

June 4, 2008

WELL-DESIGNED, FISCALLY RESPONSIBLE CORPORATE TAX REFORM COULD BENEFIT THE ECONOMY

Unpaid-For Rate Cuts Would Likely Hurt Most Americans in the Long Run

By Aviva Aron-Dine

Summary

Over the past year, proposals for federal corporate tax cuts and corporate tax reform have received increasing attention. The corporate income tax appears to have joined the long list of tax issues likely to be addressed, or at least debated, over the next few years.

Already, two different approaches have emerged. In October 2007, Ways and Means Committee Chair Charles Rangel introduced legislation that would significantly reduce the corporate tax rate and pay for the rate cut by eliminating several sizable corporate tax breaks. While some applauded Rep. Rangel's package as sensible tax reform, others have questioned the notion of paying for corporate rate cuts by scaling back corporate tax benefits. For example, economist Glenn Hubbard, former chair of President Bush's Council of Economic Advisers, wrote in a *Wall Street Journal* op-ed that "economically wise base-broadening alone is not likely to finance a significant corporate rate

KEY FINDINGS

- Some advocates of cutting the corporate income tax rate have greatly exaggerated both the level of tax that U.S. corporations pay and the economic effects of the corporate income tax.
- While the *statutory* U.S. corporate tax rate is relatively high, *effective* corporate tax rates – the share of their profits that corporations actually pay in taxes – are much lower, due to the plethora of corporate tax breaks in the tax code.
- Effective tax rates also differ substantially among different types of investment. For example, some categories of corporate investment are taxed at rates close to the statutory rate, while debt-financed investment is subject to a negative effective marginal rate.
- These large discrepancies create opportunities for revenue-neutral or revenue-raising tax reforms that could benefit the economy by leveling the playing field for different types of investment and thereby removing economic distortions that the current tax code creates.
- The evidence does not support claims that *unpaid-for* (i.e. deficit-financed) corporate tax cuts would significantly benefit the economy. In fact, a Joint Committee on Taxation analysis found that such tax cuts would actually slightly *reduce* economic growth over the long run.
- Because deficit-financed tax cuts eventually would have to be paid for (through reductions in programs or increases in other taxes), they would probably leave most Americans worse off *even if* they generated small economic gains.

cut”¹ — that is, it would not be possible to finance a corporate rate cut of the desired magnitude through base-broadening measures without harming the economy.

The Bush Administration initially appeared to endorse the rate-reducing, base-broadening tax reform model embodied in Rep. Rangel’s proposal. In July 2007, the Treasury Department issued a major report on business taxation that offered options for financing a corporate rate cut by eliminating corporate tax breaks.² But in a December follow-up report, the Treasury commented, “it remains unclear whether a revenue-neutral reform would provide a reduction in business taxes sufficient to enhance the competitiveness of U.S. businesses.”³ The implication of this and other such statements is that the overall corporate tax burden, not just the statutory tax rate, needs to be lowered substantially and that paying for a rate cut with base broadening would reduce or eliminate its economic benefits.

Given the serious fiscal challenges the nation faces, it is fortunate that these claims are mistaken. Far from being in conflict, *fiscal responsibility and economic efficiency are complementary goals for corporate tax reform*. Reforms that eliminate inefficient tax subsidies and thereby raise revenue would also have the effect of leveling the playing field for different forms of investment, making the corporate income tax more economically efficient.

This analysis makes three main points.

- **U.S. corporate tax rates are lower, and the economic effects of the U.S. corporate income tax likely smaller, than is often suggested.** Some have claimed that the U.S. corporate tax rate is out of line with international norms and unduly burdens American businesses. However, these critics typically focus only on the *statutory* marginal tax rate. The Treasury Department, the Congressional Budget Office (CBO), and other researchers have found that *effective* corporate tax rates — the share of the return on corporate investment that is actually paid in taxes — are far lower than the statutory rate and, depending on the category of investment, are similar to, only modestly higher than, or significantly lower than effective corporate tax rates in other developed countries. As the Treasury Department explained, the United States has a high statutory rate but a low effective rate because of its “narrow corporate tax base,” which is the result of “accelerated depreciation allowances [and] special tax provisions for particular business sectors . . . as well as debt finance and tax planning.”⁴

Moreover, while there is good reason to think that the corporate income tax has some economic costs, claims that it greatly harms the U.S. economy or significantly reduces U.S. wages rest on studies that are not applicable to the United States or that suffer from a number

¹ R. Glenn Hubbard, “The Corporate Tax Myth,” *Wall Street Journal*, July 26, 2007.

² Treasury also considered the possibility of using base broadening to pay for partial expensing of corporate investment, an approach that could be highly problematic if not coupled with other changes; see the box on page 19. U.S. Department of the Treasury, “Treasury Conference on Business Taxation and Global Competitiveness: Background Paper,” July 23, 2007, <http://www.treas.gov/press/releases/reports/07230%20r.pdf>.

³ Office of Tax Policy, U.S. Department of the Treasury, “Approaches to Improve the Competitiveness of the U.S. Business Tax System for the 21st Century,” December 20, 2007, http://www.ustreas.gov/press/releases/reports/hp749_approachesstudy.pdf.

⁴ Office of Tax Policy, U.S. Department of the Treasury, “Approaches to Improve the Competitiveness of the U.S. Business Tax System for the 21st Century.”

of other problems. As the non-partisan Congressional Research Service (CRS) concluded in a recent report, “many of the concerns expressed about the corporate tax are not supported by empirical data... Claims that high U.S. 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 and are less important when capital is imperfectly mobile, as it appears to be.”⁵

- **Unpaid-for corporate rate cuts are unlikely to significantly help the economy; in fact, a Joint Committee on Taxation study found they could harm it.**⁶ This could occur because the deficits and debt that result from unpaid-for tax cuts have negative economic effects, which can outweigh the economic benefits of the tax cuts themselves. Furthermore, in the long run, deficit-financed tax cuts have to be paid for, either through increases in other taxes or through cuts to government services. Given these eventual financing costs, unpaid-for corporate tax cuts would likely leave most Americans worse off in the long run, even if they generated modest economic benefits.
- **Large disparities in the treatment of different types of corporate investment create opportunities for reforms that could be revenue neutral — or even raise revenue — while at the same time improving economic efficiency.** The wide variation that exists today in corporate tax rates on different forms of investment creates economic distortions and inefficiency, since it encourages businesses to choose among investments based on their tax benefits instead of their real economic value. Thus, reforming the corporate tax so as to equalize effective tax rates among different types of investment would likely have economic benefits.

Such reform might involve lowering the statutory corporate rate while scaling back corporate tax breaks. As Brookings Institution economist and Hamilton Project director Jason Furman has explained, “Both halves of this classic equation have the potential for helping the economy by eliminating the perverse incentives to invest in tax-favored activities rather than in more economically productive activities.”⁷

I. Corporate Rates Are Lower, and Economic Effects Smaller and More Uncertain, Than Is Often Suggested

Most recent arguments for simply reducing the corporate tax rate (without enacting base-broadening measures to offset the revenue losses) rest on the premise that the U.S. corporate rate is so high as to be out of line with international norms and that this reduces the competitiveness of U.S. businesses, seriously damages the U.S. economy, and dramatically lowers workers’ wages.

⁵ Jane G. Gravelle and Thomas L. Hungerford, “Corporate Tax Reform: Issues for Congress,” Congressional Research Service, updated April 22, 2008.

⁶ Joint Committee on Taxation, “Macroeconomic Analysis of Various Proposals to Provide \$500 Billion in Tax Relief,” JCX-4-05, March 1, 2005, <http://www.house.gov/jct/x-4-05.pdf>.

⁷ Jason Furman, “Corporate Taxes, in Need of Reform,” *Washington Post*, October 27, 2007, http://www.brookings.edu/opinions/2007/1027_corporate_taxes_furman.aspx.

This claim ignores three crucial points. First, U.S. effective corporate tax rates are far lower than the statutory rate. Second, the evidence that the corporate tax has a large effect on the U.S. economy is weak, and substantial uncertainty surrounds the question of who bears the corporate tax burden. Third, many of the economic distortions created by the corporate tax arise not from the overall level of the tax burden but from the large variation in effective rates on different types of corporate investment.

The first and second of these issues are discussed below. The third is discussed in section III of this analysis.

How High Is the U.S. Corporate Rate?

In an editorial published last summer, the *Wall Street Journal* observed that the statutory U.S. corporate tax rate is high relative to other countries, and yet the U.S. corporate tax raises relatively little revenue as a share of GDP. The *Journal's* conclusion was that the U.S. must be on the “wrong side of the Laffer Curve,” with corporate tax rates reducing investment enough to actually reduce revenue.⁸

The mystery the editorial pointed to is a real one. Despite a statutory corporate tax rate higher than those of most other Organization for Economic Co-operation and Development (OECD) countries, U.S. corporate tax revenues in recent years have typically fallen well below the OECD average, measured as a share of Gross Domestic Product.

As discussed below, however, the *Journal's* theory is extremely implausible. The real explanation appears to be that the U.S. couples its high statutory marginal tax rate with very generous corporate tax loopholes, reducing *effective* marginal tax rates to levels similar to or lower than those of other OECD countries.

In a 2005 study, CBO used a data series constructed by three economists at the London-based Institute for Fiscal Studies to compare statutory and effective corporate marginal tax rates across countries.⁹ The effective marginal rate is typically the best indicator of how the corporate tax affects incentives to invest, because it measures how much the corporate tax increases what an investment needs to earn in order for it to be worth undertaking.¹⁰ The data series that CBO used computes

⁸ *Wall Street Journal*, “We’re Number One, Alas,” July 13, 2007.

⁹ The CBO study is Congressional Budget Office, “Corporate Income Tax Rates: International Comparisons,” November 2005, <http://cbo.gov/ftpdocs/69xx/doc6902/11-28-CorporateTax.pdf>. Effective tax rates were estimated by Michael P. Devereux, Rachel Griffith, and Alexander Klemm and are available on the website of the Institute for Fiscal Studies, at http://www.ifs.org.uk/publications.php?publication_id=3210. The methodology is described in Devereux, Griffith, and Klemm, “Corporate Income Tax Reforms and International Tax Competition,” *Economic Policy*, October 2002. Since the CBO study appeared, tax rate estimates for 2005 have become available.

¹⁰ The statutory corporate marginal tax rate is the rate specified by tax law. For example, in the United States, the top federal statutory corporate rate is 35 percent.

The “effective corporate marginal tax rate” is the percentage of investment returns that is paid in taxes on a “marginal” investment, where a marginal investment is one that earns returns just high enough to make it worthwhile. The effective marginal tax rate is often the best measure of how the corporate tax affects incentives to invest. This is because the share of pre-tax investment returns that must be paid in tax on a “marginal” investment is a measure of how much the corporate income tax adds to what an investment otherwise needs to earn in order for it still to be worth undertaking after taxes.

effective marginal corporate rates for 19 OECD countries, including the United States, based on statutory tax rates and each country's rules for deducting ("depreciating") the costs of investments.¹¹

Figure 1 compares U.S. corporate marginal tax rates with those of other countries. It shows that the U.S. statutory rate is indeed relatively high. (Note that the U.S. statutory rate is shown as 39 percent, rather than 35 percent, because these figures take into account state corporate income taxes.)

But U.S. *effective* marginal corporate tax rates are much lower than the statutory rate. In 2005, the U.S. effective marginal corporate rate on equity-financed investment in machinery was only 24 percent. The effective marginal corporate rate on debt-financed investment in machinery was *negative*, estimated at -46 percent, meaning that the total value of the deductions companies may claim for such investment significantly exceeds the tax they pay, and other taxpayers in effect subsidize the investment. The U.S. effective marginal rate on debt-financed investment in machinery was the second lowest among the 19 countries studied.¹² (Equity-financed corporate investment is investment financed by stock sales; investors are compensated by payment of dividends. Debt-financed investment is investment financed by issuing bonds; investors are compensated with interest payments. The meaning and economic implications of negative effective marginal tax rates on debt-financed investment are discussed below; see pages 16-20.)

U.S. effective rates are so much lower than the statutory corporate rate in large part because the U.S. rules for deducting the costs of investments are unusually generous. According to a Treasury Department analysis, they are the third most generous among OECD countries.¹³

For example, suppose investors demand an after-tax rate of return of 4 percent. Then, in the absence of taxes, any investment earning a return of 4 percent would be worth undertaking. But suppose the effective corporate marginal tax rate is 20 percent. Then this would raise the required *pre-tax* return on investment to 5 percent. ($5\% - 20\% \times 5\% = 4\%$.) Only investments earning at least a 5 percent return would be worth undertaking.

¹¹ Allowing a business to deduct (or "depreciate") more of the cost of an investment up front lowers effective marginal tax rates, while requiring it to depreciate investments over a longer period of time raises effective marginal tax rates.

"Depreciation" is the term used to refer to an object's gradual loss in value over time (e.g., a five-year-old machine is generally worth less than a new machine). When businesses make an investment, they are allowed to deduct the cost of the investment on their tax returns but must spread the deduction over a period of years. These deductions are intended to reflect the actual depreciation in the value of the investment and are referred to as depreciation deductions.

All else being equal, if tax depreciation rules match economic depreciation — that is, if businesses are allowed to deduct or "write off" the cost of investments at the rate at which the investments actually depreciate in value — then the effective marginal rate will equal the statutory rate. However, in practice, tax depreciation schedules frequently deviate significantly from the true rate of economic depreciation. If tax depreciation is more rapid than economic depreciation, the effective rate will be below the statutory rate. (Conversely, if tax depreciation is slower than economic depreciation, the effective rate will be above the statutory rate.)

¹² Devereux, Griffith, and Klemm do not provide estimates of the overall effective marginal tax rate on corporate investment. They do provide estimates for equity-financed investment in structures, but not for debt-financed investment in structures. While their data show that the U.S. effective tax rate for equity-financed investment in structures is high by international standards, Congressional Budget Office data suggest that the U.S. effective tax rate for debt-financed investment in structures is probably relatively low.

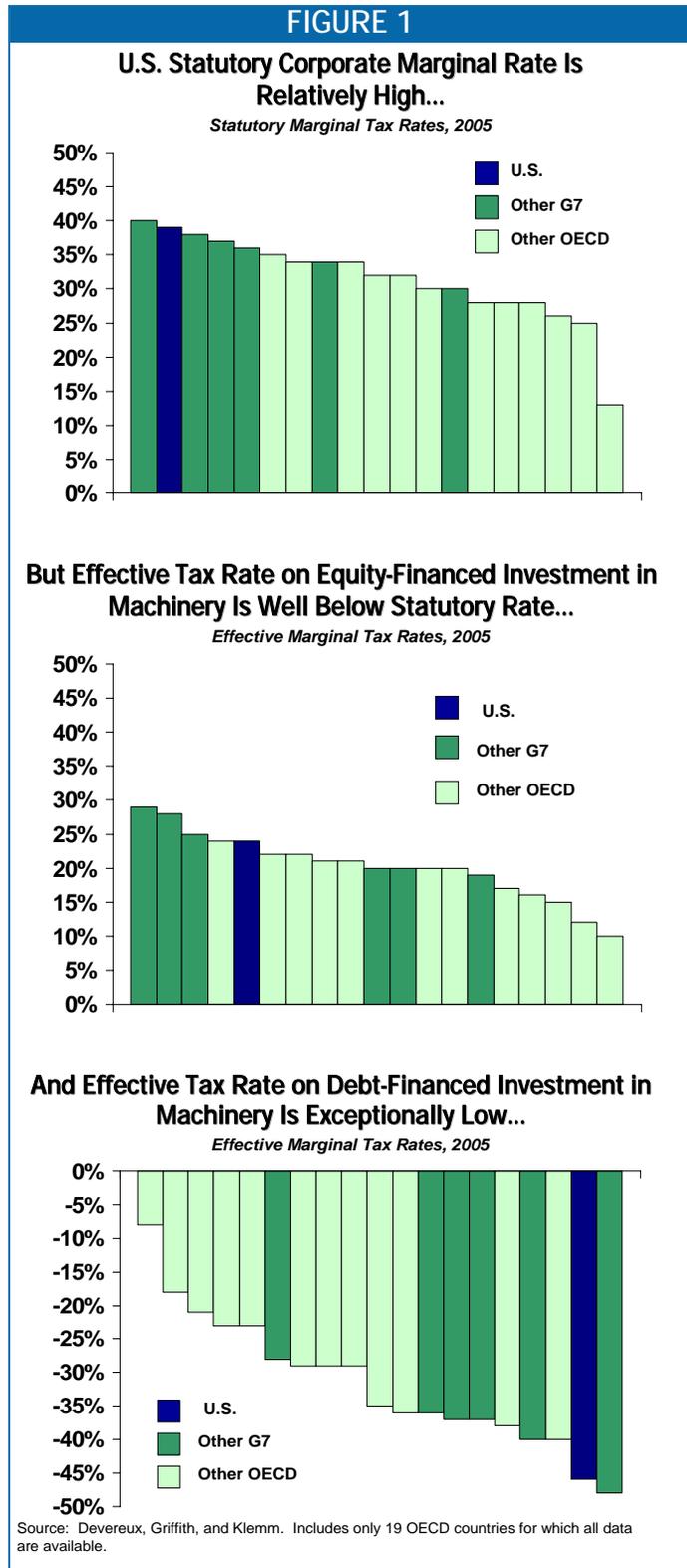
¹³ U.S. Treasury Department, "Treasury Conference on Business Taxation and Global Competitiveness: Background Paper."

The claim is often made that the United States is “falling behind” other developed countries, many of which have reduced their statutory corporate tax rates over the past decade. As Figure 1 shows, this claim ignores the fact that, even with the statutory rate reductions that have taken place in other countries, U.S. effective corporate tax rates remain in line with international norms. Also worth noting, most other countries that have lowered their statutory corporate tax rates have also taken steps to broaden their corporate tax bases, for instance by making depreciation deductions less generous or eliminating inefficient tax subsidies.¹⁴

U.S. Rates Are Similar to Those of Other Large, High-Income Countries

For many purposes, the most relevant comparisons are between U.S. corporate tax rates and the corporate tax rates of other large, high-income countries. These are the countries that generally offer investment climates most similar to that in the United States, and so they are probably the countries most often competing with the United States for specific investment projects. In addition, these are the countries for which the economic effects of the corporate income tax are probably most similar to its economic effects here.

As CBO noted in its cross-country study of corporate tax rates, “an international comparison of corporate income tax rates should account for differences among countries. The size of a country’s economy as well as its other economic characteristics influences the corporate rate that a country establishes. Consequently, an analysis of tax-rate differentials should recognize the ways in



¹⁴ See for example Devereux, Giffith, and Klemm, “Corporate Income Tax Reforms and International Tax Competition;” Jeffrey Owens, “Fundamental Tax Reform: An International Perspective,” *National Tax Journal*, March 2006; and Michael Keen, “The German Tax Reform of 2000,” *International Tax and Public Finance*, September 2002.

which countries vary. For example, comparing corporate income taxes in the United States with those of other large industrialized countries may be more revealing than comparing the United States' corporate tax structure with the structure of much smaller and less industrialized countries."¹⁵

CBO then observed, "among the OECD members, the G7 countries are the most similar to the United States in the size of their economies, level of industrialization, and, probably, the degree to which the overall supply of capital and the corporate tax base are sensitive to corporate tax rates." And "although the United States' statutory corporate tax rates are among the highest of those in OECD countries, they are comparable with the statutory rates imposed by other members of the Group of Seven (G7)."¹⁶ Figure 1 shows that U.S. effective marginal tax rates also are more similar to those of other G7 countries than to those of the OECD as a whole.

Actual U.S. Effective Marginal Rates Likely Considerably Lower

As noted above, the effective marginal tax rates shown in Figure 1 are estimates based just on the statutory tax rate and depreciation schedules (i.e., the rules that govern tax write-offs for investment purchases). They do not reflect the wide array of other tax breaks available to U.S. corporations, nor do they reflect the effects of tax shelters and illegal tax evasion. This means that actual effective marginal tax rates are likely considerably lower. (They are not necessarily lower *relative to other countries*, however, since other countries offer their own array of tax breaks.)

The Treasury Department estimates that the revenue loss from corporate tax breaks (known as "tax expenditures") will total more than \$1.2 trillion over the next ten years (2008-2017). Only about a third of this cost arises from provisions taken into account in the effective tax rate estimates cited above, leaving more than \$800 billion in additional corporate tax breaks. (For comparison, total corporate revenues over the same ten-year period are projected to equal \$3.4 trillion.) In addition, the IRS estimates that the corporate tax gap totaled \$30 billion in 2001: that is, another \$30 billion was owed but not paid in corporate taxes.¹⁷

(In addition to lowering overall tax levels, tax expenditures typically widen the discrepancies in tax rates on different types of corporate investment, an issue discussed in more detail in section III.)

Impact of Corporate Tax on Investment Is Uncertain and Likely Smaller Than Is Often Suggested

There are various channels through which the corporate income tax might affect the economy. First, it might influence businesses' decisions about whether to incorporate, whether to finance investment with debt or equity, and what types of investment to undertake. These issues are discussed in section III of this analysis.

What has received considerably more attention, however, is the potential impact of the corporate tax on the overall level of investment. In theory, the corporate tax could reduce U.S. domestic investment in two ways: it could reduce Americans' saving, and it could lead investors to invest in

¹⁵ Congressional Budget Office, "Corporate Income Tax Rates: International Comparisons."

¹⁶ Congressional Budget Office, "Corporate Income Tax Rates: International Comparisons."

¹⁷ Internal Revenue Service, "Tax Gap Facts and Figures," http://www.irs.gov/pub/irs-utl/tax_gap_facts-figures.pdf.

other countries instead of in the United States. In practice, the corporate tax appears to have little effect on saving and, although its effects on investment location decisions remain highly uncertain, the more extreme claims that have been made about these effects suffer from multiple flaws.

The Effect of the Corporate Income Tax on Saving

The corporate income tax is largely a tax on investment income — that is, on the returns to saving. Thus, it could potentially lead Americans to save less than they otherwise would.

But according to the Congressional Research Service, “most empirical evidence seems to point to little savings response [to taxes on capital income]. The savings rate has been relatively constant during most of the post war period, and attempts to formally estimate the savings response, while problematic, have found small effects of varying sign.”¹⁸ While economists still debate what drives saving decisions, evidence suggests that many people decide how much to save without reference to the after-tax rate of return. For example, it appears that many people decide how much to save on the basis of simple rules of thumb, like saving a target amount or a target percentage of income, or saving whatever amount of current income is not required to attain some desired level of consumption. Since these rules of thumb are not based on the after-tax rate of return, the savings behavior of individuals who rely on them will be largely independent of tax rates.

In a review of the economics literature on the corporate income tax, Alan Auerbach, an economist at the University of California, Berkeley and one of the foremost experts on corporate taxation, began by dismissing the issue of the savings response, commenting, “it’s a theoretically sound point, but empirically it’s difficult to demonstrate convincingly.”¹⁹ The real question, he concluded, was how the corporate tax affects the location of investment in today’s more open global economy.

The Effect of the Corporate Income Tax on Investment Location Decisions

The current debate about the corporate income tax centers on that question: how does the corporate tax affect the level of investment in the United States, given that capital is mobile across borders? In a more open world economy, firms can generally avoid paying U.S. corporate income tax by locating investments, such as new manufacturing plants, in other countries.²⁰ Thus, the corporate income tax might induce firms to invest in other countries, rather than the United States.

Provided that total national saving did not change (see the discussion above), this sort of investment shifting would have little effect on total U.S. national income. Whether U.S. savers invest in the United States or elsewhere, the returns to the investment accrue to them and are part of

¹⁸ Jane G. Gravelle, “Distributional Effects of Taxes on Corporate Profits, Investment Income, and Estates,” Congressional Research Service, updated May 7, 2007.

¹⁹ Alan Auerbach, presentation at Urban-Brookings Tax Policy Center and International Tax Policy Forum Conference, “Who Pays the Corporate Income Tax in an Open Economy?” December 18, 2007.

²⁰ In theory, U.S. corporations are required to pay tax on their worldwide income. However, they can defer taxes indefinitely by reinvesting profits abroad, and other legal tax avoidance mechanisms are also available.

The corporate income tax might also be expected to discourage investors (both U.S. and foreign) from investing in U.S. corporations.

U.S. national income.²¹ (Similarly, whether foreign savers invest in the United States or elsewhere, the returns on their investments accrue to them and are not part of U.S. national income.) But the movement of capital abroad could have important distributional consequences. Traditionally, economists have believed that the corporate tax was borne by investors in the form of lower returns on their investment. If the corporate tax led firms to invest less in the United States, however, this would decrease the size of the U.S. capital stock. With less capital available, U.S. workers would be less productive, and their wages would be lower.²² Thus, in an open global economy, some of the burden of the corporate income tax could be shifted from U.S. investors to U.S. workers. (Foreign workers, in contrast, would gain, since the capital stock in their countries would be larger.)

It is certainly plausible that the corporate income tax has some effect on investment location decisions. Unlike in the case of individuals' work and saving choices, where most empirical evidence suggests relatively little response to taxation,²³ there is considerable empirical evidence that firms' investment decisions are sometimes quite sensitive to tax considerations.²⁴

There is not, however, evidence to substantiate the stronger claims that have been made about the corporate income tax and the economy. Rather, claims that the corporate tax has such large effects on investment that cutting corporate rates would "pay for itself" or that the full burden of the tax is shifted to workers rest on the misuse of academic studies or on studies that themselves suffer from the following flaws:

- **Ignoring the fact that the United States is a special case.** Assertions about the large effects of the corporate income tax often rest on economic models of *very small, very open* economies; the prototypical example of such an economy might be Singapore or Ireland. The assumption animating these models is that, if a corporate income tax is imposed, capital will flee the country until the scarcity of investment funds raises interest rates enough to fully counterbalance the effects of the tax.²⁵ The investors who remain in the country end up just as well off as they were before, but the capital stock is much smaller, and workers' wages fall commensurately.

To state the obvious, the United States is not Singapore or Ireland. The United States is the world's largest economy and, for various reasons, investors appear to be willing to invest in the

²¹ There would be some loss to U.S. — and worldwide — income, because the tax would lead firms to invest abroad even when somewhat more productive investment opportunities were available in the United States. However, economic theory suggests these losses would be much smaller than those that would result from a reduction in total worldwide investment.

²² Some have argued that the corporate tax costs America jobs because reduced investment in the United States reduces demand for U.S. labor. This could, in theory, reduce U.S. employment. In practice, however, most economists believe that reduced demand for labor translates into lower wages, rather than reduced employment (at least over the long run), because workers are generally willing to accept lower-paying jobs rather than become unemployed.

²³ See for example Congressional Budget Office, "The Effect of Tax Changes on Labor Supply in CBO's Microsimulation Tax Model," Background Paper, April 2007, <http://cbo.gov/ftpdocs/79xx/doc7996/04-12-LaborSupply.pdf>. See also the discussion of individual savings behavior on page 8 of this analysis.

²⁴ See for example Michael P. Devereux and Rachel Griffith, "Evaluating Tax Policy for Location Decisions," *International Tax and Public Finance*, 2003.

²⁵ That is, investors will leave the country until the scarcity of investment funds leads to enough of an increase in the rate of return on investment to make up for the tax.

United States even when somewhat higher after-tax returns are available elsewhere.²⁶ These facts reduce the impact of the U.S. corporate income tax on investment, because they reduce investors' responsiveness to taxes. For this reason, results derived from theoretical models of small, open economies — or from cross-country studies where most of the countries in the sample are far smaller than the United States — are generally not applicable to the United States.

In response to such considerations, Jane Gravelle, senior economic policy Specialist at the Congressional Research Service, and Kent Smetters, an economist at the University of Pennsylvania, developed a more complex model of the corporate income tax and the economy, one capable of distinguishing between small and large countries and of taking into account various other factors. When they used their model to examine the case of a small, fully open economy, they obtained the usual result that a higher-than-average corporate income tax would cause massive capital flight, and the corporate tax would thus be fully shifted to workers. But when they recalibrated their model for a country more like the United States, they found that the effect on investment was much smaller and that between 70 and 90 percent of the corporate tax was borne by investors.²⁷ Moreover, Gravelle has since commented that even this model probably overstates the effect of the U.S. corporate income tax on investment location decisions, for such reasons as that it does not take into account the negative effective marginal tax rates on debt-financed investment in the United States, an issue discussed above.²⁸

- **Conflating profit shifting and real investment decisions.** In an open economy, firms have an incentive to move investment to low-tax countries. But they have an even stronger incentive to *make it appear* that they have moved investment to low-tax countries or to make it appear that their profits were earned in low-tax countries. This practice, known as “profit shifting,” is widely believed to be very prevalent, and it may contaminate some of the data used to assess how the corporate income tax affects investment and the economy. Profit shifting may make it appear that investment and corporate profits in low-tax countries are higher than they actually are (and, correspondingly, that investment and profits in high-tax countries are lower).²⁹

Profit shifting is a problem in its own right; it is a form of tax evasion that reduces tax revenues, and it means that resources are being wasted on tax planning that could be more productively employed in other ways. But it is very distinct from the real movement of investment and does not have the same effect on wages. It is generally best addressed through measures that improve tax enforcement and minimize opportunities for evasion.

²⁶ See Congressional Budget Office, “Why Does U.S. Investment Abroad Earn Higher Returns Than Foreign Investment in the United States?” November 30, 2005, <http://cbo.gov/ftpdocs/69xx/doc6905/11-30-Cross-BorderInvestment.pdf>.

²⁷ Jane G. Gravelle and Kent A. Smetters, “Does the Open Economy Assumption Really Mean That Labor Bears the Burden of a Capital Income Tax?” *Advances in Economic Analysis and Policy*, vol. 6, issue 1, 2006.

²⁸ Jane G. Gravelle and Thomas L. Hungerford, “Corporate Tax Reform: Issues for Congress.”

²⁹ For a discussion of how profit shifting might affect the results of studies of the effects of the corporate income tax on the economy and wages, see William Randolph's critique of Mihir A. Desai, Fritz C. Foley, and James R. Hines, Jr.'s paper, “Labor and Capital Shares of the Corporate Tax Burden: International Evidence,” at the American Enterprise Institute conference, “Assessing the Effects of Corporate Taxation,” March 17, 2008. Audio and video of the conference are available on the AEI website, http://www.aei.org/events/filter.all.eventID.1683/event_detail.asp.

Kevin Hassett and Aparna Mathur's Study of the Corporate Income Tax and Wages

Of the recent studies of the corporate income tax and the economy, the one that has probably garnered the most attention is a study by American Enterprise Institute researchers Kevin Hassett and Aparna Mathur of the corporate income tax and wages.* Hassett and Mathur examined cross-country data on corporate tax rates and manufacturing wages and concluded that higher statutory corporate tax rates lead to lower wage rates.

Hassett and Mathur's results should be viewed with considerable skepticism, for four main reasons:

- **The results are on their face implausible.** As the Congressional Research Service explained, "These results imply that a dollar increase in the corporate tax would decrease wages by \$22 or \$26, an effect that no [economic] model could ever come close to predicting."** In addition, Hassett and Mathur concluded that increases in corporate tax rates affected wages within five years. In contrast, economic theory suggests that it would take decades for the effects of a corporate tax increase on wages to materialize since it would take that long for the country's capital stock to fully adjust to the tax change.
- **Small changes in methodology appear to generate large changes in results.** One way economists generally assess studies is by examining whether their conclusions are robust to small changes in methodology. But CRS concluded that after making certain small adjustments to Hassett and Mathur's approach, "we can find no evidence that changes in the top corporate tax rate affect wage rates in manufacturing."
- **Hassett and Mathur's approach depends on the — almost certainly incorrect — assumption that the effects of the corporate income tax on wages are the same (or at least similar) in every country.** Because of the way Hassett and Mathur conducted their study, their results are meaningful only if the underlying relationship between the key variables is more or less the same in all countries. But as discussed on pages 9-10, the economic effects of the corporate income tax likely differ significantly across countries. In particular, they are probably much weaker in a country like the United States than in smaller countries.***
- **The results of these types of cross-country studies should *always* be viewed somewhat skeptically.** It is extraordinarily difficult to control for all of the factors that differ across countries and influence wages. If any of the omitted factors are correlated with corporate tax rates, the study will not provide accurate estimates of the effects of the corporate income tax, because some of the effects it attributes to the corporate tax will really be due to the missing factors. As Harvard economist (and former chair of President George Bush's Council of Economic Advisers) Greg Mankiw explained in a paper analyzing these types of studies, "Using these regressions to decide how to foster growth is also most likely a hopeless task. . . . Policymakers who want to promote growth would not go far wrong ignoring most of the vast literature reporting growth regressions."****

* Kevin A. Hassett and Aparna Mathur, "Taxes and Wages," American Enterprise Institute Working Paper No. 128, June 2006.

** Jane G. Gravelle and Thomas L. Hungerford, "Corporate Tax Reform: Issues for Congress."

*** Hassett and Mathur find that, if large countries are excluded from the sample, the effect of the corporate tax on wages appears to be even larger. They do not present results for a sample limited to large countries.

**** N. Gregory Mankiw, "The Growth of Nations," Brookings Papers on Economic Activity, 1995.

- **Relying on methodologically problematic empirical approaches.** The effects of the

corporate income tax on investment and wages are difficult to study, particularly since, when studying questions like these, economists generally do not have the option of running controlled experiments. That is, economists do not have the opportunity to pick the 15 most similar countries, tell them how to set their corporate income tax rates, require them to set otherwise identical public policy, and then watch for 50 years to see what happens. As a result, many of the claims about the corporate income tax rely on studies that simply examine the existing cross-country variation in corporate tax rates and economic outcomes and attempt to draw conclusions. But countries differ in innumerable ways besides their tax rates, and these other differences, taken together, have a much larger impact on investment and growth than the corporate income tax does.

Most academic studies do attempt to control for these other differences using statistical techniques. But when the Congressional Research Service recently examined the literature on the corporate income tax, it found that, in at least some of the recent studies, the controls were inadequate. When CRS replicated these studies with additional controls, or simply with slightly different statistical approaches, it found that the results about the corporate income tax and the economy became much weaker or disappeared.³⁰ (One study of the economic effects of the corporate income tax has received particular attention recently: Kevin Hassett and Aparna Mathur's paper on the effect of the corporate tax on wages. For a discussion of that study, see the box on page 11.)

Most mainstream economists would probably agree that the jury is still out on how the corporate income tax affects the location of investment and how much of the tax is borne by workers in the form of lower wages. (University of Michigan economist James Hines, another of the foremost experts on the corporate income tax, commented recently that the latter question is on his list of questions he would ask God, given the opportunity.) But claims that these questions have been settled in favor of the view that the U.S. corporate income tax has large economic costs are not credible.

II. Unpaid-For Corporate Rate Cuts Would Do Little to Improve Aggregate Economic Performance and Would Likely Leave Most Americans Worse Off in the Long Run

As discussed above, claims that the U.S. corporate tax rate represents an economic emergency rest on flawed characterizations of both the U.S. corporate tax burden and the economic evidence regarding the corporate income tax. Nonetheless, some have urged that the corporate tax rate be

³⁰ Jane G. Gravelle and Thomas L. Hungerford, "Corporate Tax Reform: Issues for Congress." The studies CRS examined were: Kimberly A. Clausing, "Corporate Tax Revenues in OECD Countries," *International Tax and Public Finance*, April 2007; Michael P. Devereux, "Developments in Taxation of Corporate Profits in the OECD Since 1965: Rates, Bases, and Revenues," May 2006; Alex Brill and Kevin Hassett, "Revenue Maximizing Corporate Income Tax Rates," American Enterprise Institute Working Paper No. 137, July 2007; Simeon Djankov, Tim Ganser, Caralee McLiesh, Rita Ramalho, and Andrei Shleifer, "The Effect of Corporate Taxes on Investment and Entrepreneurship," National Bureau of Economic Research Working Paper No. 13756, January 2008; Mihir A. Desai, C. Fritz Foley, and James R. Hines, Jr., "Labor and Capital Shares of the Corporate Tax Burden: International Evidence," prepared for the Urban-Brookings Tax Policy Center and International Tax Policy Forum Conference, "Who Pays the Corporate Income Tax in an Open Economy?" December 18, 2007; Rachel Alison Felix, "Passing the Burden: Corporate Tax Incidence in Open Economies," November 2006; and Kevin A. Hassett and Aparna Mathur, "Taxes and Wages," American Enterprise Institute Working Paper No. 138, June 2006.

lowered immediately and “without raising taxes.” This could involve paying for a corporate tax cut by cutting programs, an approach that would have highly regressive effects (as discussed below). More realistically, it would involve “paying for” the rate cut, at least in the short run, by running higher deficits.³¹

A deficit-financed cut in the corporate income tax rate would have two opposing effects on the economy. On the one hand, it could potentially benefit the economy by encouraging investment in the United States and perhaps reducing some of the other economic distortions caused by the corporate tax. On the other hand, the higher deficits that would result from the tax cut would have negative economic effects, because deficits reduce national saving. (National saving is the sum of private and public saving. Budget deficits constitute government *dissaving*, or negative saving, because when the federal government runs a deficit, it pays for the shortfall by borrowing money from the private sector. This borrowing consumes a portion of private saving and lowers net national saving.) Decreases in national saving make fewer funds available for investment in the United States, which decreases the size of the U.S. capital stock. With less capital available, future workers are less productive, and the decreased productivity lowers national income.³²

The ultimate effect of an unpaid-for cut in the corporate income tax on the economy depends on the relative magnitude of these two effects. When the Joint Committee on Taxation modeled such a tax cut, it found that the negative effects of higher deficits dominated: the unpaid-for corporate rate cut slightly *decreased* economic growth over the long run.³³ A recent study by Alan Viard of the American Enterprise Institute and John Diamond of the Baker Institute found that a deficit-financed corporate rate cut would modestly increase economic *output* but would *reduce* long-run economic *wellbeing*.³⁴ Under different but still plausible assumptions, an unpaid-for rate cut might have modest economic benefits, but it still would be unlikely to generate large gains.

Corporate Rate Cuts Would Be Very Regressive

Traditionally, analysts have assumed that the burden of the corporate income tax is borne by all owners of capital.³⁵ Under that assumption (which is currently used by the Congressional Budget

³¹ Some analysts have suggested paying for a corporate rate cut by increasing individual-level taxes on investment income. This approach would not add to deficits or make the tax code less progressive, and it would have certain advantages in a more open global economy. Since U.S. residents generally pay U.S. income tax on the returns to both their U.S. and foreign investment, investor-level taxes do not encourage moving investment to lower-tax countries. For further discussion, see Jane G. Gravelle and Thomas Hungerford, “Corporate Tax Reform: Issues for Congress.”

³² A reduction in national saving could also lead to an increase in U.S. borrowing from abroad and, thus, an increase in foreign investment in the United States. To the extent that reductions in national saving lead to increased foreign borrowing, they do not lower U.S. domestic investment or future U.S. labor productivity. However, they still reduce future national income, because the income earned on investments made by foreign lenders accrues to those foreign lenders, rather than remaining in the United States. For a more in-depth discussion, see Aviva Aron-Dine and Robert Greenstein, “Economic Effects of the Pay-As-You-Go Rule,” Center on Budget and Policy Priorities, March 19, 2007, <http://www.cbpp.org/3-19-07bud.htm>.

³³ Joint Committee on Taxation, “Macroeconomic Analysis of Various Proposals to Provide \$500 Billion in Tax Relief.”

³⁴ Alan D. Viard and John W. Diamond, “Welfare and Macroeconomic Effects of Deficit-Financed Tax Cuts: Lessons From CGE Models,” Prepared for American Enterprise Institute Conference: “Tax Policy Lessons From the 2000s,” May 30, 2008, http://www.aei.org/docLib/20080527_DiamondandViardPaper.pdf.

³⁵ The corporate income tax is believed to affect investors in noncorporate businesses and other owners of capital as well as corporations. To see why, consider what would happen if a corporate income tax were imposed for the first

Office, the Treasury Department, and the Urban-Brookings Tax Policy Center, among others), corporate tax cuts are extremely regressive, because capital income is heavily concentrated at the top of the income scale. As Table 1 shows, households in the bottom four-fifths of the income distribution would receive only very small benefits from a large (\$50 billion per year) corporate tax cut, while more than half the benefits would go to the top 1 percent of households (those with incomes above \$450,000), and more than a third would go to the top 0.1 percent of households (those with incomes above \$2.1 million).

Table 1: Distribution of a \$50 Billion Corporate Tax Cut, Assuming Benefits All Go To Investors			
	Average Tax Cut	Share of Total Tax Cut	Percent Increase in After-Tax Income
Bottom Quintile	\$15	0.9%	0.2%
Second Quintile	\$35	2.2%	0.2%
Middle Quintile	\$55	3.4%	0.2%
Fourth Quintile	\$130	7.8%	0.2%
Top Quintile	\$1,400	84.9%	0.9%
Top 1 Percent	\$18,600	55.4%	2.1%
Top 0.1 Percent	\$120,000	35.8%	3.0%

Source: CBPP calculations based on Urban-Brookings Tax Policy Center data on the distribution of the corporate income tax in 2007.

As discussed on pages 9-12, some have argued that a portion or even the majority of the corporate income tax is borne by workers in the form of lower wages. In response to this argument, the Treasury Department has on occasion provided alternative distributional estimates that assume that half the corporate income tax is borne by workers.

Table 2: Distribution of a \$50 Billion Corporate Tax Cut, Assuming Benefits Go Half to Investors and Half to Workers			
	Average Tax Cut	Share of Total Tax Cut	Percent Increase in After-Tax Income
Bottom Quintile	\$20	1.3%	0.3%
Second Quintile	\$65	4.0%	0.4%
Middle Quintile	\$135	8.1%	0.4%
Fourth Quintile	\$255	15.2%	0.5%
Top Quintile	\$1,200	70.9%	0.8%
Top 1 Percent	\$11,100	33.1%	1.2%
Top 0.1 Percent	\$66,200	19.8%	1.6%

Source: CBPP calculations based on Urban-Brookings Tax Policy Center data on the distribution of the corporate income tax and wage and salary income in 2007.

Table 2 shows that, even under this alternative assumption, the distribution of a corporate tax cut is quite regressive. About a third of the benefits go to the top 1 percent, and about a fifth go to the top 0.1 percent. Middle- and low-income households receive tax cuts that are far smaller — both in dollar terms and measured as a share of income — than those going to high-income households.

time. Investors would leave the corporate sector, where they would have to pay the tax, for the noncorporate sector. This capital flight would occur until the abundance of funds in the noncorporate sector drove down pre-tax returns in that sector enough that after-tax returns were the same in both sectors; thus, the noncorporate sector would bear part of the tax.

In the Long Run, Most Americans Would Probably Be Worse Off

The above figures do not tell the whole story. They show only who would benefit from a corporate rate cut, not who would ultimately pay for it. Even under the most optimistic assumptions, a corporate rate cut would not pay for itself,³⁶ nor could it be financed with higher deficits forever, especially since the nation is already on an unsustainable fiscal path. Eventually, today's unpaid-for tax cuts will have to be offset with tomorrow's tax increases or program cuts.

As the tables above show, corporate tax cuts themselves do very little for households in the middle and bottom of the income scale. Yet these households would be hurt if government services ultimately were cut back to pay for a corporate rate cut or if less progressive taxes were increased.

A simple calculation helps illustrate the consequences. Suppose that the corporate rate cut were eventually paid for in such a manner that the cost were split equally among all households (i.e. such that each household paid the same dollar amount to finance the tax cut). Something close to this scenario could occur if the tax cut were ultimately financed entirely with cuts in government programs.³⁷

Table 3: Distribution of a \$50 Billion Corporate Rate Cut, Assuming Benefits Go Half to Investors & Half to Workers and Financing Costs Are Split Equally Among Households		
Income Group	Average Gain/Loss	Percent Change in After-Tax Income
Bottom Quintile	-\$310	-4.0%
Second Quintile	-\$270	-1.4%
Middle Quintile	-\$200	-0.6%
Fourth Quintile	-\$80	-0.2%
Top Quintile	+\$850	+0.6%
Top 1 Percent	+\$10,700	+1.2%
Top 0.1 Percent	+\$65,800	+1.6%

Source: CBPP calculations based on Urban-Brookings Tax Policy Center data.

Table 3 shows the results. High-income households would gain, on average, from the combination of a corporate rate cut and the measures needed to finance it — even if one assumes that half of the benefits of a cut in the corporate income tax go to workers. But low- and middle-income households would lose, with the lowest-income households losing an average of 4 percent of their annual after-tax incomes.

³⁶ For example, in the Joint Tax Committee's scenario that uses the most optimistic economic assumptions and also assumes that the corporate rate cut would be fully paid for with spending cuts, the additional economic growth generated by the tax cut would come nowhere near to paying for the tax cut's cost. See also Jane G. Gravelle and Thomas L. Hungerford, "Corporate Tax Reform: Issues for Congress" for a discussion of claims that the U.S. is on the wrong side of the "corporate Laffer Curve." Gravelle and Hungerford note, "The issue of a Laffer Curve has not been a part of the debate [over the corporate income tax in the past] because the notion of a revenue maximizing tax rate other than at very high tax rates is inconsistent with most of the models of the corporate tax."

³⁷ This is also the financing assumption most commonly used in economic simulations aimed at calculating the efficiency benefits of tax cuts.

III. Opportunities Exist for Fiscally Responsible and Economically Beneficial Corporate Tax Reforms

Given its likely effects on the economy and the distribution of income, an unpaid-for corporate income tax cut would not be desirable. There are, however, numerous other options for corporate tax reform that would be both fiscally responsible and economically beneficial. For example, a reform that reduced the corporate statutory tax rate and recouped the lost revenue through changes that narrowed the discrepancies in effective tax rates among different types of corporate investment would likely benefit the economy, while avoiding the problems discussed above.

The U.S. Corporate Tax Treats Different Types of Investment Very Differently

As discussed above, *effective* U.S. corporate tax rates are much lower than the statutory corporate rate. Equally noteworthy are the large differences in effective tax rates on different types of investment.

Table 4 shows the Congressional Budget Office's estimates of effective marginal tax rates on corporate investment in different categories of assets. The first column shows the effective *corporate* tax rates; the second column shows the total effective tax rates, taking into account both corporate taxes and the taxes investors pay on returns paid out as dividends, capital gains, and interest. The total effective tax rates range from a high of 37 percent (for investment in computers and related equipment) to a low of 9 percent (for investment in petroleum and natural gas structures). Overall, CBO found that about a third of corporate investment is taxed at total effective rates (including investor-level taxes) above 30 percent, about a third at rates between 20 and 30 percent, and about a third at rates below 20 percent.³⁸

Effective tax rates also vary based on how investments are financed. Figure 2 shows the total effective marginal tax rates for equity- and debt-financed investment in machinery, including both corporate taxes and taxes on investors. While the effective tax rate on equity-financed investment in machinery is 36 percent, the effective tax rate on debt-financed investment in machinery is *minus* 6 percent, implying that other taxpayers are subsidizing such investment.³⁹ (These rates are higher than those shown in Figure 1 because they include investor-level taxes on interest, dividends, and capital gains.)

The far lower rate on debt-financed investment results from the fact that when a corporation issues debt to finance the purchase of an investment asset, it may claim *both* depreciation deductions, according to a specified depreciation schedule, *and* deductions for the interest it pays on the debt. (In contrast, firms that finance investment with equity claim depreciation deductions but do not claim deductions when they pay dividends to their investors.)

³⁸ Congressional Budget Office, "Taxing Capital Income: Effective Tax Rates and Approaches to Reform," October 2005. The effective tax rates included in CBO's published analysis incorporate both corporate and personal taxes on investment income. Effective tax rates reflecting only the corporate income tax are drawn from CBO's back-up spreadsheet, available at <http://cbo.gov/doc.cfm?index=7698>.

³⁹ An obvious question is why businesses would ever finance investment by issuing stock, given that debt-financed investment is taxed at much lower rates. Economists are not sure of the answer to this question, though various theories have been proposed. For a review of the literature, see Roger Gordon and Martin Dietz, "Dividends and Taxes," National Bureau of Economic Research Working Paper No. 12292, June 2006.

If deductions for interest were appropriately calculated and if tax depreciation rules matched economic depreciation (that is, if businesses wrote off the cost of investments at the rate at which the investments actually depreciate in value) this would result in a zero effective tax rate on debt-financed investment at the firm level. Investors would then pay individual income tax on the interest payments they received, and debt-financed investment would be taxed at the investors' marginal rates. But in fact, the current tax system departs from this model in three respects:

- Current tax rules effectively allow businesses to deduct part of the principal of the loan, not just the interest.⁴⁰
- Depreciation rules for many assets allow businesses to depreciate their investments much more rapidly than those investments actually lose value.
- Many investors — such as pension funds and foundations — are tax-exempt entities and hence pay no tax on the interest payments they receive.

Together, these factors result in negative effective marginal tax rates on debt-financed investment, even when the taxes that investors pay on the interest payments they receive are included.

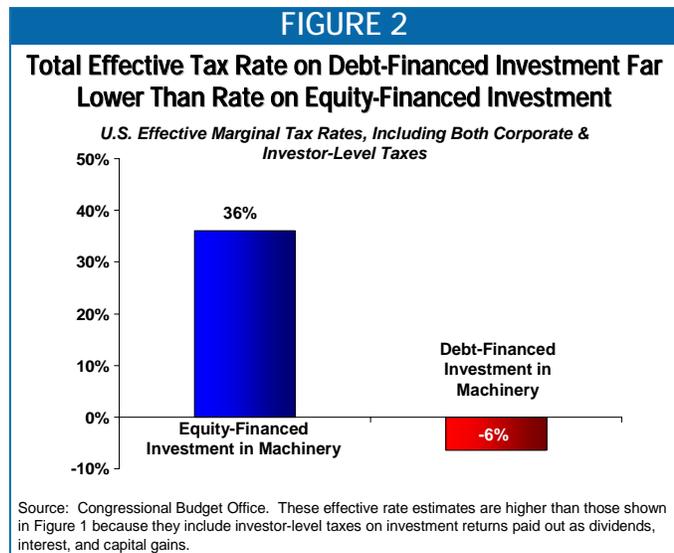
Table 4: Effective Marginal Tax Rates On Corporate Investment By Asset Type		
	Effective Rate, Corporate Taxes Only	Effective Rate, Including Investor-Level Taxes
Petroleum and Natural-Gas Structures	-2.2%	9.2%
Mining Structures	-1.7%	9.5%
Railroad Equipment	0.4%	11.4%
Aircraft	3.8%	14.5%
Specialized Industrial Machinery	4.3%	14.9%
Household Furniture	4.6%	15.1%
Fabricated Metal Products	4.9%	15.5%
Residential Equipment	5.8%	16.2%
Ships and Boats	6.1%	16.5%
Construction Machinery	6.3%	16.7%
Communication Structures	6.7%	17.0%
General Industrial Equipment	7.0%	17.3%
Construction Tractors	7.1%	17.4%
Household Appliances	7.3%	17.5%
Communications Equipment	7.6%	17.8%
Other Trucks, Buses, and Truck Trailers	8.0%	18.2%
Light Trucks	8.0%	18.2%
Other Furniture	8.4%	18.5%
Electric Structures	8.5%	18.6%
Photocopy and Related Equipment	8.7%	18.8%
Metal-Working Machinery	8.9%	19.0%
Other Power Structures	8.9%	19.0%
Nonmedical Instruments	10.0%	20.0%
Railroads	10.1%	20.1%
Agricultural Machinery	10.2%	20.2%
Medical Equipment and Instruments	10.4%	20.4%
Farm Structures	10.9%	20.8%
Other Equipment	11.8%	21.5%
Mining and Oil-Field Machinery	12.2%	21.9%
Service Industry Machinery	12.5%	22.2%
Farm Tractors	13.1%	22.7%
Steam Engines	13.3%	22.9%
Residential Buildings	14.4%	23.8%
Other Electrical Equipment	15.5%	24.8%
Electric Transmission and Distribution	15.5%	24.9%
Internal Combustion Engines	18.3%	27.3%
Hospitals and Special Care	19.4%	28.4%
Educational Buildings	19.4%	28.4%
Office & Accounting Equipment	19.4%	28.4%
Software	20.2%	29.1%
Other Structures	20.7%	29.5%
Automobiles	20.9%	29.7%
Office Buildings (Including Medical)	21.5%	30.2%
Commercial Buildings	21.7%	30.4%
Other Buildings	21.9%	30.6%
Land	22.4%	31.0%
Manufacturing Buildings	23.8%	32.2%
Inventories	26.3%	34.4%
Computers and Peripheral Equipment	29.0%	36.9%

Source: Congressional Budget Office

⁴⁰ When businesses repay a loan, they repay both interest and principal, but they are supposed to be allowed to deduct only interest payments. However, under current tax rules, interest is effectively calculated by simply subtracting the original loan from the total payments made. This ignores the fact that businesses must generally repay the original loan plus an inflation adjustment. Under current tax rules, this inflation adjustment — which is really just part of paying back the loan principal — is tax deductible, contributing to negative effective tax rates on debt-financed investment.

CBO separately calculated corporate effective tax rates for equity- and debt-financed corporate investment for each of the asset classes shown in Table 4. It found that the effective marginal corporate tax rate on debt-financed investment is negative for almost every asset class. It also found that the rate of tax paid on a given type of investment depends heavily on how the investment is financed. For example, the effective tax rate on debt-financed investment in structures is -8 percent, as compared to the 26 percent rate on equity-financed investment in the same assets.

Finally, CBO estimated that the overall effective tax rate on noncorporate investment is about a fifth lower than the overall effective tax rate on corporate investment.



Leveling the Playing Field Would Benefit the Economy

Generally speaking, a tax system is more efficient when it is neutral between similar activities. Rather than having tax rates determine how people allocate resources, it is better for the tax system to create a level playing field. In fact, when economists talk about how taxes can harm the economy, they simply mean that a tax may lead individuals and firms to allocate resources differently than they otherwise would. As Brookings Institution economist and Hamilton Project director Jason Furman explained in testimony to the Senate Finance Committee, “The primary purpose of the tax system is to raise the revenue needed to pay for government spending. As such, the goal is to raise the revenue without distorting the decisions that individuals and firms make for purely economic reasons.”⁴¹

While some of the economic distortions associated with taxes are basically inevitable — virtually any tax system will tax work but not leisure, for instance, thus potentially leading people to work less — other distortions can be avoided if the tax system consistently taxes like activities alike. For example, if all forms of investment are taxed alike, the tax system will not affect decisions about what type of investment to undertake. That benefits the economy, since it means that investment dollars will be directed based on where they are expected to yield the highest return rather than on where they will receive the greatest tax benefit.

⁴¹ Jason Furman, “The Concept of Neutrality in Tax Policy,” Testimony Before the U.S. Senate Committee on Finance Hearing on “Tax: Fundamentals in Advance of Reform,” April 15, 2008, http://www.brookings.edu/~media/Files/rc/testimonies/2008/0415_tax_neutrality_furman/0415_tax%20neutrality_furman.pdf.

Allowing Expensing Without *Disallowing* the Deductibility of Interest Would Worsen Distortions and Create Massive Tax Sheltering Opportunities

Some have proposed that instead of or in addition to reducing the corporate income tax rate, it would be desirable to replace depreciation with full or partial “expensing” for at least some categories of investment. This would involve allowing businesses to deduct all or a larger share of the cost of investments up front, instead of claiming depreciation deductions over a period of years as the investment actually declines in value.*

As discussed on pages 16-20, debt-financed investment is already taxed at negative effective rates, in part because businesses are often permitted to claim depreciation deductions more rapidly than their investments actually depreciate. Allowing full expensing of investment would greatly exacerbate this problem, making the effective tax rate on debt-financed corporate investment considerably *more* negative.

This is why tax experts almost uniformly insist that any shift to expensing would need to be coupled with the elimination of the deduction for corporate interest payments. President Bush’s Advisory Panel on Tax Reform explained, “allowing both expensing of new investments *and* an interest deduction would result in a net tax subsidy to new investment. Projects that would not be economical in a no-tax world might become viable just because of the tax subsidy. This would result in economic distortions and adversely impact economic activity.”**

Moving toward expensing while retaining the interest deduction also would create new tax sheltering opportunities, as former Congressional Budget Office director (and current advisor to Senator John McCain) Douglas Holtz-Eakin has observed: “It is a huge loophole to have [both] expensing and interest deductions.”*** Moreover, by further lowering overall effective corporate tax rates, expensing could cause a massive shift of unincorporated businesses into corporate form and also could encourage wealthy individuals to find ways to shelter their labor income in corporations. These effects would significantly increase both the revenue loss and the economic distortions that resulted from the policy.

*“Depreciation” is the term used to refer to an investment good’s gradual loss in value over time (e.g. a five-year-old machine is generally worth less than a new machine). When businesses purchase an investment good, they are allowed to deduct the cost of the investment on their tax returns over a period of years. These deductions are intended to reflect the actual depreciation in the value of the investment and are referred to as depreciation deductions.

** The President’s Advisory Panel on Tax Reform, “Simple, Fair, and Pro-Growth: Proposals to Fix America’s Tax System,” November 2005, <http://www.taxreformpanel.gov/final-report/>.

*** Douglas Holtz-Eakin, quoted in Howard Gleckman, “McCain’s X-Factor,” TaxVox: The Tax Policy Center blog, http://taxvox.taxpolicycenter.org/blog/_archives/2008/4/22/3654553.html.

In contrast, the discrepancies in effective tax rates under the current corporate income tax lead to misallocation of investment, likely reducing economic output. The negative effective tax rate on debt is especially problematic in this regard, since it means that such investment actually receives a net subsidy through the tax system. This may lead businesses to undertake investments that are not worthwhile on their merits, simply in order to benefit from the subsidy.

The discrepancy in effective corporate tax rates, and especially the negative effective tax rate on debt-financed investment, likely have other economic costs as well. As Furman observed, the disparity between debt and equity financing “encourages corporations to finance themselves more heavily through borrowing. This leverage in turn increases the financial fragility of the economy, an

effect we are seeing quite dramatically today.”⁴² (Some have proposed that, instead of or in addition to cutting the corporate income tax rate, it would be desirable to increase the share of investment that can be “expensed,” i.e. deducted, up front. Adopting this proposal without also changing the tax treatment of debt-financed investment would exacerbate the problem of negative effective tax rates; see the box above.)

Large discrepancies in effective tax rates also encourage wasteful, unproductive investments in tax planning because they create large financial incentives for individuals to seek ways to recharacterize their investments so as to pay tax at lower rates. In particular, large amounts of human and financial capital are devoted to devising ways to recharacterize equity as debt and to exploit the tax distinction between debt and equity to create tax shelters.

Examples of Reforms That Would Likely Improve Economic Efficiency

Taking steps to bring effective tax rates on different types of investment closer together would benefit the economy. Such reforms could be designed to be revenue neutral or even raise revenue while improving economic efficiency. Examples of such reforms include:

- **Eliminating tax breaks that favor one form of investment over another.** Two of the main factors behind the large differences in effective tax rates on different types of investment are inconsistent depreciation schedules and special tax breaks that favor one industry over others. Businesses are allowed to claim depreciation write-offs for many categories of investment more rapidly than the assets actually depreciate; meanwhile, other asset classes have to be depreciated more slowly than they actually lose value. Similarly, the benefits of corporate tax expenditures are distributed very unevenly; for example, the Qualified Production Activities Deduction significantly lowers effective rates for some industries while leaving rates largely unchanged for others. Addressing these two sets of issues would go a long way toward equalizing effective rates across asset classes, while also raising revenue that could be used to reduce the statutory corporate tax rate, for other public purposes, or for a combination of both.
- **Leveling the playing field between debt and equity.** The largest discrepancies in corporate effective tax rates result from the differential treatment of debt- and equity-financed investment. This distinction is also the basis for much corporate tax sheltering and tax avoidance activity, and steps to reduce it would likely improve economic efficiency. One option might be to tighten the rules surrounding the deduction for corporate interest payments.⁴³
- **Closing loopholes that sharply reduce tax on U.S. firms operating abroad.** Experts differ on how to apply the principle of tax neutrality to firms operating internationally. Some think that the goal should be to tax U.S. firms’ foreign investment at the same rates as their domestic investment, while others think the better approach is to exempt U.S. firms’ foreign earnings from U.S. tax, so that U.S. firms would be taxed at the same rates as other firms operating in

⁴² Jason Furman, “The Concept of Neutrality in Tax Policy.”

⁴³ Jane Gravelle and Thomas Hungerford of the Congressional Research Service have suggested that this could be accomplished by effectively requiring firms to calculate interest by subtracting the *inflation-indexed* value of the loan, instead of the nominal value, from total payments. They estimate that this reform would raise about \$20 billion per year. See Jane G. Gravelle and Thomas L. Hungerford, “Corporate Tax Reform: Issues for Congress.”

the same foreign countries.

The current tax system, however, appears to *subsidize* U.S. firms operating abroad: the Joint Committee on Taxation has estimated that fully exempting the foreign earnings of U.S. firms from tax would actually *raise* revenue.⁴⁴ This is in large part because current law effectively allows U.S. firms to defer tax on their foreign earnings indefinitely while still claiming immediate tax deductions for foreign business expenses. The Rangel tax reform proposal includes a provision aimed at closing this loophole.⁴⁵

The above are just a few areas in which efficiency-enhancing incremental reforms could be implemented in a revenue-neutral or revenue-raising way.⁴⁶

Conclusion

Over the coming decades, the United States is projected to face large fiscal difficulties. Rising health care costs and the aging of the population will make it a challenge to meet existing federal commitments, much less to make new investments in areas like covering the uninsured, early childhood health care and education, and science and technology. In this fiscal environment, the burden of proof lies with those who seek to reduce the overall level of corporate revenues by cutting the corporate tax rate without broadening the tax base. They would need to show that the economic costs of current tax rates are large enough to warrant directing scarce resources toward corporate tax cuts rather than other priorities.

As discussed above, the economic evidence does not meet that burden of proof. Just as important, there are opportunities for significant corporate tax reforms that would improve economic efficiency and would be revenue neutral or revenue-increasing. Finally, unpaid-for corporate rate cuts are unlikely to provide much of an economic boost and, once the measures needed to finance them are taken into account, would more likely harm than help most Americans in the long run.

⁴⁴ Joint Committee on Taxation, "Options to Improve Tax Compliance and Reform Tax Expenditures," JCS-02-05, January 27, 2005, <http://www.house.gov/jct/s-2-05.pdf>.

⁴⁵ The provision would raise about \$10 billion per year, according to the Joint Committee on Taxation.

⁴⁶ Broader revenue-neutral or revenue-raising corporate tax reforms are also worth considering, since they would likely do more to level the playing field among different forms of investment and/or to address the special issues surrounding corporate taxation in a global economy. See for example Edward D. Kleinbard, "Rehabilitating the Business Income Tax," Hamilton Project, June 2007, http://www.brookings.edu/papers/2007/06corporatetaxes_kleinbard.aspx and Kimberly A. Clausing and Reuven S. Avi-Yonah, "Reforming Corporate Taxation in a Global Economy," Hamilton Project, June 2007, http://www.brookings.edu/papers/2007/06corporatetaxes_clausing.aspx.