

# **Are U.S. Effective Corporate Tax Rates Low?**

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### ARE U.S. EFFECTIVE CORPORATE TAX RATES LOW?

### Introduction

It is widely recognized that U.S. statutory corporate tax rates are high by international standards. According to the OECD, the top U.S. corporate tax rate (federal and average state rate combined) was 39.1 percent in 2009, second highest among the 30 OECD countries after Japan (39.5 percent), and more than 13 percentage points higher than the average for the other 29 OECD countries (25.9 percent).<sup>1</sup>

However, some have argued that *effective* corporate tax rates are low relative to international norms and U.S. historical experience. U.S. multinational companies, in particular, have been identified as paying low taxes on foreign source income.

This paper reviews studies of corporate effective tax rates paid by domestic-only and multinational companies, resident in both the United States and abroad. These studies show that U.S. corporations are not lightly taxed either by international standards or relative to the last three decades of American history.

# **Statutory Corporate Tax Rates**

The literature on effective tax rates typically uses two types of measures: "book" and "marginal" effective tax rates. Book effective tax rates measure the provision for income taxes as a percent of earnings before tax as reported in financial statements. Marginal effective tax rates are a theoretical calculation of the impact of taxes on the cost of capital for a representative investment, such as plant or equipment.<sup>2</sup>

## **Book Effective Corporate Tax Rates**

Book effective tax rates measure a company's provision for income tax as a percent of its reported pre-tax profits. The tax provision includes both current and deferred taxes. Some measures of book effective tax rates include only current taxes, while others are based on the total tax provision.<sup>3</sup>

The results of recent effective tax rate studies are summarized below.

<sup>&</sup>lt;sup>1</sup> OECD Tax Database, accessed, January 22, 2010 at: http://www.oecd.org/document/60/0,3343.en\_2649\_34533\_1942460\_1\_1\_1\_1,00.html#cci,

<sup>&</sup>lt;sup>2</sup> See Robert Hall and Dale W. Jorgenson, Tax Policy and Investment Behavior, *American Economic Review*, 57:391-414.

<sup>&</sup>lt;sup>3</sup> Cash tax payments as such are not reported in financial statements but can be estimated from the statement of cash flow. Cash taxes include settlements and refunds associated with prior tax years and thus do not provide a reliable measure of current year tax liability.



# 1. University of North Carolina Cross-Country Study of Book Effective Tax Rates

Accounting researchers at the University of North Carolina have calculated book effective tax rates for companies in 85 countries from 1988 to 2007.<sup>4</sup> Detailed results are presented for nine countries: Australia, Canada, China, France, Germany, India, Japan, the United Kingdom, and the United States. Over the 2003-2007 period, for "domestics" (i.e., companies without foreign operations), U.S. corporations had the second highest book effective tax rate after Japan, and for multinational companies, U.S. corporations had the third highest book effective tax rate after Japan and Germany.<sup>5</sup>

More recent data would likely show lower German effective tax rates because Germany reduced its corporate tax rate from 39 to 30 percent in 2008.

# 2. World Bank "Doing Business" Report

For 2009, the World Bank has calculated federal, state, and local taxes that would be paid by a representative company operating within the largest city of 183 countries. Effective tax rates are calculated by dividing the estimated corporate tax liability of the representative company into its book income.

The World Bank approach has several advantages for international comparisons. First it is based on the actual tax liability for the representative company for the tax year rather than the provision for taxes determined for financial accounting purposes. Second, because the study uses the same income and financial statements in every country, the results are not distorted by cross-country differences in accounting methods or firm characteristics.

According to the World Bank's 2010 *Doing Business* report, the U.S. effective corporate tax rate in 2009 (27.9 percent) was quite high by global standards, ranking 21<sup>st</sup> highest out of 183 countries (top 12<sup>th</sup> percentile). Among the more highly developed countries within the OECD, the United State had the third highest corporate effective tax rate out of 30 countries following Japan and New Zealand.<sup>7</sup>

# **Marginal Effective Tax Rates**

Another approach for calculating effective tax rates is to calculate the "tax wedge" between the pre-tax and post-tax internal rate-of-return (IRR) on a new investment that either just breaks even or earns a higher rate of return due to some element of market power. Dividing the tax wedge into the pre-tax IRR yields an effective tax rate—termed the "marginal effective tax rate"

 <sup>&</sup>lt;sup>4</sup> Kevin Markle and Douglas Shackelford, "Do Multinationals or Domestic Firms Face Higher Effective Tax Rates?"
 *National Bureau of Economic Research*, June, 2009.
 <sup>5</sup> These results are based on total tax rates for companies that reported positive book income and nonnegative tax

These results are based on total tax rates for companies that reported positive book income and nonnegative tax provisions. The ranking of U.S. companies is similar for effective tax rates based on current taxes; however, current tax rates were not available for some countries.

<sup>&</sup>lt;sup>6</sup> For a discussion of the World Bank method, see Simeon Djankov, Tim Ganser, Caralee McLiesh, Rita Ramalho, and Andrei Shleifer, "The Effect of Corporate Taxes on Investment and Entrepreneurship," NBER Working Paper 13756, *National Bureau of Economic Research*, January 2008.

<sup>&</sup>lt;sup>7</sup> World Bank, Doing Business Project tax database, accessed on January 22, 2010 at: <a href="http://www.doingbusiness.org/ExploreTopics/PayingTaxes/">http://www.doingbusiness.org/ExploreTopics/PayingTaxes/</a>



when calculated for a break-even investment, and the "average effective tax rate" when calculated for an investment that earns an above break-even return.

### 1. Institute for Fiscal Studies Marginal and Average Effective Tax Rate Study

The Institute for Fiscal Studies has calculated marginal and average effective corporate tax rates for equity-financed investment in plant and machinery for 19 OECD countries.8 For 2005, the most recent year available, the United States had the 5th highest marginal effective tax rate out of 19 countries (top 26th percentile) and 3rd highest average effective tax rate (top 16th percentile).

#### 2. **World Bank Report on Marginal Effective Tax Rates**

In a study prepared for the World Bank, Prof. Jack Mintz calculated marginal effective tax rates on corporate capital for 80 countries. The study includes national and state government taxes on corporate income as well as other taxes on capital, including irrecoverable sales tax on capital purchases, property taxes, gross receipts taxes, and financial transaction taxes. <sup>9</sup> The overall effective tax rate is determined as a weighted average of investments in plant, equipment, land, and inventory and takes into account debt financing. For 2008, excluding temporary bonus depreciation, the study finds that the United States had the eighth highest effective tax rate on corporate capital out of 80 countries (top 10th percentile).

# **Taxation of Foreign Source Corporate Income**

#### 1. **IRS Data**

According to the Treasury Department, U.S. tax on foreign source income was \$18.4 billion in 2004. 10 In addition, foreign subsidiaries of U.S. multinationals paid \$69.3 billion in foreign income taxes and U.S. parent companies paid an additional \$28.0 billion in foreign taxes on foreign branch operations and in foreign taxes withheld on payments of dividends, interest, rents and royalties. In total, U.S. and foreign taxes on foreign source income amounted to over \$115.6 billion in 2004.<sup>11</sup>

According to IRS data (see Table 1), net foreign income was \$456.4 billion in 2004 (i.e., gross foreign income of \$700.3 billion less expenses directly and indirectly allocable to foreign income of \$243.9 billion), including both earnings reinvested abroad and distributed back to the U.S. parent. Consequently, total U.S. and foreign taxes on the foreign source income of U.S. multinational companies averaged over 25 percent in 2004 (\$115.6 billion in taxes divided by \$456.4 billion in net foreign source income).

<sup>&</sup>lt;sup>8</sup> Institute for Fiscal Studies, Corporate Tax Rate Data, available at

http://www.ifs.org.uk/publications.php?publication\_id=3210.

9 See Duanjie Chen and Jack Mintz, "Taxing Business Investments: A New Ranking of Effective Tax Rates on Capital," World Bank, July, 2008. This research is summarized in Jack M. Mintz, "Cutting the Effective Corporate Tax Rate," *Tax Notes*, Dec. 8, 2008, p. 1197, Doc 2008-23917, or 2008 TNT 237-29.

10 U.S. Department of the Treasury, Office of Tax Policy, *Approaches to Improve the Competitiveness of the U.S.* 

Business Tax System for the 21st Century, December 20, 2007, p. 57

<sup>&</sup>lt;sup>11</sup> This calculation is based on data reported in Lee Mahony and Randy Miller, "Controlled Foreign Corporations, 2004," Statistics of Income Bulletin, Summer 2008, Internal Revenue Service, and foreign tax credit information published by the Internal Revenue Service, Statistics of Income Division, for 2004.



Table 1 II S, and Foreign Tayes on Foreign Source Income, 2004 (\$ billions)

_	Table 1. U.S. and Foreign Taxes on Foreign Source Income, 2004 (\$ billions)				
			Percent of		
Line			net foreign		
ᆜ	Item	Amount	income	Source	
1	Gross foreign income	\$700.3		Line 2 + Line 3	
2	Deductions (directly and not directly allocable)	\$243.9		IRS Form 1118	
3	Net Foreign Income	\$456.4	100.0%	Lines 4 + Line 5	
4	Pre-tax E&P	\$362.2		IRS Form 5471	
5	Taxable income not paid out of E&P	\$94.2		Lines 6-7-8	
6	Taxable income less loss and adjustments	\$213.7		IRS Form 1118	
7	- Dividends (actual and deemed)	\$86.3		IRS Form 1118	
8	- Sec. 78 gross up	\$33.1		IRS Form 1118	
9	Foreign taxes	\$97.3	21.3%	Llne 10 + Line 11	
10	Income tax paid by foreign affiliates	\$69.3		IRS Form 5471	
11	Income taxes paid by US parent	\$28.0		Sum of Lines 13 to 20	
12	Taxes withheld at source on				
13	Dividends	\$1.5		IRS Form 1118	
14	Interest	\$1.0		IRS Form 1118	
15	Rents, royalties, and license fees	\$2.7		IRS Form 1118	
16	Other taxes paid or accrued on	\$0.0			
17	Branch income	\$5.7		IRS Form 1118	
18	Specifically allocable income (section 863(b))	\$0.1		IRS Form 1118	
19	Service income	\$0.3		IRS Form 1118	
20	Other income	\$16.7		IRS Form 1118	
21	US Tax on foreign income after Credits	\$18.4	4.0%	See note <sup>1</sup>	
	Total US and foreign tax	\$115.7	25.3%	Line 9 + Line 21	

<sup>1</sup>US Treasury, Approaches to Improve the Competitiveness of the US Business Tax System in the 21st Century (Dec. 20, 2007)

#### 2. Financial Statement Data

According to the University of North Carolina study discussed above, the book effective tax rate of U.S. multinational companies over the 2003-2007 period was 30 percent, higher than the 28 percent effective tax rate for U.S. companies without foreign operations. 12 Indeed, over the 1988-2007 period, the study found that the book effective tax rate of U.S. multinationals was greater than or equal to that of U.S. domestic-only companies in every year. 13 Thus, notwithstanding the ability to operate in low-tax foreign jurisdictions, the tax provision of U.S. multinationals pay is a higher share of book income than companies operating exclusively within the United States.

<sup>&</sup>lt;sup>12</sup> Kevin Markle and Douglas Shackelford, op. cit., Table 2.

<sup>13</sup> *Ibid.*, Table 3. The book effective tax rates presented in Table 3 are parameters estimated from a regression that controls for industry, year, and company size.



## **Corporate Tax Revenues**

According to the OECD, the share of corporate tax revenues as a percentage of U.S. GDP in 2007 (3.1 percent) was greater than in 1980 (2.8 percent) and the share of corporate tax revenues as a percentage of total U.S. tax revenues in 2007 (11.0 percent) also was greater than it was in 1980 (10.8 percent). One needs to look back more than three decades to find a time in American history when corporate tax revenues regularly constituted a larger share of GDP or total tax revenues.

The United States also has generally relied on corporate taxes for a larger share of government revenues than the typical OECD country over the last three decades. For all OECD countries, corporate taxes as a share of total revenues averaged 10.8 percent in 2007 (vs. 11.0 percent in the United States) and 7.6 percent in 1980 (vs. 10.8 percent in the United States).<sup>16</sup>

Although the United States relies more heavily on corporate taxes to finance the cost of government than the average OECD country, corporate taxes as a share of U.S. GDP are below the OECD average. The share of corporate tax revenues in GDP is not, however, a reliable indicator of effective corporate tax rates, because the portion of business income earned by companies subject to corporate tax varies among countries. The United States has a substantially larger share of businesses that are not subject to corporate-level tax, especially big businesses, than other OECD countries. Over 80 percent of U.S. businesses in 2004 and more than half of business income reported in 2002 were organized as pass-through entities and not subject to corporate-level tax. As a result, the taxes paid by U.S. corporations as a share of corporate profits (i.e., the effective tax rate) can be relatively high (as found in the literature reviewed above) while, at the same time, corporate tax revenues as a share of GDP (which includes economic activity of corporations and unincorporated businesses) are relatively low.

<sup>&</sup>lt;sup>14</sup> OECD. *Revenue Statistics*, 2009, Tables 12 and 13.

<sup>&</sup>lt;sup>15</sup> With the U.S. financial crisis and ensuing global economic downturn, corporate tax revenues declined in 2008 and 2009 in the United States and in many other countries.

<sup>16</sup> *Ibid.*, Table 13.

<sup>&</sup>lt;sup>17</sup> U.S. Treasury, Conference on Business Taxation and Global Competitiveness, "Background Paper," July 23, 2007, pp. 16-18.

<sup>&</sup>lt;sup>18</sup> Ibid. and *Report of the President's Advisory Board on Federal Tax Reform*, November 2005, p. 99.