GAO

Report to the Committee on Finance, U.S. Senate

August 2008

# U.S. MULTINATIONAL CORPORATIONS

# Effective Tax Rates Are Correlated with Where Income Is Reported

On September 11, 2008, the PDF file was revised to show that the shaded bars in the graphics on pages 13, 15 and the highlights page represent the share of population in each rate range and the unshaded bars represent the share of the population's total positive domestic income attributable to taxpayers in each rate range, rather than the other way around.





Highlights of GAO-08-950, a report to the Committee on Finance, U.S. Senate

## Why GAO Did This Study

U.S. and foreign tax regimes influence decisions of U.S. multinational corporations (MNC) regarding how much to invest and how many workers to employ in particular activities and in particular locations. Tax rules also influence where corporations report earning income for tax purposes.

The average effective tax rate, which equals the amount of income taxes a business pays divided by its pretax net income (measured according to accounting rules, not tax rules), is a useful measure of actual tax burdens.

In response to a request from U.S. Senate Committee on Finance, this report provides information on the average effective tax rates that U.S.-based businesses pay on their domestic and foreign-source income and trends in the location of worldwide activity of U.S.-based businesses.

GAO analyzed Internal Revenue Service (IRS) data on corporate taxpayers, including new data for 2004 and Bureau of Economic Analysis data on the domestic and foreign operations of U.S. MNCs. Data limitations are noted where relevant.

GAO is not making any recommendations in this report.

To view the full product, including the scope and methodology, click on GAO-08-950. For more information, contact James White at (202) 512-9110 or whitej@gao.gov.

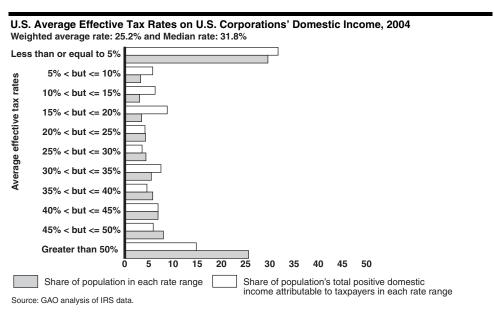
## U.S. MULTINATIONAL CORPORATIONS

# **Effective Tax Rates Are Correlated with Where Income Is Reported**

#### What GAO Found

The average U.S. effective tax rate on the domestic income of large corporations with positive domestic income in 2004 was an estimated 25.2 percent. There was considerable variation in tax rates across these taxpayers, as shown in the figure below. The average U.S. effective tax rate on the foreign-source income of these large corporations was around 4 percent, reflecting the effects of both the foreign tax credit and tax deferral on this type of income. Effective tax rates on the foreign operations of U.S. MNCs vary considerably by country. According to estimates for 2004, Bermuda, Ireland, Singapore, Switzerland, the United Kingdom (UK) Caribbean Islands, and China had relatively low rates among countries that hosted significant shares of U.S. business activity, while Italy, Japan, Germany, Brazil, and Mexico had relatively high rates.

U.S. business activity (measured by sales, value added, employment, compensation, physical assets, and net income) increased in absolute terms both domestically and abroad from 1989 through 2004, but the relative share of activity that was based in foreign affiliates increased. Nevertheless, as of 2004, over 60 percent of the activity (by all six measures) of U.S. MNCs remained located in the United States. The U.K., Canada, and Germany are the leading foreign locations of U.S. businesses by all measures except income. Reporting of the geographic sources of income is susceptible to manipulation for tax planning purposes and appears to be influenced by differences in tax rates across countries. Most of the countries studied with relatively low effective tax rates have income shares significantly larger than their shares of the business measures least likely to be affected by income shifting practices: physical assets, compensation, and employment. The opposite relationship holds for most of the high tax countries studied.



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## United States Government Accountability Office Washington, DC 20548

August 12, 2008

The Honorable Max Baucus Chairman The Honorable Charles E. Grassley Ranking Member Committee on Finance United States Senate

As globalization has intensified, cross-border investment has grown dramatically. U.S. businesses have had increasing flexibility in locating their activities abroad. From 1982 through 2007 the market value of U.S. direct investment abroad increased in real terms by more than a factor of 10.1

U.S. and foreign tax regimes influence economically significant decisions of multinational corporations (MNC), such as how much to invest and how many workers to employ in particular activities and locations. Tax rules also affect where corporations report income being earned, which may differ from the locations where their activities actually generated the income. (MNCs have various ways to shift income reported for tax purposes, including the manner in which they price transactions among affiliated entities within the corporate group.) Statutory tax rates do not provide a complete measure of the burden that a tax system imposes on business income because many other aspects of the system, such as exemptions, deferrals, tax credits, and other forms of incentives, also determine the amount of tax a business ultimately pays on its income. The average effective income tax rate that a business faces—the amount of income tax it pays divided by its pretax income—reflects the combined effects of all these tax system components. In order to gain a better understanding of the implications that the current tax system has for both the domestic and foreign operations of U.S. businesses, you asked us to provide information on (1) the average effective tax rates that U.S.-based businesses pay on their domestic and foreign-source income (before and after the application of credits) and the average effective tax rates that

<sup>&</sup>lt;sup>1</sup>Based on GAO analysis of Bureau of Economic Analysis data on the international investment position of the United States.

foreign-based businesses pay on their worldwide income and (2) trends in the location of the worldwide activity of U.S.-based businesses.

To estimate the average effective tax rates faced by U.S.-based businesses we used data that the Internal Revenue Service's (IRS) Statistics of Income division (SOI) collects from a variety of corporate tax forms and schedules.<sup>2</sup> To estimate domestic and foreign source income we used data from the new Schedule M-3, "Net Income (Loss) Reconciliation for Corporations with Total Assets of \$10 Million or More." We used the 2004 Schedule M-3, the only year available at the time we made our estimates. This schedule, which large U.S. corporate taxpayers must file, provides a detailed reconciliation of differences between income defined under financial accounting rules and income reported for tax purposes. We used both Form 1120, "U.S. Corporate Income Tax Return," and Form 1118, "Foreign Tax Credit—Corporations," to identify separately the U.S. taxes paid on domestic income and the residual U.S. tax paid on foreign-source income. Lastly, we used data from IRS Form 5471, "Information Return of U.S. Persons With Respect to Certain Foreign Corporations," to estimate the average combined (U.S. and foreign) effective tax rate on the worldwide income of U.S.-owned foreign corporations.<sup>3</sup> While there are limitations to the data provided on the Schedule M-3 and general reporting problems with tax return data, we determined that the data were reliable for our purpose of estimating ranges of average effective tax rates, provided that we include appropriate sensitivity analyses addressing the limitations. See appendix I for a further discussion of the data, methodology, and limitations.

To determine the information available on the average tax rates of companies domiciled in different countries, we reviewed the relevant literature through searches on Google Scholar and Web sites such as those of the Organization for Economic Cooperation and Development, the Institute of Fiscal Studies, the United Nations, the International Monetary

<sup>&</sup>lt;sup>2</sup>The word "average" in this term refers to the fact that the rate is the amount of tax that a corporation pays on each dollar of income, averaged across all of its income. We use the term weighted average tax rate when referring to an average of the average tax rates across a population of taxpayers in which each taxpayer's rate is given a weight equal to that taxpayer's share of the population's total income.

<sup>&</sup>lt;sup>3</sup>For both populations of corporations we estimated effective tax rates only for taxpayers with positive income because tax rates on losses in a given year are not meaningful and the inclusion of losses in our aggregate computations would obscure the effective rates paid by profitable companies.

Fund, and the World Bank. We compiled a list of articles that evaluated average corporate tax rates in one or more countries. We also reviewed the references of these studies to expand our list. The studies we found used firm financial or accounting data to calculate average tax rates. We were unable to find any studies that use foreign firms' tax returns.

To determine the recent trends in the worldwide activity of U.S. corporations and their foreign affiliates, we analyzed data from the Department of Commerce's Bureau of Economic Analysis's (BEA) benchmark surveys of U.S. multinational corporations at 5-year intervals (1989, 1994, 1999, and 2004). We based our analysis on a key set of indicators including value added, sales, net income, employment, compensation of employees, research and development, and physical assets. We reviewed BEA articles and interviewed BEA officials about the collection of data on U.S. direct investment abroad, as reported in the benchmark surveys. We determined that the data were reliable for our purpose of providing descriptive trend information on a variety of indicators of business activity. See appendix II for details relating to the data and their limitations. We conducted this performance audit from March 2007 to July 2008 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

## Results in Brief

We estimate that the weighted average U.S. effective tax rate on the domestic income of large corporations with positive domestic income in 2004 was 25.2 percent. There was considerable variation in tax rates across corporate taxpayers, with about one-third of the taxpayers having effective rates of 10 percent or less and a quarter of the taxpayers having rates over 50 percent. U.S. tax credits had a relatively small effect on these effective rates. We were not able to isolate the effects that other forms of tax preferences, such as exemptions or accelerated depreciation, had on the rates. Our estimate of the average U.S. effective tax rate on the foreignsource income is quite different conceptually from the effective tax rate on domestic income for two reasons. First, the United States imposes only a residual tax on foreign income, after providing a credit for foreign taxes paid on that same income. Second, a substantial portion of the foreign income earned by U.S. multinationals is not taxed until it is repatriated to the United States. As a result of this tax deferral and the foreign tax credit, the average U.S. effective tax rate on the foreign-source income of large

corporations was around 4 percent in 2004. Effective tax rates on the income of foreign operations of U.S. MNCs vary considerably by country. According to our estimates for 2004, Bermuda, Ireland, Singapore, Switzerland, the United Kingdom (UK) Caribbean Islands, and China had relatively low effective tax rates on the U.S. MNC operations (among countries that hosted significant shares of U.S. business activity), while Italy, Japan, Germany, Brazil, and Mexico had relatively high rates. Estimates from other studies of effective tax rates on all corporations based in foreign countries are consistent in some cases but not in others with our estimates for tax rates on U.S. corporations operating in those countries.

U.S. business activity (measured by sales, value added, employment, compensation, physical assets, and net income) increased in absolute terms both domestically and abroad from 1989 through 2004, but the relative share of activity that was based in foreign affiliates increased. Nevertheless, as of 2004, over 60 percent of the activity (by all six measures) of U.S. MNCs remained located in the United States. The extent to which activity is located abroad varies by industry. Among the three largest industries, finance and insurance has the lowest share of activity located abroad, while wholesale trade generally has the largest share. For example, only 19 percent of employment in finance and insurance was located abroad in 2004, while 36.2 percent of manufacturing employment and 42.9 percent of wholesale employment was located in foreign operations that year. Differences in tax rates across countries appear to influence how much income corporations report earning in particular countries, relative to the amount of other activity in those locations. With the exception of China, all of the countries with relatively low effective tax rates have income shares that are significantly larger than their shares of the three business activity measures least likely to be affected by incomeshifting practices: physical assets, compensation, and employment. In contrast, all of the countries with relatively high effective tax rates, except for Japan, have income shares that are smaller than their shares of physical assets, compensation and employment. The United Kingdom and Canada dominate all of the measures of activity, except for income. Germany also has at least a 5 percent share of all of the nonincome measures.

 $<sup>^4</sup>$ These islands are the Cayman Islands, the British Virgin Islands, the Turks and Caicos, and Montserrat.

We provided a draft of this report in July 2008 to the Secretary of Treasury for review and comments. Officials from the Department of the Treasury's Office of Tax Policy provided technical comments, which we incorporated as appropriate.

## Background

### **Effective Tax Rates**

Effective tax rates on corporate income can be defined in a variety of ways, each of which provides insights into a different issue. These rates fall into two broad categories—average rates and marginal rates. An average effective tax rate, computed as the ratio of taxes paid in a given year over all of the income the corporation earned that year, is a good summary of the corporation's overall tax burden during that particular period. In comparison, a marginal effective tax rate focuses on the tax burden associated with a specific type of investment (usually over the full life of that investment) and is a better measure of the effects that taxes have on incentives to invest. There is likely to be some correlation between average effective tax rates, marginal effective tax rates, and statutory tax rates across countries. In the remainder of the report, unless we specify otherwise, we use the term effective tax rate to mean an average effective tax rate.

Important methodological decisions to make when computing effective tax rates on corporate income are the scope of the corporate taxpayer to study and what measures of taxes and income to use. These decisions are ultimately driven by both conceptual considerations and data availability. These considerations will be different, depending on whether one is estimating separate effective tax rates on domestic income and foreign

<sup>&</sup>lt;sup>5</sup>For this reason, the finding we present below regarding the relationship between average effective tax rates and the size of a country's share of total MNC income (relative to its shares of other business activity) does not contradict CBO's conclusion that statutory tax rates are the tax system components that most strongly influence income-shifting behavior. (See CBO, Corporate Income Tax Rates: International Comparisons, November 2005.) Our study was not designed to identify the best measures to use for estimating the influence of taxes on particular types of behavior; rather, its objective is simply to provide information on both average effective tax rates and the location of U.S. MNC business activity. Cross-country empirical studies using all three types of measures have found negative influences between taxation and the location of foreign direct investment. (For a recent review of such studies see OECD, Tax Effects on Foreign Direct Investment: Recent Evidence and Policy Analysis, OECD Tax Policy Studies No. 17, 2007.)

income or simply a single effective tax rate on worldwide income. Our various estimates and those of others that we present below are based on the same fundamental definition of an average effective tax rate but reflect variations in scope and data as appropriate for the different populations being examined.

The Nature of U.S. Multinational Corporations and How the Federal Government Taxes Their Income

Large U.S. corporate taxpayers are often complicated groups of separate legal entities. A parent corporation may directly own (either wholly or partially) multiple subsidiary corporations. In turn, these subsidiaries may own other corporate subsidiaries, and any of these corporations may own stakes in partnerships. A domestic parent corporation (one that is organized under U.S. laws) may head a large group of affiliated businesses that includes both domestic and foreign subsidiaries and partnerships. The timing of when these various entities pay U.S. tax on their income and the tax return on which their income and taxes are reported varies depending on both the location of the entities and choices made by the parent corporation. These timing and reporting differences, which are summarized in table 1 and table 2, matter in the estimation of effective tax rates. In particular, the fact that the income of a controlled foreign corporation (CFC) is not reported or taxed on a U.S. return until it is recognized under Subpart F or repatriated in the form of dividends means that an effective tax rate estimate based solely on income reported for tax purposes would not reflect the tax treatment of a significant component of the income of MNCs. This limitation is one reason why prior analysts have used income reported on financial statements, rather than tax-reportable income, when computing effective tax rates.

Table 1: Typical Domestic Components of a U.S. Multinational Corporate Group and How the Income of the Group Generally Is Taxed

	When and where U.S. federal income tax is paid on different types of income				
Separate legal entities of U.S. multinational corporate group "A"	Income prior to distributions (includes both domestic-source income and foreign-source income from the entity's direct operations)	Distributions from the specific entity to the tax-consolidated group			
Parent corporation "A"	Taxed in current year on the consolidated return.	Not applicable (parent corporation does not make distributions to the group).			
Wholly owned domestic subsidiaries <sup>a</sup>	Taxed in current year. May be included on the consolidated return or subsidiaries may file their own returns. If the subsidiary is consolidated, all of its income and tax will be included on the consolidated return. If it is not included, none of its income or tax will be in corporate group A's consolidated income, unless a member of the group receives a distribution from the subsidiary.	If the subsidiaries are consolidated, any dividends they pay to other members of the consolidated group are not taxed. If the subsidiaries are not consolidated, the recipient includes the dividend in taxable income but is able to deduct 80 percent of the amount received. <sup>b</sup>			
Partially owned domestic subsidiaries					
Ownership share of 80 percent or more	Same as for wholly owned domestic subsidiaries.	Same as for wholly owned domestic subsidiaries.			
Ownership share of greater than or equal to 20 percent but less than 80 percent	Taxed in current year. None of this income is included in corporate group A's consolidated income unless a member of the group receives a distribution. Instead, the entity must report it on its own return.	The recipient includes the dividend in taxable income but is able to deduct 80 percent of the amount received. <sup>b</sup>			
Domestic portfolio equity investments (ownership shares of 20 percent or less)  Taxed in current year. None of this income or tax is reported on parent corporate group A's consolidated return, unless a member of the group receives a distribution. Instead, the entity must file its own return or be consolidated with a different parent corporation		The recipient includes the dividend in taxable income but is able to deduct 70 percent of the amount received. <sup>b</sup>			
Shares in domestic partnerships  Taxed in current year. The income is not taxed at the partnership level; rather, it is passed through to the group member with the ownership share and reported on the consolidated return.		Not applicable (partnerships do not make distributions; their income is directly allocated among partners).			

Source: GAO Summary based on U.S. Internal Revenue Code.

<sup>a</sup>Taxpayers have the option of including the shaded entities in a consolidated tax return. None of the entities that are unshaded may be included in the tax consolidation; however, distributions from these unconsolidated entities to any of the consolidated group members are included in the group's taxable income.

<sup>b</sup>The dividend received deductions are subject to certain limitations. In addition, dividends received on debt-financed stock are permitted a reduced deduction.

Table 2: Typical Foreign Components of a U.S. Multinational Corporate Group and How the Income of the Group Generally Is Taxed

	When and	I where U.S. federal income tax is	paid on different types of	income
	Income prior to distributions		Distributions from the specific entity to the tax-consolidated Group	
Separate legal entities of U.S. multinational corporate group "A"	Domestic-source Income	Foreign-source income of the entity's direct operations	Paid out of domestic- source income	Paid out of foreign- source income
CFCs <sup>a</sup>	Income that is "effectively connected" with the conduct of a trade or business within the United States is generally taxed in current year. None of this income is included in corporate group A's consolidated income unless a member of the group receives a distribution. Instead, the entity must report it on its own U.S. tax return. Certain types of investment income,	Generally the tax on this income is not due until the income is repatriated to the United States in the form of dividends. However, under certain circumstances, antideferral provisions may apply, causing the income to be taxed currently. One such provision, known as subpart F, disallows deferral of certain types of income, such as interest, dividends, other passive investment income, and certain types of income derived from buying or selling goods or services to or from a related U.S. person or entity.	The recipient includes the dividend in taxable income but is able to deduct 100 percent of the amount received from wholly owned subsidiaries and 80 percent of the amount received from any subsidiary of which it owns at least 20 percent.	These dividends are normally included in the recipient's taxable income in the year that they are paid. However, a recipient could make a special onetime election to deduct 85 percent of the dividends received from CFCs during either the recipient's last tax year beginning before October 22, 2004, or its first tax year beginning after that date.
Foreign corporations that are not CFCs	such as dividends and interest, not effectively connected, are subject to a flat rate tax known as the 30 percent withholding tax.  There are exceptions to these rules, such as those set out in various tax treaties.	Generally the tax on this income is not due until the income is repatriated to the United States in the form of dividends. Subpart F generally does not apply to these corporations. However, other antideferral provisions, including passive foreign investment company (PFIC) rules, could apply. <sup>b</sup>	The recipient includes the dividend in taxable income but is able to deduct 80 percent of the amount received from any subsidiary in which they own at least a 20 percent share and 70 percent of the amount received from any corporation in which it owns less than a 20 percent share.°	These dividends are included in the recipient's taxable income in the year that they are paid.
Shares in foreign partnerships	tax purposes, the incom rather, it is passed throu	treated as a partnership for U.S. e is not taxed at the entity level; agh to the group member with the ported on the consolidated return.	Not applicable (partnersh distributions; their income among partners).	

Source: GAO summary based on U.S. Internal Revenue Code.

<sup>a</sup>A CFC is a corporation that is incorporated outside of the United States but that is more than 50 percent owned (by vote or value) by one or more U.S. shareholders, each of whom owns at least 10 percent of the CFC's voting stock.

<sup>b</sup>Generally, a foreign corporation is a PFIC if 75 percent of the corporation's income is passive income or if 50 percent of its assets are passive assets. Each U.S. shareholder of a PFIC can choose to be taxed in one of two (or in the case of marketable stock, one of three) ways. They may choose to be taxed currently on the PFIC's earnings; they may defer payment of this tax on earnings, but will pay an interest charge; or, in the case of shareholders of marketable stock, their tax may be based on the appreciation or depreciation in the value of that stock.

<sup>c</sup>At least 10 percent of the stock of such corporation (by vote or value) must be owned by the U.S. corporation and no foreign tax credit is allowed with respect to the domestic source portion.

Two aspects of the U.S. tax treatment of foreign income lead to much lower U.S. tax burdens on foreign income than on domestic income, which is one reason why it makes sense to look at these effective tax rates separately. The first aspect is the aforementioned deferral of tax on the income of CFCs generally until that income is repatriated. The second aspect is the foreign tax credit, which is designed to prevent the double taxation of foreign income (once by the government of the country in which the income is earned and once by the United States). In effect, the United States taxes the foreign income only to the extent that the U.S. corporate tax rate exceeds the foreign rate of tax on that income. If the foreign rate of tax is equal to or exceeds the U.S. rate, the United States collects no tax on that income.

Department of the Treasury tax regulations generally effective since January 1, 1997 have an important influence on some of the effective tax rate estimates and data on business activity location that we present below. These regulations, 6 commonly known as check-the-box rules, permit corporate groups to treat a wholly owned entity either as a separate corporation or to "disregard" it as an unincorporated branch simply by checking a box on a tax form. Taxpayers have used this flexibility to create "hybrid entities," which are business operations treated as corporations by one country's tax authority and as unincorporated branch operations by another's. Hybrid entities can be used in a variety of ways for tax-planning purposes. In one example, a U.S. MNC can put substantial equity into a finance subsidiary located in a low-tax country. That subsidiary then can lend money to an affiliate in a high-tax country to finance most of the latter's operations. The high-tax affiliate makes taxdeductible interest payments to the finance subsidiary, which will pay a low rate of tax on this interest income. Prior to the check-the-box rules the interest income of the finance subsidiary would have been subject to U.S. tax on a current basis under the subpart F rules. Now, however, the taxpayer can, in certain circumstances, treat the high-tax affiliate as an

<sup>&</sup>lt;sup>6</sup>26 C.F.R. §§ 301.7701-1-4.

unincorporated branch of the low-tax subsidiary, so the interest payment is not recognized as a transaction for U.S. tax purposes. Subject to Subpart F, the United States only taxes that income if it is repatriated.

The American Jobs Creation Act of 2004<sup>8</sup> provided a temporary incentive for U.S. MNCs to repatriate income from their CFCs. The act allowed recipients to make a special, one-time election to deduct 85 percent of "extraordinary" dividends received from CFCs during either the recipient's last tax year beginning before October 22, 2004, or its first tax year beginning after that date, provided that the CFCs' dividends were not funded by money borrowed from their U.S. shareholders and provided that the repatriated funds were used for allowable domestic investments. Dividends were extraordinary to the extent that they exceeded the average dividends that the shareholder received from its CFCs over the previous 5 years (disregarding the highest and lowest amounts out of those 5 years). IRS tracked the amount of qualified dividends repatriated under this provision and found that 843 corporate owners of CFCs reported the receipt of \$312.3 billion in qualified dividends from tax years 2004 through 2006. Only \$9.1 billion of this total was repatriated during tax year 2004, the year on which most of our data analyses are based. At various points below we discuss how this tax provision may make some of our specific results for 2004 differ from those of surrounding years.

# Income Reporting on Financial Statements

Publicly traded corporations are required to produce financial statements according to guidelines established by the Financial Accounting Standards Board. The income reporting in these financial statements (commonly known as book income) differs in important ways from the income that the corporations report on their federal tax returns. One key difference is that book income will include a parent corporations' share (in proportion to its ownership share) of all of the income of all subsidiaries, both domestic and foreign, in which it has at least a 20 percent ownership

<sup>&</sup>lt;sup>7</sup>The high-tax foreign country still considers the affiliate located there to be a separate corporation and, therefore, allows a tax deduction for its interest payments. For further discussion of tax planning strategies based on hybrids see Rosanne Altshuler and Harry Grubert, "Governments and Multinational Corporations in the Race to the Bottom," *Tax Notes*, February 27, 2006, pp. 979-992.

<sup>&</sup>lt;sup>8</sup>Pub. L. No. 108-357 (2004).

<sup>&</sup>lt;sup>9</sup>See Melissa Redmiles, "The One-Time Received Dividend Deduction," *Statistics of Income Bulletin*, vol. 27, no.4, (2008): 102-114.

stake. Other differences arise because income reported for tax purposes reflects the effects of various incentives and disincentives embedded in the tax code (such as accelerated depreciation to encourage investment and limits on deductible compensation to discourage excessive payments).

In the early 1980s, the Joint Committee on Taxation developed an approach for using book income and taxes to estimate effective tax rates of foreign taxes on foreign-source income, U.S. taxes on domestic income, and worldwide tax on worldwide income. A limitation of this approach was that the book measures of taxes did not allow a distinction between U.S. taxes paid on domestic income and the U.S. residual tax on foreign-source income. This limitation can be overcome by using data from Schedule M-3 of the federal tax return, which just recently became available to researchers.

## Information Available from Schedule M-3

Beginning with tax year 2004, U.S. domestic corporations with assets of \$10 million or more are required to include the Schedule M-3 in their tax returns. 11 This schedule requires taxpayers to provide a more detailed reconciliation of their book income and their tax income than what was required in earlier years. Data from the Schedule M-3 allow for the computation of effective tax rates, with some limitations, that use book measures of income and taxes actually reported on returns. As a result, one can take advantage of the broader scope of foreign-source income reported in financial statements and the more detailed information on taxes paid, which permits a separation of U.S. taxes paid on domestic and foreign income. However, some data limitations remain (these are discussed in detail in app. I). The most significant limitation is that the data do not permit a comprehensive measurement of foreign income without some double counting of income. This limitation is best addressed by estimating a range of effective tax rates for foreign income using alternative measures of income. The most inclusive measure is likely to contain some double counting and, therefore, cause an understatement of

<sup>&</sup>lt;sup>10</sup>GAO subsequently replicated this approach to produce updated estimates in 1990 and 1992 (GAO, *Tax Policy: 1987 Company Effective Tax Rates Higher Than in Prior Years*, GAO/GGD-90-69 (Washington, D.C.: May 10, 1990), and *Tax Policy: 1988 and 1989 Company Effective Tax Rates Higher Than in Prior Years*, GAO/GGD-92-111 (Washington, D.C.: Aug. 19, 1992)).

<sup>&</sup>lt;sup>11</sup>SOI's corporate taxpayer sample for tax year 2004 was the most recent sample available at the time we conducted our analyses and was the first sample to include data from the Schedule M-3.

the effective rate. The least inclusive measure avoids double counting but will leave out some income that should be included, causing an overstatement of the effective rate. The true effective tax rate should be between the upper and lower bound of this range.

Effective Rates of Tax on the Income of Large U.S. Corporations Vary Considerably Both in the United States and across Foreign Locations The weighted average U.S. effective tax rate on the domestic income of large corporations with positive domestic income in 2004 was 25.2 percent, while the median effective tax rate for this population of corporations was 31.8 percent. However, as figure 1 shows, under these two summary measures there was considerable variation in effective tax rates across taxpayers. At one extreme, 32.9 percent of the taxpayers, accounting for 37.5 percent of income, had average effective tax rates of 10 percent or less; at the other extreme, 25.6 percent of the taxpayers, accounting for 14.8 percent of income, had effective tax rate over 50 percent. The average effective tax rates for the remainder of the taxpayers were fairly evenly distributed between these two extremes.

<sup>&</sup>lt;sup>12</sup>The weighted average effective rate is actually an average of the individual average tax rates of all the corporations with positive income. Each corporation's effective tax rate is weighted by that corporation's share of the population's income. The weighted average was lower than the median because corporations with lower rates accounted for a disproportionate share of the population's total positive income.

<sup>&</sup>lt;sup>13</sup>A corporation's average effective tax rate can exceed the statutory rate because of differences between financial and tax reporting. For example, depreciation for tax purposes follows the Modified Accelerated Cost Recovery System, which results in depreciation at an accelerated pace compared to depreciation for financial purposes. Firms that are no longer investing may show financial income lower than tax income in years where they have exhausted depreciation for tax purposes but continue to deduct depreciation for financial purposes. Similarly, items that cause a greater amount of income in the current period for tax purposes than they do for book purposes could result in average effective tax rates above the statutory rate. For example, bad debt expense is deducted when estimated for financial purposes but is not deductible for tax purposes until the debt has actually gone bad.

<sup>&</sup>lt;sup>14</sup>In order to determine the extent to which our weighted average and median estimates were influenced by outliers, we recomputed our estimates after dropping out cases with effective tax rates in the top 1 percent of the distribution. This sensitivity test reduced our estimated weighted average and median by less than 1 percentage point each. We also tested our results for sensitivity to potential data quality issues arising from the fact that 2004 was the first time that taxpayers had to fill out a Schedule M-3. This sensitivity test involved reestimating all the results after excluding data for all taxpayers that had internal inconsistencies in the data they reported on the sections of the Schedule M-3 that we used (although not in the specific line items that we used). The exclusion of these cases raised our estimate of the weighted average effective tax rate on domestic income to 28.6 percent for those with positive domestic income.

Weighted average rate: 25.2% and Median rate: 31.8% Less than or equal to 5% 5% < but <= 10% 10% < but <= 15% Average effective tax rates 15% < but <= 20% 20% < but <= 25% 25% < but <= 30% 30% < but <= 35% 35% < but <= 40% 40% < but <= 45% 45% < but <= 50% Greater than 50% 15 45 50 Percentage positive Share of population in each rate range Share of population's total positive domestic income attributable to taxpayers in each rate range Source: GAO analysis of IRS data.

Figure 1: U.S. Average Effective Tax Rates on Domestic Income

The Residual U.S. Average Effective Tax Rate on the Foreign Income of Large U.S. Corporations in 2004 Was Less Than 5 Percent

In order to address limitations in the available income data, we estimated the residual U.S. average effective tax rate on foreign-source income using three alternative income measures. Our estimates of the weighted average effective tax rates for large taxpayers with positive foreign income ranged

from 3.9 percent to 4.2 percent, depending on which income measure we used. The true weighted average should fall somewhere within this range.<sup>15</sup>

The residual U.S. average effective tax rates on foreign income are very low for a combination of reasons that make this measure conceptually quite different from our effective tax rate on domestic income. First, in cases where a U.S. MNC has paid foreign income taxes at a rate that is close or equal to the U.S. tax rate, the U.S. foreign tax credit eliminates most or all of the U.S. tax liability on that corporation's foreign-source income. Second, in many cases a substantial portion of the foreign-source income earned by U.S. MNCs is not taxed until it is repatriated to the United States. The denominator of our tax rate reflects all of the foreign income that was earned in 2004, but the numerator includes only taxes that were actually paid in 2004. Consequently, the numerator does not include any tax on nonrepatriated 2004 income; however, it does include tax on repatriated dividends paid out of income that CFCs earned prior to 2004. It is important to recognize that tax deferral does not necessarily mean that the tax will never be paid.

Figure 2 presents estimates for the distribution of effective tax rates that are based on our broadest income measure. The distributions of effective tax rates based on our other income measures did not look dramatically different. Approximately 80 percent of the large taxpayers with positive foreign income, accounting for about 30 percent of that population's total foreign income, paid no federal income tax on that income. An additional 8.5 percent of this population, accounting for about 52 percent of the foreign income, had positive average effective U.S. tax rates of 5 percent or less. Less than 10 percent of this population had effective tax rates over

<sup>&</sup>lt;sup>15</sup>As noted earlier, there is likely to be some doublecounting of foreign income if we include equity method income (the income of foreign subsidiaries that are not majority-owned by any U.S. parent but that are at least 20 percent owned by a U.S. corporation in our population). Similarly, there would be some double-counting if we included distributions and dividends from foreign subsidiaries. However, excluding these types of income completely would result in an understatement of foreign income. Our broadest measure of foreign-source income includes the total income from majority-owned foreign subsidiaries, plus the equity method income, plus all dividends and distributions from foreign subsidiaries. Compared to this first measure, our intermediate measure excludes equity method income. Our narrowest measure excludes both equity method income and all dividend and distributions from foreign subsidiaries. As we did for our earlier estimates, we tested these results for sensitivity to potential data quality issues. After excluding data for all taxpayers that had internal inconsistencies in the data they reported on the sections of the Schedule M-3 that we used, our range of estimates was lowered to from 3.2 percent to 3.6 percent.

10 percent. The taxpayers with the higher effective rates may have had relatively high ratios of repatriations over current-year income from their CFCs, or the dividends that they repatriated may have been paid out of income earned in relatively low-tax locations.

Weighted average rate: 3.9% and median rate: 0.0% Zero ETR 0% < but <= 5% 5% < but <= 10% Average effective tax rates 10% < but <= 15% 15% < but <= 20% Greater than 20% 10 20 30 40 50 80 Percentage positive Share of population in each rate range Share of population's total positive foreign income attributable to taxpayers in each rate range

Figure 2: U.S. Average Effective Tax Rates on Foreign-Source Income

Due to the incentives under the American Jobs Creation Act of 2004, the ratio of repatriations to CFC income may have been different in 2004 than it was in surrounding years. Some U.S. MNCs may have delayed repatriations in the year or two prior to the year in which the made a one-time "extraordinary" dividend payment, so that their repatriations first were lower than normal, then became higher than normal. The timing of this behavior could have varied across firms, depending on when their management became sufficiently confident that the tax preference would be enacted, the timing of their tax years, and other factors. The IRS data on repatriated income presented earlier suggest that the 2004 ratio of

repatriations is likely to be lower than the ratio for 2005 and, perhaps,

Source: GAO analysis of IRS data.

2006. The effects of these differences on the average effective rates of tax on foreign-source income in all of those years are uncertain. On the one hand, a higher rate of repatriation would mean that more of the CFCs' income would become subject to U.S. taxation in that year; on the other hand, the temporary deduction would effectively exclude 85 percent of the repatriations from U.S. taxable income.<sup>16</sup>

Tax Credits Have a Relatively Small Effect on U.S. Average Effective Tax Rates We estimated the effect of federal income tax credits (other than the foreign tax credit) on U.S. average effective tax rates by computing rates before and after the inclusion of the credits. We found that these credits reduced the precredit tax liabilities on domestic income by a weighted average 1.7 percentage points (from 26.9 percent to 25.2 percent). We also found that tax credits reduced the precredit tax liabilities on foreign-source income by a weighted average 0.8 percentage points. These estimates indicate the extent to which tax preferences in the form of tax credits reduce corporate tax burdens. We have no way to precisely measure the effects of other forms of tax preferences, such as exemptions or accelerated depreciation. These other forms of preferences explain some of the differences between the precredit effective tax rates shown in figure 1 and the 35 percent statutory rate; however, there are differences between book and tax income that are not tax preferences that also explain some of the differences.

<sup>&</sup>lt;sup>16</sup>The real effect of the temporary incentive is to replace a tax deferral benefit with a significant tax reduction benefit. This is not an effect that would be readily discernable in a comparison of average effective tax rates across tax years immediately surrounding and including 2004.

<sup>&</sup>lt;sup>17</sup>We disregarded the foreign tax credit for this analysis because our focus was on tax preferences in the form of credits. The foreign tax credit typically is not considered to be a tax preference; rather, it is a mechanism for avoiding the double taxation of income. This provision reflects the general international convention of giving taxing precedence to the country where the income is generated.

<sup>&</sup>lt;sup>18</sup>The size of this gap was essentially the same regardless of which measure of foreign income we used. Our sensitivity test for data quality concerns resulted in moderately smaller estimates for the effects of tax credits on the average effective tax rates on both domestic and foreign-source income.

Average Effective Tax Rates on the Worldwide Income of U.S. Controlled Foreign Corporations Vary Widely by Principal Place of Business

The U.S. average effective tax rates that we presented above do not reflect the taxes that U.S. businesses pay on their foreign-source income to foreign governments. The effective rates of foreign tax are likely to be one of several factors that influence the specific location of U.S. business activity abroad. Economists have used different approaches to estimate these effective foreign taxes. Each of these approaches has limitations; however, when used in combination, these approaches provide broadly consistent effective tax rate rankings for many important locations of U.S. business activity.

Effective Tax Rates on All CFCs with Positive Income in 2004

One estimation approach used by researchers with access to IRS tax data has been to compute effective rates of tax paid by U.S. CFCs as the ratio of the total income taxes that a CFC pays on its worldwide income, divided by that worldwide income. The income from CFCs represents a significant component of U.S. businesses' foreign-source income. We used IRS data on CFCs for 2004 to estimate that the average combined (U.S. and foreign) effective tax rate on the worldwide income of CFCs (excluding those that had negative income) was 16.1 percent. <sup>19</sup> One limitation of this estimation approach is that when aggregated, the CFC income data double counts income earned by lower-tier CFCs that is distributed to higher-tier CFCs in the form of dividends. We computed a separate effective tax rate for manufacturing CFCs only, which exclude holding companies that may be used to accumulate income from lower-tier CFCs. We found that the rate for manufacturing CFCs, at 15.4 percent, was actually lower than the rate for all CFCs. One possible explanation for this result is that, if U.S. MNCs do route substantial amounts of dividends to holding company CFCs, the dividend-paying businesses may be hybrid entities that are disregarded for U.S. tax-reporting purposes rather than CFCs themselves. That practice would make sense from a tax-planning standpoint. Under such an arrangement, the income of the hybrid entities would not be reported separately in the IRS data we used; it would be counted only once, as part of the income of a higher-tier CFC.

Our estimate for the effective rate of tax on manufacturing CFCs is significantly lower than the 21 percent effective rate that Altshuler and

<sup>&</sup>lt;sup>19</sup>To the extent that some CFCs have operations in the United States the effective tax rate reflects some income from and taxes paid to the United States; however, in 2004 CFCs that identified the United States as their principal place of business accounted for only 0.02 percent of total positive CFC income. Any U.S. taxes that are included will only be those that the CFCs pay themselves and not any additional tax that their U.S. parent companies may pay on dividends from the CFCs.

Grubert estimated for manufacturing CFCs for tax year 2001. Those authors noted that the effective tax rate has declined steadily from 33 percent in 1980. Our estimate suggests that effective rates may have continued to drop since 2001. This decline predominantly represents a reduction in the amount of tax paid to foreign governments, not to the United States. Altshuler and Grubert conclude that a significant portion of the effective tax rate reduction may be attributable to the increased taxplanning flexibility that U.S. MNCs have enjoyed since the introduction of the check-the-box rules. Oosterhuis (2006) points to Altshuler and Grubert's recent estimates as evidence of how the check-the-box rules have enabled U.S. MNCs to reduce their payments of foreign taxes. Oosterhuis notes that, although a reduction in foreign taxes may make U.S. MNCs more competitive overseas against foreign MNCs, it also makes foreign investment by U.S. MNCs more attractive relative to investment in the United States.

Another approach for estimating the effective tax rate on the foreign-source income of U.S. businesses is to use BEA's data on the operations of U.S. MNCs, which includes the amount of net income earned and foreign taxes paid by foreign affiliates of these MNCs. In the case of U.S. majority-owned foreign affiliates, the BEA data permit one to compute net income with and without equity income. The latter measure of income eliminates some important forms of double counting (discussed below). An unavoidable limitation of BEA's foreign affiliate income measure for the purposes of estimating effective tax rates is that it includes negative values for affiliates that incur losses. As a consequence, when the income data are aggregated at the country level or for the full population, the net

<sup>&</sup>lt;sup>20</sup>There are also some differences in scope between the tax data files we used and those that Altshuler and Grubert used, which could also contribute to some of the difference between our results.

<sup>&</sup>lt;sup>21</sup>Paul W. Oosterhuis, "The Evolution of U.S. International Tax Policy—What Would Larry Say," *Tax Notes International*, June 6, 2006: 1119-1128. See also the Statement of Paul W. Oosterhuis, Testimony Before the Subcommittee on Select Revenue Measures of the House Committee on Ways and Means, June 22, 2006.

<sup>&</sup>lt;sup>22</sup>See, for example, Martin A. Sullivan, "U.S. Multinationals Paying Less Foreign Tax," *Tax Notes*, March 17, 2008. The extent to which the population of majority-owned foreign affiliates represented in the BEA data differs from the population of CFCs represented in the IRS data is difficult to determine. The criteria for qualifying as a CFC are not exactly the same as BEA's criteria for majority-owned foreign affiliates. For example, BEA's data covers majority-owned partnerships, which would not be in the CFC population. However, if those partnerships are owned by an intermediate level of CFCs, then their income should be reflected in the CFC data.

value will be lower than the aggregate income of just those businesses that are profitable. In the absence of any offsetting factors, effective tax rates that have this income measure as the denominator will overstate the rates that profitable businesses pay. Using data from BEA's 2004 benchmark survey, we estimate that the average effective tax rate on foreign affiliates was 28.7 percent, significantly higher than our estimate based on CFC data.

Effective Tax Rates by Principal Place of Business

Although the CFC data may be preferable to the BEA data for estimating an overall average effective tax rate for the foreign operations of U.S. MNCs, the former data provide an imperfect basis for estimating average effective tax rates for specific countries. Although the CFC data can be aggregated by principal place of business, the allocation of income and taxes paid by principal place of business is not perfectly correlated with where the income and taxes of the CFCs are actually earned and paid because some CFCs earn income and pay taxes in multiple locations. The growing use of hybrid entities has likely reduced this correlation, particularly for CFCs located in countries that are favored locations for accumulating income. Some hybrids may formerly have been CFCs with separate U.S. tax filing requirements that indicated where their principal operations were located. Now, as hybrids, their income and tax data would not be separated from that of the CFCs into which they have become absorbed for U.S. tax-reporting purposes. Consequently, the data for those hybrids are now associated with the country where the CFC has its principal operations, rather than where the hybrid has its own operations. In contrast, the BEA data treat the disregarded hybrid entities as separate affiliates, and their data are associated with the countries where their physical assets are located or where their primary activities are carried out. An important exception to this general treatment applies in the case of holding companies. When a corporation has physical assets or operations in multiple foreign countries, it is classified as a holding company and the assets assigned to its country of incorporation include the equity that it holds in the operations in the other countries. Those outside operations are reported as separate foreign affiliates, so when the BEA data are aggregated there is some double counting of assets.

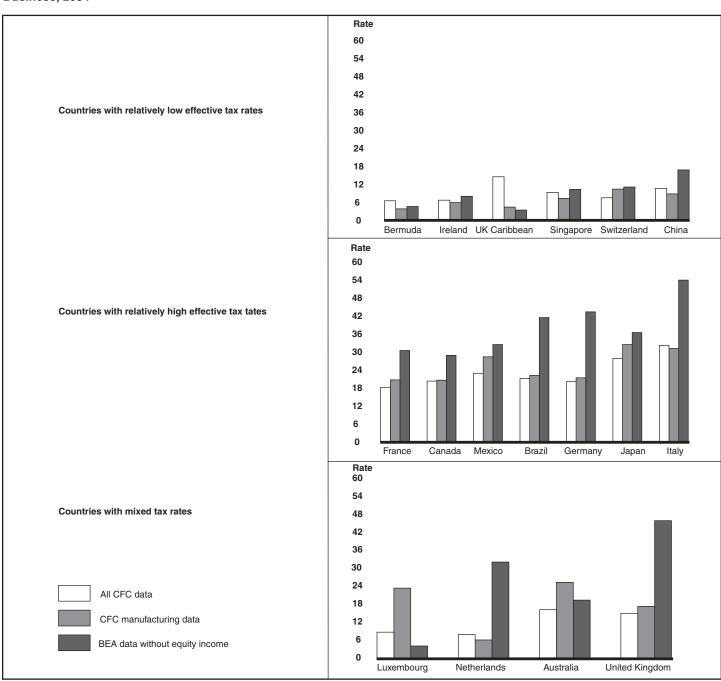
<sup>&</sup>lt;sup>23</sup>This overstatement could be increased to the extent that foreign affiliates pay tax to their host countries on dividends that they receive from investments in other countries. (When equity income is excluded, the dividend income is removed from the denominator of the effective tax rate calculation, but any tax paid on those dividends remains in the numerator.) However, corporations have an incentive to channel dividends through countries with territorial tax systems that do not tax income earned in other countries.

Figure 3 compares the three effective tax rates we estimated for 17 of the most important foreign locations of U.S. MNC operations, based on their shares of various measures of U.S. business activity. 24 In most cases the effective tax rates based on BEA data are higher than those based on either set of CFC data. Despite the variation in results from the three different measures, one subset of countries (shown in the top panel) can be identified as having relatively low effective rates of tax on the U.S. business operations located there. <sup>25</sup> Similarly, a subset of countries (shown in the middle panel) has relatively high rates (over 18 percent) by any of the three measures. Of the remaining four countries, Australia is near the boundary between high and low effective rates by all three measures, the Netherlands and the United Kingdom are shown to have low effective tax rates according to the CFC data but high rates according to the BEA data, and Luxembourg appears to have very low overall effective tax rates, but not for manufacturing CFCs. Later in the report we show how the distribution of activity by foreign affiliates of U.S. MNCs differs across these three groups of countries.

<sup>&</sup>lt;sup>24</sup>These 17 cases represent all the countries in which the operations of U.S. foreign affiliates accounted for at least 3 percent of the worldwide activity of all U.S. foreign affiliates when measured in terms of sales, value added, physical assets, employees, compensation, or pretax net income.

 $<sup>^{25}</sup>$ The effective tax rates by all three measures for these countries were 17 percent or less.

Figure 3: Average Effective Tax Rates on the Worldwide Income of CFCs and Other Foreign Affiliates, by Principal Place of Business, 2004



Source: GAO analysis of IRS data.

The Repatriated Foreign-Source Income of U.S. Corporate Taxpayers Is Composed of Various Types of Income We were not able to disaggregate the worldwide income of U.S. corporate taxpayers by character of income with the data that were available. However, we were able to present such a disaggregation for an important form of income: the foreign-source income that was subject to the federal income tax (prior to the application of foreign tax credits) in 2004. Figure 4 shows that no single form of income predominates. "Grossed-up" dividend income, the largest type of income, accounted for 24.6 percent of this foreign-source income. The next most important type of income (that could be broken out separately) was that from foreign branch operations (direct foreign operations of U.S.-based corporations that were not established as separate legal entities) with a 20.2 percent share, followed by rents, royalties, and license fees with a 16.5 percent share.

<sup>&</sup>lt;sup>26</sup>This income includes amounts repatriated to the United States as well as certain types of nonrepatriated income, such as income from branch operations and passive investment income that is taxed on a current-year basis by the United States, regardless of whether it is repatriated. We obtained these income data from the foreign tax credit filings (on IRS Form 1118) made by corporate taxpayers represented in SOI's sample of taxpayers for 2004.

<sup>&</sup>lt;sup>27</sup>The grossed-up value of a dividend equals the amount of pretax profits needed to pay the dividend. In other words, it equals the dividend received by the U.S. owner plus the amount of foreign income tax that the dividend-paying corporation paid on the portion of its profits that was used to pay the dividend. The 24.6 percent share attributable to grossed-up dividends represents a 17.8 percent share for dividends received and a 6.8 percent share for the foreign income taxes associated with those dividends.

Other income

Dividends (grossed up)

25%

Interest

Rents, royalties, and license fees

Service income

Foreign branch income

Figure 4: Distribution of Repatriated Foreign-Source Income by Type of Income, 2004

Source: GAO analysis of SOI data.

Estimates from Other Studies of Effective Tax Rates on Corporations Based in Foreign Countries Are Consistent with Our Estimates for Some Countries but Not for Others

The various estimates of effective rates of tax that we have presented up to this point have covered only U.S. businesses (those that are incorporated in the United States or whose parent corporations are). We reviewed the relevant economic literature to determine what information is available about effective tax rates imposed on all corporations based in specific foreign countries. We identified four studies that used corporations' financial statement information to compare the average effective tax rates corporations pay across multiple foreign countries. The studies we identified estimated rates of total worldwide taxes paid on total worldwide income for corporations based in countries in the European Union and in Canada, the United States, Japan, and Australia.<sup>28</sup> The two studies that covered corporations based in the European Union during the 1990s reported similar rankings of countries by average effective tax rates, although exact estimates varied across alternative measures using different measures of income (see fig. 8 in app. IV). Ireland and Austria had the lowest rates at around 20 percent or less, while Italy and Germany,

<sup>&</sup>lt;sup>28</sup>These effective rates are more closely related to those that we estimated for U.S. CFCs than to those we estimated for the population of large U.S. corporations that filed Schedule M-3s.

with rates over 35 percent, had the highest. The two other studies, which covered limited selections of countries, suggested that effective tax rates in the United States, the United Kingdom, Germany, France and Australia were within 5 percentage points of each other, while Canada had a significantly lower rate and Japan a significantly higher rate. <sup>29</sup> A comparison of the country rankings based on these estimated effective tax rates for all corporations and the rankings based on our estimates of effective rates for U.S. CFCs and other foreign affiliates of U.S. MNCs reveals both consistencies (low rates for Ireland and high rates for Italy and Japan) and inconsistencies (in the cases of Netherlands and the United Kingdom).

A Growing Share of U.S. Businesses' Activity Is Located Abroad, and the Sourcing of Income Appears to Be Influenced by Foreign Country Tax Rates

Business activity can be measured in a variety of ways and the location of these activities can be influenced by numerous factors, with certain factors having greater influence on some activities than on others. For example, taxes, wage rates, the availability of skilled labor, and proximity to natural resources or to final product markets can all influence where businesses decide to locate production facilities; however, wage rates are likely to be particularly important for the location of low-skilled, laborintensive operations, while access to a highly educated workforce may have greater influence on the location of scientific research activities. Tax regimes—both those of the United States and of foreign countries—will have some influence over where business activity is actually located; however, they also provide some incentive for businesses to report net income as coming from locations other than where factors of production, such as labor and physical capital, actually generated the income.<sup>30</sup> This shifting of income may be reflected in income data BEA and other agencies gather from businesses as well as in data on related items, such as sales and value added. In contrast, measures such as physical assets, employment, and compensation are less likely to be debatably sourced

<sup>&</sup>lt;sup>29</sup>Again, the specific ranges of rates varied when the authors used alternative measures of income; however, the differences across countries were similar, regardless of the measures used. See fig. 10 in app. IV for details.

<sup>&</sup>lt;sup>30</sup>As we and others have reported previously, corporate groups have various ways of shifting the location of reported income, including the way they set prices on goods and services transferred among affiliated corporations. See, for example, GAO, *Puerto Rico: Fiscal Relations with the Federal Government and Economic Trends during the Phaseout of the Possessions Tax Credit*, GAO-06-541 (Washington, D.C.: May 19, 2006), and U.S. Department of the Treasury, *Report to The Congress on Earnings Stripping, Transfer Pricing and U.S. Income Tax Treaties* (Washington, D.C.: 2007).

because of tax considerations.<sup>31</sup> These practices make it difficult to determine the extent to which the distribution of some of the business activities that we present below reflects the actual, as opposed to just the reported, location of the activities.

Most of the Activity of U.S. MNCs Remains Located in the United States, but the Share of Activity Located Abroad Has Increased

Figure 5 shows the trends across the last four BEA benchmark studies of U.S. MNC operations (1989–2004) for six key measures of business activity: value added, sales, physical assets, compensation of employees, number of employees, and pretax income excluding income from equity investments. Each bar in the graph shows how the aggregate amount of a particular activity was divided between operations of U.S. parent corporations (including any of their domestic subsidiaries) and the operations of the majority-owned foreign affiliates of those parent corporations. Business activity by all measures increased in absolute terms both domestically and abroad during this period, but the relative share of activity that was based in foreign affiliates increased. Nevertheless, as of 2004, over 60 percent of the activity (by all six measures) of U.S. MNCs remained located in the United States.

<sup>&</sup>lt;sup>31</sup>We use the term physical assets as shorthand for BEA's measure of net property, plant and equipment.

<sup>&</sup>lt;sup>32</sup>Value added can be measured as the value of gross output minus the cost of intermediate inputs; physical assets are the value of property, plant and equipment net of depreciation.

Share of activity 80 60 40 20 0 89 94 99 04 94 99 04 89 94 99 04 89 94 99 04 89 94 99 04 94 99 04 89 94 99 04 Value added Physical assets Pretax income Sales Compensation **Employment** Pretax income (no equity) Foreign majority owned affiliates

U.S. Parents
Source: GAO analysis of BEA data.

Figure 5: Allocation of U.S. Multinational Businesses' Domestic and Foreign Activity, for Each Indicator and Year of Activity

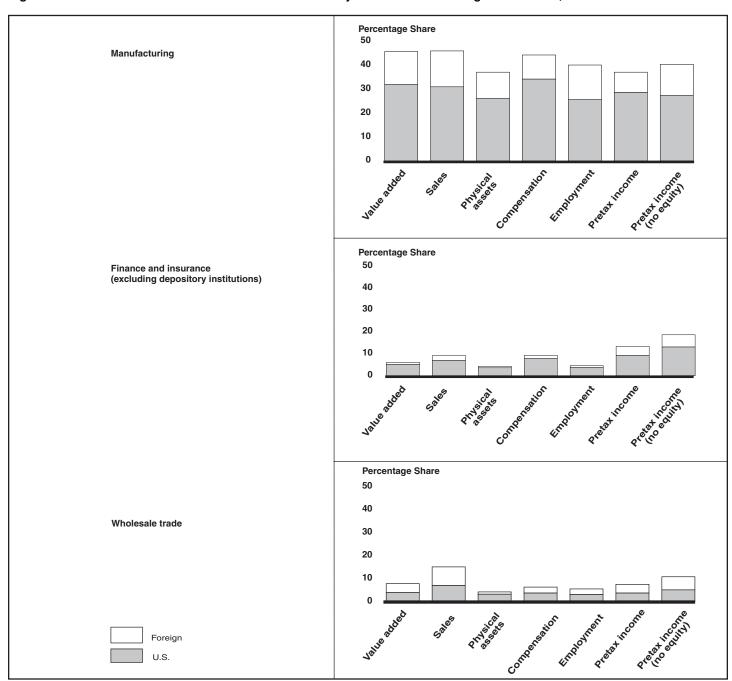
The Extent to Which Activity Is Located Abroad Varies by Industry Figure 6 compares the division of activity between U.S. and foreign operations across the three largest industries—manufacturing, finance and insurance (excluding depository institutions), and wholesale trade. The height of each bar in the figure represents the industry's share of total worldwide activity of U.S. MNCs. The division of each bar indicates how that particular measure for the industry is divided between U.S. and foreign operations. Manufacturing accounts for the largest share of all six measures of activity. Among these three industries finance and insurance

 $<sup>^{33}</sup>$ These are the only three industries that accounted for at least 10 percent of the total activity of U.S. MNCs, according to at least one of the six measures.

<sup>&</sup>lt;sup>34</sup>We do not report total assets, where finance and insurance would have the largest share, because of the double-counting issue noted previously.

has the lowest share of its activity (by all measures) located abroad, while wholesale trade generally has the largest share (except for physical assets). For example, only 19 percent of employment in finance and insurance was located abroad in 2004, while 36.2 percent of manufacturing employment and 42.9 percent of wholesale employment was located in foreign operations that year.

Figure 6: Differences in the Distribution of Business Activity across the Three Largest Industries, 2004



Source: GAO analysis of BEA data.

We can track activity by industry consistently back to 1999 only (due to a change in industrial classifications prior to 1999). The most significant difference between these three industries' shares of overall activity in 1999 and what is shown for 2004 is that manufacturing's share of total value added, physical assets, and pretax net income (excluding income from equity) all declined by 4 to 5 percentage points during that interval. At the same time, the proportions of manufacturing's value added, physical assets, and pretax net income that were located abroad increased from an average of about 25 percent to an average of about 30 percent. There were no significant changes in the shares of the finance and insurance industry. The only significant change in the wholesale trade industry is that its share of total pretax net income (excluding income from equity) increased by 6 percentage points from 1999 to 2004.

Tax Rates Appear to Have Some Influence over the International Location of Income

Figure 7 clearly reveals a relationship between effective tax rates and the size of a country's income shares relative to its shares of the other measures of business activity. The figure shows the share of the various measures of U.S. multinational business activity in 2004 for the 17 important foreign locations that we presented in figure 3. The measures include the five nonincome statistics from the previous figures (shown by the darker bars) plus three measures of net income (shown by the lighter bars). The first two income measures are pretax net income from the BEA data, excluding and including income from equity investments. 35 The third income measure is net earnings and profits from the CFC data. With the exception of China, all of the countries with relatively low effective rates of tax have income shares that are significantly larger than their share of the three measures least likely to be affected by income-shifting practices: physical assets, compensation, and employment. This relationship holds for all three income measures. In contrast, all of the countries with relatively high effective tax rates, except for Japan, have income shares that are smaller than their shares of physical assets, compensation, and employment. Of the four countries with a mix of both high and low estimated effective tax rates, the United Kingdom bears a similarity to the high-tax pattern and Luxembourg to the low-tax pattern, while Australia is balanced across all eight measures. The Netherlands has a balanced

<sup>&</sup>lt;sup>35</sup>The measure that includes equity income contains some double counting of income because a share of the after-tax income of lower-tier affiliates is counted as equity income of the holding company. In contrast to the double counting that may occur in the CFC data, the double counting in this particular BEA measure occurs whether or not the income of lower-tier affiliates is transferred to the holding companies in the form of dividends.

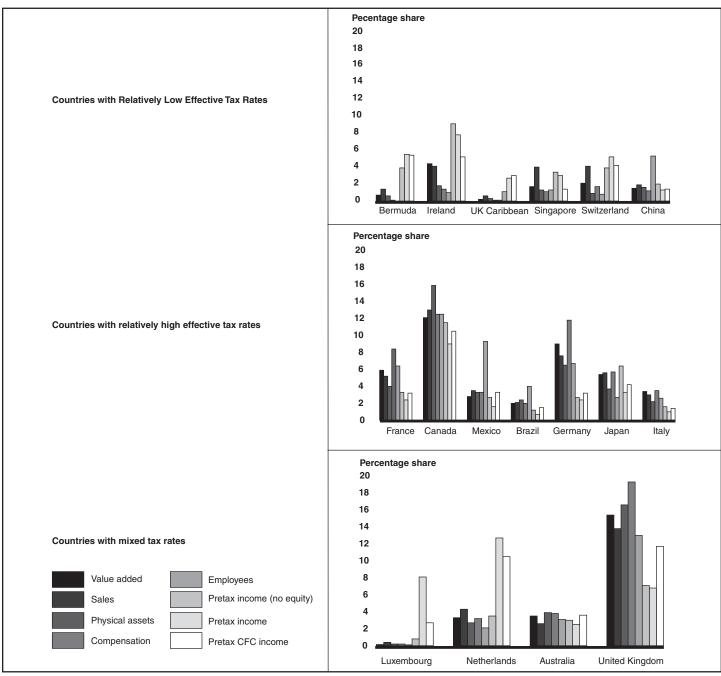
pattern when income is measured in terms of the BEA data without equity income; however, it has an extremely large proportion of equity income relative to other types of net income. Luxembourg, the United Kingdom Caribbean Islands (and, to a lesser extent, Bermuda and Switzerland) also have significant shares of income from equity investments. IRS data on dividends repatriated by U.S. MNCs claiming the temporary dividend deduction indicates that the Netherlands, Switzerland, and Bermuda were the three largest sources of such repatriations. Luxembourg and the Cayman Islands were also among the top eight sources (along with Ireland, Canada, and the United Kingdom). Income from equity investments was not prominent in any of the 17 countries in 1989 (see app. III). The growth in this category of income from 1989 through 2004 is consistent with observations made by others that the 1997 check-the-box rules have significantly affected the tax planning of U.S. MNCs. 37 Data are not yet available to show whether this accumulation of equity income in certain countries was largely a temporary phenomenon, leading up to repatriations made from 2004 through 2006.

The United Kingdom and Canada dominate all of the measures of activity, except for income. Germany also has at least a 5 percent share of all of the nonincome measures. Mexico, China, and Brazil have employment shares that are disproportionate to their shares of the other activity measures. This fact is not surprising, given that these are the three countries with the lowest wage rates out of the 17 (which is apparent from the relative sizes of their compensation and employment shares). Compared to 1989, the share of U.S. business activity, particularly physical capital, that is located in Canada has declined noticeably. This is also true, to a lesser extent, for Germany.

<sup>&</sup>lt;sup>36</sup>See Melissa Redmiles, "The One-Time Received Dividend Deduction," 106.

<sup>&</sup>lt;sup>37</sup>See Altshuler and Grubert, "Governments and Multinational Corporations in the Race to the Bottom," 979-992, and Oosterhuis, "The Evolution of U.S. International Tax Policy—What Would Larry Say," 1119-1128.

Figure 7: Distribution of U.S. Multinational Businesses' Activity in 2004 across Groups of Countries with Different Average Effective Tax Rates



Source: GAO analysis of BEA data.

Research and development is one more measure of business activity (not included in figs. 5 through 7 because it is more narrowly focused than the other measures) that is significant. The United Kingdom, which accounted for 20.7 percent of all research and development performed by foreign affiliates of U.S. MNCs, was the primary location for this activity in 2004, followed by Germany (16.2 percent share) and Canada (10.6 percent share). Japan's share of this research and development activity fell from 12.6 percent in 1989 to 6.3 percent by 2004. Among the countries whose shares increased the most over that period were Sweden (from 0.4 percent to 5.6 percent) and Israel (from 0.4 percent to 3.4 percent).

## **Agency Comments**

We provided a draft of this report in July 2008 to the Secretary of Treasury for review and comments. Officials from the Department of the Treasury's Office of Tax Policy provided technical comments, which we incorporated as appropriate.

As we agreed with your offices, unless you publicly announce the contents of this report earlier, we plan no further distribution of it until 30 days from the date of this letter. We will then send copies to others who are interested and make copies available to others who request them. This report is available at no charge on GAO's web site at http://www.gao.gov. If you or your staff have any questions on this report, please call me at (202) 512-9110 or whitej@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. Key contributors to this report are listed in appendix V.

Lanus RM Vite

James R. White Director, Tax Issues Strategic Issues

## Appendix I: Details of the Methodology for Estimating Effective Tax Rates

Average Effective Tax Rates of Schedule M-3 Filers

**Data Consistency Checks** 

Tax year 2004 was the first year for which corporations had to file the new Schedule M-3. Consequently, there was likely to be a higher rate of taxpayer error in filling out the form than there is for most forms that have been in use for many years. We ran a number of internal consistency checks and, to the extent possible, corrected common errors, guided by the findings of previous researchers. We dropped all cases that had uncorrectable errors in the data elements that were key to our analysis. These exclusions reduced our population of corporations that filed nonblank Schedule M-3s from 34,154 to 28,820. This final population of corporations accounted for 95 percent of the book income of the population of all Schedule M-3 filers.

Calculating Domestic Income

To calculate domestic income we began with the book value of income of the tax includible group and subtracted foreign-source income that is includible. Specifically, our Schedule M-3 domestic income = book income (Schedule M-3, Part I, line 11) –foreign equity method income (Schedule M-3, Part II, line 1) – gross foreign dividends (Schedule M-3, Part II, line 2) – gross foreign distributions (Schedule M-3, Part II, line 5) – domestic equity method (Schedule M-3, Part II, line 6) – minority interest reduction (Schedule M-3, Part II, line 8) – foreign partnership income (Schedule M-3, Part II, line 10). This measure is designed to be closer to a tax consolidated group measure by removing the less than 80 percent owned domestic

<sup>&</sup>lt;sup>1</sup>Charles Boyton, Portia DeFilippes, and Ellen Legel, "A First Look at 2004 Schedule M-3 Reporting by Large Corporations," Tax Notes, September 11, 2006 provided an initial summary of the Schedule M-3 data and identified common errors.

<sup>&</sup>lt;sup>2</sup>These data elements were lines 5a (Net income from nonincludible foreign entities), 5b (Net loss from nonincludible foreign entities), and 11 (Net income (loss) per income statement of includible corporations) of part I of the Schedule M-3. Lines 4 through 10 in part I of the Schedule M-3 should total to line 11. We excluded cases where line 11 did not equal the sum of completed line items and cases where lines 4 through 10 were not completed.

<sup>&</sup>lt;sup>3</sup>SOI's annual sample for 2004 of corporate tax returns are designed such that all corporations that meet the size threshold for filing a Schedule M-3 are sampled at a 100 percent level.

Appendix I: Details of the Methodology for Estimating Effective Tax Rates

subsidiaries.<sup>4</sup> It includes the total income of domestic tax consolidated subsidiaries, excludes the income of nonincludible domestic subsidiaries (ownership less than 80 percent), but includes the dividends of nonincludible domestic subsidiaries and partnership income.

There are some limitations to this measure of income. While foreign income is excluded through the conversion from the financial consolidated group to the tax consolidated group and the removal of foreign dividends, adjustments made in line 8 in Part I of the Schedule M-3 could result in the improper inclusion of foreign royalties and other foreign payments. In addition, the 2004 Schedule M-3 did not require taxpayers to fill in all of the columns in Part II. Line 10, foreign partnership income and lines 2 and 5, foreign dividends and distributions, are reported both under financial and tax rules but are not listed separately on the Form 1120. We perform a sensitivity analysis by excluding observations that did not complete all columns. (We do the same for our measures of foreign-source income, described below.)

#### Calculating Foreign Income

The data from the Schedule M-3 does not allow us to derive a comprehensive measure of foreign-source income without double counting certain types of income. For this reason, we provide estimates based on three alternative measures of foreign income. Our estimates based on one of these measures likely overstate the effective tax rate, while estimates based on an alternative measure likely understate the rates. Consequently, our range of estimates represents an upper and lower bound for the true rate.

Our broadest measure of foreign income includes the book income of majority owned foreign subsidiaries (reported on lines 5a and 5b in Part I of the Schedule M-3), plus equity-method income from foreign subsidiaries (reported on line 1 in Part II of the Schedule M-3), plus dividends and distributions from foreign subsidiaries (reported on lines 2 and 5 in Part II of the Schedule M-3). The problem with this broad measure is that it likely double counts some income in the aggregate. Lines 5a/b list 100 percent of

<sup>&</sup>lt;sup>4</sup>We remove the equity method income of domestic subsidiaries owned 20 percent to 50 percent from line 11 of part I of the Schedule M-3 to ensure the proper alignment of income and taxes for calculating effective tax rates. Even though income from these subsidiaries is listed on the parent's financial statement, these subsidiaries are not consolidated with the parent tax group and file their own separate income tax returns and pay taxes associated with that income that are not reported on parent's statement. We also remove line 8, which reverses the minority interest reduction on subsidiaries owned 80 percent or more to include the full income of the tax consolidated group.

the income of majority owned foreign subsidiaries, even if the taxpayer filing the Schedule M-3 owns less than 100 percent of the subsidiary. Thus, 5a/b overstates the consolidated group's share of the income or loss of majority owned foreign subsidiaries. This reporting limitation, by itself, would not be a problem for our aggregate measure of the foreign income of Schedule M-3 filers, except to the extent to which the minority owners of the less-than-100-percent-owned subsidiaries are not Schedule M-3 filers themselves. However, a larger potential overstatement problem arises when we include equity-method income and dividends and distributions in our measure. For example, if a foreign subsidiary is owned 75 percent by one U.S. parent and 25 percent by a second U.S. parent, line 5a/b would provide 100 percent of the income of the foreign subsidiary and line 1 in Part II of the Schedule M-3 providing the equity method income of foreign subsidiaries would add another 25 percent of the income of that subsidiary. Similarly, including the dividends and distributions in lines 2 and 5 in Part II of the Schedule M-3 would double count that income in cases where it is already counted on another Schedule M-3 filer's line 5a/b or line 1 in Part II of the Schedule M-3.

Our second measure of foreign income starts with our broadest measure and then excludes equity-method income. Our third measure excludes both equity-method income and dividends and distributions. In contrast to our broadest measure, our third measure is likely to understate foreign-source income in cases where Schedule M-3 filers share ownership of their less-than-100-percent-owned foreign subsidiaries with majority shareholders other than Schedule M-3 filers. For example, if U.S. Parent A owns 70 percent of foreign subsidiary 1 and U.S. Parent B owns 30 percent of foreign subsidiary 1 and 25 percent of foreign subsidiary 2 and a foreign parent owns 75 percent of foreign subsidiary 2, line 5a/b would provide 100 percent of the income of foreign subsidiary 1, but none of the income

<sup>&</sup>lt;sup>5</sup>If the minority shares are owned by Schedule M-3 filers, then all of the income from lines 5a/b is properly included in our measure of aggregate income.

<sup>&</sup>lt;sup>6</sup>We calculated our broadest measure, all income, which includes equity method income, dividends, and share income, as Schedule M-3, Part II, line 1 + Schedule M-3, Part II, line 2 + Schedule M-3, Part II, line 5 + Schedule M-3, Part II, line 10 - (Schedule M-3, Part I, line 5a - Schedule M-3, Part I, line 5b). We calculated a measure that only excludes equity method income, as Schedule M-3, Part II, line 2 + Schedule M-3, Part II, line 5 + Schedule M-3, Part II, line 10 - (Schedule M-3, Part I, line 5a - Schedule M-3, Part I, line 5b). Finally, we calculated the narrowest measure, one that excludes equity income and dividends, as - (Schedule M-3, Part I, line 5a - Schedule M-3, Part I, line 5b). (Note, in part I on the M3 foreign income is reported negatively and losses positively. Consequently, we need to change the sign on the variables.)

of foreign subsidiary 2. In addition, excluding dividends and distributions would exclude any income from less-than-20-percent-owned foreign subsidiaries if those subsidiaries are majority owned by a shareholder other than a Schedule M-3 filer.

We compute our various effective rate estimates only for those taxpayers that had positive domestic income, foreign income, or both. Table 3 shows how many taxpayers had positive, negative, or zero values for domestic and foreign income and the aggregate value of that income for our broadest and narrowest measures of income.

Table 3: Distribution of Schedule M-3 Filers and Income by Income Group, 2004

Dollars in billions		Corporations	Corporations	Corporations	
		with positive	with zero domestic income	with negative	Totals
Foreign income including equity	method income and	dividends			
Corporations with positive foreign income	Number:	1,907	16	1,458	3,381
	Domestic income:	\$331.5	\$0	-\$174.0	\$157.5
	Foreign income:	\$144.9	\$0.02	\$143.5	\$288.5
Corporations with zero foreign income	Number:	16,839	283	6,753	23,875
	Domestic income:	175.0	0	-65.2	\$109.8
	Foreign income:	0	0	0	\$0
Corporations with negative foreign income	Number:	920	6	638	1,564
	Domestic income:	63.7	0	-44.8	\$18.9
	Foreign income:	-13.6	-0.05	-4.5	-\$18.2
Totals	Number:	19,666	305	8,849	28,820
	Domestic income:	\$570.2	\$0	-\$284.0	\$286.3
	Foreign income:	\$131.3	-\$0.03	\$139.0	\$270.3
Foreign income excluding equity	method income and	d dividends			
Corporations with positive foreign income	Number:	1,543	0	1,315	2,858
	Domestic income:	\$297.7	\$0	-\$166.6	\$131.1
	Foreign income:	\$136.5	\$0	\$128.8	\$265.3
Corporations with zero foreign income	Number:	17,259	305	6,938	24,502
	Domestic income:	203.7	0	-69.3	\$134.5
	Foreign income:	0	0	0	\$0

Dollars in billions					
		Corporations with positive domestic income	Corporations with zero domestic income	Corporations with negative domestic income	Totals
Corporations with negative foreign income	Number:	864	0	596	1,460
	Domestic income:	68.8	0	-48.1	\$20.7
	Foreign income:	-12.9	0	-4.6	-\$17.5
Total	Number:	19,666	305	8,849	28,820
	Domestic income:	\$570.2	\$0	-\$284.0	\$286.3
	Foreign income:	\$123.6	\$0	\$124.2	\$247.8

Source: GAO analysis of SOI data.

Calculating U.S. Tax on Domestic Income and U.S. Residual Tax on Foreign Income

We computed effective tax rates before credits, after credits, and after credits and other taxes. The tax code does not specify that tax credits (other than the foreign tax credit) be allocated in any particular manner between U.S. tax on domestic income and U.S. tax on foreign-source income. We simply assume that these credits are allocated against U.S. taxes on domestic income and U.S. residual taxes on foreign-source income in proportion to each of those taxes' share of total U.S. tax.

To calculate U.S. taxes on domestic income, we began with regular tax liability and removed the foreign tax credit limit because the latter represents the initial U.S. tax due on foreign-source income before any credits are given for foreign taxes paid. Specifically, U.S. tax on domestic income before credits is calculated as regular tax liability (Form 1120, Schedule J, line 5) – the sum over each income type of foreign tax credit limitation (Form 1118, Schedule B, line 10). Taxpayers are required to file a separate Form 1118 for each category of income, so we added the separate limits from these forms together to obtain the total foreign tax credit limit on repatriated foreign income.

This calculation provides the U.S. tax on domestic income regardless of whether the corporation had excess credits because the credit limit is essentially the initial US tax (before foreign tax credit) on foreign-source income. If the corporation has an excess of foreign tax credits, then there is no residual U.S. tax on repatriated foreign income and the U.S. tax on domestic income is found by removing the initial U.S. tax on repatriated foreign income (the credit limit) from the US tax on worldwide income (Form 1120 tax liability without foreign tax credit). If the corporation is below the credit limit, then there is a residual US tax on repatriated foreign income, which would be included separately in the U.S. taxes on

Appendix I: Details of the Methodology for Estimating Effective Tax Rates

foreign-source income measure. In that case the U.S. tax on domestic income is found by removing the initial U.S. tax on repatriated foreign income (the credit limit) from the U.S. tax on worldwide income (Form 1120 tax liability without foreign tax credit). In both cases, the foreign tax credit limit represents the potential tax due on foreign-source income, and by removing it the remaining tax is on domestic income.

U.S. residual tax on foreign-source income was calculated as the difference between the foreign tax credit limit and the foreign tax credit (with any negative values treated as zeros). Specifically, it equals the greater of: the sum over the income types of the foreign tax credit limit (line 10 on Form 1118, Schedule B) – foreign tax credit (line 11 on Form 1118, Schedule B) or 0 for each type of income. The U.S. residual tax on foreign-source income is zero if the corporation has paid substantial foreign taxes such that its foreign tax credit limit is binding. For example, if a corporation paid taxes in a single country with a tax rate of 40 percent, the United States would not collect any residual tax on the repatriated income because the taxes paid abroad would be greater than the taxes due in the United States at the corporate rate of 35 percent. The residual tax is positive as long as the corporation's creditable foreign taxes paid are below the foreign tax credit limit. For example, if a corporation paid taxes abroad at a rate of 10 percent, the United States would tax that income at 35 percent and thus collect a residual tax over the credit for the tax paid abroad.

**Allocating Credits** 

To compute estimates of the domestic effective tax rates on domestic and foreign-source income after credits, we allocated credits according to the income sources' shares of total tax. Specifically, U.S. tax on domestic income after credits equals the total U.S. domestic tax before credits minus total other credits times the domestic tax share of total U.S. and foreign tax liability before the application of credits. Total other credits equal the total credits (line 7 on the Form 1120, Schedule J) minus the foreign tax credit (line 6a on the Form 1120, Schedule J). Similarly, we also estimated effective tax rates after credits and other taxes by the same formula, substituting total credits and other taxes for total credits. Total credits and other taxes equal regular tax minus final tax liability minus the foreign tax credit (line 5 – line 11 – line 6a on Schedule J of the Form 1120). The credits and other taxes are applied to the final taxes, which include both domestic tax on domestic income and residual domestic tax of repatriated foreign income.

### Average Effective Tax Rates for CFCs

We followed the methodology used by Altshuler, Grubert, and Newlon (1998) and Altshuler and Grubert (2006) to estimate average effective tax rates using data from Internal Revenue Service's Statistics of Income Division's Form 5471 study for 2004. SOI's 2004 CFC study changed from a defined population study (7,500 largest CFCS of the largest parent corporations) to a sample of CFCs that included all Form 5471's filed by all corporations in the SOI corporate study. We restrict our sample to CFCs associated with U.S. corporations sampled at 100 percent. The effective rate was computed as the income taxes paid (line 8 on Form 5471, Schedule E) divided by pretax earnings and profits. Pretax earnings and profits were calculated as final earnings and profits on line 5d of Form 5471, Schedule H plus the total income taxes paid (line 8 on Form 5471, Schedule E). We restricted our analysis to CFCs with positive pretax earnings and profits and nonnegative foreign taxes paid. We computed the effective tax rates by primary place of business, as reported by the CFCs, by aggregating the taxes paid and positive earnings for all CFCs reporting the same principal place of business and then taking the ratio.

<sup>&</sup>lt;sup>7</sup>Rosanne Altshuler, Harry Grubert, and T. Scott Newlon, "Has U. S. Investment Abroad Become More Sensitive to Tax Rates?" NBER, *International Taxation and Multinational Taxation* ed. James R. Hines, Jr. (Chicago: University of Chicago Press, 2001), and Rosanne Altshuler and Harry Grubert, "Governments and Multinational Corporations in the Race to the Bottom," *Tax Notes*, February 27, 2006: 979-992.

<sup>&</sup>lt;sup>8</sup>SOI sampling of corporate returns was not designed to make estimates for the CFC populations. As a result, the sample sizes of CFCs associated with U.S. corporations in the noncertainty strata were extremely small and population estimates are therefore unreliable. The CFCs associated with U.S. corporations sampled at 100 percent accounted for over 99 percent of both the total number of CFCs in the file and the total positive income of those CFCs.

## Appendix II: BEA Data Used in This Report

Bureau of Economic Analysis (BEA) data provide a wide array of data items on multinational corporations (MNC) cross-classified by country and industry. The financial and operating data are collected by BEA in two types of surveys—benchmark and annual, authorized by a law known as the International Investment and Trade in Services Survey Act. On both surveys, the data are collected at the enterprise, or company, level and are classified according to the primary industry of the enterprise. The annual survey estimates are a collection of sample data reported to BEA on U.S. direct investment abroad in the annual survey and the estimates of affiliates that were not in the sample. The sample is a cutoff sample, with reporting thresholds significantly higher than those on the benchmark surveys. To obtain universe estimates of the overall operations of parents and affiliates for nonbenchmark years, data reported in the benchmark surveys for nonsample companies are extrapolated forward, based on the movement of the sample data in the annual surveys. We relied on the BEA benchmark surveys, which are conducted every 5 fiscal years because the universe in the benchmark surveys did not pose the sample limitations of the annual surveys. Selected tables from the final 2004 benchmark survey results, including the tables needed for the charts in this report, are available on the BEA Web site under Operations of Multinational Companies, U.S. Direct Investment Abroad, Financial and Operating Data, Selected Tables, IID Product Guide, Revised 2004 Estimates. Final benchmark survey data results are available for all previous years.

The benchmark surveys covered every U.S. person who had a foreign affiliate—that is, who had direct or indirect ownership or control 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—any time during its reporting fiscal year. A completed benchmark survey form was required for affiliates that had total assets, sales, or net income (or losses) greater than a minimum set value per reporting year, so the trend data we present refer to information on U.S. businesses that met the reporting requirement. Data on all of the benchmark surveys were required to be reported as they would have been

<sup>&</sup>lt;sup>1</sup>22 U.S.C §§ 3101-3108 (2004).

<sup>&</sup>lt;sup>2</sup>Beginning with the results of the 1999 benchmark survey, BEA has expanded its statistics on the operations of U.S. MNCs in order to provide fuller coverage of the survey universe. In the statistics for preceding years, BEA excluded foreign affiliates below a certain size because only very limited information was reported for them, and their inclusion would not have had a material impact on the aggregate direct investment statistics in terms of value. Beginning with the data for 1999, the BEA data have included these very small affiliates.

for stockholders' reports rather than for tax or other purposes. Thus, U.S. generally accepted accounting principles were followed unless otherwise indicated by the survey instructions.

The 1999 benchmark survey marks the first year that annual and benchmark survey data on U.S. direct investment abroad have classified industries using BEA's International Survey Industry (ISI) classification system that is based on the 1997 North American Industry Classification System (NAICS).<sup>3</sup> Therefore, trend analysis by industry is not comparable before and after this change.<sup>4</sup> Our ability to provide details of worldwide activity by country and industry were limited by BEA's suppression of aggregate data when they represented a small number of corporations that accounted for a relatively large portion of the aggregate total. Under the International Investment and Trade in Services Survey Act, the direct investment data collected by BEA are confidential.

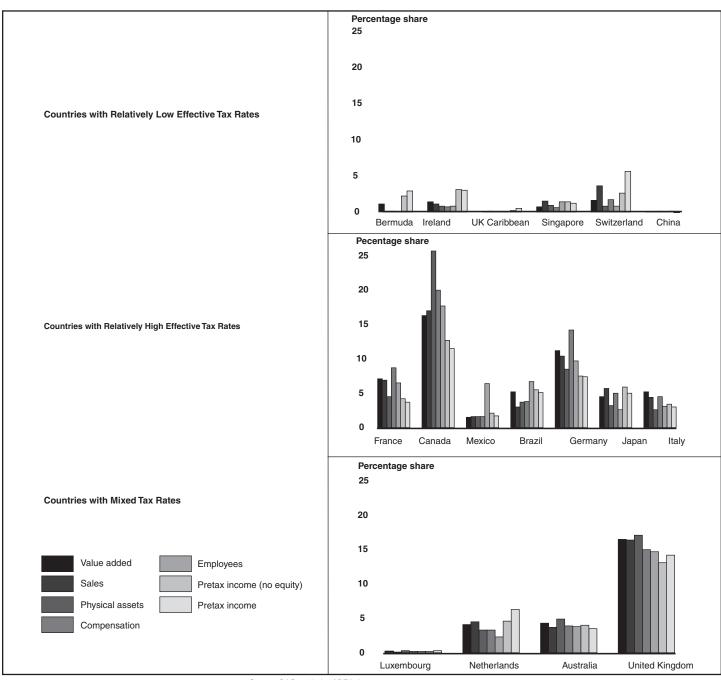
We contacted BEA to ensure that the data collection encompassed the universe of worldwide activity of U.S. companies and their foreign affiliates. BEA's methodology for benchmark survey results notes that because of limited resources, BEA's efforts to ensure compliance with reporting requirements focused mainly on large parents and affiliates. Some parents of small affiliates that were not aware of the reporting requirements and were not on BEA's mailing list may not have filed reports. BEA believes that the omission of these parents and their affiliates probably has not significantly affected the aggregate values of the various data items collected but would have caused an unknown, but possibly significant, understatement of the number of parents or affiliates.

<sup>&</sup>lt;sup>3</sup>NAICS is the new industry classification system of the United States, Canada, and Mexico. In the United States, NAICS supplants the 1987 Standard Industrial Classification (SIC), which was the basis for the old ISI classification system.

<sup>&</sup>lt;sup>4</sup>BEA changed from relying on the SIC codes to classify industry to the NAICS codes beginning with data for 1997 for foreign direct investment in the United States and for 1999 for U.S. direct investment abroad.

## Appendix III: Additional Data on the Location of Business Activity

Figure 8: Distribution of U.S. Multinational Businesses' Activity in 1989 across Groups of Countries with Different Average Effective Tax Rates (in 2004)



Source: GAO analysis of BEA data.

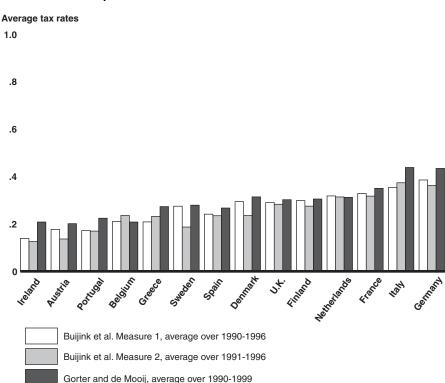
# Appendix IV: Studies of Effective Tax Rates in Foreign Countries That Include Non-U.S. Businesses

We identified four studies that used corporations' financial statements to compare the average effective tax rates of corporations across multiple foreign countries. All of these studies produced estimates for multiyear periods during the 1990s. There is considerable overlap in the methodologies across the four studies; however, there are some variations in the measures of effective tax rate used, even within some of the studies. Buijink, Janssen, and Schols (2000) and Gorter and de Mooij (2001) both use consolidated financial statements from the Worldscope financial statement database to estimate effective tax rates for countries in the European Union.<sup>1</sup> Buijink, et al. use two different measures: the first is a simple ratio of income taxes paid over pretax book income (before equity income, minority interest income, and extraordinary income); in their second measure they adjust income taxes for the net change in deferred taxes. Gorter and de Mooij's effective tax rate measure is calculated as the ratio of corporate income taxes paid over pretax corporate income. The results from these two studies are summarized in figure 9.2

<sup>&</sup>lt;sup>1</sup>W. Buijink, B. Janssen, and Y. Schols. *Evidence of the Effect of Domicile on Corporate Average Effective Tax Rates in the European Union* MARC World Paper MARC-WP/3/2000-11 (2000). J. Gorter, R. de Mooij. *Capital Income Taxation in Europe: Trends and Trade-offs*, ISBN: 90-120-9281-7 (2001). Both studies report the median (across all corporations) of average effective tax rates in each year that they cover, as opposed to an average of the average rates, to reduce the influence of outliers.

<sup>&</sup>lt;sup>2</sup>Gorter and de Mooij exclude Luxembourg from their analysis because of too few observations; therefore we exclude the country from our summary.

Figure 9: Worldwide Average Effective Tax Rates during the 1990s for Corporations Domiciled in European Union Countries



Source: Buijink et al. (2000), and Gorter and de Mooij (2001).

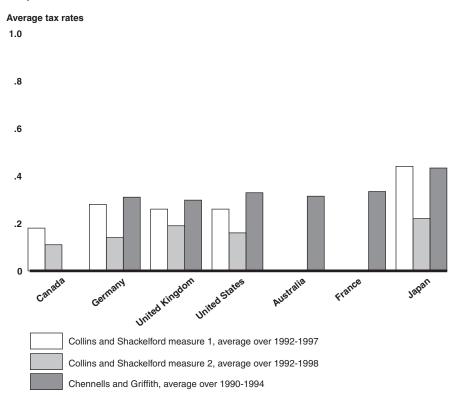
Note: each bar represents the average (across all years covered by the particular study) of the median (for the population of corporations in each study) average effective tax rates.

Collins and Shackelford (2003) and Chennells and Griffith (1997) both use Standard and Poor's Compustat Global database to estimate effective tax rates for small selections of major industrial nations (see figure 10).<sup>3</sup> The Compustat Global database is limited to information on foreign firms that people have requested and, therefore, is likely not to be a representative sample of companies, but weighted toward larger and more recognized firms. While Collins and Shackelford provide estimates of effective tax rates separately for multinational firms, the average effective tax rates

<sup>&</sup>lt;sup>3</sup>Julie H. Collins and Douglas A. Shackelford, "Do U.S. Multinationals Face Different Tax Burdens than Do Other Companies?" *Tax Policy and the Economy* 17, edited by James M. Poterba, National Bureau of Economic Research and MIT Press (Cambridge, Mass.), 2003: 141-168, and Lucy Chennells and Rachel Griffith, *Taxing Profits in a Changing World*, *Institute of Fiscal Studies*, ISBN 1-873357-73-7, 1997.

listed in figure 10 are for all companies. They use an effective tax rate measure similar to the second measure used by Buijink, et al.; they also compute an alternative estimate that uses a less comprehensive measure of income, but one that has greater comparability across countries. The authors address the outlier issue by excluding cases with negative tax rates or rates over 70 percent. Chennells and Griffith's effective tax rate measure is similar to the first measures of Collins and Shackelford and Buijink, et al., except that they do not make the adjustment for deferred taxes.

Figure 10: Worldwide Average Effective Tax Rates during the 1990s for Corporations Domiciled in Selected Countries



Source: Collins and Shackelford (2003), and Chennells and Griffith (1997).

Note: Each bar represents the unweighted average (across all corporations and years covered by the particular study) of the average effective tax rates.

# Appendix V: GAO Contact and Staff Acknowledgments

GAO Contact	James R. White, (202) 512-9110 or whitej@gao.gov
Acknowledgments	In addition to the contact named above, James Wozny, Assistant Director; Susan Baker; Sylvia Bascope; Kathleen Easterbrook; Jennifer Gravelle; Ed Nannenhorn; and Cheryl Peterson made key contributions to this report.

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