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MULTIPLE INDICATORS FOR MULTIPLE USES: UNITED STATES STATISTICS ON FOREIGN DIRECT INVESTMENT

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Abstract

Multiple Indicators for Multiple Uses: United States Statistics on Foreign Direct Investment, by Obie G. Whichard, Bureau of Economic Analysis, U.S. Department of Commerce.

The United States has a lengthy history as a direct investor and as a host of direct investment. It has developed an extensive data system to track this investment and the related operations, and over time numerous improvements to the system have been made as policy and other user needs have created new demands. This paper gives a general overview of the system and discusses selected need-driven improvements. The improvements singled out for discussion relate to current-price measures of investment stocks, supplemental current-account measures based on ownership, unduplicated measures of production by direct investment enterprises, and measures of services delivered via the commercial presence mode of supply. Use of the data to address topical issues is illustrated through a discussion of offshore outsourcing by multinational companies. The paper concludes with a discussion of two situations that have created difficulties in the interpretation of U.S. data on direct investment—(1) the interposition of holding company affiliates between U.S. parent companies and their operating affiliates, and (2) corporate inversions.

1. Introduction

Foreign direct investment has a lengthy history in the United States. From its 18th-century beginnings, the country has been both a host of foreign-owned enterprises and a source of capital for business ventures located overseas.[1] However, its systematic collection of statistics on this investment is of much more recent advent. Some information on direct investment was collected by the U.S. Government in the early 1900's, but regular and systematic data collection did not start until about 1950. Over time, the data collected have become more detailed and comprehensive, and today the nation has what many regard as the world's most fully developed data system on foreign direct investment. It covers not only stocks and flows of investment, but also extensive information on the financing and operations of the enterprises involved.

Over time, numerous data improvements have been made, and to a substantial extent, the directions taken in improving and expanding the data have reflected responses to changing policy and other user needs and to changes in the U.S. and world economies. Not only do the data serve as critical components of the balance of payments accounts, but they also have been called upon for such diverse purposes as helping gauge the nation's position as a net debtor or creditor, supporting the negotiation of trade agreements and investment treaties, investigating responses to tax regimes, and—most recently—addressing the issue that has come to be known as "offshore outsourcing". In this paper, I will describe the major improvements that have been made in these statistics and identify some of the needs they were meant to address. To give a sense of perspective, it will be helpful first to review a few key facts about direct investment in and by the United States.

The United States is both the world's largest direct investor and the host of the world's largest stock of inward direct investment. Recent United Nations estimates based on book values indicate that the United States accounted for almost one-fifth of the global stock of inward direct investments in 2003, and for about one-fourth of the global stock of outward direct investments.[2] Estimated at market value, the U.S. direct investment position abroad at yearend 2003 was $2.7 trillion, while the foreign direct investment position in the United States stood at $2.4 trillion. Although these positions are not components of gross domestic product, it may give a sense of the magnitudes involved to observe that U.S. current-dollar GDP in 2003 was $11.0 trillion, or a little more than double the combined value of the inward and outward direct investment positions. The income generated by these investments also is significant. In 2003, receipts of income on U.S. direct investment abroad were $188 billion, and payments of income on foreign direct investment in the United States were $67 billion.

Direct investors and their affiliates account for a substantial share of U.S. international trade in goods. In 2002, U.S. exports and imports of goods associated with multinational companies headquartered or investing in the United States totaled over $1.0 trillion and accounted for over half of U.S. imports and two-thirds of U.S. exports. U.S. parent companies, their foreign affiliates, and U.S. affiliates of foreign companies together employed about 34 million people in the United States and abroad in that year (26 million were in the United States, of a total private workforce of about 113 million). The combined value added of U.S. parents and U.S. affiliates accounted for over one-fourth of U.S. GDP.

The U.S. data on direct investment are collected in two distinct groups: (1) Balance of payments and direct investment position data and (2) financial and operating data. The former include the various

[1] For an account of these early ventures, see Mira Wilkins, *The Emergence of Multinational Enterprise: American Business Abroad from the Colonial Era to 1914* (Cambridge, Massachusetts: Harvard University Press, 1970).

[2] United Nations Conference on Trade and Development, *World Investment Report 2004*, Annex tables B.3 and B.4.

categories of income and capital transactions that may occur between parent companies and their affiliates, as well as the transactions that occur between parents and third parties when parents acquire or sell ownership interests in affiliates. They also include the related investment positions. These data conform closely to those called for by the 5th edition of the IMF *Balance of Payments Manual* (*BPM5)* and by the 3rd edition of the OECD *Benchmark Definition of Foreign Direct Investment* (*BD3*). Of particular importance, they use the same 10 percent ownership criterion that is recommended by those international standards as the threshold for categorizing an international investment as "direct".[3] The most recent annual estimates are shown in table 1. (This and other tables are shown at the end of the paper.)

The financial and operating data include such items as balance sheets, income statements, sales of goods and services, employment and employee compensation, U.S. trade in goods, research and development expenditures, taxes, and external financial position. Unlike the balance of payments and direct investment position data, they pertain to the entire operations of the affiliates, not just the parent company's share. Some financial and operating data are available on a 10-percent ownership basis, but to an increasing degree, both data collection and data presentation have been more focused on data for majority-owned affiliates.[4] The most recent annual estimates for these affiliates are shown in table 2.

While the United States has compiled both direct-investment-related balance of payments and financial and operating data for many years, the data have not always been as useful in addressing policy questions as they are now. In the section that follows, I would like to describe selected improvements that have been made in recent years in response to user needs and demands. The subsequent section will comment upon how BEA has brought its data to bear on the issue of offshore outsourcing, which has attracted considerable public interest in recent months. A final section discusses two issues that pose challenges for the future—holding companies and corporate inversions.

2. Improvements

BEA continually strives to improve its data on direct investment, and almost every year brings with it some data improvement or enhancement. Typical of these improvements would be the modernization of industry classifications or changes in methodology that improve alignment with international recommendations. Cataloguing and describing these improvements would easily provide material for a separate paper. However, consonant with the orientation of this conference toward policy uses of the data, I have chosen to focus here on four improvements that have played key roles in making the data BEA provides more useful for policymakers. The improvements singled out for discussion relate to the development and provision of (1) current-price measures of investment stocks, (2) supplemental current-

[3] With regard to outward investment, where the U.S. ownership interest is indirectly held, all the ownership percentages (based on voting equity) between the U.S. investor and the indirectly held foreign company are multiplied together to determine whether the 10-percent criterion has been met. (For example, if a U.S. company's share in Firm A is 60 percent and that firm, in turn, owns 40 percent of Firm B, then Firm B would be considered a foreign affiliate of the U.S. company, since the product of the two ownership shares linking it to Firm B—24 percent—is in excess of 10 percent.) This implementation of the 10-percent rule is somewhat different from that called for by *BPM5* and *BD3*, which include as foreign affiliates any firm in an unbroken chain of majority ownerships. From a practical standpoint, this difference in implementation probably does not have a major impact on the overall categorization of investments.

[4] Because of the presumption of control, majority ownership is viewed by many as the preferred basis for selecting firms for the analysis of the economic role and importance of foreign-owned firms. It is also recommended as the primary basis for the compilation of statistics on the operations of foreign-owned firms by the OECD's forthcoming *Handbook of Globalisation Indicators* and for the compilation of statistics on "foreign affiliates' trade in services" (or "FATS") by the international *Manual on Statistics of International Trade in Services.* Finally, majority ownership appears to be the most relevant concept for the support of trade agreements, such as the General Agreement on Trade in Services, and it can be viewed as a practical statistical implementation of the concept of "foreign-controlled enterprise" found in the *System of National Accounts* (which, however, may admit other firms based on subjective assessment of the degree of actual control).

account measures based on ownership, (3) unduplicated measures of production by direct investment enterprises, and (4) measures of services delivered via the commercial presence mode of supply.

2.1 Current-price measures of investment stocks

In the mid-to-late 1980's, concerns began to arise about the shift in the net international investment position (IIP) of the United States from positive to negative and about the possible implications of that shift, such as for receipts and payments of interest income or a vulnerability of the economy to capital flight. However, public debate on the issue was hampered by limitations of the statistics and, in particular, by the mix of valuation methods used by BEA in deriving the IIP. Although many of the assets in the position (such as portfolio investment and most reserve assets) were being valued at current-period prices, other assets, including direct investment, were valued at the historical cost at which they were purchased. In 1990, BEA suspended publication of the IIP and announced that it was undertaking a review of alternative methods of valuing international investment to reflect current-period prices.

As a result of its review, BEA developed two new alternative methods—current-cost and market value—to revalue its estimates of direct investment in terms of current-period prices. The *current-cost* method revalues the U.S. and foreign parents' share of their affiliates' investment in plant in equipment using a perpetual inventory model; in land, using general price indexes; and in inventories, using estimates of their current replacement cost. The *market-value* method revalues the owners' equity portions of the inward and outward direct investment positions using indexes of stock market prices.

As expected under inflationary conditions, the revalued estimates on either basis were higher than the historical-cost estimates, for both outward and inward investment. However, the differences were relatively larger for outward investment, which tended to be of older vintage than inward investment. Furthermore, the increase over historical cost was greatest for the market-value measure, which reflected changes in the price of *all* the assets of the firm, rather than only its tangible assets. In the initial estimates for 1989, the current-cost measure exceeded the historical-cost measure by 43 percent for outward investment and by 14 percent for inward investment; for market value, the comparable figures were 115 percent and 36 percent, respectively.[5] When these current-price measures were substituted for the historical-cost measures in the computation of the net U.S. IIP, the position remained negative, but by a significantly lesser amount. By placing these components of the IIP on a consistent valuation basis, this exercise provided sounder statistical underpinnings for the public dialog with regard to the nation's international claims and liabilities.

Since the release of the initial estimates more than a decade ago, a variety of developments have affected the relative current-price valuations of inward and outward direct investment—the two types of investment flows have grown at different rates, exchange rates have changed, and equity prices in the United States and abroad have changed at different rates. As a result, the adjustments to value the positions in current prices no longer uniformly raise the outward position more than the inward position. For 2003, on a current-cost basis, the adjustments raised the U.S. direct investment abroad position by 16 percent and the foreign direct investment in the United States position by 13 percent. For market value, the comparable figures were 53 percent and 77 percent, respectively.

[5] Both the initial estimates and the methodology that would subsequently be used in constructing the official estimates of the IIP are given in J. Steven Landefeld and Ann M. Lawson, "Valuation of the U.S. Net International Investment Position," *Survey of Current Business* 71 (May 1991): 40-49.

2.2 Supplemental current-account measures based on ownership

In the early 1990's, demands arose from several sources—including a blue ribbon National Academy of Sciences study panel—for the traditional balance of payments presentation to be supplemented by a presentation that reports more fully the dimension of ownership.[6] These demands arose simultaneously with, and probably to a large extent because of, the increasing interdependence of world economies that occurred as multinational firms assumed a more prominent role in the delivery of goods and services to international markets and the appearance of commercial presence as an issue to be addressed in multilateral negotiations.

In 1993 and 1995 articles, BEA proposed a framework that responded to the need for added detail on ownership while at the same time maintaining consistency with the conventions of the national and international economic accounts.[7] An objective of the framework is to better recognize the role of foreign affiliates as a means of delivering goods and services to international markets and as a contributor to the nation's economic performance in world markets. Under this framework, "trade" is construed broadly to include not only cross-border exports and imports of goods and services, but also deliveries through affiliates. However, the latter are entered in the accounts, not at their full value, but in a way that reflects only the return to the capital ownership by the parent firm. An alternative trade balance is introduced that reflects both channels of delivery, thus capturing the effects on the U.S. economy of sales that originate both within and beyond its geographical boundaries.

The conventional measure of the trade balance reflects a country's performance in international markets in terms of the net value of goods and services transactions between firms and persons residing in that country and those residing abroad. Sales of goods and services by foreign affiliates of investing companies to other foreign persons, and sales by foreign affiliates in host countries to other persons in those countries, are not regarded as exports and imports and are therefore excluded from the trade balance.

In the ownership-based framework, in contrast, sales by foreign affiliates are entered in the accounts in a way that reflects the return to the direct investor's ownership interest in the affiliate (which, in conventional balance of payments accounts, may be labelled "direct investment income"). Returns to U.S. direct investors generated by the sales of goods and services by their foreign affiliates are added to the conventional measure of U.S. cross-border exports, to yield a measure of total U.S. receipts arising from cross-border sales and sales by foreign affiliates. Similarly, returns accruing to foreign owners of affiliates located in the United States are added to U.S. cross-border imports, to yield a comparable measure of total U.S. payments. Entering the effects of affiliate sales in this way recognizes these sales as a separate and distinct method of supplying foreign markets, while at the same time ensuring that only the portion of sales revenues that accrues to the benefit of the home country is included as revenue from that country's foreign sales. The grouping of these items recognizes that cross-border trade and sales through affiliates both are methods of active participation in international markets for goods and services.

To show the linkages between the returns to direct investors and the activities of affiliates that generate these returns, details obtained from the financial and operating data are added showing the gross sales and

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[6] See Anne Y. Kester, ed., *Behind the Numbers: U.S. Trade in the World Economy*, National Research Council, Panel on Foreign Trade Statistics (Washington, DC: National Academy Press, 1992).

[7] For detailed information on the sources and methods used to prepare the supplemental accounts, see Obie G. Whichard and Jeffrey H. Lowe, "An Ownership-Based Disaggregation of the U.S. Current Account, 1982-95," *Survey of Current Business* 75 (October 1995): 52-61. For a general review of issues relating to ownership relations in international transactions, see J. Steven Landefeld, Obie G. Whichard, and Jeffrey H. Lowe, "Alternative Frameworks for U.S. International Transactions," *Survey* 73 (December 1993): 50-61. In recent years, the supplemental accounts have been updated each year in the January issue of the *Survey*.

expenses (as well as any profits accruing to local or third-country investors) that, when netted against one another, give rise to this return. Expenses are further broken down to show compensation of employees, thus providing a more detailed picture of the activities generating and underlying the return to direct investors. Having constructed these more comprehensive measures of receipts and payments resulting from international sales and purchases, a balance is calculated equal to the difference between them.

Accounts compiled on this basis have been presented periodically in the United States since the early 1990's. The basic structure of the accounts and key figures for the years 2001 and, in less detail, 2002 are shown in table 3. The table shows that, for those years, the U.S. deficit on goods, services, and net receipts from sales by affiliates is smaller than the deficit on goods and services alone, reflecting the fact that U.S. investors had higher returns on their direct investments abroad than foreign investors had on their direct investments in the United States.[8] In addition to the items discussed above, the table adds details on whether the cross-border trade is with unrelated parties or with affiliated parties and, for the latter, on whether the trade is with foreign parent companies or with foreign affiliates. In more detailed tables published by BEA, trade in goods and trade in services are separately identified for each of these ownership categories.

2.3 Unduplicated measures of production

BEA's surveys of multinational companies do not directly collect measures of value added, and before BEA began to estimate value added from other data items that are collected, policymakers and others would often use sales or employment as indicators of the scale of operations of the firms covered. While these are useful—even key—measures for many purposes, value added is a preferable measure of activity. Value added indicates the extent to which affiliates' sales result from their own production rather than from production that originates elsewhere, whereas sales data do not distinguish between value added within affiliates and the value that originates in the firms that supply affiliates with intermediate inputs (or in those firms' suppliers). Employment does not suffer from this limitation, but it is limited by its focus on only one factor of production. For example, if one firm has higher employment than another, the difference may reflect either higher production or a lower capital-labour ratio on the part of one firm than on the part of another. Value added estimates for multinational companies also are important because they can be compared to total GDP of the home or host economy, to determine their unduplicated contribution to national production.

In recognition of the need for duplication-free measures of production, BEA developed a methodology for estimating value added by parents and affiliates from items collected on its benchmark and annual surveys of direct investment. It first published estimates of the value added of foreign affiliates of U.S. companies for 1966 and first published estimates of the value added of the U.S. affiliates of foreign companies for 1974. Its first estimates of value added for U.S. parent companies covered 1977. For all three groups of companies, the estimates were initially provided only for years covered by a benchmark survey, but subsequently annual series were introduced.

BEA's estimation methodology for value added exploits the national income identity that draws an equivalence between gross product and the sum of various charges against production. The estimates are derived as the sum of the following five factor and nonfactor charges: Compensation of employees, net interest paid, capital consumption allowances, indirect business taxes, and profit-type return. An alternative method of computation would be to subtract purchases of intermediate inputs from gross

[8] Rates of return for foreign-owned U.S. companies have been persistently below those of both other U.S. companies and foreign affiliates of U.S. companies. For a discussion of the gap in rates of return between foreign-owned and U.S.-owned U.S. companies, see Raymond J. Mataloni, Jr., "An Examination of the Low Rates of Return of Foreign-Owned U.S. Companies," *Survey of Current Business* 80 (March 2000): 55-73.

output. However, purchases data are not requested on the BEA surveys, and a number of respondents have indicated that such data would be difficult to provide.[9]

2.4 Services delivered via commercial presence

To meet the needs associated with growth in the value of trade in services, trade negotiations, and the development of new and more detailed international guidelines for statistical compilation, BEA has taken a variety of steps over roughly the past two decades to improve the coverage, specificity, and international comparability of its statistics on trade in services. Included among them have been improvements in data on both trade in the conventional sense of exchanges between residents and nonresidents and services delivered through locally established affiliates, the latter corresponding broadly to the General Agreement on Trade in Services commercial presence mode of supply (or "Mode 3") and commonly referred to as "foreign affiliates trade in services", or FATS. As set forth in the *Manual on Statistics of International Trade in Services (MSITS)*, the domain of FATS statistics encompasses a variety of indicators of affiliate operations, organized in a way that highlights the role of services. BEA's approach to providing data on services delivered through affiliates is consistent with this perspective. As explained earlier, BEA has for many years collected statistics on the operations of foreign affiliates. In response to the demand for more services-oriented information, it built upon this existing system of data collection.

As interest in services grew and as it became apparent that services would be included in negotiations, a key adjustment was made to accommodate this new emphasis. In particular, questions on sales were expanded to request that sales be broken down into separate components for goods and services, and definitions were provided to distinguish between the two. In addition, when industry classifications were revised, additional detail was provided for services industries.

Perhaps the most important change was requesting that sales of services be reported separately from sales of goods. Because the data on affiliate operations are classified according to the primary industry of the affiliate, all of an affiliate's sales are recorded in a single industry, even if the affiliate has operations in multiple industries. Many manufacturing firms and other goods producers have secondary operations in services, but these operations would not be recognized as services in a breakdown by primary industry alone, thus leading to an understatement in the role and importance of services.[10] The breakdown of sales into goods and services avoids this understatement. It would be better still if sales could be broken down by product–that is, by type of good or service–but from the standpoints of respondent burden and processing costs, BEA did not feel justified in requesting this detail. Disaggregating sales as between goods and services thus served as a compromise solution, which avoided misstatement without imposing a large increase in reporting burden or processing costs.

In an annual article on international services, BEA has presented the following two items: (1) sales of services to foreign persons by majority-owned nonbank foreign affiliates of U.S. companies, and (2) sales of services to U.S. persons by majority-owned nonbank U.S. affiliates of foreign companies. The foreign affiliates' sales to U.S. customers, and U.S. affiliates' sales to foreign customers, are excluded from this integrated presentation because they are already reflected in the data on cross-border trade.[11] The data are

[9]Although the collection of data on purchases has not proved feasible, once value added has been estimated, an estimate of purchases can be derived residually, as the difference between sales (plus inventory change) and value added.

[10]It is, of course, also possible for services firms to have secondary operations in goods, but this tends to be less common than for goods producers to have secondary services operations.

[11]However, data on these sales are made available separately, as are data on total sales (including sales of goods).

for nonbank affiliates only, because the surveys from which the data are derived exclude banks from coverage.[12]

In addition to the sales variable, BEA's data on affiliate operations include a variety of other indicators, as described elsewhere in this paper. Although they are sometimes presented using different nomenclature, the variables covered include both the "basic" and the optional "additional" FATS variables suggested in the *MSITS*.

3. A Current Challenge: Offshore outsourcing

Over about the last year, there have been widespread reports in the U.S. business press about what has come to be described as "offshore outsourcing" (or often, simply "offshoring") of production by U.S. companies, either to affiliated or unaffiliated foreign firms. BEA's data on multinational company (MNC) operations have played an important role in informing the public dialog with regard to offshoring that involves the use of foreign affiliates. Here BEA has not—at least thus far—collected any new data. Rather it has taken a number of steps to bring existing data to bear on the issue. These have included accelerating the release of key indicators, organizing and analysing the data with a view to better informing public dialog, and giving a number of presentations on patterns and trends in MNC operations.

Although there has been some examination of the U.S. operations of foreign-owned firms in connection with the debate over offshoring, most of the attention has focused on the domestic and foreign operations of U.S.-headquartered MNCs. The following highlights illustrate the kinds of information that have proved of interest in this context.[13]

- The measures of value added, capital expenditures, and employment have consistently shown that U.S.-MNC operations are concentrated in the United States, but the distributions of capital expenditures and employment have changed over time. For value added, U.S. parents accounted for the same share—75 percent—of the worldwide MNC total in 2002 as in 1977 (table 4). For capital expenditures and employment, the U.S. parent share has decreased: The U.S.-parent share of capital expenditures decreased from 79 percent in 1977 to 75 percent in 2002, and the U.S.-parent share of employment decreased from 78 percent in 1977 to 73 percent in 2002. The decrease in the parent share of capital expenditures was concentrated in 2002, and it may reflect a short-term fluctuation rather than a trend that will be sustained. However, the decrease in the parent share of employment was sustained throughout 1987-2002.
- Employment by foreign affiliates remains concentrated in high-wage countries, but in recent years it has grown faster in low-wage countries. In 1991-2002, affiliate employment grew at an average annual rate of 6 percent in a selected group of "low-wage" countries, which was double the 3-percent rate in "high-wage" countries. It is not clear to what extent these differences in employment growth reflect wage differentials, but the differences probably occurred at least partly for other reasons. Some of the low-wage countries where affiliate employment has grown the most have had rapidly growing

[12] However, sales of services by U.S. affiliates in banking were collected for the first time in the 2002 benchmark survey of inward direct investment. Also collected were data on interest income and interest expense, which may provide a basis for estimating the value of unpriced services provided by banks. Bank affiliates continue to be excluded from the annual surveys.

[13] These highlights were drawn from Raymond J. Mataloni, Jr., "U.S. Multinational Companies: Operations in 2002," *Survey of Current Business* 84 (July 2004): 10-29. See also "A Note on Patterns of Production and Employment by U.S. Multinational Companies," *Survey* 84 (March 2004): 52-56.

domestic markets and have liberalized policies toward direct investment; some of the differences in growth rates may reflect these factors, rather than wage differentials.

- An aspect of the production pattern for U.S. parent companies that has changed significantly is the degree to which these firms rely on purchased goods and services rather than their own production. During 1977-2002, purchases from outside suppliers as a percentage of total sales for U.S. parent companies in all industries except wholesale and retail trade increased from 63 percent to 69 percent, indicating an increasing reliance on purchased inputs. Some of these outside purchases were obtained from domestic suppliers, and some were obtained from both affiliated and unaffiliated foreign suppliers. The share of purchases that were imported directly from foreign suppliers has been essentially unchanged, at 9 percent in both 1977 and 2002. However, it must be recognized that in many cases, the goods and services purchased domestically have some imported content, which may be considered "indirect imports"; attempting to gauge these indirect imports by combining its data on MNC operations with data from its input-output accounts is on BEA's agenda for future research.

While BEA's data on the operations of U.S. MNCs indicate a relatively stable mix of domestic and foreign operations, the inferences that can be drawn from these data about the production strategies of MNCs and about the ultimate effects of U.S.-MNC activity on the U.S. economy and on foreign economies are limited. The U.S.-parent share of U.S.-MNC activity can change for a number of reasons, and these changes do not uniformly correspond to either additions to, or subtractions from, production and employment in the United States.

To illustrate the difficulty in linking cause and effect, it might be expected that new direct investment abroad by U.S. MNCs would cause the share of U.S. parent companies in worldwide MNC employment to fall and that of foreign affiliates to rise, but its impact on employment in the United States and abroad could vary, depending on the form of the investment and the reasons why it was undertaken. For example, a new investment might represent the establishment of a new company (or "greenfield" investment), the acquisition of a successful existing company, or the acquisition of a failing company. In each case, the employment by affiliates would rise, but the impact on host-country employment would likely differ. Furthermore, this impact cannot be discerned from information on MNC operations alone. Instead, the impact will be determined by a wide range of factors, including the overall level of employment in the economy and the types of jobs involved.

To illustrate the significance of the *reasons* for the investment, affiliate employment shares might rise either because of the shifting of production from parents to affiliates or because of the opening of new overseas markets—such as those for meals or lodging—that can be served only through a locally established enterprise. In the case of production shifting, the rise in employment by affiliates might be expected to come partly or wholly at the expense of employment by the parents. In contrast, in the example of new overseas markets, the rise in employment by foreign affiliates would not affect employment in the United States by parent companies, or it could even cause U.S. employment to rise, because of the need to provide headquarters services to the newly established affiliates.

In sum, statistics on MNC operations can help to inform discussions of offshoring, but they alone cannot provide all the answers. Many of the questions are not only questions of fact, but analytical questions that must take into account a variety of factors—such as exchange rates, rates of economic growth in home and host economies, and policies toward foreign direct investment—in addition to statistics on the domestic and foreign operations of the firms that make foreign direct investments. Finally, given the impossibility of conducting controlled experiments that would compare worlds with and without direct

investment, realism requires us to acknowledge that some uncertainty about the interactions and mutual dependencies between domestic and foreign operations of MNCs will remain even with the best of data and economic analysis.

4. Future Tasks

I would like to close this paper with a brief discussion of two situations that have created difficulties in the interpretation of data on direct investment and that BEA would like to make progress in addressing in the future. The first of these is the growing practice by U.S. parent companies of interposing holding company affiliates between themselves and their foreign affiliates that are engaged in the production of goods and services. The second is the phenomenon of corporate inversions, which results in the creation of inward direct investments that in some sense may not be regarded as having true foreign ownership.

4.1 Holding companies

For the past two decades, U.S. parent companies have been funnelling an increasing share of their direct investments abroad through holding companies.[14] In 1982, foreign affiliates classified as holding companies accounted for only 9 percent of the U.S. direct investment position abroad, but by 2003, they accounted for 33 percent. This trend reflects a variety of factors. Some holding-company affiliates are established primarily to coordinate management and administration of activities—such as marketing, distribution, or financing—worldwide or in a particular geographic region. In addition, the presence of holding-company affiliates in countries where the effective income tax rate faced by affiliates is relatively low suggests that tax considerations may also have played a role in their growth.

One consequence of the increasing use of holding companies has been a reduction in the degree to which the estimates of the U.S. direct investment position abroad (and of related flows of income and capital) reflect the industries and countries in which the production of goods and services by affiliates occurs. This is because the estimates are classified according to the countries and industries of the affiliates with which the U.S. parent companies have direct transactions and positions, rather than according to the countries and industries of the affiliates whose operations the parents ultimately own or control.

Partly in response to the growing impact of holding companies on the distribution of the estimates, BEA has added presentations of position and income for U.S. direct investment abroad classified by industry of U.S. parent. Although the industry of the parent does not in all cases reflect the industries of its foreign operating affiliates, in many cases it can be expected to provide a more reliable indicator of those industries than the industries of the affiliates—which often are holding companies—with which the parent firms have direct transactions and positions.

To demonstrate the differences in the distribution of data classified on these two basis, table 5 shows position and income estimates for U.S. direct investment abroad for 2003 both by industry of foreign affiliate and by industry of U.S. parent. As can be seen, in some cases the differences are substantial. For example, manufacturing accounts for only 21 percent of the position by industry of affiliate, but it accounts for 59 percent of the position by industry of parent. "Other industries," where holding companies are classified, in contrast, accounts for a much higher share of the position when classified by industry of affiliate than when classified by industry of parent—39 percent compared to 8 percent.

[14] A holding company is a company whose primary activity is holding the securities or financial assets of other companies. The increased use of holding-company affiliates is part of a broader trend in which the U.S. parents own foreign affiliates that, in turn, own other foreign affiliates. However, holding companies have contributed the most to this trend.

Another approach to coping with the problems of interpretation caused by holding companies is simply to use the financial and operating data instead of the direct investment position data. Because these data are uniformly classified according to the country where the affiliate's physical assets are located or where its primary activity is carried out, they accurately reflect the industries and countries in which the production of goods and services by foreign affiliates occurs. However, as measures of operations, they are not adjusted for the percentage of U.S. ownership and therefore cannot substitute for the position as measures of U.S. direct investments. In addition, some items in the financial and operating data may contain duplication among affiliates that, if not adjusted out, could allow users to arrive at misleading conclusions. The potential for this to occur is particularly great where holding companies are involved. For example, assets of the holding company will be duplicated in the assets of the affiliates that it holds. The same is true of profits, which will be recorded as profits both of the holding company and of the affiliates whose productive activities generate the profits.[15]

Still another approach to dealing with holding companies would be to reallocate flows and positions from the countries of the holding companies (and of any other companies through which indirectly owned affiliates may be held) to the countries of the operating affiliates. Because of the fungibility of money and the multiplicity of uses to which the funds made available by a direct investor to given holding company may be put, it is not clear that this could always be successfully accomplished. However, by following ownership chains, it might be possible to reallocate certain components of the position, such as that accounted for by equity capital.

As the share of U.S. direct investment abroad that is channelled through holding companies has grown, BEA has become more aware of the need to consider alternative or supplemental presentations that would better deal with these investments. In the months ahead, it hopes to explore the possibilities that may be available.

4.2 Corporate inversions

Corporate inversions are business reorganizations that occur when a U.S. corporation—most typically multinational—forms a corporation in a foreign tax haven and simultaneously "inverts" the corporate chain of ownership so that the new foreign corporation replaces the U.S. corporation as the parent of the global corporate group. Once this structure is in place, the U.S. company may choose to transfer the ownership of its foreign assets to the new foreign parent company, protecting them from U.S. tax. The inverted structure may also introduce opportunities to shift profits generated by domestic (U.S.) activities to the new foreign parent, thus further reducing U.S. taxes. A recent U.S. Treasury Department study observed that "while the so-called corporate inversion transactions are not new, there has been a marked increase recently in the frequency, size, and profile of the transactions."[16]

While the development of tax or regulatory policies regarding these transactions falls outside BEA's sphere of responsibility, the agency does have an obligation to consider their implications for economic statistics. In particular, some users have expressed a concern that these transactions—by creating U.S. affiliates whose ownership chain does not end abroad but leads back to the United States—could lead to an overestimate of the extent of foreign control in the business sector of the economy. When an inversion

[15] BEA's data allow these sources of duplication to be identified, in most cases. For example, balance sheet data for affiliates separately identify equity investments in other foreign affiliates, and income statement data separately identify income from such investments. In building up value added estimates from charges against production, BEA makes an adjustment to exclude income from equity investments from the profit-type-return component, so that profits are attributed to only one affiliate, which is the affiliate whose productive activities generate the profits.

[16] "Corporate Inversion Transactions: Tax Policy Implications," U.S. Department of the Treasury, Office of Tax Policy (May 2002).

occurs, it often is through an exchange of stock, in which shares in the newly created foreign corporation are exchanged for shares in the domestic corporation. These self-financing transactions result in large, but offsetting, financial flows in the U.S. international transactions accounts and large, offsetting entries in the international investment position accounts. The large financial account inflows on direct investment that result from the newly formed foreign corporation's acquisition of shares in the domestic corporation are offset by outflows on foreign securities accounts that result from the U.S. shareholders receiving the stock of the foreign corporation.

These procedures properly account for all transactions and positions, yet the usefulness of the data on inward direct investment may suffer due to the fact that investment in these inverted U.S. corporations, which are ultimately U.S.-owned, is commingled with investments by firms that have more bona fide foreign ownership.[17] At present, BEA is unable to segregate transactions and positions that involve inverted firms from those that do not. However, it is aware of the potential for these transactions to create problems of interpretation, and when large transactions occur. It generally takes note of them and explains the method of accounting for them in interpretive commentary that accompanies data releases. It will continue to monitor and study this phenomenon.

[17]Despite the fact that most or all of the shares in the offshore parent corporations are typically held by U.S. persons (specifically, the former U.S. shareholders of the U.S. corporation), these corporations generally would not be identified in statistics as having U.S. "ultimate beneficial owners" (UBOs), since the U.S. ownership usually is dispersed among many investors, each having a claim on only a small share of the total. (In U.S. statistics, the UBO of a U.S. affiliate of a foreign company is that person, proceeding up a U.S. affiliate's ownership chain, beginning with and including the foreign parent, that is not owned more than 50 percent by another person. Unlike the foreign parent (i.e., the first foreign person in the affiliate's ownership chain), the UBO of an affiliate may be located in the United States.)

Table 1.—Key Indicators of U.S. Direct Investment Abroad and of Foreign Direct Investment in the United States, 2003

(Billions of dollars)

U.S. Direct Investment Abroad	
Position at yearend:	
Historical cost	1,788.9
Current cost	2,069.0
Market value	2,730.3
Balance of payments flows:	
Financial outflows	173.8
Equity capital	24.6
Increases in equity capital	45.3
Decreases in equity capital	20.7
Reinvested earnings	141.1
Intercompany debt	8.1
Income receipts	187.5
Income on equity	181.5
Income on debt (net U.S. receipts)	6.1
Intrafirm services transactions:	
Royalties and license fees, net receipts	29.8
U.S. parents' receipts	32.5
U.S. parents' payments	2.7
Other private services, net receipts	9.1
U.S. parents' receipts	27.7
U.S. parents' payments	18.6

Table 1 (Cont'd). Key Indicators of U.S. Direct Investment Abroad and of Foreign Direct Investment in the United States, 2003

(Billions of dollars)

Foreign Direct Investment in the United States	
Position at yearend:	
Historical cost	1,378.0
Current cost	1,554.0
Market value	2,435.5
Balance of payments flows:	
Financial inflows	39.9
Equity capital	62.2
Increases in equity capital	74.1
Decreases in equity capital	11.9
Reinvested earnings	12.0
Intercompany debt	-34.4
Income payments	68.7
Income on equity	50.3
Income on debt (net)	18.3
Intrafirm services transactions:	
Royalties and license fees (net payments)	10.3
U.S. parents' receipts	13.7
U.S. parents' payments	3.4
Other private services, net	3.9
U.S. parents' receipts	16.9
U.S. parents' payments	20.8

Table 2.—Key Indicators of the Operations of Majority-Owned Nonbank Foreign Affiliates of U.S. Companies and of Majority-Owned Nonbank U.S. Affiliates of Foreign Companies, 2002

(Billions of dollars)

	Foreign affiliates of U.S. companies	**U.S. affiliates of foreign companies**
Total assets	6,209.8	4,556.6
Sales	2,548.6	2,043.5
Goods	2,034.5	1,548.0
Services	420.2	416.2
Investment income[1]	93.9	79.3
Net income	204.8	-51.2
U.S. exports of goods[2]	177.2	137.0
U.S. imports of goods[3]	199.3	324.6
Compensation of employees	269.3	307.1
Employment (thousands)	8,813.9	5,420.3
Value added	611.5	453.6
Capital expenditures	113.2	111.9
Research and development expenditures	21.2	27.5

[1]Investment income reported by companies, primarily those in finance and insurance, that record such income as operating revenue.

[2]For foreign affiliates, shows goods shipped to affiliates. For U.S. affiliates, shows goods shipped by affiliates.

[3]For foreign affiliates, shows goods shipped by affiliates. For U.S. affiliates, shows goods shipped to affiliates.

Table 3.—Ownership-Based Framework of the U.S. Current Account, 2001-2002

(Billions of dollars)

Line		2001	2002
1	Exports of goods and services and income receipts	1,284.9	1,229.6
2	Receipts resulting from exports of goods and services or sales by foreign affiliates	1,131.9	1,117.0
3	Exports of goods and services, total	1,007.6	974.1
4	To unaffiliated foreigners	693.9	…….
5	To affiliated foreigners	313.7	…….
6	To foreign affiliates of U.S. companies	230.4	…….
7	To foreign parent groups of U.S. affiliates	83.3	…….
8	Net receipts by U.S. companies of direct investment income resulting from sales by their foreign affiliates	124.3	142.9
9	Nonbank affiliates	121.7	140.7
10	Sales by foreign affiliates	2,929.6	…….
11	Less: Foreign affiliates' purchases of goods and services directly from the United States	256.8	…….
12	Less: Costs and profits accruing to foreign persons	2,032.4	…….
13	Compensation of employees of foreign affiliates	308.3	…….
14	Other	1,724.1	…….
15	Less: Sales by foreign affiliates to other foreign affiliates of the same parent	518.7	…….
16	Bank affiliates[1]	2.7	2.3
17	Other income receipts	153.0	112.6
18	Imports of goods and services and income payments	1,632.1	1,651.7
19	Payments resulting from imports of goods and services or sales by U.S. affiliates	1,383.2	1,441.6
20	Imports of goods and services, total	1,365.4	1,392.1
21	From unaffiliated foreigners	859.9	…….
22	From affiliated foreigners	505.5	…….
23	From foreign affiliates of U.S. companies	198.5	…….
24	From foreign parent groups of U.S. affiliates	307.0	…….

25	Net payments to foreign parents of direct investment income resulting from sales by their U.S. affiliates	17.8	49.5
26	Nonbank affiliates	15.1	47.0
27	Sales by U.S. affiliates	2,354.1	…….
28	Less: U.S. affiliates' purchases of goods and services directly from abroad	393.5	…….
29	Less: Costs and profits accruing to U.S. persons	1,945.5	…….
30	Compensation of employees of U.S. affiliates	350.6	…….
31	Other	1,594.9	…….
32	Less: Sales by U.S. affiliates to other U.S. affiliates of the same parent [2]	n.a.	n.a.
33	Bank affiliates[1]	2.7	2.4
34	Other income payments	248.8	210.0
35	Unilateral current transfers, net	-46.6	-58.9
	Memoranda:		
36	Balance on goods and services	-357.8	-418.0
37	Balance on goods, services, and net receipts from sales by affiliates (line 2 minus line 19)	-251.3	-324.6
38	Balance on current account	-393.7	-480.9

1. Details on underlying sales and expenses are not available for bank affiliates.

2. Not available but, because affiliates are required to report on a consolidated basis, probably immaterial.

Source: Adapted from "An Ownership-Based Framework of the U.S. Current Account, 1992-2002," *Survey of Current Business* 84 (January 2004): 66-68, which contains additional details. The underlying data have subsequently been revised, but certain adjustments needed for this framework will not be made until the presentation is updated in January 2005.

Table 4. U.S. Parent Share of Selected Measures of the Operations of U.S. Multinational Companies, 1977-2002

(Percent)

	Value added	Capital expenditures[1]	Employment
1977	75.3	79.8	77.9
1978	n.a.	n.a.	n.a.
1979	n.a.	n.a.	n.a.
1980	n.a.	n.a.	n.a.
1981	n.a.	n.a.	n.a.
1982	78.1	80.8	78.8
1983	n.a.	81.3	79.1
1984	n.a.	82.8	78.9
1985	n.a.	83.5	79.0
1986	n.a.	83.0	79.1
1987	n.a.	81.4	79.4
1988	n.a.	79.2	78.8
1989	76.6	77.5	78.6
1990	n.a.	77.6	77.5
1991	n.a.	76.6	76.9
1992	n.a.	76.8	76.8
1993	n.a.	76.4	77.1
1994	76.5	76.4	76.5
1995	74.6	76.6	75.8
1996	74.8	76.4	75.6
1997	75.1	77.7	75.4
1998	75.9	77.1	74.5
1999	77.2	76.5	74.8
2000	77.9	78.2	74.5
2001	76.4	78.9	73.5
2002	75.2	75.1	73.3

[1]Expenditures made to acquire, add to, or improve property, plant, and equipment.

Note. In this table, a U.S. multinational company is defined as a U.S. parent company and its majority-owned foreign affiliates.

Table 5. U.S. Direct Investment Position Abroad on a Historical-Cost Basis and Direct Investment Income, by Industry of Affiliate and by Industry of U.S. Parent, 2003

	By industry of foreign affiliate		By industry of U.S. parent	
	Position[1]	Income[2]	Position[1]	Income[2]
	Billions of dollars			
All industries	1,789	165	1,789	165
Mining	99	13	43	5
Utilities	27	2	51	2
Manufacturing	378	37	1,058	99
Wholesale trade	141	20	66	7
Information	48	5	82	9
Depository institutions	64	2	61	4
Finance (except depository institutions) and insurance	300	19	221	16
Professional, scientific, and technical services	41	5	65	8
Other industries	693	62	141	14
	Percent of total			
All industries	100	100	100	100
Mining	5.5	7.8	2.4	3.1
Utilities	1.5	1.2	2.8	1.4
Manufacturing	21.1	22.2	59.1	60.1
Wholesale trade	7.9	11.9	3.7	4.2
Information	2.7	3.3	4.6	5.8
Depository institutions	3.6	1.4	3.4	2.1
Finance (except depository institutions) and insurance	16.8	11.6	12.3	9.8
Professional, scientific, and technical services	2.3	2.8	3.7	5.1
Other industries	38.7	37.8	7.9	8.4

[1]At historical cost.

[2]In this table, unlike tables 1 and 3, income is shown net of withholding taxes and without a current-cost adjustment.