

**Is the U.S. Corporate Tax in the Laffer Zone?**  
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**by Chris Edwards**

Amid growing concerns about U.S. competitiveness, policymakers are awakening to the fact that America has one of the world's most inefficient corporate income taxes. House Ways and Means Committee Chair Charles B. Rangel, D-N.Y., has proposed reducing the federal corporate tax rate from 35 percent to 30.5 percent. Treasury Secretary Henry Paulson is also promoting a corporate rate cut. Those efforts should gain wide support because both businesses and workers would benefit from rate cuts spurring rising investment and improved productivity.

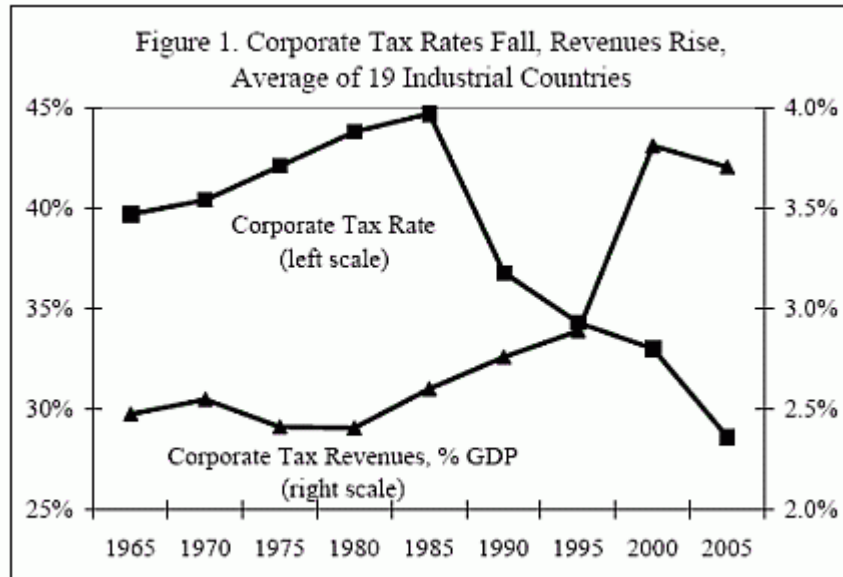
However, Rangel and Paulson seem to be assuming that a corporate rate cut has to be matched with tax increases to ensure that government revenue isn't reduced.<sup>1</sup> But there is growing evidence that a corporate rate cut would generate strong dynamic responses that would produce higher, not lower, federal tax revenue.

**Tax Rates and Tax Revenues**

Britain began the corporate tax-cutting revolution in the mid- 1980s with a reduction of its rate from 52 percent to 35 percent. The United States followed with a reduction of its rate from 46 percent to 34 percent. Since then, every major nation has cut its corporate tax rate, and many smaller nations have as well. In the European Union, the average corporate tax rate has fallen from 38 percent to 24 percent since 1996.<sup>2</sup> The United States has a combined federal and state rate of about 40 percent.

The tax-cutting trend is global. Since 2000, we've seen corporate tax cuts in far-flung places such as Russia (35 percent to 24 percent), Israel (36 percent to 29 percent), Panama (37 percent to 30 percent), Turkey (33 percent to 20 percent), Vietnam (33 percent to 28 percent), Guinea-Bissau (39 percent to 25 percent), and Ghana (33 percent to 25 percent). Perhaps the most dramatic recent cut was a 2005 reform in Egypt, which reduced that country's corporate rate from 40 percent to 20 percent in one swoop.<sup>3</sup>

In many countries, corporate rate cuts have coincided with rising tax revenues. For a group of 19 advanced economies with data back to 1965, I calculated the average statutory tax rate and average corporate tax revenue as a share of GDP.<sup>4</sup> I started with the same 20 countries as those in a recent analysis by Michael Devereux, but excluded Norway because of its huge oil-driven revenue growth.<sup>5</sup> Figure 1 shows that the average central government statutory rate was 40 percent or more before the mid-1980s. But then supply-side tax policies gained support and tax rates plunged. The average rate in the 19 countries fell from 45 percent in 1985 to 29 percent by 2005. During the same period, corporate tax revenue soared from 2.6 percent to 3.7 percent of GDP.<sup>6</sup> That is a 42 percent increase of corporate revenue relative to the size of the economy.



Source: Chris Edwards, based on data for 19 OECD countries. See endnote 4.

Why have corporate tax revenues risen so dramatically? One reason is that many countries broadened their corporate tax bases during the late 1980s, often by reducing depreciation deductions. But since then, most countries appear to not have broadened their corporate bases by much, if at all. The average value of depreciation deductions across major countries has been roughly unchanged in 15 years.<sup>7</sup> Also, effective tax rates, which include features of the tax base, have fallen with statutory rates in recent years.<sup>8</sup>

### **Dynamic Responses to Corporate Tax Cuts**

The main factor causing the surge in corporate tax revenues appears to be taxpayer responses to reduced tax rates. Lower rates generate real and financial responses from businesses, prompting them to report higher profits. Research has found that corporations are increasingly responsive to taxes in the global economy across many dimensions. James Hines of the University of Michigan concludes: "Evidence indicates that taxation significantly influences the location of foreign direct investment, corporate borrowing, transfer pricing, dividend and royalty payments, and research and development performance."<sup>9</sup>

Countries that raise corporate tax rates increase the pretax returns that are required of new projects because after-tax returns tend to be equalized across countries. The result is that fewer investment projects will be undertaken and capital will emigrate. With a smaller capital stock, labor productivity and wages will fall, and government revenue will be reduced. Jack Mintz of the University of Toronto notes that "economic studies show conclusively that business taxes significantly affect investment in a country."<sup>10</sup> His analyses show that "high effective tax rates on capital result in less foreign direct investment and therefore less economic growth."<sup>11</sup>

Harvard University's Greg Mankiw and Matthew Weinzierl examined the government revenue impact of tax cuts to capital, such as corporate income tax cuts.<sup>12</sup> They found that tax cuts would lose only about half of the revenue otherwise expected because rising investment generates offsetting revenue over the long run. In a 2006 study, German economists Mathias Trabandt and Harald Uhlig estimated similar dynamic revenue responses.<sup>13</sup>

In addition to those real investment effects, corporate tax changes prompt an array of financial or tax avoidance responses. At the domestic level, corporate tax cuts can induce noncorporate businesses to switch to taxable corporate status. One recent study found that this shift in Europe has led to an increase in the tax-to- GDP ratio of a modest 0.2 percentage points since the early 1990s.<sup>14</sup>

At the international level, tax cuts can induce many profit- shifting responses by multinational corporations, and those may have played a substantial role in the growing revenues in those countries that cut taxes. Those responses include companies changing their policies on dividend repatriations, transfer pricing, debt financing, foreign affiliate structure, intellectual property, and other items. As tax rates have come down, multinational corporations tend to report more profits to tax authorities.

The research that suggests strong dynamic responses by corporations to tax rates is matched by many media reports about particular businesses. On the financial side, Tax Analysts' Martin Sullivan routinely chronicles the profit-shifting activities of corporations. He noted recently, for example, that Sandisk, a maker of MP3 players, reported \$106 million in profit in Ireland in 2005, even though the company has only eight employees there.<sup>15</sup> Sandisk is apparently using financial techniques to move profits from high-tax America to low-tax Ireland.

On the real investment side, Intel Corp. has warned federal policymakers repeatedly that it costs about \$1 billion more for the company to build and operate a semiconductor plant in the United States than elsewhere.<sup>16</sup> About 70 percent of that additional cost stems from tax differences between the United States and other countries. Those cost differences are a key driver in where the company chooses to invest.

Thus, it was not surprising that Intel recently announced that it would build a \$2.5 billion wafer fabrication plant in China. Would this Intel plant have been built in the United States if the U.S. didn't have such an unappealing corporate tax climate? We don't know. But in announcing the investment, Intel leaders pointed not only to business reasons for the Chinese location, but also to the \$1 billion cost disadvantage of the United States and to attractive financial incentives provided by China.<sup>17</sup>

### **Laffer Curve**

Considering the range of real and financial responses to corporate taxes, it is likely that cutting the high U.S. corporate tax rate would induce a large expansion of the tax base

over time. Both U.S. and foreign firms would invest more in the United States, and they would have less incentive to shift reported profits to other countries.

The Laffer curve illustrates the idea that above a specific tax rate, cuts to the rate cause the tax base to expand sufficiently for revenue to increase. The U.S. corporate tax rate seems to be above that rate, and thus in a strong Laffer zone. The U.S. *statutory* rate is the second highest of the 30 nations in the OECD, and by one estimate, the *effective* rate is the highest.<sup>18</sup> Yet U.S. corporate tax revenues as a share of GDP are below average.

Economists Alex Brill and Kevin Hassett looked at these relationships in the OECD for 1980 to 2005. They found that increases in corporate tax rates in the OECD above 26 percent tended to reduce government revenues.<sup>19</sup> The U.S. corporate tax rate is 14 percentage points above that rate, and thus probably far into the Laffer zone.

Mintz recently found similar results for Canada using a sample of OECD countries.<sup>20</sup> He calculated that the revenue-maximizing corporate tax rate is about 28 percent. Canada is much smaller than the United States, but is subject to the same global economic forces.

However, a new study by the Congressional Research Service has tried to throw cold water on the whole idea of a corporate Laffer curve.<sup>21</sup> But the sense I get reading the CRS report is that the authors are in denial about the corporate tax revolution that is going on around the world. For example, the report says: "Claims that high U.S. tax rates will create problems for the United States in a global economy suffer from a misrepresentation of the U.S. tax rate compared to other countries."<sup>22</sup>

### **Misrepresentation?**

The data in KPMG's annual corporate tax survey are crystal clear.<sup>23</sup> The average federal-state statutory corporate rate across 92 countries surveyed by KPMG was 26.9 percent in 2007. Again, the comparable rate is 40 percent in the United States, or 13 points above the average. And note that some of America's largest business centers, including California, New York, and Massachusetts, have much higher state rates than average.

The CRS report also suggests that the United States doesn't look out of line when one considers effective corporate tax rates. While there are many ways to measure effective rates, a new study by Mintz finds that the U.S. effective corporate rate is the highest in the OECD and the fourth highest among 80 countries studied.<sup>24</sup>

The CRS report chooses to focus on tax rates in the G-7 countries. But even in those large countries, there are major reforms in the pipeline. Canada just passed a reduction of its federal corporate rate from 22 percent to 15 percent. Britain's corporate rate is falling from 30 percent to 28 percent, and Germany's is plunging from 38 percent to 30 percent. Corporate tax cuts are also on the agenda in France, and have been discussed in Japan.

### **Conclusion**

The direction of tax reforms around the world is clear, and it is time for the CRS, and Congress in general, to hop on board the corporate tax reform express. A modest corporate tax rate cut would likely result in no government revenue losses in the long term. However, the goal of policy should be to maximize growth, not revenue, and thus a much larger rate cut is in order. I've proposed that the corporate rate be cut to 15 percent within a major overhaul of the tax code.<sup>25</sup> That wouldn't quite match Ireland's 12.5 percent corporate rate, but it would reduce tax avoidance, make the United States a premier location for international investment, and supercharge American growth and innovation.

## FOOTNOTES

<sup>1</sup> Corporate base broadening was a focus of a July Treasury report. *See* U.S. Treasury background paper, "Treasury Conference on Business Taxation and Competitiveness," July 23, 2007.

<sup>2</sup> KPMG, "Corporate and Indirect Tax Rate Survey," 2007. The KPMG data include national and subnational taxes.

<sup>3</sup> An interesting article from the American Chamber of Commerce in Egypt at [www.amcham.org.eg/Publications/BusinessMonthly/september%2005/inperson.asp](http://www.amcham.org.eg/Publications/BusinessMonthly/september%2005/inperson.asp). (Other sources indicate that the standard rate before 2005 was 40 percent.)

<sup>4</sup> Revenue data from the OECD, "Revenue Statistics, 1965-2006," 2007. Rates are for national governments from the University of Michigan Office of Tax Policy Research, as adjusted and corrected by the author.

<sup>5</sup> Michael Devereux, "Developments in the Taxation of Corporate Profit in the OECD since 1965," Oxford University, Dec. 2006.

<sup>6</sup> OECD, *supra* note 4, at 81.

<sup>7</sup> Devereux, *supra* note 5, Figure 5. *See also* Rachel Griffith and Alexander Klemm, "What Has Been the Tax Competition Experience of the Last 20 Years?" *Tax Notes Int'l*, June 28, 2004, p. 1299.

<sup>8</sup> Devereux, *supra* note 5, figures 7 and 9.

<sup>9</sup> James Hines, "Introduction," in *International Taxation and Multinational Activity* (Chicago: University of Chicago Press, 2001), p. 1.

<sup>10</sup> Jack Mintz, "2007 Tax Competitiveness Report," C.D. Howe Institute, Sept. 2007, p. 8.

<sup>11</sup> *Id.* at 11.

<sup>12</sup> Greg Mankiw and Matthew Weinzierl, "Dynamic Scoring: A Back-of-the-Envelope Guide," Harvard University, Dec. 12, 2005.

<sup>13</sup> Mathias Trabandt and Harald Uhlig, "How Far Are We From the Slippery Slope?" Humboldt University, Apr. 3, 2006.

<sup>14</sup> Ruud de Mooij and Gaetan Nicodeme, "Corporate Tax Policy, Entrepreneurship, and Incorporation in the EU," CESifo Working Paper No. 1883, Dec. 2006.

<sup>15</sup> Martin Sullivan, "Wake-Up Call for the Celtic Tiger," *Tax Notes*, Apr. 23, 2007, p. 312.

<sup>16</sup> *See, e.g.*, Craig Barrett, Testimony Before the House Committee on Ways and Means, June 22, 2006.

<sup>17</sup> Jason Dean, "Intel to Build Factory and Put Some Chips in China," *The Washington Post*, Mar. 26, 2007. The story is sourced to *The Wall Street Journal*.

<sup>18</sup> For the effective rate, see Mintz, *supra* note 10, at 9.

<sup>19</sup> Alex Brill and Kevin Hassett, "Revenue- Maximizing Corporate Income Taxes," American Enterprise Institute, July 31, 2007.

<sup>20</sup> Mintz, *supra* note 10, at 15.

<sup>21</sup> Jane Gravelle and Thomas Hungerford, "Corporate Tax Reform: Issues for Congress," CRS, Oct. 31, 2007.

<sup>22</sup> *Id.* at 1.

<sup>23</sup> KPMG, "Corporate and Indirect Tax Rate Survey," 2007. The KPMG data include national and subnational taxes.

<sup>24</sup> Mintz, *supra* note 10, at 9.

<sup>25</sup> Chris Edwards, "Options for Tax Reform," Cato Institute, Feb. 24, 2005.