assets in the U.S. are mainly negative. Thus, measures of rates of return that include "other changes" in capital gains will overstate the rate of return on U.S. assets abroad and understate the rate of return on foreign assets in the United States, and will overstate the differential between rates of return on U.S. investments abroad and rates of return on foreign investment in the United States. Our purpose is to clarify rates of return that affect the investment position directly through capital gains.

Beginning in June 2005, the publication of aggregate time series of U.S. investment abroad and foreign investment in the United States, including aggregate position, financial flow, and valuation adjustment statistics for price changes, exchange rate changes and "other changes", provided new information from which rates of return on these cross-border investments could be computed. Two sets of rates of return based

on the BEA time series are presented in table D, one using the published data and one using data adjusted for "capital gains and losses" included in “other changes” for direct investment. In this adjusted series these "capital gains and losses" are added to the price changes and exchange rate changes that comprise capital gains or losses in the unadjusted BEA series.

The differential of total returns on U.S. assets less total returns on U.S. liabilities based on the revised BEA series are 1.5 percent (unadjusted) and 1.7 percent (adjusted) compared to 1.0 percent from Curcuru, Dvorak, and Warnock (2008) for the same time period (1990-2005). Most of the difference in the two differentials comes from capital gains, with the BEA differentials for capital gains at 0.3 percent and 0.5 percent, whereas Curcuru, Dvorak, and Warnock (2008) found a differential of zero. A variety of rates of return differentials have been reported in the literature. The total return differentials reported in this paper lie between those found by Curcuru, Dvorak, and Warnock (2008) and by those who have suggested that the United States has enjoyed a significant advantage with a differential in investment returns of around 3 percent.

Adding "capital gains and losses" reported in direct investment as “other changes” to capital gains in the adjusted returns raises the capital gains returns on U.S. claims by about 0.1 percent (relative to the unadjusted returns), and lowers capital gains returns on U.S. liabilities by about 0.2 percent, raising the differential on capital gains by about 0.2 percent, and the differential for total returns by about 0.2 percent.

The current treatment of "capital gains and losses" reported in direct investment as “other changes” was implemented in 1992 when these amounts were removed from measures of direct investment income and reinvested earnings, and included in valuation adjustments to the investment position as “other changes”. Revisions at that time were made back to 1982. These gains and losses include several types of changes that affect the book value of the direct investment affiliate including the following: losses from disasters unreimbursed by insurance, changes in the value of plant and equipment and intangible assets, gains and losses from the sale of financial assets, impairment losses on financial assets, and goodwill impairment. The change in treatment was introduced to align the measurement of income from direct investment with income measurement in the National Income and Product Accounts. Because these gains and losses of direct

investment affiliates are excluded from price changes in the published statistics, the price change statistics for direct investment positions mainly reflect changes in the price indexes used to revalue the historic-cost values of direct investment equity to either current cost or the market value.

To look more deeply into rates of return on the U.S. international investment position we use the unpublished revised time series on valuation adjustments. Our results for direct investment, long-term portfolio debt, equities, and other (including short-term portfolio debt, reserve assets, and other investment) are presented in table E. The largest of the total returns differentials between claims and liabilities is for direct investment at 3.4 percent for the published series and 4.2 percent for the series adjusted to include "capital gains and losses" from “other changes”. The well known differential for income yields is partly offset by a negative differential for capital gains. Total returns differentials for other categories show little evidence of a significant advantage for U.S. investors. The differential for long-term debt is 1.3 percent, for equities it is -1.9 percent, and for other types of investment it is 0.4 percent.

The derivation of rates of return for U.S. assets abroad (U.S. claims) from the U.S. investment position data is relatively straightforward because positions for long-term debt and equity have always been available. Deriving rates of return for foreign investment in the United States (U.S. liabilities) has been difficult within the existing framework because (1) the presentation of U.S. equity and U.S. long-term debt is obscured by the split between investments of foreign official agencies and other foreigners, and (2) foreign investments in long-term and short-term instruments are commingled for U.S. Treasury securities. Researchers have not had access to the unpublished detail that allows us to present estimates for these components. The application of the international standards to the IIP means that income and position statistics for U.S. claims and U.S. liabilities would be presented by type of instrument in the future, simplifying the construction of rates of return and other analyses of investment by type of instrument.

Future Developments

BEA is in the midst of a multi-year project to modernize and enhance the international economic accounts that will result in a new presentation, similar to the experimental tables discussed above, that it plans to introduce in 2012. Major objectives for the new presentation include improving the statistics in table 1 by aligning them as closely as possible with international standards, providing supplemental tables with additional detail, and moving to quarterly estimates for the IIP. Quarterly IIP may first be published in its existing format before being converted to the BPM6 format. Improved source data will be needed to make the new presentation in table 1 and the supplemental tables as complete and accurate as possible. Some new source data are already forthcoming and discussions are taking place to make changes to collection procedures for other source data.

Several lines in table 1 are denoted "not available" (n.a.) because the required source data are not currently available. In many cases, the transactions for those lines are included elsewhere in the accounts; however, we are currently not able to present the transactions separately. Yuskavage and Howell (2010) describe several of these improvements that are still under study.

As an example of a supplemental table, we have included table C, a preliminary version of a table for portfolio investment. Supplemental tables can be used to provide additional analytical detail, including detail on sector and maturity from the BPM6 standard components that will not fit in table 1. In table C, it is immediately apparent that sector breakdowns are available for debt securities on the liabilities side, but no sector breakdowns are available for equity or for any U.S. assets. The sector breakdowns on the liabilities side reflect enhancements to the TIC system source data made by the U.S. Department of the Treasury and the Federal Reserve System to produce the U.S. external debt statistics beginning in mid-2003.

BEA's future plans include increasing and improving sector and maturity breakdowns for portfolio and other investment. To meet this goal, BEA has requested improvements to TIC monthly, quarterly, and annual data collections and will make use

of the new TIC form SLT, "Report of U.S. and Foreign Resident Aggregate Holdings of Long-term Securities."[19]

The purpose of the SLT is to gather more frequent information on holdings of long-term securities, which will improve the ability of the United States to meet requests from the IMF and other international bodies for more frequent reporting of the IIP and the Coordinated Portfolio Investment Survey (CPIS). The addition of monthly position data will improve U.S. statistics on cross-border transactions in long-term securities. In addition, the SLT will provide more data on instruments and sectors recommended for the financial account and the IIP in BPM6.

To understand the challenges of obtaining statistics by sector, it is instructive to look more closely at the problem of collecting data by sector for U.S. securities and foreign securities. The TIC data system relies on reporting of custodians for holdings of long- and short-term negotiable instruments and the reporting of securities brokers for gross purchases and sales (transactions) in long-term securities. Because the sector associated with foreign holdings of U.S. securities is the sector of the issuer (the debtor), and U.S. securities are commonly identified by the issuer (Treasury securities, agency securities, etc.), the custodians reporting in annual security-by-security enumerations of foreign holdings can provide all the information needed to precisely measure foreign holdings of U.S. securities by U.S. sector.

For foreign securities, the problem of collecting holdings by sector is more difficult. The information that identifies the type of foreign security does not identify the sector of the U.S. resident who is the ultimate owner of the security (the creditor). Thus, custodians have to draw on information about the customer who placed the securities into their custody and make a determination about the sector of the owner from those records.[20]

BEA will propose changes to existing TIC data collections to its partners at the U.S. Treasury and the Federal Reserve that collect the TIC data. These proposals will include collection of sector information for U.S. holdings of foreign short-term securities in the quarterly TIC banking reports and in the annual and benchmark surveys of U.S.

[19] The proposed rule and the draft Form SLT and instructions are available from the Treasury Department's Web site at http://www.treas.gov/tic/forms-slt.shtml.
[20] For more information on these measurement issues, see Bertaut, Griever, and Tryon (2006).

holdings of long- and short-term foreign securities. For loans and deposits collected by the TIC system, BEA will be requesting that its partners collect new data on both the maturity and the sector of reported positions, mainly for assets; significant sector and maturity data are already available for deposits and loans on the liability side. With more complete sector information, the analysis of the IIP could be extended from total holdings of debt and equity for U.S. assets and U.S. liabilities to the holdings of debt and equity by deposit-taking institutions, other financial institutions, and nonfinancial institutions.

Portfolio investment is a major part of the IIP, so advances in obtaining sector and maturity data for quarterly supplemental BOP tables will also be reflected in the IIP when the BPM6 format is introduced. In our table C, we have included a column of positions to indicate how the detailed position statistics now appear. In the future, quarterly transactions and position statistics will likely be presented in separate tables.

Publication of quarterly IIP is a recommendation from the IMF and the Financial Stability Board (IMF and FSB, 2009) that BEA intends to implement in the next two or three years, once methodological and resource issues can be resolved. Quarterly publication of the IIP in the existing format is being studied now. The greatest challenge for quarterly IIP publication is the need for more frequent revaluation of direct investment assets and liabilities. These investments are not frequently traded and are composed of many diverse components which are difficult to value accurately.

Conclusion

The eventual transformation of the U.S. financial account and IIP, by aligning these presentations with the definitions and standard components of BPM6, will make cross-border transactions statistics available for useful functional categories and, within the functional categories, by instrument, sector, and maturity. The new presentations enable analyses of rates of return and leverage, addressing important questions raised by users of the data that could not be answered as easily or as accurately, using the existing presentation. It is important not to overstate the benefits of the new presentation. Confined to showing only cross-border transactions and positions, it cannot provide a comprehensive view of the U.S. financial sector; however, by moving to the internationally accepted standards, the financial account and the IIP will be more

comparable to other U.S. and foreign statistics produced following BPM6 and related national accounts statistics that follow the SNA.

Useful analyses are performed now using the current presentation. For example, data users follow BEA's presentation of foreign official assets in the United States for information about transactions by foreign monetary authorities and sovereign wealth funds in U.S. dollar-denominated assets. BEA intends to continue elements of the current presentation valued by users in supplemental tables.

BEA will also continue to seek and develop new data needed to move ahead with the quarterly IIP and to complete important sector categories and new types of instruments needed to improve the utility of the accounts for analyses by instrument, sector, and maturity, to fill gaps in the accounts, and to improve the comparability of the international accounts with other systems of accounts.

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Table A. Current and BPM6-based Structures for the Financial Account, 2009

Line[1]	Current structure by U.S. sector	Billions of dollars	Line[2]	BPM6-based structure by functional category	Billions of dollars
40	**U.S.-owned assets, excluding financial derivatives**	**140.5**	73	**Net acquisition of assets, excluding financial derivatives**	**121.9**
41	U.S. official reserve assets	52.3	93	Reserve assets	52.3
42	Gold	0.0	94	Monetary gold	0.0
43	Special drawing rights	48.2	95	Special drawing rights	48.2
44	Reserve position in the International Monetary Fund	3.4	96	Reserve position in the International Monetary Fund	3.4
45	Foreign currencies	0.7	97	Other reserve assets	0.7
46	U.S. government assets, other than official reserve assets	-541.3	74	Direct investment	250.1
47	U.S. credits and other long-term assets	4.1	75	Equity and investment fund shares	258.3
48	Repayments of U.S. credits and other long-term assets	-2.1	76	Equity other than reinvestment of earnings	18.4
49	U.S. foreign currency holdings and other short-term assets	-543.3	77	Reinvestment of earnings	239.9
			78	Debt instruments	-8.3
50	U.S. private assets	629.6	79	U.S. parents' claims on foreign affiliates	-0.2
51	Direct investment (outward)	268.7	80	U.S. affiliates' claims on foreign parent groups	-8.0
52	Foreign securities	208.2			
53	U.S. claims on unaffiliated foreigners reported by U.S. nonbanking concerns	-124.4	81	Portfolio investment	404.5
54	U.S. claims reported by U.S. banks and securities brokers	277.1	82	Equity and investment fund shares	63.3
			83	Debt securities	341.2
			84	Short term	196.3
			85	Long term	144.9
			86	Other investment	-585.0
			87	Other equity	n.a.
			88	Currency and deposits	-447.0
			89	Loans	-73.6
			90	Insurance, pension, and standardized guarantee schemes	n.a.
			91	Trade credits and advances	-3.4
			92	Other accounts receivable	-61.0

Line[1]	Current structure by foreign counterparty	Billions of dollars	Line[2]	BPM6-based structure by functional category	Billions of dollars
55	**Foreign-owned assets in the United States, excluding financial derivatives**	**305.7**	102	**Net incurrence of liabilities, excluding financial derivatives**	**287.1**
56	Foreign official assets in the United States	450.0	103	Direct investment	116.1
57	U.S. government securities	441.1	104	Equity and investment fund shares	123.2
58	U.S. Treasury securities	561.1	105	Equity other than reinvestment of earnings	94.8
59	Other	-120.1	106	Reinvestment of earnings	28.5
60	Other U.S. government liabilities	58.0	107	Debt instruments	-7.1
61	U.S. liabilities reported by banks and securities brokers	-70.9	108	U.S. affiliates' liabilities to foreign parent groups	3.4
62	Other foreign official assets	21.9	109	U.S. parents' liabilities to foreign affiliates	-10.6
63	Other foreign assets in the United States	-144.3	110	Portfolio investment	366.7
64	Direct investment (inward)	134.7	111	Equity and investment fund shares	160.5
65	U.S. Treasury securities	22.8	112	Debt securities	206.1
66	U.S. securities other than U.S. Treasury securities	0.1	113	Short term	-114.9
67	U.S. currency	12.6	114	Long term	321.0
68	U.S. liabilities to unaffiliated foreigners reported by U.S. nonbanking concerns	-1.5			
69	U.S. liabilities reported by U.S. banks and securities brokers	-313.0	115	Other investment	-195.6
			116	Other equity	n.a.
			117	Currency and deposits	-171.9
			118	Loans	-81.1
			119	Insurance, pension, and standardized guarantee schemes	n.a.
			120	Trade credits and advances	-0.2
			121	Other accounts payable	9.9
			122	Special drawing rights	47.6

Line[1]		Billions of dollars	Line[2]		Billions of dollars
70	**Financial derivatives, net**	**-50.8**	123	**Financial derivatives, net**	**-50.8**

n.a. Transactions are possible, but data are not available.

BPM6 *Balance of Payments and International Investment Position Manual*, 6th ed. (Washington, DC: International Monetary Fund, 2009).

1. The line numbers are from the current “Table 1. U.S. International Transactions” published by BEA, but the data for 2009 are presented on the new basis, without the uniform use of negative signs to indicate debits.

2. The line numbers are from table 1 of this article.

Table B. Current and BPM6-based Structures for the International Investment Position, 2009

Line[1]	Current structure	Billions of dollars	Line[2]	BPM6-based structure by functional category	Billions of dollars
1	**Net international investment position of the United States (lines 2+3)**	**-2,737.8**	**1**	**Net international investment position (lines 2+3)**	**-2,737.8**
2	Financial derivatives, net (line 5 less line 25)	127.9	2	Financial derivatives, net (line 5 less line 30)	127.9
3	Net international investment position, excluding financial derivatives (line 6 less line 26)	-2,865.8	3	Net international investment position, excluding financial derivatives (line 6 less line 31)	-2,865.8
4	**U.S.-owned assets abroad (lines 5+6)**	**18,379.1**	**4**	**U.S.-owned assets abroad (lines 5+6)**	**18,991.2**
5	Financial derivatives (gross positive fair value)	3,512.0	5	Financial derivatives (gross positive fair value)	3,512.0
6	U.S.-owned assets abroad, excluding financial derivatives (lines 7+12+17)	14,867.1	6	U.S.-owned assets abroad, excluding financial derivatives (lines 7+12+17+22)	15,479.2
7	U.S. official reserve assets	403.8	7	Reserve assets	403.8
8	Gold	284.4	8	Gold	284.4
9	Special drawing rights	57.8	9	Special drawing rights	57.8
10	Reserve position in the International Monetary Fund	11.4	10	Reserve position in the International Monetary Fund	11.4
11	Foreign currencies	50.2	11	Other reserve assets	50.2
12	U.S. Government assets, other than official reserve assets	82.8	12	Direct investment at current cost	4,663.3
13	U.S. credits and other long-term assets	71.8	13	Equity and investment fund shares	3,875.7
14	Repayable in dollars	71.6	14	Debt instruments	787.6
15	Other	0.3	15	U.S. parents' claims on foreign affiliates	516.5
16	U.S. foreign currency holdings and U.S. short-term assets	10.9	16	U.S. affiliates' claims on foreign parent groups	271.1
17	U.S. private assets	14,380.5	17	Portfolio investment	6,003.2
18	Direct investment at current cost	4,051.2	18	Equity and investment fund shares	3,977.4
19	Foreign securities	5,471.0	19	Debt securities	2,025.8
20	Bonds	1,493.6	20	Short term	532.2
21	Corporate stocks	3,977.4	21	Long term	1,493.6
22	U.S. claims on unaffiliated foreigners reported by U.S. nonbanking concerns	794.2			
23	U.S. claims reported by U.S. banks and securities brokers, n.i.e.	4,064.1	22	Other investment	4,408.9
			23	Other equity	n.a.
			24	Currency and deposits	2,926.6
			25	Loans	1,200.8
			26	Insurance, pension, and standardized guarantee schemes	n.a.
			27	Trade credits and advances	28.5
			28	Other accounts receivable	253.0
24	**Foreign-owned assets in the United States (lines 25+26)**	**21,116.9**	**29**	**Foreign-owned assets in the United States (lines 30+31)**	**21,729.0**
25	Financial derivatives (gross negative fair value)	3,384.1	30	Financial derivatives (gross negative fair value)	3,384.1
26	Foreign-owned assets in the Unites States, excluding financial derivatives (lines 27+34)	17,732.9	31	Foreign-owned assets in the Unites States, excluding financial derivatives (lines 32+37+42)	18,345.0
27	Foreign official assets in the United States	4,373.8	32	Direct investment at current cost	3,284.9
28	U.S. Government securities	3,592.4	33	Equity and investment fund shares	2,164.5
29	U.S. Treasury securities	2,871.1	34	Debt instruments	1,120.4
30	Other	721.3	35	U.S. affiliates' liabilities to foreign parent groups	779.3
31	Other U.S. Government liabilities	98.8	36	U.S. parents' liabilities to foreign affiliates	341.0
32	U.S. liabilities reported by U.S. banks and securities brokers, n.i.e.	187.5			
33	Other foreign official assets	495.2	37	Portfolio investment	10,436.6
			38	Equity and investment fund shares	2,830.2
34	Other foreign assets	13,359.0	39	Debt securities	7,606.4
35	Direct investment at current cost	2,672.8	40	Short term	982.0
36	U.S. Treasury securities	826.2	41	Long term	6,624.4
37	U.S. securities other than U.S. Treasury securities	5,287.2			
38	Corporate and other bonds	2,841.2	42	Other investment	4,623.5
39	Corporate stocks	2,445.9	43	Other equity	n.a.
40	U.S. currency	313.8	44	Currency and deposits	2,712.3
41	U.S. liabilities to unaffiliated foreigners reported by U.S. nonbanking concerns	665.5	45	Loans	1,154.7
42	U.S. liabilities reported by U.S. banks and securities brokers, n.i.e.	3,593.6	46	Insurance, pension, and standardized guarantee schemes	n.a.
			47	Trade credits and advances	20.0
			48	Other accounts payable	681.1
			49	Special drawing rights	55.4
	Memoranda:			**Memoranda:**	
43	Direct investment abroad at market value	4,302.9	50	Direct investment assets at market value	4,915.0
			51	Equity and investment fund shares	4,127.3
			52	Debt instruments	787.6
44	Direct investment in the United States at market value	3,120.6	53	Direct investment liabilities at market value	3,732.7
			54	Equity and investment fund shares	2,612.3
			55	Debt instruments	1,120.4

n.a. Transactions are possible, but data are not available.

n.i.e. Not included elsewhere

BPM6 *Balance of Payments and International Investment Position Manual*, 6th ed. (Washington, DC: International Monetary Fund, 2009).

1. The line numbers are from the current "Table 1. International Investment Position of the United States at Yearend" published by BEA.

2. The line numbers are from table 2 of this article.

Table C. Portfolio Investment, 2006-2009

[Billions of dollars]

Line		Transactions				Position as of:
		2006	2007	2008	2009	Dec. 31, 2009
1	**Net acquisition of portfolio investment assets (Table 1, line 81)**	497.3	381.2	-295.4	404.5	6,003.2
2	Equity and investment fund shares	137.3	147.8	-39.0	63.3	3,977.4
3	Debt Securities	360.0	233.4	-256.4	341.2	2,025.8
4	Short term	132.2	14.7	-97.5	196.3	532.2
5	*Short-term debt securities by instrument:*					
6	Negotiable certificates of deposit	79.0	-5.8	-36.1	125.6	264.8
7	Commercial paper	18.9	-1.7	-12.9	64.8	182.6
8	Other short-term securities	34.3	22.2	-48.5	5.9	84.8
9	Long term	227.8	218.7	-158.9	144.9	1,493.6
10	**Net incurrence of portfolio investment liabilities (Table 1, line 110)**	1,126.7	1,156.6	520.1	366.7	10,436.6
11	Equity and investment fund shares	145.5	275.6	126.4	160.5	2,830.2
12	Debt securities	981.3	881.0	393.7	206.1	7,606.4
13	Short term	25.1	156.9	305.2	-114.9	982.0
14	*Short-term debt securities by instrument:*					
15	Negotiable certificates of deposit	10.1	19.0	14.0	-18.5	55.1
16	Commercial paper	44.5	18.9	-58.9	-42.7	71.3
17	Other short-term securities	-29.5	119.1	350.1	-53.7	855.5
18	*Short-term debt securities by sector of U.S. issuer:*					
19	Central bank	0.0	0.0	0.0	0.0	0.0
20	Deposit-taking institutions, except the central bank	25.2	44.9	-8.2	-15.4	92.5
21	General government	-11.4	49.4	455.2	-1.1	756.8
22	Federal	-11.4	49.4	453.9	0.2	756.8
23	State and local	0.0	0.0	1.3	-1.3	0.0
24	Other sectors	11.3	62.6	-141.8	-98.4	132.7
25	Other financial institutions	7.7	73.8	-142.5	-83.7	124.7
26	Federally-sponsored agencies	-22.9	87.4	-99.2	-48.7	53.3
27	Other	30.7	-13.6	-43.3	-35.0	71.4
28	Nonfinancial institutions, households, and NPISHs	3.5	-11.2	0.7	-14.7	8.0
29	Long term	956.2	724.1	88.5	321.0	6,624.4
30	*Long-term debt securities by sector of U.S. issuer:*					
31	General government	161.7	115.9	256.2	583.7	2,940.5
32	Federal	161.7	115.9	256.2	583.7	2,940.5
33	State and local	n.a.	n.a.	n.a.	n.a.	n.a.
34	Other sectors	794.4	608.2	-167.7	-262.6	3,683.9
35	Federally-sponsored agencies	245.6	162.7	-129.9	-125.8	1,145.3
36	Other[1]	548.8	445.5	-37.8	-136.8	2,538.6

n.a. Transactions are possible, but data are not available.

1. Long-term debt liabilities of deposit-taking institutions are included in this line because they not separately identifiable in the source data.

Chart 1. Total Portfolio Investment

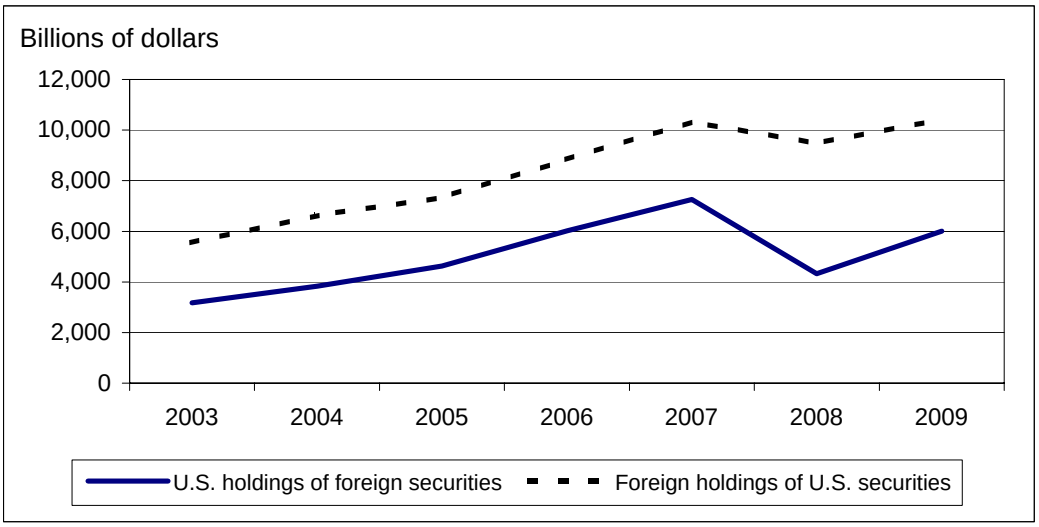


Chart 2. Portfolio Investment in Debt and Equity



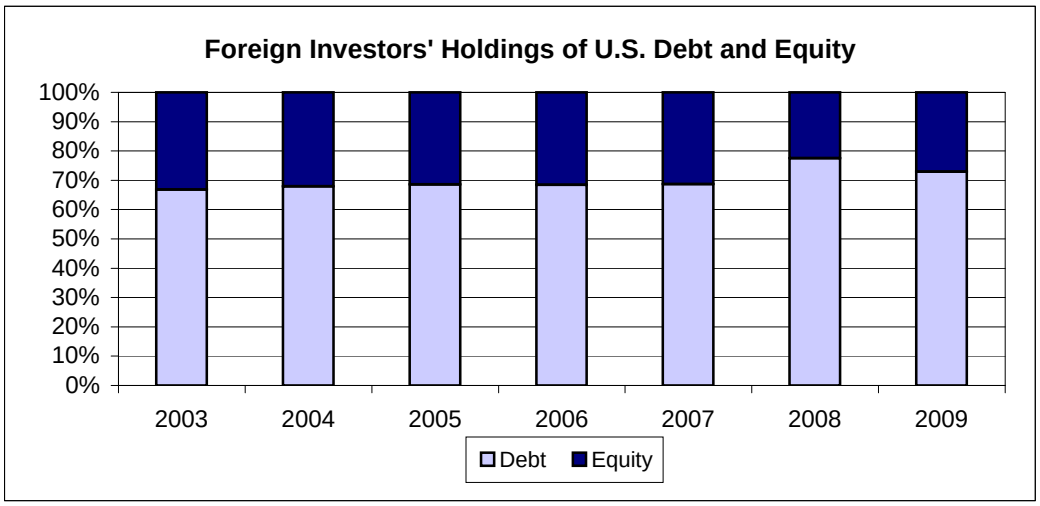


Table D. Average Annual Rates of Return on Cross-Border Investment 1990-2005

	Unadjusted			Adjusted*		
	Claims	Liabilities	Difference	Claims	Liabilities	Difference
Total Return	7.6%	6.1%	1.5%	7.6%	5.9%	1.7%
Yield	5.0%	3.8%	1.2%	5.0%	3.8%	1.2%
Capital Gains	2.6%	2.3%	0.3%	2.7%	2.1%	0.5%

* Adjusted estimates include "capital gains and losses" from other changes in capital gains for direct investment.

Table E. Average Annual Rates of Return by Type of Cross-Border Investment 1990-2005

	Unadjusted			Adjusted*		
Direct Investment at Market Value						
	Claims	Liabilities	Difference	Claims	Liabilities	Difference
Total Return	10.2%	6.8%	3.4%	10.4%	6.2%	4.2%
Yield	6.9%	2.1%	4.8%	6.9%	2.1%	4.8%
Capital Gains	3.2%	4.7%	-1.4%	3.4%	4.0%	-0.6%

Long-term Debt

	Claims	Liabilities	Difference
Total Return	7.7%	6.4%	1.3%
Yield	7.0%	6.3%	0.6%
Capital Gains	0.7%	0.0%	0.6%

Equities

	Claims	Liabilities	Difference
Total Return	8.5%	10.3%	-1.9%
Yield	2.5%	2.1%	0.3%
Capital Gains	6.0%	8.2%	-2.2%

Other

	Claims	Liabilities	Difference
Total Return	4.3%	3.9%	0.4%
Yield	4.2%	3.9%	0.3%
Capital Gains	0.1%	0.0%	0.1%

* Adjusted estimates include "capital gains and losses" from other changes in capital gains for direct investment.

Table 1. U.S. International Transactions, 2006-2009--Continues

[Billions of dollars]

Line		2006	2007	2008	2009
	Current account				
1	**Exports of goods and services and income receipts**	**2,212.9**	**2,560.6**	**2,731.6**	**2,245.5**
2	Exports of goods and services	1,452.7	1,649.4	1,840.6	1,572.7
3	Goods, balance of payments basis	1,038.7	1,164.6	1,310.1	1,071.9
4	General merchandise	1,027.1	1,147.1	1,286.2	1,054.6
5	Foods, feeds, and beverages	66.0	84.3	108.3	93.9
6	Industrial supplies and materials	279.1	316.2	386.9	293.7
7	Capital goods	404.0	433.0	457.7	390.5
8	Automotive vehicles, parts, and engines	107.3	121.3	121.5	81.7
9	Consumer goods	129.1	146.0	161.3	150.0
10	Other goods	41.6	46.3	50.5	44.7
11	Net exports of goods under merchanting	2.8	4.2	5.2	3.4
12	Nonmonetary gold	8.8	13.3	18.7	13.9
13	Services	414.0	484.8	530.5	500.8
14	Manufacturing services on physical inputs owned by others	n.a.	n.a.	n.a.	n.a.
15	Maintenance and repair services, n.i.e.	8.2	9.3	9.8	11.6
16	Transport	57.8	66.3	75.5	62.2
17	Travel	107.3	120.0	135.4	121.5
18	Construction	2.1	3.0	4.2	4.4
19	Insurance services	9.4	10.8	13.5	14.7
20	Financial services	47.9	61.0	60.8	55.4
21	Royalties and license fees	70.7	84.6	93.9	89.8
22	Telecommunications, computer, and information services	17.2	20.2	22.8	22.7
23	Other business services	61.2	73.9	81.4	82.2
24	Personal, cultural, and recreational services	14.5	16.2	15.6	16.5
25	Government goods and services, n.i.e.	17.5	19.4	17.6	19.8
26	Primary income receipts	692.3	841.6	807.7	597.8
27	Compensation of employees	4.5	4.6	4.7	4.6
28	Investment income	687.8	837.0	803.0	593.2
29	Direct investment	333.2	381.0	412.8	354.0
30	Portfolio investment	166.1	221.6	241.4	186.2
31	Other investment	187.3	232.9	147.3	52.2
32	Reserve assets	1.1	1.5	1.6	0.8
33	Other primary income	n.a.	n.a.	n.a.	n.a.
34	Secondary income (transfer) receipts	67.9	69.7	83.3	75.0
35	**Imports of goods and services and income payments**	**3,014.5**	**3,277.9**	**3,399.6**	**2,623.3**
36	Imports of goods and services	2,212.9	2,352.5	2,540.4	1,948.6
37	Goods, balance of payments basis	1,875.3	1,983.6	2,139.5	1,575.4
38	General merchandise	1,869.7	1,974.7	2,127.1	1,566.6
39	Foods, feeds, and beverages	74.9	81.7	89.0	81.6
40	Industrial supplies and materials	611.5	647.1	798.3	467.7
41	Capital goods	420.0	446.0	455.2	369.7
42	Automotive vehicles, parts, and engines	254.3	256.7	231.2	157.6
43	Consumer goods	446.1	478.2	484.7	430.7
44	Other goods	62.9	65.0	68.7	59.3
45	Nonmonetary gold	5.6	8.8	12.5	8.8
46	Services	337.6	369.0	400.8	373.1
47	Manufacturing services on physical inputs owned by others	n.a.	n.a.	n.a.	n.a.
48	Maintenance and repair services, n.i.e.	4.6	5.2	5.9	6.2
49	Transport	80.7	81.8	86.1	67.2
50	Travel	78.4	82.8	86.8	81.0
51	Construction	2.1	3.1	4.3	5.1
52	Insurance services	39.4	47.5	56.1	55.2
53	Financial services	14.7	19.8	20.2	16.5
54	Royalties and license fees	23.5	24.9	25.8	25.2
55	Telecommunications, computer, and information services	19.8	22.4	24.1	24.2
56	Other business services	41.6	47.9	57.2	55.7
57	Personal, cultural, and recreational services	2.5	2.6	2.9	3.3
58	Government goods and services, n.i.e.	30.3	31.0	31.5	33.6
59	Primary income payments	642.1	740.1	653.9	474.7
60	Compensation of employees	9.5	10.1	10.4	10.8
61	Investment income	632.6	730.0	643.5	464.0
62	Direct investment	159.2	139.5	125.1	102.0
63	Portfolio investment	304.5	381.5	399.8	331.6
64	Other investment	168.9	209.1	118.6	30.4
65	Other primary income	n.a.	n.a.	n.a.	n.a.
66	Secondary income (transfer) payments	159.4	185.3	205.3	200.0
	Capital account				
67	**Credits**	**0.0**	**0.5**	**6.2**	**0.0**
68	Gross acquisitions of nonproduced nonfinancial assets	0.0	0.5	0.0	0.0
69	Capital transfers	0.0	0.0	6.2	0.0
70	**Debits**	**1.8**	**0.1**	**0.2**	**0.1**
71	Gross disposals of nonproduced nonfinancial assets	0.1	0.0	0.0	0.0
72	Capital transfers	1.7	0.1	0.2	0.1

Table 1. U.S. International Transactions, 2006-2009--Table Ends

[Billions of dollars]

	Financial account				
73	**Net acquisition of financial assets, excluding financial derivatives**	**1,336.9**	**1,594.0**	**-140.8**	**121.9**
74	Direct investment	296.1	532.3	366.5	250.1
75	Equity and investment fund shares	266.3	431.3	385.1	258.3
76	Equity other than reinvestment of earnings	49.0	200.9	145.5	18.4
77	Reinvestment of earnings	217.3	230.5	239.5	239.9
78	Debt instruments	29.7	101.0	-18.6	-8.3
79	U.S. parents' claims on foreign affiliates	11.7	22.7	-33.3	-0.2
80	U.S. affiliates' claims on their foreign parent groups	18.0	78.3	14.7	-8.0
81	Portfolio investment	497.3	381.2	-295.4	404.5
82	Equity and investment fund shares	137.3	147.8	-39.0	63.3
83	Debt securities	360.0	233.4	-256.4	341.2
84	Short term	132.2	14.7	-97.5	196.3
85	Long term	227.8	218.7	-158.9	144.9
86	Other investment	545.9	680.4	-216.6	-585.0
87	Other equity	n.a.	n.a.	n.a.	n.a.
88	Currency and deposits	333.8	474.8	-40.9	-447.0
89	Loans	96.2	299.8	-126.0	-73.6
90	Insurance, pension, and standardized guarantee schemes	n.a.	n.a.	n.a.	n.a.
91	Trade credits and advances	3.3	8.7	-6.8	-3.4
92	Other accounts receivable	112.6	-102.9	-43.0	-61.0
93	Reserve assets	-2.4	0.1	4.8	52.3
94	Monetary gold	0.0	0.0	0.0	0.0
95	Special drawing rights	0.2	0.2	0.1	48.2
96	Reserve position in the International Monetary Fund	-3.3	-1.0	3.5	3.4
97	Other reserve assets	0.7	1.0	1.3	0.7
98	Currency and deposits	0.3	0.5	0.6	0.1
99	Securities	0.3	0.3	0.4	0.5
100	Financial derivatives	0.0	0.0	0.0	0.0
101	Other claims	0.1	0.2	0.2	0.1
102	**Net incurrence of liabilities, excluding financial derivatives**	**2,116.3**	**2,226.0**	**470.0**	**287.1**
103	Direct investment	294.3	389.5	343.6	116.1
104	Equity and investment fund shares	184.1	208.0	308.6	123.2
105	Equity other than reinvestment of earnings	115.0	152.8	261.6	94.8
106	Reinvestment of earnings	69.1	55.2	47.0	28.5
107	Debt instruments	110.1	181.5	35.1	-7.1
108	U.S. affiliates' liabilities to their foreign parent groups	77.1	141.5	34.5	3.4
109	U.S. parents' liabilities to their foreign affiliates	33.1	40.0	0.6	-10.6
110	Portfolio investment	1,126.7	1,156.6	520.1	366.7
111	Equity and investment fund shares	145.5	275.6	126.4	160.5
112	Debt securities	981.3	881.0	393.7	206.1
113	Short term	25.1	156.9	305.2	-114.9
114	Long term	956.2	724.1	88.5	321.0
115	Other investment	695.3	679.8	-393.7	-195.6
116	Other equity	n.a.	n.a.	n.a.	n.a.
117	Currency and deposits	345.0	323.5	-442.1	-171.9
118	Loans	102.7	150.1	70.1	-81.1
119	Insurance, pension, and standardized guarantee schemes	n.a.	n.a.	n.a.	n.a.
120	Trade credits and advances	2.5	2.0	-7.6	-0.2
121	Other accounts payable	245.1	204.2	-14.1	9.9
122	Special drawing rights	0.0	0.0	0.0	47.6
123	**Financial derivatives, net**	**-29.7**	**-6.2**	**32.9**	**-50.8**
124	**Net errors and omissions**[1]	**-5.8**	**78.7**	**84.1**	**161.9**
	Balances:				
125	Current account	-801.6	-717.2	-668.0	-377.8
126	Goods and services	-760.2	-703.1	-699.8	-375.9
127	Goods	-836.6	-818.9	-829.5	-503.5
128	Services	76.4	115.8	129.7	127.7
129	Primary income	50.1	101.5	153.8	123.0
130	Secondary income	-91.5	-115.6	-122.0	-125.0
131	Capital account	-1.8	0.4	6.0	-0.1
132	Net financial flows[2]	-809.2	-638.2	-577.9	-216.1

(*) Transactions are less than $50,000,000 (±).

n.a. Transactions are possible, but data are not available.

n.i.e. Not included elsewhere

1. Net financial flows less the sum of the current-account and capital-account balances (line 132 - line 125 - line 131).

2. Net acquisition of financial assets less net incurrence of liabilities plus financial derivatives, net (line 73 - line 102 + line 123).

Table 2. U.S. International Investment Position at Yearend, 2006-2009

[Billions of dollars]

Line		2006	2007	2008	2009
1	**Net international investment position (lines 2+3)**	**12,529.4**	**13,941.8**	**7,936.7**	**12,223.0**
2	Financial derivatives, net (line 5 less line 30)	59.8	71.5	159.6	127.9
3	Net international investment position, excluding financial derivatives (line 6 less line 31)	12,469.5	13,870.3	7,777.1	12,095.1
4	**U.S.-owned assets abroad (lines 5+6)**	**14,887.7**	**18,917.5**	**19,872.4**	**18,991.2**
5	Financial derivatives (gross positive fair value)	1,239.0	2,559.3	6,127.5	3,512.0
6	U.S.-owned assets abroad, excluding financial derivatives (lines 7+12+17+22)	13,648.7	16,358.1	13,744.9	15,479.2
7	Reserve assets	219.9	277.2	293.7	403.8
8	Gold	165.3	218.0	227.4	284.4
9	Special drawing rights	8.9	9.5	9.3	57.8
10	Reserve position in the International Monetary Fund	5.0	4.2	7.7	11.4
11	Other reserve assets	40.7	45.5	49.3	50.2
12	Direct investment at current cost	3,407.7	4,130.5	4,370.3	4,663.3
13	Equity and investment fund shares	2,772.1	3,368.9	3,584.9	3,875.7
14	Debt instruments	635.6	761.6	785.4	787.6
15	U.S. parents' claims on foreign affiliates	463.0	510.1	503.0	516.5
16	U.S. affiliates' claims on foreign parent groups	172.6	251.5	282.4	271.1
17	Portfolio investment	6,017.1	7,262.0	4,321.6	6,003.2
18	Equity and investment fund shares	4,329.0	5,248.0	2,748.4	3,977.4
19	Debt securities	1,688.1	2,014.1	1,573.2	2,025.8
20	Short term	412.6	427.0	335.9	532.2
21	Long term	1,275.5	1,587.1	1,237.3	1,493.6
22	Other investment	4,004.0	4,688.4	4,759.2	4,408.9
23	Other equity	n.a.	n.a.	n.a.	n.a.
24	Currency and deposits	2,580.7	3,084.7	3,245.5	2,926.6
25	Loans	861.7	1,183.3	1,218.6	1,200.8
26	Insurance, pension, and standardized guarantee schemes	n.a.	n.a.	n.a.	n.a.
27	Trade credits and advances	32.8	41.8	34.8	28.5
28	Other accounts receivable	528.8	378.6	260.3	253.0
29	**Foreign-owned assets in the United States (lines 30+31)**	**17,079.3**	**20,833.2**	**23,366.3**	**21,729.0**
30	Financial derivatives (gross negative fair value)	1,179.2	2,487.9	5,967.8	3,384.1
31	Foreign-owned assets in the Unites States, excluding financial derivatives (lines 32+37+42)	15,900.2	18,345.3	17,398.4	18,345.0
32	Direct investment at current cost	2,613.6	2,988.1	3,148.9	3,284.9
33	Equity and investment fund shares	1,756.5	1,932.1	2,024.5	2,164.5
34	Debt instruments	857.1	1,056.1	1,124.4	1,120.4
35	U.S. affiliates' liabilities to foreign parent groups	570.1	730.0	779.3	779.3
36	U.S. parents' liabilities to foreign affiliates	287.0	326.1	345.1	341.0
37	Portfolio investment	8,843.5	10,327.0	9,473.0	10,436.6
38	Equity and investment fund shares	2,791.9	3,231.7	2,132.6	2,830.2
39	Debt securities	6,051.6	7,095.3	7,340.5	7,606.4
40	Short term	621.2	790.2	1,096.7	982.0
41	Long term	5,430.5	6,305.2	6,243.7	6,624.4
42	Other investment	4,443.0	5,030.2	4,776.5	4,623.5
43	Other equity	n.a.	n.a.	n.a.	n.a.
44	Currency and deposits	2,741.7	3,075.4	2,791.0	2,712.3
45	Loans	906.0	1,070.9	1,221.9	1,154.7
46	Insurance, pension, and standardized guarantee schemes	n.a.	n.a.	n.a.	n.a.
47	Trade credits and advances	25.7	27.9	20.1	20.0
48	Other accounts payable	762.3	848.3	735.9	681.1
49	Special drawing rights	7.4	7.7	7.5	55.4
	Memoranda:				
50	Direct investment assets at market value	4,929.9	5,852.6	3,731.2	4,915.0
51	Equity and investment fund shares	4,294.3	5,091.0	2,945.8	4,127.3
52	Debt instruments	635.6	761.6	785.4	787.6
53	Direct investment liabilities at market value	3,752.6	4,174.5	3,180.1	3,732.7
54	Equity and investment fund shares	2,895.5	3,118.4	2,055.7	2,612.3
55	Debt instruments	857.1	1,056.1	1,124.4	1,120.4

n.a. Transactions are possible, but data are not available.