

U.S. International Economic Accounts: Concepts and Methods

*International Transactions Accounts,
International Investment Position Accounts,
and the Activities of Multinational Enterprises*



U.S. International Economic Accounts: Concepts and Methods



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Preface

In June 2014, the Bureau of Economic Analysis (BEA) introduced a comprehensive restructuring of the U.S. international economic accounts, the most significant change in the presentation of these accounts since 1976. The comprehensive restructuring represents the culmination of a multi-year effort to modernize and enhance the accounts by introducing changes recommended by new international statistical guidelines along with other improvements. These changes improve the overall comparability of international economic statistics across countries and provide policymakers and others with a stronger statistical foundation for understanding and responding to international economic events.

This volume builds on BEA's recent volume on the concepts and methods used to prepare the U.S. international transactions accounts that was released on the BEA Web site in 2011. The coverage of this volume has been expanded to include not only the featured International Transactions Accounts but also the related International Investment Position Accounts and statistics on the Activities of Multinational Enterprises. The restructured international economic accounts described in this volume bring BEA's statistics into closer alignment with both international guidelines and with the statistics provided by many U.S. trading and investment partners.

As with the prior methodology volume, this volume is intended to be a living reference that will be updated to reflect changes in concepts, sources, and methods as they are introduced into the U.S. international economic accounts. In addition, new material may be introduced as needed to provide thorough and up-to-date documentation of important topics and issues related to these accounts.

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BEA would also like to acknowledge the influence of the International Monetary Fund's 6th edition of the *Balance of Payments and International Investment Position Manual (BPM6)* on the structure and content of this volume. The organization of this volume closely resembles that of *BPM6* and the content of Part II (Conceptual Framework) relies partly on material published in *BPM6*.

List of Abbreviations

ACE	U.S. Army Corps of Engineers
AID	U.S. Agency for International Development
AMNE	Activities of Multinational Enterprises
BD4	4 th edition of the <i>Benchmark Definition of Foreign Direct Investment</i>
BEA	U.S. Bureau of Economic Analysis
BPM5	5 th edition of the <i>Balance of Payments and International Investment Position Manual</i>
BPM6	6 th edition of the <i>Balance of Payments and International Investment Position Manual</i>
CBP	U.S. Customs and Border Protection
CIF	Cost, insurance, and freight
DHS	U.S. Department of Homeland Security
DOD	U.S. Department of Defense
EBOPS	Extended Balance of Payments Classification System
FAS	Free alongside ship
FATS	Foreign affiliates statistics
FDI	Foreign direct investment
FDIR	Framework for Direct Investment Relationships
FRB	Federal Reserve Board
FRBNY	Federal Reserve Bank of New York
FISIM	Financial intermediation services indirectly measured
FOB	Free on board
GAAP	Generally accepted accounting principles
GATS	General Agreement on Trade in Services
GDP	Gross domestic product
GNI	Gross national income
HS	Harmonized Commodity Description and Coding System
IIP	International Investment Position
IMF	International Monetary Fund
IRS	Internal Revenue Service
ISIC	International Standard Industrial Classification
ITA	International Transactions Accounts
MNE	Multinational enterprises
MSITS	Manual on Statistics of International Trade in Services
NAICS	North American Industry Classification System
NIPA	National Income and Product Accounts
NPISH	Nonprofit institutions serving households
OECD	Organisation for Economic Co-operation and Development
OMB	U.S. Office of Management and Budget
R&D	Research and development
SDR	Special Drawing Rights
SIAT	Survey of International Air Travel
SNA	System of National Accounts
TIC	Treasury International Capital
UBO	Ultimate beneficial owner
WCO	World Customs Organisation
WTO	World Trade Organisation

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PART I

Introduction and Overview

This part of the volume provides an introduction to and an overview of key aspects of the U.S. international economic accounts. Chapters 1–5 discuss the purpose and structure of the accounts, new international guidelines, a brief history of the accounts, their relationship to other economic accounts, and the release and revision cycle for the statistics.

- 1. Purpose and Structure of the Accounts**
- 2. New International Guidelines**
- 3. Brief History of the Accounts**
- 4. Relationship to Other Economic Accounts**
- 5. Release and Revision Cycle**

Purpose and Structure of the Accounts

1.1. The international economic accounts prepared by the Bureau of Economic Analysis (BEA) provide timely, accurate, and relevant economic statistics that allow policymakers and other decision makers to understand the role of the United States in the global economy and the performance of the U.S. economy relative to other countries. These accounts include the International Transactions Accounts (ITAs), the International Investment Position (IIP) Accounts, and statistics on the Activities of Multinational Enterprises (AMNE)¹. Taken together, these accounts and related statistics provide a comprehensive, integrated, and detailed picture of important and closely followed U.S. international economic activities.

1.2. International economic statistics that are comparable across countries allow assessments of relative economic performance, facilitate trade negotiations, and provide the basis for tracking and analyzing the global economy. BEA's international economic accounts are also used to study international competitiveness and to formulate trade policy. Data on the activities of U.S. multinational enterprises (MNEs) and the U.S. affiliates of foreign MNEs are used by businesses to assist in their decisions on the location of affiliates abroad, the hiring of foreign labor, and sales and purchases of goods and services abroad.

1.3. The ITAs are a quarterly statistical summary of transactions between U.S. residents and nonresidents organized into three major accounts: the current account, the capital account, and the financial account. The current account records exports and imports of goods and services, receipts and payments of primary income, and receipts and payments of secondary income (current transfers). Current account data are used in compiling the U.S. national income and product accounts (NIPAs) prepared by BEA. The capital account records capital transfers, such as debt forgiveness, and transactions in nonproduced nonfinancial assets. The financial account records investment transactions between U.S. residents and nonresidents for direct investment, portfolio investment, other investment, reserve assets, and financial derivatives. Financial account data are used in compiling the flow of funds statistics prepared by the Federal Reserve Board.

1.4. The IIP accounts are a statistical summary of the quarter-end value of accumulated stocks of U.S. assets and U.S. liabilities as well as the value of the net international position of the United States. Separate statistics are available for the value of accumulated stocks of direct investment, portfolio investment, other investment, reserve assets, and financial derivatives. Changes in positions arise from financial transactions, asset valuation changes, and other changes in the volume of assets. Data from the IIP are used in compiling national balance sheet statistics prepared by the Federal Reserve Board.

1. The term "multinational enterprises" replaces the term "multinational companies" previously used in BEA's international economic accounts to more closely conform to international guidelines.

1.5. As part of its extensive data collection program to measure U.S. direct investment abroad and foreign direct investment in the United States, BEA prepares statistics on the financial and operating activities of U.S. MNEs and the U.S. affiliates of foreign MNEs. These AMNE statistics, which include sales, employment, value added, capital expenditures, and balance sheets, are critical for understanding the role played by multinational enterprises in an increasingly integrated global economy. AMNE statistics also include related foreign affiliate statistics that show services supplied outside of the home economy by both foreign affiliates of U.S. parent companies and U.S. affiliates of foreign parent companies.

1.6. The global economic crisis that started in late 2008 highlighted the importance of economic statistics that provide a clear and timely depiction of major developments in both the real and the financial sectors of economies around the world. In some respects, the responses of policymakers to the crisis were hampered by a lack of detailed, timely, and internationally comparable information about financial asset and liability flows and their impact on production, employment, and income. As part of a broad initiative to further improve the timeliness, accuracy, and relevance of economic statistics, in 2009 BEA embarked on a path towards a comprehensive restructuring of the U.S. international economic accounts, the most extensive restructuring since 1976.

1.7. The comprehensive restructuring that BEA released in June 2014 represents the culmination of a multiyear effort to modernize and enhance the accounts by introducing changes recommended by international statistical guidelines along with other improvements. While selected changes have been introduced over the last several years, the June 2014 release features a new presentation of the accounts that not only conforms more closely to international guidelines but that also brings the U.S. accounts into closer alignment with those of other countries. These changes improve the overall comparability of international economic statistics and provide policymakers and others with a stronger statistical foundation for understanding and responding to international economic events.

1.8. This volume is organized into five parts consisting of fifteen chapters, appendices, and a glossary. Part I (chapters 1–5) provides an introduction and overview. Part II (chapters 6–9) is a conceptual framework that provides descriptions of key concepts and principles that underlie the international economic accounts and that are critical for understanding and interpreting the statistics. Part III (chapters 10–13) provides a summary of statistical methodologies, including key data sources and estimation methods, for the ITAs, the IIP accounts, and AMNE statistics. Part IV (chapters 14–15) covers special topics in the international economic accounts. Part V provides supplemental information including appendices and a glossary of terms.

New International Guidelines

2.1. National statistical organizations compiling economic accounts attempt to adhere closely to guidelines developed by the international statistical community to improve the accounts, promote consistency, and to facilitate international comparability. BEA has a strong tradition of actively participating with other countries and international organizations in the development of new and updated guidelines for the preparation of economic accounts. Periodic updates to international statistical guidelines serve several purposes, including making countries' economic accounts more informative and relevant, improving the validity of cross-country comparisons, and promoting statistical integration efforts within countries by coordinating updates for related international, national, industry, and regional accounts.

2.2. In 2009 the International Monetary Fund (IMF) released the sixth edition of the *Balance of Payments and International Investment Position Manual (BPM6)*. This update, the first since 1993, was coordinated with an update in 2008 of the *System of National Accounts (2008 SNA)* in order to maximize consistency between these two key sets of international guidelines for economic accounts. In addition, in 2008 the Organisation for Economic Co-operation and Development (OECD) updated its *Benchmark Definition of Foreign Direct Investment (BD4)*, and in 2010 guidance was provided in manuals for statistics on merchandise trade and services trade. These manuals include *International Merchandise Trade Statistics: Concepts and Definitions 2010* and *Manual on Statistics of International Trade in Services 2010*.

2.3. The new international statistical guidelines were developed in response to important economic developments that arose after the last set of updates in 1993. Some of these developments include the increased globalization of economic activity, rising innovation and complexity in financial markets, and an increased emphasis on the balance sheet as a tool for understanding economic activity. Adopting new guidelines and other improvements that respond to new economic developments allows BEA's economic accounts to retain their relevance in an evolving global economy. While a wide variety of new recommendations were made in both *BPM6* and *BD4*, some of the recommendations were particularly noteworthy for their impact on the U.S. international economic accounts. These include the following:

- Trade in goods and services should be more strictly defined on a change-of-ownership basis to increase consistency with the treatment of the related financial flows and the treatment of domestic transactions and to more clearly identify global outsourcing of manufactured goods.

- Direct investment should be presented on an asset/liability (gross) basis, and the related income flows should be defined on a receipts/payments basis, instead of both being presented on a directional (net) basis. This change facilitates comparisons with related balance sheet and financial flow statistics.
- Financial intermediation services that are not explicitly charged—but are implicit in transactions and can be measured indirectly—should be recognized in order to account more completely for the different ways that financial services are priced and delivered.
- Research and development (R&D) results should be treated as produced assets and included in the current account with other produced assets rather than treated as nonproduced assets recorded in the capital account. This change better reflects the role of R&D results as assets that contribute to current production.

2.4. Changes to the international economic accounts that affect definitions, classifications, methodology, and presentation are typically made by BEA as part of annual revisions that BEA releases in June, primarily to allow the changes to be made for as many time periods as possible in order to ensure time series consistency. Because of the broad scope of the changes, BEA adopted a phased approach to implementing the new international guidelines that took into account the feasibility of implementation due to factors such as source data availability, resource requirements, and consistency with BEA's national, industry, and regional accounts. BEA considered not only the economic and statistical significance of changes but also factors such as information technology (IT) requirements, estimation needs, and implications for publication tables and data dissemination. The timetable also recognized the resources impact of other important BEA initiatives, such as a major long-term effort to significantly upgrade and improve BEA's IT systems.

2.5. In June 2014, BEA introduced restructured presentations of the international economic accounts. Revised statistics were presented as a consistent quarterly time series back to 1999 for most series. In general, before June 2014 BEA introduced changes that did not require changes to the presentation of the accounts. These earlier changes are described in appendix A.

2.6. In June 2014, BEA also introduced selected changes in treatment recommended by the international guidelines. These additional changes in definitions, classifications, and methodology were described in the March 2014 issue of the *SURVEY OF CURRENT BUSINESS*. Revised statistics were presented as a consistent quarterly time series back to 1960 for the highest levels of aggregation, back to 1999 for most current account detailed series, and back to 2003 for most other detailed series. While BEA attempted to implement each of the major *BPM6* recommendations, not all were feasible at this time. Major departures from *BPM6* are described in Part III and in appendix B.

Changes in presentation

2.7. One of BEA’s principal objectives in adopting the new international guidelines was to bring its standard presentation into closer alignment with the presentation recommended by *BPM6*. BEA’s previous presentation of the international economic accounts differed in several significant ways even from the prior IMF guidelines (*BPM5*), particularly for the financial account and the IIP accounts. Adopting the *BPM6*-recommended presentation ensures that statistics from the U.S. international economic accounts are more clearly identified, better understood by customers, and easier to compare with similar statistics from other countries.

2.8. Several aspects of the restructured international economic accounts represent major changes from BEA’s long-standing presentation. The major changes, which are briefly described below, include changes in sign convention and income presentation, the use of functional investment categories and sector detail, and the presentation of direct investment on an asset/liability basis.

2.9. **Sign convention.** The uniform use of negative signs for debit entries is eliminated. Previously, credits (exports, income receivable, transfers received, reductions in assets, and increases in liabilities) were presented as positive numbers, and debits (imports, income payable, transfers made, increases in assets, and reductions in liabilities) were presented as negative numbers. Although this convention facilitated some types of aggregation across accounts, it has proved to be a source of confusion for a significant number of data users.

2.10. Under the new presentation, positive signs are used to show exports and imports, income receipts and payments, transfers made and received, and increases in assets and liabilities. Negative signs are used only to indicate negative investment income (losses) and decreases in assets or in liabilities (as occur, for example, if investments are sold off). Current-account and capital-account balances are calculated as the difference between the underlying gross flows (exports minus imports, for example). For the financial account, net lending/borrowing is calculated as the difference between the acquisition of assets and the incurrence of liabilities. These new conventions should not only make the ITAs easier to understand and interpret, but should also simplify understanding their relationship to the corresponding changes in asset and liability positions in the IIP accounts.

2.11. **Income presentation.** The new tables adopt the nomenclature of primary income and secondary income introduced for the current account in *BPM6*. Primary income is income generated from current production and is equivalent to income receipts and income payments as shown in BEA’s previous presentation. Secondary income is equivalent to current transfers and is presented on a gross basis—that is, secondary income receipts and secondary income payments are shown separately rather than combined and presented on a net basis.

2.12. **Functional categories.** The new presentation reflects significant changes to the presentation of the financial account and the IIP accounts. Financial account transactions and positions in the IIP accounts are classified according to five functional categories—direct investment, portfolio investment, other investment, reserve assets, and financial derivatives other than reserves—and then according to the type of instrument. Investment income in the current account is also classified by functional category.

2.13. **Sector detail.** The new presentation introduces additional detail on portfolio investment and, in the future, other investment by sector. *BPM6* defines four main sectors—central bank, deposit-taking corporations except the central bank, general government, and “other sectors,” which includes the two subsectors “other financial corporations” and “nonfinancial corporations, households, and NPISHs” (nonprofit institutions serving households). BEA has eliminated the summary category “other sectors” and presents the two subsectors in its place.

2.14. Two basic changes to the names in the new presentation have been made. First, the term “corporations” is replaced with the term “institutions” to include enterprises such as partnerships that belong in this category but that are not organized as publicly held corporations. Second, because BEA has little source data on the transactions of households and NPISHs with foreign residents, BEA uses the label “nonfinancial institutions.”

2.15. **Asset/liability basis.** Direct investment is presented on the asset/liability basis recommended by *BPM6*, to the extent that source data allow, in addition to the directional basis recommended by earlier guidelines. On the directional basis, direct investment statistics are organized according to whether the direct investment is outward (U.S. direct investment abroad) or inward (foreign direct investment in the United States). On the asset/liability basis, direct investment statistics are organized according to whether the investment relates to an asset or a liability. This treatment primarily affects the recording of intercompany debt between parents and affiliates. Under the asset/liability basis, U.S. parents’ debt claims are no longer netted against their debt liabilities to their foreign affiliates, and U.S. affiliates’ debt claims are no longer netted against their debt liabilities to their foreign parent groups.

2.16. Difficulties with full implementation of the asset/liability basis are related to the treatment in the new guidelines of reverse investment and fellow enterprises. Reverse investment represents direct investment by affiliates in their parents. Fellow enterprises are enterprises with no direct investment relationship with one another but that have a common direct investor. As a result of the data limitations described below, the asset/liability basis can only be approximated using the information that BEA collects.

2.17. BEA collects information on reverse intercompany debt investment, which allows this type of investment to be shown in the new presentation on a full asset/liability basis. Therefore, instead of netting U.S. parents’ liabilities to their foreign affiliates against their claims on these affiliates, the former are recorded as liabilities and the latter as assets. Similarly, U.S. affiliates’ claims on

their foreign parent groups are recorded as assets, and their liabilities to their foreign parent groups are recorded as liabilities. Corresponding adjustments are made to direct investment interest income in the current account.

2.18. BEA collected data on reverse equity investment by foreign affiliates in their U.S. parents on the 2009 benchmark survey of U.S. direct investment abroad and found the amounts to be negligible. BEA will continue to collect these data on benchmark surveys to assess their significance. BEA also collected information on U.S. affiliates' reverse equity investment in their foreign parents on the 2012 benchmark survey of foreign direct investment in the United States. These data are under review. Given the empirical results so far, BEA will not record reverse equity investment as called for in the new guidelines.

2.19. BEA's current data collection system for direct investment does not collect debt investment between fellow enterprises according to the definitions in *BPM6*. Fellow enterprises are enterprises with no direct investment relationship with one another but that have a common direct investor. First, BEA's data collection system covers only majority-owned fellow enterprises while the guidelines call for covering all fellow enterprises that meet the 10 percent ownership criteria. Second, the guidelines call for classifying transactions between fellow enterprises based on the location of the ultimate investor. However, transactions between fellow enterprises cannot be separately identified in the source data for U.S. direct investment abroad.

Brief History of the Accounts

3.1. The history of the U.S. international economic accounts dates to the early 1920s. The U.S. Department of Commerce first published the balance of payments accounts in 1922 and later provided statistics back to 1919. The Department's Bureau of Foreign and Domestic Commerce published the accounts throughout the 1930s and during World War II. These statistics were in great demand to measure the flow of goods and services abroad during the war. Even greater attention was focused on the accounts published by the Office of Business Economics (OBE), BEA's predecessor agency. OBE played a prominent role in the measurement of financial assistance provided for economic reconstruction in the late 1940s and much of the 1950s.

3.2. With the advent of increased currency convertibility and the increased flow of capital globally, considerable disagreement arose by the late 1960s as to how best present the accounts. Several "partial" balances, consisting mostly of various components of the current account and some long-term capital transactions, were viewed as presenting an incomplete picture of total payments flows. Financial transactions were not recognized as part of the payments flow of the nation in any of these balances, yet they had begun to rise sharply in size. This was especially true with the surge in transactions of U.S. banks in the rapidly developing Eurodollar market. With capital mobility, it became increasingly difficult to distinguish between transactions in liquid and illiquid assets and to distinguish between financial flows (particularly short-term) that arose from the nation's payments and flows that were considered settlement transactions required of monetary authorities under the system of fixed exchange rates.

3.3. Differences of opinion also emerged on how best to capture, in a single "overall" or "summary" balance, the total payments flows of the nation. Several "overall" balances were published as part of the official presentation of the accounts, but often gave conflicting evidence on the payments flows of the nation for a given quarter or year. Equally important, these "overall" balances were far too volatile in short time periods to provide a reliable gauge of longer run developments in the payments position of the nation. In the final analysis, the choice of one or several "overall" balances was made more difficult not only by limitations of the statistical reporting system but also by complications resulting from the dollar's role as an international reserve currency.

3.4. The choice of several "overall" balances was retained, and improved somewhat, in the 1971 modification of the presentation of the accounts, but the end of the Bretton Woods system of fixed exchange rates in 1973 made the presentation of these balances considerably less relevant. The most recent presentation of the accounts by BEA originated in 1976, following a review by an expert

advisory panel, which recommended that the accounts be presented with no single “overall” or “summary” balance; however, presentation of “partial” balances was considered appropriate. That same committee also recommended that BEA’s primary presentation feature “international transactions” rather than “balance of payments.” This recommendation led to the accounts being renamed the International Transactions Accounts (ITAs). Although the presentation has been modified since 1976, no significant alterations in the basic structure of the ITAs were made until the comprehensive restructuring in June 2014.

3.5. The United States was also involved in the 1920s with the collection of data on the operations of U.S. multinational enterprises (MNEs). When U.S. MNE data were first provided in 1929 the scope was limited to one item—the value of foreign commercial assets controlled by U.S. companies. Since then, the scope has been greatly expanded in step with the growth in MNEs and the increasing integration of the global economy. A Department of Commerce census of U.S. direct investment abroad (outward investment) for 1950 marked the first appearance on a federal government survey of questions on the financing and operations of foreign affiliates of U.S. companies. In the 1980s, in response to increased foreign direct investment in the United States, BEA for the first time conducted a survey of the financing and operations of the U.S. affiliates of foreign MNEs.

Overview of historical changes

3.6. BEA’s international economic accounts have evolved continuously in response to policy needs and to address gaps in the coverage of international transactions and financial position statistics, particularly those arising from rapid growth and innovation in international services trade and financial markets and the shifting global patterns of goods production and merchandise trade. Below are examples of some of the major changes that have been introduced to keep the accounts up-to-date and relevant to the needs of government and business officials. Most of these changes resulted in improvements to the ITAs but some also resulted in improvements to the International Investment Position (IIP) Accounts and statistics on the Activities of Multinational Enterprises (AMNE).

3.7. With continued growth of outward direct investment and the acceleration of inward direct investment in the 1970’s and 1980’s, interest in the finances and operations of MNEs—such as employment, technology, and domestic production – increased correspondingly, and equal emphasis started to be placed on collecting data on investment in both directions. In response, BEA expanded its data on the overall operations of U.S. parent companies and their foreign affiliates and instituted new surveys to collect similar data on the operations of the U.S. affiliates of foreign companies. The resulting AMNE statistics became a main BEA data series. The authority to collect these data regularly on a mandatory basis was secured with the enactment of the International Investment Survey Act of 1976.

3.8. As concern over the rapid growth of inward direct investment increased during the late 1980’s, the U.S. Congress and the general public demanded more information to assess the impact of this investment on particular industries and

States. This concern led to major efforts in the early 1990's to link BEA's enterprise-level data on direct investment with establishment-level data from the Census Bureau and the Bureau of Labor Statistics. These linkages provided access to those agencies' more detailed data by industry and State for the foreign-owned U.S. companies that report to BEA. This project represented one of several improvements that have been achieved through sharing of existing data without imposing additional reporting burden on the business community. These data sharing projects were authorized by the Foreign Direct Investment and International Financial Data Improvements Act of 1990.

3.9. In the late 1980s and early 1990s, BEA's current collection system for business services was first developed to capture the rapidly expanding universe of internationally traded services, partly in response to the International Investment and Trade in Services Survey Act of 1984, which amended the 1976 International Investment Survey Act. The 1984 amendment established mandatory reporting of U.S. international trade in services and called for benchmark surveys of international services. For the first time, trade in services between affiliated enterprises (parent companies and their affiliates) was recorded on a gross basis. Previously, services transactions between parent companies and their affiliates had been recorded on a net basis. This net treatment obscured the two-way flow of intrafirm services trade resulting in an understatement of total exports and imports of services.

3.10. Shortly afterwards, questions pertaining to sales reported on BEA's surveys of U.S. affiliates abroad and foreign affiliates in the United States were expanded to request separate reporting of sales of goods and services. As a result, BEA started to provide annual statistics on the sales of services by affiliates, often described as Foreign Affiliate Statistics (FATS). The supply of services by affiliates corresponds to delivery of services via the channel of commercial presence, which is one of the four modes of service delivery identified in the General Agreement on Trade in Services. Later, during the mid-2000s, BEA developed new measures of services supplied by affiliates for insurance services, financial services, and wholesale and retail trade services that better capture the value of these services.

3.11. In 1989, the ITAs adopted the international Harmonized Commodity Description and Coding System (Harmonized System) of commodity classification for goods exports and imports, which provided a much improved and more detailed structure for classifying merchandise trade data. The Harmonized System was developed under the auspices of the World Customs Organization to establish an internationally accepted standard for the classification of traded goods. Many countries adopted the system at the time of its introduction in the late 1980s, and in 1989 the Census Bureau and BEA adopted the Harmonized System as the basic building block for U.S. merchandise trade data. At that time BEA revamped its end-use commodity classification system to reflect the new Harmonized System. Commodity trade flows on the newly developed end-use basis were carried back to 1978.

3.12. Starting with the first quarter of 1990, U.S.-compiled exports to Canada were replaced with the counterpart Canadian import statistics, and Canadian-compiled exports to the United States were replaced with the counterpart U.S.

import statistics. This exchange of statistics between the U.S. Census Bureau and Statistics Canada eliminated many of the U.S. balance of payments adjustments to the Census-basis data for timing, coverage, and valuation that were needed when Canada and the United States each collected their own export and import data.

3.13. In 1994, a new set of monthly services statistics was introduced in response to requests from policymakers for more timely data on services transactions that complemented the long-standing monthly series for merchandise trade. The new services statistics for seven services categories enabled BEA and the Census Bureau to begin publishing a joint monthly release for goods and services trade, which resulted in a more complete picture of U.S. international trade.

3.14. In the late 1990s, BEA introduced new statistics for receipts and payments for financial services based on its first benchmark survey of financial services transactions between U.S. financial services providers and unaffiliated foreigners conducted for 1994. Services newly covered included financial management services, financial advisory and custody services, credit card services, credit-related services, securities lending services, and electronic funds transfer services. Indirect methods used for brokerage services were replaced by survey data for commissions on stock transactions, private stock and bond placements, futures transactions, and foreign exchange transactions. The new statistics based on the benchmark survey began with 1992.

3.15. In the late 1990s, changes resulting from the issuance of the 5th edition of the *Balance of Payments and International Investment Position Manual* were introduced in the ITAs, including the establishment of the financial account along with the capital account in order to distinguish financial asset transactions from transactions in nonproduced nonfinancial assets. Transactions were presented in three accounts: current account, capital account, and financial account. Previously, transactions had been presented in just the current account and the capital account. The current account was redefined by removing capital transfers and transactions in nonproduced nonfinancial assets to the new capital account. The previous capital account became the new financial account. The revised presentation provided statistics starting with 1982.

3.16. From 2001 to 2005, the reorganization and significant expansion of the U.S. Treasury Department's and Federal Reserve Board's statistical collection system for transactions in securities and for transactions of banks and nonbank firms—the Treasury International Capital (TIC) reporting system—led to major improvements in coverage, which resulted in benefits not only for the financial account and the IIP accounts but also for portfolio and other investment income. In 2007, estimates of transactions in financial derivatives were incorporated into the ITAs and the IIP accounts for the first time, based on a newly developed TIC survey conducted by the Federal Reserve Bank of New York on behalf of the U.S. Treasury Department.

3.17. In July 2003, insurance services in the current account were redefined and new estimation methods were developed to remove the impact of catastrophic events on the measure of services activity. Insurance services were previously measured as premiums less actual losses paid or recovered. A major

shortcoming of this measure was that the often highly variable fluctuations in losses from period to period caused the measure of insurance services to vary in a way that had little relation to the services provided. The new method measures services as premiums less expected, or “normal” losses, where normal losses are inferred from the relationship between actual losses and premiums averaged over several years. Statistics were revised back to 1992. In addition, auxiliary insurance services were reclassified from business, professional, and technical services to insurance services.

3.18. In 2006 and 2007, the geographic detail available for the ITAs was expanded significantly from 18 to 38 major countries and areas in response to demand for bilateral statistics for a wider set of U.S. trading partners.

3.19. In July 2008, services receipts and payments were revised for 2006–2007 to incorporate BEA’s benchmark survey of international services for 2006 and BEA’s new quarterly follow-on surveys for 2007. Both the benchmark and quarterly surveys were redesigned to consolidate transactions with affiliated and unaffiliated parties into a single reporting system. In addition, detail by type of service activity for affiliated transactions was greatly expanded to parallel the detail available for unaffiliated transactions. The new estimates provided a more complete picture of services trade by detailed type of service.

3.20. In July 2008, claims on foreign residents reported by U.S. nonbank firms were revised for 2005–2007 to significantly expand the coverage of financial intermediaries’ claims associated with the issuance of asset-backed commercial paper (ABCP), resulting in improvements to both the ITAs and IIP accounts. During this period many offshore structured investment vehicles and ABCP conduits set up 100-percent-owned affiliates in Delaware for the sole purpose of issuing ABCP in the U.S. market. The ABCP proceeds were then lent to the offshore special purpose vehicles, which used the funds to purchase other assets. The intercompany debt transactions between Delaware affiliates and their offshore parents took the form of increases and decreases in U.S. nonbank claims on financial intermediaries’ accounts. Estimates were based on data from industry sources.

3.21. In the annual revisions of the ITAs and the IIP accounts released in June 2013, BEA integrated new monthly data on cross-border holdings of U.S. and foreign long-term securities collected on a new TIC form, Aggregate Holdings of Long-Term Securities by U.S. and Foreign Residents (SLT). BEA now uses the monthly SLT positions data to supplement the monthly transactions data from the TIC reporting system to improve coverage of long-term securities in financial account statistics.

3.22. Other improvements, both introduced in March 2013, include the acceleration of the release of monthly goods and services trade statistics from 40 days after the end of the reference month to 35 days and the establishment of the quarterly IIP accounts. One important factor that allowed production of quarterly IIP accounts was an acceleration of the reporting of financial derivatives in the TIC system from 60 days to 45 days after the reference quarter. Both of these acceleration initiatives responded to requests from policymakers for more timely and more frequent data from the U.S. international economic accounts.

Relationship to Other Economic Accounts

4.1. BEA's international economic accounts are an important component of the three major sets of accounts that comprise the U.S. national economic accounts—the national income and product accounts (NIPAs), the industry accounts, and the flow of funds accounts. The U.S. economic accounts closely follow the recommendations of the international System of National Accounts (SNA). While the International Transactions Accounts (ITAs) correspond to the SNA's rest-of-the-world accounts, they differ in that the ITAs present U.S. transactions with nonresidents from the perspective of the resident sectors, whereas the national economic accounts present these transactions from the perspective of nonresidents. The SNA items that are equivalent to international transactions items include exports and imports of goods and services, primary income, secondary income, current external balance, balance on the capital account, and net lending/net borrowing.

4.2. The NIPAs, prepared by BEA, feature gross domestic product (GDP) statistics. These accounts present the value and composition of national output and the distribution of incomes generated in production. The international dimension of these productive activities is represented by transactions in goods and services between U.S. residents and nonresidents, which are obtained from the ITAs. The net exports component of GDP includes exports of goods and services less imports of goods and services. Income flows to and from foreign residents, which are also obtained from the ITAs, represent the international dimension of series such as national income and corporate profits.

4.3. Several adjustments are made to the ITAs current-account statistics before they are incorporated in the NIPAs. These adjustments are generally small because of the use of common concepts, definitions, and source data. Adjustments are available in NIPA table 4.3B and are published annually in the August issue of the *SURVEY OF CURRENT BUSINESS*. The largest adjustments are for territorial coverage, for nonmonetary gold, and for financial intermediation services indirectly measured (FISIM). In recent years, these adjustments have usually had only a small or negligible net impact on the current-account balance on the NIPA basis. An occasional exception is the adjustment for U.S. territories (mainly Puerto Rico), which lowers the current-account deficit on the NIPA basis relative to the current-account deficit on the ITA basis because of Puerto Rico's deficit with the rest of the world.

4.4. The industry accounts, also prepared by BEA, consist of the input-output (I-O) accounts and the GDP-by-industry accounts. The I-O accounts trace the flow of goods and services among industries in the production process and show the value added by each industry and the detailed commodity composition of national output. The GDP-by-industry accounts measure the contribution of each

private industry and of government to nominal and real GDP. International flows of goods and services from the ITAs are critical to the complete measurement of output at the national level and to the industry composition of that output. Import use tables derived from the I-O accounts, which show the use of imported goods and services by industries and final uses, are partly based on data from the ITAs.

4.5. The flow of funds accounts, prepared by the Federal Reserve Board, record the acquisition and sales of nonfinancial and financial assets throughout the U.S. economy, the sources of funds used to acquire those assets, and the value of assets held and of liabilities owed. Data on transactions and positions in financial assets and liabilities from the U.S. international economic accounts, including the ITAs and the IIP accounts, provide the international dimension of transactions and positions for the flow of funds accounts. In addition, BEA and the Federal Reserve Board jointly publish the U.S. Integrated Macroeconomic Accounts (IMAs), which combine data from the NIPAs, the ITAs, and the flow of funds to provide a reconciliation between national aggregate statistics for flows and stocks.

4.6. BEA also prepares regional accounts, which consist of statistics on GDP by state and by metropolitan area, state personal income, and local area personal income. ITA statistics for compensation of border workers are used for these accounts. Finally, the U.S. Bureau of Labor Statistics prepares estimates of productivity for major sectors of the U.S. economy, which are partly based on BEA's estimates of GDP and GDP by industry.

Release and Revision Cycle

5.1. For the international economic accounts, BEA prepares and releases statistics at monthly, quarterly, and annual frequencies. BEA releases U.S. International Trade in Goods and Services monthly (jointly with the U.S. Census Bureau), the International Transactions Accounts (ITAs) and the International Investment Position (IIP) Accounts quarterly, and statistics on the Activities of Multinational Enterprises (AMNE) annually.

5.2. Annual statistics for trade in goods and services and for the ITAs represent the sum of the four quarters of the calendar year. The annual statistics for the IIP accounts represent the positions at yearend. BEA also provides annual statistics for services supplied by U.S. and foreign affiliates, resident-nonresident trade in services, and direct investment transactions and positions. These services and direct investment statistics are more detailed than those provided in the annual ITAs and IIP accounts.

5.3. Monthly, quarterly, and annual statistics from the international economic accounts are revised on a regular and published schedule. Revisions typically incorporate new and revised source data and periodically incorporate changes in definitions, classifications, and estimation methods. Revision cycles for the monthly goods and services, the ITAs, the IIP accounts, and annual statistics are described below.

5.4. **Monthly goods and services.** Preliminary statistics are released each month about 35 days after the end of the reference month. These statistics are revised the following month to incorporate new source data. No further revisions are made until more complete source data become available in March, June, September, and December. The releases in these four months contain revised statistics for the previous six months.

5.5. The releases in February and March also contain revisions for each month of the prior year so that the total of the seasonally adjusted months equals the annual totals. The release in June includes annual revisions, which reflect newly available and revised source data, changes in definitions and classifications, and changes in estimation methods.

5.6. **ITAs.** Preliminary quarterly ITA statistics are released in March, June, September, and December approximately 75 days after the end of the reference quarter. These statistics are revised the following quarter to incorporate new source data. Quarterly statistics are open for revision for at least the prior three years in annual revisions released in June. Preliminary annual statistics are released in March along with statistics for the fourth quarter of the previous year. These annual statistics are open for revision in subsequent annual revisions.

5.7. **IIP Accounts.** Preliminary quarterly IIP account statistics are released in March, June, September, and December approximately 85 days after the end of the reference quarter. These statistics are revised the following quarter to incorporate new source data. Quarterly statistics are open for revision for at least the prior three years in annual revisions released in June. Preliminary annual statistics are released in March reflecting positions at the end of the fourth quarter of the previous year. These annual statistics are revised in subsequent annual revisions.

5.8. **AMNE and other annual statistics.** Preliminary U.S. MNE financial and operating data and direct investment transactions and positions by country and by industry for the previous year are released in August or November and are revised once the following August or November. Preliminary statistics for services supplied by the foreign affiliates of U.S. MNEs and the U.S. affiliates of foreign MNEs for the year before the previous year are released in October and are revised once the following October.

5.9. Departures from the standard revision practices are made infrequently, with advance notice, and only for special circumstances. For example, for the third quarter of 2009, BEA revised the ITAs in December 2009 to include a new treatment of special drawing rights requested by the International Monetary Fund as part of efforts to monitor the impact of the global financial crisis. Under the standard procedures, revisions to quarterly statistics are not made until the following June, when annual revisions incorporate newly available and revised source data and all quarters of the current and previous years are open for revision.

5.10. Statistics are available from interactive tables on BEA's Web site, www.bea.gov. For the ITAs and the IIP accounts, electronic releases occur in March, June, September, and December. Statistics also appear in articles published in the January, April, July, and October issues of the *SURVEY OF CURRENT BUSINESS*, which is available on the BEA Web site. AMNE and supplemental direct investment statistics are released either in the August or November issues of the *SURVEY*.

Reliability of the statistics

5.11. Based on an analysis of revisions to the 1999–2011 quarterly ITA statistics, BEA's early estimates provide a consistent and accurate picture of economic activity between U.S. and foreign residents.¹ Early estimates closely track later estimates, particularly for key aggregates. Revisions are small relative to the statistics themselves or relative to quarter-to-quarter variability in the statistics. Revisions rarely change the direction of movement in the accounts.

5.12. Despite the strong overall performance of the ITA statistics, revisions of some components are larger than those of others. Among components with the

1. For details, see Daniel R. Yorgason and Sarah P. Scott, "An Analysis of Revisions to BEA's International Economic Accounts," *SURVEY OF CURRENT BUSINESS* 92 (November 2012): 76–102.

largest revisions are income receipts and payments, particularly those related to direct investment. Other specific findings of the revisions analysis study include:

- More than 95 percent of first estimates of the current-account balance show the same direction of change as third estimates. First estimates also correctly identify 95 percent of third-estimate turning points.
- The component that makes the largest contribution to quarter-to-quarter changes of major aggregates is the same for both first and third estimates in at least 75 percent of the estimates for each major aggregate.
- Revisions in the current account to quarterly estimates of exports of goods and services and to imports of goods and services are particularly small, at less than 1 percent of component value.
- The average revision to the current-account balance, relative to the sum of the credits and debits contributing to the balance, is less than one-half of 1 percent. For goods trade, whose sum of credits and debits constitutes approximately 60 percent of all credits and debits in the current account, the average revision of the balance is smaller still.
- The average revision to the current-account balance is less than 50 percent of the quarterly variability of the current-account balance.
- Revisions in the financial account are larger in dollar terms than those in the current account but are of similar magnitude relative to the quarterly variability of both of these accounts and of smaller magnitude relative to comparably scaled revisions in gross domestic product.

5.13. The range of revisions for components of the IIP accounts and AMNE statistics is similar, on a relative basis, to the range of ITA current-account revisions. AMNE statistics are available only annually and the IIP account statistics were available only annually at the time of the revision study.

PART II

Conceptual Framework

This part of the volume is a conceptual framework that provides descriptions of key concepts and principles that underlie the international economic accounts and that are critical for understanding and interpreting the statistics. Chapters 6–9 address the topics of economic territory and residence, institutional units and sectors, accounting principles, and classification of transactions and positions.

6. Economic Territory and Residence

7. Institutional Units and Sectors

8. Accounting Principles

9. Classification of Transactions and Positions

Economic Territory and Residence

6.1. Economic territory and residence are fundamental concepts for international economic accounts because, along with the concept of institutional unit described in chapter seven, they determine the scope of the economy for which the accounts are compiled. An economy consists of the institutional units that are resident in a specific economic territory. The degree to which institutional units are connected to a particular economic territory is largely determined by factors such as physical presence and the extent of control by the government. Most institutional units have strong connections with only one economy.

Economic territory

6.2. The most common concept of economic territory is the area controlled by a single government.

6.3. The economic territory includes the land area, airspace, territorial waters, islands belonging to the territory, and territorial enclaves in the rest of the world. Territorial enclaves are clearly identified land areas physically located in other territories and used by governments for diplomatic, military, scientific, or other purposes. Examples include embassies, consulates, military bases, and immigration offices. International organizations, such as the International Monetary Fund and the United Nations, are economic territories in their own right, and are not considered part of the economic territory in which they are physically located.

6.4. For purposes of the U.S. international economic accounts, the United States consists of the 50 states, the District of Columbia, Puerto Rico, the Virgin Islands and other territories and possessions, and U.S. foreign trade zones. The U.S. national economic accounts use a slightly different definition of the United States which excludes the territories and possessions. The territories and possessions are included in the international economic accounts because they have a closer degree of economic association with the United States than with any other country. Alternatively, this could also be described by pointing out that the United States is the predominant **center of economic interest** for these territories and possessions.

6.5. U.S. government military, diplomatic, consular, and other nonmilitary installations abroad are considered to be part of the U.S. economy, and their operations are regarded as an extension of U.S. government domestic operations.

Residence

6.6. Residence is another fundamental concept for the international economic accounts because its application, in terms of the location of institutional units, determines whether transactions and related economic activities are within the scope of the international economic accounts. Each institutional unit's residence is the economic territory with which it has the strongest connection, expressed as its center of predominant economic interest. Each institutional unit is a resident of one and only one economic territory.

6.7. An institutional unit is resident in an economic territory when it engages—or intends to engage over a long period—in economic activities from some specific location in that territory. It is not necessary for the location to be fixed as long as it remains within the economic territory. In practice, actual or intended location for one year or more is used as the criterion for establishing residency in order to avoid uncertainty and to promote cross-country consistency.

6.8. For the U.S. international economic accounts, a U.S. resident is defined to include (1) individuals who reside or intend to reside in the United States for more than one year, (2) business enterprises and nonprofit organizations established under U.S. laws, including corporations, partnerships, and proprietorships; and (3) U.S. federal, state, and local governments, together with their subdivisions. Residency criteria for each of these three groups are described below. Also discussed below are the residency of international organizations and the determination of partner country classifications.

Individuals

6.9. Individuals who reside or intend to reside in the United States for one year or more are considered U.S. residents. The residence of an individual is determined by the economic territory in which their household members maintain or intend to maintain their principal dwelling. All members of the same household have the same residence as the household itself. Exceptions are made for students who study abroad and for persons who travel for medical treatment. Students retain the residency of their home country regardless of their length of stay. Medical patients, like students, retain the residency of their home country regardless of their length of stay for treatment.

6.10. U.S. government employees stationed abroad (and their families) such as diplomats, consular officials, and members of the armed forces are treated as U.S. residents, regardless of their length of stay abroad. Border workers, seasonal workers, and other short-term workers are considered residents of the country of their principal dwelling, rather than the country of their employment. Refugees are considered as residents of their country of refuge, rather than their home country, if they have stayed or intend to stay for one year or more. Crews of ships, aircraft, oil rigs, space stations, and other similar equipment that operate outside a territory or across several territories are treated as residents of their home country.

6.11. International organization staff, including those with diplomatic status, are treated as residents of the territory of their principal dwelling. The treatment of international organization staff differs from that for national diplomats and other government officials mentioned previously because the latter continue to be paid from and directed by their home government.

Business enterprises and nonprofit institutions

6.12. Business enterprises and nonprofit institutions serving households (NPISHs) are treated as residents of the country in which they are located, operated, organized, or incorporated. U.S. resident entities consist of all for-profit and nonprofit institutions established under U.S. laws; their foreign affiliates—subsidiaries, branches, partnerships, and sole proprietorships—are considered residents of the countries in which they are located. Similarly, all affiliates—subsidiaries, branches, partnerships, and sole proprietorships—of foreign for-profit and nonprofit institutions that operate in the United States are considered U.S. residents.

6.13. A branch is an unincorporated business affiliate established in a foreign country to conduct the business of the parent company in the parent's name; it is not a separate legal entity. A foreign subsidiary is a business affiliate established and incorporated in a foreign country under local laws; it is a separate legal entity from the parent company. Affiliates of multinational enterprises (MNEs) are treated as residents of the country in which they are located, not as residents of the country of the parent; thus, U.S. affiliates of foreign corporations are considered U.S. residents, and foreign affiliates of U.S. corporations are considered foreign residents.

General government

6.14. General government—including Federal, state, and local governments—and their agencies and subdivisions, operating at home and abroad, are treated as residents of their home country. Thus, U.S. government installations abroad are considered residents of the United States, and foreign government installations located in the United States are considered as residents of their home country. This treatment is adopted because such units usually have some degree of immunity from the host country's laws and, under international law, are deemed to be extensions of the home government's territory.

International organizations

6.15. International organizations, such as the International Monetary Fund and the United Nations, are treated as residents of an international area of their own beyond national boundaries, rather than as residents of the country in which they are located or in which they operate. ITA transactions include, for example, the administrative expenses of these organizations in the United States and the compensation paid to U.S. resident employees by these organizations.

Partner country classifications

6.16. International economic accounts show transactions and positions with all nonresidents as a single total, but considerable interest exists for data on transactions and positions with nonresidents classified by individual **partner country** or groups of countries. Such breakdowns may be provided for the accounts as a whole, or for particular components, such as goods, services, direct investment, portfolio investment, or sales and employment of MNEs and affiliates. Partner country data allow bilateral comparisons and assist in identifying compilation problems. The U.S. international economic accounts provide extensive bilateral (partner country) statistics for the International Transactions Accounts (ITAs) and for AMNE statistics, but only for the direct investment component of the International Investment Position (IIP) Accounts. (More detailed information on U.S. bilateral statistics is provided in chapter 15.)

6.17. The basic principle for attribution by partner country is the economy of residence of the counterparty to the transaction or position. The same principles for determining residence apply but they are often more difficult for partner country attribution because the information is not always known to the resident counterparty. For ITA transactions the partner attribution for the United States is based on the location of the parties to the transaction (transactor approach). For the IIP accounts, U.S. asset positions are attributed to the country of residence of the issuer and U.S. liability positions are attributed to the country of residence of the holder (debtor/creditor approach). In practice, such attributions are sometimes made to the country of residence of the transactor, such as a financial institution located in an international financial center, because the residence of the holder is not known. Inward AMNE statistics for U.S. affiliates are attributed to the country of residence of the ultimate beneficial owner, and outward AMNE statistics for foreign affiliates of U.S. MNEs are attributed to the country where the affiliate is located.

Institutional Units and Sectors

7.1. Institutional units are entities that engage in transactions and other economic activities in an economic territory and that form the foundation for economic statistics compiled in national and international economic accounts. These units are characterized by having the right to own goods or assets and to exchange their ownership, the ability to make economic decisions and engage in economic transactions, the ability to incur liabilities on their own behalf and to enter into contracts, and the existence of a complete set of financial accounts or the capacity to construct such accounts as needed. Such units are grouped into sectors for the U.S. international economic accounts.

Institutional units

7.2. The two principal types of entities that qualify as **institutional units** are households and institutions. Households consist of persons or groups of persons who share the same living accommodation, pool some of their income and wealth, and consume certain goods and services collectively. Households include persons living in institutional arrangements such as retirement homes. Institutions include legally incorporated business enterprises but also entities such as cooperatives, limited liability partnerships, notional resident units, unincorporated business enterprises, government units, and nonprofit institutions.

7.3. An enterprise is an institutional unit engaged in production and may be a corporation, a nonprofit institution, or an unincorporated enterprise. A notional resident unit is a type of U.S. enterprise created for statistical purposes to hold land owned by foreign residents. A wholly owned subsidiary corporation can be recognized as an institutional unit separate from its parent. Enterprises also include investment funds and other institutions and trusts that hold assets and liabilities on behalf of owners. A branch is a nonresident unit with substantial operations over a significant period in an economic territory but with no separate legal entity for those operations. Each branch is a direct investment enterprise.

7.4. BEA has adopted two basic changes to the names of institutional units recommended in BPM6. First, the BPM6 term “corporations” is replaced with the term “institutions” in order to include enterprises such as partnerships that belong in this category but that are not organized as publicly held corporations. This departure from BPM6 was made to clarify the concept for data users and survey respondents in the United States. The term “quasi-corporation” is also replaced by its definition, which is “unincorporated business enterprise.” Second, because little source data are available for the international transactions of households and nonprofit institutions serving households (NPISHs), BEA uses the label “non-financial institutions” without reference to households and NPISHs.

Institutional sectors

7.5. Institutional units that have similar economic objectives and behavior are grouped into **institutional sectors**. While an institutional sector classification could apply to both resident units and counterpart nonresident units, BEA applies it only to resident units. The institutional sector classification system recommended in BPM6 closely follows that found in the 2008 System of National Accounts. For the U.S. international economic accounts, sectors are recognized for financial asset and liability transactions in the financial account of the International Transactions Accounts (ITAs) and for positions in the International Investment Position (IIP) Accounts. For the IIP accounts, assets are classified by sector of the U.S. holder and liabilities are classified by sector of the U.S. issuer. Sector classifications for related ITA transactions follow the same principles. Sectors are not recognized for AMNE statistics although those statistics are classified by industry.

7.6. BEA's presentation uses sectors adapted from the BPM6 guidelines primarily to provide additional detail on portfolio investment and other investment. BPM6 defines four main sectors—central bank, deposit-taking corporations except the central bank, general government, and “other sectors,” which includes the two subsectors “other financial corporations” and “nonfinancial corporations, households, and NPISHs.” BEA has eliminated the summary category “other sectors” and presents the two subsectors in its place. Due to source data limitations, BEA's sector classifications comprise central bank, deposit-taking institutions except central bank, other financial institutions, nonfinancial institutions except general government, and general government. Each of these sectors is described below.

7.7. **Central bank** is the financial institution that exercises control over key aspects of the financial system. In the United States the central bank is part of the Federal Reserve System. The central bank conducts activities such as issuing currency, managing international reserves, transacting with the International Monetary Fund, and providing credit to deposit-taking institutions.

7.8. **Deposit-taking institutions except central bank** are business enterprises that engage in financial intermediation as their principal activity. As a result, they have liabilities in the form either of deposits or financial instruments that are close substitutes for deposits. These enterprises include commercial banks, savings banks, savings and loan associations, credit unions, cooperative credit banks, and other specialized financial institutions that take deposits.

7.9. **Other financial institutions** consist of all business enterprises other than deposit-taking institutions that are principally engaged in providing financial services to other institutional units. Such services include financial intermediation, financial risk management, liquidity transformation, and auxiliary financial services such as securities brokerage. Other financial institutions include money market funds (MMFs), non-MMF investment funds, insurance enterprises, pension funds, and other financial intermediaries such as those engaged in the securitization of assets, financial leasing, and commercial and personal lending.

7.10. **Nonfinancial institutions except general government** include business enterprises whose principal activity is the production of market goods or nonfinancial services, households, and NPISHs. The business enterprises include corporations, branches of nonresident enterprises, unincorporated business enterprises, notional resident units owning land, and nonprofit institutions that are market producers of goods or nonfinancial services. As described above, households consist of a group of persons who share the same living accommodation. NPISHs are entities engaged in providing goods and services to households or the community at large free of charge or at prices that are not economically significant, and that are not controlled and financed by government units.

7.11. **General government** units are legal entities established by political processes and that have legislative, judicial, or executive authority over other institutional units within a given area. The principal functions of government are to provide goods and services to the community or individual households and to finance their provision; to redistribute income and wealth by means of transfers; and to engage in nonmarket production. In the United States, many separate government units exist at different levels, including federal, state, and local government.

Accounting Principles

8.1. The previous chapters in Part II described the concepts of economic territory and residence and institutional units and sectors. This chapter discusses the accounting principles underlying the recording of entries in the international economic accounts that are designed to ensure a complete integration of flows and positions along with symmetric counterparty recording. This chapter first describes the characteristics of flows and positions, then explains the double-entry recording system, and follows with explanations of general accounting principles such as time of recording, valuation, and gross vs. net recording of values. These principles apply primarily to the International Transactions Accounts (ITAs) and the International Investment Position (IIP) Accounts. Accounting principles for Activities of Multinational Enterprises (AMNE) statistics follow U.S. generally accepted accounting principles.

Flows and positions

8.2. **Flows** refer to economic activities and events that occur within an accounting period and positions refer to a level of assets or liabilities at a point in time. Cross-border flows are recorded in the ITAs as transactions and as changes in financial assets and liabilities (other flows). Flows and **positions** are integrated so that all changes in positions between two points in time are fully explained by the recorded flows. The ITAs consist of transactions and exclude other changes in the volume, value, or classification of assets and liabilities. The IIP accounts consist of positions and, for annual statistics, changes in positions, including transactions and changes in the volume, value, and classification of assets and liabilities. AMNE statistics consist of both flows and positions.

8.3. A **transaction** is an exchange or transfer of value between two institutional units that occurs by mutual agreement or by law. Transactions are classified according to the nature of the economic value provided—namely, goods or services, primary income, secondary income, capital transfers, nonproduced non-financial assets, financial assets, or liabilities. With an exchange of value, a transaction consists of two economic flows, one in each direction—for example, goods supplied by one party in return for currency supplied by the other. Transfers represent transactions in which economic value is acquired or provided without a corresponding return of economic value (*quid pro quo*).

8.4. Other flows are changes in the volume, value, or classification of an asset or liability not arising from a resident-nonresident transaction. These flows capture changes in the values of assets and liabilities between opening and closing positions that are not due to transactions. Other flows consist of two broad types of changes: (a) other changes in the volume of assets and liabilities, which reflect the entry of new and the exit of existing assets and liabilities from balance sheets

that are not due to transactions and (b) revaluations (holding gains and losses) on an asset or liability that arise from changes in their prices or exchange rates. In the international economic accounts, revaluations are further classified into those due to exchange rate changes and those due to other price changes.

8.5. Positions refer to the level of financial assets or liabilities at a point in time and typically are shown at the beginning and end of an accounting period. Positions between two periods are connected with flows during that period because changes in positions are caused by transactions and other flows. The IIP accounts include financial assets and liabilities that have an international dimension. All financial claims and financial liabilities each involve two parties and have an international dimension when the counterparty is a nonresident institutional unit. AMNE statistics include positions from balance sheet statistics.

Double-entry principle

8.6. The ITAs are based on a **double-entry system of accounting**. The main characteristic of double-entry accounting is that each transaction leads to two corresponding entries—a credit entry and a debit entry—in the accounts of the transactors. The international economic accounts for an economy are compiled on a double-entry basis from the perspective of the residents of that economy.

8.7. In the current and capital accounts, a credit denotes entries from exports, primary income receipts, secondary income (transfers) receipts, and disposals of nonproduced nonfinancial assets. A debit is used to record entries for imports, primary income payments, secondary income (transfers) payments, and acquisitions of nonproduced nonfinancial assets.

8.8. In the case of transactions in financial assets and liabilities, the terms “net acquisition of financial assets” and “net incurrence of liabilities” are used. Financial account items are recorded on a net basis separately for each financial asset and liability (i.e., they reflect changes due to all credit and debit entries during an accounting period). The use of the terms “net acquisition of financial assets” and “net incurrence of liabilities” highlights the impact of the financial account on the international investment position. The use of these terms also simplifies the interpretation of data. A positive change indicates an increase in assets or liabilities and a negative change indicates a decrease in assets or liabilities.

8.9. The interpretation of increase or decrease under the credit or debit notion, however, depends on whether the increase or decrease refers to assets or liabilities (a debit for an asset is an increase; a debit for a liability is a decrease). Although the debit and credit presentation is not emphasized for the financial account transactions, it is important to recognize and maintain the accounting identities. For example, a credit is always conceptually matched with a corresponding debit, the latter relating to either an increase in an asset or a reduction in a liability.

8.10. Each credit entry requires an equal and offsetting debit entry, and vice versa. For example, if a foreign resident purchases a U.S. good with a payment from its U.S. bank account, the offset to the credit entry for U.S. goods exports

would be a debit entry for U.S. incurrence of liabilities abroad by U.S. deposit-taking institutions, reflecting the reduction in U.S. bank deposit liabilities to foreign residents. Similarly, a debit entry for a donation of emergency supplies by a U.S. resident to a foreign resident (transfer payment) is offset by a credit entry for U.S. goods exports.

Time of recording and change in ownership

8.11. International guidelines recommend use of the **accrual basis** for determining the time of recording of flows for the ITAs and AMNE statistics. Entries for transactions in goods, nonproduced nonfinancial assets, and financial assets are made at the time economic ownership changes. **Economic ownership**, which may differ from legal ownership, accrues to the party that bears the risks and enjoys the rewards of ownership. For services, transactions are recorded when the services are performed or provided rather than when payments are made. For income, transactions are recorded in the period in which the amounts payable accrue, not when the income is paid or received. Entries for sales, payroll, and other AMNE flow statistics are recorded in a similar manner.

8.12. The accrual basis, which matches the time of recording with the timing of the events giving rise to the flows, provides the most comprehensive accounting because all flows are recorded, including nonmonetary transactions, imputed transactions, and other flows. Such a comprehensive recording ensures the integration of flows and changes in balance sheets, and consistency among ITA, IIP, and AMNE statistics. The accrual basis is consistent with the way transactions, other flows, and key aggregates are defined, and it corresponds closely to U.S. business accounting practices.

8.13. The accrual basis specifies that transactions are to be recorded when a change of ownership occurs in real or financial assets. Generally, economic ownership changes when real and financial assets are purchased or sold, and the time of recording these transactions is when the purchases or sales are entered on the books of the business entities, regardless of when payment was due or actually made. This change in ownership principle is the same as that employed throughout the U.S. national economic accounts.

8.14. The concept of economic ownership refers to the ownership of assets and all of the risks and rewards of ownership. The risks include the potential losses caused by damage, theft, or holding losses; by management, transfer, or maintenance costs that are greater than anticipated; and, in the case of financial assets, by default of the counterparty. The rewards generally refer to the ability to use assets in production, such as buildings or machinery; the generation of services, such as renting produced assets to another entity; the generation of property income, such as interest and dividends received by owners of financial assets; and the potential to sell and thus realize holding gains.

8.15. Economic ownership is often the same as legal ownership and changes in legal ownership are often used as evidence that a change in economic ownership has occurred. However, evidence that legal ownership has changed is sometimes not available in a timely fashion and occasionally differs from the concept

of risk and rewards of economic ownership. In such cases, pragmatic applications are employed to gauge the appropriate time of recording of transactions.

Valuation

8.16. In principle, whenever feasible the U.S. international economic accounts use market prices as the basis for valuation. **Market prices** are the amounts that willing buyers pay to acquire something from willing sellers. The exchanges are made between independent parties on the basis of commercial considerations only—sometimes called “at arm’s length.” Market price is the price payable by the buyer after taking into account any rebates, refunds, and adjustments from the seller. Imports and exports of general merchandise are recorded at “free on board” values, which take into account export taxes payable or tax rebates receivable. Most statistics from the international economic accounts are recorded at market prices.

8.17. Transactions in financial assets and liabilities are recorded exclusive of any commissions, fees, and taxes whether charged explicitly, included in the purchaser’s price, or deducted from the seller’s proceeds. Both debtors and creditors presumably record the same amount for the transaction in the same financial instrument. The commissions, fees, and taxes are recorded separately from the transaction under appropriate categories. The valuation of transactions in financial instruments, which excludes commission charges (recorded as transactions in services), differs from the valuation of nonfinancial asset transactions, which includes any costs of ownership transfer unless paid separately.

8.18. **Transfer pricing** refers to the valuation of transactions between affiliated enterprises. In the U.S. international economic accounts, these transactions are described as intrafirm trade. In some cases, transfer pricing may be motivated by income allocation or equity buildups or withdrawals. In principle, replacing book values (transfer prices) with market-equivalent values is desirable when the distortions are large and when availability of data makes it feasible to do so. However, in practice the United States lacks the source data needed to identify transfer prices and adjust these to market values.

8.19. In general, positions of financial assets and liabilities are valued at market prices. Values are assigned as though the instruments were acquired in market transactions on the balance sheet reporting date. Loan positions and positions on deposits and accounts receivable/payable are recorded at nominal value. Nominal value refers to the outstanding amount owed, which consists of the outstanding principal amount including accrued interest. Use of nominal values for loans and deposits reflects pragmatic concerns about data availability and the need for symmetry between debtors and creditors. BEA applies these principles to the valuation of the IIP accounts for each functional category, subject to limitations imposed by data availability.

8.20. Direct investment positions are valued at market prices, which is BEA’s featured measure, at **current cost** and at **historical cost**. AMNE balance sheet statistics are valued at historical cost. Historical cost largely reflects prices at the time the asset was acquired and is the valuation method used for positions reported on BEA’s direct investment surveys. BEA’s market value statistics are de-

rived by revaluing the historical cost values of the equity portion of direct investment using indexes of stock market prices. Historical cost valuations are used for direct investment position statistics classified by country and by industry.

Gross and net recording

8.21. Transactions in the current account and capital account of the ITAs are recorded on a gross basis in order to present a complete picture of the two-way flow of trade and the exchange of nonproduced nonfinancial assets. Transactions in the financial account, however, are presented on a net basis for net U.S. acquisition of assets and for net U.S. incurrence of liabilities. For example, if the United States both exported and imported automobiles in a given period, the exports and the imports would be separately recorded. If, in contrast, U.S. residents both sold and purchased foreign securities in a given period, only the net sales or purchases would be recorded. As a result, financial account entries can have a negative sign depending on the magnitudes of cross-border gross outflows and inflows.

8.22. Except in certain circumstances, financial asset flows are not netted against financial asset liabilities. For the United States, an exception is the treatment of financial derivatives, which are presented on a net basis as assets less liabilities. AMNE statistics are recorded on a gross basis, except for value added, which is a net measure of production.

8.23. Transactions and other flows in financial assets and liabilities are recorded as net changes in financial assets and net changes in liabilities, respectively. The net recording principle is applied at the lowest level of classification of financial instruments taking into account the functional, institutional sector, maturity, and currency classifications, as applicable. Generally, the net recording principle is applied within a given standard component of assets or liabilities.

8.24. Positions of financial assets and liabilities are recorded on a gross basis. Positions of the same type of financial instrument held as both a financial asset and a liability are presented gross, so that assets are recorded under assets and liabilities are recorded under liabilities. For example, a claim from short-term debt securities held as an asset is presented separately from a liability for short-term debt securities.

Classification of Transactions and Positions

9.1. The international economic accounts disaggregate and classify resident-nonresident transactions and positions in various ways to provide greater insight into their economic significance and to present the statistics in the broader context of integrated economic accounts. Classifications are used to group similar components and to separate components with different characteristics. This chapter describes important classifications of transactions that distinguish activities in the current and capital accounts, the key characteristics of financial assets and liabilities and related classifications, and the functional categories that are used to classify positions, income flows, and financial account transactions. Some of these classifications also apply to BEA's statistics on the Activities of Multinational Enterprises (AMNE).

Current and capital accounts

9.2. The current account of the International Transactions Accounts (ITAs) consists of resident-nonresident transactions in produced assets, primary income, and secondary income (current transfers). The capital account of the ITAs consists of resident-nonresident transactions in nonproduced nonfinancial assets and capital transfers. Major current account classifications include goods vs. services and primary income vs. secondary income (current transfers). Distinctions between goods and services, between current and capital transfers, and between primary income and services are not always straightforward. This section discusses important cross-cutting classification issues that affect the current and capital accounts.

Goods vs. services

9.3. In economic accounts, goods and services are the two major categories of outputs of productive activities. Goods are physical items with ownership rights that can be exchanged among institutional units through transactions. The production of a good can be separated from its subsequent sale or resale. Services are the result of activities that change the condition of the consumer or that facilitate the exchange of products and financial assets. In general, ownership rights cannot be established for services and they cannot be separated from their production. Exceptions occur for some intellectual property products, such as computer software and audio-video recordings, that can be traded separately from their production.

9.4. In the ITAs, the valuation of goods includes transport services within the exporting economy as well as wholesale and retail services embedded in the price of the goods. Cross-border transport and insurance services for goods are included in services. Certain services include the value of goods, such as travel,

construction, and government goods and services n.i.e. Moreover, some services, particularly manufacturing services, repairs, and freight transport, are closely related to the production or transport of new and used goods.

Primary income vs. services

9.5. Primary income includes both investment income such as interest, dividends, and reinvested earnings and compensation of employees. An important issue for distinguishing compensation of employees from services trade is the existence of an employer-employee relationship between a resident and nonresident. Provision of certain types of services may pose classification problems because firms may choose to purchase a service, such as legal services, from a self-employed person or may hire an employee to provide the service. If an employer-employee relationship exists between the worker and the producing entity, the payment represents compensation of employees. If an employer-employee relationship does not exist, the payment constitutes a purchase of services.

9.6. Another cross-cutting issue regarding classifications between primary income and services concerns dividends paid by the affiliates of multinational enterprises (MNEs) to their parents. In some cases, parents provide management and administrative services to their affiliates without an explicit charge and account for these services as revenue for the parent and an expense for the affiliate. If these types of intra-firm services transactions are not recognized for accounting purposes, then the measured flow of dividends between the parent and the affiliate would be affected. These distinctions are important for proper measurement of both the international and national economic accounts.

9.7. Disproportionately large values of services between affiliated enterprises, for example large fluctuations that do not reflect actual changes in the services provided, may indicate the existence of disguised dividends. Financial reporting and income tax minimization strategies may provide incentives for firms to characterize unpriced services transactions between affiliated enterprises as business expense rather than as dividends.

Current vs. capital transfers

9.8. Secondary income in the current account consists of current transfers between residents and nonresidents. The capital account includes capital transfers along with transactions in nonproduced nonfinancial assets. Unlike an exchange, a transfer is a transaction that provides a good, service, or asset to another institutional unit without a corresponding return of economic value (*quid pro quo*). Capital transfers represent change in ownership of an asset between parties. Current transfers include items such as personal remittances, government grants, cross-border fines and penalties, and institutional remittances. Capital transfers include debt forgiveness, non-life insurance payments resulting from catastrophic events, and investment grants.

9.9. Current transfers directly affect the level of disposable income and savings and influence the consumption of goods or services. That is, current transfers reduce income and consumption possibilities of the donor country and increase income and consumption possibilities of the recipient country. As a result, current transfers are closely related to the goods, services, and financial assets exchanged and are included in the current account.

9.10. Entries for current transfers offset transactions with nonresidents that involve real resources or financial assets recorded in the goods, services, income, or financial accounts. Because a transfer is the counter entry to an actual resource flow, the value of the transfer equals the value of the corresponding flow. In general, transfers are recorded at the time of delivery of goods, performance of services, or disbursement of cash. The valuation of noncash transfers generally corresponds to the value of the goods or services for which they are offsets.

Financial assets and liabilities

9.11. **Financial assets** are a type of economic asset identified in economic accounts. Economic assets are resources over which ownership rights are enforced and from which future economic benefits may flow to the owner. They include fixed assets, such as equipment and outcomes of research and development, that are used repeatedly or continuously in production over more than one year. Economic assets also include inventories, valuables, nonproduced assets, and financial assets. Aggregate economic accounts usually distinguish produced and nonproduced assets among the universe of economic assets. In the international economic accounts, transactions in produced assets are recorded in the current account, nonproduced nonfinancial assets in the capital account, and financial assets and liabilities in the financial account.

9.12. **Financial instruments**, which consist of the full range of financial contracts between institutional units, may give rise to financial claims. A claim is a financial instrument that leads to an economic asset with a counterpart liability. Claims arise from contractual relationships under which one institutional unit promises to provide funds or other resources to another in the future. The only financial instrument that does not give rise to a claim is gold bullion, which is included in monetary gold.

9.13. Each claim is a financial asset that has a corresponding liability. The existence of two parties to a claim implies that it can arise in a cross-border situation. Nonfinancial assets do not have a corresponding liability. Financial assets, which consist of claims and the gold bullion component of monetary gold, include equity and investment fund shares, debt instruments, financial derivatives other than reserve assets, and monetary gold.

Classification by type of instrument

9.14. Three broad categories of financial assets and liabilities are identified for the U.S. international economic accounts: (1) equity and investment fund shares, (2) debt instruments, and (3) other financial assets and liabilities. More detailed classifications of financial assets and liabilities are also provided that are based primarily on the legal characteristics of the relationship between the involved parties. The classification system provides broad categories that allow for international comparability and the inclusion of new instruments arising from financial innovation. BEA's financial instrument detail closely follows but does not exactly match the detail recommended by BPM6. Departures from BPM6 guidelines are described below.

Equity and investment fund shares

9.15. Equity and investment fund shares have the distinguishing feature that the holders own a residual claim on the assets of the institutional unit that issued the instrument. Equity represents the owners' funds in the institutional unit and is treated as a liability of the issuing institutional unit. In contrast to debt, equity generally does not provide the owner with a right to a predetermined amount or an amount determined by a fixed formula. Investment fund shares have a specialized role in financial intermediation as a type of collective investment in other assets. Investment funds include money market funds (MMF) and non-MMF investment funds. Equity securities excluding investment fund shares include common stocks, preferred stocks, restricted stocks, and depository receipts. Investment fund shares include shares in money market, equity, and bond mutual funds, real estate investment trusts, index-linked equity unit investment trusts, and limited partnership interests.

Debt instruments

9.16. Debt instruments require the payment of principal and/or interest at some future point. Debt instruments consist of IMF special drawing rights (SDRs), currency and deposits, debt securities, loans, insurance technical reserves, pension and related entitlements, provision for calls under standardized guarantees, and other accounts receivable/payable. The term debt instrument applies to both the liability and the corresponding claim. Some instruments, such as currency and certain deposits, pay no interest. Debt securities are negotiable instruments that include asset-backed securities, collateralized debt obligations, and collateralized mortgage obligations.

9.17. Debt instruments differ from equity and investment fund shares in the nature of the liability and risk. While equity provides a residual claim on the assets of the entity, a debt instrument involves an obligation to pay an amount of principal and/or interest, usually according to a predefined formula. As a result, the creditor usually has a more limited risk exposure than with equity. In contrast, the return on equity largely depends on the economic performance of the issuer. Unlike financial derivatives, debt instruments have a principal amount typically associated with the supply of financial or other resources.

9.18. The U.S. international economic accounts include detailed statistics for a variety of debt instruments in portfolio investment, other investment, and reserve assets in the ITAs and in the International Investment Position (IIP) Accounts. Below are descriptions for each of the published types of debt instrument.

9.19. ***Debt securities.*** Debt securities are negotiable instruments serving as evidence of a debt. They include bills, bonds, notes, negotiable certificates of deposit, commercial paper, debentures, asset-backed securities, money market instruments, and similar instruments traded in financial markets.

9.20. Debt securities include corporate bonds and notes both in registered and in bearer form, convertible debt, zero coupon debt, index-linked debt securities, medium term notes, note issuance facilities, floating rate notes, asset-backed securities, sovereign debt of foreign governments and their political subdivisions, and debt issued by international and regional financial institutions.

Debt securities also include U.S. Treasury securities, Federally-sponsored agency securities, and securities issued by state and local governments.

9.21. Asset-backed securities include collateralized mortgage obligations, collateralized bond obligations, collateralized loan obligations, collateralized debt obligations, other securities backed by pools of mortgages, credit card receivables, automobile loans, consumer and personal loans, and commercial and industrial loans.

9.22. **Currency and deposits.** Currency consists of notes and coins with fixed nominal values and that are issued or authorized by central banks or governments. Deposits include all claims on deposit-taking institutional units that are represented by evidence of deposit. The nominal value of deposits is usually fixed in the currency of denomination.

9.23. **Loans.** Loans are financial assets that are established when a creditor lends funds directly to a debtor and that are evidenced by documents that are not negotiable. This category includes installment loans, hire-purchase loans, and trade credit finance. Loans also include securities repurchase agreements and financial leases. Financial leases are contracts under which the lessor of an asset conveys substantially all the risks and rewards of ownership to the lessee. This is equivalent to a loan from the lessor to the lessee.

9.24. Some types of debt instruments may be classified as deposits or as loans. BPM6 recommends that “interbank positions” (transactions between U.S. banks and foreign banks) be classified as deposits. Because the Treasury International Capital source data used by BEA provide a breakdown of interbank positions between loans and deposits, BEA provides “interbank transactions” as a subset of transactions by deposit-taking institutions except central bank for both other investment assets and liabilities. These interbank transactions may include deposits or loans.

9.25. Securities repurchase agreements, which are a widely used type of financial instrument in the U.S. economy, may also be classified as deposits or as loans. BEA follows the BPM6 recommendation that the supply and receipt of funds under a securities repurchase agreement is generally a loan, but this activity is classified as a deposit if it involves liabilities of a deposit-taking institution and is included in national measures of broad money.

9.26. **Insurance technical reserves.** These reserves consist of reserves for unearned nonlife insurance premiums due to prepayment of premiums and reserves against outstanding nonlife insurance claims, which are amounts identified by insurance companies to cover expected payouts from actual events for which claims have not been settled. Insurance technical reserves arise for both nonlife direct insurance and reinsurance.

9.27. **Trade credit and advances.** Trade credit and advances consist of credit extended directly by the suppliers of goods and services to their customers and advances for work in progress and prepayment by customers for goods and services not yet provided. Trade credit and advances arise when payment for goods

and services is not made at the same time as the change in ownership of the good or provision of a service.

9.28. *Special drawing rights.* Special drawing rights (SDRs) are international reserve assets created by the International Monetary Fund (IMF) and allocated to members to supplement existing official reserves. SDR holdings represent unconditional rights to obtain foreign exchange or other reserve assets from other IMF members.

9.29. *Reserve position in the IMF.* A country's reserve position in the IMF equals the sum of the reserve tranche plus any indebtedness of the IMF in the General Resources Account that is readily available to the member country. The reserve tranche represents the member's unconditional drawing right on the IMF.

Other financial assets and liabilities

9.30. For the U.S. international economic accounts, other financial assets and liabilities include (1) financial derivatives other than reserves and (2) monetary gold

9.31. **Financial derivatives other than reserves.** In BPM6, this item is defined as financial derivatives and employee stock options. Financial derivatives and employee stock options have similar features in that both transfer risk, but employee stock options are also designed to be a form of compensation. However, BEA is not able at this time to estimate cross-border transactions in employee stock options. A financial derivative contract is a financial instrument that is linked to another specific financial instrument, indicator, or commodity, and through which specific financial risks can be traded in financial markets. Transactions and positions in financial derivatives are treated separately from the values of underlying linked items.

9.32. **Monetary gold.** Monetary gold is gold for which the monetary authorities have title and is held as reserve assets. Gold includes gold bullion and unallocated gold accounts with nonresidents. All monetary gold is included in reserve assets or is held by international financial organizations. In contrast to monetary gold, which is a financial asset, nonmonetary physical gold is classified as a good. Monetary gold is treated differently because of its role as a means of international payments and store of value for use in reserve assets.

Classifications by maturity, currency, and sector

9.33. The **maturity** of a debt instrument is classified as either short-term or long-term. Short-term is defined as payable on demand or with a maturity of one year or less. Long-term is defined as having a maturity of more than one year or with no stated maturity (other than on demand, which is included in short-term). This classification provides information on the liquidity dimensions of debt. Currency is included in short term maturity. Maturity may relate to original maturity or remaining maturity.

9.34. A financial asset or liability can also be classified as domestic currency or foreign currency, depending on its unit of account, denomination, or settlement. The currency of denomination is determined by the currency in which the value

of the positions is fixed as specified in the contract between the parties. The currency of settlement may differ from the currency of denomination and its use means that a currency conversion is required each time a settlement occurs.

9.35. Classification of financial assets and liabilities by **sector** can provide useful insights into how financial transactions and positions are distributed across the U.S. economy. For the U.S. international economic accounts, sectors include central bank, deposit-taking institutions except central bank, other financial institutions, nonfinancial institutions except general government (including households and nonprofit institutions), and general government. Financial assets are classified by the sector of the U.S. holder and financial liabilities are classified by the sector of the U.S. issuer. Classifications by sector and by type of instrument provide even further insight into the distribution of asset and liability positions in the U.S. economy. (See chapter seven for more detailed information about institutional sectors.)

Functional categories

9.36. In the U.S. international economic accounts, **functional categories** are the primary classification used for financial transactions, positions, and income. Five functional categories of investment are identified in the accounts: direct investment, portfolio investment, other investment, reserves, and financial derivatives other than reserves.

9.37. While the functional categories are based on the classification of financial assets and liabilities discussed above, they also take into account aspects of the relationship between the transactors and the motivation for the investment. The functional categories are designed to facilitate analysis by distinguishing categories that demonstrate different motivations and behavior patterns. For example, a loan can appear under direct investment or other investment, but the different nature of the relationship between the parties is important because the risks and motivations underlying the transaction may be different. A different relationship exists between the counterparties for portfolio investors vs. direct investors.

9.38. Direct investment is related to control or a significant degree of influence and is usually associated with a lasting relationship. In contrast, portfolio investors typically have a much smaller role in the operations of the enterprise, with potentially important implications for future flows and for the volatility of the price and volume of positions.

9.39. Portfolio investment differs from other functional categories because it provides a direct way for investors to access financial markets and thus can provide liquidity and flexibility. It is associated with financial markets and with their specialized service providers, such as exchanges, dealers, and regulators.

9.40. Other investment is a residual category that includes positions and transactions other than those included in direct investment, portfolio investment, reserve assets, and financial derivatives other than reserves. Other investment includes the large volume of international transactions intermediated by large bank and nonbank financial intermediaries through loans and deposits.

9.41. Reserve assets are shown separately because they serve a different function and thus are managed in different ways from other assets. Reserve assets include a range of instruments that are shown under other categories when they are not owned by monetary authorities. As reserve assets, however, they have the distinct purpose to meet balance of payments financing needs and to undertake market intervention to influence the exchange rate.

9.42. The nature of financial derivatives other than reserves as instruments through which risk is traded in its own right in financial markets sets them apart from other types of investment. While other instruments may also have risk transfer elements, these other instruments also provide financial or other resources.

Direct investment

9.43. Direct investment is a category of cross-border investment in which a resident in one economy has control or a significant degree of influence on the management of an enterprise resident in another economy. In addition to the equity that leads to control or influence, direct investment also includes investment associated with that relationship, including investment in indirectly influenced or controlled enterprises, investment in fellow enterprises, most debt, and reverse investment.

9.44. The OECD's Framework for Direct Investment Relationships provides criteria for determining whether cross-border ownership results in a direct investment relationship based on control and influence. Control or influence may be achieved directly by owning equity that gives voting power in the enterprise, or indirectly by having voting power in another enterprise that has voting power in the enterprise. Immediate direct investment relationships arise when a direct investor directly owns equity that entitles it to 10 percent or more of the voting power in the direct investment enterprise. Control exists if the direct investor owns more than 50 percent of the voting power in the direct investment enterprise.

9.45. Indirect direct investment relationships arise through the ownership of voting power in one direct investment enterprise that owns voting power in another enterprise or enterprises. An entity is thus able to exercise indirect control or influence through a chain of direct investment relationships. For example, an enterprise may have an immediate direct investment relationship with a second enterprise that has an immediate direct investment relationship with a third enterprise. Although the first enterprise has no equity in the third enterprise, it may be able to exercise indirect control or influence.

9.46. U.S. direct investment abroad (outward investment) is the ownership or control, directly or indirectly, by one U.S. entity of 10 percent or more of the voting securities of an incorporated foreign business enterprise, or an equivalent interest in an unincorporated foreign business enterprise. Foreign direct investment in the United States (inward investment) is the ownership or control, directly or indirectly, by one foreign entity of 10 percent or more of the voting securities of an incorporated U.S. business enterprise, or an equivalent interest in an unincorporated U.S. business enterprise.

9.47. For partnerships, the determination of whether a partner and a limited partnership are in a direct investment relationship is based on control of the partnership and not on the percentage of ownership in the partnership's equity. In most cases, the general partner is presumed to control a limited partnership and thus have a direct investment relationship with the limited partnership. In the case of multiple general partners, the partnership is presumed to be controlled equally by each of the general partners, unless a clause to the contrary is contained in the partnership agreement. Limited partners normally do not exercise any control over a limited partnership. Unless a limited partner is granted some control over the partnership in a specific clause in the agreement or the agreement grants voting rights to limited partners, the limited partner is assumed to not be in a direct investment relationship with the partnership.

9.48. Direct investment refers to ownership by a single entity, or group of related entities, not to the combined ownership of all entities in a country. An "entity" is broadly defined to include (1) any individual, branch, partnership, associated group, estate, trust, corporation or other business organization, (2) any government, including a foreign government, the U.S. government, a state or local government, or any division thereof, and (3) any government-sponsored agency or government sponsored investment fund, such as a sovereign wealth fund. An associated group is treated in this definition as a single entity.

9.49. Because direct investment is defined from a single-owner viewpoint, it excludes investment in enterprises in which ownership is so dispersed that no one owner in another economy has an interest of 10 percent or more and the owners do not, or cannot, act in concert to influence management. The single-owner viewpoint also means that investment by a U.S. entity of less than 10 percent in a foreign business enterprise is not considered direct investment, even if another U.S. entity has an interest of at least 10 percent in the enterprise. Thus, if one U.S. entity owns 11 percent and another owns 9 percent, the 11 percent interest is included, but the 9 percent interest is excluded. However, if two or more U.S. entities each hold an interest of at least 10 percent, and are not associated with each other, each such interest is included.

9.50. A direct investment ownership in a foreign business enterprise can result from direct or indirect ownership by a U.S. entity. For outward investment, it is directly held if the U.S. entity itself holds the ownership interest in the foreign business enterprise. It is indirectly held if one or more tiers of ownership exist between the foreign business enterprise and the U.S. entity. For example, a foreign business enterprise may be directly owned by another foreign business enterprise that is, in turn, owned by the U.S. entity.

9.51. A U.S. entity's percentage of indirect voting ownership in a given foreign business enterprise is equal to the direct-voting-ownership percentage of the U.S. entity in the first foreign business enterprise in the ownership chain, times the first enterprise's direct-voting-ownership percentage in the second foreign business enterprise in the chain, times the corresponding percentages for all intervening enterprises in the chain, times the last intervening enterprise's direct-voting-ownership percentage in the given foreign business enterprise.

9.52. For example, suppose there are three related direct investment enterprises: a U.S. parent company (enterprise A), a directly-held foreign affiliate in the Netherlands (enterprise B), and an indirectly-held foreign affiliate in Spain (enterprise C). If enterprise A owns 80 percent of the voting power in enterprise B, which, in turn, owns 50 percent of the voting power in enterprise C, then enterprise A's indirect voting ownership share in enterprise C is 40 percent (80 percent x 50 percent).

9.53. If more than one ownership chain exists, the percentages of direct and indirect ownership in all the chains are summed to determine the U.S. entity's ownership percentage. For inward direct investment, the ownership percentage of a foreign entity in a given U.S. business enterprise is calculated in a parallel manner.

9.54. The direct investor is the entity that has a 10-percent or more direct or indirect ownership interest in a business enterprise located in another country. For outward investment, the direct investor is referred to as the "U.S. parent." If incorporated, the U.S. parent is the fully consolidated domestic U.S. enterprise that consists of (1) the U.S. corporation whose voting securities are not owned more than 50 percent by another U.S. corporation, and (2) proceeding down each ownership chain from that U.S. corporation, any U.S. corporation whose voting securities are more than 50 percent owned by the U.S. corporation above it in the chain. All other U.S. corporations and all foreign business enterprises owned by the U.S. parent are excluded from the full consolidation.

9.55. For inward investment, the direct investor is referred to as the "foreign parent," but the concept is defined much more narrowly than that of "U.S. parent" for outward investment. The foreign parent is the first foreign entity outside the United States in a U.S. affiliate's ownership chain that has direct investment in the affiliate. Thus, while for outward investment the parent includes all members of the fully consolidated U.S. enterprise, for inward investment it includes only the first foreign entity outside the United States and excludes all other affiliated foreign entities. However, direct investment statistics include direct transactions of U.S. business entities with all of the affiliated foreign entities that, together with the foreign parent, constitute the "foreign parent group."

9.56. The foreign parent group, which is conceptually analogous to the U.S. parent for outward investment, consists of (1) the foreign parent, (2) any foreign entity, proceeding up the foreign parent's ownership chain, that owns more than 50 percent of the entity below it up to and including the ultimate beneficial owner (the entity that is not owned more than 50 percent by another entity), and (3) any foreign entity, proceeding down the ownership chain of each of these members, that is owned more than 50 percent by the entity above it. Because the members of the foreign parent group may be located in different countries, transactions of a U.S. business entity with members of the foreign parent group are classified in the U.S. international economic accounts by the respective country of each member.

9.57. Affiliates are enterprises that are directly or indirectly owned or controlled by an entity in another country to the extent of 10 percent or more ownership of the voting stock for an incorporated business, or an equivalent interest for an unincorporated business. A business enterprise is any organization, association, branch, venture, or ownership of real estate that exists for profit-making purposes or to otherwise secure economic advantage. A business enterprise may be either incorporated or unincorporated. Unincorporated business enterprises include branches, partnerships, and sole proprietorships.

9.58. Direct investment transactions and positions include the equity that gives rise to control or influence and intercompany lending, i.e., debt between affiliated enterprises. However, debt between selected affiliated financial institutions is not classified as direct investment because it is not considered to be so strongly connected to the direct investment relationship. These transactions are classified as other investment because the transactions are more closely connected to financial intermediation. The financial institutions covered by this exception are: (a) deposit-taking corporations; (b) investment funds; and (c) other financial intermediaries except insurance enterprises and pension funds.

9.59. Also excluded from direct investment, by definition, are transactions in financial derivatives. These transactions are included as a separate functional category in the international economic accounts. Even when transactions in financial derivatives are conducted by a direct investor or direct investment affiliate, they are considered transactions in financial instruments rather than transactions between a direct investor and an affiliated or unaffiliated entity. No transactions in employee stock options are included in the U.S. international economic accounts because of the lack of appropriate source data.

9.60. Direct investment is presented on the asset/liability basis recommended by BPM6 to the extent that source data allow in addition to the directional basis recommended by earlier guidelines. On the directional basis, direct investment statistics are organized according to whether the direct investment is outward or inward. On the asset/liability basis, direct investment statistics are organized according to whether the investment relates to an asset or a liability. This primarily affects the recording of intercompany debt between parents and affiliates.

9.61. Under the asset/liability basis, U.S. parents' debt claims are no longer netted against their debt liabilities to their foreign affiliates, and U.S. affiliates' debt claims are no longer netted against their debt liabilities to their foreign parent groups. Because of source data limitations related to the measurement of reverse investment and investment between fellow enterprises, BEA can only approximate the full asset/liability basis. BEA will continue to present direct investment statistics on a directional basis for the purpose of classifying direct investment by partner country and by industry.

Portfolio investment

9.62. Portfolio investment is defined as cross-border transactions and positions involving debt or equity securities, other than those included in direct investment or reserve assets. Securities are debt and equity financial instruments

that have the characteristic feature of negotiability. Negotiability is a way of facilitating trading, allowing securities to be held by different parties during their lives. Negotiability allows investors to diversify their portfolios and to withdraw their investment readily.

9.63. Portfolio investment includes securities traded on organized financial markets. Such investment usually involves financial infrastructure, along with market-making dealers, and a sufficient volume of buyers and sellers. Acquisition of shares in hedge funds, private equity funds, and venture capital are examples of portfolio investment that occurs in less public and more lightly regulated markets. Portfolio investment is distinctive because of the nature of the funds raised, the largely anonymous relationship between the issuers and holders, and the degree of trading liquidity in the instruments. Portfolio investment may be classified by instrument, original or remaining maturity, or institutional sector.

Other investment

9.64. Other investment is a residual category that includes positions and transactions other than those included in direct investment, portfolio investment, reserve assets, and financial derivatives other than reserves. To the extent that the following classes of financial assets and liabilities are not included under direct investment or reserve assets, other investment includes: (a) other equity, (b) currency and deposits, (c) loans (including use of IMF credit and loans from the IMF), (d) nonlife insurance technical reserves, life insurance and annuities entitlements, pension entitlements, and provisions for calls under standardized guarantees, (e) trade credit and advances, (f) other accounts receivable/payable, and (g) SDR allocations (SDR holdings are included in reserve assets).

9.65. Other equity is included in other investment when it is not direct investment or reserve assets. Other investment may be further classified by type of instrument, original or remaining maturity, or institutional sector. In the U.S. international economic accounts transactions in other equity and other accounts receivable/payable are not separately reported because of the lack of appropriate source data. Transactions in insurance technical reserves are available only beginning in 2014.

Reserves

9.66. Reserve assets are those external assets that are readily available to and controlled by monetary authorities for meeting balance of payments financing needs, for intervention in exchange markets to affect the currency exchange rate, and for other related purposes such as maintaining confidence in the currency and the economy, and serving as a basis for foreign borrowing. Underlying the concept of reserve assets are the notions of “control” and “availability for use” by the monetary authorities. For the United States, the monetary authority is the Federal Reserve Board.

9.67. In general, only external claims actually owned by the monetary authority can be classified as reserve assets. Reserve assets must also be readily available in the most unconditional form. Reserve assets consist of monetary gold, SDR holdings, reserve position in the IMF, currency and deposits, securities (including debt and equity securities), financial derivatives, and other claims (loans

and other financial instruments, including repurchase agreements). Monetary gold, SDR holdings, and reserve position in the IMF are considered reserve assets because of ready availability to the monetary authorities in unconditional form. Currency and deposits, securities, and other assets often are equally available and therefore qualify as reserve assets.

Financial derivatives other than reserves

9.68. The functional category financial derivatives other than reserves in the U.S. international economic accounts largely coincides with the corresponding financial instrument class described above; however, no transactions in employee stock options are included in the U.S. accounts because of the lack of appropriate source data.

9.69. This category is identified separately because it relates to risk transfer rather than supply of funds or other resources. Unlike other functional categories, no primary income accrues on financial derivatives. Any amounts accruing under the contract are classified as revaluations and are included in the other changes in assets and liabilities account.

9.70. While BPM6 encourages the recording of financial derivatives separately for both assets and liabilities, it recognizes that measuring transactions on a gross basis may not be feasible, in which case net reporting is acceptable. In the ITAs, net transactions are reported because measuring transactions on a gross basis is not feasible. In the IIP accounts, however, gross positions are reported for financial derivatives held as assets and as liabilities.

PART III

Statistical Methodology

This part of the volume provides a summary of statistical methodologies for the U.S. international economic accounts. Chapters 10–12 cover the International Transactions Accounts, the International Investment Position Accounts, and the Activities of Multinational Enterprises. Chapter 13 covers data sources used for the international economic accounts.

10. International Transactions Accounts

11. International Investment Position Accounts

12. Statistics on the Activities of Multinational Enterprises

13. Data Sources

International Transactions Accounts

10.1. This chapter presents the methodology for statistics published in the International Transactions Accounts (ITAs). It includes major sections for the current account, the capital account, the financial account, and the statistical discrepancy. Each account and its published components are discussed in the order they are presented in [ITA table 1.2](#) U.S. International Transactions, Expanded Detail shown below. More detailed statistics are published in other tables that are referenced in this publication and that can also be found on the [BEA Web site](#).

ITA Table 1.2. U.S. International Transactions, Expanded Detail—Continues

Line	Current account
1	Exports of goods and services and income receipts (credits)
2	Exports of goods and services
3	Goods
4	General merchandise
5	Foods, feeds, and beverages
6	Industrial supplies and materials
7	Capital goods except automotive
8	Automotive vehicles, parts, and engines
9	Consumer goods except food and automotive
10	Other general merchandise
11	Net exports of goods under merchandising
12	Nonmonetary gold
13	Services
14	Maintenance and repair services n.i.e.
15	Transport
16	Travel (for all purposes including education)
17	Insurance services
18	Financial services
19	Charges for the use of intellectual property n.i.e.
20	Telecommunications, computer, and information services
21	Other business services
22	Government goods and services n.i.e.

ITA Table 1.2. U.S. International Transactions, Expanded Detail—Continues

Line	Current account
23	Primary income receipts
24	Investment income
25	Direct investment income
26	Portfolio investment income
27	Other investment income
28	Reserve asset income
29	Compensation of employees
30	Secondary income (current transfer) receipts
31	Imports of goods and services and income payments (debits)
32	Imports of goods and services
33	Goods
34	General merchandise
35	Foods, feeds, and beverages
36	Industrial supplies and materials
37	Capital goods except automotive
38	Automotive vehicles, parts, and engines
39	Consumer goods except food and automotive
40	Other general merchandise
41	Nonmonetary gold
42	Services
43	Maintenance and repair services n.i.e.
44	Transport
45	Travel (for all purposes including education)
46	Insurance services
47	Financial services
48	Charges for the use of intellectual property n.i.e.
49	Telecommunications, computer, and information services
50	Other business services
51	Government goods and services n.i.e.
52	Primary income payments
53	Investment income
54	Direct investment income
55	Portfolio investment income
56	Other investment income
57	Compensation of employees
58	Secondary income (current transfer) payments

ITA Table 1.2. U.S. International Transactions, Expanded Detail—Continues

Line	Capital account
59	Capital transfer receipts and other credits
60	Capital transfer payments and other debits
	Financial account
61	Net U.S. acquisition of financial assets excluding financial derivatives (net increase in assets / financial outflow (+))
62	Direct investment assets
63	Equity
64	Debt instruments
65	Portfolio investment assets
66	Equity and investment fund shares
67	Debt securities
68	Short term
69	Long term
70	Other investment assets
71	Currency and deposits
72	Loans
73	Insurance technical reserves
74	Trade credit and advances
75	Reserve assets
76	Monetary gold
77	Special drawing rights
78	Reserve position in the International Monetary Fund
79	Other reserve assets
80	Currency and deposits
81	Securities
82	Financial derivatives
83	Other claims
84	Net U.S. incurrence of liabilities excluding financial derivatives (net increase in liabilities / financial inflow (+))
85	Direct investment liabilities
86	Equity
87	Debt instruments
88	Portfolio investment liabilities
89	Equity and investment fund shares
90	Debt securities
91	Short term
92	Long term

ITA Table 1.2. U.S. International Transactions, Expanded Detail—Table Ends

Line	Financial account
93	Other investment liabilities
94	Currency and deposits
95	Loans
96	Insurance technical reserves
97	Trade credit and advances
98	Special drawing rights allocations
99	Financial derivatives other than reserves, net transactions
	Statistical discrepancy
100	Statistical discrepancy

ITA Current Account

10.2. The current account consists of transactions between U.S. residents and nonresidents in goods, services, primary income, and secondary income. Sources and methods for each of these major components of the current account are provided below. Included are descriptions of concepts and coverage, including departures from *BPM6*, key data sources, and estimation methods for each of the published components.

Goods

Concepts and coverage

10.3. **Goods** are physical items with ownership rights that can be exchanged among institutional units through transactions. The production of a good can be separated from its subsequent sale or resale. Resident-nonresident transactions in goods include all goods sold, exchanged, donated, or otherwise transferred from U.S. to foreign ownership and vice versa. The major published components are *general merchandise*, *net exports of goods under merchanting*, and *nonmonetary gold*.

10.4. The ITAs include goods that were produced in previous periods (used goods and inventories) and goods that were produced in other countries (reexports). The ITAs do not identify how the goods were used, such as for personal consumption, intermediate consumption, inventories, or gross fixed capital formation.

Departures from BPM6

10.5. The coverage and presentation of goods closely follow *BPM6* recommendations. The most important departure stems from BEA not implementing the new treatment of manufacturing services on physical inputs owned by others (“goods for processing”). As explained in Appendix B, lack of adequate source data prevents BEA from introducing the new treatment at this time.

10.6. Under BEA’s current treatment, a change in ownership is imputed when goods enter or leave the United States and the value of the goods is included in goods exports and imports. Under the *BPM6* treatment, goods that are sent abroad for processing without a change in ownership and that are returned to the United States should be excluded from statistics on trade in goods, and the processing fee charged by the foreign manufacturing service provider should be recorded as U.S. imports of services. Similarly, goods that enter the United States for processing without a change in ownership and that are returned to the country of ownership should be excluded from statistics on trade in goods, and the processing fee charged by the U.S. manufacturing service provider should be recorded as U.S. exports of services.

10.7. In addition, goods sent abroad for processing and subsequently sold abroad should be recorded as U.S. exports of goods when they are sold, and any inputs purchased abroad by the U.S. firm and processed abroad should be recorded as U.S. imports of goods; the processing fee should be recorded as U.S. imports of services. Similarly, goods entering the United States for processing and subsequently sold in the United States should be recorded as U.S. imports of goods when they are sold, and any inputs purchased in the United States by the foreign firm and processed in the United States should be recorded as U.S. exports of goods; the processing fee should be recorded as U.S. exports of services.

10.8. Currently, detailed information on the processing fees received and paid by U.S. firms for manufacturing services and on the underlying goods transactions either are not available in the U.S. statistical system or are not identifiable in any of the source data. Despite these challenges, BEA continues to conduct research to determine feasible approaches for implementing this treatment.

10.9. In addition, under *net exports of goods under merchanting*, *BPM6* recommends presenting separately merchandise gross flows for *goods acquired under merchanting* as negative exports in the period the merchant acquires the goods and merchandise gross flows for *goods sold under merchanting* as positive exports in the period the merchant sells the goods. However, source data are not available for implementing this recommendation. BEA’s source data on merchanting transactions reflect the net value of goods that are purchased and subsequently resold abroad and thus assume that the purchase and sale occur in the same quarter.

Key data sources

10.10. *U.S. Census Bureau*. U.S. exports to all countries, except Canada, are compiled primarily from data submitted through the Automated Export System, as required by law to be filed by exporters or their agents with the U.S. Census

Bureau. U.S. imports from all countries are compiled primarily from data submitted through the Automated Commercial System, as required by law to be filed by importers or their agents with U.S. Customs and Border Protection.

10.11. *United States-Canada Data Exchange.* For exports to Canada, the United States substitutes Canadian imports from the United States for U.S. exports to Canada in accordance with a 1987 Memorandum of Understanding signed by the U.S. Census Bureau, U.S. Customs and Border Protection, Canada Border Services Agency, and Statistics Canada. Similarly, under this Memorandum of Understanding, Canada substitutes U.S. imports from Canada for Canadian exports to the United States.

10.12. *BEA Survey Data.* Statistics for fuel procured in ports by nonresident ocean and air carriers, which are not included in the Census Bureau data described above, are based on data collected on BEA's surveys of international transactions in transportation services. Statistics for *net exports of goods under merchanting* are based on data collected on BEA's quarterly and benchmark surveys of international transactions in selected services and intellectual property.

10.13. *U.S. Department of Defense.* Statistics for transfers of goods under the Foreign Military Sales program and for goods purchased abroad by U.S. military agencies are reported quarterly to BEA by the Department of Defense, as required under Office of Management and Budget Statistical Directive No. 19.

Estimation methods

10.14. Statistics for trade in goods in the ITAs are based on monthly trade data compiled by the U.S. Census Bureau (Census basis data), which are further described below. BEA makes adjustments to the Census basis data in order to align them with the coverage, valuation, definitions, and concepts used for the international and national economic accounts. These adjustments, which are applied separately to exports and imports, are necessary to supplement coverage of the Census basis data, to eliminate duplication of transactions recorded elsewhere in the ITAs, to value transactions at market prices, and to include certain changes in ownership that occur without the goods crossing the U.S. customs boundary.

10.15. Exports of goods consist of *general merchandise*, *net exports of goods under merchanting*, and *nonmonetary gold*. Imports of goods consist of *general merchandise* and *nonmonetary gold*. Each of these published components is described below.

10.16. **General merchandise.** General merchandise covers goods exchanged between a resident and a nonresident and excludes goods under merchanting and nonmonetary gold. While transactions in goods that have not changed ownership should be excluded from the ITAs according to international guidelines, BEA is not currently able to identify these transactions to remove them from the source data it receives from the Census Bureau (see Departures from *BPM6* above for more information).

10.17. General merchandise is presented as a single item in the *BPM6* standard components with no proposed standards for classification of goods. However, *BPM6* encourages presentations according to the priorities of the compiling economy. In the ITAs, exports and imports of general merchandise are classified and presented by six broad end-use categories in table 1.2 and by more detailed end-use categories in table 2.1. The end-use categories are based on the detailed Harmonized Commodity Description and Coding System (see “Goods, Census Basis” section on *Classification*).

10.18. **Net exports of goods under merchanting.** Merchanting is defined as the purchase of goods by a resident of the compiling economy from a nonresident combined with the subsequent resale of the same goods to another nonresident without the goods entering the compiling economy. Merchanting arrangements are often used for international wholesale and retail trade operations, but they may also be used in commodity dealing and for managing global manufacturing processes. In principle, for goods shipped under merchanting arrangements, purchases and resales are recorded at the time economic ownership of the goods changes.

10.19. BEA currently measures merchanting as the margin between proceeds from the sale of the goods and the cost of acquiring the goods sold. Data on this margin are collected as “net merchanting receipts” on BEA’s surveys of selected international services transactions and presented as net exports of goods under merchanting. The Census basis data do not include goods under merchanting because these goods do not cross the U.S. customs boundary.

10.20. **Nonmonetary gold.** Nonmonetary gold covers all gold other than monetary gold. (Monetary gold is owned by monetary authorities and is held as a reserve asset.) Nonmonetary gold can be in the form of bullion, gold powder, noncommemorative gold coins, and gold in other unwrought or semi-manufactured forms. Nonmonetary gold is shown separately from other goods partly because of its special role in financial markets and partly because most gold transactions have little to do with current production, consumption, or income.

10.21. In the ITAs, nonmonetary gold reflects the sum of cross-border trade in nonmonetary gold that is recorded in the Census basis data and transactions between foreign official agencies and private U.S. residents in foreign official reserves of gold that are held in the custody of the Federal Reserve Bank of New York (FRBNY). These latter transactions are not captured in Census basis data but are added to goods exports and imports through a balance of payments adjustment. Gold that is purchased by foreign official agencies, such as a foreign central bank, from private entities in the United States and is shipped to the FRBNY for storage is recorded as an export. Similarly, gold that is purchased by private entities in the United States from foreign official agencies out of stock held at the FRBNY is recorded as an import.

Goods, Census basis

10.22. Exports consist of shipments of domestic and foreign goods by U.S. residents to foreign residents, involving both commercial and noncommercial transactions. Domestic exports consist of commodities grown, produced, or

manufactured in the United States and commodities of foreign origin that have been changed in form or enhanced in value in the United States. Foreign exports consist of commodities of foreign origin that are substantially in the same condition when exported as when initially imported into the United States. Exports of foreign goods are often referred to as reexports.

10.23. Imports consist of shipments of foreign goods and goods of U.S. origin by foreign residents to U.S. residents, involving both commercial and noncommercial transactions. Goods of U.S. origin include U.S. goods returned and reimports. U.S. goods returned consist of commodities that are not accepted by the foreign purchaser because of problems such as damage, defects, and incorrect shipments. Reimports consist of commodities of U.S. origin that are substantially in the same condition when imported as when initially exported from the United States.

10.24. **Valuation.** Exports are valued on a **free alongside ship (f.a.s.)** basis at the U.S. port of export. The value of exports at the U.S. port of export is based on the transaction price, including inland freight, insurance, and other charges incurred in placing the goods alongside the carrier at the U.S. port of export. The value, as defined, excludes the cost of loading the goods aboard the exporting carrier and also excludes freight, insurance, and charges or transportation costs beyond the U.S. port of export. Freight, insurance, and charges beyond the U.S. port of export are assumed to be incurred by the foreign importer.

10.25. Imports are valued on a customs value basis at the foreign port of export. The **customs value** is the value of imports as appraised by U.S. Customs and Border Protection in accordance with the legal requirements of the Tariff Act of 1930, as amended. The value is generally defined as the price actually paid or payable for goods at the foreign port of export, excluding U.S. import duties, freight, insurance, and other charges incurred in bringing the goods to the United States. Freight, insurance, and charges beyond the foreign port of export are assumed to be incurred by the U.S. importer.

10.26. **Classification.** Exports and imports are organized under several different commodity classification systems, including the international **Harmonized Commodity Description and Coding System** (Harmonized System) and the end-use system. BEA primarily uses the **end-use classification system**, which was created by the Balance of Payments Division of the former Office of Business Economics (BEA's predecessor) to make it easier to relate changes in goods trade to changes in production and in consumption.

10.27. The end-use commodity classification system is based on the Harmonized System of commodity classification, which is an internationally accepted standard for the commodity classification of internationally traded goods developed under the auspices of the World Customs Organization. The Harmonized System organizes transactions by the physical nature of commodities and their stage of processing rather than their end-use. The current U.S. Harmonized System consists of approximately 9,000 export commodity categories and 18,000 import commodity categories.

10.28. The broad end-use categories used by BEA and the Census Bureau are foods, feeds, and beverages; industrial supplies and materials; capital goods except automotive; automotive vehicles, parts, and engines; consumer goods except food and automotive; and “other” goods. Currently, the end-use classification system includes about 200 subcategories of exports and 200 subcategories of imports.

Balance of payments adjustments to Census basis data

10.29. As described above, BEA makes adjustments to the Census basis data in order to align them with the coverage, valuation, definitions, and concepts used for the international and national economic accounts. These adjustments are discussed below and are also presented in ITA table 2.4, which presents the reconciliation between Census basis data and balance of payments basis data. For both exports and imports, the largest adjustments are additions for goods procured in ports by nonresident ocean and air carriers.

Export adjustments

10.30. An addition is made for the value of goods transferred under U.S. Foreign Military Sales contracts. The addition reflects the replacement of data identified as exports under the Foreign Military Sales program in the Census basis data with data reported to BEA by the Department of Defense. The data reported to BEA are more comprehensive than the data reported to the Census Bureau. Negative values may sometimes occur as a result of timing differences for transactions recorded in the two data sets.

10.31. An addition is made for goods procured in U.S. ports by foreign ocean and air carriers. At this time, these purchases are limited to fuel, which are not included in the Census basis data described above. Estimates are based on a supplemental report provided by the Census Bureau and on BEA’s surveys of international transactions in transportation services.

10.32. An addition is made for the net value of goods under merchanting. This value reflects the net value of goods that are purchased and subsequently sold abroad without the goods entering the United States. Because these goods do not cross the U.S. customs boundary, their value is not recorded in the Census basis data. This adjustment is based on BEA’s surveys of international services transactions.

10.33. An addition is made for nonmonetary gold not included in the Census basis data. This involves gold that is purchased by foreign official agencies and is shipped to the FRBNY where it is held in custody for foreign official accounts. No export documents are filed for this gold transaction. The adjustment is based on the monthly average of daily fixings of London gold prices and on data provided by the FRBNY.

10.34. An addition is made for personal parcels shipped via the U.S. Postal Service because Census basis data do not cover these items. The adjustment is based on a survey of postal operations and estimates by BEA. The counterpart of

this item is included as part of personal transfers in secondary income. An addition is also made for U.S. mail order shipments to Canada based on data provided by Statistics Canada.

10.35. A deduction is made for the value of nonwarranty repairs and alterations of foreign-owned equipment repaired or altered in the United States and subsequently exported. The value of these repairs is combined with data on equipment repairs from BEA's surveys of international services transactions and included in services exports in *maintenance and repair services n.i.e.* The adjustment is based on Census basis data.

10.36. An addition is made to low-value transactions (estimates below the reporting threshold) included in Census basis data to phase in a revised low-value estimation methodology that was implemented by the Census Bureau beginning with estimates for 2010. This adjustment is applied to statistics prior to 2010.

10.37. An addition is made for electric energy supplied to Mexico. The adjustment is based on data from Global Trade Information Services, a private data source.

10.38. An addition is made to raise the value of recorded smart cards to their full market value from the value of the media—that is, the value of the blank or unrecorded smart cards. The adjustment is based on Census basis data and is applied beginning with statistics for 2009.

10.39. A deduction is made for exposed motion picture film for sale or rent. These exports are already included in services exports in *charges for the use of intellectual property n.i.e.* The adjustment is based on Census basis data.

10.40. A deduction is made for U.S.-owned grain shipped for storage in Canada and an addition is made for subsequent delivery of U.S.-owned grain from Canadian warehouses to third countries. The net effect of these adjustments to total goods exports is zero. These adjustments are based on Census basis data.

Import adjustments

10.41. An addition is made for goods procured in foreign ports by U.S. ocean and air carriers. At this time, these purchases are limited to fuel, which are not covered in the Census basis data described above. Data are based on a supplemental report provided by the Census Bureau and on BEA's surveys of international transactions in transportation services.

10.42. An addition is made for the value of goods purchased abroad by U.S. military agencies, which is reported to BEA by the Department of Defense. The Census basis data only include imports of goods by U.S. military agencies that enter the U.S. customs territory.

10.43. An addition is made for inland freight charges to transport goods from their point of origin in Canada and in Mexico to the U.S. customs boundary. Imports of goods from all countries should be valued at the customs value—that is,

the value at the foreign port of export including inland freight charges. For imports from Canada and Mexico, this should be the cost of the goods at the U.S. border. However, the customs value for imports for certain Canadian and Mexican goods is at the point of origin in Canada or Mexico. BEA makes an addition for the inland freight charges of transporting these goods to the U.S. border to make the value comparable to the customs value reported for imports from other countries. The adjustment is based on Census basis data.

10.44. An addition is made for locomotives and railcars imported from Canada and Mexico, which are not reported on U.S. Customs and Border Protection import declarations. The adjustment is based on data from Statistics Canada and from Global Trade Information Services, a private data source.

10.45. An addition is made for nonmonetary gold not included in Census basis data. This involves gold that is sold by foreign official agencies to private purchasers out of stock held at the FRBNY. No import documents are filed for this gold. The adjustment is based on the average of daily fixings of London gold prices and data provided by the FRBNY.

10.46. A deduction is made for the value of nonwarranty repairs and alterations of U.S.-owned equipment repaired or altered abroad and subsequently imported to the United States. The value of these repairs is combined with data on equipment repairs from BEA's surveys of international services transactions and included in services imports in maintenance and repair services *n.i.e.* The adjustment is based on Census basis data.

10.47. An addition is made to raise the value of selected non-customized computer software to its full market value from the value of the medium (such as CDs, DVDs, and smart cards) on which it is placed, which is the value reported on U.S. Customs and Border Protection import declarations.

10.48. An addition is made to low-value transactions (estimates below the reporting threshold) included in Census basis data to phase in a revised low-value estimation methodology that was implemented by the Census Bureau beginning with estimates for 2010. This adjustment is applied to statistics prior to 2010.

10.49. An addition is made for the value of electric energy imported from Mexico. The adjustment is based on data from Global Trade Information Services, a private data source.

10.50. A deduction is made for imports of exposed movie film for sale or rent included in Census basis data. These transactions are already included in services imports in *charges for the use of intellectual property n.i.e.* The adjustment is based on Census basis data.

10.51. A deduction is made for the value of repairs performed abroad on U.S.-owned vessels included in Census basis data. These transactions are already included in services imports in *transport*. The adjustment is based on Census basis data.

Services

Concepts and coverage

10.52. **Services** consists of transactions arising from productive activities that change the condition of the consumer or that facilitate the exchange of products and financial assets. In general, ownership rights cannot be established for services and their consumption or use cannot be separated from their production.

10.53. Services can be provided to international markets by one of four **modes of supply** identified in the World Trade Organization's General Agreement on Trade in Services. Modes of supply are discussed in chapter 14. This chapter covers services provided by the modes of cross-border supply, consumption abroad, and the presence of natural persons, specifically services suppliers. Excluded from this chapter is the supply of services via commercial presence, such as by the affiliates of multinational enterprises. This mode is described in chapter 14.

10.54. Services are classified into nine broad categories that correspond to standard components in the *BPM6* classification scheme. Monthly, quarterly, and annual statistics are provided for these nine categories. Exports and imports of services are further classified into subcategories in table 3.1. Detail by type of service and by **partner country** in the annual statistics exceeds that in the quarterly statistics, and the detail in the quarterly statistics exceeds that in the monthly statistics. (No partner country detail is available for the monthly statistics.)

10.55. In some cases, BEA provides detail beyond the *BPM6* standard components that corresponds with the Extended Balance of Payments (EBOPS) classification system published in the *Manual on Statistics of International Trade in Services (MSITS) 2010*. Both the *BPM6* and EBOPS classification systems are mainly product-based, which means that they are based on the type of service rather than the industry or entity that provides the service. However, classifications are transactor-based for *travel*, for the construction component of *other business services*, and for *government goods and services n.i.e. (not included elsewhere)*.

Departures from *BPM6*

10.56. The coverage and presentation of services differs in some ways from *BPM6* recommendations. One major departure stems from not implementing the new treatment of manufacturing services on physical inputs owned by others. As explained in appendix B, lack of adequate source data prevents BEA from introducing the new treatment at this time. Despite this source data limitation, services associated with contract manufacturing are partly included in the U.S. international economic accounts because a portion of these services is included in the value of goods exports and imports; however, the services portion cannot be separately identified.

10.57. Under BEA's current treatment, a change in ownership is imputed when goods enter or leave the United States and the value of the goods is included in goods exports and imports. Under the *BPM6* treatment, goods that are sent

abroad for processing without a change in ownership and that are returned to the United States should be excluded from statistics on trade in goods, and the processing fee charged by the foreign manufacturing services provider should be recorded as U.S. imports of services. Similarly, goods that enter the United States for processing without a change in ownership and that are returned to the country of ownership should be excluded from statistics on trade in goods, and the processing fee charged by the U.S. manufacturing services provider should be recorded as U.S. exports of services.

10.58. In addition, goods sent abroad for processing and subsequently sold abroad should be recorded as U.S. exports of goods when they are sold, and any inputs purchased abroad by the U.S. firm and processed abroad should be recorded as U.S. imports of goods; the processing fee should be recorded as U.S. imports of services. Similarly, goods entering the United States for processing and subsequently sold in the United States should be recorded as U.S. imports of goods when they are sold, and any inputs purchased in the United States by the foreign firm and processed in the United States should be recorded as U.S. exports of goods; the processing fee should be recorded as U.S. exports of services.

10.59. Currently, detailed information on the processing fees received and paid by U.S. firms for manufacturing services and on the underlying goods transactions either are not available in the U.S. statistical system or are not identifiable in any of the source data. Despite these challenges, BEA continues to conduct research to determine feasible approaches for implementing this treatment.

10.60. Another major departure arises from not implementing the new treatment of implicitly priced financial services. Financial services may involve explicit charges, margins on buying and selling transactions, asset management fees, or implicit charges such as financial intermediation services indirectly measured (FISIM), which represents the margin between interest payable and the reference rate on loans and deposits. At this time financial services in the U.S. international economic accounts excludes FISIM and dealers' and market-makers' margins on buying and selling transactions other than bonds. As explained in appendix B, implementation requires coordinating this new treatment with that in the national economic accounts and determining how the measurement of FISIM relates to cross-border monetary interest flows in the international economic accounts. As a result, the services category *financial services* covers only financial services with explicit charges, with the exception of implicit fees on bond transactions measured as the difference between bid and ask prices.

10.61. BEA's new presentation does not separately include the *BPM6* standard components *construction* and *personal, cultural, and recreational services*. These services are, however, included in the BEA category *other business services*. Source data are not adequate for preparing separate quarterly statistics for these categories. In addition, BEA's *insurance services* category differs from the *BPM6* standard component *insurance and pension services* due to a lack of source data for pension services.

Key data sources

10.62. *BEA Survey Data*. Statistics for several of the ITA services categories are based largely on data collected on BEA's quarterly and benchmark services surveys. These services categories include *transport; insurance services; financial services; charges for the use of intellectual property n.i.e.; telecommunications, computer, and information services; and other business services*. These BEA surveys are described in chapter 13.

10.63. *Department of Homeland Security (DHS)*. Statistics for *travel* between the United States and countries other than Canada and Mexico rely on counts of foreign visitors to the United States and U.S. visitors to foreign countries from the DHS Office of Immigration Statistics. Passenger counts are also used to prepare statistics for parts of *transport*.

10.64. *U.S. Department of Commerce, International Trade Administration, National Travel and Tourism Office (NTTO)*. Estimates for *travel* rely partly on estimates of average expenditure per traveler based on the Survey of International Air Travelers (SIAT) conducted by NTTO. This survey is conducted at U.S. international airports for both departures and arrivals.

10.65. *U.S. Treasury Department*. Estimates for components of *financial services* are based partly on cross-border transactions collected on selected Treasury International Capital (TIC) forms.

Estimation methods

10.66. Estimation methods vary depending on the services component and the estimation period. As described above, for many of the services components, statistics are based on BEA survey data with adjustments for coverage and concepts. *Travel* statistics are prepared as the product of the number of travelers and the average expenditure per traveler. Other components are based on government administrative data and other sources.

10.67. Definitions and estimation methods for each of the nine broad services categories published quarterly by BEA are provided below. These categories closely follow but do not always exactly match the *BPM6* standard components for services. Specific departures from *BPM6* are also described below. Services categories are presented in the same order as in ITA table 3.1. Unless otherwise noted, descriptions of methods apply to both exports and imports.

10.68. ***Maintenance and repair services n.i.e.*** Maintenance and repair services n.i.e. covers maintenance and repair services by residents of one country on goods that are owned by residents of another country. The repairs may be performed at the site of the repair facility or elsewhere. Maintenance and repair of ships, aircraft, and other transport equipment are currently included in *transport* because these transactions cannot be separately identified in BEA's source data for *transport* services. Construction maintenance and repairs, including renovation, repair, or extension of fixed assets in the form of buildings, and repairs of

railway facilities, harbors, and airfield facilities are included in the construction component of *other business services*. Computer maintenance and repairs are included in the computer services component of *telecommunications, computer, and information services*.

10.69. Statistics for maintenance and installation are based primarily on BEA survey data and are supplemented by Census Bureau data on the cross-border movement of equipment and other goods for repair. The BEA surveys include the Quarterly Survey of Transactions in Selected Services and Intellectual Property With Foreign Persons (BE–125) and the Benchmark Survey of Transactions in Selected Services and Intellectual Property With Foreign Persons (BE–120). The value recorded for maintenance and repair services is the value of the work performed, not the gross value of the goods before or after repair. Service values include parts or materials supplied by the service provider.

10.70. **Transport.** Transport consists of moving people and property from one location to another and includes related supporting and auxiliary services. Transport is classified by mode of transport—sea, air, or other mode—and by what is transported (passengers or freight). Under sea transport and air transport, BEA presents port services, which includes cargo handling, storage and warehousing, and other related transport services. BEA does not present separately the *BPM6* standard component of postal and courier services.

10.71. The primary sources of information are four mandatory BEA surveys of U.S. and foreign air and ocean carriers; Census Bureau data on U.S. exports and imports by air; and U.S. Army Corps of Engineers (ACE) data on U.S. exports and imports by water. Three of the BEA surveys are quarterly (U.S. ocean and air carriers and foreign air carriers) and one is annual (foreign ocean carriers). The Census Bureau data and the ACE data are monthly.

10.72. A variety of methods are used to estimate the transactions covered by the components of transport. For some components, the transactions are available from a primary data source, such as a BEA survey. For most components, however, transactions are estimated using multistep methods that include, for example, multiplying the volume of goods transported, based on information from the Census Bureau or ACE, by estimates of freight rates derived from BEA surveys.

10.73. Freight services are recorded in the U.S. international economic accounts when shipping services are performed by the residents of one country for residents of other countries. A key convention in estimating freight services is the assumption that shipping services performed on a country's goods exports beyond its borders are paid for by the importing country. Thus, freight charges for transporting U.S. exports of goods are included in the U.S. international accounts as transport exports if the carriers are U.S. residents; if the carriers are foreign residents, the charges are excluded because the transactions are deemed to be between foreign residents. Similarly, freight charges for transporting U.S. imports of goods are included in the U.S. international accounts as transport imports if the carriers are foreign residents; if the carriers are U.S. residents, the charges are excluded because the transactions are deemed to be between U.S. residents.

10.74. *Sea transport* consists of *freight* services and *port* services. Freight services exports include receipts of U.S. vessel operators for transporting U.S. goods exports to foreign ports and transporting goods between foreign ports. Imports include U.S. payments to foreign vessel operators for transporting U.S. goods imports from foreign ports to U.S. ports. Port services exports include the value of goods and services procured by foreign carriers in U.S. ports. Imports include the value of non-fuel goods and services procured by U.S. carriers in foreign ports. Purchases of fuel in ports are excluded from transport and included in exports and imports of goods.

10.75. Sea freight services statistics are primarily based on ACE data on waterborne exports and imports and BEA's quarterly BE-30 survey, Ocean Freight Revenues and Foreign Expenses of U.S. Ocean Carriers. The ACE waterborne data provides tonnage and value of goods transported, freight and insurance charges on imports, and the residency of the vessel operator. ACE data cover both U.S.-flag and foreign-flag vessels providing liner, tanker, and tramp services to and from the United States, including transport on the U.S. Great Lakes. The BE-30 survey covers U.S. ocean carriers' revenues and tonnage for transporting U.S. exports to foreign points and revenues for transporting freight between foreign points.

10.76. Sea freight exports are estimated by multiplying ACE data on export tonnages carried by U.S.-operated vessels for each type of service (liner, tanker, and tramp) by corresponding freight rates. Freight rates for liner services are derived from data reported on the BE-30 survey. Freight rates for tanker and tramp services are based on global rate indexes covering the tanker and dry bulk shipping market provided by the Baltic Exchange. Also included in sea freight exports are receipts of U.S.-operated vessels from foreign residents for carrying goods between foreign ports and for operating leases of transportation equipment with crew for limited periods of time (such as a single voyage) for the carriage of freight and passengers. These receipts are reported on the BE-30 survey.

10.77. Sea freight imports are estimated by summing ACE data on import freight and insurance charges received by foreign-operated vessels. An estimate of insurance payments is removed from the ACE imports data. These data are captured in BEA's source data for *insurance services*. Also included in sea freight imports are payments of U.S.-operated vessels to foreign residents for operating leases of transportation equipment with crew for limited periods of time (such as a single voyage) for the carriage of freight and passengers. These payments are reported on the BE-30 survey.

10.78. Sea port services statistics are based on BEA's annual BE-29 survey, Foreign Ocean Carriers' Expenses in the United States, the BE-30 survey, and ACE data on U.S. waterborne exports and imports. The BE-29 survey covers the expenses incurred by foreign ocean carriers in U.S. ports. These carriers include foreign affiliates of U.S. companies that operate vessels for their own accounts. The BE-30 survey covers the expenses incurred by U.S. ocean carriers in foreign ports. The ACE waterborne data provides U.S. export and import tonnage by residency of the vessel operator and by type of service (liner, tanker, and tramp) transported to and from the United States, including transport on the U.S. Great Lakes.

10.79. Sea port exports are estimated by multiplying ACE data on export and import tonnages carried by foreign-operated vessels for each type of service by corresponding per ton port expense rates derived from the BE–29 survey. Sea port imports are estimated by multiplying ACE data on export and import tonnages carried by U.S.-operated vessels for each type of service by corresponding per ton port expense rates derived from the BE–30 survey. Sea port exports and imports exclude purchases of fuel. Foreign-operated vessels’ purchases of fuel in U.S. ports are included in exports of industrial supplies and materials and U.S.-operated vessels’ purchases of fuel in foreign ports are included in imports of industrial supplies and materials.

10.80. *Air transport* consists of *passenger services*, *freight services*, and *port services*. Air passenger services cover the transport of nonresidents by U.S. air carriers between the United States and foreign countries and between two foreign points (exports), and the transport of U.S. residents by foreign air carriers between the United States and foreign countries (imports). Air freight services exports cover U.S. air carriers transporting U.S. goods exports from the United States to foreign points and for transporting goods between foreign points. Imports cover foreign air carriers transporting U.S. goods imports from foreign countries to U.S. points. Port services exports include the value of goods and services procured by foreign air carriers in U.S. ports, and imports include the value of goods and services procured by U.S. air carriers in foreign ports. Purchases of fuel in ports, however, are excluded from transport and included in goods exports and imports.

10.81. Air passenger services statistics are compiled separately for Canada and all other countries. For countries and areas other than Canada, BEA multiplies data on the number of travelers by estimates of average air fares. Numbers of travelers are from the DHS, Office of Immigration Statistics. Average fares are from surveys of travelers conducted by the U.S. Department of Commerce, NTTO. For travel to and from Canada, BEA uses data provided by Statistics Canada.

10.82. Also included in air passenger services are receipts of U.S. air carriers for transporting passengers between two foreign points and receipts and payments from interline settlements. Interline settlement receipts occur when foreign residents purchase tickets on foreign air carriers and transfer to U.S. air carriers to reach their final destinations. Interline settlement payments occur when U.S. residents purchase tickets on U.S. air carriers and transfer to foreign air carriers to reach their final destinations. Estimates for both of these items are based on data obtained from BEA’s quarterly BE–37 survey, U.S. Airline Operators’ Foreign Revenues and Expenses.

10.83. Air freight statistics are based primarily on BEA’s quarterly BE–37 survey and the Census Bureau’s monthly air export and import data. The BE–37 survey covers U.S. air carriers’ revenues for transporting U.S. exports to foreign points and for transporting freight between foreign points. The Census Bureau air freight data provides export tonnage and import freight and insurance charges by residency of operator.

10.84. Air freight exports are estimated based on the revenue data reported on the BE–37 survey. BEA uses ratios derived from transport tonnage information

in the Census Bureau's air export data to distribute total U.S. air carriers' revenues to each of the balance of payments areas and countries. Air freight imports are estimated by summing Census Bureau data on import freight and insurance charges received by foreign air carriers. An estimate of insurance payments is removed from the ACE imports data. These data are captured in BEA's source data for *insurance services*. U.S. Postal Service receipts from foreign residents for the transportation of foreign mail and payments to foreign residents by the U.S. Postal Service for the transportation of U.S. mail are included in air freight.

10.85. Air port services statistics are based on BEA's quarterly BE-9 survey, Foreign Airline Operators' Revenues and Expenses in the United States and the quarterly BE-37 survey. Air port exports are estimated based on reported data from the BE-9 survey, which covers the expenses incurred by foreign air carriers in the United States. Air port imports are estimated based on reported data from the BE-37 survey, which covers the expenses of U.S. air carriers in foreign countries. Air port exports and imports exclude purchases of fuel. Foreign air carrier's purchases of fuel in U.S. ports are included in exports of industrial supplies and materials and U.S. air carriers' purchases of fuel in foreign ports are included in imports of industrial supplies and materials.

10.86. *Other modes of transport* include freight services performed by truck, rail, pipeline, in space, and port services for rail and water transport. Statistics for each of these modes are derived using a variety of sources and methods.

10.87. Truck freight services exports consist of U.S. truck carriers transporting U.S. exports from the U.S.-Canadian border to points in Canada and for transporting U.S. imports from points in Canada to the U.S.-Canadian border. Imports consist of Canadian truck carriers transporting U.S. exports from points inside the United States to the U.S.-Canadian border and for transporting U.S. imports from the U.S.-Canadian border to points inside the United States. Small adjustments are made to account for U.S. and Canadian carriers' receipts for cabotage and landbridge-type activities. Sources consist primarily of data from the U.S. Department of Transportation, Bureau of Transportation Statistics and private sources.

10.88. Rail freight services exports represent revenues of U.S. rail carriers for transporting (1) Canadian exports to, and imports from, third countries through the United States; (2) U.S. exports from the U.S. customs frontier to interior destinations or to other rail connections in Canada; (3) goods within Canada transported on the U.S. rail carriers' leased trackage in Canada; and (4) foreign-owned goods through the United States en route to another foreign country. Imports represent revenues of Canadian rail carriers for transporting U.S. imports from third countries through Canada and U.S. goods through Canada en route from one U.S. point to another. Rail port services represent the expenditures by Canadian rail carriers in the United States (exports) and by U.S. rail carriers in Canada (imports). Sources include the U.S. Department of Transportation, Surface Transportation Board and Statistics Canada.

10.89. Space transport exports represent revenues of U.S. launch service providers for launching foreign-owned satellites into space. Space transport imports represent revenues of foreign launch service providers for launching U.S.-owned

satellites into space. The primary data source is the U.S. Department of Transportation, Federal Aviation Administration.

10.90. Pipeline freight exports represent revenues of U.S.-incorporated affiliates of Canadian pipeline companies for transporting oil and gas, unloaded from tankers in Portland, Maine, to destinations in Canada. Transportation of oil en route from one Canadian point to another through pipelines across the northeast region of the United States is also included. Data are obtained each quarter from the U.S. affiliates of Canadian companies that provide such services.

10.91. ***Travel (for all purposes including education)***. Travel consists of transactions involving goods and services acquired by nonresidents while visiting another country. A traveler is defined as a person who stays, or intends to stay, for less than one year in a country of which he or she is not a resident. Purchases can be either for own use or for transfer to others. Travel is a transactor-based component that covers a variety of goods and services, primarily lodging, meals, transportation in the country of travel, amusement, entertainment, and gifts. Travel excludes goods for resale, which are included in goods under *general merchandise*. Air passenger services for travel between countries is included in *transport*.

10.92. Travel is further classified between *business travel* and *personal travel*. Business travel covers goods and services acquired by persons whose primary purpose for travel is for business. It includes goods and services for which business travelers are reimbursed by their employers. BEA breaks down business travel into (1) expenditures by border, seasonal, and other short-term workers and (2) other business travel. Personal travel covers travel for all non-business purposes. BEA breaks down personal travel into (1) health related, (2) education related, and (3) other personal travel.

10.93. Because of differences in source data for other business travel and other personal travel, statistics for exports to and imports from Canada and Mexico are prepared differently than for all other countries. Statistics for Canada and Mexico are based on data provided by Statistics Canada and the Bank of Mexico. Statistics for all other countries are prepared as the product of the number of travelers and the average expenditure per traveler. Numbers of travelers are obtained from the DHS, Office of Immigration Statistics. Average expenditures per traveler are obtained from the SIAT conducted by the U.S. Department of Commerce, NTTO. These sources include the country of origin for foreign travelers to the U.S. and the country of destination for U.S. travelers abroad.

Business travel

10.94. *Expenditures by border, seasonal, and other short-term workers* cover the expenditures on goods and services by foreign residents who commute to work in the United States, other foreign workers temporarily employed in the United States, and U.S. residents employed temporarily abroad. Statistics are based on the earnings of these workers, which are included in *compensation of employees*, and on information from the Department of Labor, Bureau of Labor Statistics (BLS) Consumer Expenditure Survey that BEA uses to estimate the portion of earnings spent.

10.95. *Other business travel* is estimated as a share of an aggregate measure of travel that excludes expenditures by border, seasonal, and other short-term workers and is derived by multiplying the number of travelers—whose primary travel purpose is not for health or education—by a measure of their average expenditures. Numbers of travelers are obtained from the DHS Office of Immigration Statistics. Average expenditures are obtained from the SIAT. These data sources include the country of origin for foreign travelers to the United States and the country of destination for U.S. travelers abroad. The shares for determining other business travel and other personal travel are estimated using information from the SIAT.

Personal travel

10.96. *Health-related travel* is based on periodic updates of a BEA study on foreign resident medical treatment in the United States and BEA estimates of payments by U.S. residents who travel abroad to selected countries for medical purposes, such as cosmetic surgery and dental procedures.

10.97. *Education-related travel* is based on data on the number of U.S. students abroad and foreign students in the United States from the Institute for International Education. Average student expenditures for tuition, room and board, and living expenses are from the National Center for Education Statistics and BLS.

10.98. *Other personal travel* is estimated as a share of an aggregate measure of travel that excludes expenditures by border, seasonal, and other short-term workers and is derived by multiplying the number of travelers—whose primary travel purpose is not for health or education—by a measure of their average expenditures. See *other business travel* above for the method used to estimate *other personal travel* and *other business travel*.

10.99. **Insurance services.** Insurance services include the *direct insurance* services of providing life insurance (including annuities) and non-life (property and casualty) insurance, *reinsurance*, and *auxiliary insurance services*. Direct insurance and reinsurance are measured as gross premiums earned plus premium supplements less claims payable with an adjustment for claims volatility. Premium supplements represent investment income from insurance reserves attributed to policyholders who are treated as paying it back to the insurer. Auxiliary insurance is measured separately and includes agents' commissions, brokerage services, insurance consulting services, actuarial services, and other insurance services. BEA does not include the *BPM6* component pension services due to a lack of source data.

10.100. While premiums and premium supplements are relatively stable, claims payable, which are subtracted from premiums, can be quite volatile from quarter to quarter. The resulting measure of insurance services could thus be erratic, or even negative in periods of catastrophic events. To deal with fluctuating loss settlements, insurance services are measured as premiums less claims payable adjusted for claims volatility, a concept called "expected losses." Expected losses are inferred from the relationship between actual losses and premiums averaged over six years. An additional adjustment is made for losses related to certain catastrophic events, which are averaged over 20 years. This treatment removes much of the volatility in insurance services that can be caused by large swings in actual losses.

10.101. Expected losses are considered transfers from the policyholders to the insurance company and are recorded in *secondary income* as a current transfer. Claims payable are transfers from the insurance company back to the policyholder and are also recorded in *secondary income*. An exception to this treatment is for catastrophic losses, which BEA defines as events where the total impact, insured and uninsured, is greater than one percent of gross domestic product. For catastrophic losses, the full amount of the insured loss is entered as a transfer in the *capital account* in the quarter in which the event occurs. This treatment considers the recovery of losses as an increase in financial assets, rather than an increase in current economic activity that would have been implied if it were combined with regular losses in current transfers. The treatment also removes a significant source of volatility in the current-account balance.

10.102. Statistics for *insurance services* are based on BEA survey data and company reports. The BEA surveys include the Quarterly Survey of Insurance Transactions by U.S. Insurance Companies With Foreign Persons (BE-45) and the Benchmark Survey of Insurance Transactions by U.S. Insurance Companies With Foreign Persons (BE-140). Direct insurance and reinsurance are estimated separately. An amount collected on BEA surveys is added for auxiliary services such as agents' commissions and insurance brokerage and agency services. Most cross-border activity occurs in reinsurance where U.S. purchases from foreign reinsurance companies greatly exceed foreign purchases of reinsurance from companies in the United States.

10.103. **Financial services.** Financial services include financial intermediary and auxiliary services, except insurance services. These services include those normally provided by banks and other financial institutions. Services primarily include those for which an explicit commission or fee is charged; implicit fees for bond transactions are also included. While *BPM6* recommends inclusion of financial intermediation services indirectly measured (FISIM) and dealers' and market-makers' margins on financial instruments, BEA does not include these components at this time.

10.104. BEA classifies and presents financial services according to the four components described below:

10.105. *Securities brokerage, underwriting, and related services* cover commission or fee-based financial services such as (1) brokerage services related to equity services, such as commissions and fees for executing orders to purchase or sell equities; (2) brokerage services for executing orders to purchase or sell forwards, futures, options, and swaps and other financial instruments, including brokerage of foreign currencies, whether conducted on organized exchanges, in over-the-counter markets, or over Internet and electronic communications networks; (3) brokerage services related to debt securities, estimated as implicit fees for executing orders to purchase and sell bonds; and (4) underwriting and private placement services for both equities and bonds.

10.106. *Financial management, financial advisory, and custody services* cover (1) fees for administering portfolios of cash, securities, financial derivatives, and other financial instruments; (2) fees for advisory services on mergers and acquisitions, commodity trading services, investment newsletters or investment advice,

and proxy voting advisory services, and (3) custody services (including payments and settlements services such as mortgage servicing services) and other custody services.

10.107. *Credit card and other credit-related services* cover (1) credit card services, such as transaction and service fees, interchange fees, and currency-conversion fees and (2) credit-related services, such as for establishing and maintaining standby letters of credit, arranging mortgages, performing factoring services, issuing financial guarantees and loan commitments, and arranging or entering into financial lease contracts.

10.108. *Securities lending, electronic funds transfer, and other services* cover (1) amounts received or paid for lending or borrowing securities, arranging loan terms and conditions, monitoring the value of collateral, providing guarantees against default, and providing other securities lending services; (2) fees for the electronic funds transfers of money or financial assets received directly from, or paid directly to, foreign persons; and (3) other financial services, such as asset pricing services, check processing fees, and securities or futures clearing and settling services.

10.109. Due to disclosure issues, not all of the individual components described above can be shown separately in the more detailed annual presentation of services trade. The combined categories, which prevent disclosure of individual company information, are brokerage services, underwriting services, credit card and other credit-related services, management services, advisory services, and other financial services, including securities lending and electronic funds transfer.

10.110. Statistics for financial services are based primarily on BEA survey data. The BEA surveys include the Quarterly Survey of Financial Services Transactions between U.S. Financial Services Providers and Foreign Persons (BE-185) and the Benchmark Survey of Financial Services Transactions by U.S. Financial Services Providers With Foreign Persons (BE-180). These surveys collect data on cross-border receipts and payments for the categories of financial services transactions identified above. Because bonds are generally not traded on a commission or fee basis, bond transactions are measured by the difference between bid and ask prices, based on market data from industry sources, multiplied by transactions volume.

10.111. ***Charges for the use of intellectual property n.i.e.*** Charges for the use of intellectual property n.i.e. include (a) charges for the use of proprietary rights (such as patents, trademarks, copyrights, industrial processes and designs including trade secrets, and franchises) that can arise from research and development as well as from marketing and (b) charges for licenses to reproduce or distribute (or both) intellectual property embodied in produced originals or prototypes (such as copyrights on books and manuscripts, computer software, cinematographic works, and sound recordings) and related rights (such as for live performances and television, cable, or satellite broadcast).

10.112. For computer software products, licenses to use, excluding reproduction and distribution, are included in *computer services*.

10.113. Under *BPM6*, licenses to use audio-visual and related products such as books, movies, and sound recordings, excluding reproduction and distribution, are included in a *BPM6* standard services category called personal, cultural, and recreational services. However, BEA currently lacks the source data needed to present this standard category or to distinguish between licenses to use, reproduce, or distribute audio-visual and related products. As a result, all of these transactions are currently included under charges for the use of intellectual property n.i.e.

10.114. Under *BPM6*, outright sales of the outcomes of research and development such as patents, copyrights, and industrial processes and designs are included under *research and development services*, a component of *other business services*, and outright sales of marketing assets such as franchises and trademarks are included in the *capital account*. At this time, however, BEA lacks the source data needed to distinguish outright sales from licenses to use, reproduce, or distribute. As a result, all of these transactions are currently included under charges for the use of intellectual property n.i.e.

10.115. BEA classifies and presents charges for the use of intellectual property n.i.e. according to the five components described below:

10.116. Rights related to *industrial processes* and products include license fees, royalties, and other fees received or paid for the sale or purchase, right to use, or right to reproduce or distribute intellectual property, including patents, trade secrets, and other proprietary rights, that are used in connection with, or related to, the production of goods.

10.117. Rights to *computer software* include receipts and payments for rights to distribute general use software, and rights to reproduce or use general use computer software that was made from a master copy. This item includes licensing fees for reproducing copies of general use software for local area network computer systems.

10.118. *Trademarks and franchise fees* include receipts and payments for the rights to sell products under a particular trademark, brand name, or signature and fees received and paid under business format franchising agreements with foreign persons.

10.119. Rights to *audio-visual and related products* include receipts and payments for the rights to display, reproduce, or distribute performances and events pre-recorded on motion picture film and TV tape (including digital recordings); to record and/or broadcast "live" artistic performances, sports events, and other live performances or events; and to perform, broadcast, reproduce, and sell as CD's, digital music, books (including books and magazines downloaded from the Internet), etc. or otherwise use copyrighted material and other intellectual property.

10.120. Payments (or receipts) for the acquisition (or sale) of rights to broadcast a major live performance or event, such as the Olympics, often extend over several years prior to the event. The cumulative amount of payments over all the years is recorded in the period in which the event is held.

10.121. *Other intellectual property* includes intellectual property not classified in one of the preceding categories such as receipts or payments by communications carriers to secure capacity by indefeasible right of user (IRU's).

10.122. More detailed definitions for these components can be found on BEA's surveys of transactions in selected services and intellectual property described in chapter 13.

10.123. Statistics for charges for the use of intellectual property, n.i.e. are based primarily on BEA survey data. The BEA surveys include the Quarterly Survey of Transactions in Selected Services and Intellectual Property With Foreign Persons (BE-125) and the Benchmark Survey of Transactions in Selected Services and Intellectual Property With Foreign Persons (BE-120). Quarterly and benchmark survey data are collected by type of affiliation as well as by type of service. Exports are the sum of receipts from unaffiliated persons and receipts by U.S. parents from their foreign affiliates and by U.S. affiliates from their foreign parent groups. Imports are the sum of payments to unaffiliated persons and payments by U.S. parents to their foreign affiliates and by U.S. affiliates to their foreign parent groups.

10.124. ***Telecommunications, computer, and information services.*** This *BPM6* standard component consists of *telecommunications services*, *computer services*, and *information services*. BEA publishes each component separately.

10.125. Telecommunications services include the broadcast or transmission of sound, images, data, or other information by electronic means. These services do not include the value of the information transmitted.

10.126. Computer services consists of hardware- and software-related services and data processing services. It includes sales of customized software and related use licenses as well as licenses to use non-customized software with a periodic license fee. This item also includes software downloaded on the Internet, fees and subscriptions for online gaming, and licensing agreements and end-user fees associated with downloading applications. Cross-border transactions in non-customized packaged software with a license for perpetual use are included in goods.

10.127. Information services includes news agency services, database services, and Web search portals.

10.128. Statistics for telecommunications, computer, and information services are based primarily on BEA survey data. The BEA surveys include the Quarterly Survey of Transactions in Selected Services and Intellectual Property With Foreign Persons (BE-125) and the Benchmark Survey of Transactions in Selected Services and Intellectual Property With Foreign Persons (BE-120). Specific

definitions for these components can be found on BEA's surveys of transactions in selected services and intellectual property described in chapter 13. Adjustments are made to survey results for computer services transactions between the United States and Canada to incorporate counterpart data from Statistics Canada.

10.129. **Other business services.** This category, which is a combination of several *BPM6* standard components, consists of *research and development services*, *professional and management consulting services*, and *technical, trade-related, and other business services*. BEA publishes each component separately.

10.130. Research and development services consist of services associated with basic and applied research and experimental development of new products and processes.

10.131. Professional and management consulting services include legal services, accounting, management consulting, managerial services, public relations services, advertising, and market research. Included are amounts received by a parent company from its affiliates for general overhead expenses related to these services.

10.132. Technical, trade-related, and other business services include architectural and engineering services, waste treatment, operational leasing, trade-related, and other business services.

10.133. In the U.S. international economic accounts, the definition of other business services is expanded to include the *BPM6* standard component of *construction* and selected components of the *BPM6* standard component of *personal, cultural, and recreational services*. These items are included as part of other business services due to source data limitations for quarterly statistics. *Construction* covers the creation, renovation, repair, or extension of structures. It also includes management of construction projects. The components of *personal, cultural, and recreational services* that BEA includes in other business services include fees to performers, athletes, directors, and producers involved with concerts, theatrical and musical productions, sporting events, and similar events for performing arts, sports, etc., remotely-provided telemedicine services, and online non-travel education.

10.134. Statistics for research and development services, professional and management consulting services, and technical, trade-related, and other business services are based primarily on BEA survey data. The BEA surveys include the Quarterly Survey of Transactions in Selected Services and Intellectual Property With Foreign Persons (BE-125) and the Benchmark Survey of Transactions in Selected Services and Intellectual Property With Foreign Persons (BE-120). Specific definitions for these components can be found on BEA's surveys of transactions in selected services and intellectual property described in chapter 13.

10.135. **Government goods and services *n.i.e.*** This *BPM6* standard component covers goods and services supplied by and to enclaves, such as embassies, military bases, and international organizations; goods and services acquired from the host economy by diplomats, consular staff, and military personnel located

abroad and their dependents; and services supplied by and to governments that are not included in other services categories. Services supplied by and to governments are classified to specific services categories when source data permit. Statistics for government goods and services n.i.e. are based largely on data provided to BEA by other U.S. government agencies.

Primary Income

Concepts and coverage

10.136. **Primary income** represents the return that accrues to institutional units for their contribution to the production process or for the provision of financial assets and renting natural resources to other institutional units. The first-level published components are **investment income** and **compensation of employees**. Investment income is the return for providing financial assets and includes direct investment income, portfolio investment income, other investment income, and income on reserve assets. Unlike other functional categories, no primary income accrues to financial derivatives; any amounts that accrue under the contract are classified as revaluations. Compensation of employees is income for the contribution of labor inputs to the production process. Cross-border primary income flows provide a link between gross domestic product (GDP) and gross national income (GNI) as GNI equals GDP plus the primary income balance.

10.137. The presentation structure of investment income in the current account is consistent with that for the corresponding financial flows in the financial account and positions in the International Investment Position (IIP) Accounts. Investment income receipts and payments are classified and presented by functional category. Table 4.1 presents primary income by functional category and by instrument type. Table 4.2 presents direct investment income by type and by industry. Tables 4.3 and 4.4 present portfolio investment income and other investment income by sector and by type of instrument.

Departures from BPM6

10.138. The coverage and presentation of primary income closely follows *BPM6* recommendations, particularly in the more detailed tables 4.1-4.4. One departure is the absence of statistics for *other primary income*, which consists of rent for the use of natural resources and taxes less subsidies on products and production. Source data are not available that allow the separation of rental income from investment income. Cross-border taxes and subsidies on products and production are rare. In addition, statistics are not provided for investment income attributable to standardized guarantees and pension funds as these financial instruments are not captured in BEA's source data for international transactions and positions.

Key data sources

10.139. *BEA Survey Data*. Statistics for direct investment income receipts and payments are based largely on data collected on BEA's quarterly, annual, and benchmark direct investment surveys. The quarterly surveys collect only information needed for the ITAs and the IIP accounts—specifically, information on

income flows between parents and their affiliates as well as related financial transactions and positions between parents and their affiliates.

10.140. The BE–577 survey collects quarterly data on U.S. direct investment abroad and the BE–605 survey collects quarterly data on foreign direct investment in the United States. Each year, the data from the quarterly surveys are reconciled to the BE–11 annual survey of U.S. direct investment abroad and to the BE–15 annual survey of foreign direct investment in the United States. Once every five years, the data from the quarterly surveys are reconciled to the BE–10 benchmark survey of U.S. direct investment abroad and to the BE–12 benchmark survey of foreign direct investment in the United States.¹

10.141. *U.S. Treasury Department.* Estimates for portfolio investment income and other investment income presented in tables 1.1–1.3 and in tables 4.3–4.4 are based partly on resident-nonresident transactions and positions collected monthly on the Treasury International Capital (TIC) S, SLT, C, and B forms and on the related SHC(A) and SHL(A) annual and benchmark surveys.

10.142. Interest yields on U.S. corporate, federally-sponsored agency, and Treasury long-term debt securities are the current yields derived from the SHL(A) survey data and interest yields on long-term foreign debt securities are the current yields derived from the SHC(A) survey data.

10.143. *Federal Reserve Bank of New York.* Interest earned on U.S. reserves and central bank liquidity swaps are provided to BEA.

10.144. *International Monetary Fund (IMF).* The IMF provides month-end position data and daily increases and decreases during each month, including interest flows, for the U.S. accounts at the IMF. The data include positions and transactions between the United States and the IMF for the Special Drawing Rights account and the General Resources (tranche) account and its subaccounts covering securities, valuation adjustments, and IMF borrowing from the United States.

10.145. *Foreign counterparty.* TIC and BEA survey coverage of claims and liabilities of U.S.-resident nonbanking enterprises with foreign-resident banks are supplemented by reports from the Federal Reserve Board, the Bank for International Settlements, and bilateral statistics from partner country central banks. These sources provide quarterly data on loans and deposits from the point of view of the foreign bank counterparties.

10.146. *Morgan Stanley Capital Index (MSCI) and Standard & Poor's (S&P).* For U.S. equity shares, BEA uses the S&P 500 dividend yield, which is a proxy for the composition of foreign holdings of U.S. equity shares. For foreign equity shares,

1. The reconciliation of the quarterly and benchmark survey data is described in the SURVEY OF CURRENT BUSINESS. The most recent reconciliation of the data on U.S. direct investment abroad is described in Marilyn Ibarra-Caton, "Direct Investment for 2009–2012: Detailed Historical-Cost Positions and Related Financial and Income Flows." SURVEY 93 (September 2013): 200–206. The most recent reconciliation of the data on foreign direct investment in the United States is described in Jeffrey H. Lowe, "Direct Investment for 2007–2010: Detailed Historical-Cost Positions and Related Financial and Income Flows." SURVEY 91 (September 2011): 50–56.

BEA uses MSCI national and regional yields for developed and emerging markets matched to the composition of the foreign stocks held by U.S. residents. Dividend yields and equity share price indexes are closely related.

10.147. *Federal Reserve Board (FRB) and British Bankers Association (BBA)*. For representative interest yields on loans and deposits, BEA uses U.S. money market, Eurodollar market, and foreign money market rates from the FRB and the BBA. BEA also uses lending rates from the FRB’s “Survey of Terms of Business Lending” for U.S. dollar-denominated loans, deposits, and trade credit and advances.

Estimation methods

10.148. Estimation methods vary significantly for the components of investment income and for compensation of employees. Direct investment income statistics are based largely on data reported on BEA’s direct investment surveys. Portfolio investment income, other investment income, and reserve asset income statistics are primarily derived by type of asset and liability as the product of positions from the IIP accounts and effective yields. Compensation of employees statistics are based on a wide variety of sources and methods, including direct reporting by foreign central banks, counterpart statistical organizations, and international organizations, supplemented by estimates from various sources on numbers of employees and average compensation. These sources and methods are described below. Unless otherwise noted, descriptions of methods apply to both receipts and payments of primary income.

Direct investment income

10.149. **Direct investment** income receipts and payments cover transactions in income earned on U.S. direct investment abroad and on foreign direct investment in the United States. Income measures the return that **direct investors** receive on their equity and debt investments in affiliates abroad or in the United States. It consists of the parents’ shares of the earnings and losses from current operations of affiliates plus interest received and paid on intercompany debt. Income includes both earnings distributed to **parent companies** and earnings reinvested in **affiliates**. The inclusion of reinvested earnings in direct investment income recognizes that the earnings of affiliates are income to parents, whether or not a portion is reinvested. Interest is income received or paid on intercompany loans, trade credit, and other forms of debt between related parties.

10.150. Direct investment income is recorded on an **asset/liability basis** in the aggregate statistics. Recording direct investment income on an asset/liability basis is consistent with the recording of income for the other functional categories in the international economic accounts. It also facilitates balance sheet analysis and is consistent with other macroeconomic statistics. On an asset/liability basis, direct investment income statistics are organized according to whether the income is earned on an asset or paid on a liability.

10.151. Direct investment income statistics presented by country or by industry, however, are presented on a **directional basis** because that basis is better

suited for analyzing certain aspects of direct investment, such as identifying the foreign countries in which U.S. **multinational enterprises** (MNEs) invest or the U.S. industries in which foreign direct investors invest. On the directional basis, direct investment statistics in the current account are organized according to whether the direct investment is outward or inward (that is, whether the investor is a domestic resident or a foreign resident).

10.152. Tables 1.1 and 1.2 present direct investment transactions on an asset/liability basis, while table 1.3, which presents bilateral statistics, presents direct investment transactions on a directional basis. Table 4.2 presents the translation from the asset/liability basis to the directional basis and also presents detail on direct investment income by industry of the affiliate.

10.153. On an asset/liability basis, U.S. receipts of direct investment income measure receipts on direct investment assets, whether those assets are held by U.S. parents or U.S. affiliates. Similarly, U.S. payments measure payments of direct investment income on liabilities, whether those liabilities are incurred by U.S. parents or U.S. affiliates. Thus, direct investment income receipts measure the return on U.S. direct investment assets. In contrast, on a directional basis, U.S. receipts of direct investment income measure the return on U.S. direct investment abroad—that is, the U.S. parents’ return on their equity and debt investments in their foreign affiliates. U.S. payments of direct investment income measure the return on foreign direct investment in the United States—that is, the foreign parents’ return on their equity and debt investments in their U.S. affiliates, plus the return of other members of the foreign parent group on their debt investments in their U.S. affiliates.

10.154. The published statistics represent the aggregation of income-related data items reported on BEA direct investment surveys by U.S. MNEs for U.S. direct investment abroad and by the U.S. affiliates of foreign MNEs for foreign direct investment in the United States. The following sections describe the methods used for each of the direct investment income statistics presented in tables 1.1–1.3 and for each of the components and classifications presented in table 6.1.

Income on equity

10.155. Direct investment income on equity represents parents’ shares in the net income of their affiliates, after provision for income taxes. A parent’s share in net income is based on its directly held equity interest in the affiliate; a parent’s directly held debt in the affiliate is not considered in determining the parent’s share because debt is not an indication of ownership. Debt instruments are, however, a major component of direct investment. Direct investment income on equity is recorded as it accrues, in accordance with the accrual principles of accounting. Income on equity is recorded before deduction of withholding taxes on dividends. These taxes are treated as payable by the recipients of such income, even though as an administrative convenience, they may be withheld at the source.

10.156. Direct investment income on equity measures earnings from productive activities during the current period. This concept of income on equity is

sometimes referred to as net operating earnings or net operating surplus. Because income on equity is related to current production, it excludes several items that may be included in the financial accounting statements of the enterprise. Examples of such exclusions are (1) parents' shares of capital gains and losses of affiliates, such as realized or unrealized gains and losses that result from the sale or other disposition of affiliates' assets and liabilities, (2) realized gains or losses on plant and equipment that result from the closures of part or all of a business, (3) realized gains and losses on the sale or disposition of financial assets including investment securities, except in cases where the affiliate is a market maker, (4) goodwill impairment, (5) restructuring costs that reflect write-downs or write-offs of assets, and (6) gains and losses from changes in the dollar value of foreign-currency-denominated assets and liabilities, or from the translation of affiliates' financial statements from local currencies into dollars due to changes in exchange rates. These capital gains and losses are, however, included as valuation adjustments to outstanding assets and liabilities in the IIP accounts.

10.157. A **current cost adjustment** is made to measure direct investment income on equity at current (replacement) cost in the international economic accounts—that is, after adjustments to the depreciation, depletion, and exploration and development costs reported in the financial statements of enterprises. These adjustments are made primarily to ensure that these charges reflect current-period prices and to more closely align income earned in a given period with charges against income in the same period, as required by economic accounting principles. The adjustment converts depreciation charges valued for financial accounting purposes at historical cost to a current (replacement) cost valuation. The adjustment also adds charges for depletion of natural resources back to income and reinvested earnings because these charges are not treated as production costs in the U.S. national economic accounts, and it reallocates expenses for mineral exploration and development across periods so that they are written off over their economic lives rather than all at once. Estimates for the adjustments are available only on a global basis; estimates by country or by industry are not possible due to a lack of appropriate source data.

10.158. The two major components of direct investment income on equity are in *dividends and withdrawals* and *reinvested earnings*.

10.159. *Dividends and withdrawals* are distributed earnings allocated to the owners of a business for placing funds at the disposal of the business. For corporations, they represent the payment of dividends to the owners of equity. They are the returns to the shareholders or owners. Although dividends are notionally paid out of the current period's earnings, corporations often smooth the payment of dividends, sometimes paying out more than current operating earnings by using the surplus earned in earlier periods, other times paying out less than current operating earnings.

10.160. In addition to dividends from corporations, withdrawals from unincorporated affiliates, subsidiaries, and branches are included in income on equity. These entities usually engage in the same type of economic and financial activities and maintain separate financial statements as do corporations, but they are not legally incorporated. Legally, they cannot distribute income as dividends.

Nevertheless, the owner, or owners, may choose to withdraw some or all of the income earned by the enterprise. Some are entities formally organized as trusts, partnerships, or other institutions that may formally distribute some or all of their earnings. From an economic point of view, the withdrawal of such income is equivalent to the distribution of corporate income through dividends and is treated the same way in the ITAs.

10.161. Exceptional payments by corporations and unincorporated entities to their shareholders or owners that are made out of accumulated reserves, or from sales of assets, are not treated as dividends and withdrawals. Such exceptional payments, sometimes called super-dividends, are treated as withdrawals of equity, and are therefore recorded in the financial account. Stock dividends are also excluded from dividends because they are not considered as a remittance of earnings, but rather a capitalization of retained earnings and thus a substitution of one type of equity (capital stock) for another (retained earnings). Liquidating dividends are also excluded from dividends because they are a return of capital, rather than a remittance of earnings.

10.162. Dividends are recorded at the time they are either received from or entered into, intercompany accounts with the affiliate, whichever occurs first. Withdrawals of income from unincorporated entities are recorded when they are withdrawn by their owners. Dividends and withdrawals of income are recorded before the deduction of withholding taxes. These taxes are treated as payable by recipients of such income.

10.163. *Reinvested earnings* are the earnings that remain after distributions have been made to owners of the enterprise. They represent the net savings of the enterprise in the period. Because reinvested earnings, or net savings, represent an addition to owners' capital, an offsetting entry of equal magnitude is made in the direct investment component of the financial account, where reinvestment of earnings is listed separately along with other equity and intercompany debt as components of owners' investment in the enterprise.

10.164. Reinvested earnings are recorded in the period in which they accrue and are measured after deduction of income taxes charged on the income earned by the enterprise. Such taxes are payable by the enterprise and not by its owners. Reinvested earnings are also calculated after the depreciation of fixed assets has been restated at current (replacement) cost and the adjustments described above have been made to depletion charges and exploration and development costs.

10.165. Reinvested earnings can be negative when a direct investment enterprise has a loss on its operations or the dividends declared in a period are larger than net earnings in that period. If direct investment generates negative earnings, the entry is shown as negative income receipts by the direct investor.

Interest

10.166. On an asset/liability basis, interest receipts and payments are recorded on a gross basis. Interest income that accrues to U.S. parents or U.S. affiliates from affiliated foreign persons is a gross receipt and interest income that is

paid by U.S. parents or U.S. affiliates to affiliated foreign persons is a gross payment. U.S. direct investment interest receipts consist of U.S. parents' receipts of interest from their foreign affiliates and U.S. affiliates' receipts of interest from their foreign parent group, both before the deduction of withholding taxes. Likewise, U.S. interest payments on direct investment consist of U.S. parents' interest payments to their foreign affiliates and U.S. affiliates' interest payments to their foreign parent groups.

10.167. On a directional basis, interest receipts and payments are recorded on a net basis. Interest is income received by, or credited to, parents on intercompany debt owed to them by their affiliates, less interest paid or credited by parents on intercompany debt owed by them to their affiliates, both before the deduction of withholding taxes. Interest includes net interest on capitalized leases between parents and affiliates.

10.168. The following table presents an example of the conversion of direct investment income defined on the asset/liability basis recommended by *BPM6* to the directional basis recommended for classifying direct investment income by partner country and by industry.

10.169. Interest is recorded on an accrual basis—that is, interest is recorded as accruing continuously over time to the creditor on the amount of debt outstanding, in accordance with the principles of accrual accounting. Under the accrual basis, as interest accrues, the amount of debt outstanding increases; accrued interest not yet paid becomes part of the amount of debt owed to the creditor. What are commonly referred to as interest payments, therefore, are financial account transactions that reduce the debtor's existing liability.

10.170. Interest received and paid on debt instruments excludes receivables and payables on intercompany debt between parents in the finance industry and affiliated financial institutions. This exclusion derives from the treatment in the financial accounts of intercompany debt transactions among certain non-bank financial institutions. Under this treatment, the transactions are classified as portfolio investment claims and liabilities rather than direct investment claims and liabilities because the nature of the transactions is related to the underlying activity of financial intermediation rather than to activity typical of a direct investment relationship. Therefore, the related interest received and paid on the debt is excluded from direct investment interest and included in portfolio investment interest. The financial intermediary accounts consist of transactions between firms in a direct investment relationship where both the U.S. and foreign firms are classified in the finance industry (excluding insurance) but the firms are not banks.

10.171. Interest received and paid between affiliated depository institutions—banks, bank holding companies, and financial holding companies—are also excluded from direct investment and combined with these institutions' receipts and payments with unaffiliated entities as other investment. The combination groups together transactions related to the underlying activity of financial intermediation, regardless of the affiliation of the enterprises. BEA began reclassifying income from permanent debt positions between affiliated banks, bank

holding companies, and financial holding companies from direct investment to other investment starting with 2007. For earlier years, income from permanent debt positions remains in direct investment, where permanent debt is deemed to represent a lasting interest in the institution receiving the funds, such as funding used for working capital or to finance plant and equipment.

**Direct Investment Income on the
Asset/Liability Basis and the Directional Basis**

Receipts	Millions of dollars
Primary income on direct investment, asset/liability basis (table 1.2, line 25)	130
Income on equity	100
Dividends and withdrawals	75
Reinvested earnings	25
Interest	30
U.S. parents' receipts	20
U.S. affiliates' receipts	10
<i>Less:</i> Adjustments to convert to directional basis	25
U.S. parents' interest payments	15
U.S. affiliates' interest receipts	10
<i>Equals:</i> Primary income for outward direct investment (U.S. direct investment abroad), directional basis (table 1.3)	105
Income on equity	100
Dividends and withdrawals	75
Reinvested earnings	25
Interest, net receipts	5
U.S. parents' receipts	20
U.S. parents' payments	15
Payments	Millions of dollars
Primary income on direct investment, asset/liability basis (table 1.2, line 54)	90
Income on equity	50
Dividends and withdrawals	30
Reinvested earnings	20
Interest	40
U.S. affiliates' payments	25
U.S. parents' payments	15
<i>Less:</i> Adjustments to convert to directional basis	25
U.S. parents' interest payments	15
U.S. affiliates' interest receipts	10
<i>Equals:</i> Primary income for inward direct investment (Foreign direct investment in the United States), directional basis (table 1.3)	65
Income on equity	50
Dividends and withdrawals	30
Reinvested earnings	20
Interest, net payments	15
U.S. affiliates' payments	25
U.S. affiliates' receipts	10

Portfolio investment income

10.172. Portfolio investment income consists of income received by U.S. and foreign investors who own equity and debt securities that are included in the portfolio investment functional category. The published components are income on *equity* and *investment fund shares* and *interest* on debt securities. U.S. portfolio income receipts are income received by U.S. residents who own equity or debt securities issued by foreign governments or business enterprises. U.S. portfolio income payments are income paid to foreign residents who own equity or debt securities issued by the U.S. government, U.S. federally-sponsored agencies, or U.S. business enterprises.

10.173. Receipts and payments of income on holdings of equity and debt securities are estimated by multiplying average positions owned by investors by representative dividend or current interest yields. The methods for average positions and representative yields are described below.

Average positions

10.174. Average positions for U.S. and foreign short-term debt securities and for negotiable certificates of deposit are based on the positions reported in the monthly and quarterly TIC B and C forms. Average positions for U.S. and foreign equity and long-term debt securities are based on data from the monthly SLT. Prior to December 2011, when the SLT was first used by BEA for income estimates, average positions for U.S. and foreign long-term debt securities were based on annual and benchmark survey positions from the SHC(A) and SHL(A), advanced by monthly transactions summed to quarters plus valuation adjustments from indexes of market prices. BEA continues to use these annual and benchmark surveys to review, and if necessary revise, the average positions that are based on the SLT.

Interest yields

10.175. For interest on short-term debt securities and on negotiable certificates of deposit, BEA uses representative U.S. money market and Eurodollar rates for U.S. dollar-denominated securities. BEA uses foreign money market rates for foreign-currency-denominated securities. Rates are matched to average positions estimated for U.S.-and foreign-issued securities and negotiable certificates of deposit based on the currency of denomination and the type of instrument.

10.176. For interest on long-term debt securities, BEA uses representative current yields that reflect coupon interest flows. This current yield is the same measure used for the U.S. national income and product accounts and it meets IMF guidelines, which recommend estimating interest on debt securities on a debtor basis, or the actual coupon payments made by debtors. Current yields are derived based on the annual and benchmark surveys of U.S and foreign holdings of long-term debt securities by multiplying the face values of held debt securities by their coupon rates. The resulting annual coupon interest is divided by the market value of the securities to obtain the current yield for the long-term debt securities reported in the surveys. In order to estimate a quarterly current yield between annual surveys when income data are not available, the most recent annual current yield is advanced by holding interest income constant and revaluing the market value of bond holdings by weighted average price indexes.

10.177. For U.S. holdings of foreign bonds, Merrill Lynch price indexes, stated in dollar terms for six major currencies, are used to advance the market value of bonds and implicitly the current yields each quarter for both foreign-currency-denominated and dollar-denominated bonds. The indexes are weighted by the distribution of currencies on the latest annual or benchmark survey. For foreign holdings of U.S. bonds, Merrill Lynch price indexes for U.S. long-term corporate debt and for Eurobonds (denominated in both U.S. dollars and foreign currencies) are used to advance the market value of bonds and implicitly the current yields each quarter.

Dividend yields

10.178. For U.S. holdings of foreign equities, BEA uses market dividend yields by major country and area. The dividend yields are Morgan Stanley Capital Indexes of dividend yields stated in dollar terms. Seven country and two regional indexes are used for developed markets abroad, and two indexes derived from several country indexes and one regional index are used for emerging markets. The nine developed market yields are combined to create a weighted average yield for the developed markets. The weighted yield is applied to holdings of foreign equities, averaged over two quarter-end positions, for all developed countries to estimate dividend receipts. The three emerging market yields are combined to create a weighted average yield for emerging markets. The weighted yield is applied to holdings of foreign equities, averaged over two quarter-end positions, for all emerging market countries to estimate dividend receipts. The weights are based on the country distribution of holdings in the latest annual or benchmark survey.

10.179. For foreign holdings of U.S. equities, the dividend yield is the yield on the S&P 500 index. It is multiplied by an average of two quarter-end positions, advanced by monthly holdings and valuation adjustments in U.S. equities, to estimate dividend payments. Only a single index is necessary because the composition of holdings in the annual and benchmark TIC surveys is very similar to the composition of equities included in the S&P 500 index.

Other investment income

10.180. Other investment income consists of income received by U.S. and foreign residents who own financial assets such as **loans**, **deposits**, **insurance technical reserves**, and **trade credit and advances** that are included in the other investment functional category. The published components are *interest* and *income attributable to insurance policyholders*. U.S. other investment income receipts include income received by U.S. residents on loans to foreign residents, extensions of trade credit and advances to foreign residents, deposits in foreign banks, and claims on insurance technical reserves of foreign-resident insurance companies. U.S. other investment income payments include income paid to foreign residents on loans to U.S. residents, extensions of trade credit and advances to U.S. residents, deposits in U.S. banks, and claims on insurance technical reserves of U.S.-resident insurance companies.

10.181. Other investment income is a broad category with statistics based on several sources and methods. Some components are reported on BEA direct investment surveys or on reports provided by the Federal Reserve Board and by U.S. government operating agencies under Office of Management and Budget

(OMB) Directive No. 19. Other components are derived by multiplying average positions by representative yields.

10.182. Income receipts and payments associated with loans, deposits, and trade credit and advances for which the U.S. party to the transaction is a business enterprise are mostly estimated by multiplying average positions held by investors by representative interest yields. U.S. financial and nonfinancial business enterprises report their claims and liabilities for these types of assets on the TIC B and C forms. Loans and deposits are reported on both the B and C forms. Trade credit and advances are separately identified in the TIC system only on the C forms (form CQ-2).

10.183. Estimation methods are described separately below by type of business entity or by type of income. Income yields that are used for several components were described above under major data sources.

U.S. financial enterprises and their U.S. and foreign customers

10.184. Beginning in December 2013, all U.S. financial enterprises reported positions vis-à-vis affiliated and unaffiliated foreign residents on the B forms with the exception of pension funds and insurance companies because their positions with affiliates are defined as direct investment. Thus, the positions reported on the B forms completely cover other investment positions for financial enterprises and their U.S. and foreign customers for whose accounts the financial enterprises also report. Average positions reported on the B forms for U.S. financial enterprises and their customers are multiplied by income yields to obtain the statistics for other investment income.

10.185. Prior to December 2013 and beginning in February 2003, U.S. banks, bank and financial holding companies, and securities brokers reported vis-à-vis affiliated and unaffiliated foreign residents on the B forms, but other financial enterprises reported on the C forms vis-à-vis only unaffiliated foreign residents. As a result, the other investment income statistics for this period consist of (1) average positions from the B and C forms for financial enterprises that reported on these forms multiplied by income yields and (2) income data collected on BEA direct investment surveys for U.S. financial enterprises that were not banks, bank and financial holding companies, or securities brokers.

10.186. Prior to February 2003, U.S. banks and bank and financial holding companies reported vis-à-vis affiliated and unaffiliated foreign residents on the B forms, U.S. securities brokers reported vis-à-vis only unaffiliated foreign residents on the B forms, and other U.S. financial enterprises reported vis-à-vis only unaffiliated foreign residents on the C forms. As a result, the other investment income statistics for this period consist of (1) average positions from the B and C forms for financial enterprises that reported on these forms multiplied by income yields and (2) income data collected on BEA direct investment surveys for U.S. financial enterprises that were neither banks nor bank and financial holding companies.

U.S. nonfinancial enterprises

10.187. U.S. nonfinancial enterprises report their other investment claims and liabilities vis-à-vis unaffiliated foreign residents on the C forms. Average positions

from the C forms are multiplied by representative income yields to obtain statistics for other investment income receipts and payments for U.S. nonfinancial enterprises.

Foreign bank counterparty claims and liabilities on U.S. nonbank firms

10.188. BEA supplements other investment position data for deposits and loans reported by U.S. nonbank firms on the TIC B and C forms, and for nonbank financial intermediaries on surveys of direct investment, with counterparty claims and liabilities from foreign banks. For other investment claims, the supplemental foreign data are assumed to represent U.S. deposits placed abroad. Average positions for these supplemental deposits are multiplied by the deposit income yield to obtain statistics for other investment income receipts attributable to the supplemental deposits. For other investment liabilities, the supplemental foreign data are assumed to represent U.S. loans from foreign banks. Average positions for these supplemental loans are multiplied by the loan income yield to obtain statistics for other investment income payments attributable to the supplemental loans.

Insurance premium supplements

10.189. Other investment income from insurance premium supplements is interest that accrues to the owners of insurance policies from insurance company reserves that are accumulated from premiums paid by insurance policy owners. Insurance policy owners benefit from the interest on the reserves through lower premiums due to the interest insurance companies receive from holding reserves. These implicitly charged services are included in the *insurance services* component of *services*, and an offsetting entry is made in other investment income receipts or payments. Statistics for interest paid to foreign policy owners by U.S. insurance companies and for interest received by U.S. policy owners from foreign insurance companies are based on BEA's insurance surveys and industry data.

U.S. government and central bank assets and liabilities

10.190. U.S. government income receipts earned on outstanding U.S. government credits extended to foreign residents are reported quarterly to BEA by U.S. government operating agencies under OMB Directive No. 19. Receipts include capitalized interest, which is reported as having been realized through the recording of an additional credit utilization, which, in turn, increases principal indebtedness outstanding. Except for capitalized interest, receipts are recorded on a cash collection basis or when the debtor delivers goods or services to U.S. operating agencies. Collections of commitment fees for credits extended by U.S. government operating agencies are included indistinguishably with these interest receipts.

10.191. U.S. government debt is mainly in the form of debt securities, so it does not pay interest to foreign residents on loans, deposits, or trade credit and advances. The U.S. government does pay interest to the IMF on allocations of special drawing rights (SDRs), which are reserve-related liabilities on the books of the Exchange Stabilization Fund of the U.S. Treasury Department. Monthly reports of interest payments are made available to BEA through the IMF accounting department.

10.192. Beginning in December 2007, the Federal Reserve Board (FRB) provided dollar funding to foreign central banks through temporary central bank liquidity swaps, which do not meet the definition of a reserve asset. Under these arrangements, foreign central banks sold their currencies to the FRB in exchange for dollars. The foreign currency received by the FRB remained on deposit at the foreign central bank until the swap was reversed, creating a U.S. asset that earned interest. The FRB reports these interest receipts monthly to BEA on a cash-received basis.

Reserve assets income

10.193. U.S. monetary authorities invest U.S. foreign currency reserves in a variety of instruments that yield market rates of return and that have a high degree of liquidity and credit quality. To the greatest extent practicable, the investments are split evenly between the System Open Market Account of the FRB and the Treasury Department's Exchange Stabilization Fund.

10.194. A significant portion of the U.S. monetary authorities' foreign exchange reserves is usually invested on an outright basis in German, French, and Japanese government securities. A smaller portion of the reserves is usually invested in euro-denominated repurchase agreements, under which the U.S. monetary authorities may accept sovereign debt backed by the full faith and credit of the following governments: Belgium, France, Germany, Italy, the Netherlands, and Spain. Foreign currency reserves are also invested at the Bank for International Settlements and in facilities at other official institutions. The FRB reports these interest receipts monthly to BEA on a cash-received basis.

10.195. U.S. reserve assets also include the U.S. reserve position at the IMF and SDRs held in the U.S. SDR account at the IMF. The IMF pays interest on these U.S. assets. Monthly reports of interest receipts are made available to BEA through the IMF accounting department.

Compensation of employees

10.196. Compensation of employees receipts covers (1) earnings of U.S. residents employed temporarily abroad, (2) earnings of U.S. residents employed by foreign governments in the United States, and (3) earnings of U.S. residents employed by international organizations in the United States.

10.197. Compensation of employees payments covers (1) Canadian and Mexican workers who commute to work in the United States, (2) foreign students studying at colleges and universities in the United States, (3) foreign professionals temporarily residing in the United States, (4) foreign temporary agricultural workers in the United States, (5) foreign temporary nonagricultural workers in the United States, and (6) foreign nationals working for U.S. diplomatic missions abroad.

10.198. Compensation receipts and payments, which are recorded before the deduction of U.S. and foreign income taxes, are based on a variety of methods and on source data from foreign statistical authorities, the U.S. Internal Revenue

Service (IRS), and various demographic and labor market data from the Department of Agriculture, the Department of State, the Department of Homeland Security, and the Department of Labor.

Compensation receipts

10.199. *Earnings of U.S. residents employed temporarily abroad.* This item measures the earnings of U.S. residents employed temporarily abroad. Estimates for Germany, Canada, and the United Kingdom are based on data from the Deutsche Bundesbank, Statistics Canada, and United Kingdom Office of National Statistics, respectively. Estimates of U.S. residents' earnings abroad for countries other than Germany, Canada, and the United Kingdom are estimated as a share of total foreign-earned income paid to foreign residents of U.S. taxpayers in each country. The estimates by country are based on data from the IRS.

10.200. Because the IRS data commingle earnings of U.S. taxpayers who own equity or debt securities issued by the U.S. government, U.S. federally-sponsored agencies, or U.S. business enterprises abroad both temporarily (for less than 1 year and are therefore considered U.S. residents) and permanently (with the intent to stay 1 year or more and are therefore not considered U.S. residents), data from selected countries are used to construct an average proportion of U.S. residents' earnings from temporary employment to total foreign-earned income of U.S. taxpayers from both temporary and permanent employment. This average proportion is applied to the IRS data by country to estimate U.S. residents' earnings from temporary employment abroad and then summed to a worldwide total for countries other than Canada, Germany, and the United Kingdom.

10.201. *Earnings of U.S. residents employed by foreign governments in the United States.* This item measures earnings of U.S. residents employed by foreign governments in the United States. Earnings are estimated by multiplying the number of U.S. residents employed by average compensation, with the exception of Canada, for which Statistics Canada provides an estimate of earnings of U.S. residents employed by the Canadian government installations in the United States. Estimates for countries other than Canada are based on various studies and on data on the number of foreign diplomats in the United States from the U.S. State Department and estimates of their average compensation.

10.202. *Earnings of U.S. residents employed by international organizations in the United States.* This item measures earnings of U.S. residents, including foreign nationals, employed by international organizations in the United States. Earnings are estimated by multiplying the number of U.S. residents employed by average compensation. Estimates are based on direct reporting from international organizations in some cases and from their annual reports in other cases. Foreign nationals employed by international organizations in the United States are considered U.S. residents.

Compensation payments

10.203. *Canadian and Mexican workers who commute to work in the United States.* This item measures the compensation of Mexican and Canadian residents who commute to jobs in the United States. Employment of Mexican workers is

generally limited to the United States-Mexican border area; employment of Canadian workers is mostly along the United States-Canadian border. The proximity of the households to the places of employment permits daily trips to and from work across the border. Compensation of Mexican workers is based on academic and other studies and is extrapolated forward each year. Estimates of compensation of Canadian residents working in the United States are based on estimates provided to BEA by Statistics Canada that are extrapolated forward each year.

10.204. *Foreign students studying at colleges and universities in the United States.* This item measures wages earned by foreign students studying in the United States. Estimates are based on data from an annual survey of about 2,700 accredited U.S. institutions conducted by the Institute for International Education (IIE). Foreign students are defined as individuals enrolled in institutions of higher education in the United States who are not U.S. citizens, immigrants, or refugees. Characteristics of the population used in the estimates include the geographic area of the college or university, type of institution (public or private), enrollment status (part-time or full-time), and academic level of the institution. The survey covers students enrolled in undergraduate programs, graduate programs, and other programs, which consist of intensive English language programs and non-degree programs.

10.205. *Foreign professionals temporarily residing in the United States.* This item measures the compensation of foreign professionals temporarily residing in the United States, including artists, athletes, consultants, and teachers. Estimates are based on data from the Department of State on visas issued to foreign professionals and average wage rates reported by employers to the Department of Labor's Office of Foreign Labor Certification, supplemented by data on earnings of foreign artists and athletes from the IRS.

10.206. *Foreign temporary agricultural workers in the United States.* This item measures the compensation of foreign temporary agricultural workers in the United States. Estimates cover both documented and undocumented workers (that is, workers who are in the United States with no work authorization) who are employed in the United States 23 weeks a year, on average, to assist in the growing and harvesting of crops. The primary residence of these workers is usually Mexico and other Latin American countries.

10.207. The estimates are based on biennial data from the U.S. Department of Labor's National Agricultural Workers Survey (NAWS), H-2A visa counts from the U.S. Department of State visa statistics, and data from the U.S. Department of Agriculture's Quarterly Agricultural Labor Survey (QALS). The NAWS, which is based on interviews with agricultural workers, covers crop workers such as cash grains, fruits and vegetables, and exclude livestock, poultry, and animal fodder workers. The QALS is a telephone survey of farm employers conducted four times per year.

10.208. *Foreign temporary nonagricultural workers.* This item measures the compensation of foreign temporary nonagricultural workers in the United States. Estimates cover both documented and undocumented workers (that is, workers who are in the United States with no work authorization). The primary residence

of these workers is usually Mexico and other Latin American countries. Compensation is calculated by multiplying the number of foreign temporary nonagricultural workers by their annual employment in hours and their average hourly wage.

10.209. The number of documented temporary nonagricultural workers is obtained from H–2B visa counts from the U.S. State Department visa statistics. The number of undocumented temporary nonagricultural workers is calculated by combining an estimate of the undocumented immigrant population in the U.S. civilian labor force based on data from the Department of Homeland Security Office of Immigration Statistics and the Pew Hispanic Center, with an estimate of the share of those who are temporary workers based on information from the NAWS.

10.210. Annual employment is estimated at approximately 1,000 hours. The average wage rate for undocumented workers is based on wage rates for occupations commonly filled by this group and various studies about undocumented workers. The wage rate for documented workers is based on information on the occupational distribution of H–2B visa holders from the Office of Foreign Labor Certification and wage rates from the U.S. Bureau of Labor Statistics for occupations filled by H–2B visa holders.

10.211. *Foreign nationals working for U.S. diplomatic missions abroad.* This item measures the compensation of foreign nationals employed directly by U.S. diplomatic missions abroad. Estimates are based on data reported to BEA quarterly by the U.S. Department of State.

Secondary Income

Concepts and coverage

10.212. **Secondary income** presents **current transfers** between residents and nonresidents. **Capital transfers** are presented in the capital account. Unlike an exchange, a transfer is a transaction in which a good, service, or asset is provided without a corresponding return of economic value. Current transfers directly affect the level of disposable income and savings and influence the consumption of goods or services in both the donor and recipient countries. Entries for current transfers in the ITAs offset transactions with nonresidents that involve real resources or financial assets recorded in the goods, services, income, or financial accounts.

10.213. Secondary income receipts and payments are further classified and presented in table 5.1. Both receipts and payments are distinguished between U.S. government transfers and private transfers. For payments, U.S. government transfers are classified between U.S. government grants and U.S. government pensions and other transfers, and private transfers are classified between personal transfers and other current transfers. U.S. government grants include both military and nonmilitary assistance. Personal transfers, often referred to as remittances, consists of amounts sent by U.S. resident individuals to households

abroad. Other current transfers include institutional remittances, withholding taxes, and an adjustment to insurance services for insurance claims volatility.

Departures from BPM6

10.214. The coverage and presentation of secondary income closely follows *BPM6* recommendations, although the presentation of detailed components in table 5.1 differs somewhat from that proposed by *BPM6* due to the detail in the source data used for the U.S. statistics.

Key data sources

10.215. *BEA Survey Data*. Estimates for the adjustments for insurance claims volatility are largely based on data collected on BEA's quarterly and benchmark surveys of insurance transactions (BE-45, BE-140) and on BEA's quarterly and benchmark services surveys (BE-125, BE-120).

10.216. BEA's direct investment surveys provide data for withholding taxes on dividends.

10.217. Statistics for institutional remittances are obtained partly from BEA's voluntary survey of U.S. religious, charitable, educational, scientific, and similar nonprofit and philanthropic foundations and organizations on cash transfers abroad by country (BE-40).

10.218. *U.S. Census Bureau*. The American Community Survey (ACS) is conducted annually by the U.S. Census Bureau to collect data on the income and characteristics of the U.S. population, including the U.S. resident immigrant population. Data from the ACS are used to develop model-based estimates of personal transfers to foreign residents.

10.219. *U.S. Government Agencies*. U.S. government grants are estimated on the basis of data submitted quarterly by U.S. government agencies under Office of Management and Budget (OMB) Directive No. 19. Fines received by the U.S. government are compiled by BEA using publicly available data from the agency that issues the fine.

Estimation methods

10.220. Estimation methods vary for the different components of secondary income. Statistics for some components are based directly on source data while statistics for other components reflect a combination of source data and models. Methods for the components presented in table 5.1 are described below.

10.221. ***U.S. government transfers (receipts)***. This component includes withholding taxes, fines and penalties, and transfers received by the U.S. government from foreign residents.

10.222. *Withholding taxes received by the U.S. government* represent taxes collected by the U.S. government on nonresidents' interest and dividend income and the distribution of earnings on foreign direct investment in the United States.

Taxes on various services transactions and on compensation earned by nonresidents temporarily employed are also included. These taxes are included in services imports and primary income payments. The offsets to these taxes are included in this item. For securities, withholding taxes for both dividends and interest are based on Internal Revenue Service (IRS) data and BEA research. For direct investment, withholding taxes are reported on BEA surveys for dividends and are estimated for interest. For services and compensation, estimates are based on BEA research, BEA surveys, and IRS data.

10.223. *Fines and penalties received by the U.S. government.* This component represents monetary fines and penalties paid by foreign corporations to the U.S. government for violations of U.S. laws including antitrust and environmental laws, the U.S. Foreign Corrupt Practices Act, banking regulations, and others. Statistics are compiled by BEA using data from U.S. government agencies, U.S. courts, and other public documents.

10.224. *Grants received by the U.S. government* represents cash settlements for grants previously provided to foreign residents, for returns of equipment previously transferred, for foreign currencies provided to offset U.S. expenditures under foreign assistance programs, and for goods and services provided under mutual assistance programs that require the receiver to extend assistance to the United States or other countries to achieve a common objective. Statistics are based on data submitted quarterly by U.S. government operating agencies under OMB Directive No. 19.

10.225. *Private transfers (receipts).* This component consists primarily of pension, inheritance, and other benefits received by U.S. residents from residents and governments in Canada, Germany, and the United Kingdom, personal transfers paid to U.S. residents by nonresidents, and the counterpart entry to the adjustment for insurance claims volatility made to insurance services. (This adjustment is described below as a component of secondary income payments.)

10.226. For pension, inheritance, and other benefits, statistics are based on information from Statistics Canada, the Deutsche Bundesbank, and the Office for National Statistics of the United Kingdom. Data from other countries are not available. Indemnification transfers from Germany associated with World War II indemnification claims of U.S. residents are also included.

10.227. *U.S. government transfers (payments).* This component includes U.S. government grants and U.S. government pensions and other transfers.

10.228. *U.S. government grants (payments).* This component covers the use of U.S. government financing to transfer real resources or financial assets to foreigners under programs enacted by the U.S. Congress for the provision of nonmilitary and military foreign assistance (grants) for which no repayment is expected. Also included are transfers under assistance programs for which repayment terms are indeterminate at the time of the transfer and subject to future settlement. These types of assistance are recorded as grants in the period rendered. Subsequently, when settlement for the assistance is agreed upon, the terms may call for a cash settlement, which are included as U.S. government transfers receipts.

10.229. U.S. government nonmilitary grants payments measure the financing of goods delivered, services rendered, or cash disbursed by U.S. nonmilitary agencies to foreign countries under programs enacted by the U.S. Congress to authorize the provision of nonmilitary assistance for which no repayment is expected or for which repayment terms are indeterminate.

10.230. U.S. government nonmilitary grants payments include (1) funds advanced to finance sales to foreign governments and to release foreign governments from their contractual liabilities to pay for defense articles and services purchased under the Arms Export Control Act; (2) funds advanced by the U.S. Agency for International Development (AID); and (3) contributions and special grants to international agencies carrying out humanitarian activities. Also included are (4) assistance for economic reconstruction and humanitarian relief abroad; (5) donations of food and other relief supplies, and their transportation; (6) expenditures for international refugee assistance; (7) expenditures for the Peace Corps; and (8) contributions to the economic development and subsidies for the Pacific Ocean islands that the United States holds in trusteeship for the United Nations.

10.231. The offsetting entries to the expenditures by the Peace Corps and AID are included in exports of U.S. government goods and services n.i.e. where they represent the “export” of U.S. government goods and services to the aid-receiving countries. When services are obtained and paid for abroad, an entry is also recorded in payments under U.S. government goods and services n.i.e. If the specific type of service provided or obtained can be identified, the entries are recorded in *other business services* exports or imports, respectively.

10.232. U.S. government military grants payments measure the financing of goods delivered, services rendered, or cash disbursed by U.S. military services to foreign countries under programs enacted by the U.S. Congress to authorize the provision of military assistance for which no repayment is expected or for which repayment terms are indeterminate.

10.233. For recent time periods, military grants payments include primarily transfers of equipment, materials, supplies, and services for Iraq, Afghanistan, and Pakistan military security forces (valued on the basis of the U.S. government financial records reflecting the expenditure of authorized funds). For earlier time periods, similar transfers made under various military assistance programs are also included here.

10.234. Military grants payments include transfers of goods and services purchased with dollar funds appropriated or with foreign currencies owned by the U.S. government and authorized by legislation for that use (valued on the basis of the U.S. government financial records reflecting the expenditure of authorized funds). Military grants payments also include transfers of goods under authorizations to deliver to foreign nations the equipment and material deemed excess to U.S. requirements and military drawdowns (valued according to the legislative authorization under which the transfer is made).

10.235. Military grants payments also include transfers for programs such as U.S. Department of Defense (DOD) narcotics in-country support, cooperative

threat reduction, and humanitarian assistance for which the DOD has been designated as the executive agent.

10.236. The value of goods and services financed by U.S. military grant programs offsets identical credit entries for goods and for services in the current account, which reflect the military goods delivered and services rendered.

10.237. U.S. government grants statistics are based on data submitted quarterly by U.S. government operating agencies under OMB Directive No. 19. Where necessary, the reported data are adjusted for timing. The adjustments are based on supplementary information, including published statements, congressional submissions, and the financial and operating records of government agencies. For transactions that are reported only partially or not at all by the operating agencies, BEA uses supplementary information.

10.238. **U.S. government pensions and other transfers (payments).** This component covers (1) payments of social security, railroad retirement, and other social insurance benefits to eligible persons residing abroad, (2) payments under retirement and compensation programs for former U.S. government civilian employees, military personnel, and veterans residing abroad, including the cost of providing medical services abroad under Veterans' Administration programs, (3) membership contributions (dues) to international nonfinancial organizations, (4) payments under U.S. educational, cultural exchange, and research programs, and (5) damage claims paid by the U.S. armed services in countries where they have installations. Statistics for this component are estimated based on data submitted quarterly by U.S. government operating agencies under OMB Directive No. 19.

10.239. **Private transfers.** This component consists of personal transfers and other current transfers.

10.240. **Personal transfers (payments).** Personal transfers, often called 'remittances', consist of all current transfers in cash or in kind sent by the foreign-born population resident in the United States to households abroad. The foreign-born population resident in the United States is defined as that part of the total foreign-born population that has resided, or intends to reside, in the United States for more than 1 year. These transfers are estimated using a model that incorporates demographic and economic characteristics of the foreign-born population, including size of the foreign-born population, the income of the foreign-born population, and the percentage of income remitted by the foreign-born population. The percentage of income remitted varies based on the demographic characteristics of the foreign-born population.

10.241. The size of the foreign-born population, their demographic characteristics, and their income are based on source data from the U.S. Census Bureau's annual American Community Survey. The percentage of income remitted is a BEA estimate based on the Census Bureau's 2008 migration supplement to the Current Population Survey and various research and academic studies. The demographic characteristics in the model include duration of stay in the United States,

family type (that is, presence or absence of the spouse and the presence or absence of roommates), and country of origin—all of which have been shown to have a clear impact on remitting behavior.

10.242. ***Other current transfers (payments)***. These payments are primarily charitable donations by U.S. entities such as nonprofit institutions and corporations, withholding taxes paid to foreign governments, and the counterpart of adjustments for insurance claims volatility made to insurance services. Other current transfer payments also includes fines and penalties paid by U.S. corporations to foreign entities, largely as a result of violations of foreign antitrust laws for participation in illegal international cartels.

10.243. Donations by U.S. entities are based on several sources. One source is data reported by U.S. religious, charitable, educational, scientific, and similar nonprofit and philanthropic foundations and organizations on BEA's BE-40 survey, "Institutional Remittances to Foreign Countries." Data are reported by country and consist entirely of funds (cash) transferred. Funds transferred to foreign residents include outright grants, payments abroad for procurement of goods to be used abroad, payments for contract services abroad, and salaries and other administrative expenses abroad. The BE-40 does not currently request reporting of goods donations. Goods shipped abroad as donations are based on U.S. Census Bureau export data identified as donated goods.

10.244. These data are supplemented by grants data from The Foundation Center, a leading authority on philanthropy that connects nonprofit institutions and grant-makers, and by data reported annually to the U.S. Agency for International Development by private voluntary organizations. Business and financial statistics are also used to identify potential corporate charitable donations not distributed through foundations.

10.245. *Withholding taxes paid to foreign governments* represents taxes collected by foreign governments primarily on U.S. residents' interest and dividend receipts and the distribution of earnings on U.S. direct investment abroad. Payments of taxes on various services transactions and on compensation earned by U.S. residents employed temporarily abroad are also included. These taxes are included, but not separately identified, in services exports and primary income receipts; the offsets to these taxes are included here as outward current transfers. For securities, withholding taxes for both dividends and interest are based on IRS data and BEA research. For direct investment, withholding taxes are reported on BEA surveys for dividends and are estimated for interest. For services and compensation, estimates are based on BEA research, BEA surveys, and IRS data.

10.246. *Insurance claims volatility adjustment*. Insurance services are measured as premiums less expected losses. Expected losses consist of losses that occur regularly and a share of certain major catastrophic losses that occur at infrequent intervals. For regularly occurring losses, expected losses are measured as a 6-year moving average of the ratio of premiums to actual losses. Certain catastrophic losses are added in equal increments to the estimate of regularly occurring losses over the 20 years following the event to derive an estimate of total expected losses. The determination of which catastrophic losses are subject to

20-year spreading is made on a case-by-case evaluation of each major event or loss.

10.247. Expected losses are considered transfers from the policyholders to the insurance company. This transfer offsets the portion of premiums that is not accounted for in insurance services. Claims payable (actual losses) are transfers from the insurance company to the policyholder. Payments for the insurance claims volatility adjustment consist of expected losses associated with insurance services payments and actual losses associated with insurance services receipts. Receipts for the insurance claims volatility adjustment consist of expected losses associated with insurance receipts and actual losses associated with insurance payments.

10.248. An exception to this treatment is for catastrophic losses, which BEA defines as events where the total impact, insured and uninsured, is greater than one percent of gross domestic product. For catastrophic losses, the full amount of the insured loss is entered as a transfer in the capital account in the quarter in which the event occurs. This treatment considers the recovery of losses as an increase in financial assets, rather than an increase in current economic activities that would have been implied if it were combined with regular losses in current transfers. The treatment also removes a significant source of volatility in the current-account balance.

10.249. *Fines and penalties paid by U.S. corporations to foreign entities.* This item measures monetary fines and penalties paid by U.S. corporations to foreign governments, including the European Commission, for violations of foreign anti-trust laws for participation in illegal international cartels. Estimates are from administrative records of foreign government agencies and foreign courts.

Capital Account

Concepts and coverage

10.250. The **capital account** presents **capital transfers** between residents and nonresidents and the cross-border acquisition and disposal of **nonproduced non-financial assets**. Current transfers are presented in the current account. Capital transfers include debt forgiveness and nonlife insurance claims. Nonproduced nonfinancial assets include natural resources and contracts, leases, and licenses.

10.251. Capital account transactions are distinguished from current account transactions in that capital account transactions result in a change in the assets of one or both parties to the transaction without affecting the income or savings of either party. Thus, transactions in the components of the capital account do not affect measures of production, income, and savings of an economy, whereas transactions in the components of the current account do affect these measures.

Departures from BPM6

10.252. The coverage and presentation of the capital account largely follows *BPM6* recommendations, including the separate presentation of credits (receipts) and debits (payments). Transactions related to debt assumption, investment grants, and marketing assets, including goodwill, are not included in the

ITAs due to the lack of adequate source data. BEA combines capital transfers with other capital account transactions in its presentation.

Key data sources

10.253. *U.S. Treasury Department.* Data for forgiveness of U.S. government loans are obtained from the U.S Treasury Department.

10.254. *Publicly available information.* Data for significant one-time or intermittent capital-account transactions are obtained from publicly available sources. Data for disaster-related claims are mostly based on press releases issued by insurance companies.

Estimation methods

10.255. Estimation methods differ between capital transfers and the acquisition and disposal of nonproduced nonfinancial assets. For capital transfers, the most significant component is the transfer related to insured disaster-related losses.

10.256. *Capital transfers.* The two most important components are insured disaster-related losses and debt forgiveness. Insured disaster-related losses are based on information obtained from insurance company financial reports. A single entry for the entire amount of the loss recovered from foreign reinsurance and primary insurance companies is made in the quarter in which the disaster occurs. These transfers are separated from other insurance transactions to assure that insured disaster-related losses do not affect measures of income and savings in the national income and product accounts.

10.257. Debt forgiveness is the voluntary cancellation of all or part of a debt obligation within a contractual agreement between a creditor and debtor. With debt forgiveness, the contractual arrangement cancels or forgives all or part of the principal amount outstanding, including interest unpaid past the due date (arrears) and other interest costs that have accrued. Currently, source data are available only for forgiveness of debt owed to the U.S. government.

10.258. *Acquisition and disposal of nonproduced nonfinancial assets.* Acquisitions and disposals of nonproduced nonfinancial assets include purchases and sales of rights to tangible assets, such as mineral rights, electromagnetic spectrum, and offshore drilling rights, and purchases and sales of certain intangible assets, such as trademarks and franchises. Source data are not available to separately identify and completely measure most of these transactions. Transactions are intermittent and recorded in the ITAs when large transactions are identified. In some cases, capital account transactions may be covered but are commingled with transactions recorded elsewhere in the accounts; for example, U.S government investment grants are commingled with U.S. government current transfers in secondary income payments.

10.259. Examples of intermittent transactions in nonproduced nonfinancial assets currently included in the capital account are receipts of U.S.-based sports leagues for the establishment of franchises in Canada, receipts of the U.S. State Department for the sale of land in London, and payments for the purchase of rights to negotiate with foreign athletes. Although no source data are regularly available, transactions in nonproduced nonfinancial assets are included in the capital account when BEA can identify them.

ITA Financial Account

The financial account consists of transactions between U.S. residents and nonresidents for direct investment, portfolio investment, other investment, reserves, and financial derivatives other than reserves. Sources and methods for each of these major components are described below. Each major component includes descriptions of concepts and coverage, including departures from *BPM6*, key data sources, and estimation methods for each of the individual components.

Direct Investment

Concepts and coverage

10.260. **Direct investment** is a category of cross-border investment associated with a resident in one economy having control or a significant degree of influence on the management of an enterprise resident in another economy. The major published components are **equity** and **debt instruments**. Generally, direct investment indicates a long-term relationship with the management of a foreign enterprise. Ownership or control of 10 percent or more of the nonresident entity's voting securities is the threshold for separating direct investment from other types of investment.

10.261. Table 6.1 presents direct investment financial transactions first on the **asset/liability basis** recommended by *BPM6* for aggregate direct investment statistics and then on the **directional basis**—outward and inward—recommended for classifying direct investment by partner country and by industry. Table 6.1 also presents the conversion of direct investment on the asset/liability basis to the directional basis. Table 1.3 presents financial transactions for outward and inward direct investment by country.

10.262. Like other financial account components, direct investment is measured and presented on a net basis. Net acquisition of direct investment assets represents net purchases (gross purchases less gross sales) of foreign assets by U.S. residents, and net incurrence of direct investment liabilities represents net purchases of U.S. assets by foreign residents.

Departures from *BPM6*

10.263. The coverage and presentation of direct investment including supplemental table 6.1 closely follow *BPM6* recommendations with the exception of classifications for **reverse investment** and **fellow enterprises** due to limitations in BEA's source data. Although BEA's direct investment surveys capture reverse debt

investment, they are not designed to fully capture reverse equity investment.² The surveys capture investment between majority-owned fellow enterprises but not with those fellow enterprises that are minority-owned as called for in *BPM6* and *BD4*.

Key data sources

10.264. *BEA Survey Data*. Statistics for direct investment financial transactions (assets and liabilities) presented in tables 1.1–1.3 and in table 6.1 are based largely on data collected on BEA’s quarterly, annual, and benchmark direct investment surveys. The quarterly surveys collect only information needed for the ITAs and the IIP accounts—specifically, financial transactions and positions between parents and their affiliates and income flows between parents and their affiliates.

10.265. The BE–577 survey collects quarterly data on U.S. direct investment abroad and the BE–605 survey collects quarterly data on foreign direct investment in the United States. Each year, the data from the quarterly surveys are reconciled to the BE–11 annual survey of U.S. direct investment abroad and to the BE–15 annual survey of foreign direct investment in the United States. Once every five years, the data from the quarterly surveys are reconciled to the BE–10 benchmark survey of U.S. direct investment abroad and to the BE–12 benchmark survey of foreign direct investment in the United States.³

Estimation methods

10.266. Direct investment financial transactions represent the aggregation of data items reported on BEA’s direct investment surveys by U.S. **multinational enterprises** (MNEs) for U.S. direct investment abroad and by the U.S. affiliates of foreign MNEs for foreign direct investment in the United States. The following sections describe the methods used for each of the direct investment components and classifications presented in table 6.1.

Equity other than reinvestment of earnings

10.267. Parents’ equity in incorporated affiliates consists of the parents’ holdings of capital stock in, and other capital contributions to, their affiliates. Capital stock consists of all stock of affiliates, whether common or preferred, voting or nonvoting. Other capital contributions by parents, also referred to as the “equity in additional paid-in capital,” consist of (1) capital, invested or contributed, that is not included in capital stock (such as amounts paid for stock in excess of its par or stated value), and (2) capitalizations of intercompany accounts (conversions of debt

2. BEA has included questions to gauge the magnitude of reverse equity investment on its direct investment benchmark surveys. Results from the 2009 benchmark survey of U.S. direct investment abroad indicate that reverse equity investment was immaterial; data from the 2012 benchmark survey of foreign direct investment are under review.

3. The reconciliation of the quarterly and benchmark survey data is described in the *SURVEY OF CURRENT BUSINESS*. The most recent reconciliation of the data on U.S. direct investment abroad is described in Marilyn Ibarra-Caton, “Direct Investment for 2009–2012: Detailed Historical-Cost Positions and Related Financial and Income Flows.” *SURVEY 93* (September 2013): 200–206. The most recent reconciliation of the data on foreign direct investment in the United States is described in Jeffrey H. Lowe, “Direct Investment for 2007–2010: Detailed Historical-Cost Positions and Related Financial and Income Flows.” *SURVEY 91* (September 2011): 50–56.

to equity) that do not result in the issuance of capital stock. Direct investment equity does not include investment fund shares. Parents' equity in unincorporated affiliates consists of the parents' share of the affiliates' total owners' equity.

10.268. Equity investment other than reinvestment of earnings is the net of parents' equity increases and decreases in their affiliates. It excludes changes in equity that result from the reinvestment of earnings, which are recorded as a separate component of direct investment financial transactions. Increases in equity investment other than reinvestment of earnings result from the parents' establishment of new affiliates (i.e., greenfield investment), from initial acquisitions of a 10-percent-or-more ownership interest in existing businesses, from acquisitions of additional ownership interests in existing affiliates, and from capital contributions to affiliates. Decreases in equity investment other than reinvestment of earnings result from liquidations of affiliates, from partial or total sales of ownership interests in affiliates, and from the return of capital contributions. Decreases also include liquidating dividends, which are a return of capital to parents. Decreases in equity investment other than reinvestment of earnings are netted against increases to derive net flows of equity other than reinvestment of earnings.

Reinvestment of earnings

10.269. Reinvestment of earnings of affiliates are total earnings less dividends and withdrawals. Earnings are the parents' shares in the net income of their affiliates after provision for host country income taxes. Earnings are from the books of the affiliate. A parent's share in net income is based on its directly held equity interest in the affiliate.

10.270. Reinvestment of earnings is shown as a separate component of direct investment financial transactions, in recognition of the fact that the earnings of an affiliate are income to the parent, whether they are reinvested or remitted to the parent. However, because reinvested earnings are not actually transferred to the parent but increase the parent's investment in its affiliate, an entry of equal magnitude, but opposite direction, is made in the direct investment financial account, offsetting the entry made in direct investment income receipts or payments.

10.271. Reinvestment of earnings, as well as total earnings and total income in the current account, is measured at current cost (or replacement cost) rather than at historical cost to assure that fixed assets are valued at current-period prices and to assure that reported measures of earnings and income earned in a given period are properly aligned with charges against income in the same period. The adjustment is made at the global level because source data are not available to apply at either the country level or industry level; reinvestment of earnings at country and industry levels remain based on historical-cost assets. The total amount of the current-cost adjustment is entered in the "international organizations and unallocated" area to assure that the sum of the geographic areas adds to the global total for reinvestment of earnings.

Debt instruments

10.272. Debt instrument transactions can involve transactions between a parent and its affiliates or between enterprises that are under the control or influence of the same immediate or indirect investor, but where neither enterprise

controls or influences the other enterprise (“fellow enterprises”). For example, debt instrument transactions for foreign direct investment in the United States cover transactions between U.S. affiliates and members of their foreign parent group other than their immediate foreign parent.

10.273. When a parent lends funds to its affiliate, the balance of the parent’s receivables (amounts due) from the affiliate increases; subsequently, when the affiliate repays the principal owed to its parent, the balance of the parent’s receivables from the affiliate is reduced. Similarly, when a parent borrows funds from its affiliate, the balance of the parent’s payables (amounts owed) to the affiliate increases; subsequently, when the parent repays the principal owed to its affiliate, the balance of the parent’s payables to the affiliate is reduced. Quarterly transactions in debt instruments are derived by subtracting the net outstanding intercompany debt balance at the end of the previous quarter from the net outstanding balance at the end of the current quarter.

10.274. Debt investment transactions are recorded on an asset/liability basis in the aggregate statistics. However, statistics presented by country or by industry are presented on a directional basis because the directional basis is better for analyzing certain aspects of direct investment, such as identifying the foreign countries in which U.S. MNEs are investing or the U.S. industries in which foreign direct investors are investing. On an asset/liability basis, direct investment statistics are organized according to whether the investment relates to an asset or a liability. On the directional basis, direct investment statistics in the financial account are organized according to whether the direct investment is outward or inward (that is, whether the investor is a domestic resident or a foreign resident).

10.275. On the asset/liability basis, debt instrument transactions are recorded on a gross basis. Transactions that increase or decrease U.S. parents’ receivables (claims) from their foreign affiliates and transactions that increase or decrease U.S. affiliates’ receivables (claims) from their foreign parent groups are recorded under net U.S. acquisition of direct investment assets. Likewise, transactions that increase or decrease U.S. parents’ payables (liabilities) to their foreign affiliates and transactions that increase or decrease U.S. affiliates’ payables (liabilities) to their foreign parent groups are recorded under U.S. net incurrence of direct investment liabilities. On the directional basis, debt instrument transactions are recorded on a net basis. They consist of the change in parents’ net intercompany debt due from their affiliates during the quarter. The net balance at the end of a quarter or year is calculated as parents’ receivables less parents’ payables.

10.276. Increases in U.S. parents’ receivables from their foreign affiliates or reductions in U.S. parents’ payables to their foreign affiliates result in increases in U.S. parents’ net assets and give rise to outflows in debt instruments under outward direct investment. Reductions in U.S. parents’ receivables from their foreign affiliates or increases in U.S. parents’ payables to their foreign affiliates result in decreases in U.S. parents’ net assets and give rise to inflows in debt instruments under outward direct investment.

10.277. Increases in U.S. affiliates’ payables to their foreign parents or reductions in U.S. affiliates’ receivables from their foreign parents result in increases in U.S. affiliates’ net liabilities and give rise to inflows in debt instruments under

inward direct investment. Reductions in U.S. affiliates' payables to their foreign parents or increases in U.S. affiliates' receivables from their foreign parents result in decreases in U.S. affiliates' net liabilities and give rise to outflows in debt instruments under inward direct investment.

10.278. The table below presents an example of the conversion of direct investment financial account transactions defined on the asset/liability basis recommended by *BPM6* to the directional basis recommended for classifying direct investment transactions by partner country and by industry.

Direct Investment Financial Transactions on the Asset/Liability Basis and the Directional Basis

Net U.S. acquisition of assets/transactions for outward investment	Millions of dollars
Net U.S. acquisition of direct investment assets, asset/liability basis	460
Equity	400
Equity other than reinvestment of earnings	50
Reinvestment of earnings	350
Debt instruments	60
U.S. parents' claims	20
U.S. affiliates' claims	40
<i>Less: Adjustments to convert to directional basis</i>	50
U.S. parents' liabilities	10
U.S. affiliates' claims	40
<i>Equals: Financial transactions for outward direct investment, directional basis</i>	410
Equity	400
Equity other than reinvestment of earnings	50
Reinvestment of earnings	350
Debt instruments	10
U.S. parents' claims	20
U.S. parents' liabilities	10
Net U.S. incurrence of liabilities/transactions for inward investment	Millions of dollars
Net U.S. incurrence of direct investment liabilities, asset/liability basis	255
Equity	200
Equity other than reinvestment of earnings	90
Reinvestment of earnings	110
Debt instruments	55
U.S. affiliates' liabilities	45
U.S. parents' liabilities	10
<i>Less: Adjustments to convert to directional basis</i>	50
U.S. parents' liabilities	10
U.S. affiliates' claims	40
<i>Equals: Financial transactions for inward direct investment, directional basis</i>	205
Equity	200
Equity other than reinvestment of earnings	90
Reinvestment of earnings	110
Debt	5
U.S. affiliates' liabilities	45
U.S. affiliates' claims	40

10.279. Not all debt instrument transactions reflect actual flows of funds. For example, when distributed earnings or interest accrue to a parent from an affiliate, the full amount is included as a receipt or payment of direct investment income. If all or part of that amount is not actually transferred to the parent, the amount not transferred is entered into debt instruments as an increase in the parent's receivables from its affiliate.

10.280. The following sections discuss special issues in the measurement of direct investment transactions. These special issues include financial intermediaries, capital and operating leases, direct investment and portfolio investment, and reverse investment.

Financial intermediaries

10.281. Complexities arise in the classification of intercompany debt transactions involving parents and/or affiliates in financial industries, particularly when one of those parties is located in an offshore financial center. For example, if a U.S. manufacturer borrows funds from its financial affiliate or its parent in the Cayman Islands, the acquisition of those funds should be recorded as an increase in debt instrument payables (a debt inflow) and the repayment of those funds as a decrease in debt instrument payables (a debt outflow) and both are included in direct investment financial transactions. However, if a U.S. financial firm acquires funds from or repays funds to a financial affiliate or parent in the Cayman Islands, those financial transactions should be classified as portfolio investment claims and liabilities because the nature of the transactions is more closely related to the underlying activity of financial intermediation than to activity typical of a direct investment relationship.

10.282. These financial intermediaries' accounts are defined as transactions between firms in a direct investment relationship (that is, between U.S. parents and their foreign affiliates or between U.S. affiliates and their foreign parent groups), where both the U.S. and foreign firms are classified in a finance industry (excluding insurance), but the firms are not banks. (By the same reasoning, related interest flows are also classified as portfolio investment income rather than as direct investment interest.)

10.283. Debt transactions between affiliated depository institutions—banks, bank holding companies, and financial holding companies—are also excluded from direct investment and combined with these institutions' transactions with unaffiliated entities as other investment in the ITAs. The combination groups together transactions related to the underlying activity of financial intermediation, regardless of the affiliation of the enterprises. BEA began reclassifying permanent debt transactions between affiliated banks, bank holding companies, and financial holding companies from direct investment to other investment with data for year 2007. For earlier years, permanent debt transactions remain in direct investment, where permanent debt is debt that is deemed to represent a lasting interest in the institution receiving the funds, such as funding used for working capital or to finance plant and equipment.

Capital and operating leases

10.284. Transactions in debt instruments includes changes in the value of capital—or financial—leases and operating leases of more than 1 year between parents and their affiliates. When property is leased by a foreign affiliate from its

U.S. parent, or leased by a foreign parent from its U.S. affiliate, the value of the leased property is recorded as an asset of the U.S. parent or U.S. affiliate because it increases its receivables (a debt instruments outflow). The subsequent payment of principal on a capital lease, or the component of payments on an operating lease that reflects depreciation, is a return of capital and is recorded as a reduction in the U.S. parent's or U.S. affiliate's assets because it reduces its receivables (a debt inflow).

10.285. Similarly, when property is leased to a U.S. parent by its foreign affiliate, or to a U.S. affiliate by its foreign parent, the value of the leased property is recorded as a liability of the U.S. parent or U.S. affiliate because it increases its payables (a debt instruments inflow). The subsequent payment of principal on a capital lease, or the component of payments on an operating lease that reflects depreciation, is a return of capital and is recorded as a reduction in the U.S. parent's or U.S. affiliate's liabilities because it reduces its payables (a debt outflow).

Direct investment and portfolio investment

10.286. Some transactions require a shift in classification between direct investment and portfolio investment. If a U.S. parent's equity interest in a foreign business enterprise, or a foreign parent's equity interest in a U.S. business enterprise, is originally less than 10 percent, and if additional purchases result in a greater than 10 percent equity interest, a direct investment financial transaction equal to the value of the additional interest is recorded. In addition, offsetting valuation adjustments are made to the direct investment position and the portfolio investment position to bring the original interest into the direct investment position. If a U.S. parent's equity interest in a foreign affiliate or a foreign parent's equity interest in a U.S. affiliate falls below 10 percent, a direct investment financial transaction equal to the value of the reduction in interest is recorded, and offsetting valuation adjustments are made to the direct investment position and the portfolio investment position to extinguish the remaining direct investment position. Related income flows are also reclassified.

Reverse investment

10.287. A U.S. parent may have investment in a foreign affiliate that, in turn, has investment in the U.S. parent as a result of the affiliate's lending funds to, or acquiring voting securities or other equity interest in, the U.S. parent. Likewise, a foreign parent may have investment in a U.S. affiliate that, in turn, has investment in the foreign parent as a result of the affiliate's lending funds to, or acquiring voting securities or other equity interest in, the foreign parent. These cases of affiliates having investment in their parent companies are known as "reverse investment." International guidelines call for reverse equity investment of less than 10 percent to be separately identified in the ITAs and labeled as "reverse investment," in cases where it is significant.

10.288. The results from the 2009 benchmark survey of U.S. direct investment abroad suggest that this is currently not the case for U.S. outward investment, so BEA has decided to not show this category in its accounts at this time.⁴ Reverse equity investment of 10 percent or more is treated like any other direct investment relationship. International guidelines call for reverse debt investment to be

4. The results of the 2012 benchmark survey of foreign direct investment in the United States, which are currently under review, will address this question from the perspective of inward investment.

separately identified in the ITAs and labeled as “direct investment between fellow enterprises,” in cases where it is significant. Because of the high level of consolidation of data collected for U.S. parent companies, BEA is not able to separately identify fellow enterprise transactions on outward investment. For this reason, these transactions are treated as direct transactions between the U.S. parent company and its foreign affiliates on outward investment. For consistency, these transactions are treated as direct transactions between U.S. affiliates and their foreign parent group on inward investment as well. On an asset/liability basis, the direction of equity ownership does not matter; an inflow of direct-investment-related debt funds represents an increase in U.S. debt liabilities and an outflow of direct-investment-related debt funds represents an increase in U.S. debt assets.

Portfolio Investment

Concepts and coverage

10.289. **Portfolio investment** consists of cross-border transactions involving debt or equity **securities**, excluding those included in direct investment or reserve assets. The major published components are **equity and investment fund shares** and **debt securities**. In table 7.1, portfolio investment is presented by maturity and by **type of instrument** for debt securities, by **sector** of U.S. holder for assets, and by sector of U.S. issuer for liabilities. Transactions in portfolio investment liabilities to **foreign official agencies** are presented in table 9.1.

10.290. Like other financial account components, portfolio investment is measured and presented on a net basis. Net acquisition of portfolio investment assets represents net purchases (gross purchases less gross sales) of foreign securities by U.S. residents, and net incurrence of portfolio investment liabilities represents net purchases of U.S. securities by foreign residents.

Departures from BPM6

10.291. The coverage and presentation of portfolio investment closely follows *BPM6* recommendations. BEA uses slightly different terminology and slightly different sector detail in some cases.

Key data sources

10.292. *U.S. Treasury Department*. U.S. residents’ net purchases of foreign-issued equity and long-term debt securities and foreign residents’ net purchases of U.S.-issued equity and long-term debt securities are based on data collected monthly on the Treasury International Capital (TIC) SLT form. The related annual and benchmark surveys cover equity and long- and short-term debt, including negotiable certificates of deposit, and are used to supplement the other TIC data sources. The SHL(A) covers foreign holding of U.S. securities and the SHC(A) covers U.S. holdings of foreign securities. Values on these surveys reflect the secondary market prices of the equity and long-term debt securities.

10.293. Estimates of U.S. short-term debt securities and negotiable certificates of deposit are based on the TIC B and C forms: BC, BL–2, BQ–1, BQ–2, and CQ–1. Values on the TIC B and C forms are reported at their original contractual values (face value).

10.294. Changes in reported values caused by the addition of new reporters, corrected reports, or other changes to the reporting panels of these TIC surveys are reported to BEA. As a result, changes in quarterly balances not due to transactions, price changes, or exchange rate changes can be removed when estimating transactions.

10.295. The values of securities denominated in foreign currencies, including most foreign-issued securities and some U.S.-issued securities, are converted to U.S. dollars at exchange rates prevailing on the reporting date and are reported in U.S. dollars on the TIC surveys.

10.296. *Morgan Stanley Capital Index (MSCI), Standard & Poor's (S&P), and Merrill Lynch Price Indexes.* For U.S. equity shares, BEA uses the Standard and Poor's (S&P) 500 stock index, which is a proxy for the composition of foreign holdings of U.S. equity shares. For U.S. corporate, federally-sponsored agency, and Treasury long-term debt securities, BEA uses various Merrill Lynch indexes matched to these market segments and to the maturity, investment quality, and currency of denomination of U.S. long-term debt securities held by foreign residents.

10.297. For foreign equity shares, BEA uses MSCI national and regional indexes for developed and emerging markets matched to the composition of the foreign stocks held by U.S. residents. For foreign bonds, BEA uses various Merrill Lynch indexes representing investment quality long-term debt securities issued abroad in the U.S. dollar, the euro, the Japanese yen, the Canadian dollar, and the British pound, as well as a global broad market index excluding U.S. dollar debt, to match the composition of foreign-issued long-term debt held by U.S. residents.

10.298. *Depository Trust and Clearing Corporation (DTCC).* BEA receives reports of commercial paper issued in the United States from DTCC. The data provided by DTCC are combined with databases of company reports to determine whether commercial paper issuers are U.S. residents or foreign residents, providing estimates that supplement U.S. holdings of foreign commercial paper reported on TIC form BQ-1 and the SHC(A).

Estimation methods

10.299. Estimation methods for portfolio investment statistics, including classifications by maturity and sector, are summarized below in tables A, B, and C. Table A summarizes transactions in short-term debt securities and negotiable certificates of deposit (NCDs) of any maturity. Table B summarizes transactions in equity and long-term securities, excluding long-term NCDs. Table C summarizes methods used to derive detailed components by sector from aggregate components.

Short-term debt securities and NCDs of any maturity

10.300. Estimates of U.S. residents' net purchases of foreign short-term debt securities and NCDs of any maturity and of foreign residents' net purchases of U.S. short-term debt securities and NCDs of any maturity are based on changes in quarterly holdings of these securities reported on the TIC B and C forms. U.S. residents' holdings of foreign commercial paper reported on the BQ-1 are supplemented by holdings estimated from DTCC data. Transactions in short-term

instruments and NCDs are equal to holdings reported at the end of the current quarter, less holdings reported at the end of the preceding quarter, less changes in holdings not due to transactions.

10.301. Changes not due to transactions include changes in holdings caused by changes to reporting panels and changes in foreign currency denominated instruments caused by changes in exchange rates. Because holdings are reported at face value, reported values are not much affected by price changes in secondary markets, so no adjustment is made for changes in secondary market prices. Table A below indicates the components published in tables 7.1 and 9.1 derived by this method.

Table A. Transactions in Short-Term Debt Securities and Negotiable Certificates of Deposit in Tables 7.1 and 9.1, Directly Estimated From TIC B & C and DTCC Reported Holdings

Line	Item description
Table 7.1.	
U.S. International Financial Transactions for Portfolio Investment	
	<i>Net U.S. acquisition of portfolio investment assets</i>
7+13	Negotiable certificates of deposit, any maturity
8	Commercial paper
9	Other short-term securities
	<i>Assets by sector of U.S. holder</i>
34	Short-term debt securities held by deposit-taking institutions except central bank ¹
39	Short-term debt securities held by other financial institutions ¹
44	Short-term debt securities held by nonfinancial institutions except general government ¹
	<i>Net U.S. incurrence of portfolio investment liabilities</i>
22+29	Negotiable certificates of deposit, any maturity
20	Treasury bills and certificates
21	Federally sponsored agency securities, short term
23	Commercial paper and other short-term securities
	<i>Liabilities by sector of U.S. issuer</i>
50	Short-term debt securities issued by deposit-taking institutions except central bank ²
56	Federally sponsored agency securities, short term (equals line 21)
59	Short-term debt securities issued by other financial institutions
64	Short-term debt securities issued by nonfinancial institutions except general government
69	U.S. Treasury securities, short term (equals line 20)
Table 9.1.	
U.S. International Financial Transactions for Liabilities to Foreign Official Agencies	
	<i>Net U.S. incurrence of portfolio investment liabilities</i>
10+17	Negotiable certificates of deposit, any maturity
8	Treasury bills and certificates
9+11	Short-term federally sponsored agency securities plus commercial paper and other short-term securities

1. Transactions in negotiable certificates of deposit directly estimated for this sector are allocated between short- and long-term maturities based on annual data from the SHC(A).

2. All transactions in U.S. negotiable certificates of deposit are allocated to deposit-taking institutions except central bank. Transactions are allocated between short- and long-term maturities based on annual data from the SHL(A).

10.302. The TIC B and C forms provide outstanding amounts for NCDs, but do not provide long-term and short-term holdings for these instruments. BEA uses annual data from the SHC(A) and SHL(A) annual and benchmark surveys of portfolio investment on long- and short-term holdings of NCDs to allocate flows computed for NCDs to long-term and short-term flows for tables 7.1, lines 7, 13, 22, 29, 34, 35, 39, 40, 44, 45, 50, and 51, and for table 9.1, lines 10 and 17.

10.303. The SHL(A) annual and benchmark surveys of foreign portfolio investment in the United States provide complete holdings by foreign official agencies of all types of U.S.-issued short-term securities and short- and long-term negotiable certificates of deposit. The TIC form BL-2 provides monthly holdings by foreign official agencies of short-term U.S. Treasury securities and the aggregate holdings of all other U.S. short-term securities plus NCDs of any maturity.

10.304. Quarterly aggregate holdings by foreign official agencies from the BL-2 are combined with the detailed annual holdings by security type from the SHL(A) to estimate quarterly holdings by foreign official agencies of short-term U.S. federally-sponsored agency securities, U.S. commercial paper and other U.S. short-term securities, and U.S. short- and long-term NCDs. Also included are holdings by foreign official agencies of U.S. Treasury bills and certificates, which are available quarterly on the BL-2. The statistics in table 9.1, lines 8-11 and 17, are based on the quarterly changes in these estimated holdings by foreign official agencies.

Equity and long-term debt securities, excluding long-term NCDs

10.305. Statistics for U.S. residents' net purchases of foreign equity and long-term debt securities and for foreign residents' net purchases of U.S. equity and long-term debt securities are based on (1) changes in quarterly holdings of these securities reported in the TIC SLT form, (2) changes in the value of the holdings based on broad market price indexes, and (3) other changes in reported holdings not due to transactions, such as changes in reporting panels. Price indexes denominated in U.S. dollars are used to measure changes in prices. For foreign currency-denominated equity and debt securities, changes in value caused by changes in exchange rates are included in the price changes computed from the U.S. dollar-denominated price indexes. Transactions are equal to holdings reported at the end of the current quarter, less holdings reported at the end of the preceding quarter, less the sum of changes in the value of the holdings caused by changes in prices and exchange rates and other changes in holdings not due to transactions. Table B on the next page indicates the components published in tables 7.1 and 9.1 derived by this method.

10.306. Annually, BEA uses corresponding annual or benchmark survey data for cross-border securities holdings to reconcile positions and transactions by comparing the annual or benchmark survey results to the TIC Form SLT data for the same reporting date.

Table B. Transactions in Equity and Long-Term Securities in Tables 7.1 and 9.1, Directly Estimated From Valuation-Adjusted SLT Holdings—Continues

Line	Item description
Table 7.1. U.S. International Financial Transactions for Portfolio Investment	
	<i>Net U.S. acquisition of portfolio investment assets</i>
	<i>By type of foreign security:</i>
2.....	Equity and investment fund shares
3.....	<i>Equity other than investment fund shares</i>
4.....	<i>Investment fund shares</i>
	<i>Debt securities</i>
	Negotiable certificates of deposit, any maturity (lines 7 + 13)
	<i>Short term</i>
7.....	Negotiable certificates of deposit
8.....	Commercial paper
9.....	Other short-term securities
	Long term
11+12.....	Long-term government securities plus corporate bonds and notes
11.....	Government securities
12.....	Corporate bonds and notes
13.....	Negotiable certificates of deposit
	<i>Net U.S. incurrence of portfolio investment liabilities</i>
	<i>By type of U.S. security acquired by foreign residents:</i>
15.....	Equity and investment fund shares
16.....	Equity other than investment fund shares
17.....	Investment fund shares
	<i>Debt securities</i>
	Negotiable certificates of deposit, any maturity (lines 22 + 29)
	<i>Short term</i>
20.....	Treasury bills and certificates
21.....	Short-term federally sponsored agency securities
22.....	Negotiable certificates of deposit
23.....	Commercial paper and other short-term securities
	Long term
25.....	Treasury bonds and notes
26.....	State and local government securities
27.....	Federally sponsored agency securities
26+28.....	Corporate bonds and notes plus state and local government securities
29.....	Negotiable certificates of deposit
	<i>Liabilities by sector of U.S. issuer</i>
	<i>Debt securities</i>
57.....	Federally sponsored agency securities, long term (equals line 27)
70.....	U.S. Treasury securities, long term (equals line 25)

Table B. Transactions in Equity and Long-Term Securities in Tables 7.1 and 9.1, Directly Estimated From Valuation-Adjusted SLT Holdings—Table Ends

Line	Item description
Table 9.1.	
U.S. International Financial Transactions for Liabilities to Foreign Official Agencies	
	<i>Net U.S. incurrence of portfolio investment liabilities</i>
	By type of U.S. security acquired by foreign residents:
3.....	Equity and investment fund shares
16.....	Equity other than investment fund shares
17.....	Investment fund shares
	<i>Debt securities</i>
	Negotiable certificates of deposit, any maturity (lines 10 + 17)
	<i>Short term</i>
	Long term
13.....	Treasury bonds and notes
26.....	State and local government securities
15.....	Federally sponsored agency securities
14+16.....	Corporate bonds and notes plus state and local government securities

10.307. Table C presents the lines in tables 7.1 and 9.1 that are estimated by allocating estimates of transactions in equity and long-term securities from the lines listed in table B according to U.S. holdings of foreign assets at the end of the current quarter or according to foreign holdings of U.S. liabilities at the end of the current quarter. In table C the derived estimate described in column A is equal to the source estimate in column B multiplied by the ratio of column C holdings to column D holdings, at the end of the current quarter. Transactions in long-term negotiable certificates of deposit, estimated as described in the previous section, are added to selected lines listed in table C covering long-term debt securities.

Table C. Transactions in Equity and Long-Term Debt Securities From Valuation-Adjusted SLT Holdings and Ratios From SLT Holdings Detail [Cont.]

Derived transactions			Source transactions			Allocation ratio components from SLT holdings	
Table	Line	Item description	Table	Line	Item description	Numerator	Denominator
[A]			[B]			[C]	[D]
Net U.S. acquisition of portfolio investment assets							
Assets by type of foreign security							
Equity and investment fund shares							
7.1	3	Equity other than investment fund shares	7.1	2	Equity and investment fund shares	Equity other than investment fund shares	Equity and investment fund shares
7.1	4	Investment fund shares	7.1	2	Equity and investment fund shares	Investment fund shares	Equity and investment fund shares
Long-term debt securities							
7.1	11	Government securities	7.1	11+12	Long-term government securities <i>plus</i> corporate bonds and notes	Government securities	Long-term government securities <i>plus</i> corporate bonds and notes
7.1	12	Corporate bonds and notes	7.1	11+12	Long-term government securities <i>plus</i> corporate bonds and notes	Government securities	Long-term government securities <i>plus</i> corporate bonds and notes
Assets by sector of U.S. holder							
Deposit-taking institutions except centra bank							
7.1	32	Equity and investment fund shares held by deposit-taking institutions except central bank	7.1	2	Equity and investment fund shares held by all sectors	Equity and investment fund shares held by deposit-taking institutions except central bank	Equity and investment fund shares held by all sectors
7.1	35	Long-term debt securities held by deposit-taking institutions except central bank ¹	7.1	10	Long-term debt securities held by all sectors	Long-term debt securities held by deposit-taking institutions except central bank	Long-term debt securities held by all sectors

1. Transactions in negotiable certificates of deposit directly estimated for this sector are allocated between short- and long-term maturities based on annual data from the SHC(A).

Table C. Transactions in Equity and Long-Term Debt Securities From Valuation-Adjusted SLT Holdings and Ratios From SLT Holdings Detail [Cont.]

Derived transactions			Source transactions			Allocation ratio components from SLT holdings	
Table	Line	Item description	Table	Line	Item description	Numerator	Denominator
[A]			[B]			[C]	[D]
Other financial institutions							
7.1	37	<i>Equity and investment fund shares</i> held by other financial institutions	7.1	2	<i>Equity and investment fund shares</i> held by all sectors	<i>Equity and investment fund shares</i> held by other financial institutions	<i>Equity and investment fund shares</i> held by all sectors
7.1	40	<i>Long-term debt securities</i> held by other financial institutions ¹	7.1	10	<i>Long-term debt securities</i> held by all sectors	<i>Long-term debt securities</i> held by other financial institutions	<i>Long-term debt securities</i> held by all sectors
Nonfinancial institutions except general government							
7.1	42	<i>Equity and investment fund shares</i> held by nonfinancial institutions except general government	7.1	2	<i>Equity and investment fund shares</i> held by all sectors	<i>Equity and investment fund shares</i> held by nonfinancial institutions except general government	<i>Equity and investment fund shares</i> held by all sectors
7.1	45	<i>Long-term debt securities</i> held by nonfinancial institutions except general government ¹	7.1	10	<i>Long-term debt securities</i> held by all sectors	<i>Long-term debt securities</i> held by nonfinancial institutions except general government	<i>Long-term debt securities</i> held by all sectors
Net U.S. incurrence of portfolio investment liabilities							
Liabilities by type of U.S. security acquired by foreign residents							
Equity and investment fund shares acquired by all foreign residents							
7.1	16	Equity other than investment fund shares	7.1	15	Equity and investment fund shares	Equity other than investment fund shares	Equity and investment fund shares
7.1	17	Investment fund shares	7.1	15	Equity and investment fund shares	Investment fund shares	Equity and investment fund shares

1. Transactions in negotiable certificates of deposit directly estimated for this sector are allocated between short- and long-term maturities based on annual data from the SHC(A).

Table C. Transactions in Equity and Long-Term Debt Securities From Valuation-Adjusted SLT Holdings and Ratios From SLT Holdings Detail [Cont.]

Derived transactions			Source transactions			Allocation ratio components from SLT holdings	
Table	Line	Item description	Table	Line	Item description	Numerator	Denominator
[A]			[B]			[C]	[D]
Equity and investment fund shares acquired by foreign official agencies							
9.1	4	Equity other than investment fund shares	9.1	3	Equity and investment fund shares	Equity other than investment fund shares	Equity and investment fund shares
9.1	5	Investment fund shares	9.1	3	Equity and investment fund shares	Investment fund shares	Equity and investment fund shares
Long-term debt securities acquired by all foreign residents							
7.1	26	State and local government securities	7.1	26+28	Corporate bonds and notes <i>plus</i> state and local government securities	State and local government securities	Corporate bonds and notes <i>plus</i> state and local government securities
7.1	71	State and local government long-term securities	7.1	26+28	Corporate bonds and notes <i>plus</i> state and local government securities	State and local government securities	Corporate bonds and notes <i>plus</i> state and local government securities
7.1	28	Corporate bonds and notes	7.1	26+28	Corporate bonds and notes <i>plus</i> state and local government securities	Corporate bonds and notes	Corporate bonds and notes <i>plus</i> state and local government securities
Long-term debt securities acquired by foreign official agencies							
9.1	14	State and local government securities	9.1	14+16	Corporate bonds and notes <i>plus</i> state and local government securities	State and local government securities	Corporate bonds and notes <i>plus</i> state and local government securities
9.1	16	Corporate bonds and notes	9.1	14+16	Corporate bonds and notes <i>plus</i> state and local government securities	Corporate bonds and notes	Corporate bonds and notes <i>plus</i> state and local government securities
Liabilities by sector of U.S. issuer							
Deposit-taking institutions except central bank							
7.1	48	<i>Equity and investment fund shares</i> issued by deposit-taking institutions except central bank	7.1	15	<i>Equity and investment fund shares</i> issued by all sectors	<i>Equity and investment fund shares</i> issued by deposit-taking institutions except central bank	<i>Equity and investment fund shares</i> issued by all sectors

Table C. Transactions in Equity and Long-Term Debt Securities From Valuation-Adjusted SLT Holdings and Ratios From SLT Holdings Detail [End]

Derived transactions			Source transactions			Allocation ratio components from SLT holdings	
Table	Line	Item description	Table	Line	Item description	Numerator	Denominator
[A]			[B]			[C]	[D]
Liabilities by sector of U.S. issuer							
Deposit-taking institutions except central bank							
7.1	51	Long-term debt securities issued by deposit-taking institutions except central bank ²	7.1	26+28	Corporate bonds and notes plus state and local government securities	Long-term debt securities issued by deposit-taking institutions except central bank	Corporate bonds and notes plus state and local government securities
Other financial institutions							
7.1	53	Equity and investment fund shares issued by other financial institutions	7.1	15	Equity and investment fund shares issued by all sectors	Equity and investment fund shares issued by other financial institutions	Equity and investment fund shares issued by all sectors
7.1	60	Long-term debt securities issued by other financial institutions	7.1	26+28	Corporate bonds and notes plus state and local government securities	Long-term debt securities issued by other financial institutions	Corporate bonds and notes plus state and local government securities
Nonfinancial institutions except general government							
7.1	62	Equity and investment fund shares issued by nonfinancial institutions except general government	7.1	15	Equity and investment fund shares issued by all sectors	Equity and investment fund shares issued by nonfinancial institutions except general government	Equity and investment fund shares issued by all sectors
7.1	65	Long-term debt securities issued by nonfinancial institutions except general government	7.1	26+28	Corporate bonds and notes plus state and local government securities	Long-term debt securities issued by nonfinancial institutions except general government	Corporate bonds and notes plus state and local government securities

2. All transactions in U.S. negotiable certificates of deposit are allocated to deposit-taking institutions except central bank. Transactions are allocated between short- and long-term maturities based on annual data from the SHL(A).

Other Investment

Concepts and coverage

10.308. **Other investment** is a residual category that includes financial account transactions other than those included in direct investment, portfolio investment, financial derivatives, and reserve assets. Other investment consists of a wide variety of financial instruments that are usually, but not always, issued and held by financial institutions. The major published components are **currency and deposits, loans, insurance technical reserves, and trade credit and advances**. Other investment liabilities also include allocations of **special drawing rights (SDRs)** by the International Monetary Fund.

10.309. In ITA table 8.1, other investment is classified and presented by **type of instrument** and by **maturity** for both assets and liabilities. In addition, assets and liabilities are classified and presented by the **sector** of the U.S. holder for assets and by the sector of the U.S. issuer for liabilities. For each sector, classification by type of instrument is also presented. Transactions in other investment liabilities to **foreign official agencies** are presented in line 18 of table 9.1.

10.310. Like other financial account components, other investment is measured and presented on a net basis. Net acquisition of other investment assets represents gross acquisitions less gross disposals of foreign financial instruments by U.S. residents, and net incurrence of other investment liabilities represents gross acquisitions less gross disposals of U.S. financial instruments by foreign residents.

Departures from BPM6

10.311. *BPM6* introduces a new class of financial instruments—*insurance, pension, and standardized guarantee schemes*—which includes insurance technical reserves (prepayments of premiums and reserves against outstanding insurance claims), pension entitlements (the claims of pensioners on their employers or pension funds), and provisions for calls under standardized guarantees (prepayments of net fees and provisions to meet outstanding calls under standardized loan guarantees). BEA is working with the U.S. Treasury Department to improve the existing source data for cross-border transactions in insurance technical reserves. Currently, the insurance-related transactions cannot be distinguished from other changes in claims and liabilities reported on Treasury International Capital (TIC) reporting system surveys.

10.312. While source data for transactions related to pension entitlements and standardized guarantee schemes are not sufficient for preparing statistics, cross-border transactions in pension entitlements and standardized guarantees are believed to be negligible. Also, in some cases BEA uses slightly different terminology and slightly different sector detail. For example, BEA uses the term *trade credit and advances* because it is the only item for which source data are available under the component *other accounts receivable/payable*.

10.313. Currently, BEA is not able to provide separate estimates of other equity, which is equity that is not in the form of securities. It can include equity in institutions such as branches, trusts, limited liability and other partnerships, unincorporated funds, and notional units for ownership of real estate and other natural resources. The ownership of many international organizations is not in the form of shares and is thus classified as other equity. Other equity is commingled with equity reported in the TIC system and is included in *portfolio investment*. Other equity of the U.S. government in international organizations may also be included in U.S. government reporting of U.S. claims on foreign residents that is classified as loans in other investment.

10.314. In BEA's presentation, the sectors "other financial institutions" and "nonfinancial institutions excluding general government" are combined, mainly because partner country data used to supplement TIC survey data do not distinguish between U.S. financial institutions and nonfinancial nonbank institutions.

Key data sources

10.315. *U.S. Treasury Department*. Claims and liabilities for deposits, loans, and insurance technical reserves are reported by financial institutions on the TIC B forms. Deposits, loans, and trade credit and advances are reported by nonfinancial institutions on the TIC C forms beginning in December 2013. Prior to December 2013, U.S. banks, bank holding companies, financial holding companies, and securities brokers and dealers reported deposits and loans on the TIC B forms, and other types of financial intermediaries, nonfinancial institutions, and nonprofit institutions reported deposits, loans, insurance technical reserves, and trade credit and advances on the TIC C form.

10.316. Values on the TIC B and C forms are reported at their original contractual values (face value). Changes in prices in the secondary markets for assets and liabilities reported on the TIC B and C forms are assumed to have little or no impact on the reported positions. Write-offs of assets are reported on the TIC B forms and, if write-offs are significant, estimates of transactions are adjusted to exclude the impact of write-offs. Other known inconsistencies between reported quarterly balances, caused by the addition of new reporters or corrected reporting, are also reported to BEA so that the changes in quarterly balances caused by these inconsistencies can be removed from total changes in balances when estimating transactions.

10.317. *BEA Survey Data*. BEA makes two types of adjustments to the TIC source data based on surveys it conducts. One type of adjustment adds transactions in loan claims and loan liabilities not covered in the TIC source data to estimates from the TIC B and C forms. The second type of adjustment removes transactions in owner's equity between financial institutions and unincorporated branches, which are covered in *direct investment*, from transactions in loan claims and loan liabilities computed from the TIC B forms. The loan transactions removed are covered in the TIC B forms because positions in owner's equity in unincorporated branches cannot be separated from other intercompany positions in the TIC B reporting. These adjustments are based on data reported on BEA's quarterly direct investment surveys for U.S. direct investment abroad (BE-577) and foreign direct investment in the United States (BE-605).

10.318. *U.S. Department of Defense.* Advance payments for sales of military goods to foreign governments are reported to BEA. U.S. government liabilities to foreign governments for these advance payments are classified as payments for *trade credit and advances* in the general government sector.

10.319. *U.S. government administrative data.* U.S. government agencies that engage in international transactions, primarily the U.S. State Department and the U.S. Department of Defense, report these transactions quarterly to BEA. Loans by the U.S. government to foreign residents are mostly made under programs enacted by the U.S. Congress for the provision of foreign assistance, requiring repayment over a period of years, usually with interest.

10.320. *Federal Reserve Board.* Net shipments of U.S. currency into and out of the United States are provided by the U.S. Federal Reserve Board to BEA to measure increases and decreases in foreign holdings of U.S. currency. These transactions are not captured elsewhere in statistical reporting systems.

10.321. *Federal Reserve Bank of New York. (FRBNY)* “The Treasury and Federal Reserve Foreign Exchange Operations Report” from the FRBNY provides data for transactions in central bank liquidity swaps. The report of foreign central bank account balances at the FRBNY provides key data for central bank sector deposit transactions.

10.322. *International Monetary Fund (IMF).* The IMF issues press releases and posts information on its Web site when it implements significant decisions such as allocating new special drawing rights to members or increasing member quotas. Recommendations by the IMF Executive Board for such actions must be ratified by member countries before they can be implemented.

10.323. *Depository Trust and Clearing Corporation (DTCC).* Claims of U.S. non-bank firms include claims associated with the issuance of asset-backed commercial paper (ABCP) that are not completely captured in BEA’s direct investment reporting system. In the absence of direct investment reporting for some important issuers, estimates of the intercompany debt transactions between U.S. affiliates located in Delaware and their offshore parents are estimated from DTCC records for selected ABCP programs.

10.324. *Supplemental counterparty data.* Bilateral comparisons between U.S. statistics and comparable statistics from foreign banks for loans and deposits show that U.S. statistics, collected directly from U.S. nonbank firms, understate the external claims and liabilities of U.S. nonbank firms vis-à-vis foreign banks. The foreign banking data are from the central banks of the United Kingdom and Germany, from the Bank for International Settlements for the Netherlands, and from Federal Reserve Board reports for banks in the Bahamas and the Cayman Islands.

Estimation methods

10.325. Estimation methods are described below for each of the major published components. These components include currency, deposits, loans, insurance technical reserves, trade credit and advances, and SDRs. Unless otherwise

noted, methods are the same for U.S. asset transactions and U.S. liability transactions.

Currency

10.326. Transactions in U.S. currency liabilities are equal to net shipments of U.S. currency into and out of the United States. Net disbursements of \$100 notes from Federal Reserve cash offices to foreign wholesale banks serve as the measure of currency flows. In a typical transaction, foreign wholesale banks purchase notes from the Federal Reserve for distribution to customers abroad. Foreign wholesale banks also sell back to the Federal Reserve notes unfit for further circulation or excess balances of notes.

10.327. U.S. currency liabilities are liabilities of the U.S. central bank sector. Transactions in these liabilities are presented in table 8.1 but are excluded from table 9.1 because they are not liabilities to foreign official agencies.

Deposits

10.328. U.S. deposit claims and liabilities with foreign residents include those reported by U.S. financial and nonfinancial institutions both for their own account and for their customers on the TIC B and C forms. Also included are the deposit claims and liabilities of the U.S. Federal Reserve with foreign central banks reported in administrative data.

10.329. Statistics for transactions in deposit claims and liabilities of U.S. financial and nonfinancial institutions are based on changes in quarterly holdings as reported on the TIC B and C forms, which are supplemented by changes in quarterly holdings of deposits placed in foreign banks by U.S. nonbank firms estimated from supplementary counterparty data from foreign banks. The computed changes in holdings are adjusted to remove the impact of any changes in holdings not caused by transactions, such as changes in exchange rates or reporting panels for the TIC surveys.

10.330. Assets held abroad by the U.S. Federal Reserve as the result of central bank liquidity swaps with foreign central banks are classified in other investment as deposits of the U.S. central bank in foreign central banks. Transactions in these deposits are equal to changes in quarterly swap balances reported by the Federal Reserve. These deposits are excluded from U.S. reserve assets because they are held until the swap is reversed and are not available for other purposes. The Federal Reserve also reports to BEA its deposit liabilities and its liabilities from repurchase agreements with foreign central banks. The liabilities from repurchase agreements are classified as deposits following *BPM6* guidelines. Transactions are equal to changes in the liability balances reported by the U.S. Federal Reserve.

10.331. Transactions in U.S. deposit liabilities for all U.S. sectors with foreign official agencies are estimated from changes in deposit liabilities to foreign official agencies available separately on the TIC form BL-1. These liabilities include those of the Federal Reserve System. These transactions are presented in table 9.1.

10.332. U.S. deposit claims and liabilities by sector are presented in table 8.1. Central bank deposit claims received by the U.S. Federal Reserve in central bank liquidity swaps are short-term and the deposits are denominated in foreign currencies. Deposits placed in foreign banks by U.S. deposit-taking institutions except central bank are estimated from separate reports by deposit-taking institutions on the TIC B forms.

10.333. U.S. central bank deposit liabilities to foreign central banks include liabilities from repurchase agreements. Repurchase agreements are short-term and the other deposit liabilities are available to foreign central banks on short notice, so these are classified as short-term liabilities. Deposit liabilities of U.S. deposit-taking institutions except central bank with foreign residents are estimated from separate reports by deposit-taking institutions on the TIC B forms.

10.334. Securities brokers, classified in the other financial institutions sector, hold brokerage balances in brokerage accounts for their customers that are very similar to deposits. Many investors use their brokerage balances like deposit accounts and many brokers pay interest on the accounts and offer limited or unlimited check writing on the accounts. Because of the similarity of brokerage balances to deposits, BEA records transactions in brokerage balances in the deposit liability category. Transactions of U.S. securities brokers with foreign residents in brokerage balances are estimated from separate reports by securities brokers on the TIC B forms.

Loans

10.335. U.S. loan claims and liabilities with foreign residents include those reported by U.S. financial and nonfinancial institutions both for their own account and for their customers on the TIC B and C forms. Also included are loan claims on foreign residents reported by U.S. government agencies, mainly under foreign assistance programs, in administrative data.

10.336. Statistics for transactions in loans of U.S. financial and nonfinancial institutions with foreign residents are based on changes in quarterly holdings as reported on the TIC B and C forms, which are supplemented by loan claims and loan liabilities of U.S. nonbank firms with foreign banks that are based on supplementary counterparty data from foreign banks. Prior to the first quarter of 2014, loans also includes intercompany debt of selected financial intermediaries reported on BEA surveys of direct investment. Beginning with the first quarter of 2014, all financial firms with reportable other investment claims and liabilities reported those positions on the TIC B forms, eliminating the need to include the intercompany debt of the selected financial intermediaries. The computed changes in holdings from the TIC data are adjusted to remove the impact of any changes in holdings not caused by transactions, such as changes in exchange rates or TIC survey reporting panels.

10.337. Quarterly statistics for transactions in U.S. government loan claims are based on data submitted by U.S. government operating agencies under Office of Management and Budget Directive No. 19; data are summarized by country and by agency. BEA supplements these data with information from quarterly statements of receipts, expenditures, and balances of foreign currency holdings,

provided by the U.S. Treasury Department, published financial statements, annual reports and other submissions to the U.S. Congress, and the financial and operating records of other U.S. government agencies.

10.338. U.S. loan claims and liabilities by sector are presented in table 8.1. U.S. loan liabilities of all U.S. sectors with foreign official agencies are estimated from changes in deposit liabilities to foreign official agencies available separately on the TIC forms BL-1 and BL-2. These transactions are presented in table 9.1. Transactions in loans to foreign residents by U.S. deposit-taking institutions except central bank are estimated from separate reports by deposit-taking institutions on the TIC B forms.

10.339. Transactions in loans to foreign residents by other U.S. financial institutions and nonfinancial institutions excluding general government comprise the remaining loans estimated from the TIC B and C forms, supplemented by counterparty data from foreign banks. Prior to 2014, this sector includes intercompany debt reported on BEA surveys of direct investment by selected financial intermediaries.

10.340. Loan liabilities of U.S. deposit-taking institutions except central bank with foreign residents are estimated from separate reports by deposit-taking institutions on the TIC B forms. Transactions in loans from foreign residents to other U.S. financial institutions and nonfinancial institutions excluding general government comprise the remaining loans estimated from the TIC B and C forms, supplemented by counterparty data from foreign banks. Prior to 2014, this sector includes intercompany debt reported on BEA surveys of direct investment by selected financial intermediaries.

Insurance technical reserves

10.341. Transactions in insurance technical reserves are based on changes in quarterly holdings as reported on the TIC B forms. The computed changes in holdings are adjusted to remove the impact of any changes in holdings not caused by transactions. Transactions in insurance technical reserves are not separately available at this time. Collection of data for insurance technical reserves as a separate item began in December 2013. Separate transactions will be published in table 8.1 pending evaluation of the new source data for reliability and confidentiality.

10.342. Insurance technical reserves are not liabilities to foreign official agencies and are therefore not relevant for inclusion in table 9.1.

Trade credit and advances

10.343. Transactions in claims and liabilities with foreign residents from trade credit and advances include those reported by U.S. financial and nonfinancial institutions on the TIC form CQ-2. Also included are transactions in the liabilities of the U.S. government to foreign governments from funds advanced mainly for the purchase of military goods and services reported to BEA in U.S. government administrative data.

10.344. Trade credit and advances of other U.S. financial institutions and non-financial institutions are estimated from changes in quarterly holdings as reported on the TIC CQ-2 form. The computed changes in holdings are adjusted to remove the impact of any changes in holdings not caused by transactions. Claims and liabilities are reported in table 8.1. The liabilities are not liabilities to foreign official agencies and are therefore not relevant for inclusion in table 9.1.

10.345. U.S. government transactions in liabilities from advance payments for foreign purchases of goods and services that are mainly for military use are the sum of (1) U.S. government cash receipts from foreign governments for purchases of military goods and services and (2) the financing of military sales by U.S. government credits and grants. Netted against this gross total are (3) the part of the receipts from foreign governments that represents principal repayments on credits financing military agency sales contracts, (4) issues of special U.S. Treasury securities that are subject to redemption prior to maturity for the purpose of prepaying for military purchases in the United States, and (5) the counterpart to the value of deliveries of military goods and services recorded in the goods and services accounts. These liabilities are classified as long-term liabilities because contracts for the foreign purchases of goods and services are generally long-term arrangements. Estimates of these U.S. liabilities are presented in tables 8.1 and 9.1.

Special drawing rights (SDR) allocations

10.346. SDR allocations to the United States and other countries through a collective decision of IMF-member governments are rare. The most recent allocations occurred in the third quarter of 2009 and were widely publicized in IMF and other publications. Data on future SDR allocations will continue to be obtained from IMF publications and databases.

10.347. By sector, SDR allocations are liabilities of the U.S. Treasury Department to other governments that participate in the SDR program and are classified in the general government sector. Transactions are presented in tables 8.1 and 9.1.

Reserve Assets

Concepts and coverage

10.348. **Reserve assets** are those external assets that are readily available to and controlled by monetary authorities for meeting balance of payments financing needs, for intervention in exchange markets to affect the currency exchange rate, and for other related purposes such as maintaining confidence in the currency and the economy, and serving as a basis for foreign borrowing. The major published components are **monetary gold, International Monetary Fund (IMF) special drawing rights (SDRs), reserve position in the IMF, and other reserve assets**.

10.349. Other reserve assets enable the United States to hold foreign currency balances that are highly liquid and that are available for intervention sales. U.S. foreign currency balances include deposits, debt securities, and repurchase

agreements that are classified as “other.” The United States does not have financial derivatives in its reserve assets.

10.350. Excluded from transactions are changes in the value of reserve assets attributable to holding gains and losses, which are not considered to be international transactions. Thus, changes in the value of assets that arise from fluctuations in the market price of gold and from fluctuations in the exchange market value of the dollar vis-à-vis foreign currencies and SDRs are excluded. Also excluded are reclassifications arising from monetizations and demonetizations of monetary gold by monetary authorities. These exclusions are, however, included in the International Investment Position (IIP) Accounts as valuation adjustments.

10.351. Transactions in nonmonetary gold—gold exported or imported in forms such as ore, scrap and base bullion, refined bullion, and coins and medallions—are not included with transactions in monetary gold; they are included in goods exports and goods imports.

Departures from BPM6

10.352. The coverage and presentation of reserve assets closely follows *BPM6* recommendations.

Key data sources

10.353. *U.S. government administrative data.* Data on U.S. reserve assets are published by the U.S. Treasury Department in terms of holdings (outstanding amounts). BEA also uses U.S. Treasury Department source data on the gold stock.

10.354. *Federal Reserve Bank of New York (FRBNY).* “The Treasury and Federal Reserve Foreign Exchange Operations Report” from the FRBNY provides data for transactions in central bank liquidity swaps. Other data for interest earned on reserves and swaps and on claims and liabilities with foreign central banks are provided to BEA for estimates of reserve assets and central bank sector transactions.

10.355. *International Monetary Fund (IMF).* The IMF provides month-end position data and daily increases and decreases during each month for the U.S. accounts at the IMF. The data include positions and transactions between the United States and the IMF for the SDR account and the General Resources (tranche) account and its subaccounts covering securities, valuation adjustments, and IMF borrowing from the United States.

Estimation methods

10.356. Descriptions are provided below for each component and classification published in table 1.2.

Monetary gold

10.357. Transactions in monetary gold are rare. Such transactions can only take place with another monetary authority or with an international institution such as the IMF that is authorized to hold monetary gold. If transactions were to

take place, BEA would obtain from the U.S. Treasury Department data for the quantity of gold transferred out or received from the counterparty, either in ounces or in dollars at a known price. If daily data were available, BEA would value the daily gold transactions using the afternoon (PM) fix in the London market for each day. If transactions occurred over a period of time and daily data were not available, the transactions over the period would be valued at an average price of gold over that period. Transactions valued using the PM fix for the gold price in London would be aggregated and reported quarterly.

Special drawing rights (SDRs)

10.358. The SDR is an international reserve asset, created by the IMF in 1969 to supplement its member countries' official reserves. Its value is based on a basket of four key international currencies, and SDRs can be exchanged for freely usable currencies. The SDR is neither a currency nor a claim on the IMF. Rather, it is a potential claim on the freely usable currencies of IMF members. In addition to its role as a supplementary reserve asset, the SDR serves as the unit of account of the IMF and some other international organizations. The value of the SDR in terms of the U.S. dollar is determined daily and posted on the IMF's Web site. It is calculated as the sum of specific amounts of the four basket currencies valued in U.S. dollars on the basis of exchange rates quoted at noon each day in the London market.

10.359. Transactions in SDRs can take place with the IMF, which uses the SDR as a common unit of account for transactions with member countries, or with other countries and institutions that subscribe to the SDR. Generally, all U.S. transactions in SDRs are conducted through the U.S. SDR account at the IMF with the IMF as the immediate foreign counterparty.

10.360. BEA converts daily increases or decreases caused by transactions in the U.S. SDR account from SDRs to U.S. dollars at the conversion rate in effect on that date. These daily transactions are aggregated into quarterly financial flows for the ITAs.

Reserve position in the IMF

10.361. The U.S. reserve position in the IMF is comprised of the U.S. general resources, or tranche, account plus any borrowing by the IMF from the United States through the General Arrangements to Borrow (GAB), the New Arrangements to Borrow (NAB), or other borrowing facilities. The U.S. general resources account is equal to the U.S. quota in the IMF less IMF holdings of dollars, excluding dollar holdings in IMF administrative and subsidiary accounts. Thus, the reserve position is affected by changes in the U.S. quota, changes in IMF holdings of U.S. dollars, and changes in balances borrowed from the United States by the IMF. Transactions in the reserve position in the IMF are equal to transactions in the general resources account plus transactions from IMF borrowings or repayments.

10.362. Transactions from IMF borrowings or repayments are provided for each day of the reporting month to BEA by the IMF. BEA converts daily increases

or decreases from SDRs to U.S. dollars at the conversion rate in effect on that date. These daily transactions are aggregated into quarterly financial flows for the ITAs.

10.363. Transactions in the general resources account are computed by deducting valuation changes from the total change in balance of the account, which is equal to the U.S. holdings at the end of the current quarter converted to U.S. dollars, less the U.S. holdings at the end of the previous quarter converted to U.S. dollars. The valuation changes are computed from the change in the SDR/U.S. dollar conversion rate and valuation adjustments to IMF holdings of U.S. dollars. The SDR/ U.S. dollar conversion rate and valuation adjustments to IMF holdings of U.S. dollars are provided to BEA by the IMF.

Other reserve assets

10.364. Other reserve assets can include currency and deposits, securities, financial derivatives, and other claims, such as repurchase agreements that are readily redeemable in foreign currencies to enable the monetary authorities to carry out timely interventions in the foreign exchange market or to facilitate balance of payments financing. The United States does not have financial derivatives in its reserve assets.

10.365. The U.S. monetary authorities invest their foreign currency reserves in a variety of instruments that yield market rates of return and have a high degree of liquidity and credit quality. To the greatest extent practicable, the investments are split evenly between the System Open Market Account at the Federal Reserve Board and the Exchange Stabilization Fund at the U.S. Treasury Department.

10.366. A significant portion of the U.S. monetary authorities' foreign exchange reserves is invested on an outright basis in German, French, and Japanese government securities. Euro- and yen-denominated reserves are also held on deposit at official institutions. Reserves are also invested in euro-denominated repurchase agreements, under which the U.S. monetary authorities may accept sovereign debt backed by the full faith and credit of the following governments: Belgium, France, Germany, Italy, the Netherlands, and Spain. Foreign currency reserves are also invested at the Bank for International Settlements and in facilities at other official institutions.

10.367. Intervention in the foreign exchange market by U.S. monetary authorities is relatively rare. It is much more common for transactions in other reserve assets to reflect income earned on the deposits, securities, and repurchase agreements. The interest collected on these investments is reported by the FRBNY to BEA. This interest is entered by type of investment into the U.S. reserve assets as an increase in assets and into investment income on U.S. reserve assets.

10.368. Intervention purchases and sales of assets are also reported to BEA by type of investment by the Federal Reserve Board, so that the appropriate increase or decrease in deposits, securities, or repurchase agreements can be recorded in the accounts. Purchases or sales of foreign currency would be recorded

in nominal U.S. dollar amounts at the exchange rates in effect at the time of the transactions. The impact of changes in exchange rates on the value of reserve assets is excluded from transactions and is reflected in price and exchange rate changes recorded in the IIP accounts.

Financial Derivatives Other Than Reserves

Concepts and coverage

10.369. **Financial derivatives other than reserves** consist of cross-border transactions arising from financial contracts that are linked to underlying financial instruments, commodities, or indicators. Transactions in financial derivatives consist of U.S. cash receipts and payments arising from the sale, purchase, periodic settlement, or final settlement of financial derivatives contracts. *Financial derivatives* are a type of financial instrument and *financial derivatives other than reserves* is a functional category. Transactions in financial derivatives were introduced into the ITAs beginning with statistics for the first quarter of 2006.

10.370. Transactions are reported in the source data on a net settlements basis as U.S. cash receipts less payments on individual contracts grouped into reporting categories. Because of the difficulty in characterizing transactions as arising from assets (contracts with positive fair values) or from liabilities (contracts with negative fair values), transactions for assets and liabilities are not separately reported. Thus, net settlements are presented in ITA table 1.2 on a single line, separate from net U.S. acquisition of assets and net U.S. incurrence of liabilities.

Departures from BPM6

10.371. The coverage of financial derivatives other than reserves follows *BPM6* recommendations for the net reporting of transactions when gross reporting is not feasible. However, *BPM6* also recommends that (1) employee stock options be included with financial derivatives other than reserves and (2) when financial derivatives are reported net they should be reported as a component of assets. BEA does not follow the first recommendation because source data are not available for employee stock options. For the second recommendation, BEA prefers to present transactions in U.S. assets and U.S. liabilities excluding financial derivatives for analytical purposes. The functional category, *financial derivatives other than reserves, net transactions*, is presented as a component of the financial account separately from transactions in U.S. assets and U.S. liabilities.

Key data sources

10.372. *U.S. Treasury Department*. Comprehensive data on financial derivatives are collected on Treasury International Capital (TIC) Form D, "Report of Holdings of, and Transactions in, Financial Derivatives Contracts." Data are collected quarterly from U.S. banks, bank holding companies, financial holding companies, securities dealers, and all other firms with worldwide holdings of financial derivatives, for their own and their customers' accounts combined, in excess of

\$400 billion in notional value. Trading in financial derivatives is highly concentrated among a small number of large firms.

10.373. Survey respondents provide net settlements data following specific steps. Receipts of cash by U.S. residents from foreign residents are treated as positive amounts, and payments of cash by U.S. residents to foreign residents are treated as negative amounts. The receipts and payments for all contracts are summed for each reporting category. A net settlement cash receipt or payment occurs only when cash is received or paid for the purchase or sale of a derivative, or a settlement payment (such as the periodic settlement under a swap agreement or the daily settlement of an exchange-traded contract) is received or paid.

Estimation methods

10.374. Published statistics are equal to net settlements from the TIC Form D with the sign reversed. The sign is reversed because net settlements from TIC Form D have a positive sign when U.S. receipts of cash from foreign residents exceed U.S. payments of cash to foreign residents, and these net U.S. receipts, which represent net U.S. borrowing from financial-account transactions, are recorded with a negative sign in the ITAs. Similarly, net U.S. payments have a negative sign in the TIC source data, and net U.S. payments, which represent net U.S. lending from financial-account transactions, are recorded with a positive sign in the ITAs. Geographic detail for net settlements is presented in ITA table 1.3.

Statistical Discrepancy

10.375. The statistical discrepancy is the amount that balances the sum of the recorded credits and debits underlying the International Transactions Accounts (ITAs).

10.376. The statistical discrepancy is the difference between total debits and total credits recorded in the current, capital, and financial accounts. A positive value indicates that recorded debits (inflows) exceed recorded credits (outflows), and a negative value indicates that recorded credits exceed recorded debits. The statistical discrepancy can be calculated as the difference between net lending/borrowing as measured by transactions recorded in the current and capital accounts and as measured by transactions recorded in the financial account.

10.377. Errors and omissions in recorded transactions may exist in any account or component and may arise for many reasons. Statistical reporting systems may be inaccurate in their measurement or may be incomplete in their coverage. Such systems may overlap in their coverage of transactions or completely miss transactions that do not fall clearly under one reporting system or the other. Statistical reporting systems, which are often independent of each other, must capture opposite sides of the same transaction identically for errors and omissions to be zero. For example, the total value for U.S. purchases of goods measured in one reporting system must be the same as the total value for the payments for those goods measured in another system. Finally, some accounts

do not lend themselves to survey-based measurement and must be estimated indirectly from economic data series; these statistics depend critically on the adequacy of source data and estimation methods.

10.378. The greatest challenges for statistical reporting systems often result from rapid changes in economic and financial markets. During the economic cycle of 1997–2002, numerous and large mergers and acquisitions were difficult to track and measure accurately. Throughout the 1990s and 2000s, the evolution and development of complex financial derivatives were incompletely recorded in the accounts for nearly the entire period. The rapid expansion in 2003–2008 of hedge funds, many of which operated from offshore locations, proved especially difficult to track because of the inability to locate officials responsible for reporting transactions. The securitization of assets in 2003–2008 and the establishment of special investment vehicles abroad to borrow funds in the United States for distribution abroad escaped tracking by traditional reporting systems. Difficulties in recording the process of securitization were compounded by the rapid run up in leveraging and then deleveraging of these activities.

10.379. It is not unreasonable to expect that the size and volatility of fluctuations in the statistical discrepancy might increase in times of heightened uncertainty and increased activity in the financial markets. In fact, such a tendency has been demonstrated in the past. The statistical discrepancy increased sharply in absolute value about the time of the 1997–98 financial crisis that started in East Asia and also during the 2008 global financial crisis. However, the relationship is not strong, and the discrepancy may also be large in periods of relative stability in financial markets. If both sides of a transaction are absent from the statistical reporting systems, the statistical discrepancy is unaffected, but the accounts will likely still contain errors, inaccuracies, or gaps in coverage.

10.380. Analysis of the statistical discrepancy could identify data problems, such as gaps in coverage or misreporting. A consistently positive or negative sign may indicate a bias in one or more of the underlying components. For example, a positive statistical discrepancy may indicate that credit entries, such as exports or income receipts, are understated or omitted, or that debit entries, such as imports or income payments, are overstated. However, the ability to use analysis of the statistical discrepancy to identify data problems is limited by the fact that measurement errors in opposite directions offset each other.

10.381. At the global level, the statistical discrepancy represents net errors and omissions in recorded transactions. For individual countries and regions, in addition to errors and omissions, it also reflects discrepancies that arise when transactions with one country or region are settled through transactions with another country or region. These transfers of funds between foreign areas often occur because the dollar is used extensively in settling international transactions and forms a large part of the foreign currency reserves of many countries. Therefore, changes in dollar balances held by one country often cannot be accounted for by U.S. transactions with that country. Consequently, the statistical discrepancies included in the country and area statistics of the international economic accounts cannot be interpreted as a measure of the area distribution of global errors and omissions. Instead, they reflect a combination of errors and omissions and third-country settlements.

International Investment Position Accounts

11.1. This chapter presents the methodology for statistics published in the International Investment Position (IIP) Accounts. It includes major sections for the functional categories of direct investment, portfolio investment, financial derivatives other than reserves, other investment, and reserve assets. Each category and its published components are discussed in the order they are presented in [IIP table 1.2](#), U.S. Net International Investment Position at the End of the Period, Expanded Detail shown below. Additional IIP account statistics are published in other tables that are referenced in this publication and that can be found on the [BEA Web site](#).

**IIP Table 1.2. U.S. Net International Investment Position
at the End of the Period, Expanded Detail—Continues**

Line	Type of investment
1	U.S. net international investment position (line 4 less line 35)
2	Net international investment position excluding financial derivatives (line 5 less line 36)
3	Financial derivatives other than reserves, net (line 6 less line 37)
4	U.S. assets
5	Assets excluding financial derivatives (sum of lines 7, 10, 21, and 26)
6	Financial derivatives other than reserves, gross positive fair value (line 15)
	By functional category:
7	Direct investment at market value
8	Equity
9	Debt instruments
10	Portfolio investment
11	Equity and investment fund shares
12	Debt securities
13	Short term
14	Long term
15	Financial derivatives other than reserves, gross positive fair value
16	Over-the-counter contracts
17	Single-currency interest rate contracts
18	Foreign exchange contracts
19	Other contracts
20	Exchange-traded contracts
21	Other investment
22	Currency and deposits
23	Loans
24	Insurance technical reserves

11.2. IIP table 1.2 presents end-of-quarter positions for assets and liabilities by functional category and by type of financial instrument. IIP table 1.3 presents end-of-year positions classified the same way as in IIP table 1.2 but also disaggregates the change in position for the calendar year by financial-account transactions and by other changes in position. The latter is further disaggregated into

**IIP Table 1.2. U.S. Net International Investment Position
at the End of the Period, Expanded Detail—Table Ends**

Line	Type of investment
25	Trade credit and advances
26	Reserve assets
27	Monetary gold
28	Special drawing rights
29	Reserve position in the International Monetary Fund
30	Other reserve assets
31	Currency and deposits
32	Securities
33	Financial derivatives
34	Other claims
35	U.S. liabilities
36	Liabilities excluding financial derivatives (sum of lines 38, 41, and 56)
37	Financial derivatives other than reserves, gross negative fair value (line 50)
	By functional category:
38	Direct investment at market value
39	Equity
40	Debt instruments
41	Portfolio investment
42	Equity and investment fund shares
43	Debt securities
44	Short term
45	Treasury bills and certificates
46	Other short-term securities
47	Long term
48	Treasury bonds and notes
49	Other long-term securities
50	Financial derivatives other than reserves, gross negative fair value
51	Over-the-counter contracts
52	Single-currency interest rate contracts
53	Foreign exchange contracts
54	Other contracts
55	Exchange-traded contracts
56	Other investment
57	Currency and deposits
58	Loans
59	Insurance technical reserves
60	Trade credit and advances
61	Special drawing rights allocations

price changes, exchange-rate changes, and changes in volume and valuation n.i.e. IIP table 2.1 converts direct investment positions at market value on an asset/liability basis to positions at market value on a directional basis and, in turn, to positions at historical cost on a directional basis. IIP table 3.1 presents the IIP for U.S. liabilities to foreign official agencies.

11.3. The IIP accounts are classified and presented for each of the five functional categories that are used for primary income in the current account of the ITAs and for transactions in the financial account of the ITAs. Within the functional categories, the IIP account is further classified by type of financial instrument, similar to the detail for primary income and financial account transactions, with additional detail for financial derivatives other than reserves. The financial account of the ITAs and the IIP accounts are closely related: the position at the end of a period equals the value at the start of the period plus financial-account transactions for the current period plus valuation and volume changes that occur during the period.

11.4. Price changes apply to equity and debt instrument asset and liability positions for direct investment, some debt instrument asset and liability positions for portfolio investment, and monetary gold positions for reserve assets. Exchange-rate changes represent the gain or loss on foreign-currency denominated assets and liabilities due to their revaluation to U.S. dollars at current exchange rates. These changes apply to direct investment equity assets, portfolio investment assets and debt security liabilities, other investment assets and liabilities, and reserve assets. Changes in volume and valuation n.i.e. reflect the entry of new and the exit of existing assets and liabilities from balance sheets that are not due to transactions, revaluations (holding gains and losses) on assets or liabilities that arise from changes in their prices, and other changes that are not explained by transactions, price changes, or exchange-rate changes.

Direct Investment

Concepts and coverage

11.5. **Direct investment** is a category of cross-border investment associated with a resident in one economy having control or a significant degree of influence on the management of an enterprise resident in another economy. For both assets and liabilities, the major published components are equity and debt instruments. Generally, direct investment indicates a long-term relationship with the management of a foreign enterprise. Ownership or control of 10 percent or more of the nonresident entity's voting securities is the threshold for separating direct investment from other types of investment.

11.6. On the asset/liability basis, the direct investment position (IIP table 1.2) shows, at a point in time, the value of U.S. assets and U.S. liabilities associated with direct investment in the IIP accounts. The direct investment position on the directional basis—outward and inward—is the value of the direct investors' equity in, and net outstanding loans to, their affiliates at a point in time (IIP table 2.1). It can be viewed as the financing provided in the form of equity and debt by

the parent company to their affiliates or as the parents' net financial claims on their affiliates.¹

11.7. The statistics on an asset/liability basis are useful for macroeconomic analysis because these direct investment statistics are consistent with the statistics for the other functional categories as well as other macroeconomic statistics. The statistics on a directional basis are useful for analyzing the motivation for direct investment, such as identifying the foreign countries in which U.S. multinational enterprises (MNEs) are directly investing, or the U.S. industries in which foreign direct investors are directly investing. BEA reports statistics on direct investment positions at **historical cost**, at **market value**, and at **current cost**. IIP table 2.1 shows the conversion of direct investment positions from the asset/liability basis to the directional basis and the conversion from the market value of the position to the historical cost value.

11.8. The asset/liability direct investment position at market value is the featured measure in the IIP accounts because its valuation is comparable to that of the other items in these accounts. However, market values are often not available for direct investment because the equity for many direct investment enterprises is not listed on stock exchanges. Consequently, as described below, the market values of the direct investment positions are based on the historical cost position data collected on BEA's direct investment surveys and information from stock price indexes.

Departures from BPM6

11.9. The coverage and presentation of direct investment in the IIP accounts closely follow *BPM6* recommendations with the exception of classifications for **reverse investment** and **fellow enterprises** due to limitations in BEA's source data. Although BEA's direct investment surveys capture reverse debt investment, they are not designed to fully capture reverse equity investment.² The surveys capture investments between majority-owned fellow enterprises but not with those fellow enterprises that are minority-owned, as called for in *BPM6* and *BD4*.

Key data sources

11.10. *BEA Survey Data*. Statistics for the historical cost direct investment position are based largely on data collected on BEA's quarterly, annual, and benchmark direct investment surveys. The quarterly surveys—the BE–577 quarterly survey of U.S. direct investment abroad and the BE–605 quarterly survey of foreign direct investment in the United States—collect the information on financial transactions and positions between parents and their affiliates needed to construct the IIP accounts.

11.11. Each year, the data from the quarterly surveys are reconciled to the BE–11 annual survey of U.S. direct investment abroad and to the BE–15 annual

1. For inward investment, the direct investment position data measure the U.S. affiliate's transactions and positions with its foreign parent and other members of its **foreign parent group**.

2. BEA has included questions to gauge the magnitude of reverse equity investment on its direct investment benchmark surveys. Results from the 2009 benchmark survey of U.S. direct investment abroad indicate that reverse equity investment was immaterial, while data from the 2012 benchmark survey of foreign direct investment are under review.

survey of foreign direct investment in the United States. Once every five years, the data from the quarterly surveys are reconciled to the BE–10 benchmark survey of U.S. direct investment abroad and to the BE–12 benchmark survey of foreign direct investment in the United States.³

11.12. *Morgan Stanley Capital International Index* and *Standard and Poor's 500 Stock Market Index* are used to revalue the equity portion of the historical cost outward and inward direct investment positions, respectively, to a market value basis.

11.13. *BEA Fixed Assets Perpetual Inventory Model* is used to revalue parents' share of their affiliate's tangible assets to current period prices for the current cost valuation. *Other BEA indexes* are used to revalue land and inventories.

Estimation methods

11.14. This section begins with estimation methods for the direct investment position at historical cost and then describes the estimation methods for the market value and current cost measures of the position, which are derived from the historical cost measure. BEA's direct investment surveys collect direct investment position data valued at historical cost because that is the primary basis used for valuation in company accounting records in the United States. Therefore, it is the basis on which companies can most easily report data on BEA's direct investment surveys. The historical cost value largely reflects prices at the time of investment rather than prices of the current period. It is also the only basis for which detailed estimates of the position are available by country, by industry, and by component. Discussions below apply to both the *equity* and *debt instrument* components of direct investment asset and liability positions.

Historical cost

11.15. The direct investment position in an affiliate is equal to the parent's equity in and debt with its affiliates. Parents' equity in incorporated affiliates can be broken down into parents' holdings of capital stock in, and other capital contributions to, their affiliates and parents' equity in the retained earnings of their affiliates. Capital stock consists of all the stock of the affiliates—both common and preferred and voting and nonvoting. Other capital contributions by parents, also referred to as the "parents' equity in additional paid-in capital," consist of the invested and contributed capital that is not included in capital stock, such as cash contributions, the amount paid for stock in excess of its par or stated value, and the capitalization of intercompany accounts (conversions of debt to equity) that do not result in the issuance of capital stock. Parents' equity in retained earnings is the parents' shares of the cumulative undistributed earnings of their incorporated affiliates.

3. The reconciliation of the quarterly and benchmark survey data is described in the SURVEY OF CURRENT BUSINESS. The most recent reconciliation of the data on U.S. direct investment abroad is described in Marilyn Ibarra-Caton, "Direct Investment for 2009–2012: Detailed Historical-Cost Positions and Related Financial and Income Flows," SURVEY 93 (September 2013): 200–206. The most recent reconciliation of the data on foreign direct investment in the United States is described in Jeffrey H. Lowe, "Direct Investment for 2007–2010: Detailed Historical-Cost Positions and Related Financial and Income Flows," SURVEY 91 (September 2011): 50–56.

11.16. Parents' debt with their affiliates, also called intercompany debt, consists of trade accounts and trade notes payable, other current liabilities, and long-term debt owed. On an asset/liability basis, debt instrument positions are recorded on a gross basis. Debt instruments that U.S. parents hold in their foreign affiliates and that U.S. affiliates hold in their foreign parent groups are recorded as U.S. assets. Likewise, debt instruments that U.S. parents issue to their foreign affiliates or that U.S. affiliates issue to their foreign parent groups are recorded as U.S. liabilities.

11.17. On a directional basis, debt instrument positions are recorded on a net basis. For outward investment, the debt position consists of the debt foreign affiliates owe to their U.S. parents net of the debt owed to foreign affiliates by their U.S. parents. Likewise, for inward investment, the debt position consists of the debt U.S. affiliates owe to their foreign parent groups net of the debt owed to U.S. affiliates by their foreign parent groups.

11.18. The table below provides an example of the conversion of the direct investment position on an asset/liability basis to a directional basis.

**Direct Investment Position on the
Asset/Liability Basis and the Directional Basis**

U.S. assets/outward investment	Millions of dollars
U.S. direct investment assets (table 1.1, line 7)	1,120
Equity.....	1,000
Debt.....	120
U.S. parents' claims	80
U.S. affiliates' claims	40
<i>Less:</i> Adjustments to convert to directional basis.....	65
U.S. parents' liabilities.....	25
U.S. affiliates' claims	40
<i>Equals:</i> Outward direct investment position	1,055
Equity.....	1,000
Debt.....	55
U.S. parents' claims	80
U.S. parents' liabilities.....	25
U.S. liabilities/inward investment	Millions of dollars
U.S. direct investment liabilities (table 1.1, line 15)	920
Equity.....	800
Debt.....	120
U.S. affiliates' liabilities.....	95
U.S. parents' liabilities.....	25
<i>Less:</i> Adjustments to convert to directional basis.....	65
U.S. parents' liabilities.....	25
U.S. affiliates' claims	40
<i>Equals:</i> Inward direct investment position	855
Equity.....	800
Debt.....	55
U.S. affiliates' liabilities.....	95
U.S. affiliates' claims	40

11.19. The direct investment position at the end of the period is equal to the position at the end of the previous period plus the change in the position during the period. The change during the period is the sum of direct investment financial transactions and **valuation adjustments**. Valuation adjustments are broadly defined to include all changes in the position other than financial transactions.

11.20. For the historical cost position, valuation adjustments are derived from BEA's direct investment survey data and consist of translation changes, capital gains and losses, and "other" valuation adjustments. **Translation adjustments** result from changes in exchange rates used to translate the foreign-currency-denominated assets and liabilities of affiliates into U.S. dollars. **Capital gains and losses of affiliates** comprise changes in asset values that generate revenues or expenses that are not related to current production. **"Other" valuation adjustments** primarily reflect differences between transactions values, which are used to record direct investment financial transactions, and the book values on foreign affiliates' books, which are used to record the position. "Other" valuation adjustments also include changes in coverage and the reclassification of investment positions between direct investment and other investment as the 10-percent threshold criteria for direct investment is crossed.

11.21. Several issues related to definition and classification are important to resolve as part of developing the historical cost estimates of direct investment positions. These issues include financial intermediaries, capital and operating leases, direct investment and portfolio investment, and reverse investment. Each issue is described separately below.

Financial intermediaries

11.22. Complexities arise in the classification of intercompany debt positions involving parents and/or affiliates in financial industries, particularly when one of those parties is located in an offshore financial center. For example, if a U.S. manufacturer borrows funds from its financial affiliate or its parent in the Cayman Islands, that debt position should be included in the direct investment position. However, if a U.S. financial firm acquires funds from a financial affiliate in the Cayman Islands, that debt position should be classified as *portfolio investment* assets and liabilities because the nature of the transaction is more closely related to the underlying activity of financial intermediation than to activity typical of a direct investment relationship. Debt positions between financial intermediaries are defined as being between firms in a direct investment relationship (that is, between U.S. parents and their foreign affiliates or between U.S. affiliates and their foreign parent groups), where both the U.S. and foreign firms are classified in a finance industry (excluding insurance) but the firms are not banks.

11.23. Debt positions between affiliated depository institutions—banks, bank holding companies, and financial holding companies—are also excluded from the direct investment position and combined with these institutions' positions with unaffiliated entities under *other investment*. The combination groups together transactions related to the underlying activity of financial intermediation, regardless of the affiliation of the enterprises. BEA began reclassifying permanent debt positions between affiliated banks, bank holding companies, and financial holding companies from direct investment to *other investment* with data for year

2007. For earlier years, permanent debt positions remain in direct investment, where permanent debt is debt that is deemed to represent a lasting interest in the institution receiving the funds, such as funding used for working capital or to finance plant and equipment.

Capital and operating leases

11.24. Intercompany debt includes the value of capital leases and of operating leases of more than 1 year between affiliates and their parents. Under a capital lease, it is assumed that the title to the leased property will be transferred to the lessee at the termination of the lease, similar to an installment sale. When property is leased by a foreign affiliate from its U.S. parent or leased by a foreign parent from its U.S. affiliate, the value of the leased property is recorded as an asset of the U.S. parent or U.S. affiliate. The value of the leased property is calculated according to U.S. **generally accepted accounting principles** (GAAP); the lessee records either the present value of the future lease payments or the fair market value, whichever is lower, and the lessor records the present value of future lease receipts. Similarly, when property is leased to a U.S. parent by its foreign affiliate or to a U.S. affiliate by its foreign parent, the value of the leased property is recorded as a liability of the U.S. parent or U.S. affiliate. For operating leases of more than 1 year, which are carried only on the balance sheet of the lessor, the value recorded is the original cost of the leased property less the accumulated depreciation.

Direct investment and portfolio investment

11.25. Some transactions require a shift in classification between direct investment and portfolio investment. If a U.S. parent's equity interest in a foreign business enterprise, or a foreign parent's equity interest in a U.S. business enterprise, is originally less than 10 percent, and if additional purchases result in a greater than 10 percent equity interest, offsetting valuation adjustments are made to the direct investment position and to the portfolio investment position to bring the original interest into the direct investment position. If a U.S. parent's equity interest in a foreign affiliate or a foreign parent's equity interest in a U.S. affiliate falls below 10 percent, offsetting valuation adjustments are made to the direct investment position and the portfolio investment position to extinguish the remaining direct investment interest.

Reverse investment

11.26. A U.S. parent may have investment in a foreign affiliate that, in turn, has investment in the U.S. parent as a result of the affiliate's lending funds to, or acquiring voting securities or other equity interest in, the U.S. parent. Likewise, a foreign parent may have investment in a U.S. affiliate that, in turn, has investment in the foreign parent as a result of the affiliate's lending funds to, or acquiring voting securities or other equity interest in, the foreign parent. These cases of affiliates having investment in their parent companies are known as "reverse investment." International guidelines call for reverse equity investment of less than 10 percent to be separately identified in the IIP accounts and labeled as "reverse investment," in cases where it is significant.

11.27. The results from the 2009 benchmark survey of U.S. direct investment abroad indicate that reverse investment is negligible for U.S. outward investment, so BEA has decided to not show this category in its accounts at this time.⁴ Reverse equity investment of 10 percent or more is treated like any other direct investment relationship. International guidelines call for reverse debt investment to be separately identified in the IIP and labeled as “direct investment in fellow enterprises.” Because of the high level of consolidation of data collected for U.S. parent companies, BEA is not able to separately identify positions between fellow enterprises for outward investment. For this reason, these positions are treated as direct positions between the U.S. parent company and its foreign affiliates on outward investment.

11.28. For consistency, these positions are treated as direct positions between U.S. affiliates and their foreign parent group on inward investment as well. On an asset/liability basis, debt instruments that U.S. parents hold in their foreign affiliates and that U.S. affiliates hold in their foreign parent groups are recorded as U.S. assets, and debt instruments that U.S. parents issue to their foreign affiliates or that U.S. affiliates issue to their foreign parent groups are recorded as U.S. liabilities.

Market value

11.29. The market value of the direct investment position revalues the historical cost value of parents’ equity investment in their affiliates using stock market indexes. The market value estimates revalue only the equity portion of the direct investment position because it is assumed that the debt portion is already valued at current period prices. The revaluation method excludes the portion of the movements in stock prices due to the retention of earnings. This avoids the double-counting of retained earnings that would result from the inclusion of reinvested earnings in direct investment financial transactions.

11.30. The outward investment position is revalued using a weighted average of stock market indexes from Morgan Stanley Capital International. If a stock market index is available for a country, that index is used. For countries where a stock market index is not available, the Morgan Stanley World Index is used. The stock market data are first converted into U.S. dollars so that exchange rate effects are reflected in the market indexes. For inward investment, the Standard and Poor’s 500 stock market index is used. The key assumption of this method is that using general stock market indexes produces on average a reasonable estimate of the aggregate value of the equity in affiliates in a country.

11.31. The change in the market value position is equal to financial transactions including reinvestment of earnings with the current cost adjustment plus valuation adjustments. The valuation adjustments consist of price changes, exchange-rate changes, and “other” changes. For market value, price changes represent changes in the local currency value of stock market indexes after removing the effects of reinvested earnings. Exchange-rate changes represent gains or

4. The results of the 2012 benchmark survey of foreign direct investment in the United States, which are currently under review, will address this question from the perspective of inward investment.

losses on foreign-currency denominated assets and liabilities due to their revaluation at current exchange rates. “Other” changes include changes in coverage and other changes in value, such as the capital gains and losses of affiliates discussed above.

Current cost

11.32. The current cost estimates of the direct investment position revalue parents’ investment in their affiliates’ tangible assets from historical cost to current-period prices. It revalues affiliates’ tangible assets using a perpetual inventory model for plant and equipment, general price indexes for land, and estimates of current replacement cost to revalue direct investment in inventories.

11.33. The perpetual inventory model is the same one used by BEA to produce estimates of total U.S. fixed assets.⁵ The perpetual inventory model first revalues each year’s plant and equipment investments from historical cost to constant cost using U.S. capital goods price indexes for inward investment and a weighted average of country-by-industry price indexes for outward investment. The constant-cost gross capital stock of plant and equipment for a given year is then obtained by cumulating past investment in plant and equipment and deducting the accumulated plant and equipment that has been discarded, using estimated average service lives and retirement patterns. The constant-cost net capital stock of plant and equipment is obtained in a similar manner, using a depreciation formula to write off the value of assets over their service lives. The constant-cost net capital stock is then revalued to current cost using the appropriate price indexes for capital goods.

11.34. The current-cost value of the net capital stock of plant and equipment derived by this method is added to the current-cost estimate of the parents’ share of their affiliate’s land and inventories. Land is revalued using U.S. and foreign gross domestic product price indexes. Inventories are revalued using ratios of current cost to historical cost values for U.S. inventory stocks. The sum of the revalued plant and equipment, land, and inventories produce a current-cost replacement value of tangible assets.

11.35. As with market value, the change in the current-cost position is equivalent to the financial transactions including reinvestment of earnings with the current-cost adjustment plus valuation adjustments. The valuation adjustments consist of price changes, exchange-rate changes, and “other” changes. For the current-cost position, price changes reflect changes in the average price of the capital stock. Exchange-rate changes represent gains or losses on foreign-currency denominated assets and liabilities due to their revaluation at current ex-

5. For a description of the model, see “Methodology, Fixed Assets and Consumer Durables, 1925–1997,” September 2003, available at http://www.bea.gov/methodologies/index.htm#national_meth.

change rates. “Other” changes include changes in coverage and other changes in value, such as the capital gains and losses of affiliates discussed above.

Portfolio Investment

Concepts and coverage

11.36. Portfolio investment consists of cross-border positions in debt or equity securities, excluding those included in direct investment or reserve assets. The major published components are **equity and investment fund shares** and **debt securities**. Debt securities are classified by **maturity** (short term vs. long term). Short-term debt security liabilities are further classified as U.S. Treasury bills and certificates and other securities, and long-term debt security liabilities are further classified as U.S. Treasury bonds and notes and other long-term securities. Other short- and long-term U.S. debt securities include securities issued by federally-sponsored agencies, corporations, and state and local governments.

Departures from BPM6

11.37. The coverage and presentation of portfolio investment positions closely follows *BPM6* recommendations. BEA uses slightly different terminology in some cases.

Key data sources

11.38. *U.S. Treasury Department*. U.S. residents’ holdings of foreign-issued equity and long-term debt securities and foreign residents’ holdings of U.S.-issued equity and long-term debt securities are based on data collected monthly on the Treasury International Capital (TIC) SLT form. The related annual and benchmark surveys cover equity, long-term debt, and short-term debt, including negotiable certificates of deposit (NCDs). These surveys are also used to supplement the other TIC data sources. The SHL(A) covers foreign holdings of U.S. securities and the SHC(A) covers U.S. holdings of foreign securities. Values on these surveys reflect the secondary market prices of the equity and long-term debt securities. Cross-border holdings of short-term debt securities and NCDs are based on the TIC B and C forms: BC, BL–2, BQ–1, BQ–2, and CQ–1.

11.39. Details on the primary sources of portfolio investment positions for lines presented in IIP tables 1.2 and 3.1 are provided in the table below. Positions for some components are taken directly from the SLT while positions for other components are projected from the annual and benchmark surveys. In these cases, the projection methodology is indicated.

11.40. *Morgan Stanley Capital Index (MSCI), Standard & Poor’s (S&P), and Merrill Lynch Price Indexes*. For U.S. equity shares, BEA uses the S&P 500 stock index, which is a proxy for the composition of foreign holdings of U.S. equity

shares. For U.S. corporate, federally-sponsored agency, and Treasury long-term debt securities, BEA uses various Merrill Lynch indexes matched to these market segments and to the maturity, investment quality, and currency of denomination of U.S. long-term debt securities held by foreign residents.

11.41. For foreign equity shares, BEA uses MSCI national and regional indexes for developed and emerging markets matched to the composition of the foreign stocks held by U.S. residents. For foreign bonds, BEA uses various Merrill Lynch indexes representing investment quality long-term debt securities issued abroad in the U.S. dollar, the euro, the Japanese yen, the Canadian dollar, and the British

Portfolio Investment Source Data for the International Investment Position

IIP table	Line	Type of investment	Primary source of investment positions
1.2	4	U.S. assets	
1.2	10	Portfolio investment.....	
1.2	11	Equity and investment fund shares	SHC(A) plus SLT change
1.2	12	Debt securities	
1.2	13	Short term	BC, BQ-1, BQ-2, CQ-1, and DTCC
1.2	14	Long term	SHC(A) plus SLT change
1.2	35	U.S. liabilities to all foreign residents...	
1.2	41	Portfolio investment.....	
1.2	42	Equity and investment fund shares	SHL(A) plus SLT change
1.2	43	Debt securities	
1.2	44	Short term	
1.2	45	Treasury bills and certificates.....	BL-2
1.2	46	Other short-term securities	BL-2, BQ-2 and CQ-1
1.2	47	Long term	
1.2	48	Treasury bonds and notes	SLT
1.2	49	Other long-term securities	SHL(A) plus SLT change
3.1	1	U.S. liabilities to foreign official agencies	
3.1	2	Portfolio investment.....	
3.1	3	Equity and investment fund shares	SLT
3.1	4	Debt securities	
3.1	5	Short term	
3.1	6	Treasury bills and certificates.....	BL-2
3.1	7	Other short-term securities	BL-2
3.1	8	Long term	
3.1	9	Treasury bonds and notes	SLT
3.1	10	Other long-term securities	SLT

pound, as well as a global broad market index excluding U.S. dollar debt, to match the composition of foreign-issued long-term debt held by U.S. residents.

11.42. *Depository Trust and Clearing Corporation (DTCC)*. BEA receives reports of commercial paper issued in the United States from DTCC. The data provided by DTCC are combined with databases of company reports to determine whether commercial paper issuers are U.S. residents or foreign residents, providing estimates that supplement U.S. holdings of foreign commercial paper reported on TIC form BQ–1 and the SHC(A).

Estimation methods

11.43. The presentation of portfolio investment positions for *equity and investment fund shares* and for *debt instruments* in the IIP accounts include statistics for positions at period end and for changes in position between periods. Changes in position consist of financial-account transactions and other changes in position, which include changes due to price changes, exchange-rate changes, and changes in value and volume n.i.e. As described in chapter 10, portfolio investment transactions are generally derived as the difference between the total change in positions and position changes that are not due to transactions. IIP table 1.2 presents portfolio investment position levels at quarter end. IIP table 1.3 presents portfolio investment position levels at yearend and a decomposition of annual changes in position. The published statistics are derived using the methods described below.

Short-term debt securities and NCDs of any maturity

11.44. **Positions.** U.S. holdings of short-term foreign debt securities equal positions reported on the TIC BC, BQ–1, BQ–2 and CQ–1 forms plus supplemental data for foreign commercial paper from the DTCC. U.S. holdings of foreign-issued NCDs reported on the TIC B and C forms are allocated between short- and long-term holdings based on data reported in the SHC(A).

11.45. Foreign holdings of short-term U.S. debt securities equal positions reported on the TIC BL–2, BQ–2 and CQ–1 forms. Foreign holdings of U.S.-issued NCDs reported on the TIC B and C forms are allocated between short- and long-term holdings based on data reported in the SHL(A).

11.46. **Total change in position.** Total change in position of U.S. residents' holdings of foreign short-term debt securities and NCDs of any maturity and in foreign residents' holdings of U.S. short-term debt securities and NCDs of any maturity equal the changes in quarterly holdings of these securities reported on the TIC B and C forms. U.S. residents' holdings of foreign commercial paper reported on the BQ–1 are supplemented by holdings estimated from DTCC data.

11.47. **Financial-account transactions.** As described in chapter 10, portfolio investment transactions are generally derived as the difference between the total change in position and position changes that are not due to transactions.

11.48. **Price changes.** Values on the TIC B and C forms are reported at their original contractual values (face value). Changes in prices in the secondary markets for short-term securities and for NCDs are assumed to have little or no impact on transactions estimated from the reported values. Price changes are not presented in IIP table 1.3 for short-term securities and NCDs.

11.49. **Exchange-rate changes.** Claims and liabilities of U.S. residents with foreign residents that are denominated in foreign currencies are reported on the BQ-2 and CQ-1, separately from dollar-denominated holdings. Claims and liabilities of U.S. financial companies and those of their customers with foreign residents that are denominated in foreign currencies are reported on the BQ-2. Claims and liabilities of U.S. nonfinancial companies with foreign residents that are denominated in foreign currencies are reported on the CQ-1.

11.50. Total holdings are reported in U.S. dollars with additional detail on the currency composition of the holdings. The exchange-rate change for each currency denomination is calculated by subtracting the exchange-rate-adjusted change in position from the total change in position. The exchange-rate-adjusted change is computed by converting the change in the amount of each foreign currency held into U.S. dollars using the each currency's average exchange rate for the period. The total change in position is calculated by converting the foreign-currency-denominated positions to U.S. dollars and computing the change from those dollar-equivalent positions. Exchange-rate changes are computed for each currency and summed to obtain the total exchange-rate change. Annual changes due to exchange-rate changes are presented in IIP table 1.3.

11.51. **Other changes in volume and valuation n.i.e.** Changes in TIC reporting caused by the addition of new reporters, corrected reporting, or other changes to the reporting panels are reported to BEA so that quarterly changes in positions that are not caused by transactions, price changes, and exchange-rate changes can be removed from total changes in positions when estimating transactions. Annual changes of this type are presented in IIP table 1.3

Equity and long-term debt securities, excluding long-term NCDs

11.52. **Positions.** Portfolio investment positions for equity and long-term debt securities are compiled from TIC surveys in one of two ways. Positions are either taken directly from the monthly SLT or they are projected by adding the quarterly change in the SLT positions to the most recent TIC annual or benchmark survey positions. Investment positions from the SLT and from the annual and benchmark surveys are reported at market value. The portfolio investment positions derived from these surveys are presented at market value.

11.53. Positions are taken directly from the monthly SLT when holdings reported on the SLT tend to be in close alignment with holdings from the relevant annual or benchmark survey. This condition generally holds for foreign official holdings of U.S. equity and long-term debt securities, and for foreign holdings of long-term U.S. Treasury securities and U.S. federally-sponsored agency securities.

11.54. Positions are projected by adding quarterly changes in SLT positions to yearend positions in the SHC(A) for U.S. holdings of foreign equity and long-term debt securities. For foreign private holdings of U.S. corporate bonds and stocks, positions are projected by adding quarterly changes in SLT positions to positions in the SHL(A), reported as of June 30 each year. Positions are projected in this way because for these types of holdings, the annual and benchmark surveys, which are compiled from micro data reported for cross-border holdings of individual securities, are significantly more accurate than the aggregate data reported more frequently on the SLT. Although the annual and benchmark surveys provide the best available measure of positions at certain points in time, the change in the SLT positions is the best available information for projecting the positions quarter-by-quarter.

11.55. Annually, when annual or benchmark survey results are available that can be compared with the SLT results available earlier in the estimation cycle for the same period, the key assumption about the agreement between the annual or benchmark survey and the SLT can be tested. BEA's annual revision cycle provides the opportunity to revise positions that had been based on SLT positions if, in fact, the SLT and the most recent annual or benchmark survey do not agree as expected.

11.56. **Total change in position.** Total change in position for U.S. residents' holdings of foreign equity and long-term debt securities and for foreign residents' holdings of U.S. equity and long-term debt securities are equal to changes in quarterly holdings of these securities reported in the TIC SLT. This change is presented in the annual IIP table 1.3

11.57. **Financial-account transactions.** As described in chapter 10, portfolio investment transactions are generally derived as the difference between the total change in position and position changes that are not due to transactions.

11.58. **Price changes and exchange-rate changes.** Price indexes denominated in U.S. dollars are used to measure changes in prices and exchange rates. U.S. dollar-denominated securities have no exchange-rate change component as part of the total price change. Price changes for a given period are equal to the holdings at the beginning of the period multiplied by the percent change over the period in the appropriate price index. For U.S. dollar-denominated securities, price changes computed by this method are presented in the annual IIP table 1.3.

11.59. For foreign currency-denominated equity and debt securities, changes in value caused by changes in exchange rates are included in the price change computed from the U.S. dollar-denominated price index. Exchange-rate changes for a given period are equal to the holdings of securities of a particular currency at the beginning of the period multiplied by the percent change in the relevant exchange rate over the period. These exchange-rate changes are subtracted from total price changes measured in U.S. dollars to obtain price changes exclusive of changes due to exchange rates.

11.60. **Other changes in volume and valuation n.i.e.** Changes in TIC SLT reporting caused by the addition of new reporters, corrected reporting, or other changes to the reporting panels are reported to BEA so that quarterly changes in positions that are not caused by transactions, price changes, or exchange-rate changes can be removed from total changes in positions when estimating transactions. Annual changes of this type are presented in IIP table 1.3.

Financial Derivatives Other Than Reserves

Concepts and coverage

11.61. **Financial derivatives other than reserves** consist of cross-border positions arising from financial contracts that are linked to underlying financial instruments, commodities, or indicators. Positions in financial derivatives consist of contracts with positive fair values that are assets of U.S. residents and contracts with negative fair values that are liabilities of U.S. residents. Statistics for both gross positive fair value and gross negative fair value are presented in IIP table 1.2. *Financial derivatives* are a type of financial instrument and *financial derivatives other than reserves* is a functional category. Positions in financial derivatives were introduced into the IIP accounts beginning with statistics for the end of the fourth quarter of 2005.

Departures from BPM6

11.62. The coverage and presentation of positions in financial derivatives other than reserves closely follows *BPM6* recommendations. However, BEA does not include employee stock options with financial derivatives other than reserves because of a lack of source data. BEA provides some detail on risk categories of financial derivatives that is not required by *BPM6*, but is not able to provide other detail recommended by *BPM6* due to source data limitations.

Key data sources

11.63. *U.S. Treasury Department.* Comprehensive data on financial derivatives are collected on Treasury International Capital (TIC) Form D, "Report of Holdings of, and Transactions in, Financial Derivatives Contracts." Data are collected quarterly from U.S. banks, bank holding companies, financial holding companies, securities dealers, and all other firms with worldwide holdings of financial derivatives, for their own and their customers' accounts combined, in excess of \$400 billion in notional value. Trading in financial derivatives is highly concentrated among a small number of large firms. Classifications by risk category are also available from TIC Form D.

Estimation methods

11.64. Estimation methods for quarterly and annual statistics, including the risk category classifications of *over-the-counter contracts* and *exchange-traded contracts*, are the same. Decompositions of changes in positions are available only for annual statistics.

11.65. **Positions.** Positions equal the reported gross positive fair values from the TIC Form D for assets and the reported gross negative fair values from the TIC Form D for liabilities.

11.66. **Financial-account transactions.** As described in chapter 10, published statistics equal net settlements from the TIC Form D with the sign reversed.

11.67. **Other changes.** Data are not available from the TIC Form D to provide separate estimates of price changes, exchange-rate changes, and other changes in volume and value n.i.e. Total other changes in position, which equals total change in position less financial-account transactions, is presented as other changes in volume and valuation n.i.e.

Other Investment

Concepts and coverage

11.68. **Other investment** is a residual category that includes positions other than those included in direct investment, portfolio investment, financial derivatives, and reserve assets. Other investment consists of a wide variety of financial instruments that are usually, but not always, issued and held by financial institutions. The major published components are **currency and deposits, loans, insurance technical reserves, and trade credit and advances**. Other investment liabilities also include allocations of **special drawing rights** (SDRs) by the International Monetary Fund.

Departures from BPM6

11.69. *BPM6* introduces a new class of financial instruments—“insurance, pension, and standardized guarantee schemes”—which includes insurance technical reserves (prepayments of premiums and reserves against outstanding insurance claims), pension entitlements (the claims of pensioners on their employers or pension funds), and provisions for calls under standardized guarantees (prepayments of net fees and provisions to meet outstanding calls under standardized loan guarantees). BEA is working with the U.S. Treasury Department to improve the existing source data for cross-border transactions in insurance technical reserves. Currently, the insurance-related positions cannot be distinguished from other changes in claims and liabilities reported on Treasury International Capital (TIC) reporting system surveys.

11.70. While source data for positions related to pension entitlements and standardized guarantee schemes are not sufficient for preparing statistics, cross-border positions in pension entitlements and standardized guarantees are believed to be negligible. Also, in some cases BEA uses slightly different terminology and slightly different sector detail. For example, BEA uses the term “trade credit and advances” because it is the only item for which source data are available under the *BPM6* component “other accounts receivable/payable.”

11.71. Currently, BEA is unable to provide separate statistics for other equity, which is equity that is not in the form of securities. Other equity can include equity in institutions such as branches, trusts, limited liability and other partnerships, unincorporated funds, and notional units for ownership of real estate and other natural resources. The ownership of many international organizations is not in the form of shares and is thus classified as other equity. Other equity is commingled with equity reported in the TIC system and is included in *portfolio investment*. Other equity of the U.S. government in international organizations may also be included in U.S. government reports of U.S. claims on foreign residents. These claims are classified as loans in other investment.

Key data sources

11.72. *U.S. Treasury Department*. Claims and liabilities for deposits, loans, and insurance technical reserves are reported by financial institutions on the TIC B forms. Deposits, loans, and trade credit and advances are reported by nonfinancial institutions on the TIC C forms beginning in December 2013. Prior to December 2013, U.S. banks, bank holding companies, financial holding companies, and securities brokers and dealers reported deposits and loans on the TIC B forms, and other types of financial intermediaries, nonfinancial institutions, and non-profit institutions reported deposits, loans, insurance technical reserves, and trade credit and advances on the TIC C forms.

11.73. Values on the TIC B and C forms are reported at their original contractual values (face value). Changes in prices in the secondary markets for assets and liabilities reported on the TIC B and C forms are assumed to have little or no impact on the reported positions.

11.74. *BEA Survey Data*. BEA makes two types of adjustments to the TIC source data based on surveys it conducts. One type of adjustment adds positions in loan claims and loan liabilities not covered in the TIC source data to estimates from the TIC B and C forms. The second type of adjustment removes selected debt positions and positions in owner's equity between financial institutions and unincorporated branches, which are covered in *direct investment*, from positions in loan claims and loan liabilities computed from the TIC B forms. The loan positions removed are covered in the TIC B forms because positions in owner's equity in unincorporated branches cannot be separated from other intercompany positions in the TIC B reporting. These adjustments are based on data reported on BEA's quarterly direct investment surveys for U.S. direct investment abroad (BE-577) and foreign direct investment in the United States (BE-605).

11.75. *U.S. Department of Defense*. Advance payments for sales of military goods to foreign governments are reported to BEA. U.S. government liabilities to foreign governments for these advance payments are classified as trade credit and advances in the general government sector.

11.76. *U.S. government administrative data.* U.S. government agencies that engage in international transactions, primarily the U.S. State Department and the U.S. Department of Defense, report these transactions quarterly to BEA. Quarterly statistics for transactions in U.S. government loan claims are based on transactions data submitted by U.S. government operating agencies under Office of Management and Budget (OMB) Directive No. 19. Positions are projected from the transactions.

11.77. *Federal Reserve Board (FRB).* Net shipments of U.S. currency into and out of the United States are provided by the FRB to BEA to measure increases and decreases in foreign holdings of U.S. currency. The holdings projected from these transactions are not captured elsewhere in statistical reporting systems.

11.78. *Federal Reserve Bank of New York (FRBNY).* “The Treasury and Federal Reserve Foreign Exchange Operations Report” from the FRBNY provides data for positions in central bank liquidity swaps. The report of foreign central bank account balances at the FRBNY provides key data for central bank sector positions.

11.79. *International Monetary Fund (IMF).* The IMF issues press releases and posts information on its Web site when it implements significant decisions such as allocating new SDRs to members or increasing member quotas. Recommendations by the IMF Executive Board for such actions must be ratified by member countries before they can be implemented.

11.80. *Depository Trust and Clearing Corporation (DTCC).* Claims of U.S. non-bank firms include claims associated with the issuance of asset-backed commercial paper (ABCP) that are not completely captured in other source data.

11.81. *Supplemental counterparty data.* Bilateral comparisons between U.S. statistics and comparable statistics from foreign banks for loans and deposits show that U.S. statistics, collected directly from U.S. nonbank firms, understate the external claims and liabilities of these firms vis-à-vis foreign banks. The foreign banking data are from the central banks of the United Kingdom and Germany, from the Bank for International Settlements for the Netherlands, and from FRB reports for banks in the Bahamas and the Cayman Islands.

Estimation methods

11.82. The presentation of the IIP accounts includes statistics for positions at period end and for changes in position. Changes in positions consist of financial-account transactions and changes due to price changes, exchange-rate changes, and changes in value and volume n.i.e. Estimation methods for financial-account transactions are described in chapter 10. IIP table 1.2 presents other investment position levels at quarter end. IIP table 1.3 presents other investment position levels at yearend and a decomposition of changes in position. Methods for each of the published components are described below. Unless otherwise noted, methods are the same for both U.S. asset positions and U.S. liability positions.

Currency

11.83. **Positions.** Foreign holdings of U.S. currency abroad are projected based on an estimate of holdings in 1973 brought forward by adding quarterly net shipments, which are used to measure transactions. Foreign holdings of U.S. currency are not liabilities to foreign official agencies and are thus not included in IIP table 3.1.

11.84. **Financial-account transactions.** As described in chapter 10, transactions in U.S. currency liabilities are equal to net shipments of U.S. currency into and out of the United States.

11.85. **Price changes.** The value of U.S. currency abroad is not affected by changes in prices.

11.86. **Exchange-rate changes.** The value of U.S. currency abroad is not affected by changes in exchange rates.

11.87. **Other changes in volume and valuation n.i.e.** Source data are not available for this category.

Deposits

11.88. **Positions.** U.S. deposit claims and liabilities with foreign residents include (1) deposits reported by U.S. financial institutions and nonfinancial institutions for their own account and for their customers on the TIC B and C forms, (2) the deposit claims and liabilities of the FRB with foreign central banks reported in administrative data, and (3) additional deposits placed in foreign banks by U.S. nonbank firms based on counterparty data from foreign banks. Brokerage balances held by securities brokers for their customers that are very similar to deposits, and that are reported in the deposit category on the TIC B forms, are also classified as deposits. The deposit claims of the FRB include holdings of foreign currency obtained through central bank liquidity swaps.

11.89. Positions in deposit claims and liabilities in the IIP accounts equal the positions reported on the TIC B and C forms, the administrative data from the FRB, and the supplemental balances computed from the counterparty data from foreign banks. U.S. deposit liabilities to foreign official agencies are estimated from reported deposit liabilities to foreign official agencies available separately on the TIC form BL-1.

11.90. **Financial-account transactions.** As described in chapter 10, transactions in deposit claims and liabilities of U.S. financial institutions and nonfinancial institutions are based on changes in quarterly holdings as reported on the TIC B and C forms. These estimates are supplemented by changes in quarterly holdings of deposits placed in foreign banks by U.S. nonbank firms based on counterparty data from foreign banks.

11.91. Transactions in deposits denominated in foreign currency equal the change in holdings, with the holdings converted to the original currency of denomination at the exchange rates in effect at the beginning and end of the period, less changes due to changes in reporting panels classified as other changes in volume and valuation *n.i.e.* The foreign-currency-denominated estimate of the transaction amount is converted to U.S. dollars using an average exchange rate for the period.

11.92. Transactions in deposits denominated in U.S. dollars equal the reported dollar-denominated change in holdings, less changes due to changes in reporting panels classified as other changes. Transactions in deposits abroad held by the FRB acquired through central bank liquidity swaps equal changes in quarterly swap balances reported by the FRB.

11.93. **Price changes.** The value of U.S. deposit claims and liabilities with foreign residents is not affected by changes in prices.

11.94. **Exchange-rate changes.** The calculation of exchange-rate changes for foreign-currency denominated deposits, excluding those acquired by the FRB through central bank liquidity swaps, makes use of the exchange-rate-adjusted transactions described above. Exchange-rate changes equal the unadjusted total change in holdings of foreign-currency denominated deposits less the sum of transactions and changes in reporting panels that would be classified as other changes in volume and value *n.i.e.*

11.95. Deposits abroad held by the FRB acquired through central bank liquidity swaps are denominated in foreign currency; however, changes in exchange rates do not change the U.S. dollar-equivalent holdings reported to the public by the FRB. The swaps are reversed at prearranged exchange rates specified in the swap agreement and the same amounts of U.S. dollars are always returned as were originally swapped. The FRB carries these assets on its balance sheet at constant U.S. dollar-equivalent values. The FRB's holdings are not affected by changes in exchange rates.

11.96. **Other changes in volume and valuation *n.i.e.*** Changes in TIC reporting caused by the addition of new reporters, corrected reporting, or other changes to the reporting panels are reported to BEA so that the changes in quarterly balances not caused by transactions or exchange-rate changes can be removed from total changes in holdings when estimating transactions.

Loans

11.97. **Positions.** U.S. loan claims and liabilities with foreign residents include (1) loans reported by U.S. financial institutions and nonfinancial institutions both for their own account and for their customers on the TIC B and C forms, (2) loan claims on foreign residents reported in administrative data by U.S. government agencies, and (3) additional loans to or from U.S. nonbank firms with foreign banks based on counterparty data from foreign banks.

11.98. Prior to the first quarter of 2014, loans also included intercompany debt of selected financial intermediaries reported on BEA surveys of direct invest-

ment. Beginning with positions reported as of the end of December 2013, all financial firms with reportable other investment claims and liabilities reported those positions on the TIC B forms. This eliminated the need to include the inter-company debt of the selected financial intermediaries reported on the BEA direct investment surveys.

11.99. Quarterly statistics for positions in U.S. government loan claims are projected based on an estimate of holdings in 1976 brought forward by adding transactions. Transactions are based on data submitted by U.S. government operating agencies under OMB Directive No. 19; data are summarized by country and by agency.

11.100. Other positions in loan claims and liabilities in the IIP accounts are equal to the positions reported on the TIC B and C forms supplemented by the balances computed from the counterparty data from foreign banks. U.S. loan liabilities to foreign official agencies are estimated from reported loan liabilities to foreign official agencies available separately on the TIC forms BL-1 and BL-2.

11.101. **Financial-account transactions.** As described in chapter 10, transactions in loans of U.S. financial institutions and nonfinancial institutions with foreign residents are based on changes in quarterly holdings as reported on the TIC B and C forms. These estimates are supplemented by loan claims and loan liabilities of U.S. nonbank firms with foreign banks that are based on supplementary counterparty data from foreign banks. The computed changes in holdings from the TIC data are adjusted to remove the impact of any changes in holdings not caused by transactions, such as changes in exchange rates or changes in TIC survey reporting panels.

11.102. Transactions in loans denominated in foreign currency equal the change in holdings, with the holdings converted to the original currency of denomination at the exchange rates in effect at the beginning and end of the period, less changes due to changes in reporting panels classified as other changes in volume and valuation n.i.e. The foreign-currency-denominated estimate of the transaction amount is converted to U.S. dollars using an average exchange rate for the period.

11.103. Transactions in loans denominated in U.S. dollars equal the reported dollar-denominated change in holdings, less changes due to changes in reporting panels classified as other changes in volume and valuation n.i.e. Quarterly statistics for transactions in U.S. government loan claims are based on transactions data submitted by U.S. government operating agencies under OMB Directive No. 19. All U.S. government loan claims are assumed to be denominated in U.S. dollars.

11.104. **Price changes.** The value of U.S. loan claims and liabilities with foreign residents is assumed to be unaffected by changes in prices in secondary markets.

11.105. **Exchange-rate changes.** The calculation of exchange-rate changes for foreign-currency denominated loans makes use of the exchange-rate adjusted transactions described above. Exchange-rate changes equal the unadjusted total change in holdings of foreign-currency denominated loans less the sum of transactions and any changes in reporting panels that would be classified as other changes in volume and value n.i.e.

11.106. **Other changes in volume and valuation n.i.e.** Changes in TIC reporting caused by the addition of new reporters, corrected reporting, or other changes to the reporting panels are reported to BEA so that the changes in quarterly balances not caused by transactions or exchange-rate changes can be removed from total changes in holdings when estimating transactions.

Insurance technical reserves

11.107. Positions for insurance technical reserves are based on quarterly holdings as reported on the TIC B forms. Collection of data for insurance technical reserves as a separate data item began in December 2013. Positions will be published pending evaluation of the new source data for reliability and confidentiality.

11.108. Insurance technical reserves are not liabilities to foreign official agencies and are therefore not included in IIP table 3.1.

Trade credit and advances

11.109. **Positions.** Holdings of claims and liabilities with foreign residents from trade credit and advances include (1) those reported by U.S. financial institutions and nonfinancial institutions on the TIC Form CQ–2 and (2) the liabilities of the U.S. government to foreign governments from funds advanced mainly for the purchase of military goods and services reported to BEA in U.S. government administrative data.

11.110. The trade credit and advances of other (non-deposit-taking) U.S. financial institutions and nonfinancial institutions equal the quarterly holdings as reported on the TIC Form CQ–2. The liabilities are not liabilities to foreign official agencies and are not included in IIP table 3.1.

11.111. U.S. government liabilities from advance payments for foreign purchases of goods and services that are mainly for military use are projected based on an estimate of holdings in 1976 brought forward by adding quarterly transactions to the latest position estimate. Transactions are based on U.S. government administrative data. These U.S. government liabilities to foreign governments are also included in trade credit and advances in IIP table 3.1.

11.112. **Financial-account transactions.** As described in chapter 10, transactions in trade credit and advances of U.S. financial institutions and nonfinancial institutions with foreign residents are based on changes in quarterly holdings of

claims and liabilities as reported on the TIC Form CQ–2. The computed changes in holdings from the TIC data are adjusted to remove the impact of any changes in holdings not caused by transactions, such as changes in exchange rates or TIC survey reporting panels.

11.113. Transactions in trade credit and advances denominated in foreign currency equal the change in holdings, with the holdings converted to the original currency of denomination at the exchange rates in effect at the beginning and end of the period, less changes due to changes in reporting panels classified as other changes in volume and valuation n.i.e. The foreign-currency-denominated estimate for the transaction amount is converted to U.S. dollars using an average exchange rate for the period.

11.114. Transactions in trade credit and advances denominated in U.S. dollars equal the reported dollar-denominated change in holdings less changes due to changes in reporting panels classified as other changes in volume and valuation n.i.e.

11.115. U.S. government liabilities from advance payments for foreign purchases of goods and services are estimated directly from U.S. government administrative data for payments received, which increase liabilities, and for deliveries of goods and services, which reduce liabilities.

11.116. **Price changes.** The value of U.S. trade credit and advances with foreign residents is assumed to be unaffected by changes in prices in secondary markets.

11.117. **Exchange-rate changes.** The calculation of exchange rate changes for foreign-currency denominated trade credit and advances makes use of the exchange-rate adjusted transactions described above. Exchange rate changes are equal to the unadjusted total change in holdings of foreign-currency denominated trade credit and advances less the sum of transactions and any changes in reporting panels that would be classified as other change in volume and value n.i.e.

11.118. **Other changes in volume and valuation n.i.e.** Changes in TIC reporting caused by the addition of new reporters, corrected reporting, or other changes to the reporting panels are reported to BEA so that the changes in quarterly balances not caused by transactions or exchange-rate changes can be removed from total changes in holdings when estimating transactions.

SDR allocations

11.119. **Positions.** SDR allocations to the United States are available in an IMF public database with values denominated in SDRs. The position in the IIP accounts equals the amount reported by the IMF as of the end of the period con-

verted from SDRs to U.S. dollars at the conversion rate in effect at the end of the period. SDR allocations are also included in IIP table 3.1.

11.120. **Financial-account transactions.** As described in chapter 10, changes in SDR allocations to the United States are available in IMF public releases and databases with values denominated in SDRs.

11.121. **Price changes.** The value of SDR allocations to the United States is not affected by changes in prices.

11.122. **Exchange-rate changes.** The exchange-rate change for a period when the SDR allocation is unchanged equals holdings in U.S. dollars at the end of the period less holdings in U.S. dollars at the beginning of the period, with the holdings converted to U.S. dollars from SDRs at the conversion rates in effect at the beginning and end of the period. If the SDR allocation changed during the period, exchange-rate changes for each level and duration of the allocation would be computed and summed to obtain the exchange-rate change for the period.

11.123. **Other changes in volume and valuation n.i.e.** Increases or decreases in SDR allocations to the United States are always transactions as defined in *BPM6*. As a result, other changes in volume and valuation do not apply to this component.

Reserve Assets

Concepts and coverage

11.124. Reserve assets are those external assets that are readily available to and controlled by monetary authorities for meeting balance of payments financing needs, for intervention in exchange markets to affect the currency exchange rate, and for other related purposes such as maintaining confidence in the currency and the economy, and serving as a basis for foreign borrowing. The major published components are **monetary gold**, **International Monetary Fund (IMF) special drawing rights (SDRs)**, **reserve position in the IMF**, and **other reserve assets**.

11.125. Other reserve assets enable the United States to hold foreign currency balances that are highly liquid and that are available for intervention sales. U.S. foreign currency balances include deposits, debt securities, and repurchase agreements that are classified as “other claims.” The United States does not have financial derivatives in its reserve assets.

Departures from *BPM6*

11.126. The coverage and presentation of reserve assets closely follows *BPM6* recommendations.

Key data sources

11.127. *U.S. Treasury Department data.* Data on U.S. reserve assets are published by the U.S. Treasury Department in terms of holdings (outstanding amounts). BEA also uses U.S. Treasury Department source data on the gold stock.

11.128. *Federal Reserve Bank of New York (FRBNY).* “The Treasury and Federal Reserve Foreign Exchange Operations Report” from the FRBNY provides data for transactions in central bank liquidity swaps. Other data for interest earned on reserves and swaps and on claims and liabilities with foreign central banks are provided to BEA for estimates of reserve assets and central bank sector transactions.

11.129. *International Monetary Fund (IMF).* The IMF provides month-end position data and daily increases and decreases during each month for the U.S. accounts at the IMF. The data include positions and transactions between the United States and the IMF for the SDR account and the General Resources (tranche) account and its subaccounts covering securities, valuation adjustments, and IMF borrowing from the United States.

Estimation methods

11.130. The presentation of the IIP includes statistics for positions at period end and for changes in position. Changes in positions consist of financial-account transactions and changes due to price changes, exchange-rate changes, and changes in value and volume n.i.e. Estimation methods for financial-account transactions are described in chapter 10. IIP table 1.2 presents reserve assets position levels at quarter end. IIP table 1.3 presents reserve assets position levels at yearend and a decomposition of annual changes in position. Methods for each of the published components are described below.

Monetary gold

11.131. **Positions.** Positions in monetary gold are equal to the amount of gold in ounces in the monthly U.S. Treasury Department report on the U.S. gold stock at the end of the quarter, multiplied by the price of gold from the afternoon price quoted in the London gold market (“the London gold afternoon fixing”) at the end of the quarter. If the London gold market is closed on the afternoon of the last day of the quarter, then the last fixing for the quarter is the price used.

11.132. Monetary gold is valued at the market price in London, following recommendations from *BPM6* that the investment position should be valued at market prices. The value of monetary gold in the IIP accounts is different from the valuation used by the U.S. Treasury Department in the official statement of the value of U.S. reserve assets. The price used to value gold in the U.S. Treasury Department report on the U.S. gold stock and in the official statement of the value of U.S. reserve assets is fixed by U.S. law at \$42.2222 per ounce. Official valuations of U.S. gold are made pursuant to the Par Value Modification Act (Public Law 92–268) and its amendment (Public Law 93–110).

11.133. **Financial-account transactions.** As described in chapter 10, if transactions were to occur, BEA would obtain from the U.S. Treasury Department data for the quantity of gold transferred out or received from the counterparty, either in ounces or in dollars at a known price. If daily data were available, BEA would value the daily gold transactions using the afternoon (PM) fix in the London market for each day. If transactions were to occur over a period of time and daily data were not available, the transactions over the period would be valued at an average price of gold for that period. Transactions valued using the PM fix for the gold price in London would be aggregated and reported quarterly.

11.134. **Price changes.** Price changes for a given period equal the holdings in ounces at the beginning of the period multiplied by the change in the gold price. If the holdings of gold change during the period, price changes for each level and duration of holdings would be computed and summed to obtain the price change for the period. A significant change in gold holdings would be unusual; accurate price changes can usually be computed based on the holdings at the beginning of the period.

11.135. **Exchange-rate changes.** The value of the gold stock is not affected by changes in exchange rates.

11.136. **Other changes in volume and valuation n.i.e.** The value of changes in the gold stock caused by the monetization or demonetization of gold would be recorded in this category, based on the price on the date of the monetization or demonetization.

Special drawing rights (SDRs)

11.137. **Positions.** Positions in SDRs equal the amount in the U.S. SDR account reported by the IMF as of the end of the period, converted to U.S. dollars at the conversion rate in effect at the end of the period.

11.138. **Financial-account transactions.** As described in chapter 10, BEA converts daily increases or decreases caused by transactions in the U.S. SDR account from SDRs to U.S. dollars at the conversion rate in effect on that date. These daily transactions are aggregated into quarterly financial transactions for the ITAs.

11.139. **Price changes.** The value of U.S. holdings of SDRs is not affected by changes in prices.

11.140. **Exchange-rate changes.** Exchange rate changes equal the total change in U.S. SDR holdings, less financial account transactions computed from reported increases and decreases.

11.141. **Other changes in volume and valuation n.i.e.** Increases or decreases in the value of U.S. SDR holdings are completely accounted for by transactions and by exchange-rate changes. As a result, other changes in volume and valuation n.i.e do not apply to this component.

Reserve position in the IMF

11.142. **Positions.** Positions in the U.S. reserve position in the IMF equal the amount in the U.S. general resources, or tranche, account plus any borrowing by the IMF from the United States through the General Arrangements to Borrow (GAB), the New Arrangements to Borrow (NAB), or other borrowing facilities, converted to U.S. dollars at the conversion rate in effect at the end of the period.

11.143. **Financial-account transactions.** As described in chapter 10, transactions from IMF borrowings or repayments are provided for each day of the reporting month to BEA by the IMF. The IMF reports these values in terms of SDRs. BEA converts daily increases or decreases from SDRs to U.S. dollars at the conversion rate in effect on that date. These daily transactions are aggregated into quarterly financial transactions for the ITAs.

11.144. Transactions in the general resources account are computed by deducting valuation changes from the total change in balance of the account, which is equal to U.S. holdings at the end of the current quarter converted to U.S. dollars, less U.S. holdings at the end of the previous quarter converted to U.S. dollars. The valuation changes are computed from the change in the SDR/U.S. dollar conversion rate and from valuation adjustments to IMF holdings of U.S. dollars recorded by the IMF in their accounting records. The SDR/ U.S. dollar conversion rate and valuation adjustments to IMF holdings of U.S. dollars are provided to BEA by the IMF.

11.145. **Price changes.** The value of the U.S. reserve position in the IMF is not affected by changes in prices.

11.146. **Exchange-rate changes.** Exchange-rate changes are equal to the total change in the U.S. reserve position in the IMF, less financial account transactions.

11.147. **Other changes in volume and valuation n.i.e.** Increases or decreases in the value of the U.S. reserve position in the IMF are completely accounted for by transactions and exchange-rate changes. As a result, changes in volume and valuation n.i.e do not apply to this component.

Other reserve assets

11.148. **Positions.** Positions in other reserve assets are equal to the U.S. dollar-equivalent positions reported by U.S. monetary authorities to BEA in administrative data as of the end of the quarter. These reports include holdings of foreign-currency denominated deposits, securities, and repurchase agreements, all converted to U.S. dollars at exchange rates in effect at the end of the quarter.

11.149. **Financial-account transactions.** As described in chapter 10, transactions are estimated from reports of interest collected from holdings of deposits, securities, and repurchase agreements, and from reports of any intervention purchases or sales of assets from the FRB.

11.150. **Price changes.** BEA estimates price changes for securities, but not for deposits and repurchase agreements, because the impact of secondary market prices for deposits and repurchase agreements is assumed to be minimal. Price changes for securities equal total changes in securities holdings, less the sum of exchange-rate changes and other changes in volume and value n.i.e.

11.151. **Exchange-rate changes.** The exchange-rate change for each instrument in each period for each currency denomination (Japanese yen and euro) is calculated by subtracting the exchange-rate-adjusted change in position from the total change in position. The exchange-rate-adjusted change is computed by converting the change in the amount of Japanese yen or euros held into U.S. dollars using each currency's average exchange rate for the period. The total change in positions is calculated by converting the foreign-currency-denominated positions to U.S. dollars and computing the change from those dollar-equivalent positions. Exchange-rate changes are computed for each currency and summed to obtain the total exchange-rate change.

11.152. **Other changes in volume and valuation n.i.e.** These changes mainly include offsetting changes in holdings of deposits, securities and repurchase agreements by U.S. monetary authorities, representing changes in the mix of investments held. These offsetting changes are excluded from transactions because they are accomplished without any impact on the value of the U.S. dollar in exchange markets and they do not change the total reserve holdings of a particular foreign currency.

11.153. For deposits, other changes equal the total change less the sum of the financial transactions and the exchange-rate change. Price change does not apply to deposits. For other claims (repurchase agreements), other changes equal the total change less the sum of financial transactions and the exchange-rate change. Price changes do not apply to repurchase agreements. For securities, other changes equal the sum of other changes for deposits and repurchase agreements with the sign reversed, reflecting the assumption that other changes are offsetting and do not change the total reserve holdings of foreign currencies.

Statistics on the Activities of Multinational Enterprises

Concepts and coverage

12.1. Statistics on the **activities of multinational enterprises (AMNE)** provide a comprehensive and integrated data set for empirical analysis of **multinational enterprises (MNEs)** and their effects on home and host country economies. These statistics provide an additional perspective on the impact of **direct investment** beyond that provided by the International Transactions Accounts (ITAs) and the International Investment Position (IIP) Accounts. AMNE statistics provide insights into the overall activities of U.S. MNEs, the foreign affiliates of U.S. MNEs, and the U.S. affiliates of foreign MNEs using a wide variety of indicators of their financial structure and operations. The statistics on foreign affiliates and U.S. affiliates cover the entire operations of the affiliate, regardless of the share of ownership by the parent companies.

12.2. BEA's AMNE statistics include the following:

- Balance sheets and income statements
- Sales by type (goods or services) and destination (local or nonlocal)
- Value added
- Employment and employee compensation
- U.S. trade in goods
- Research and development

12.3. Each of these categories includes additional related individual data items. For example, detailed balance sheet components (inventories, net property, plant and equipment, etc.) are available annually for majority-owned affiliates. The amount of additional detail available for some of the categories is greater in benchmark survey years (every five years) than in other years.

12.4. BEA's AMNE statistics are compiled for all direct investment enterprises and, separately, for a subset of **direct investment enterprises** in which the **direct investor** directly or indirectly holds or controls a majority of the voting power. In BEA's AMNE statistics, these controlled direct investment enterprises are referred to as **majority-owned affiliates**. BEA goes beyond *BPM6* guidance by not excluding from the scope of AMNE statistics the activities of **associates**, which are business entities that are owned between 10 and 50 percent by another business entity. However, fewer statistics are compiled for the broader set of all MNEs

than for the subset that excludes associates. BEA compiles AMNE statistics for both foreign enterprises resident in the U.S. economy (“inward AMNE”) and foreign affiliates owned by U.S. residents (“outward AMNE”). In addition, selected AMNE statistics are compiled for the domestic activities of U.S. MNE parent companies.

12.5. Closely related to AMNE statistics are **foreign affiliate statistics (FATS)**. Whereas AMNE statistics provide information on the overall operations of MNEs in their home country and on their affiliates in host countries, FATS data focus on goods produced and services provided by affiliates in foreign markets and provide information on additional economic variables such as sales and or output, employment, value added, exports and imports of goods and services, and number of enterprises. FATS represents a subset of AMNE statistics that exclude the activities of the affiliate’s ultimate parent enterprise. The population of enterprises covered by FATS statistics is a subset of the enterprises covered by direct investment statistics.

12.6. Understanding the behavior of MNEs requires a conceptual framework in which an economic actor controls the global activities of these businesses. As a result, BEA provides separate tabulations for foreign affiliates that are majority-owned by their U.S. parent(s) and for U.S. affiliates that are majority-owned by their foreign parent(s). Statistics on U.S. affiliates and foreign affiliates are published by country and by industry. More detailed tables by industry and state on U.S. affiliate operations at the establishment level are available for selected years as a result of a special project that links BEA’s enterprise data for U.S. affiliates with establishment data for all U.S. companies from the Census Bureau.

12.7. AMNE statistics provide insight into the finances and operations of MNEs, the effects of increased globalization of economic activity, and the continued growth of services trade. The latter has led to the need for a more complete picture of the international supply of services that considers not only resident-nonresident transactions as recorded in the ITAs but also those services delivered via physical commercial presence by foreign affiliates that are not included in ITA statistics. Commercial presence is one of the four **modes of supply** for services (mode 3) identified in the **General Agreement on Trade in Services (GATS)**. More information on modes of supply is available in chapter 14.

12.8. AMNE statistics are important for understanding the impact of direct investment on a broad set of economic activities in an economy such as output, employment, **value added**, and trade, rather than just the investment transactions and positions that are the focus of direct investment statistics. AMNE statistics are also important for the analysis of the performance of domestically and foreign controlled enterprises, both in absolute terms and relative to the larger domestic and foreign populations of enterprises. For example, direct investment enterprises may be involved in activities such as research and development that have important impacts in the domestic economy but that may not be recorded as international transactions.

Departures from BPM6

12.9. *BPM6* includes an appendix that endorses and provides guidance for the compilation of AMNE statistics as a supplement to the direct investment statistics compiled for the ITAs and the IIP accounts. Detailed discussion and guidance for both AMNE statistics and FATS is found in the *Manual on Statistics of International Trade in Services (MSITS)*, specifically in Chapter IV. Additional guidance is found in the *OECD Handbook on Economic Globalization Indicators* and in the fourth edition of the *OECD Benchmark Definition of Foreign Direct Investment*. BEA's AMNE statistics exceed the standards recommended by these guidelines. BEA's statistics also cover a broader set of MNEs than recommended in *BPM6*, one that includes associates. However, BEA features statistics prepared on a majority-owned basis that can be directly compared to AMNE statistics from other countries.

Key data sources

12.10. *BEA Survey Data*. BEA's AMNE statistics are based entirely on data collected on BEA's mandatory annual and benchmark direct investment surveys. These surveys include the Annual Survey of U.S. Direct Investment Abroad (BE-11), the Annual Survey of Foreign Direct Investment in the United States (BE-15), the Benchmark Survey of U.S. Direct Investment Abroad (BE-10), and the Benchmark Survey of Foreign Direct Investment in the United States (BE-12).

Estimation methods

12.11. BEA's AMNE statistics represent the aggregation of financial and operating data items reported by U.S. multinational enterprises (MNEs) for their U.S. operations and for their foreign affiliates, and by the U.S. affiliates of foreign MNEs operating in the United States. Published statistics represent the sum of (1) values reported by firms that exceed asset reporting thresholds selected with certainty and (2) values estimated for sampled firms based partly on benchmark-year levels.

12.12. Most of the concepts and definitions used for BEA's AMNE statistics can be found in the instructions for BEA surveys. The following sections highlight some concepts, definitions, and statistical issues that require further explanation or that are not covered on the forms or in the instructions. Further elaboration of these issues can be found in BEA's direct investment benchmark publications. These include *U.S. Direct Investment Abroad: Final Results from the 2009 Benchmark Survey* and *Foreign Direct Investment in the United States: Final Results from the 2007 Benchmark Survey*.

12.13. **Balance sheets and income statements**. Balance sheets and income statements are required to be reported as they would have been for stockholders' reports, preferably according to U.S. **generally accepted accounting principles (GAAP)**. Some exceptions, such as consolidation, are explained in the survey instructions. For most parents and affiliates, the income statement includes all types of income, both ordinary and extraordinary.

12.14. **Sales by type and destination.** BEA surveys collect data on sales or gross operating revenues disaggregated into goods, services, and investment income. Sales are further disaggregated according to whether they were to affiliated parties or unaffiliated parties and whether the customer was in the country of the affiliate or another country.

12.15. **Value added.** Value added is a useful summary measure of MNE operations derived from AMNE data. MNE value added measures the value of goods and services produced by MNEs, either in the United States (U.S.-parent value added or majority-owned U.S. affiliate value added or abroad (majority-owned foreign affiliate value added)). Compared with sales, value added is a preferable measure of production because it indicates the extent to which a firm's output results from its own production rather than from production that originates elsewhere.

12.16. A firm's value added can be measured as gross output (revenue) less its intermediate inputs (purchased goods and services used in production). Alternatively, it can be measured as the sum of the costs incurred (except for intermediate inputs) and the profits earned in production. The costs fall into four major categories: compensation of employees, net interest paid, taxes on production and imports, and capital consumption allowances. BEA's value added estimates are calculated as the sum of costs incurred and profits earned in production.

12.17. **Employment and employee compensation.** Employment represents the number of full-time and part-time employees on the payroll at the end of the fiscal year. However, some respondents provide a count taken during the year if it is a reasonable proxy for the end-of-year number. In addition, if employment at the end of the year was unusually high or low because of temporary factors, such as seasonal variations or a strike, respondents may provide a number reflecting normal operations. Employee compensation includes wages and salaries and supplements, such as fringe benefits.

12.18. **U.S. trade in goods.** The concepts and definitions underlying the data collected in the BEA surveys on trade in goods are nearly identical to those used for the data on total U.S. trade in goods compiled by the Census Bureau. Although the trade data are particularly difficult for U.S. MNEs to report, BEA's review of the reported data indicates that most of the data conform well to Census Bureau concepts and definitions.

12.19. **Research and development (R&D).** R&D expenditures are collected for R&D funded by the parent or the affiliate whether performed internally or by others, and for R&D performed by the parent or the affiliate whether for its own use or for use by others. BEA provides statistics for R&D expenditures by U.S. parents in the United States, by foreign affiliates in the United States, and by U.S. affiliates abroad.

12.20. AMNE statistics may be classified in several ways. One key classification is geographical, which involves determining the country where production occurs and also the country that should be regarded as the location of the owner of the producing affiliate. Another key classification is based on the primary industrial activity or product of the producer.

Classification by country

12.21. **Inward AMNE.** For foreign-controlled affiliates in the United States, BEA attributes AMNE statistics to the country of the ultimate investor or **ultimate beneficial owner (UBO)**. Usually the immediate investor (first foreign parent) and the ultimate investor are the same, but in many cases they differ. Apart from practical considerations, attributing variables concerning production to the country of the ultimate investor is preferred because that country controls and derives most of the benefits from controlling the direct investment enterprise. While BEA follows international guidelines by attributing most inward AMNE statistics to the country of the UBO, it also provides selected tabulations by the country of the first foreign parent.

12.22. **Outward AMNE.** For foreign affiliates controlled by U.S. residents, two options for the geographical attribution of AMNE statistics are possible. The statistics could be attributed to the country of location of the affiliate or, if the ownership is through a directly-held affiliate located in another country, to the country of that affiliate. Following international guidelines, BEA attributes outward AMNE statistics to the country of the affiliate whose operations are described by the statistics; that is, to the country in which the foreign direct investor's commercial presence exists and where the various activities covered by the statistics are conducted.

Classification by industry or product

12.23. International guidelines recommend classification of AMNE and FATS statistics by activity according to the International Standard Industrial Classification (ISIC), and grouped according to the ISIC Categories for Foreign Affiliates (ICFA), which are derived from ISIC. These categories cover all activities but provide more detail for services than for goods.

12.24. BEA has developed its own enterprise industry classification system for AMNE statistics that is comparable to but more detailed than the ICFA categories. U.S. parents and their foreign affiliates and foreign parents and their U.S. affiliates are classified according to International Surveys Industry (ISI) classifications. The classifications and their code numbers are adapted by BEA from the most recent North American Industry Classification System (NAICS). For the most part, the ISI classifications are equivalent to NAICS four-digit industries; at its most detailed level, NAICS classifies industries at a six-digit level. The ISI classification system is less detailed than NAICS because it is designed for classifying enterprises rather than establishments.

12.25. Because many direct investment enterprises are active in several industries, it is not meaningful to classify all of their data in a single industry if that industry is defined too narrowly. Each U.S. parent or foreign affiliate and each U.S. affiliate is classified by industry on the basis of its sales (or for holding companies, on the basis of its total income) in a three-step procedure. First, a given parent or affiliate is classified in the NAICS sector that accounts for the largest percentage of its sales. Second, within the sector, the parent or affiliate is classified in the three-digit sub-sector in which its sales are largest; a three-digit sub-sector consists of all four-digit industries that have the same first three digits in their four-

digit ISI code. Third, within its three-digit subsector, the parent or affiliate is classified in the four-digit industry in which its sales are largest. This procedure ensures that the U.S. parent or foreign affiliate is not assigned to a four-digit industry outside either its sector or its three-digit subsector.

12.26. BEA has also developed a supplementary classification system designed to approximate classification on an establishment basis rather than on an enterprises basis. Establishment-level classification at detailed industry levels provide insights into the types of products produced and sold. Tabulations of AMNE statistics by “industry of sales” are developed by asking respondents to report their sales broken down by four-digit product codes. AMNE statistics classified on this basis can be compared to establishment-based statistics for the host economy.

Data Sources

13.1. As described in other chapters throughout this manual, the methodologies used to prepare statistics for the U.S. international economic accounts rely on a wide variety of source data that are adjusted as needed to meet the definitions and concepts used for the accounts. These accounts include the International Transactions Accounts (ITAs), the International Investment Position (IIP) Accounts, and statistics on the Activities of Multinational Enterprises (AMNE).

13.2. Most of the source data are derived from data collection programs conducted by BEA, the U.S. Treasury Department, and the U.S. Census Bureau. In addition, BEA uses data provided by U.S. government agencies involved with international transactions, other government and private surveys related to cross-border activities, and counterpart data provided by foreign statistical agencies, foreign central banks, and international organizations.

13.3. Source data used for the accounts are classified into three major categories: survey data, administrative data, and other source data. Each of these categories is discussed below.

Survey data

BEA survey data

13.4. Direct investment financial flows and positions and related income flows are based on BEA's mandatory quarterly, annual, and benchmark surveys of direct investment. Services exports and imports statistics are based largely on BEA's mandatory quarterly and benchmark surveys of cross-border transactions in business, financial, and insurance services. BEA also conducts mandatory surveys to measure transport services and a voluntary survey of institutional remittances.

13.5. BEA conducts six surveys to collect information on U.S. direct investment abroad and foreign direct investment in the United States and 11 surveys to collect information on U.S. international trade in services. Each of the BEA survey forms described below, and more information about how they are conducted, can be found on the BEA Web site at "Survey forms and related materials" under the section "International."

BEA's direct investment surveys

13.6. BEA conducts mandatory quarterly, annual, and benchmark surveys of U.S. direct investment abroad and foreign direct investment in the United States. Quarterly surveys provide data for measuring direct investment transactions and income for the ITAs and direct investment positions for the IIP accounts. Annual and benchmark surveys provide AMNE statistics and more detailed data needed for annual and benchmark revisions.

13.7. Benchmark surveys are conducted at five-year intervals and provide the most comprehensive coverage of business entities, transactions, and data items. Quarterly and annual surveys are cutoff sample surveys, which cover a sample of U.S. parents and their foreign affiliates above a size-exemption level. The legal authority for all of the direct investment surveys is the International Investment and Trade in Services Survey Act (P.L. 94–472, as amended; 22 U.S.C. 3101–3108).

13.8. U.S. direct investment abroad represents the ownership or control, directly or indirectly, by one U.S. entity of a ten percent or more voting interest (or the equivalent) of a foreign business enterprise. U.S. entities with direct investment abroad are required to report on a fully consolidated enterprise basis. While U.S. entities are asked to report for each foreign affiliate separately, in cases where that is not possible the U.S. entity may consolidate affiliates in the same country when the affiliates are in the same BEA detailed industry or the affiliates are integral parts of the same business operation.

13.9. Foreign direct investment in the United States represents the ownership or control, directly or indirectly, by a foreign entity (including business enterprises) of a ten percent or more voting interest (or the equivalent) in a U.S. business enterprise. A U.S. business enterprise subject to these reporting requirements is known as a U.S. affiliate. A U.S. affiliate must file on a fully consolidated domestic U.S. basis. The fully consolidated domestic entity is considered one U.S. affiliate.

BEA's surveys of direct investment include:

BE–577: Quarterly survey of U.S. direct investment abroad

BE–11: Annual survey of U.S. direct investment abroad

BE–10: Benchmark survey of U.S. direct investment abroad

BE–605: Quarterly survey of foreign direct investment in the United States

BE–15: Annual survey of foreign direct investment in the United States

BE–12: Benchmark survey of foreign direct investment in the United States

BEA's services surveys

13.10. BEA conducts mandatory quarterly, annual, and benchmark surveys of U.S. exports and imports of services. Survey respondents are primarily U.S. business enterprises with cross-border receipts or payments for services that exceed certain thresholds. Quarterly surveys provide information on services transactions with both affiliated and unaffiliated parties by partner country. Benchmark services surveys are conducted at five-year intervals.

13.11. The legal authority for all of the surveys is the International Investment and Trade in Services Survey Act (P.L. 94–472, as amended; 22 U.S.C. 3101–3108). The financial services surveys are also authorized by the Omnibus Trade and Competitiveness Act of 1988 (15 U.S.C. 4908). All U.S. entities that meet the mandatory thresholds for covered transactions with foreign entities must report these transactions to BEA. Each of the BEA services surveys is described below.

13.12. Quarterly Survey of Foreign Airline Operators' Revenues and Expenses in the United States (BE–9). This survey covers revenues of foreign air carriers for transporting freight to and from the United States, the volume of merchandise transported, expenses incurred in the United States, aircraft leasing expenses, number of passengers transported to and from the United States, and revenues for transporting passengers to and from the United States. The data from this survey are used to prepare transport statistics for the ITAs. U.S. offices, agents, or other representatives of foreign airline operators that transport passengers or freight and express to or from the United States must report.

13.13. Annual Survey of Foreign Ocean Carriers' Expenses in the United States (BE–29). This survey covers the expenses incurred by foreign ocean carriers in U.S. ports, both those that own and operate vessels and those that operate chartered U.S.-flag and foreign-flag vessels. The data from this survey are used to prepare transport statistics for the ITAs. U.S. agents of foreign ocean carriers must report all relevant transactions on port services provided or obtained by them for foreign carriers and on port services provided by third persons.

13.14. Quarterly Survey of Ocean Freight Revenues and Foreign Expenses of United States Carriers (BE–30). This survey covers U.S. ocean carriers'—both U.S.-flag and foreign-flag vessels—revenues from the transportation of U.S. exports and imports and associated volumes, revenues from the transportation of cargo between foreign ports, expenses incurred by U.S. ocean carriers in foreign countries, and charter hires with crew and space-leasing transactions with foreign residents. The data from this survey are used to prepare transport statistics for the ITAs.

13.15. Quarterly Survey of U.S. Airline Operators' Foreign Revenues and Expenses (BE–37). This survey covers U.S. air carriers' revenues for transporting U.S. exports to foreign points and for transporting freight between foreign points, expenses incurred by U.S. airline operators in foreign countries, aircraft leasing expenses, revenues for transporting passengers between foreign points, revenues for transporting passengers to and from the United States, number of passengers transported to and from the United States, and interline settlements. The data from this survey are used to prepare transport statistics for the ITAs.

13.16. Benchmark Survey of Financial Services Transactions Between U.S. Financial Services Providers and Foreign Persons (BE–180). This survey covers U.S. international transactions in financial services between U.S. financial services providers and foreign persons. The data from this survey are used to prepare the financial services statistics for the ITAs. This survey covers payments to, and receipts from, affiliated and unaffiliated foreign persons for each transaction in 10 types of financial services.

13.17. Quarterly Survey of Financial Services Transactions Between U.S. Financial Services Providers and Foreign Persons (BE–185). This survey covers U.S. international transactions in financial services between U.S. financial services providers and foreign persons. The data from this survey are used to prepare the financial services statistics for the ITAs. This survey covers payments to, and receipts from, affiliated and unaffiliated foreign persons for the same financial services as the BE–180 benchmark survey.

13.18. **Benchmark Survey of Insurance Transactions by U.S. Insurance Companies With Foreign Persons (BE–140).** This survey is filed by U.S. insurance companies that have engaged in reinsurance transactions with foreign persons, that have earned premiums from, or incurred losses to, foreign persons in the capacity of primary insurers, or that may have receipts from or payments to foreign persons for auxiliary insurance services. The data from this survey are used to prepare the insurance services statistics for the ITAs. U.S. insurance companies that have engaged in insurance transactions with foreign persons during the reporting period must report premiums and losses related to reinsurance and primary insurance along with receipts and payments for auxiliary insurance services.

13.19. **Quarterly Survey of Insurance Transactions by U.S. Insurance Companies With Foreign Persons (BE–45).** This survey is filed by U.S. insurance companies that have engaged in reinsurance transactions with foreign persons, that have earned premiums from, or incurred losses to, foreign persons in the capacity of primary insurers, or that have receipts from or payments to foreign persons for auxiliary insurance services. The data from this survey are used to prepare the insurance services statistics for the ITAs. U.S. insurance companies that have engaged in insurance transactions with foreign persons during the reporting period must report the same data items as on the BE–140 benchmark survey.

13.20. **Benchmark Survey of Transactions in Selected Services and Intellectual Property With Foreign Persons (BE–120).** This survey covers U.S. international transactions in all types of services and intellectual property for which information is not collected on the other BEA surveys and is not available to BEA from other sources. The data from this survey are used to prepare statistics on intellectual property; telecommunications, computer, and information services; and other business services for the ITAs. It also collects data on payments to foreign residents for financial and insurance services by U.S. persons that are not financial services or insurance services providers to ensure complete coverage of these services.

13.21. This survey is filed by U.S. persons who had transactions—receipts and/or payments—with affiliated and unaffiliated foreign persons during the reporting period for 27 different types of business, professional, and technical services. This survey is also filed by U.S. persons that have entered into agreements with affiliated or unaffiliated foreign persons to distribute, buy, sell, or use eight different types of intellectual property or proprietary rights.

13.22. **Quarterly Survey of Transactions in Selected Services and Intellectual Property With Foreign Persons (BE–125).** This survey covers U.S. international transactions in all types of services and intellectual property for which information is not collected on the other BEA surveys and is not available to BEA from other sources. The data from this survey are used to prepare the statistics on intellectual property; telecommunications, computer, and information services; and other business services for the ITAs. This survey is filed by U.S. persons who had transactions—receipts and/or payments—with affiliated and unaffiliated foreign persons during the reporting period in the same types of services and intellectual property and proprietary rights as on the BE–120 benchmark survey.

13.23. Quarterly Survey of Payment Card and Bank Card Transactions Related to International Travel (BE–150). This survey covers information on the credit, debit, charge, automated teller machine, and point of sale transactions of U.S. persons traveling abroad and foreign persons traveling in the United States. The data from this survey are used in conjunction with other data to prepare the travel statistics for the ITAs. This survey is filed by U.S. credit card companies and by debit networks that are based on personal identification numbers. These companies must report (1) transactions between U.S. cardholders traveling abroad and foreign businesses and (2) transactions between foreign cardholders traveling in the United States and U.S. businesses.

13.24. Payments and receipts data must be reported for transactions for cash advances and withdrawals and for major categories of goods and services purchased while traveling. Companies must report transactions when the bank or payment card is present at the point of sale separately from transactions when the card is not present. Transactions must also be disaggregated by spending category by type of card—personal card, government card, or business or corporate card.

BEA's institutional remittances survey

13.25. Survey of Institutional Remittances to Foreign Countries (BE–40). This survey covers cash transfers of U.S. religious, charitable, educational, scientific, and similar nonprofit and philanthropic foundations and organizations to foreign residents. Funds transferred to foreign residents include outright grants, payments abroad for procurement of goods to be used abroad, payments for contract services abroad, and salaries and other administrative expenses abroad. The data from this survey are used to prepare the institutional remittances component of secondary income payments. The BE–40 is a voluntary survey. The authority for this survey is the Bretton Woods Agreements Act, Section 8 (Public Law 171, as amended; 22 U.S.C. 286f).

U.S. Treasury Department survey data

13.26. The Treasury International Capital (TIC) reporting system is the U.S. government's primary source of data on financial flows into and out of the United States, excluding direct investment, and the resulting levels of cross-border claims and liabilities. The TIC reporting system consists of a related set of monthly, quarterly, annual, and benchmark surveys conducted by the Federal Reserve Bank of New York (FRBNY) acting as the fiscal agent for the U.S. Treasury Department, which has the legal authority to collect the survey data and to publish the resulting statistics. In 1998, the Federal Reserve Board started performing validation and review services on behalf of the Treasury in support of this data collection system.

The current TIC reporting system

13.27. The TIC reporting system collects data on all financial activities of U.S. residents with foreign residents, excluding direct investment, taking advantage of the concentration of international financial activity in large U.S. financial enterprises. The TIC system requires that U.S. banks, securities brokers, and custodians report not only their own positions or transactions with foreign residents but also

the positions or transactions of their customers. With one exception discussed below, respondents report both for themselves and for their U.S. and foreign customers. TIC surveys can be grouped according to the types of financial instruments covered.

13.28. **Other investment and short-term debt securities.** The TIC B and C forms collect balance sheet positions from U.S. financial and nonfinancial enterprises for their claims and liabilities with foreign residents. Instruments covered include loans, deposits, trade credit, and similar instruments that are classified as other investment in the international economic accounts. These surveys also collect balance sheet positions covering short-term debt securities and negotiable certificates of deposit, which are classified as portfolio investment in the international economic accounts.

Treasury International Capital (TIC) Reporting Forms

TIC B Reports	
BC	Report of U.S. Dollar Claims of Financial Institutions on Foreign Residents
BL-1	Report of U.S. Dollar Liabilities of Financial Institutions to Foreign Residents
BL-2	Report of Customers' U.S. Dollar Liabilities to Foreign Residents
BQ-1	Report of Customers' U.S. Dollar Claims on Foreign Residents
BQ-2	Part 1: Report of Foreign Currency Liabilities and Claims of Financial Institutions and of Their Domestic Customers' Foreign Currency Claims With Foreign Residents Part 2: Report of Customers' Foreign Currency Liabilities to Foreign Residents
BQ-3	Report of Maturities of Selected Liabilities and Claims of Financial Institutions With Foreign Residents
TIC C Reports	
CQ-1	Report of Financial Liabilities to, and Financial Claims on, Unaffiliated Foreign Residents
CQ-2	Report of Commercial Liabilities to, and Commercial Claims on, Unaffiliated Foreign Residents

13.29. Financial enterprises are required to report on the B forms if their claims or liabilities with foreign residents exceed the exemption levels. Most financial enterprises report their positions with affiliated and unaffiliated foreign residents on the B forms. Transactions in debt instruments, such as deposits and loans, between affiliated U.S. and foreign financial enterprises are not considered to be part of a direct investment relationship.

13.30. Nonfinancial enterprises, which must file the C form if their claims or liabilities with foreign residents exceed the exemption levels, report only positions with unaffiliated foreign residents to avoid reporting direct investment with affiliates. Insurance companies and pension funds receive special treatment because their transactions with affiliates are defined as direct investment in international

guidelines; they are financial companies that report their balances only with unaffiliated foreign residents on the B forms.

13.31. **Financial derivatives.** Comprehensive data on financial derivatives are collected on TIC Form D, “Report of Holdings of, and Transactions in, Financial Derivatives Contracts.” Data are collected from U.S. banks, bank holding companies, financial holding companies, securities dealers, and all other firms with worldwide holdings of financial derivatives, for their own and their customers’ accounts combined, in excess of \$400 billion in notional value. The data collected include the fair value of derivative positions, which are part of the IIP accounts, and the net settlement payments associated with derivatives contracts, which are included in the ITAs. Trading in financial derivatives is highly concentrated among a small number of large firms. With the introduction of the D form, derivatives were excluded from BEA’s direct investment surveys to avoid double counting of transactions.

13.32. **Equity and long-term securities.** TIC surveys that focus on the collection of transactions and positions between U.S. residents and foreign residents in long-term securities are another major group of surveys. Data are collected monthly on TIC form S “Purchases and Sales of Long-term Securities by Foreign Residents” on U.S. international transactions in equity and long-term debt securities from U.S. securities brokers, custodians, underwriters, issuers, investors, and other U.S. institutions in the securities markets. Complementing the S form, the monthly TIC form “Aggregate Holdings of Long-term Securities by U.S. and Foreign Residents” (SLT) collects holdings of equity and long-term debt securities by U.S. and foreign residents through reports by U.S. custodians, U.S. issuers, and large U.S. investors.

13.33. In addition to these monthly surveys, benchmark surveys conducted every five years and related annual surveys collect holdings of equity securities and long- and short-term debt securities from U.S. custodians, U.S. issuers, and large U.S. investors. These less-frequent surveys are different from the SLT in important ways. Separate surveys are conducted to collect U.S. residents’ holdings of foreign securities and foreign residents’ holdings of U.S. securities. The “Report of U.S. Ownership of Foreign Securities, Including Selected Money Market Instruments” [SHC(A)], collects U.S. residents’ holdings of foreign securities. The “Foreign-Residents’ Holdings of U.S. Securities, Including Selected Money Market Instruments” [SHL(A)] collects foreign resident’s holdings of U.S. securities.

13.34. For the annual surveys, only the largest custodians and institutions are required to report and statistical methods are used to estimate holdings that are consistent with the most recent benchmark survey. In the benchmark surveys a broader reporting panel is surveyed to obtain all holdings. The U.S. custodians and the large U.S. investors provide detailed records of all reportable securities on the SHC(A) and SHL(A). Compiling these surveys security-by-security provides a much more detailed understanding of the holdings of securities of U.S. and foreign residents than the SLT, which is collected by allowing reporters to submit aggregated monthly reports by security type.

13.35. The U.S. securities brokers, banks, custodians, investors, and other reporters on the B and C forms, S-form, SLT, SHC(A), and SHL(A) are instructed, in cooperation with BEA, to not report holdings of or transactions in equity or debt securities that are part of a direct investment relationship, as defined in the TIC form instructions.

The TIC reporting system prior to December 2013

13.36. Significant changes have been made to the TIC reporting system in recent years in response to innovation in financial activity and changes to international guidelines for preparing statistics for international economic accounts. These changes are described below because of the key role played by TIC source data for preparing statistics for earlier periods.

13.37. ***Other investment and short-term debt securities.*** Changes to the TIC B forms in February 2003 and in December 2013 increased the coverage of claims and liabilities of U.S.-resident financial enterprises with respect to their financial affiliates. These changes are noteworthy because they affect the way BEA compiles other investment statistics for loans and deposits. The current coverage of most U.S.-resident financial enterprises with respect to their financial affiliates on the TIC B form that began in December 2013 is described above.

13.38. Prior to December 2013 and beginning in February 2003, U.S. banks, bank and financial holding companies, and securities brokers and dealers reported vis-à-vis affiliates on the B forms, and all other companies, including some important financial enterprises such as investment banks, reported only vis-à-vis unaffiliated foreign residents on the C form.

13.39. Prior to February 2003, only U.S. banks and bank and financial holding companies reported vis-à-vis affiliates on the B forms. U.S. securities brokers and dealers reported only vis-à-vis unaffiliated foreign residents on the B forms while all other financial and nonfinancial enterprises reported only vis-à-vis unaffiliated foreign residents on the C forms.

13.40. ***Financial derivatives.*** Until the introduction of the TIC D form in March 2005 the United States did not have a comprehensive survey dedicated to the measurement of financial derivatives transactions and positions for the international economic accounts. Derivatives were included as a separate component in the international economic accounts for positions beginning in December 2005 and for transactions beginning in the first quarter of 2006. Prior to the introduction of statistics from the D form, BEA included transactions in exchange-traded derivatives based on data obtained from exchanges, and some derivatives were reported on BEA's direct investment surveys.

13.41. ***Equity and long-term securities.*** The introduction of the SLT survey in 2011 was the most recent change to the group of surveys that BEA uses to measure international transactions in equity and long-term debt securities. This survey is a significant addition to the TIC system because it allows inferences of transactions from position data as an alternative to measuring transactions directly through the collection of monthly purchases and sales reported on the S form, which often were not consistent with annual position estimates.

13.42. Prior to the introduction of the SLT, the annual and benchmark surveys were introduced in their current formats, covering equity and short- and long-term debt securities, with the SHC(A), introduced in December 2001 and the SHL(A), introduced in June 2002. The annual surveys provided more frequent checks on position estimates and on the S-form transactions.

13.43. Prior to the introduction of the SHL(A), the TIC system conducted benchmark surveys of foreign portfolio holdings of U.S. long-term securities in 1978, 1984, 1989, 1994, 1997 and 2000. Prior to the introduction of the SHC(A), the TIC system conducted a benchmark survey of U.S. portfolio holdings of foreign long-term securities in 1997.

Other survey data

13.44. BEA also relies on surveys conducted by other government agencies and private organizations for source data for some of the components in the ITAs. Brief descriptions of some of these surveys follow.

13.45. *The National Travel & Tourism Office (NTTO), International Trade Administration, U.S. Department of Commerce.* NTTO conducts the Survey of International Air Travelers (SIAT). The SIAT is conducted either in the gate area at airports or aboard a sample of scheduled flights departing the United States. More than 70 U.S. and foreign carriers, which account for more than 95 percent of the international travel market, participate in the survey. Data are collected on actual expenditures in the United States by departing foreign residents and anticipated expenditures abroad by departing U.S. residents.

13.46. *U.S. Census Bureau.* The American Community Survey (ACS) is conducted annually by the U.S. Census Bureau to collect data on the income and characteristics of the U.S. population. Periodically the Census Bureau conducts a special migration supplement to the monthly Current Population Survey (CPS) to collect data on the characteristics of the foreign-born population residing in the United States. Data from the ACS and CPS are used to develop model-based estimates of remittances to foreign residents.

13.47. *U.S. Department of Labor.* The National Agricultural Workers Survey (NAWS) is conducted biannually by the Department of Labor to collect data on the characteristics of temporary foreign workers in the United States. Data from this survey are used to develop estimates of compensation of nonresident employees. The Consumer Expenditure Survey (CES) is conducted monthly to collect data on household expenditures. Data from this survey are used to develop estimates of expenditures on goods and services by nonresidents working in the United States on a short-term basis and the living expenses of students.

13.48. *U.S. Department of Agriculture.* The Quarterly Agricultural Labor Survey (QALS) is a telephone survey of farm employers conducted by the Department of Agriculture to obtain data on the characteristics of foreign farm laborers in the United States. Data from this survey are used to develop statistics for compensation of nonresident agricultural employees.

13.49. *U.S. Treasury Department.* Data from the Internal Revenue Service (IRS) are used to prepare statistics for several components related to foreign income paid and received. These components include withholding taxes, compensation of nonresident employees, and nonresident transfers.

13.50. *U.S. Department of Education.* Data from the National Center for Education Statistics (NCES) are used to prepare estimates of average expenditures for education, including tuition and room and board, by U.S. students abroad and foreign students in the United States.

13.51. *Institute for International Education (IIE).* Surveys conducted by the IIE provide data needed to develop estimates for the number of U.S. students abroad and foreign students in the United States.

Administrative data

U.S. Census Bureau

13.52. Data on exports and imports of goods are based on monthly tabulations of shipping documents that exporters and importers must file with the U.S. Customs and Border Protection (CBP), Department of Homeland Security (DHS), and that are tabulated by the U.S. Census Bureau. The U.S. Census Bureau is the primary source of monthly data for goods exports and goods imports. The Bureau compiles data from three major data collection systems.

13.53. Statistics for U.S. exports to all countries, except Canada, are compiled primarily from data submitted through the Automated Export System (AES), as required by law to be filed by exporters or their agents with the U.S. Census Bureau. For exports to Canada, the United States substitutes statistics on Canadian imports from the United States obtained through the United States-Canada Data Exchange. Statistics for U.S. imports are compiled primarily from data submitted through the Automated Commercial System (ACS), as required by law to be filed by importers or their agents with CBP.

13.54. Detailed information compiled by the Census Bureau from data reported to CBP provide data on mode of transport for both merchandise exports and imports along with the value, weight, and freight charges (for imports only) of the shipment. This information is used to prepare various components of transport statistics. Specifically, BEA uses import freight charges to measure revenues of foreign ocean and air carriers for transporting U.S. imports from foreign countries to U.S. ports. In addition, BEA uses air export tonnage information in the Census Bureau's air export data to distribute total U.S. air carriers' revenues, obtained from the BE-37 survey, to each of the countries and areas identified in the ITAs.

U.S. Department of Homeland Security

13.55. In addition to the data from CBP compiled by the U.S. Census Bureau on merchandise trade, BEA uses other DHS data for several components of the ITAs.

13.56. For travel statistics, the number of foreign residents visiting the United States is based on data collected by the DHS Office of Immigration Statistics on form I-94. While form I-94 data include the number of foreign residents arriving in the United States by country of residence, the data do not identify whether the foreign residents arrive on U.S. carriers or on foreign carriers. BEA calculates the percentage of foreign residents arriving on U.S. air carriers using data collected by DHS from its Advance Passenger Information System (APIS). Both the I-94 and APIS data are published by the National Travel & Tourism Office, International Trade Administration, U.S. Department of Commerce.

13.57. DHS data on the number of H-2A and H-2B visas are used to prepare statistics for the compensation of employees component of primary income.

13.58. *U.S. State Department* visa statistics. Data on the number of H-1B, H-1B1, E-3, H-2A, H-2B, and TN visas are used to prepare statistics on the compensation of employees component of primary income.

13.59. *Federal Reserve Board (FRB)*. Net shipments of U.S. currency into and out of the United States are provided by the FRB to BEA to measure increases and decreases in foreign holdings of U.S. currency. The net amount of outflows and inflows of notes at Federal Reserve cash offices equal the transactions reported in the ITAs. These transactions are not captured elsewhere in statistical reporting systems.

13.60. *Federal Reserve Bank of New York (FRBNY)*. Data for transactions in central bank liquidity swaps are provided by “The Treasury and Federal Reserve Foreign Exchange Operations Report” from the FRBNY. Other data for interest earned on reserves and swaps and for claims and liabilities with foreign central banks are provided to BEA for statistics on reserve assets and central bank sector transactions.

13.61. *International Monetary Fund (IMF)*. The IMF provides month-end position data and daily increases and decreases during each month, including interest flows, for the U.S. accounts at the IMF. The data include positions and transactions between the United States and the IMF for the special drawing rights (SDR) account and the General Resources (tranche) account and its subaccounts covering securities, valuation adjustments, and IMF borrowing from the United States. The IMF also issues press releases and posts information on its Web site when it implements significant decisions such as allocating new SDRs to members or increasing member quotas.

13.62. *U.S. Agency for International Development (USAID)*. USAID collects data on a mandatory basis from organizations engaged in international relief efforts. These data are used to prepare statistics on the institutional remittances (transfer) component of secondary income.

13.63. *U.S. Army Corp of Engineers* data for waterborne commerce. These data on freight tons carried on coastal and inland waterways are used to prepare transport statistics for the ITAs.

13.64. *U.S. Postal Service* data for private parcels and money orders are used to prepare statistics on goods exports and secondary income.

13.65. *Internal Revenue Service* data for compensation paid to foreign athletes and artists in the United States and earnings of U.S. residents abroad are used to prepare statistics on the compensation of employees component of primary income.

Other data sources

13.66. U.S. government agencies that engage in international transactions, primarily the U.S. State Department and the U.S. Department of Defense, report these transactions quarterly to BEA. Partner country, private for-profit, and non-profit sources are also used.

13.67. *The Foundation Center*. This nonprofit organization, a leading authority on philanthropy that connects nonprofit institutions and grant-makers, provides data that are used to prepare statistics on the institutional remittances (transfers) component of secondary income.

13.68. *Pew Hispanic Center*. Statistics compiled by this nonprofit research organization are used to prepare statistics on the personal transfers component of secondary income.

13.69. *Depository Trust and Clearing Corporation (DTCC)*. Claims of U.S. non-bank firms include, as a component of “financial intermediaries’ accounts,” estimates for claims associated with the issuance of asset-backed commercial paper (ABCP) that are not captured in BEA’s direct investment reporting system. In the absence of direct investment reporting for many structured investment vehicles, additional estimates of the intercompany debt transactions between Delaware affiliates and their offshore parents are estimated from DTCC records for selected ABCP programs. BEA also receives reports from DTCC of commercial paper issued in the United States that is used to supplement data on U.S. holdings of foreign commercial paper reported on TIC forms.

13.70. *Morgan Stanley Capital Index (MSCI), Standard & Poor’s (S&P), and Merrill Lynch Price Indexes*. For U.S. equity shares, BEA uses the S&P 500 stock index, which is a proxy for the composition of foreign holdings of U.S. equity shares. For U.S. corporate, federally-sponsored agency, and Treasury long-term debt securities, BEA uses various Merrill Lynch indexes matched to these market segments and to the maturity, investment quality, and currency of denomination of U.S. long-term debt securities held by foreign residents.

13.71. For foreign equity shares, BEA uses MSCI national and regional indexes for developed and emerging markets matched to the composition of the foreign stocks held by U.S. residents. For foreign bonds, BEA uses various Merrill Lynch indexes representing investment quality long-term debt securities issued abroad in the U.S. dollar, the Euro, the Japanese yen, the Canadian dollar, and the British pound, as well as a global broad market index excluding U.S. dollar debt, to match the composition of foreign-issued long-term debt held by U.S. residents.

13.72. *MSCI and S&P Dividend Yields.* BEA uses the S&P 500 dividend yield, which is a proxy for the composition of foreign holdings of U.S. equity shares. For foreign equity shares, BEA uses MSCI national and regional yields for developed and emerging markets matched to the composition of the foreign stocks held by U.S. residents. Dividend yields and equity share price indexes are closely related.

13.73. *Federal Reserve Board (FRB) and British Bankers Association (BBA).* For representative interest yields on loans and deposits, BEA uses U.S. money market, Eurodollar market, and foreign money market rates from the FRB and the BBA. BEA also uses lending rates from the FRB's "Survey of Terms of Business Lending" for U.S. dollar-denominated loans, deposits, and trade credit and advances.

13.74. *U.S. Treasury Surveys.* Interest yields on U.S. corporate, federally-sponsored agency and Treasury long-term debt securities are the current yields derived from the SHL(A) survey data and interest yields on foreign long-term debt securities are the current yields derived from the SHC(A) survey data.

Partner country data

13.75. Data from the statistical agencies and central banks of certain partner countries, primarily Canada and Mexico, are used to prepare statistics for several components of the ITAs and the IIP accounts. These sources are sometimes described as counterpart data.

13.76. Data from Statistics Canada are used to compile ITA statistics for travel services and for telecommunications, computer, and information services. BEA uses Statistics Canada statistics for Canadian travel expenditures in the United States and U.S. residents' travel expenditures in Canada. BEA also uses Statistics Canada statistics for education payments by U.S. students enrolled directly in Canadian educational institutions and data from Statistics Canada on U.S. imports of computer services and information services.

13.77. Data from the Bank of Mexico are used to prepare ITA statistics for travel services. BEA uses statistics provided by the Bank of Mexico on Mexican travel expenditures in the United States and on U.S. residents' travel expenditures in Mexico.

13.78. Data from the United Kingdom, Australia, and Ireland on the education expenditures of U.S. students enrolled directly in educational institutions in these countries are used to prepare statistics on the education component of travel services.

13.79. TIC and BEA survey coverage of claims and liabilities of U.S.-resident nonbanking enterprises with foreign-resident banks are supplemented by reports from the Federal Reserve Board, the Bank for International Settlements, and bilateral statistics from partner country central banks. These sources provide quarterly data on loans and deposits from the point of view of the foreign bank counterparties.

PART IV

Special Topics

This part of the volume includes special topics related to the preparation and interpretation of the U.S. international economic accounts.

14. Modes of Supply for International Services

15. Bilateral Statistics

Modes of Supply for International Services

14.1. A key initiative of the international community in response to the rapid expansion of international trade and investment was the creation in 1995 of the World Trade Organization (WTO) following the Uruguay Round of multilateral trade negotiations. The WTO provides a common framework for the conduct of trade relations among its members. Its main functions are facilitating the implementation, administration, and operation of the multilateral trade agreements; providing a forum for further negotiations; reviewing national trade policies; and securing solutions to trade disputes.

14.2. The three principal WTO agreements are the General Agreement on Tariffs and Trade (GATT) of 1994, the General Agreement on Trade in Services (GATS), and the Agreement on Trade-related Aspects of Intellectual Property Rights (TRIPS). GATS constitutes the first set of legally enforceable disciplines and rules at the multilateral level established to cover international trade in services. GATS defines the “supply of a service” to include the production, distribution, marketing, sale and delivery of that service.

14.3. While international trade in services primarily occurs through the channel of cross-border transactions, often facilitated by electronic communications networks, the supply of many services is possible only through the simultaneous physical presence of both producer and consumer. As a result, in order for transactions to be commercially meaningful, trade commitments must frequently extend to cross-border movements of the consumer, the establishment of a commercial presence within a market, or the temporary movement of the individual service provider.

14.4. GATS defines trade in services in terms of four modes of supply. The definition of services trade under GATS depends on the territorial presence of the supplier and the consumer at the time of the transaction. The four modes include (1) cross-border supply, (2) consumption abroad, (3) commercial presence, and (4) presence of natural persons. This definition is broader than the balance of payments (BOP) concept of services trade, which is concerned only with transactions between residents of a given country and nonresidents encompassing modes 1, 2, and 4. While the BOP focuses on residence rather than nationality, certain transactions falling under the GATS, in particular in the case of mode 3, typically involve only residents of the country concerned.

14.5. The four GATS modes of supply are defined as follows:

14.6. **Cross-border supply** (mode 1) covers services flows from the territory of one country into the territory of another country (e.g. banking or architectural services transmitted via telecommunications or mail).

14.7. **Consumption abroad** (mode 2) refers to situations where a service consumer (e.g. tourist or patient) moves into another country's territory to obtain a service.

14.8. **Commercial presence** (mode 3) implies that a service supplier of one country establishes a territorial presence, including through ownership or lease of premises, in another country's territory to provide a service (e.g. domestic subsidiaries of foreign insurance companies or hotel chains).

14.9. **Presence of natural persons** (mode 4) consists of persons of one country entering the territory of another country to supply a service (e.g. accountants, doctors or teachers). This mode includes self-employed persons and employees on temporary assignment (intra-corporate transferees). The terminology "natural persons" is used to differentiate between individuals and the generic use of "persons," which covers individuals, branches, partnerships, associated groups, associations, estates, trusts, government agencies, and others.

14.10. International statistical guidelines for services recommend publishing services trade by mode of supply and by partner country. While BEA, like most national statistical agencies, does not provide services trade statistics classified by mode of supply, this objective can be approximated using BEA's published statistics from the International Transactions Accounts (ITAs) and from the Activities of Multinational Enterprises (AMNE). Most of the published ITA services categories correspond in whole or in part to the cross-border supply mode. Travel and a portion of government services n.i.e. correspond to consumption abroad. BEA's AMNE statistics on services supplied by affiliates correspond to commercial presence. Statistics for services provided by the presence of natural persons are commingled with statistics for cross-border supply and compensation of employees in various published categories.

14.11. Chapter 5 of the *Manual on Statistics of International Trade in Services (MSITS) 2010* provides a framework for compiling services statistics by mode of supply based on published ITA and AMNE services statistics. MSITS acknowledges that not each of the services categories from the ITAs can be mapped to a specific mode of supply. Rather, the intent of the framework is to provide options for identifying the dominant mode of supply when multiple modes apply and to refine the assignments over time based on compiler knowledge about the delivery of specific services.

14.12. Following the MSITS framework, services supplied by majority-owned affiliates obtained from BEA's AMNE statistics are always assigned to mode 3 due to the commercial presence of the affiliates. The specific service activity within mode 3 is determined from BEA's International Surveys Industry code for affiliates. Modes 1, 2, and 4 can be approximated from the published ITA services categories, but some services cannot be assigned to a single mode. Assignments are as follows:

14.13. **Mode 1:** Transport (excluding port component), insurance, finance services, telecommunication services, information services, and charges for the use of intellectual property n.i.e.

14.14. **Mode 2:** Travel, port component of transport, and maintenance and repair services n.i.e due to the movement of equipment.

14.15. *Mode 4: Construction.*

14.16. *Modes 1 and 4: Computer services, research and development services, professional and management consulting services, and technical, trade-related, and other business services.*

14.17. *Modes 1, 2, and 4: Government goods and services, n.i.e.*

14.18. The delivery of computer-related services to foreign markets by U.S. residents and foreign affiliates provides an example of how the different modes of supply might apply to a specific set of services. Sales of computer-related services to foreign residents through the foreign affiliates of U.S. MNEs, which is the most prominent delivery channel based on the value of sales, would be classified as mode 3, reflecting the commercial presence of the affiliate abroad. BEA's AMNE statistics for services supplied by affiliates are classified by the primary industry of the affiliate rather than by type of service. The industries most closely associated with sales of computer-related services are software publishing, computer systems design and related services, and the industry group Internet service providers, web search portals, data processing services, Internet publishing and broadcasting, and other information services.

14.19. Sales of computer services through electronic networks, such as telecommunications or the Internet, to a nonresident who remains in their home country would be classified as mode 1, cross-border supply. In the ITAs, these exports would primarily be found in computer services, information services, and the computer software component of charges for the use of intellectual property n.i.e. Purchases of packaged software by foreign residents visiting the United States would be recorded in the ITAs as an export of travel services and classified as mode 2, consumption abroad. Finally, employees of U.S. business enterprises and certain self-employed persons can provide computer services by traveling to their nonresident customer's location, which would be classified as mode 4, presence of natural persons. Due to limitations of BEA's source data, the earnings of U.S. residents who provide computer services to nonresidents, but who are not employees of a nonresident entity, are included in compensation receipts in the ITAs but their earnings cannot be separately identified. The mirror situation is present for computer services provided by nonresidents to U.S. residents.

Bilateral Statistics

15.1. One of the most important classifications of statistics from the U.S. international economic accounts are partner country or geographic classifications, which provide the basis for compiling bilateral statistics. U.S. bilateral statistics provide important measures of trade and investment between the United States and other countries and world regions. Bilateral statistics provide critical information for understanding economic relationships among countries, developing trade and investment policy, managing exchange rates, and aiding business and government decision making. Bilateral statistics are also a useful tool for improving international economic statistics by facilitating cooperation among statistical agencies through bilateral reconciliation exercises.

15.2. BEA provides several levels of partner country detail for its bilateral statistics. The primary presentation of the International Transactions Accounts (ITAs) shows transactions with all nonresidents as global totals in tables 1.1 and 1.2. Major published components from the current account and the financial account are provided in table 1.3 for 38 areas that reflect a combination of individual countries and regional groupings. Greater partner country detail for trade in goods, for services trade, and for direct investment positions at historical cost is available in more detailed ITA tables and in other tables published by BEA. Activities of Multinational Enterprises (AMNE) statistics are classified by partner country at a level of detail similar to that for direct investment. BEA's International Investment Position (IIP) Accounts do not provide partner country detail.

15.3. Table A below identifies the 38 countries and regional groupings for which selected ITA statistics are available quarterly. While international guidelines do not provide specific recommendations for partner country detail, compiling countries are encouraged to provide detail relevant to their economies. When new countries emerge or when existing countries no longer exist, BEA makes changes to the individual country detail and related regional groupings. These changes are made consistently for all of the major components and statistics are provided for earlier periods when sufficient source data are available. BEA considerably expanded its partner country classification detail for the ITAs in 2007 to account for changes arising from the expansion of the European Union and other geopolitical developments. Country detail for the ITAs is more limited for years before 1999.

15.4. The basic principle for determining the partner country in the ITAs and the IIP accounts is the location of the residence of the counterparty to the transaction or financial position. For AMNE statistics, the basic principle is the location of the ultimate source or host country rather the direct counterparty. The same principles for determining residence discussed in chapter six apply but they are often more difficult to implement because location information is not necessarily known by the resident counterparty. Most of the key data sources used by BEA,

however, include information needed to determine the counterparty country. For example, merchandise trade statistics from the Census Bureau, the Treasury International Capital (TIC) reporting system, and BEA's direct investment and services surveys include partner country information.

15.5. Following the general principle of change of ownership that underlies the recording of international transactions, the partner country classification of goods is based on the country of the new owner for exports and the country of the former owner for imports. While BEA has attempted to follow the BPM6 change of ownership principle, it has not been able to implement the new treatment of goods-for-processing due to source data limitations. As a result, some goods with no ownership change are treated as though their ownership did change due to their inclusion in the Census basis merchandise trade statistics. For services transactions, the partner country classification is based on the residence of the service provider or service recipient. For primary income, the partner country classification is based on the creditor country that receives income on its foreign assets and the debtor country that pays income on its liabilities to foreign residents. For secondary income (current transfers), country classifications are based on the residence of the donor and the recipient.

15.6. The country attribution of financial account transactions is based on the country of residence of the foreign creditor for the net incurrence of liabilities and the country of residence of the foreign debtor for the net acquisition of foreign assets. In practice, identification of the counterparty country for securities positions, income, and transactions is difficult for various reasons, including that (a) the issuer is not always aware of current holders of securities, (b) transactors in securities markets may not be aware of the identity of the counterparty, and (c) security holders may be unaware that income on securities positions may be payable by a financial intermediary that created a "short" or reverse position in the security rather than by the issuer of the security.

15.7. In the TIC reporting system, data are generally classified by the foreign country or geographical area in which the foreign transactor or intermediary is located, as shown in the records of the U.S. reporting institution. The geographic distribution of the reported data may not necessarily reflect the nationality of the ultimate foreign owner of U.S. securities or the country of issue of foreign securities. Thus, securities transactions between U.S. and foreign residents effected in countries that are international financial centers—such as the United Kingdom, the Channel Islands, the Cayman Islands, the Bahamas, the Netherlands, and Hong Kong—are recorded for those countries, regardless of the country of issue of the foreign security or of the nationality of the ultimate foreign owners of U.S. securities.

15.8. BEA provides additional partner country detail in addition to the standard 38 countries and areas for merchandise trade transactions, for services trade transactions, for direct investment transactions, positions, and income, and for AMNE statistics due to detail available in the source data for these components. These include the merchandise trade statistics compiled by the Census Bureau and the direct investment and services surveys conducted by BEA. Each of

the components with expanded partner country detail is further described below.

Merchandise trade

15.9. Additional partner country detail is available in the merchandise trade statistics published by the U.S. Census Bureau and provided by BEA in the detailed ITA table on U.S. trade in goods. As described above, the geographic attribution of merchandise trade exports is the country where the goods are to be consumed, further processed, or manufactured, as known to the shipper at the time of exportation. If the shipper does not know the country of ultimate destination, the shipment is credited to the last country the shipper knows that the goods will be in the same form as when exported. The geographic attribution of merchandise trade imports is the country of origin. When goods are produced in several countries and shipped through one or more countries before final shipment to the United States, the country of attribution may, in practice, be the last country of shipment.

15.10. The country of destination for goods may frequently differ from the country of payment for the goods. For example, when a foreign resident purchases an aircraft in the United States but leases it to an airline in another country, the country of destination shown on the export declaration may be that of the lessee, not that of the lessor (the owner of the equipment). In this case, the goods accounts include the commodity flow by the country of destination and the financial accounts record the financial flow by the country of payment. In line with the change of ownership principle, the residence of the seller or purchaser of the good is the preferred concept. In practice, available data may be based on the economy of origin, consignment, destination, or other criteria that may differ from the economy of the seller or purchaser. This is especially likely in cases of merchandising and goods processed on a fee basis.

Direct investment and AMNE statistics

15.11. Direct investment transactions and positions by partner country should be reported according to the immediate host or investing economy, based on the direct relationships between the parties rather than based on the residence of the ultimate partner countries or transactors. Supplementary data on direct investment positions may be prepared according to ultimate source and host economy (destination). Such data may be useful when direct investment is channeled through intermediate entities, such as holding companies or special purpose entities. For AMNE statistics, the primary classification is by the ultimate source or host country. However, BEA provides some tabulations of its inward AMNE statistics by the immediate investing country (i.e., by the country of the foreign parent).

15.12. For U.S. direct investment abroad, each foreign affiliate is classified by its country of location—that is, the country in which the affiliate’s physical assets are located or in which its primary activity is carried out. In most cases, the country of location of a business enterprise is the same as its country of organization or incorporation. In some cases, though, a business enterprise is incorporated in one country, but part or all of its physical assets are located, or its activities are

carried out in a second country. If all its physical assets or operations are located in a single foreign country outside its country of incorporation, the enterprise is treated as an incorporated foreign affiliate in the country where its physical assets and operations are located. However, if an enterprise has some physical assets or operations in each country, it is considered two affiliates—an incorporated affiliate located in the country of incorporation and an unincorporated affiliate located in the other country.

15.13. International transactions between parents and affiliates are classified in the country of the affiliate with which the U.S. parent had a direct transaction, even if the transaction may reflect indirect claims on, liabilities to, or income from indirectly held affiliates in third countries. For example, if a U.S. parent company acquires all of the equity in a German manufacturer for \$100 million and channels the purchase through its holding-company affiliate in the Netherlands, then both the direct investment financial flow and the direct investment position would be classified in the Netherlands, because that is the country of the affiliate with which the U.S. parent had a direct transaction. By contrast, AMNE statistics—such as employment and sales—of the newly acquired affiliate would be classified in Germany because that is where the operations are located.

15.14. For foreign direct investment in the United States, both the foreign parent and ultimate beneficial owner (UBO) of a U.S. affiliate are each classified by country. For affiliates with more than one foreign parent or UBO, each foreign parent or UBO is classified by country. For most U.S. affiliates, the country of the UBO is the same as the country of the foreign parent. However, for some UBO countries—most notably, Hong Kong and a number of countries in the Middle East—the country of foreign parent of most affiliates differs from that of their UBO. For these countries, much of the foreign direct investment in the United States is conducted through intermediaries located in other countries, most notably Luxembourg and several other countries in the Other Western Hemisphere region.

15.15. Classification by country of UBO typically is used for AMNE statistics because the country that ultimately owns or controls a U.S. affiliate and that therefore derives benefits from owning or controlling the affiliate generally is considered most important for analyzing these data. In supplemental tables, direct investment income and direct investment position data are also classified by country of UBO, so that the income and position statistics are classified on the same basis. In contrast, the data in the ITAs and in the primary presentation of the foreign direct investment position in the United States are classified by the country of each member of the foreign parent group with which there are direct transactions or positions.

Services trade

15.16. Additional partner country detail for services trade is provided in an annual release each October that provides statistics on resident-nonresident services transactions along with services supplied by the affiliates of MNEs. The additional country and area detail for the annual services trade statistics includes Bermuda, Chile, Indonesia, Ireland, Israel, Malaysia, Norway, Saudi Arabia, Spain, Sweden, Switzerland and Thailand.

**Table A. Countries and Regional Groupings
for Bilateral Quarterly ITA Statistics**

Europe
European Union
Euro area
Belgium
France
Germany
Italy
Luxembourg
Netherlands
Other Euro area
United Kingdom
Other European Union
Europe excluding European Union
Canada
Latin America and Other Western Hemisphere
South and Central America
Argentina
Brazil
Mexico
Venezuela
Other South and Central America
Other Western Hemisphere
Asia and Pacific
Australia
China
Hong Kong
India
Japan
Korea, Republic of
Singapore
Taiwan
Other Asia and Pacific
Middle East
Africa
South Africa
Other Africa
International organizations and unallocated
Members of OPEC

PART V

Supplemental Information

This part of the volume includes Appendixes and a Glossary of Terms for the international economic accounts.

Appendix A

Appendix B

Glossary of Terms

Appendix A

Improvements Introduced Before June 2014

A.1. In 2009, BEA started introducing changes related to the new international guidelines as part of an ongoing effort to modernize and enhance the international economic accounts. Improvements were limited to those that could be introduced without also making changes to the presentation of the accounts. This appendix provides a summary of significant changes that were introduced between 2009 and 2013. The additional changes in definitions, classifications, and methodology that were introduced in June 2014 as part of the comprehensive restructuring of the accounts were described in the March 2014 *SURVEY OF CURRENT BUSINESS*.

A.2. **Introduced quarterly International Investment Position (IIP) Accounts.** One of the most significant improvements was the introduction in March 2013 of quarterly IIP statistics. While not a direct result of the new international guidelines, this change responded to a request from the International Monetary Fund (IMF) for more countries to compile quarterly IIP statistics as an economic monitoring tool in the wake of the global financial crisis. Previously, BEA had released only annual IIP statistics each June. The new quarterly IIP statistics complement the annual statistics by providing more frequent and timely information on the U.S. external position. These statistics also satisfy the new statistical guidelines from the IMF Executive Board, which prescribe quarterly IIP reporting for members that participate in its Special Data Dissemination Standard. BEA's quarterly IIP accounts provide only position statistics, unlike BEA's more detailed annual IIP accounts, which include transactions and detailed valuation adjustments.

A.3. **Reclassified cruise fares from passenger fares to travel.** *BPM6* recommends that cruise fares be classified as travel because they cover onboard expenditures for goods and services similar to expenditures related to land travel, such as accommodations, meals, and entertainment. In the June 2011 annual revision, beginning with statistics for 1999, cruise fares were excluded from passenger fares and were included in travel. Passenger fares were presented separately under services in the previous presentation of the ITAs but are included as part of transport under services in the new presentation.

A.4. **Reclassified distribution rights for film and television from "other" private services to royalties and license fees.** *BPM6* recommends that transactions related to the rights to distribute film and television recordings be classified in the same category as other intellectual property products. Charges for the right

to distribute film and television recordings had been classified in “other” private services along with other audiovisual services, such as those related to the production of motion pictures and radio and television programs. In the June 2011 annual revision, beginning with statistics for 1999, the distribution rights related to film and television recordings were classified under royalties and license fees, now charges for the use of intellectual property n.i.e. in the new presentation. This change aligned the treatment of these charges with the classification of other intellectual property.

A.5. Recorded income on holdings of SDRs on a gross basis. *BPM6* recommends that interest receipts and payments associated with U.S. holdings and allocations of SDRs be recorded on a gross basis. In the ITAs, such income flows were included in the “U.S. government receipts” account on a net basis; that is, the recorded amount equaled interest receipts on SDR holdings net of interest payments on SDR allocations. In the June 2011 annual revision, beginning with statistics for 2003, interest receipts were recorded as portfolio investment receipts and interest payments were recorded as portfolio investment payments.

A.6. Reclassified transactions in goods and services. International guidelines recommend separating goods and services transactions to the extent possible given the nature of the source data used to compile the accounts. Previously, several categories in the International Transactions Accounts (ITAs) commingled goods and services. A clearer separation of goods and services more closely aligns BEA’s goods and services statistics with international economic accounting concepts and improves the comparability of statistics for trade and domestic production. As part of the June 2010 annual revision, BEA reclassified certain exports and imports of military-related goods from services to goods. In addition, BEA reclassified goods procured by air and ocean carriers in foreign ports from services to goods.

A.7. Recorded permanent debt between selected affiliated financial intermediaries as “other investment” rather than as direct investment. In general, under *BPM5* debt between affiliated entities (intercompany debt) had been classified as direct investment. However, *BPM6* recognizes that debt transactions between selected affiliated financial intermediaries are more strongly related to their role as intermediaries than to a direct investment relationship. *BPM5* recommended that only permanent debt between these entities should be classified as direct investment; permanent debt was defined as debt that represents a lasting interest. Nonpermanent debt between these entities was classified as other investment. *BPM6* removed the exception and excluded from direct investment all debt transactions (permanent and nonpermanent) between affiliated financial intermediaries. In the June 2010 annual revision, beginning with statistics for the first quarter of 2007, permanent debt between selected affiliated financial intermediaries was excluded from direct investment and recorded as “other investment.”

A.8. Excluded migrants’ transfers from the capital account. Migrants’ transfers, a measure of the net worth of individuals who immigrate or emigrate during the period, do not involve a change in ownership, and international guidelines no longer treat these transfers as international transactions. In the June 2010 annual

revision, migrants' transfers were removed from the capital account. This change more clearly focused the ITAs on transactions involving change in ownership. Migrants' investments in their country of origin continue to be recorded in the IIP accounts when migration changes the status of these investments from domestic to international, but they enter the position as "other changes" in valuation rather than as financial flows.

A.9. Recorded allocations of special drawing rights (SDRs) as transactions. BEA implemented the new treatment of allocations of SDRs recommended by *BPM6* with the December 2009 release of the ITAs for the third quarter of 2009. SDRs allocated to the United States by the IMF were included in "U.S. official reserve assets," and the related increases in the liabilities of the U.S. Treasury were included in "other" U.S. government liabilities, a component of "other investment" in the new presentation. Prior to this change, BEA followed the recommendation of *BPM5* and excluded SDR allocations from international transactions. To complete the implementation of *BPM6* recommendations on the treatment of SDR allocations, BEA revised the IIP accounts by adding the U.S. reserve-related liabilities resulting from the allocations to the "other" U.S. government liabilities component. In addition, the allocations now enter the IIP accounts as financial flows, following the *BPM6* recommendations; previously, they entered the position as "other changes" in value.

A.10. Reclassified certain disaster-related insurance settlements from the current account to the capital account. This change was introduced in the June 2009 annual revision, and a parallel change was introduced in the comprehensive NIPA revision in July 2009. Insurance settlements received in connection with major disasters, which are treated as transfers, were removed from "private remittances and other transfers" in the current account and recorded as capital transfers in the capital account. This new treatment, which corresponds with recommendations in *BPM6* and *SNA 2008*, acknowledges the capital nature of disaster-related losses and removes volatility not related to current production and income from the current account.

Appendix B

Significant Departures From International Guidelines

B.1. Below is a summary of major recommendations from international guidelines that BEA has not yet implemented but will consider for future annual revisions.

B.2. Manufacturing services on physical inputs owned by others (goods for processing). This recommendation changes the treatment of goods that are sent abroad for processing without a change in ownership of the goods and also provides guidance for the treatment of goods purchased and processed abroad.

B.3. Under BEA's current treatment, a change in ownership is imputed when goods enter or leave the United States and are included in goods exports and imports. Under the *BPM6* treatment, goods that are sent abroad for processing without a change in ownership and that are returned to the United States should be excluded from statistics on trade in goods, and the processing fee charged by the foreign manufacturing services provider should be recorded as U.S. imports of services. Similarly, goods that enter the United States for processing without a change in ownership and that are returned to the country of ownership should be excluded from statistics on trade in goods, and the processing fee charged by the U.S. manufacturing services provider should be recorded as U.S. exports of services.

B.4. In addition, goods sent abroad for processing and subsequently sold abroad should be recorded as U.S. exports of goods when they are sold, and any inputs purchased abroad by the U.S. firm and processed abroad should be recorded as U.S. imports of goods; the processing fee should be recorded as U.S. imports of services. Similarly, goods entering the United States for processing and subsequently sold in the United States should be recorded as U.S. imports of goods when they are sold, and any inputs purchased in the United States by the foreign firm and processed in the United States should be recorded as U.S. exports of goods; the processing fee should be recorded as U.S. exports of services.

B.5. Currently, detailed information on the processing fees received and paid by U.S. firms for manufacturing services and on the underlying goods transactions either are not available in the U.S. statistical system or are not identifiable in any of the source data. Despite these challenges, BEA continues to conduct research to determine feasible approaches for implementing this treatment.

B.6. Implicitly priced financial services. *BPM6* recommends including the values of two implicitly priced services in the measure of financial services: financial intermediation services indirectly measured (FISIM) and dealers' and market-makers' margins on financial instruments.

B.7. FISIM measures the fees implicitly received by financial intermediaries for their lending and deposit-taking services using the margin between interest payable for loans and deposits and a reference rate that represents the cost of funds. BEA continues to evaluate methods for estimating FISIM for the international

economic accounts by reviewing the applicability of the methodology used for FISIM exports in the NIPAs and by developing statistics for FISIM imports from data on U.S. loans from, and U.S. deposits placed with, banks abroad. The FISIM methodology for the ITAs requires coordination with the current methodology for cross-border interest receipts and payments. BEA plans to introduce FISIM into the international accounts in 2015 or later.

B.8. Dealers and market-makers in financial instruments may be reimbursed in full or in part for their market-making services by the margin between buying and selling prices. The existence of the buy/sell (or bid/ask) spread is an indication that these dealers are providing market-making services, similar to wholesalers, by providing liquidity and holding inventory. It is important to include these implicitly priced services in the measure of financial services to provide a complete picture of the services being traded. BEA includes margins on bond trading in brokerage services and has begun to explore possible data sources and estimation methods for these implicitly priced services for other financial instruments.

B.9. **Transactions related to intellectual property.** Under the *BPM6* guidelines, transactions for the rights to use intellectual property, the rights to reproduce or distribute intellectual property, and outright sales and purchases of intellectual property should each be treated differently in the international economic accounts.

B.10. Transactions for rights to reproduce or distribute intellectual property and some transactions in rights to use intellectual property should be classified under *charges for the use of intellectual property n.i.e.*

B.11. Transactions reflecting the outright sale of certain types of intellectual property and certain transactions related to its use should be reclassified to the appropriate services categories. For example, outright sales of the outcomes of research and development (R&D), such as the outright sale of a patent or a copyright, should be recorded in *R&D services*, while the rights to use the outcomes of R&D should be recorded as *charges for the use of intellectual property n.i.e.* Outright sales of intellectual property considered marketing assets—such as trademarks, brands, logos, and franchises—remain in the capital account because they are still treated as nonproduced nonfinancial assets.

B.12. Currently, transactions for the use, distribution, and sale of intellectual property are commingled in BEA's source data and are recorded indistinguishably under charges for the use of intellectual property n.i.e. BEA is considering changes to its Survey of Transactions in Selected Services and Intellectual Property with Foreign Persons that would allow for the proper recording of the various types of intellectual property transactions.

B.13. **New financial instruments.** The *BPM6* guidelines introduce a new class of financial instruments—"insurance, pension, and standardized guarantee schemes"—which includes insurance technical reserves (prepayments of premiums and reserves against outstanding insurance claims), pension entitlements (the claims of pensioners on their employers or pension funds), and provisions

for calls under standardized guarantees (prepayments of net fees and provisions to meet outstanding calls under standardized loan guarantees). The U.S. Treasury Department redesigned its surveys to improve reporting of cross-border transactions in insurance technical reserves beginning with the fourth quarter of 2013. BEA plans to evaluate the results of the new data collection and introduce these statistics in a future annual revision. Source data for transactions related to pension entitlements and standardized guarantee schemes are not sufficient for preparing statistics, but cross-border transactions in pension entitlements and standardized guarantees are believed to be negligible.

U.S. International Economic Accounts Glossary of Terms

Term	Definition
Accrual accounting	Accounting method that matches the time of recording with the timing of the events giving rise to economic flows. Revenues and expenses are reflected in the accounts in the period earned or expensed rather than when cash receipts or disbursements occur (cash accounting). Accrual accounting is used to compile the ITAs and the IIP accounts.
Activities of multinational enterprises (AMNE)	AMNE statistics relate to the operations and finances of multinational enterprises such as sales, employment, capital expenditures, balance sheets, and value added. These statistics include closely related foreign affiliate statistics (FATS).
Affiliate	Enterprise that is directly or indirectly owned or controlled by an entity in another country to the extent of 10 percent or more ownership of the voting stock for an incorporated business or an equivalent interest for an unincorporated business.
Affiliated trade	Resident-nonresident trade between entities that have a direct relationship with each other, such as between a parent and its affiliate. Also known as intrafirm trade.
Asset/liability principle	Method of presenting direct investment statistics under which the financial flows and positions are organized according to whether the investment relates to an asset or liability without any offsetting adjustments for reverse investment or investment by fellow enterprises. An alternative presentation is the directional principle.
Associate	Business entity that is owned between 10 and 50 percent by another business entity.
Balance of payments	Statistical statement that summarizes, for a specific time period, the economic transactions of an economy with the rest of the world.
Balance of payments adjustments	Additions and subtractions to goods exports and imports compiled on a customs basis (merchandise trade statistics) to meet balance of payments requirements. Adjustments are made for coverage, timing, valuation, residence, and other factors.
BD4	The 4 th edition of the <i>Benchmark Definition of Foreign Direct Investment</i> published by the Organisation for Economic Co-operation and Development. This manual contains guidelines for the preparation of statistics related to direct investment transactions, positions, and income.
Bilateral statistics	International economic accounts statistics disaggregated according to partner-country classifications. Bilateral statistics provide important measures of trade and investment between the United States and other countries and world regions.
BPM6	The 6 th edition of the <i>Balance of Payments and International Investment Position Manual</i> published by the International Monetary Fund. This manual contains guidelines for the preparation of international economic accounts.
Branch	Business entity that is unincorporated and is owned by another business entity.
Capital account	Major account of the ITAs that records resident-nonresident transactions for capital transfers and for the acquisition or disposal of nonproduced nonfinancial assets.

U.S. International Economic Accounts Glossary of Terms

Term	Definition
Capital gains and losses of direct investment affiliates	Capital gains and losses include gains and losses resulting from the sale or disposition of assets, excluding inventories; certain holding gains and losses on financial assets; goodwill impairment; writedowns and writeoffs of assets and liabilities associated with restructuring; disposals of discontinued operations; extraordinary, unusual, and infrequently occurring items that are material, including losses from accidental damages or natural disasters after insurance reimbursement; and changes in accounting principles.
Capital transfers	Component of the capital account treated as the offset to financial claims or nonfinancial assets acquired or provided without a corresponding return of economic value (quid pro quo).
Center of economic interest	Location of an institutional unit from which it engages, or intends to engage, in economic activities and transactions on a significant scale for one year or more. Determines the country of residence for international economic accounts.
Change in ownership	Basic principle in <i>BPM6</i> for determining international transactions. Occurs when an asset has been received or a service has been provided. It is generally deemed to have occurred when the two parties (resident and nonresident) record a transaction in their respective accounts.
Change in volume and valuation n.i.e. (not included elsewhere)	Change in the value of an asset or a liability in the IIP accounts from the beginning to the end of a period due to changes other than financial transactions, price changes, and exchange-rate changes.
Compensation of employees	Comprises wages, salaries, and other benefits earned by employees for work performed.
Credit	Transaction that records revenue earned (for example, exports of goods and services), receipt of income, a decrease in U.S. assets, or an increase in U.S. liabilities. Treated as a positive value when calculating the statistical discrepancy.
Currency and deposits	Currency consists of notes and coins with fixed nominal values that are issued or authorized by central banks or governments. Deposits include all claims on deposit-taking institutional units that are represented by evidence of deposit.
Current account	Major account of the ITAs that covers resident-nonresident transactions that involve exchange of economic values (goods, services, and income) and transfers of current economic value without a quid pro quo.
Current cost	Valuation of assets based on the prices prevailing at the time of valuation. It incorporates the effects of both depreciation and changes in market prices.
Current cost adjustment	Adjustment to earnings that converts depreciation reported for financial accounting purposes to a measure more consistent with economic accounting principles. The adjustment (1) converts depreciation valued at historical cost to current (replacement) cost, (2) adds depletion of natural resources back to earnings for consistency with national economic accounts, and (3) reallocated mineral exploration and development costs across periods so that they are written off over their economic lives rather than all at once.
Current transfers	Component of the current account treated as the offset to current economic value acquired or provided without a corresponding return of economic value (quid pro quo).

U.S. International Economic Accounts Glossary of Terms

Term	Definition
Customs value	Valuation method used in the U.S. international economic accounts for U.S. imports of goods. The value is generally defined as the price actually paid or payable for goods at the foreign port of export, excluding U.S. import duties, freight, insurance, and other charges incurred in bringing the goods to the United States.
Debit	Transaction that records expense incurred (for example, imports of goods and services), payment of income, an increase in U.S. assets, or a decrease in U.S. liabilities. Treated as a negative value when calculating the statistical discrepancy.
Debt	Financial claim that refers to lending of funds by a creditor (lender) to a debtor (borrower). Debt comprises securities that are generally marketable and other instruments that are generally not marketable.
Debt forgiveness	Component of capital transfers in the capital account whereby a government creditor entity in one economy formally agrees with a debtor entity in another economy to extinguish all or part of the obligations of the debtor to that creditor.
Debt instruments direct investment	Direct investment that results from changes in net outstanding loans between parents (or for inward investment, other foreign parent group members and their affiliates, including loans by parents to affiliates and loans by affiliates to parents.
Debt securities	Negotiable instruments that serve as evidence of debt including bills, bonds, notes, negotiable certificates of deposit, commercial paper, debentures, asset-backed securities, money market instruments, and similar instruments traded in financial markets.
Debtor/creditor principle	Type of geographic attribution in the international economic accounts whereby financial assets (claims) of the compiling economy are attributed to the country of residence of the non-resident debtor and financial liabilities are attributed to the country of residence of the non-resident creditor. An alternative approach is the transactor principle.
Direct investment	Functional category for primary income and the financial account of the ITAs and for the IIP accounts that refers to an investment by a resident entity in one economy that represents a lasting interest in an enterprise resident in another economy. The lasting interest implies the existence of a long-term relationship between the direct investor and the enterprise and a significant degree of influence by the investor on the management of the enterprise. Lasting interest is determined by a 10 percent or more ownership share.
Direct investment enterprise	An incorporated or unincorporated enterprise in which a direct investor, who is a resident enterprise in another economy, owns 10 percent or more of the ordinary shares or voting power (for an incorporated enterprise) or the equivalent (for an unincorporated enterprise). Equivalent to an affiliate in the U.S. international economic accounts.
Direct investment financial transactions	Transactions that change financial claims (assets) and liabilities between U.S. parents and their foreign affiliates or between U.S. affiliates and their foreign parents. Financial outflows result from transactions that increase U.S. assets or decrease U.S. liabilities. Financial inflows result from transactions that decrease U.S. assets or increase U.S. liabilities. Direct investment financial transactions consist of reinvestment of earnings, equity other than reinvestment of earnings investment, and debt instruments investment.

U.S. International Economic Accounts Glossary of Terms

Term	Definition
Direct investment position	The value of direct investors' equity in, and net outstanding loans to, their affiliates. The direct investment position may be viewed as the direct investors' net financial claims on their affiliates. BEA reports statistics on the positions for outwards direct investment and for inward direct investment at historical cost, current cost, and market value.
Direct investor	An incorporated or unincorporated enterprise resident in one economy that owns 10 percent or more of the ordinary shares or voting power (for an incorporated enterprise) or the equivalent (for an unincorporated enterprise) of an enterprise resident in another economy. Equivalent to a U.S. parent or the foreign parent in the U.S. international economic accounts.
Directional principle	Method of presenting direct investment statistics under which the financial flows and positions are organized according to the direction of the direct investment relationship (outward vs. inward). Reverse investment and certain types of investment in fellow enterprises are subtracted from gross outward and inward flows and positions. An alternative presentation is the asset/liability principle. The directional principle is used for classifying direct investment flows and positions by partner country and by industry.
Dividends and withdrawals	Distributed earnings to equity holders of incorporated private enterprises, cooperatives, and public corporations that are paid from after-tax profits, and distributed income from quasi-corporations, such as branches.
Double entry accounting	Basic accounting convention whereby each recorded transaction is represented by at least two corresponding entries (credit and debit) with equal values in the accounts of the transactor. This convention is used for compiling the ITAs.
Economic assets	Resources over which ownership rights are enforced and from which future economic benefits may accrue to the owner. They include fixed assets, inventories, valuables, nonproduced assets, and financial assets.
Economic ownership	Economic ownership, which may differ from legal ownership, accrues to the party that bears the risks and enjoys the rewards of ownership.
End use system	System of classification of merchandise trade data developed by BEA for publishing U.S. goods trade statistics according to analytically meaningful categories. It is based on the Harmonized System.
Enterprise	An institutional unit engaged in production that may be a corporation, a nonprofit institution, or an unincorporated business enterprise.
Equity and investment fund shares	Financial instrument category that includes both equity excluding investment fund shares and investment fund shares.
Equity excluding investment fund shares	Financial instruments that represent claims to the residual values of incorporated enterprises. Includes common stocks, preferred stocks, restricted stocks, and depository receipts.

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Equity other than reinvestment of earnings direct investment	Direct investment measured as the difference between equity increases and decreases. Equity increases result from (1) parents' establishments of new affiliates, (2) payments by parents to unaffiliated parties for the purchase of capital stock or other equity interests when they acquire an existing business, (3) payments to acquire additional ownership interests in their affiliates, and (4) capital contributions to their affiliates. Equity decreases are the funds parents receive when they reduce their equity interests in their affiliates.
Exchange rate change	Change in the value of an asset or a liability in the IIP accounts from the beginning to the end of a period due to changes in the value of the currency of issue versus local currency.
Fellow enterprises	Enterprises that have no direct investment relationship with one another but that have a common direct investor.
Financial account	Major account of the ITAs that records resident-nonresident transactions in financial instruments classified by the functional categories of direct investment, portfolio investment, other investment, reserve assets, and financial derivatives. All financial account transactions are summarized as net acquisition of U.S. assets, net incurrence of U.S. liabilities, and net transactions in financial derivatives other than reserves.
Financial assets	Economic assets that are financial instruments. Financial assets include financial claims and, by convention, monetary gold held as gold bullion.
Financial derivatives other than reserves	Financial instruments that represent securities providing payoffs that are based on the values of other assets such as commodity prices, securities prices, or market index values. Examples are futures, forwards, options and swaps. It is also a functional category of investment.
Financial institutions	Corporations and unincorporated enterprises that are principally engaged in providing financial services, including insurance and pension fund services. Includes depository and non-depository financial enterprises.
Financial instruments	Consists of the full range of financial contracts between institutional units and that may give rise to financial claims. A claim is a financial instrument that gives rise to an economic asset with a counterpart liability. Financial instruments are classified as equity and investment fund shares, debt instruments, and other financial assets and liabilities.
Flows	Economic activities and events that occur within an accounting period. Cross-border flows are recorded in the international economic accounts as transactions and as changes in financial assets and liabilities (other flows).
Foreign affiliate statistics (FATS)	Subset of AMNE statistics that focuses on goods produced and services provided by majority-owned affiliates in local markets.
Foreign direct investment in the United States (inward direct investment)	Ownership or control, directly or indirectly, by one foreign resident, the foreign parent, of at least 10 percent of a U.S. business enterprise, which is called a U.S. affiliate. Foreign direct investment includes equity and net debt investments by the foreign parent, and net debt investment by any other members of the foreign parent group.

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Foreign official agencies	Primarily consists of treasuries, including ministries of finance or corresponding departments of national governments, central banks, stabilization funds, exchange control offices, and other governmental exchange authorities. Also included are other entities that are authorized as fiscal agents of national governments.
Foreign parent group	The foreign parent group of a U.S. affiliate consists of (1) the foreign parent, (2) any foreign person (including a company), proceeding up the foreign parent's ownership chain, that owns more than 50 percent of the person below it, up to and including the ultimate beneficial owner (UBO), and (3) any foreign person, proceeding down the ownership chain(s) of each of these members, that is owned more than 50 percent by the person above it.
Free alongside ship (F.A.S.)	Valuation method used in the U.S. international economic accounts for U.S. exports of goods. Includes domestic trade and transport margins.
Free on board (F.O.B.)	Valuation method recommended in <i>BPM6</i> for consistent valuation of goods at the customs frontier of the economy from which the goods are exported. Includes domestic trade and transport margins plus the cost of loading merchandise on a transport carrier.
Functional category	In the U.S. international economic accounts, functional categories are the primary classification system used for financial transactions, positions, and income. The five functional categories of investment are direct investment, portfolio investment, financial derivatives other than reserves, other investment, and reserve assets.
General government	Legal entities established by political processes that have legislative, judicial, or executive authority over other institutional units within a given area. In the United States, many separate government units exist at different levels, including federal, state, and local government.
Generally accepted accounting principles (GAAP)	The common set of accounting principles, standards and procedures that companies use to compile their financial statements, particularly in the United States. U.S. GAAP is used by respondents to BEA's direct investment surveys.
Goods	Major component of the current account that covers commodities for which ownership rights can be established and transferred. Goods are classified as general merchandise, net exports of goods under merchanting, and nonmonetary gold.
Harmonized Commodity Description and Coding System (Harmonized System)	Classification system established by the World Customs Organization to secure a high degree of harmony and uniformity across countries in customs data systems. This system is used to classify U.S. trade in goods.
Historical cost	Valuation of assets based on the value recorded in the financial accounts of the enterprise at the time the asset was acquired. Historical cost is the basis on which companies can most easily report data for BEA's direct investment surveys.
Households	Consists of persons or groups of persons who share the same living accommodation, pool some of their income, and consume certain goods and services collectively. Households include persons living in institutional arrangements.

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Institutional unit	Entities that engage in transactions and other economic activities in an economic territory and that form the foundation for economic statistics compiled in national and international economic accounts.
Insurance technical reserves	Reserves for unearned nonlife insurance premiums due to prepayment of premiums and reserves against outstanding nonlife insurance claims.
Interest	Income that is receivable by the owners of certain kinds of financial assets, namely deposits, debt securities, loans, and other accounts receivable, for placing the financial assets at the disposal of another institutional unit.
International Investment Position (IIP) Accounts	Statistical statement of the value and composition of the stock of an economy's claims on the rest of the world and the value and composition of the stock of an economy's liabilities to the rest of the world.
International Transactions Accounts (ITAs)	Official title for the U.S. balance of payments accounts which consists of the current account, the capital account, and the financial account.
Intrafirm trade	Resident-nonresident trade between entities that have a direct investment relationship with each other, such as between a parent and its affiliate. Also known as affiliated trade.
Investment fund shares	Type of collective investment that includes money market funds (MMF) and non-MMF investment funds. Includes shares in money market, equity, and bond mutual funds, real estate investment trusts, index-linked equity unit investment trusts, and limited partnership interests.
Investment income	Component of the current account that includes income on equity and on debt. Equity income consists of profits (distributed or reinvested) on direct investment and dividends on portfolio stocks. Debt income consists of interest from direct, portfolio, and other investment.
Loans	Financial instruments that are established when a creditor lends funds directly to a debtor and that are evidenced by non-negotiable documents. This category includes installment loans, hire-purchase loans, and trade credit finance. Loans also include securities repurchase agreements and financial leases.
Majority-owned affiliate	An affiliate (direct investment enterprise) that is controlled by a nonresident direct investor through the ownership either directly or indirectly of 50 percent or more of the voting equity of an incorporated business or an equivalent interest in an unincorporated business. Known in <i>BPM6</i> as a subsidiary.
Market value	Amount that willing buyers pay to acquire something from willing sellers. The exchanges are made between two independent parties and on the basis of commercial considerations only.
Maturity	Period after which a security can be redeemed for its maturity value. Short-term is defined as payable on demand or at one year or less. Long-term is defined as payable after more than one year or with no maturity.

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Maturity value	The amount the issuer will pay the holder of a security at the date of redemption of the security. It is often referred to as par, face, principal and redemption value.
Migrant's transfers	Component of capital transfers that represents counter entries to changes in financial account items that arise from the migration (change of residence for at least a year) of individuals from one economy to another.
Modes of supply	Categories of services transactions developed by the World Trade Organization for compiling statistics related to administration of the General Agreement on Trade in Services.
Monetary authority	Includes the central bank and other institutional units that conduct operations on behalf of the central bank. Such operations include the issuance of currency, maintenance and management of reserve assets, and the operation of exchange stabilization funds. For the United States the central bank is the Federal Reserve System.
Monetary gold	Reserve asset item that refers to gold owned by the monetary authorities and held as a reserve asset. Transactions in monetary gold occur only between monetary authorities and their counterparts in other economies or between monetary authorities and international monetary organizations.
Money market securities	All highly marketable debt securities with an initial term to maturity of a year or less that generally give the holder the unconditional right to receive a stated, fixed sum of money on a specific date.
Multinational enterprises (MNEs)	Enterprise groups with a direct investor resident in one country that has direct investment enterprises located in one or more other countries. In the U.S. international economic accounts, MNEs consist of parent companies and their affiliated groups.
National Income and Product Accounts (NIPAs)	Part of the U.S. system of national economic accounts. The NIPAs display the value and composition of U.S. production, the distribution of incomes generated in production, and the sources of saving, which provides for investment in future production.
Net international investment position	Component of the international investment position accounts that represents the stock of external financial assets minus the stock of external liabilities. The net position shows what the economy owns in relation to what it owes to nonresidents.
Net lending/borrowing	Measure of U.S. net inflows or outflows in the international economic accounts. It can be measured as the sum of balances on the current account and capital account or as the balance on the financial account. Positive values indicate net outflows (net lending) and negative values indicate net inflows (net borrowing).

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Net U.S. acquisition of assets	Major component of the financial account that covers the acquisition by U.S. residents of financial assets issued by nonresidents. Categories of assets include direct investment, portfolio investment, other investment, and reserve assets.
Net U.S. incurrence of liabilities	Major component of the financial account that covers the incurrence by U.S. residents of financial liabilities to nonresidents. Categories of liabilities include direct investment, portfolio investment, and other investment.
Nonfinancial institutions	Institutions whose principal activity is the production of market goods or nonfinancial services. These include legally constituted corporations, branches of nonresident enterprises, quasi-corporations, notional resident units owning land, and resident nonprofit institutions that are market producers of goods or nonfinancial services.
Nonmonetary gold	Refers to all gold not held as reserve assets.
Nonproduced nonfinancial assets	Component in the capital account that covers transactions in tangible assets that are used in production but that are not actually produced, such as natural resources, and nonproduced intangible assets, such as patents, copyrights, trademarks, and franchises.
Nonprofit institutions serving households (NPISH)	Entities engaged in providing goods and services to households or the community at large free of charge or at prices that are not economically significant, except for those entities that are controlled and financed by government units.
Nonresident	An institutional unit that is not treated as a resident of the U.S. economy. The ITAs and the IIP accounts record transactions and positions between U.S. residents and nonresidents.
Notional resident unit	A type of enterprise identified for statistical purposes to hold land and natural resources owned by nonresidents.
Other flows	Changes in the volume, value, or classification of an asset or liability not due to resident-nonresident transactions. Consist of revaluations and other changes in the volume, value, or classification of assets and liabilities.
Other investment	Functional category for primary income and the financial account of the ITAs and for the IIP accounts that is not direct investment, portfolio investment, reserves, or financial derivatives other than reserves and that covers loans, deposits, and other assets and liabilities.
Other reserve assets	Reserve assets other than monetary gold, SDRs, and reserve position in the IMF. Can include currency and deposits, securities, financial derivatives, and other claims.

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Other valuation adjustments	Valuation adjustments to the historical cost direct investment position that reflect differences between transactions values, which are used to record direct investment financial flows, and the book values on foreign affiliates' books, which are used to record the position, changes in coverage, and the reclassification of investment positions between direct investment and other investment.
Partner country	Country of residence of the counterparty to an international transaction or financial position. Provides the basis for compiling bilateral statistics.
Parent company	A U.S. parent is a U.S. entity that has a direct investment interest in a foreign business enterprise. A foreign parent is the first entity outside the United States in a U.S. affiliates ownership chain that has a direct investment interest in the affiliate.
Portfolio investment	Functional category for primary income and the financial account of the ITAs and for the IIP accounts for transactions and positions involving debt or equity securities, other than those included in direct investment or reserve assets. Securities are debt and equity financial instruments that have the characteristic feature of negotiability.
Positions	Fundamental concept for the IIP accounts that refers to the value of assets or liabilities at a point in time.
Price change	Change in the value of an asset or a liability in the IIP accounts from the beginning to the end of a period due to changes in the market price of the security.
Primary income	Major component of the current account that represents the return to institutional units for their contribution to the production process or for the provision of financial assets. Consists of investment income and compensation of employees.
Profits	Earnings of enterprises measured net of income or corporation taxes payable during the recording period. Profits are treated as investment income on direct investment in the ITAs.
Reinvested earnings/ reinvestment of earnings	Reinvested earnings of affiliates equal total earnings less dividends and withdrawals. Earnings are the parents shares in the net income of their affiliates after provision for host country income taxes. Reinvested earnings are a component of direct investment transactions in the same period (reinvestment of earnings).
Repurchase agreements	Transactions involving a sale of securities and a simultaneous agreement to repurchase the same securities or similar securities at a specified date and price. Repurchase agreements are treated as loans in other investment in the ITAs and the IIP.
Reserve assets	Functional category for primary income and the financial account of the ITAs and for the IIP accounts that consists of claims on nonresidents that are readily available to and controlled by monetary authorities. They can be used to affect the currency exchange rate and for other purposes.
Reserve position in the International Monetary Fund	Reserve asset item that refers to the sum of the reserve tranche purchases that a member of the fund may draw upon and any indebtedness of the International Monetary Fund that is readily repayable to the member.

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Resident	An institutional unit is regarded as resident when it has a center of economic interest in the economic territory of a country. The ITAs and the IIP accounts record transactions and positions between U.S. residents and nonresidents.
Reverse investment	Direct investment by affiliates (direct investment enterprises) in their parent or parent group (direct investor). This direct investment usually consists of debt rather than equity.
Secondary income	Major component of the current account that presents current transfers between residents and nonresidents. Unlike an exchange, a transfer is a transaction that provides a good, service, or asset without a corresponding return of economic value (quid pro quo).
Sectors	Groupings of institutional units that have similar economic objectives and behavior for the purpose of providing analytically useful aggregates of economic statistics. For the U.S. international accounts sectors include central bank, deposit-taking institutions except central bank, other financial institutions, nonfinancial institutions except general government (including households and NPISHs), and general government.
Securities	Financial instruments that are marketable such as publicly traded stocks, bonds, money market securities and other financial instruments.
Securitization	Pooling of non-marketable (non-liquid) assets into standardized securities backed by those assets for the purpose of trading on organized exchanges.
Services	Major component of the current account that refers to products which are generally intangible and which generally cannot be traded separately as they are generally consumed by the time their production is completed. Services are classified into nine broad categories based on <i>BPM6</i> .
Special drawing rights (SDRs)	Reserve asset item created by the IMF to supplement other reserve assets that are periodically allocated to IMF members in proportion to their respective quotas. Value of SDRs is determined by a weighted basket of currencies. Transactions in SDRs are recorded in the financial account and positions are recorded in the IIP accounts.
Statistical discrepancy	The difference between total debits and total credits recorded in the current, capital, and financial accounts of the ITAs. In principle it equals zero but in practice this rarely happens due to errors and omissions in the source data used to compile the accounts.
System of National Accounts (SNA)	An international set of guidelines for a system of economic accounts, published by the Commission for the European Communities, the International Monetary Fund, the Organisation for Economic Co-operation and Development, the United Nations, and the World Bank. The most recent edition of the SNA was published in 2008 and was coordinated with the publication of <i>BPM6</i> .
Term to maturity	Fixed period of time corresponding to the lifetime of a security. The term to maturity corresponds to the period of time between the date at which the security is issued (original term to maturity) or is outstanding (remaining term to maturity) and the date at which the security is redeemable (maturity date).

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Trade credit and advances	Credit extended directly by suppliers of goods and services to their customers and advances for work in progress and prepayment by customers for goods and services not yet provided.
Transaction	An exchange or transfer of value between two institutional units that occurs by mutual agreement or by law. Transactions are classified according to the nature of the economic value provided—namely, goods or services, primary income, secondary income, capital transfers, nonproduced nonfinancial assets, financial assets, or liabilities.
Transactor principle	Type of geographic attribution in the international economic accounts whereby financial assets and liabilities of the compiling economy are attributed to the country of residence of the counterpart non-resident party to the transaction. An alternative approach is the debtor-creditor principle.
Transfer pricing	Valuation of transactions between affiliated parties. Transfer prices often differ from market prices and are designed to achieve certain objectives for multinational enterprises.
Translation adjustments	A type of valuation adjustment to investment positions that results from changes in exchange rates used to translate foreign-currency-denominated assets and liabilities into U.S. dollars.
Treasury International Capital (TIC) reporting system	System of monthly, annual, and benchmark surveys conducted by the Federal Reserve Bank of New York on behalf of the U.S. Treasury Department to collect cross-border transactions and positions for financial assets and liabilities. Major data source for both the ITAs and the IIP accounts.
Ultimate beneficial owner (UBO)	Entity that ultimately owns or controls and thus ultimately derives the benefits and assumes the risks from owning or controlling an affiliate. The UBO is often but not always the same as the foreign or U.S. parent.
Unaffiliated trade	Resident-nonresident trade between two entities that do not have a direct investment relationship with one another.
U.S. direct investment abroad (outward direct investment)	Ownership or control, directly or indirectly, by one U.S. resident, the U.S. parent, of at least 10 percent of a foreign business enterprise, which is called a foreign affiliate.
Value added	An output measure derived as gross output (revenue) less intermediate inputs (purchased goods and services used in production). It can also be derived as the sum of the costs incurred (except for intermediate inputs) and the profits earned in production.
Valuation	The determination of asset, liability and transaction values. Different methods of valuation (transaction value, market price, issue price, book value, maturity value, etc.) often reflect applicable accounting principles, legal restrictions, and other fact
Valuation adjustments	Valuation adjustments include all changes in the position other than financial transactions. They consist of price changes, exchange-rate changes, and other changes.