



## A Modern Corporate Tax

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Alan J. Auerbach, University of California, Berkeley

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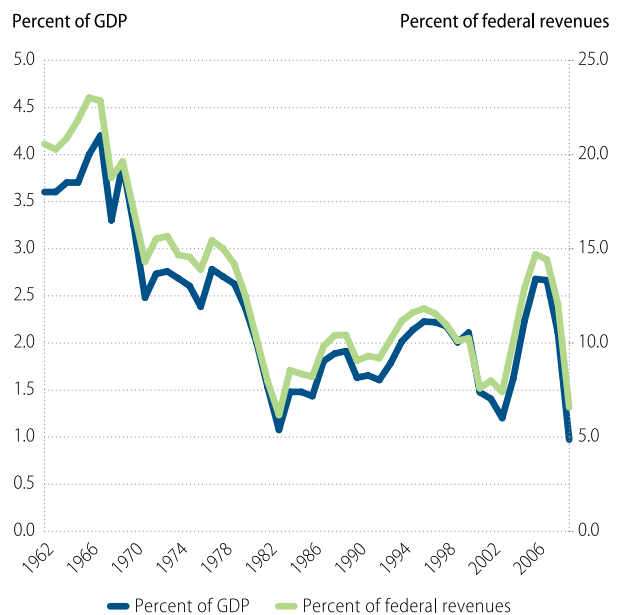
# Introduction and Summary

The U.S. corporate tax system debuted more than 100 years ago and has evolved little to meet the challenges of today's economy. The country would benefit greatly from a reform of this system that maintains corporate tax revenues while increasing incentives for businesses to locate, invest, and produce in the United States, thus offering the prospect of higher wages and better job opportunities for American workers.

At its peak in the 1960s, the U.S. corporate income tax accounted for more than one-fifth of all federal revenues, making it the second most important federal revenue source after the personal income tax. Figure 1 shows that since then corporate tax revenues have declined as a share of national income and total federal revenues. After the major Reagan-era tax cuts in 1981, the corporate tax has provided less than 12 percent of federal revenues in all but four fiscal years, during the period 2005–2008, when a booming financial sector generated temporarily high profits and tax revenues. Few analysts expect a rebound back to those levels.<sup>1</sup>

FIGURE 1

Corporate tax revenues, percent of GDP and of federal revenues



Source: Congressional Budget Office



The declining importance of the corporate income tax is particularly troubling as budget pressures increase.<sup>2</sup> But beyond concerns about revenue, much of the current pressure on the corporate tax relates to the competitiveness of the United States in the global economy as a home for multinational corporations, new business investment, and production and economic activity. How U.S. corporations are taxed strikes at the heart of productivity, wages, and employment of American workers.

### Avoiding the “race to the bottom”

This paper proposes an alternative treatment of international transactions that would relieve the international pressure to reduce rates while attracting foreign business activity to the United States. It addresses concerns about the effect of rising international competition for multinational business operations on the sustainability of the current corporate tax system. With rising international capital flows, multinational corporations, and cross-border investment, countries’ tax rates and tax structures are of increasing importance. Indeed, part of the explanation for declining corporate tax rates abroad is competition among countries for business activity. Given that the United States has a relatively high corporate tax rate of 35 percent, some observers suggest that we must join this “race to the bottom” by reducing rates and further eroding tax revenues to keep business activity and jobs in the United States.

Generating long-run productivity gains for American workers and firms by increasing investment in U.S. businesses is a related concern. Investments in factories, machines, software, and equipment are a key driver of increases in workers’ productivity and wages; changes in the corporate tax system that increase investment can help increase living standards for American workers. A key challenge is finding a revenue-efficient means to support new investment.

Finally, the recent economic crisis heightened concerns that the corporate tax contributes to economic instability by encouraging excessive corporate borrowing. The growing importance of the financial sector as well as increases in financial innovation and the sophistication of financial transactions have contributed to the recent

financial crisis, recession, and the resultant increase in unemployment. The corporate tax system contributes to America’s private debt burden because it encourages borrowing relative to other forms of financing—interest payments are deductible whereas payments to shareholders are not. Addressing this economic distortion provides a means to facilitate a more sustainable, efficient, and stable business sector.

The corporate tax can survive as an important source of federal revenue, but its survival and the alleviation of concerns about its effects on the economy require that it be reformed to address the challenges described above. I propose changes that would set the U.S. corporate tax apart from those found abroad, but these proposals are based on ideas that are neither new nor radical<sup>3</sup> and would result in a tax system better suited to today’s economy than our current system.

In brief, the reform would consist of two fundamental pieces, one affecting the treatment of investment and borrowing, and the other dealing with international transactions.

**First, an immediate deduction for all investments would replace the current system of depreciation allowances.** Currently, when a firm invests in a factory or other equipment, it deducts the cost of that investment over a number of years. Allowing firms to deduct the costs of investment against their taxable income in the year the investment is made reduces the after-tax cost of investments because a dollar in tax savings today is worth more than a dollar many years hence. In fact, the value of the immediate deduction for investment against taxes today exactly offsets the net present value of future taxes on that investment, reducing the effective tax rate on new investment to zero. Such a change is not novel—smaller businesses may already take advantage of immediate expensing up to a limit. In addition, the 2002, 2003, 2008, and 2009 tax cuts included temporary partial expensing to help stimulate investment and economic activity.

My proposal includes a similar change in the treatment of borrowing that would remove the current advantage to debt from the firm’s tax calculation. As noted above, business investments financed through debt receive more favorable tax treatment than equity-financed investments.



One means to rectify this disparity is to deny a deduction for interest expense in the same way that deductions are prohibited for dividend payments to equity holders. This paper takes an alternative approach that effectively achieves the same outcome but retains deductibility of interest expense: by including non-equity financial transactions in the calculation of taxable income, the new tax treatment of debt—taxable when borrowed but deductible when repaid—would mirror the symmetric tax treatment of equity—non-taxable when issued and not deductible when dividends are paid.

This system of immediate expensing and symmetric treatment of equity and debt is sometimes called a cash-flow tax because it is levied on the cash passing through a firm. For example, when calculating taxable income, firms would include revenues from both sales of goods and services and from financial transactions like bond issuances. Firms would receive deductions for payments made for the same costs as they do now—wages, cost of goods sold, interest expense—but would also deduct other financial payments, such as repayment of loans. In addition to enhancing the incentive to invest and removing the incentive to borrow, the simplified tax does not require depreciation schedules or inventory accounting—a domestic business’s tax books could look much like an individual’s annual checking account statement.

**Second, a system that ignores all transactions except those occurring exclusively in the United States would replace the current approach to taxing foreign-source income.** Most countries, including the United States, attempt to collect corporate taxes based on where a corporation’s profits are earned. The problems with this approach are that businesses and investments are increasingly internationally mobile and a business’s profits are intrinsically hard to attribute to a particular place; indeed, the fungibility of profits results in a system where a disproportionate share of the profits of multinational companies appear to occur in the world’s least-taxed countries. Current corporate tax systems generate incentives that

result in the current environment where countries compete for multinational business activity by lowering their corporate tax rates. To remedy this situation, sales abroad would not be included in corporate revenue nor would purchases or investment abroad be deductible in the second major piece of the proposed corporate tax reform. As a result, the corporate tax would be assessed based on where a corporation’s products are used rather than where the corporation is located or where the goods are produced. Assessing the tax based on where a firm’s products are used eliminates issues of where to locate a business and incentives for U.S.-domiciled businesses to shift profits abroad to reduce U.S. taxes.

This plan therefore delivers a host of economic advantages to U.S. businesses and American workers. Promoting domestic corporate activity and encouraging investment would boost productivity, the key driver of increases in wages, employment, and living standards. Indeed, estimates of similar proposals suggest these changes could increase national income by as much as 5 percent over the long run.

Importantly, this reform would achieve these benefits without reducing corporate tax revenues. Because the United States now has one of the highest corporate tax rates among the world’s leading economies, some argue that it must lower its corporate tax rate to compete. A simple reduction in its corporate tax rate is not the answer, though, because it would leave in place all the flaws of the existing system.

This new tax system also would retain or even increase the progressive element of the corporate tax system. The proposal would effectively implement a tax on consumption in the United States that is not financed out of wage and salary income. This progressivity is tied to the shift in incentives that would make the United States more attractive as a location for corporate businesses and their new investment.

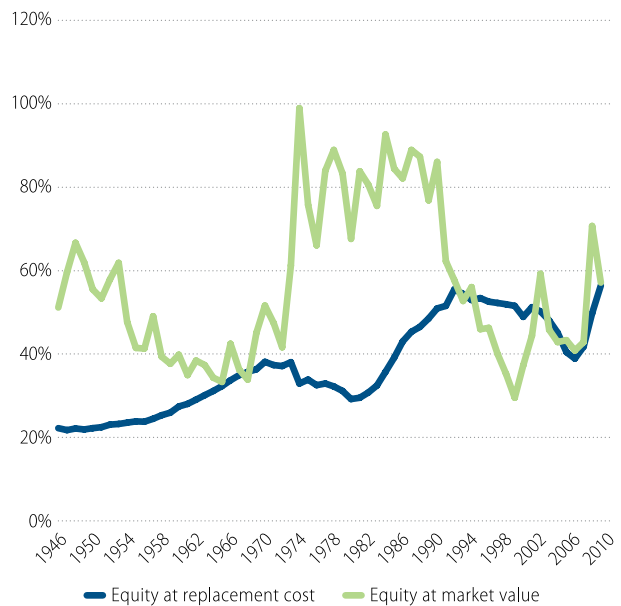
# The U.S. Corporate Income Tax: In Need of Reform

The basic form of the U.S. corporate income tax has changed little over time. But the environment in which U.S. corporations operate has changed markedly. One significant change in the economic environment is the increasing importance of the financial sector and the growing sophistication of financial transactions and instruments. While financial innovation has its benefits, its pitfalls have been all too evident in recent years. Although most of the focus during the Great Recession and its aftermath has been on the role of the financial sector in fueling an unsustainable housing bubble, financial innovation presents challenges related to the corporate sector as well. The corporate tax encourages borrowing because interest payments are deductible from tax, while the earnings of shareholders are not. This has always been true under the U.S. tax system, but over time financial innovation and development have helped reduce the cost of borrowing and extend access to credit markets to a greater share of the corporate sector. This evolution in credit markets can enhance productivity and economic growth, but it also can lead firms to take greater advantage of the existing tax incentive to borrow. In turn, tax-induced borrowing can contribute to economic instability, making companies more susceptible to distress and bankruptcy during economic downturns.

Figure 2 on the right shows the trend in debt-equity ratios for U.S. nonfinancial corporations during the postwar period. Measuring equity at the replacement cost of tangible assets minus liabilities shows a definite upward trend. This trend is much less evident when one measures equity using current stock market value. Some argue that despite its volatility as a measure, stock market value is more appropriate than the

value of tangible assets because the market value of a firm automatically incorporates the value of its intangible assets, which have been growing over time in their importance relative to tangible assets.<sup>4</sup> But as the recent past has shown, looking backward is not necessarily a good way to anticipate the next financial crisis. Also, borrowing by financial companies, which is not included in Figure 2, quite clearly was a

FIGURE 2  
Debt-equity ratios, U.S. nonfinancial corporations



Source: Board of Governors of the Federal Reserve System

central issue in the most recent recession, and the financial sector has been growing as a share of the corporate sector. In recent years, this sector typically has accounted for around one-quarter of all corporate tax revenues.<sup>5</sup>

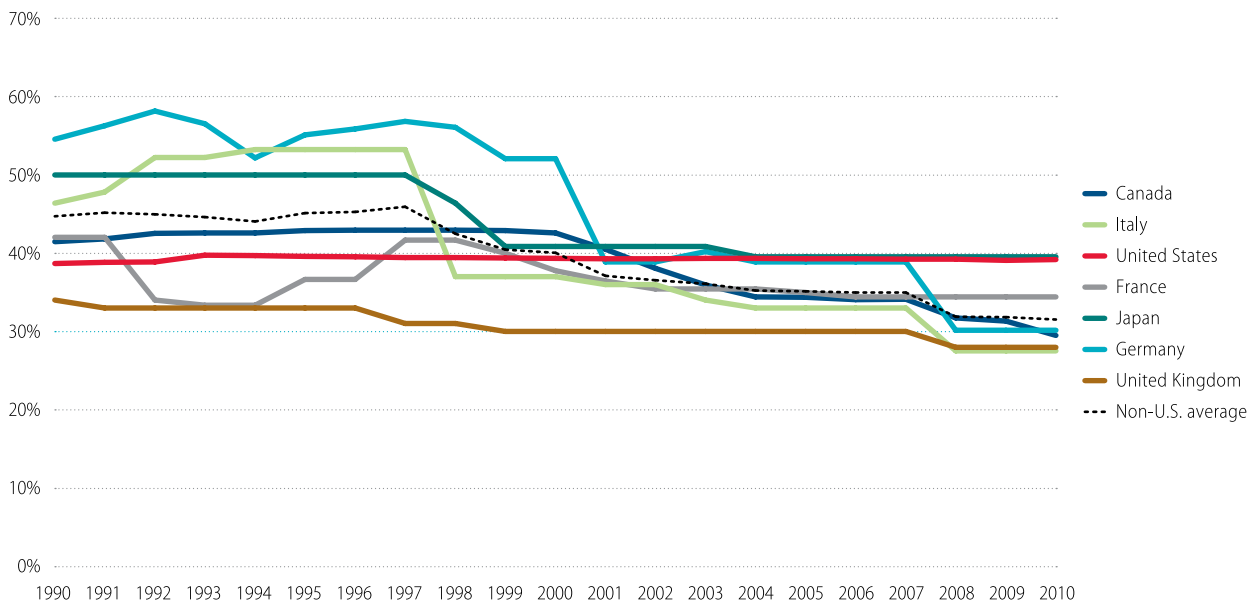
But how to modify the tax treatment of borrowing is not obvious. Given the importance of the financial sector, any sensible change in the tax treatment of borrowing must be comprehensive but also take into account the special circumstances of financial companies. For example, simply reducing the deductibility of interest payments would wreak havoc on their traditional process of borrowing to lend. The reform approach I propose can be applied equally to financial and nonfinancial companies, and therefore will not require any special rules for financial companies or that a distinction be made between financial and nonfinancial companies, a distinction that has less and less meaning as many traditionally non-financial companies incorporate financial services in their portfolio of activities.

Another important change necessitating reform involves the growth of international capital flows, multinational corporations, and cross-border investment.<sup>6</sup> Partly in response to the increased openness of economies, corporate tax rates

have trended downwards abroad. Figure 3 below shows the corporate tax rates in the G-7 countries since 1990, taking into account taxes at the national and sub-national levels. The U.S. tax rate, which had dropped sharply in the previous decade as a consequence of the Tax Reform Act of 1986, has stayed roughly constant since then, while tax rates elsewhere have continued to decline. At least part of the explanation for declining tax rates abroad is straightforward: with more intense competition for mobile international business operations, countries reduce corporate tax rates to keep pace. Empirical evidence confirms that this form of tax rate competition is occurring.<sup>7</sup>

The clear implication to some observers is that the United States should join this race to the bottom and lower its corporate tax rate to remain competitive. They argue that the United States will gain little additional revenue by keeping its corporate tax rate relatively high because this tax rate differential will cause business activity and reported profits to shift abroad. Second, they argue that because of the mobility of capital, at least some of whatever revenue we may collect because of our higher corporate tax rate will be borne not by the owners of corporations or by capital owners more broadly. Instead, some of this tax will be borne by the U.S. workers

FIGURE 3  
G-7 corporate tax rates, 1990-2010



Source: Institute for Fiscal Studies, available at <http://www.ifs.org.uk/publications/3210>.

whose earnings will be held down because capital flight hinders U.S. worker productivity. Thus, the argument goes, keeping the U.S. corporate tax rate high will produce neither revenue nor a progressive outcome.

Not all accept the premise that this race to the bottom is inevitable. The Obama Administration has formulated a very different response which rests on the view that alternative means can arrest capital flight and profit-shifting. This approach would entail strengthening the existing method of taxing multinational corporations and international finance and investment. Included in proposals to reform the U.S. international tax system put forward in the Administration's fiscal year 2011 budget, estimated to raise \$122 billion dollars over ten years,<sup>8</sup> are a series of changes that would limit the ability of U.S. multinational corporations to transfer profits abroad using expense allocation and other accounting practices. These changes effectively would raise the U.S. tax rates applied to the foreign operations of U.S. multinationals. Thus, the Administration's proposals seek to address profit sharing and capital flight not by lowering the corporate tax rate, but by limiting U.S. multinationals' profit-shifting opportunities and the attractiveness of operating abroad.

The Administration's approach might succeed in achieving its objectives, but why this approach has not taken hold elsewhere merits thought. Not only have most other G-7 countries taken the path of reduced corporate tax rates shown in Figure 3, but they have also moved away from their attempts at taxing the foreign operations of their multinational companies. With the recent adoption by the United Kingdom and Japan of so-called territorial or exemption tax systems,

the United States is now the only G-7 member that attempts to impose a worldwide tax system on the foreign business income of its resident multinational companies. Exempting foreign-source income from tax has been justified on the grounds of international competitiveness: it allows a country's multinationals to operate in foreign countries without facing an additional tax burden not faced by their competitors based in other countries. The argument is that if the United States does not adopt such an approach, U.S. multinationals will either lose the battle with foreign-based multinationals or seek to relocate to other countries, as they did during the spate of corporate "inversions" that occurred earlier in this decade before legislation stopped them.<sup>9</sup> Additional evidence shows that increased operations abroad do not necessarily reduce the domestic activities of U.S. multinationals,<sup>10</sup> which weakens the argument that U.S. taxation of foreign operations is needed to protect domestic activity. But adopting an exemption system does not relieve the pressure on a country to reduce its corporate tax rate because operations and profits reported in low-tax countries are taxed less heavily.

The United States might succeed following the path the Administration proposes because it differs from the other members of the G-7, having the world's largest economy and being home to many of the world's leading multinational companies. But I argue that my proposed reforms offer a simpler and more direct method of dealing with the pressures of international tax competition. It builds on the Administration's approach but is modified in a manner that promotes the competitiveness of U.S. producers and alleviates the pressure to reduce the corporate tax rate.

# Two Steps to Fundamental Corporate Tax Reform

Corporations operate in an environment greatly changed by the growth in credit markets as well as the increasing international mobility of capital and companies. Reform is needed for the corporate tax to be a viable, progressive revenue source that does not hinder economic growth or promote economic instability. The system I propose addresses these two important economic changes with two main sets of reforms, each directed at one of the key problems just identified: a shift in the corporate tax from equity to debt, to deal with the tax incentive to borrow, and a change in the treatment of cross-border flows, to alter fundamentally the terms of international

tax competition. The resulting tax system should also be more progressive and much simpler than the current one.

The first would convert the corporate income tax into a corporate cash-flow tax. The second would apply the corporate cash-flow tax on a destination basis, limiting the focus of the tax to transactions occurring exclusively in the United States. Table 1 below illustrates the key elements of this reformed tax system and compares them to the existing U.S. tax system as well as a standard territorial approach to taxing business income that many G-7 countries have adopted.

TABLE 1

## Key Elements of Tax Systems

	<b>U.S. corporate income tax</b>	<b>Territorial corporate income tax</b>	<b>A modern corporate tax</b>
Sales revenues	Taxable	Taxable	Taxable if from domestic sources; otherwise ignored
Current expense, including wages and salaries	Deductible	Deductible	Deductible if from domestic sources; otherwise ignored
Interest expense	Deductible	Deductible	Deductible if borrowing is domestic; otherwise ignored
Borrowing	Ignored	Ignored	Taxable if from domestic sources; otherwise ignored
Capital investment	Deductible over time following depreciation schedule	Deductible over time following depreciation schedule	Immediately deductible if from domestic sources; otherwise ignored
Inventory investment	Ignored until goods sold	Ignored until goods sold	Immediately deductible if from domestic sources; otherwise ignored
Active foreign-source income	Taxable when repatriated, subject to foreign tax credit	Ignored	Ignored
Passive foreign-source income and royalties	Taxable	Taxable	Ignored

## Step One: Changing the tax treatment of investment and borrowing

The first piece of the reform would eliminate the role that the corporate income tax plays in discouraging productive investment and encouraging excessive borrowing. Table 2 below helps illustrate the proposed changes by providing selected items from the cash-flow base for the nonfinancial corporate sector for the years 2005–2009.<sup>11</sup> Profits before tax follow the pattern one would expect over this period, growing between 2005 and 2006, starting to dip in 2007 when the recession began, and then dropping sharply in 2008 and slightly again in 2009.<sup>12</sup> Let us assume that this measure of profits is the tax base under current law, ignoring differences between tax and book measures of profit for purposes of illustration.

My proposed reforms would change the tax treatment of investment in the following manner: First, depreciation deductions would be replaced with immediate expensing for all tangible investment in plant, equipment, and inventories.<sup>13</sup> Immediate expensing also would be provided for net financial investment; defining increased liabilities to exclude net issues of equity, net financial investment would equal increases in financial assets net of increases in financial liabilities—that is, net lending minus net borrowing.

Starting with profits before tax, this change in the tax base would involve first adding current depreciation allowances back to profits, since the initial calculation of profits as reported involved subtracting them. Then, fixed investment, inventory investment, and net financial investment would be subtracted to get to the new tax base. Although (gross) fixed investment will generally be positive, inventory investment and financial investment need not be, and each of these components is negative in some of the five years shown in Table 2.

TABLE 2

### Base Adjustment: An Illustration for Nonfarm Nonfinancial Corporate Business

		(Billions of dollars)				
		2005	2006	2007	2008	2009
	Profits before tax (1)	954.1	1,115.1	1,056.4	805.0	783.4
+	Capital consumption allowance (4)	608.7	638.7	676.6	834.7	780.9
-	Fixed investment (12)	947.6	1,077.3	1,173.9	1,207.3	995.0
-	Inventory investment (13-7)	78.0	98.4	63.0	11.9	-121.7
-	Financial investment (15+39)	-360.4	-704.9	-994.8	-906.6	39.3
=	Cash-flow base	897.6	1,283.0	1,490.9	1,327.1	651.7

Source: Board of Governors of the Federal Reserve System, *Flow of Funds Accounts of the United States: Annual Flows and Outstandings, 2005–2009* (Washington, DC, 2010), Table F.102. Numbers in parentheses are the line numbers (or combination of line numbers) in the original table.

Shifting from depreciation deductions to immediate expensing typically will reduce the tax base; this will be true whenever investment exceeds depreciation, which is typical for a growing economy and true in each of these five years. On the other hand, net financial investment for this sector is typically negative, because the nonfinancial sector is a net debtor to the rest of the economy, and growing companies typically increase their liabilities over time. Thus, these changes in the tax base typically offset each other, and the net impact could be positive or negative. In this example, the tax base would be reduced in 2005 and 2009 and increased in 2006–2008. Note that whether the tax base rises or falls is not related in any simple way to the state of the economy, as the tax base rises in one recession year (2008) and falls in another (2009); it rises in two expansion years (2006 and 2007) and falls in another (2005).

Although my proposal makes no explicit connection between the sources and uses of funds, one way of viewing this new approach to taxation is that it provides businesses with an immediate deduction for the tangible investments they undertake in excess of the funds that they borrow to do so. Thus, investments financed entirely with borrowed funds receive no net deduction (to compensate for interest deductions received subsequently), while investments financed by equity funds are fully deductible. Although the conversion from the current tax base to the new tax base involves the steps laid out in Table 2, one also could have arrived at the new tax base through an even simpler process, without ever having to calculate profits in the first place. The new tax base equals the firm's cash flows, equal to its cash receipts less its cash expenditures; the only adjustment to this measure is that cash raised from new equity issues is excluded from receipts. Whatever else can be said of this new method of defining the corporate tax base, it is much simpler than the present one. For example, neither depreciation schedules nor inventory accounting would be necessary for tax purposes.

This simplicity extends to financial companies as well. Consider the basic case in which a financial institution has only financial assets and borrows money that it then lends, making a profit on the spread between the interest rate charged to borrowers and the rate paid to lenders. To the extent that the borrowing and lending net out, as they largely will for companies with very little equity relative to their gross assets, there will be no change at all in the tax base, as net borrowing will be zero and there will still be a tax on inter-

est receipts net of interest expense. If, on the other hand, a financial institution expands its equity base as it expands its portfolio, it will increase its net financial assets and effectively get an additional deduction for the equity expansion (regardless of whether this occurs through the issuance of new equity or the retention of earnings).

The U.S. financial sector today includes companies engaging in a variety of sophisticated transactions far removed from simple borrowing and lending, but cash-flow taxation remains simple even in such cases. It would no longer be necessary to distinguish the composition of credit flows between interest and principal, for example, because both would now be subject to the same tax treatment; this would be especially helpful when dealing with derivatives and other complex financial instruments. For financial and non-financial companies alike, the task of the firm's tax accounting department and the Internal Revenue Service auditor basically would be to adhere to the advice memorably provided by Deep Throat in the story of Watergate, as chronicled by Carl Bernstein and Bob Woodward in 1974: "Follow the money."<sup>14</sup>

Just as the tax calculation described in Table 2 has offsetting components, so will the effects on the firm's incentives. Corporations financing their investments largely with equity will see a reduction in their cost of capital, as the benefit of immediate expensing of investment will offset a higher after-tax cost of borrowing. In fact, the effective corporate tax on new, break-even equity investments will now be zero, a property of cash-flow taxation established more than 60 years ago;<sup>15</sup> for such investments, the immediate deduction of the cost of investment will just offset the taxes paid subsequently on earnings. One way of interpreting this result is that the government becomes a silent equity partner, sharing equally in investment costs and returns.

The effective corporate tax on new investments financed entirely by borrowing also will be zero under the new scheme; such investments receive no net up-front deduction as the tax on borrowed funds offsets the deduction for investment. But the deduction of interest payments shields the subsequent investment earnings from tax, so break-even investments that return just enough to cover interest costs will face no tax. That this treatment represents a tax increase for debt-financed investments reflects the fact that under the current system these investments face a corporate tax rate that is effectively negative—the corporate tax provides taxpayers with a net



subsidy. Such subsidies distort the allocation of investment funds, in particular encouraging the types of investments that can be financed more easily using borrowed funds. Leveling the incentives between debt and equity will help direct investment funds to their most productive uses.

As this discussion implies, while new, break-even investments would now be subject to a uniform effective tax rate of zero, this would not be the case for other sources of income. Because corporations generate additional earnings, called rents, through production, there would still be a corporate tax base. But the taxation of rents and break-even returns to capital have different effects on behavior and, as a consequence, on the incidence of the corporate tax burden.<sup>16</sup> While taxing the normal returns required to meet the cost of capital discourages investment and, especially in an open economy, may cause a shift in some of the corporate tax burden from capital to labor because of the resulting decline in worker productivity, taxing rents is less likely to do so, particularly if these rents are not easily shifted from the United States—an issue that the second major piece of the proposal addresses.

## Step Two: Revamping the tax treatment of cross-border flows

The U.S. corporate tax system's current treatment of foreign-source income represents a compromise between what are commonly seen as the two main approaches: full taxation on a worldwide basis and territorial taxation. The territorial tax approach has become dominant outside the United States, while current policy initiatives would shift the U.S. system closer to the worldwide approach.

The arguments in favor of each approach are varied and complex. Simply put, moving toward the worldwide approach is seen as reducing incentives for U.S. multinationals to shift profits and capital away from the United States, while the territorial approach is seen as improving the competitiveness of U.S. multinationals with respect to their overall operations. But the worldwide approach would raise the costs of U.S. multinationals relative to their non-U.S. competitors, and the territorial approach would increase their incentives to shift activities and profits abroad. Moving closer to one form or the other from the current U.S. system is seen as a trade-off, helpful in one dimension and harmful in the other, and these are generally presented as the two reform options available.<sup>17</sup>

## Introducing the destination principle

But the United States could benefit by moving beyond these two heavily discussed choices. Instead of using either corporate residence or the source of production to determine the tax base, I propose to use the destination principle, collecting tax on the basis of where a corporation's products are used.

The destination principle is already familiar in the context of taxation, because it is the approach used around the world in the implementation of value-added taxes (VATs). Under the VAT, the destination principle is applied through border adjustments, which impose the VAT on all imports and rebate the tax previously collected on domestic production that is exported. Imposing border adjustments serves to make the VAT a tax on all domestic consumption, but another important feature is that it eliminates the incentive that domestic producers would otherwise have to engage in profit shifting for tax purposes.<sup>18</sup>

Moving from our current international tax provisions to a system based on the destination principle can be seen as a two-stage process. The first stage is to eliminate all taxes (and tax credits) on foreign-source income. The second stage is to exclude from the calculation of a company's tax base all cross-border transactions, regardless of their nature, thereby making the tax liability relate only to domestic transactions. In particular, sales abroad would not be included in receipts, nor would purchases from abroad be deductible. The same exclusion would apply to financial transactions as well; financial flows from abroad would not be added to the tax base, nor would flows going abroad be deductible. These excluded flows would include borrowing and lending as well as payment and receipt of interest on loans and liabilities.

The two stages together make the corporate cash-flow tax destination-based. One might view this treatment of international transactions as a super territorial system—one that ignores not only activities that occur abroad, but also those going and coming. While a simple territorial system would worsen the transfer-pricing problem because it would encourage companies to shift the reported location of activity from the United States to low-tax countries, the two stages together would actually alleviate the problem, because such shifting would no longer be possible. Some simple examples should help illustrate why this is so.

**Example one:** Suppose a U.S. company shifts reported profits abroad by understating the value of sales to a foreign subsidiary. Under the proposed tax system, such sales would be ignored and hence would have no impact on the U.S. tax base.

**Example two:** Consider a U.S. company that borrows from a related foreign party, overstating the interest rate on the loan to increase domestic interest deductions and increase interest receipts reported abroad. Because the interest paid abroad would not be deductible, this transaction would have no impact on the U.S. tax base.

In both examples, the shift of a dollar of income from the United States would have no U.S. tax consequences. But assuming that the other country applies some sort of traditional income tax, both shifts would increase tax liability in the other country, regardless of that country's own corporate tax rate, since taxable profits would increase there. Thus, corporations would have an incentive to shift profits to the United States, even from the tax havens that have been the focus of so much attention in recent years. This incentive would exist regardless of the U.S. corporate tax rate because that rate would apply only to U.S. domestic transactions.

Note also the simplicity of this proposed approach to international activities compared to that of the current tax system or a territorial system. The United States currently requires companies to allocate expenses for domestic interest and research and development costs, an allocation that would become even more critical under a territorial system because U.S. companies would have the incentive to locate in the United States expenditures producing income in low-tax countries. Under the proposed approach, there would be no need to decide how to allocate such activities.

Instead of excluding cross-border transactions from the tax base, a similar outcome could be achieved using border adjustments as practiced under VATs. Under this alternative approach, cross-border transactions would initially be included in the corporate tax base and then offset using border adjustments. Indeed, the Growth and Investment Tax Plan put forward by the President's Advisory Panel on Federal Tax Reform (PAPFTR) advocated a similar approach.<sup>19</sup> But relying on border adjustments would accomplish nothing except to make the corporate tax system more complex.<sup>20</sup>

As one further contribution to simplification, the corporate tax would apply only to domestic activities, so the need for and logic of the domestic production deduction introduced in 2004 would disappear.

By its nature, the destination-based cash-flow tax imposes no burden on the foreign operations of domestic companies. Thus, like the territorial approach, it allows U.S. companies to compete abroad on an equal footing with companies from other countries. But the tax does not encourage U.S. companies to move their operations abroad. With investments facing a zero rate of corporate tax in the United States, they will be taxed less heavily than in countries that impose positive tax rates, even low ones, on corporate income. Thus, as in the case of profit-shifting activities, the pressure of international tax competition will no longer be a relevant consideration in setting the U.S. corporate tax rate.

In addition to the many benefits just described, a destination-based tax is often credited with one additional advantage that is largely nonexistent, at least for a country like the United States. Some VAT proponents argue that providing border adjustments makes exports cheaper abroad and imports more expensive here, thereby making domestic production more competitive internationally. This argument would make sense in a fixed-exchange-rate environment, for example, if applied to a country in the Euro zone regarding its trade with other Euro-zone countries. But the U.S. exchange rate with respect to other currencies is basically flexible, and logic and analysis suggest that exchange rate adjustments will immediately offset the incipient gain in competitiveness.<sup>21</sup> The same argument applies to the destination-based corporate cash-flow tax. In conjunction with the expected and immediate exchange rate adjustment, taking cross-border transactions out of the tax base would make imports no more costly and export sales no more competitive.

Because the destination-based cash-flow tax would represent a major reform of our current system, the appendix provides some examples of how it would apply to companies in different situations.

## Further Issues and Analysis

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If it were to implement the proposed reforms, the United States would need to consider several issues, including revenue effects, changes to individual taxes, extensions to businesses outside traditional C corporations, and transition provisions, as well as the proposal's potential economic benefits.

### Revenue effects

The primary objective of this proposal is to change the structure of the corporate income tax to render it more sustainable, efficient, and equitable. Because there would be several significant changes in the tax base, the net impact on revenues is difficult to predict, and as the example laid out in Table 2 suggests, this impact will vary from year to year. However, previous analysis of related proposals provides some idea of the proposal's overall revenue effects.

The first step of the proposal—to allow expensing of investment net of corporate borrowing—is likely to have a small net impact on revenue, at least in the long run.<sup>22</sup> For a closely related change in the corporate tax base to allow expensing and eliminate deductions for net interest rather than taxing net borrowing, a group of researchers estimated that the corporate income tax would have reduced corporate taxes by \$18.0 billion in 1995. However, they also estimated that most of this loss was due to business-cycle effects, noting in particular that 1995 was a stronger-than-average year for economic performance. Controlling for this, they estimated a business-cycle-adjusted change in corporate tax liability for 1995 of just -\$0.7 billion.<sup>23</sup> By comparison, corporate tax collections in that year were \$157.0 billion.

The second stage of the proposal—to include only domestic transactions in the tax base—is somewhat more difficult to assess in terms of revenue effects. We can take advantage of existing revenue estimates by considering it as if it consisted of two separate components: a move to territorial taxation and border-tax adjustments to eliminate cross-border transactions. (While this is not how the proposal would actually be implemented, we break it down this way to take advantage of existing revenue estimates for the two components.) The revenue effects of adopting a territorial system depend on the details of such a shift. The Joint Committee on Taxation, as cited recently by Congressional Budget Office, estimates that exempting active foreign dividends from U.S. taxation—the key component of a territorial tax system—would increase revenues by around \$7 billion a year in the near term, and \$76.2 billion over the ten-year period 2010–2019.<sup>24</sup> How exempting certain income that is now subject to tax (after foreign tax credits) could increase tax revenue follows from the other elements assumed for the proposal. Those include a reduction in tax deductions for certain U.S. expenses attributable to the now-exempt foreign-source income and the loss of foreign tax credits that previously could have been used to offset other foreign-source income that remains subject to tax, notably royalties.

This revenue estimate is somewhat controversial because it makes particular assumptions about how a territorial system would be imposed and the extent to which sophisticated multinational corporate taxpayers would respond. For example, some corporations might relocate intangible assets abroad. But this controversy simply reinforces my view that shifting to

a territorial tax system, on its own, is not a complete answer to international tax reform because it exacerbates profit-shifting tax-planning incentives. Excluding cross-border transactions neutralizes such incentives. For example, royalties received from foreign subsidiaries would be ignored in the tax calculation. Thus, shifting intangibles abroad would have no U.S. tax consequences, and any additional foreign tax to which the subsidiaries would then be subject would provide an incentive to keep them in the United States.

When viewed as the second component of international tax reform, border-tax adjustments would have their own revenue impact. The PAFTR report estimated that border adjustments under its Growth and Investment Tax Plan would raise a substantial amount of revenue— \$775 billion over ten years.<sup>25</sup> The reason for such a large revenue gain is that the United States is currently running enormous trade deficits, with imports exceeding exports. For example, in 2007, net imports were just over 5 percent of GDP. Hence, border adjustments applied only to exports and imports would raise considerable revenue.

But unlike under the Growth and Investment Tax Plan, the border adjustments implicit in the proposed system also would cover financial transactions. These financial flows offset to a considerable extent the flows in goods and services through the balance between capital and current accounts, which must hold at the national level. Just as the United States is a net importer, it is a net borrower, so increased capital inflows (net of interest payments made to foreign creditors) would generate tax reductions that would offset the revenue increase associated with leaving exports and imports out of the tax base. The offset would not be complete, even though capital and current accounts balance overall, because corporations and other private entities are not the only ones participating in international financial transactions. The U.S. government is a big foreign borrower, too. But given the likelihood that international sovereign borrowing will have to slow in the coming years, the implicit border adjustments probably will not be a major long-run revenue source under this plan.

A tax reform as significant as the one laid out here will have many distinct revenue effects working in positive and negative directions. It is plausible that the net impact will be small and perhaps positive, but many factors are left to be consid-

ered, including three discussed next: potential modifications to individual tax rates, extension to businesses not currently subject to the corporate income tax, and transition relief.

### Potential modifications to individual tax rates

Changes in corporate-level taxation also have implications for the appropriate tax treatment at the individual level. The double-taxation of corporate earnings has been one standard argument for tax provisions favoring dividends and capital gains, including those introduced in 2003 that cap the rate at 15 percent on such income. Scaling back the favorable treatment of dividends and capital gains could be considered under a reformed corporate tax since double-taxation of the returns to capital would no longer be an issue. This would be particularly true if it were ultimately determined that the net revenue impact of the proposal would otherwise be negative.

At the very least, a revenue-neutral shift in tax rates at the individual level would be appropriate to bring the treatment of interest, capital gains and dividends more into line, given that the tax system will no longer favor borrowing at the corporate level. The 2005 Growth and Investment Tax Plan took this approach and would have imposed a uniform tax rate on all interest, capital gains, and dividends. Such a flat rate tax on earnings from different sources would also simplify the tax system, which has been a motivation for the adoption of this approach under the dual-income tax systems prevalent in the Nordic countries.<sup>26</sup>

### Extension to other business entities

Gradually over recent decades, the U.S. business sector has evolved into one that is, to a considerable extent, not subject to the corporate income tax, reflecting the growth of business entities outside the traditional C corporation form. In 1980, C corporations accounted for 80 percent of U.S. business income, while partnerships, sole proprietorships, limited liability companies, and S corporations made up the remainder. By 2007, the C corporation income share had fallen to 53 percent, with the fastest relative growth experienced by S corporations—corporations from a legal perspective that are taxed as so-called pass-through entities, in which their income is attributed directly to shareholders and taxed only at the shareholder level. The income share of S corporations rose from 1 percent in 1980 to 14 percent in 2007.<sup>27</sup> Tax rules

have played a role in this growth; for example changes to relative corporate and individual tax rates in the Tax Reform Act of 1986 made corporate tax avoidance more valuable.<sup>28</sup>

My proposed changes to corporate taxation are not designed to have a major impact on overall corporate tax collections. On this basis alone, there is no compelling need to couple them with a reformed treatment of pass-through entities. But growth continues outside the corporate sector, particularly among S corporations and other entity forms that can, from an ownership and organizational perspective, serve as reasonably close substitutes for C corporations. Many see this growth as a challenge to the viability of the corporate tax base and another distortion of business decisions, in this case with respect to organizational form.<sup>29</sup> Further, the change proposed here in the treatment of foreign-source income and other international transactions would introduce one more distinction in the treatment of C corporations and hence would provide an additional channel through which taxes might distort the choice of organizational form. Therefore, the reform will work best if the changes extend to those companies that bear a close resemblance in their characteristics to C corporations.

The simplest approach would be to subject other entities to the same reform being imposed on C corporations. This uniformity of treatment would be more practical under the new system than under current law because the tax treatment of C corporations would be much simpler than it is now. The 2005 Growth and Investment Tax Plan took this approach, proposing to impose a 30 percent cash-flow tax on all business entities except sole proprietorships and a uniform 15 percent tax on all earnings distributed by such entities.<sup>30</sup> But this broad extension is probably not needed if the aim is to cover companies that could serve as substitutes for C corporations.

For example, consider S corporations, which, since 2004, are permitted to have as many as 100 distinct shareholders. In 2007, 90 percent of all such corporations, accounting for 58 percent of all net income of S corporations, had at most two shareholders.<sup>31</sup> Only 0.2 percent of the sector's returns, accounting for less than 8 percent of the sector's income, came from S corporations with more than 20 shareholders. Therefore, limiting the reform to those S corporations with more than a few shareholders would have a minor impact on the sector as a whole, and similar rules could be applied to other entity forms.<sup>32</sup>

## Transition provisions

Even if revenue is kept constant, the adoption of a new tax system will create winners and losers, raising the issue of transition rules.

There are two important shifts in the tax burden associated with the proposed reform. One is between equity and debt, with debt losing its previous tax advantage through the inclusion of borrowing in the tax base. The other is between new and existing sources of capital income. By implementing immediate expensing of investment, the proposal would effectively eliminate the tax on new investment. But the tax relief would apply to new investment only, and taxes on existing assets would rise if depreciation deductions were eliminated immediately.

Based on past practice, one might imagine providing transition relief by phasing in new provisions over a relatively short period of time. The Tax Reform Act of 1986 took this approach when it eliminated the deduction for consumer interest in 20 percent increments over a five-year transition (allowing 80 percent of interest to be deducted in the first year, 60 percent in the second year, and so forth). The 2005 Growth and Investment Tax Plan proposed the same approach for depreciation allowances on existing capital, and one could imagine a similar approach for inventories as well. That plan would have eliminated the tax advantage to borrowing by eliminating the interest deduction, and would have followed the same five-year approach to phasing out interest deductions. My alternative approach to debt, which would add new borrowing to the tax base, already follows a smooth transition path because it would apply to existing debt only as it matures and is refinanced. Thus, the case for additional transition relief for debt is not obvious.

Transition provisions could have a significant revenue cost, as the following rough calculation shows. In the years just prior to the recent recession, corporate depreciation deductions were roughly half a trillion dollars annually.<sup>33</sup> Assuming that 10 percent of each year's deductions are attributable to new investment and a 30 percent tax rate (to account modestly for the fact that not all companies are taxable in a given year), a five-year transition would involve revenue losses of \$108 billion, \$72 billion, \$42 billion, and \$18 billion during the four years of partial deductibility. Paying for \$240 billion of tax relief would require an increase in some other taxes; a variety



of approaches might be considered. A temporary increase in the corporate income tax of five percentage points (from 35 percent to 40 percent) over the same period would provide revenues of roughly the same magnitude, for example. Or, one might phase in any planned reductions in the taxation of interest income under the individual income tax, perhaps also keeping taxes on dividends above their long-run level during the same period. Or perhaps some tax could be imposed on the unrepatriated earnings of multinational companies, in lieu of the tax they eventually would have faced under the current system.

If not carefully considered, an approach to paying for transition relief could result in perverse timing incentives. For example, a delayed implementation of full expensing should be avoided, because it would make it attractive to delay investment. But phasing in reductions in tax rates would be much less problematic because the future income from new investments would face the lower long-run tax rates.<sup>34</sup>

### Effects on distribution and economic activity

Who ultimately bears the burden of the corporate income tax has been the subject of debate for many years, as has the closely related question of the impact of the tax on economic activity. The view for many decades has been that the corporate tax reduces activity in the corporate sector, increases it in other sectors, and is borne roughly in its entirety by owners of all capital.<sup>35</sup> This view of the corporate tax as a progressive revenue source that distorts the allocation of capital and labor, but not necessarily the level of domestic economic activity, has been challenged by those who argue that, in an open economy, a tax on mobile corporate capital will cause capital to relocate to other countries, thereby shifting the burden largely to labor through lower wages or employment and reducing domestic economic activity.<sup>36</sup>

Some recent empirical studies have argued that the shift to labor is considerable, although the research is certainly not without its critics.<sup>37</sup> But there is little doubt or disagreement that taxes imposed on corporate earnings generated by production in the United States do provide incentives for companies to locate capital in lower-tax jurisdictions and that the resulting corporate responses shift at least some of the corporate tax burden to domestic U.S. labor. This holds true even

for the existing U.S. tax system, which applies more fully to U.S.-source earnings than those generated abroad.

The tax reform laid out in this paper would alter this situation in two ways. First, by eliminating the corporate level tax on new investment, it would reduce the incentive to locate capital abroad. Second, by excluding cross-border transactions from the tax base, it would collect the corporate tax, now a cash-flow tax, based on the corporate products' destination, not on their origin. This would shift the focus of taxation from ownership to consumption. In fact, a business cash-flow tax is equivalent to a consumption tax, but with one major difference—the exclusion of wages and salaries from the tax base. As such, and unlike a VAT or other traditional consumption taxes, it is a highly progressive instrument of tax policy, effectively imposing a tax on consumption in the United States that is not financed out of wage and salary income. This progressivity is a consequence of the shift in incentives that would make the United States more attractive as a location for corporate businesses and their new investment.

### How much new investment and business activity would the reform would generate?

Some indication of how the reform would play out comes from estimates for the Growth and Investment Tax Plan, which would have implemented a business cash-flow tax with border adjustments, in conjunction with a flat 15 percent tax rate on individual income from business, including from entities like S corporations and partnerships.<sup>38</sup> The Department of the Treasury estimated that plan could have increased national income by up to 2.4 percent over the ten-year budget window, 3.7 percent over 20 years, and 4.8 percent over the long run.<sup>39</sup> The division of this increase in income between capital and labor is not specified, but if one makes the empirically reasonable assumption that my proposed reform would not change the labor and capital shares of income, labor income would exhibit the same percentage increases. How much of this potential increase in labor income of several percentage points would be reflected in higher wages and how much in increased employment would depend on many factors, including the degree of slack in the labor market. A greater share most likely would be reflected in increased employment under current conditions than in a tight labor market.

How can a proposal that roughly maintains the existing level of corporate tax revenue increase economic activity? By reducing the tax differential between debt and equity, a better allocation of investment will occur; by reducing the incentive to shift profits and activities abroad, existing tax rates can generate more revenue and more domestic investment; and by shifting the tax burden from new investment to existing sources of corporate income, capital investment will be encouraged.



## Conclusion

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The set of reforms proposed in this paper would produce a streamlined corporate tax by replacing the current system with a much simpler one. It would eliminate the normal returns to capital from the corporate tax base, thereby encouraging investment. It would neutralize existing tax incentives for corporate borrowing, removing a potential source of future economic instability. By limiting the tax base to domestic cash flows, it would eliminate incentives to shift profits abroad without requiring U.S. participation in a race to

the bottom to cut the corporate tax rate. At the same time, it would jettison one of the most complicated sets of tax policy provisions, those relating to international taxation. Although the plan would maintain the corporate tax as a source of revenue, it would make the burden of this tax more progressive and likely increase domestic activity, income, and employment. It is a corporate tax system that is much more appropriate for our current economic environment than the one we have inherited from a century ago.

## Appendix: Relationship to Other Existing and Proposed Tax Systems

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The corporate tax system proposed here would implement a destination-based cash-flow tax on the domestic real and financial flows of businesses in the United States. In the late 1970s, the Meade Committee in the United Kingdom notably proposed taxing businesses on a cash-flow basis.<sup>40</sup> The Meade Committee described the approach taken here as an “R+F”-base cash-flow tax, distinguishing it from the use of an “R”-base that considers real flows but ignores financial flows, neither taxing borrowing nor denying a deduction for interest. The Meade Committee proposal did not, however, focus on the treatment of cross-border flows.

The business tax component of the 2005 Growth and Investment Tax Plan was an R-base cash-flow tax with border adjustments for international transactions.<sup>41</sup> As discussed in the text, border adjustments have an effect that is economi-

cally equivalent to the exclusion of cross-border transactions from the tax base. R-base business cash-flow taxes have also been proposed as components of a “flat tax” and an “X tax” – neither of which would have accorded special treatment for cross-border flows in their basic forms.<sup>42</sup>

Except for the deduction for labor compensation, a destination-based tax on business cash flows is a tax on value added. In structure, the proposal made here also differs from VATs common around the world in two other important respects that make it more comprehensive and simpler. First, it includes financial transactions, that is, applies to the R+F base rather than to the R base. Second, it is implemented using the “subtraction” method, aggregating and subtracting deductions rather than giving credit for specific purchases based on invoices showing the prior payments of taxes.

# Some Examples

## Two examples

Two simplified examples illustrate how the proposed tax system would work for a nonfinancial company and a financial company.

## A nonfinancial company

Table A1 lists an industrial company's annual revenues, expenses, and purchases from domestic operations (first column); its tax base under the current tax system (second column); and its tax base under the proposed system (third column).

TABLE A1

Hypothetical Nonfinancial Company (figures in millions of dollars)

		Tax base under current system	Tax base under new system
<b>Sales revenues</b>			
Domestic	1,500	1,500	1,500
Export	300	300	
<b>Expenses</b>			
Labor costs	750	(750)	(750)
<b>Cost of goods sold</b>			
Domestic	100	(100)	(100)
Imported	150	(150)	
Interest	250	(250)	(250)
Depreciation	250	(250)	
<b>Capital purchases</b>			
Domestic	150		(150)
Imported	150		
Inventory investment	50		(50)
Borrowing	200		200
Principal repayment	100		(100)
Tax base		300	300

In this case, it is assumed that all borrowing and purchases for inventory investment are done domestically. Under the new tax system, export sales would be excluded from revenues, but net domestic borrowing would be added, and imported inputs would not be deductible. Depreciation deductions would be eliminated, but deductions for new investment (in fixed capital and inventories) purchased from domestic vendors would be introduced.

In the case shown, the company's tax base stays the same, but it could increase or decrease under a variety of different assumptions. It would increase, for example, if a greater share of its sales were domestic or its domestic borrowing were higher. On the other hand, if a substantial share of the company's revenues were from export sales, its tax base would be lower, potentially even negative. For the tax system to work well under such a circumstance, it should incorporate a provision to allow unused losses to be carried forward with interest.

Note that the exchange rate adjustments would likely offset the apparent tax benefits accorded foreign sales and domestic purchases. For this reason, simple calculations of changes in tax payments are misleading indicators of changes in competitiveness.

## A financial company

Table A2 lists a financial company's annual revenues, expenses, and purchases from domestic operations (first column); tax base under the current tax system (second column); and tax base under the proposed system (third column).

Once again, it is assumed that all borrowing is done domestically. (This example excludes capital and non-labor inputs to keep things simple; they would be treated as in the previous example.) Under the new tax system, interest received from foreign borrowers would be excluded from revenues, domestic borrowing would be added, and domestic lending deducted. As in the previous case, the company's tax base remains the same under the new system, but it could increase if a greater share of its lending were done abroad or decrease if some of its new borrowing were done abroad, for example.

Note that in paying no tax on interest received from foreign borrowers, the company does not receive a tax treatment that is preferential relative to the treatment of domestic lending. This is because domestic lending receives an immediate deduction, whereas foreign lending does not. Taking into account the time value of money, the difference between treatment of foreign and domestic financial activities is merely a difference of timing.

TABLE A2

### Hypothetical Financial Company (figures in millions of dollars)

		Tax base under current system	Tax base under new system
Interest receipts			
Domestic borrowers	1,300	1,300	1,300
Foreign borrowers	200	200	
Expenses			
Interest expense	1,200	(1200)	(1200)
Labor costs	100	(100)	(100)
Net lending			
Domestic	800		(800)
Foreign	300		
Net borrowing	1,000		1,000
Tax base		200	200

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# Endnotes

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- 1 For example, the Congressional Budget Office projects that corporate tax collections will raise 2.1 percent of GDP over the period 2011–2020. Congressional Budget Office, *The Budget and Economic Outlook: An Update* (Washington, DC, 2010).
- 2 For analysis of the importance of different factors in explaining this decline, see Alan J. Auerbach and James Poterba, “Why Have Corporate Tax Revenues Declined?” in L. Summers, ed., *Tax Policy and the Economy, Volume 1* (Cambridge, MA: The MIT Press, 1987), 1–28; and Alan J. Auerbach, “Why Have Corporate Tax Revenues Declined? Another Look,” *CESifo Economic Studies* (June 2007): 153–71.
- 3 The appendix provides a brief summary placing the proposal put forward here in the context of other existing and proposed tax systems.
- 4 See Carol Corrado, Charles Hulten, and Daniel Sichel, “Intangible Capital and U.S. Economic Growth,” *Review of Income and Wealth* 55, 3 (2009): 661–85. Another problem with interpretation is that the corporate sector covered by these measures includes S corporations. S corporations, which have been growing in importance over time, do not have the same tax incentive to borrow as the C corporations because their earnings are not subject to the corporate income tax. Separate statistics for C and S corporations are not published.
- 5 Alan J. Auerbach, Michael P. Devereux, and Helen Simpson, “Taxing Corporate Income,” in J. Mirrlees et al., eds., *Dimensions of Tax Design* (Oxford: Oxford University Press, 2010), 837–93.
- 6 For example, between 1982 and 2005, the share of net assets of the U.S. corporate sector accounted for multinational companies—those with active foreign-source income—rose from 49 percent to 82 percent, according to calculations in Rosanne Altshuler, Alan J. Auerbach, Michael Cooper, and Matthew Knittel, “Understanding U.S. Corporate Tax Losses,” in J. Poterba, ed., *Tax Policy and the Economy, Volume 23* (Chicago, IL: University of Chicago Press, 2009), 73–122.
- 7 See Michael P. Devereux, Ben Lockwood, and Michela Redoano, “Do Countries Compete over Corporate Tax Rates?” *Journal of Public Economics* 92, 5–6 (2008): 1210–35.
- 8 U.S. Department of the Treasury, *General Explanations of the Administration’s Fiscal Year 2011 Revenue Proposals* (Washington, DC: 2010).
- 9 For a discussion of inversion transactions and their tax policy implications, see U.S. Department of the Treasury, *Corporate Inversion Transactions: Tax Policy Implications* (Washington, DC: Office of Tax Policy, 2002).
- 10 See Mihir A. Desai, C. Fritz Foley, and James R. Hines Jr., 2009, “Domestic Effects of the Foreign Activities of US Multinationals,” *American Economic Journal: Economic Policy* 1, 1 (2009): 181–203. The evidence relates to increases in foreign operations induced by economic growth abroad, rather than to increases associated with other factors, such as differences in costs.
- 11 Table 2 is created using information on the U.S. nonfinancial corporate sector’s aggregate flows of funds, as compiled by the Board of Governors of the Federal Reserve System (2010, Table F.102). Imagining this entire sector as a single corporation, one can use the entries in that table to show how this corporation’s tax base would change.
- 12 This exercise will show only rough magnitudes, since the book measures reported here for profits, depreciation, and other items differ from those used in calculating tax liability; and, being based on the aggregate nonfinancial corporate sector, it will not display the varied impact across different types of companies.
- 13 No change is needed for intangible investment expenditures, which are already immediately deducted as expenses. As to specific tax incentive provisions like the Research & Experimentation Credit, these are tax expenditures not logically tied to any particular method of taxing business income and therefore are not considered specifically in this paper.
- 14 Carl Bernstein and Bob Woodward, *All the President’s Men* (New York: Simon and Schuster, 1974).
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- 16 Alan J. Auerbach, “Who Bears the Corporate Tax?” in J. Poterba, ed., *Tax Policy and the Economy, Volume 20* (Cambridge, MA: The MIT Press, 2006), 1–40.
- 17 This is the case, for example, in the recently released report of the President’s Economic Recovery Advisory Board (PERAB), Section V. President’s Economic Recovery Advisory Board, *The Report on Tax Reform Options: Simplification, Compliance, and Corporate Taxation* (Washington, DC: U.S. Government Printing Office, 2010).
- 18 For a detailed discussion on this point, see David A. Weisbach, “Implementing Income and Consumption Taxes,” in A. Auerbach and D. Shaviro, eds., *Institutional Foundations of Public Finance* (Cambridge: Harvard University Press, 2008), 59–93.
- 19 See President’s Advisory Panel on Federal Tax Reform (PAPFTR), *Simple, Fair, and Pro-Growth: Proposals to Fix America’s Tax System* (Washington, DC: U.S. Government Printing Office, 2005), Chapter 7, for a similar corporate tax scheme. The mechanism of border adjustments under cash-flow taxation is discussed in further detail in Auerbach, Devereux and Simpson, note 5. The Growth and Investment Tax Plan would not have applied border adjustments to financial flows, because these were also excluded from the basic tax base calculation. But that plan left somewhat uncertain how it would deal with financial companies and with transactions between financial companies and non-financial companies.
- 20 Constructing the tax system in the proposed way might also help avoid entanglement in the issue of whether border adjustments to the cash flow tax are consistent with World Trade Organization rules. The PAPFTR report argued that they would be, but this view is not universally held. See PAPFTR, note 19, 171.
- 21 Because this is a point often raised, it has received ample attention in the economics literature, which without notable exception comes to the same conclusion. See, for example, Feldstein and Krugman (1990) or Auerbach (1997). As discussed in Auerbach (2008), the argument holds even with respect to countries that peg their exchange rates to the dollar, if the determinants of the peg relate to the real exchange rate, i.e., to relative competitiveness between the two countries.
- 22 Evidence for this conclusion comes from Roger H. Gordon, Laura Kalambokidis, and Joel Slemrod, “Do We Now Collect Any Revenue from Taxing Capital Income?” *Journal of Public Economics* 88, 5 (2004): 981–1009.
- 23 The proposal analyzed by Gordon, Kalambokidis, and Slemrod, *ibid.*, and the one laid out here likely have different cyclical effects on revenue. For example, if borrowing surges along with investment in good times, then the inclusion of borrowing in our proposal would lessen the tendency of the system to lose money in those years.
- 24 Congressional Budget Office, *Budget Options, Volume 2* (Washington, DC, 2009), 245.
- 25 PAPFTR 2005, note 19, 172.
- 26 Soren Bo Nielsen and Peter Birch Sørensen, “On the Optimality of the Nordic System of Dual Income Taxation,” *Journal of Public Economics* 63, 3 (1997): 311–29.
- 27 President’s Economic Recovery Advisory Board, note 17, Table 8.
- 28 Alan J. Auerbach and Joel Slemrod, “The Economic Effects of the Tax Reform Act of 1986,” *Journal of Economic Literature* 35 (1997): 589–632.



- 29 Altshuler et al., note 6, find that tax losses have been much more prevalent among C corporations than S corporations over a period dating back to the late 1990s, a pattern that cannot be explained by differences in industrial composition or other observable firm characteristics, such as size or age. One possible explanation is that companies with a greater likelihood of profitability were more likely to choose the S-corporate form to avoid the higher overall tax burden imposed on earnings of C corporations.
- 30 I thank Rosanne Altshuler for clarifying how the 2005 proposal would have worked.
- 31 IRS Statistics of Income, <http://www.irs.gov/taxstats/article/0,,id=171045,00.html>.
- 32 One would also want to use the presence of significant international transactions as a determinant of whether a firm would be included in the reform, given the proposed change in international tax rules.
- 33 This figure, for all corporate tax returns excluding those of S corporations, Real Estate Investment Trusts and regulated investment companies, comes from IRS Statistics of Income, <http://www.irs.gov/taxstats/article/0,,id=170720,00.html>.
- 34 Indeed, keeping the corporate tax rate temporarily high could actually spur investment during the transition because it would enhance the value of the immediate deduction for new investment.
- 35 This view was first articulated in Arnold C. Harberger, "The Incidence of the Corporation Income Tax," *Journal of Political Economy* 70 (1962): 215–40.
- 36 For evaluations of the economic models that underlie this argument, see William C. Randolph, "International Burdens of the Corporate Income Tax," Working paper 2006-09 (Washington, DC: Congressional Budget Office, 2006); and Jennifer C. Gravelle, "Corporate Tax Incidence: Review of General Equilibrium Estimates and Analysis," Working paper 2010-03 (Washington, DC: Congressional Research Service, 2010).
- 37 Proponents include Mihir A. Desai, C. Fritz Foley, and James R. Hines Jr., 2009, "Domestic Effects of the Foreign Activities of US Multinationals," *American Economic Journal: Economic Policy* 1, 1 (2009): 181–203; R. Alison Felix, "Passing the Burden: Corporate Tax Incidence in Open Economies," Regional Research Working Paper RRWP 07-01 (Kansas City, MO: Federal Reserve Bank of Kansas City, 2007); and Kevin A. Hassett and Aparna Mathur, "Taxes and Wages," Working paper 128 (Washington, DC: American Enterprise Institute, 2006). For a criticism of this approach, see Jane G. Gravelle and Thomas L. Hungerford, *Corporate Tax Reform: Issues for Congress* (Washington, DC: Congressional Research Service, 2010).
- 38 The Growth and Investment Tax Plan would have included other tax changes as well, including base-broadening, increased saving incentives, and a reduction in the top marginal tax rate to 30 percent, so this estimate should be viewed as an upper bound for the impact of the business tax reform on its own.
- 39 PPFTR, note 19, 190.
- 40 Institute for Fiscal Studies, *The Structure and Reform of Direct Taxation* (London: Allen and Unwin, 1978).
- 41 PPFTR, note 19.
- 42 The flat tax was proposed in Robert E. Hall and Alvin Rabushka. *Low Tax, Simple Tax, Flat Tax* (New York: McGraw-Hill, 1993). The X tax was proposed in David F. Bradford, *Untangling the Income Tax* (Cambridge: Harvard University Press, 1986).

## Alan J. Auerbach

### Robert D. Burch Professor of Economics and Law

Alan J. Auerbach is the Robert D. Burch Professor of Economics and Law, director of the Burch Center for Tax Policy and Public Finance, and former chair of the economics department at the University of California, Berkeley. He is also a research associate of the National Bureau of Economic Research and previously taught at Harvard and the University of Pennsylvania, where he also served as economics department chair.

Auerbach was deputy chief of staff of the U.S. Joint Committee on Taxation in 1992 and has been a consultant to several government agencies and institutions in the United States and abroad. A former vice president of the American Economic Association, he was editor of that association's *Journal of Economic Perspectives* and is now editor of its new *American Economic Journal: Economic Policy*.

Auerbach is a fellow of the American Academy of Arts and Sciences and of the Econometric Society.

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# A Modern Corporate Tax

## Summary of findings

The U.S. corporate tax system introduced more than 100 years ago has not kept pace with changes to the economy. The growing role of financial innovation and the increasingly global nature of U.S. corporate operations are chief among these changes, necessitating reform.

The recent economic crisis heightened concerns that the corporate tax contributes to economic instability by encouraging excessive corporate borrowing. Additionally, U.S. corporations now operate in a global economy. The increasing international mobility of capital and companies has greatly changed the business environment. This global competition has led to declining corporate tax rates abroad. Given that the United States has a relatively high corporate tax rate, some suggest that we must join the race to the bottom by reducing rates and further eroding tax revenue to keep business activity and jobs in the United States.

Reform is needed to address both these concerns and ensure that the corporate tax is a viable, progressive revenue source that does not hinder economic growth or promote economic instability. This paper proposes two pieces of reform to the U.S. corporate tax system that would eliminate existing incentives to borrow and shift profits abroad while maintaining the corporate tax as a progressive revenue source.

First, an immediate deduction for all investments would replace the current system of depreciation allowances. This reform would increase firms' incentives to invest while simplifying the tax system by removing the need for depreciation schedules or inventory accounting. Extending a similar change to the treatment of borrowing would eliminate its current tax incentive.

Second, the plan would replace the current approach to taxing foreign-source income with a system that ignores all transactions except those occurring exclusively in the United States. This step would reduce incentives for U.S.-based firms to shift profits abroad while also promoting international competitiveness by allowing U.S. companies to compete abroad on an equal footing with companies from other countries.

In addition to the benefits discussed above, this plan would deliver a host of other economic advantages to U.S. businesses and American workers by promoting domestic corporate activity. Estimates of similar proposals suggest these changes could increase national income by as much as 5 percent over the long run.

## Fast facts

- At its peak in the 1960s, the U.S. corporate income tax accounted for more than one-fifth of all federal revenues, second in value only to the personal income tax. Since 1981, the corporate tax has provided less than 12 percent of federal revenues in all but four fiscal years.
- The United States has one of the highest corporate tax rates among the world's leading economies.
- With the recent adoption by the United Kingdom and Japan of so-called territorial or exemption tax systems, the United States is now the only member of the G-7 that attempts to impose a worldwide system that taxes the foreign business income of its resident multinational companies.
- Gradually over recent decades, the U.S. business sector has evolved into one that to a considerable extent is not subject to the corporate income tax because a growing number of business entities lie outside the traditional C corporation form, escaping the tax.
- Taxes imposed on corporate earnings generated by U.S. production provide incentives for companies to locate capital in lower-tax jurisdictions, with at least some of the corporate tax burden shifted to domestic U.S. labor. The tax reform laid out in this paper would alter this situation.
- The corporate tax encourages borrowing because interest payments are deductible from tax, while the earnings of shareholders are not. Tax-induced borrowing can contribute to economic instability, making companies more susceptible to distress and bankruptcy during economic downturns. The tax reform laid out in this paper would eliminate this favorable treatment of borrowing.