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Cutting the Effective Corporate Tax Rate

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With credit markets in disarray and the United States facing a possible recession, Americans are looking closely at the economic proposals of the presidential candidates. Luckily, there is a reform option available to the next president that would generate stronger economic growth and is easy to implement. Corporate tax reform that lowers the rate and achieves a more neutral burden across business activities could boost capital investment, aid the adoption of new technologies, and increase the capacity of the economy to grow.

This bulletin presents new estimates showing that the United States has one of the highest effective tax rates on corporate capital in the world at 36 percent, which compares to an average of just 19.5 percent for 79 other countries studied. These tax rates take into account the corporate income tax, sales taxes on capital purchases, and other capital-related taxes. Cutting the high U.S. tax rate and reducing the current variation in effective rates across industries and assets would improve productivity and generate higher economic growth.¹

The U.S. corporate income tax rate is so high that cutting it would likely increase federal revenues because it would reduce tax avoidance while stimulating added investment. A statistical analysis finds that the revenue-maximizing statutory corporate tax rate is about 28 percent, substantially less than the current combined U.S. federal and state rate of about 39 percent. Thus, cutting the corporate tax rate by 10 percentage points or more could be a winner for both the economy and the government.

Effective Corporate Tax Rates in 80 Countries

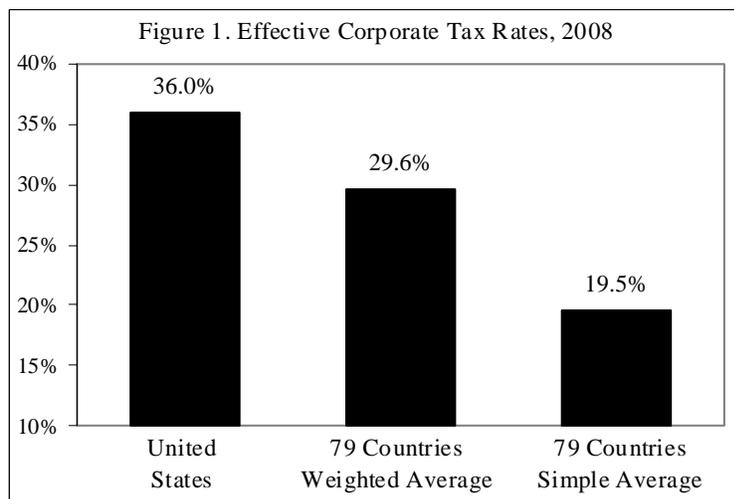
Businesses base their capital decisions on the after-tax profitability of their investments—additional capital will be invested if it can earn a higher return than the cost of attracting financing from investors in global markets. Businesses locate new facilities in those jurisdictions that offer the best returns. With many businesses operating global supply chains, countries that provide skilled labor, political stability, infrastructure, and favorable tax policies

will attract investment to create new jobs and rising incomes. All else equal, lower effective tax rates will encourage greater investment.

Figure 1 summarizes the estimates of marginal effective tax rates on capital for multinational corporations operating in the United States and 79 other countries. Table 1 provides details.² The data include both national and subnational corporate income taxes.

The tax rates are calculated as taxes paid as a proportion of the gross-of-tax return on capital for additional, or marginal, investments. For example, if the pre-tax return on a firm's investment project is 12 percent, and the effective tax rate is 50 percent, then the net-of-tax return is 6 percent.³ If a return of 6 percent is just sufficient to attract financing from investors, then the firm can move ahead with the project.

The effective tax rates take into account statutory corporate rates, capital cost recovery, and taxes on capital purchases such as retail sales taxes and nonrefundable value-added taxes. Other capital-related taxes are also included, such as taxes on assets, gross receipts taxes, stamp duties, and financial transaction taxes.



The table shows that the United States has the eighth highest marginal effective corporate tax rate among the 80 countries studied at 36 percent.⁴ This high effective tax rate on capital has two main causes:

- The U.S. statutory income tax rate is one of the highest in the world. Even taking into account the special tax break for domestic production that was enacted in 2004, the combined federal and state corporate tax rate is the third highest in the world after Japan and Chad at about 39 percent.
- State retail sales taxes on capital purchases and state franchise taxes add to the high tax rate on capital. Their removal would reduce the effective tax rate on capital from 36 percent to 28 percent.

Numerous advanced economies have effective corporate tax rates that are less than half the U.S. rate, including Belgium, Hong Kong, Ireland, the Netherlands, Singapore, and Switzerland. Belgium provides a deduction for the cost of equity financing that sharply reduces its effective rate, whereas other countries, such as Ireland, have low statutory rates.

Many countries have taken actions to cut effective corporate tax rates. Just since 2005 those countries have included: Canada (down 10.2 percentage points), Denmark (4.1 points), Egypt (10.8 points), Germany (7.8 points), Italy (5.3 points), the Netherlands (4.5 points), Spain (4.6 points), and Turkey (7.4 points).

Why are effective tax rates so important? Academic studies show conclusively that reductions in effective tax rates on capital spur increased foreign direct investment.⁵ One 2003 study surveyed the literature and found that a 1 percentage point cut in the effective rate increased capital investment by about 3 percentage points.⁶ Based on this result, a 1 percentage point cut in the effective tax rate on capital will increase foreign direct investment as a share of gross domestic product by 0.1 percent.⁷ Thus, if the United States cut its effective tax rate by 10 percentage points, its inward direct investment would rise substantially from 1.3 percent to 2.3 percent of GDP.

If the federal corporate income tax rate were cut from 35 percent to 25 percent—as proposed by Sen. John McCain—the effective U.S. tax rate would drop from 36 percent to 30 percent. If state sales taxes on capital purchases were also removed, the effective tax rate on capital would drop to 21 percent. That drop would

Table 1. Effective Corporate Tax Rates, 2008

United States*	36.0%		
Argentina	46.0%	Denmark	18.6%
China	45.3%	Malaysia	18.5%
Chad	40.1%	Bangladesh	17.8%
Brazil	39.1%	Madagascar	17.4%
India	37.6%	Netherlands	16.6%
Korea	37.1%	Uganda	16.4%
Russia	37.0%	Vietnam	16.3%
France	35.9%	Jamaica	16.2%
Japan	35.0%	Switzerland	15.5%
Australia	29.3%	Mexico	15.4%
Canada	29.1%	South Africa	15.1%
Pakistan	28.9%	Ghana	14.8%
Britain	28.7%	Trinidad	14.8%
Italy	28.1%	Czech Rep.	14.7%
Costa Rica	27.9%	Morocco	14.5%
Germany	27.3%	Poland	14.0%
Indonesia	26.9%	Rwanda	13.8%
Iran	26.5%	Chile	13.8%
Lesotho	26.5%	Ecuador	13.7%
Spain	26.4%	Hungary	13.5%
Austria	26.4%	Ireland	13.2%
Peru	24.7%	Slovak Rep.	12.6%
Norway	24.5%	Greece	11.9%
Botswana	23.3%	Iceland	10.5%
Tunisia	23.1%	Egypt	10.4%
Tanzania	22.2%	Croatia	9.6%
Ethiopia	21.9%	Romania	9.4%
Bolivia	21.9%	Turkey	9.2%
Sierra Leone	21.9%	Ukraine	8.7%
Sweden	21.1%	Singapore	8.0%
Zambia	20.6%	Mauritius	7.4%
Georgia	20.5%	Hong Kong	4.4%
Kazakhstan	20.4%	Latvia	4.2%
Finland	20.1%	Bulgaria	4.1%
New Zealand	20.1%	Nigeria	3.1%
Uzbekistan	20.1%	Kenya	1.8%
Jordan	20.0%	Belgium	-3.4%
Fiji	19.2%	Serbia	-6.0%
Luxembourg	19.1%		
Portugal	19.0%	Weighted Average**	29.6%
Thailand	19.0%	Simple average	19.5%

* The U.S. rate excludes temporary bonus depreciation.

** Average of 79 nations weighted by gross domestic product.

substantially boost the U.S. capital stock and result in much higher incomes for Americans over time.

Corporate Rate Cuts Can Be Good for Governments

Corporate tax reform would be good for the U.S. government as well. When a country has a high corporate tax rate, multinational companies use financial structures and transfer pricing to shift profits to lower-tax jurisdictions. The United States shoots itself in the foot by imposing a high corporate tax rate that induces such international income-shifting and encourages the emigration of real investment capital.

Partly because of these dynamic responses, recent studies have suggested that a Laffer curve exists for corporate income taxes, meaning that tax rate cuts in higher-rate countries will increase, not decrease, tax revenues.⁸ Although other factors, such as economic growth, affect corporate tax revenues, differences in tax rates across countries also play an important role.

I estimated a Laffer curve relationship for OECD countries for the period 2001 to 2005.⁹ A regression analysis took account of each country's economic growth, inflation, and the size of the resource and financial sectors. The results indicate that the revenue-maximizing corporate income tax rate is about 28 percent.

Thus the government would likely gain revenue if the federal corporate tax rate were cut from 35 percent to 25 percent. With that lower rate, the combined federal and state rate would be about 30 percent, which is still above the revenue-maximizing rate. Further reforms to cut the rate below the revenue-maximizing rate of 28 percent would be desirable since the corporate tax seriously distorts investment and asset allocation decisions throughout the economy.

Conclusion

The U.S. corporate tax system is an important barrier to economic growth. At a time when the economy faces severe challenges, business tax reform should be front-and-center in policy discussions. The aim of reforms should be to create a tax system that has competitive rates and is neutral between different business activities. A sharp reduction to the federal corporate rate accompanied by reforms to make the tax base more neutral would help generate higher growth and more jobs over the long run.

State governments also play an important role in setting business tax policy. Unfortunately, the average state corporate tax rate is about the same today as it was in

1980, despite major reductions around the world since then.¹⁰ Furthermore, state retail sales taxes impose high rates of tax on intermediate and capital purchases, which undermines U.S. productivity. Retail sales taxes should be reformed to remove taxation on business inputs.

In sum, cutting the federal corporate tax rate by 10 percentage points or more would help jump-start the economy in the short run, while boosting growth over the long run and losing the government little if any revenue.

¹ For background on how corporate tax reform would boost productivity, see Dale Jorgensen and Kun-Young Yun, *Lifting the Burden: Tax Reform, The Cost of Capital, and U.S. Economic Growth* (Cambridge: MIT Press, 2001).

² More detailed results can be found in Duanjie Chen and Jack M. Mintz, "Still a Wallflower: The 2008 Report on Canada's International Competitiveness," C. D. Howe Institute, September 18, 2008. Mintz can be reached at jmmintz@ucalgary.ca.

³ For further elaboration, see Duanjie Chen and Jack M. Mintz, "Taxing Business Investments: A New Ranking of Effective Tax Rates on Capital," World Bank, July, 2008. Our theory takes into account risk that is netted from the returns on capital.

⁴ This estimate excludes the effect of the "bonus depreciation" tax break that expires after this year. With bonus depreciation in place, the U.S. effective tax rate is 26 percent.

⁵ For example, see Michael Devereux, "The Impact of Taxation on the Location of Capital, Firms and Profit: A Survey of Empirical Evidence," Oxford University Center for Business Taxation, April 2006. And see Jack M. Mintz and Thomas Tsiopoulos, "Taxation of Foreign Capital in the Mediterranean Region," *Transnational Corporations* 6, no. 2 (August 1997): 51–94.

⁶ Ruud de Mooij and Sjef Ederveen, "Taxation and Foreign Direct Investment: A Synthesis of Empirical Research," *International Tax and Public Finance* 10, no. 6 (November 2003): 673–693.

⁷ Jack M. Mintz, "2007 Tax Competitiveness Report: A Call for Comprehensive Tax Reform," C. D. Howe Institute, September 2007.

⁸ See Kimberly Clausing, "Corporate Tax Revenues in OECD Countries," *International Tax and Public Finance* 14, no. 2 (April 2007): 115–134. The author estimated the revenue-maximizing corporate rate to be about 33 percent for OECD countries. And see Kevin Hassett and Alex Brill, "Revenue-Maximizing Corporate Income Taxes," American Enterprise Institute, July 31, 2007. The authors estimated that the revenue-maximizing rate is about 26 percent.

⁹ Jack M. Mintz, "2007 Tax Competitiveness Report."

¹⁰ For background on global tax cuts, see Chris Edwards and Daniel J. Mitchell, *Global Tax Revolution* (Cato Institute, 2008).