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Report to the Ranking Minority Member Committee on Ways and Means House of Representatives

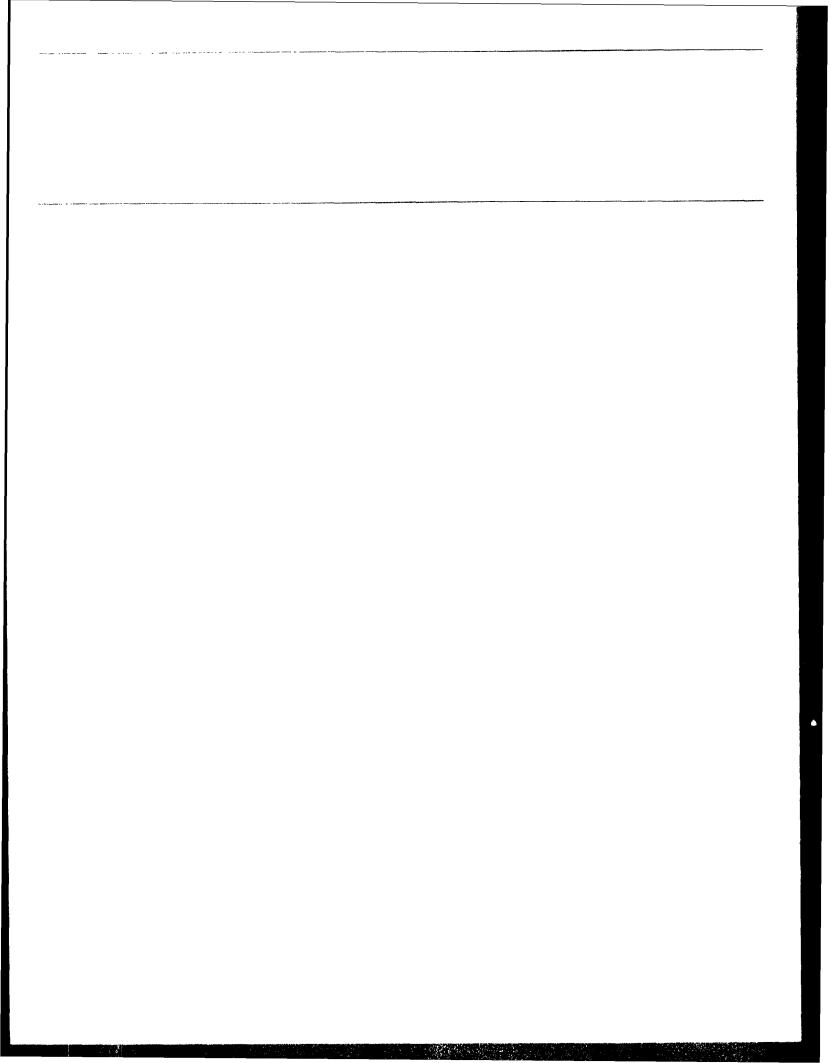
May 1993

### TAX POLICY

Implications of Replacing the Corporate Income Tax With a Consumption Tax









United States General Accounting Office Washington, D.C. 20548

#### **General Government Division**

B-251186

May 11, 1993

The Honorable Bill Archer Ranking Minority Member Committee on Ways and Means House of Representatives

Dear Mr. Archer:

This report discusses the advantages and disadvantages of replacing the corporate income tax with a broad-based consumption tax. The report reviews the impact of such a change in terms of (1) its effects on economic efficiency and equity; (2) its effects on tax administration costs; and (3) its effects on tax compliance costs. In particular, the report evaluates the likely effects of replacing the corporate income tax and the employer's share of the Federal Insurance Contributions Act (FICA) payroll tax with the Uniform Business Tax (UBT). The UBT was proposed by former Congressman Richard T. Schulze, who originally requested this study.

#### Background

Almost 90 percent of U.S. federal tax revenue is collected either from income taxes or wage taxes, the FICA payroll tax. The federal income tax system includes an individual income tax and a separate tax on the income of corporate businesses. Income earned by noncorporate businesses—sole proprietorships and partnerships—is taxed under the individual income tax. Income generated by corporations (C corporations) is subject to tax at the company level in addition to any individual tax on dividends received by shareholders.<sup>1</sup>

Corporate income is taxed both when earned by the corporation and then again when dividends are distributed to shareholders. In this sense, the current U.S. individual and corporate income taxes are not integrated. Critics of the corporate tax argue that the double taxation of equity income discourages investment in the corporate sector and encourages investment in the noncorporate sector. An additional potential bias arises because interest paid by corporations is generally deductible at the corporate level while payments to equity capital are taxed. Critics contend that this leads to an overreliance on debt as a source of finance for corporate investment.

<sup>&</sup>lt;sup>1</sup>For tax purposes, corporations fall into two categories. Corporations with 35 or fewer shareholders can qualify as Subchapter S corporations. The income of S corporations is allocated to shareholders and is taxed at the individual level, much like the income of partnerships and sole proprietorships is taxed. Other corporations (C corporations) are taxed as separate entities. For simplicity, we will refer to sole proprietorships, partnerships, and S corporations as "noncorporate" businesses.

Other critics of the corporate tax have suggested that it has a negative influence on international trade. Unlike the treatment of transaction-based taxes—such as value-added taxes (VAT)—the provisions of the General Agreement on Tariffs and Trade do not allow rebates on taxes based on individual or company income. Because it is an income and not an output or sales tax, the corporate tax cannot be rebated under current rules. Without rebates on exports, it is alleged, U.S. goods are less competitive in foreign markets.

Finally, many have suggested that the corporate tax has become increasingly complicated over the years. For example, calculating tax depreciation requires at least one separate set of records beyond standard financial records. The rules governing the foreign tax credit have also become increasingly complicated.

In addition to those critics who focus on the corporate income tax, there are others who fault income taxes in general as inefficient. They suggest that income taxes tax the fruits of working and saving and, thus, may give people incentives to work and save less than they would without the tax.

In an attempt to eliminate the perceived inefficiencies and complexities of the current method of taxing U.S. businesses, legislation (H.R. 3170) was introduced in the 102nd Congress to replace the current corporate income tax and the employer's share of the FICA payroll tax with the UBT. The UBT would tax net business receipts, which are defined as gross receipts minus the cost of purchased goods and services from other businesses, including investment goods. The tax base would include all compensation paid to workers including fringe benefits, interest payments, and profits—distributed and undistributed—less investment purchases. The proposed UBT tax rate would be 9 percent. If the value of all purchases—including investment goods—were to exceed the value of sales, the company could carry this loss forward to subsequent tax years.

Under the proposal, all C corporations would pay the UBT instead of the corporate income tax and the employer's share of the payroll tax. Noncorporate businesses with net receipts greater than \$50,000 would also be subject to the UBT. Smaller noncorporate businesses could choose to be under the UBT. To protect the integrity of the social security trust fund, which is funded by the FICA payroll tax, there would be a minimum UBT equal to the employer part of the payroll tax. Owners of noncorporate businesses would receive a credit against individual taxes equal to the amount of UBT paid above the minimum UBT.

#### Results in Brief

The UBT closely resembles a consumption-type VAT because it allows businesses to deduct investment expenditures but not wages and interest. Under an income tax, corporations are allowed a deduction for depreciation of plant and equipment representing the loss in value over time. In contrast, consumption taxes in general—and the UBT in particular—allow the immediate deduction of all investment spending. The corporate income tax also allows a deduction for wages and interest expense, while the UBT does not. Because the UBT is a consumption tax, it would not serve as a company-level tax in an integrated income tax system. Nor, without an offset at the individual level for taxes paid on wages at the company level, would it serve as a company-level tax in an integrated consumption tax system.

Thus, replacing the corporate income tax and a portion of the payroll tax with the UBT would likely increase taxes on wage income and decrease taxes on capital income. The increased taxes on wages may have little effect on the labor supply of full-time workers. However, the labor supply of part-time workers and those deciding whether to enter the labor force is generally more responsive to after-tax wages. As a result, the labor supply of these groups could be reduced by the UBT.

The reduced taxes on capital income could raise investment demand. Whether such an increase in demand would actually lead to greater investment and a larger stock of plant and equipment would depend on the availability of new financial resources, either through more domestic saving or inflows of foreign funds. Most, but not all, studies of the effect of income taxes on saving find the effect to be small. However, the effect on saving of a switch from a corporate income tax to a consumption tax is more difficult to predict. If domestic saving increases less than investment demand, additional investment would have to be financed by foreign sources. Over time, increased investment will raise the capital stock and the average level of worker productivity. The increase in real wages may offset some of the short-run effects on labor supply.

Replacing the corporate income tax with the UBT would eliminate the current bias in favor of debt finance, but create a bias in favor of financing from undistributed profits. Under the proposal, undistributed corporate profits could be reinvested and any income earned subjected to little or no tax until shares of stock were sold. Because the UBT proposal grants offsets to individual income taxes for certain sole proprietorships and

<sup>&</sup>lt;sup>2</sup>An integrated tax system is one in which the base—whether consumption or income—is taxed only once, either at the company or at the individual level. If there is a company-level tax, an integrated tax system allows an offset at the individual level.

partnerships, it is not clear whether replacing the corporate income tax with the UBT will reduce the bias against the corporate form that currently exists.

Value-added taxes usually feature border tax adjustments; taxes on exports are rebated and imports are taxed. Some advocates of a VAT have alleged that these adjustments may favor domestic production and improve the trade deficit. Although this may appear to be the case from the perspective of a particular company or industry, it does not necessarily apply to the economy as a whole.

If substituting a VAT for an income tax were to improve the trade balance, it would not be the result of border tax adjustments. Rather, the substitution would improve the trade balance to the extent that it reduced domestic spending compared to output or raised output compared to spending. Therefore, the effect on the trade balance of a switch from the corporate income tax to the UBT depends not only on how national saving is affected by the policy change, but also on whether national saving increases by more or less than investment.

Regardless of what happens to the trade balance, the tax switch would likely alter the composition of trade. If the tax shifts the tax burden away from capital income toward labor income, capital-intensive goods would become relatively less expensive and labor-intensive goods would become relatively more expensive after replacing the corporate income tax with a consumption tax. Therefore, exports of capital-intensive goods might rise and labor-intensive goods fall, while imports of capital-intensive goods might fall and labor-intensive goods rise.

The replacement of the corporate tax and the employer's share of the payroll tax with the UBT would likely make the tax system less progressive, but how much less is uncertain. There is considerable debate about whether the corporate tax results in lower income for shareholders, lower income for owners of capital in general, lower wages for workers, or higher prices for consumers. If the current corporate tax is paid by workers or consumers, the switch to the UBT will not affect the distribution of income substantially, although the lowest income groups could pay somewhat higher taxes. However, to the extent that the current corporate tax falls on capital income, the switch to the UBT becomes more regressive.

Moving from the current corporate income tax to the UBT would not necessarily lower either the administrative or compliance costs of the tax

system. While both types of costs could go down for corporations, some noncorporate businesses could pay both the income tax and the UBT. Their compliance costs could rise, and their additional returns would have to be processed and examined, thereby increasing administrative costs.

#### Income Taxes Include Saving and Investment

Income and consumption taxes can be levied on individuals or on businesses. The most important difference between these taxes is in the treatment of saving or investment. The tax base of a broad-based individual income tax includes wages, interest, dividends, and capital gains, as well as income generated by a taxpayer-owned business. All uses of income—whether consumption or saving—are taxed.

Under a business income tax, income attributable to the owners of the business or shareholders of a corporation is calculated by subtracting (or deducting) the costs of doing business from gross business receipts. Deductible business costs include wages and the costs of materials used in production. Many business income tax systems (including the U.S. system) also allow the deduction of interest payments on debt.

One of the most important components of an income tax system is the treatment of purchased capital assets such as plant and equipment. The calculation of taxable income includes an allowance for depreciation that is meant to account for the wearing out, physically and economically, of these assets. The amount by which capital assets depreciate is generally recognized as a cost of doing business, and is therefore deductible.

A comprehensive income tax system may include, but does not require, a separate tax on businesses, especially corporations. If all corporate income was attributed to shareholders and taxed at the individual level (as is the case with noncorporate business), a separate corporate tax would not be necessary. Alternatively, if capital gains that arise from the ownership of corporate stock were taxed as they accrue rather than only when the stock is sold, a separate tax might not be needed. However, because the current U.S. individual income tax base includes a corporation's distributed profits but does not include undistributed profits as they are earned, some analysts believe that the U.S. corporate income tax is necessary to ensure that all income generated in the corporate sector is taxed at least once.

#### Consumption Taxes Exempt Saving and Investment From Tax

Consumption taxes differ from income taxes in that they exempt saving and investment from tax. Since exempting saving can be done in several ways, consumption taxes can take several forms, which may appear different but are essentially the same. Consumption taxes can be levied directly on the sale of consumption goods and services (as in a retail sales tax), or they can take a more indirect form as a tax on the difference between income and saving.

With appropriate modifications, an income tax can be transformed into a consumption tax by changing how income from saving and investment is taxed. Under an income tax, income that is saved is generally not deductible, and income earned on savings is subject to tax. For example, currently no deduction is allowed for money placed in a savings account, and the interest earned on the account is taxed. A consumption tax system could be implemented by changing either of these features—either allowing saving to be deducted immediately and taxing income earned when used for consumption, or by not allowing a deduction for saving and exempting the return to savings from tax.

Under the first approach, individuals calculate their income as they now do for income tax, but are allowed a deduction for all income that is saved. Tax is thus assessed based on consumption because income that is not saved is used for consumption. Under this approach, the return from past saving is taxed when it is used for consumption. For example, money placed in a savings account would be deductible, and interest received on the account would be taxed. If the return on savings is also saved (reinvested), the taxpayer would be entitled to a deduction for additional savings, which offsets the tax on the income.

Another approach to taxing consumption is to exempt the return to savings from tax. Current law exempts interest income from state and local bonds from tax; a consumption tax could be implemented by extending this treatment to all forms of saving. Under this approach, no deduction is allowed for saving, but income earned on saving is not taxed. This approach is sometimes referred to as the "prepayment" approach: by not allowing a deduction for saving immediately, the government collects the tax on consumption ahead of time, but levies no further tax burden when the income is actually used for consumption.

The difference between the two approaches is in their timing. Under the first approach, the taxpayer receives an immediate deduction for saving, but pays tax in the future when the income is used for consumption. If the

taxes not paid on the deductible amount were saved, the interest earned would pay for the future tax liability. Under certain assumptions, the two approaches are equivalent over time because the present discounted value of taxes on saving is the same—namely, zero.<sup>3</sup>

Finally, a business-level consumption tax that allows all purchases of investment goods to be deducted immediately—that is, expensed—is equivalent to one that exempts from tax all normal or expected returns to investment and only taxes above normal, or excess profits. Under an income tax, the income of a business is measured by allowing a deduction for depreciation of capital assets and by including revenues generated through the use of the assets. Just as allowing an immediate deduction for saving is the same as not taxing the income from saving, allowing an immediate deduction for all investment spending effectively exempts investment income from tax. The present value of the taxes paid on investment income should be equal to the present value of taxes saved by expensing, rather than depreciating, business investment. If the asset earns a higher-than-expected rate of return, then excess returns (economic rents) are taxed.

Therefore, although a tax may seem to be an income tax if individuals must compute their income to determine their tax liability, a tax may in fact be a consumption tax if some sources of income (income from savings) are exempt from tax or if deductions for some uses of income (saving) or types of spending (investment) are allowed. If the base of a tax (1) allows savings to be immediately deducted, (2) allows business investment to be immediately deducted, or (3) exempts from tax the return to savings, the tax should be classified as a consumption tax.

While Income Taxes
May Reduce Incentive
to Save, Both Income
and Consumption
Taxes May Reduce
Incentive to Work

An income tax can affect individuals' decisions on how much to work and how much to save because it taxes both labor income (wages) and capital income (return from saving). By comparison, a consumption tax does not tax the return from saving, and therefore must effectively tax wages at a higher rate than an income tax to raise the same amount of revenue. How a switch that increased the relative importance of consumption compared to income taxation would affect saving, labor supply, and overall economic efficiency continues to be debated.

<sup>&</sup>lt;sup>3</sup>There are several assumptions that must be made for the approaches to be strictly equivalent. For example, tax rates must be constant over time, individuals must be able to borrow and lend at the same interest rate, and the actual rate of return on investments must equal the expected return. For further conditions and explanation, see Michael J. Graetz, "Expenditure Tax Design," in Joseph A. Pechman, ed., What Should Be Taxed: Income or Expenditure (Washington D.C.: Brookings Institution, 1980).

An income tax makes saving less attractive by reducing the after-tax return to saving; at the same time, however, such a tax reduces consumption along with income. Economic theory indicates that an income tax could either increase or decrease savings—defined as income minus consumption—compared to a consumption tax. Furthermore, empirical economic research has not been able to determine conclusively whether an income tax reduces or increases saving. This research has focused on whether higher after-tax returns to saving raise or lower the amount of saving. Much of the research indicates that saving is not very responsive to the rate of return, so that moving from an income to a consumption tax would not raise private saving much, if at all. However, a few studies have measured a significant response of savings to the after-tax rate of return. If these studies are correct, replacing an income tax with a consumption tax might raise saving substantially.<sup>4</sup>

The taxation of labor income also has countervailing effects on a person's decision to work in exchange for wages. First, by reducing the return received from working for a wage or salary, it discourages that form of work and encourages alternative forms of work or leisure, that are not taxed.<sup>5</sup> Second, the tax reduces the worker's income, which may encourage more work to maintain a standard of living. The first effect tends to reduce hours worked, while the second tends to increase work. Without knowing the size of the two effects, we do not know if income taxes increase or reduce work effort.

As is true of an income tax, a consumption tax may affect a person's decision to work in the labor market. Consumption taxes can be thought of as increasing the effective price of goods and services or as taxing the income earned to purchase goods and services. Either way, the consumption tax reduces the incentive to work by reducing the purchasing power of wages in terms of consumption goods and increases the need to work to maintain a standard of living.<sup>6</sup>

<sup>&</sup>lt;sup>4</sup>For a survey of empirical estimates of the savings response to after-tax returns as well as labor supply elasticities, see Jerry A. Hausman and James M. Poterba, "Household Behavior and the Tax Reform Act of 1986," <u>Journal of Economic Perspectives</u>, Summer 1987: pages 111-12.

<sup>&</sup>lt;sup>b</sup>These untaxed alternatives include performing services in the home, engaging in barter transactions, and participating in the underground economy.

The Congressional Budget Office and others who calculate the distributional effects of taxes usually assume that all payroll taxes, whether directly paid by employers or employees, are ultimately borne by workers. Throughout this report, we assume that since wages and fringe benefits are included in the UBT base, workers ultimately bear the burden of that part of the tax.

Empirical studies that have attempted to measure the effects of taxes on labor supply have found differences among groups of workers. For example, working-age males do not appear to significantly change how much they work is response to changes in after-tax wages, while married females may be more willing to substitute work outside the labor force for market employment. There is even some evidence that certain high-income individuals may work more when income taxes are increased.

Although many proponents of a consumption tax argue that shifting from an income to a consumption tax will raise saving, a more important and complicated question is whether such a switch will improve overall economic efficiency. A number of academic studies have analyzed this issue using empirically based simulation models. These studies have evaluated whether using a consumption tax (1) to reduce or eliminate individual and corporate income taxes or (2) to integrate the corporate income tax with the individual income tax would increase or decrease economic efficiency.

Some studies have found significant gains in economic efficiency from moving toward consumption taxation. Others have found efficiency losses, or increases that are so small that the transitional costs to a new system probably outweigh any efficiency gains. For example, Ballard, Scholz, and Shoven found that a 10-percent VAT used to reduce individual income tax rates would increase real income by between 0.7 and 1.1 percent. On the other hand, Gravelle's estimates of the efficiency effects of replacing the income tax with a consumption tax ranged from an increase in real income of 0.7 percent to a reduction in income of 0.2 percent.<sup>8</sup>

The results generated by these models depend on certain key assumptions. Among the most important assumptions are how responsive saving is to changes in the return to saving and how responsive labor supply is to changes in wages. In general, the more responsive saving is to the rate of return, the more beneficial a switch to a consumption tax would be. The

The models involved use household and company-level data, along with empirical estimates of behavioral responses, to simulate changes in tax policy. Because some of the behavioral estimates are controversial, many studies use different values for these parameters and compare the results.

<sup>\*</sup>See Charles L. Ballard, John K. Scholz, and John B. Shoven, "The Value-Added Tax: A General Equilibrium Look at Its Efficiency and Incidence," in Martin Feldstein, ed., The Effects of Taxation on Capital Accumulation (Chicago: University of Chicago Press, 1987); and Jane G. Gravelle, "Income, Consumption, and Wage Taxation in a Life-Cycle Model: Separating Efficiency from Redistribution," American Economic Review, Vol. 81, No. 4 (September 1991): 985-1001.

<sup>&</sup>lt;sup>9</sup>Another important consideration, discussed on page 14 of this report, is how open an economy is to capital flows from abroad.

more responsive labor supply is to wage changes, the less beneficial such a switch would be. The empirical evidence on the responsiveness of savings and labor supply is not yet precise enough to indicate with certainty whether a switch toward consumption taxation would increase or decrease overall efficiency.

#### The UBT Proposal Would Not Reduce Individual Income Tax but Would Raise Taxation of Labor Income

Most of the studies on the relative effects of income and consumption taxes have analyzed cases where additional revenue from consumption taxes is used to either reduce individual income tax rates or integrate individual and corporate income taxes. The UBT proposal, on the other hand, would eliminate the corporate income tax but have little effect on individual income taxes. As a result, the effect on saving of the UBT proposal is not readily deducible from other consumption tax analyses. The effect would depend on how corporations and households adjust their saving behavior.

Shifting from the corporate income tax and the payroll tax to the UBT would increase the taxation of labor income. Because wages would not be deductible under the UBT, they would be taxed at both the individual level under the individual income tax and the company level. The proposed tax rate of the UBT (9 percent) is higher than the rate of the employer share of the FICA payroll tax that would be repealed by the proposal (7.65 percent). Therefore, the tax on wages currently subject to the Old-Age, Survivors, and Disability Insurance (OASDI) tax would increase 1.35 percentage points. Above the OASDI cap (\$55,500 in 1992), the tax rate would increase by 7.55 percentage points on wages up to the Hospital Insurance (HI) tax cap (\$130,200 in 1992). Above the caps, tax rates on wages would increase 9 percentage points.

Because evidence suggests that most full-time workers do not significantly reduce their labor supply in response to current wage taxes, higher taxes are not likely to substantially reduce labor supply for this group. However, some individuals may move from full-time to part-time work, and some may choose to leave the labor force in response to higher tax rates on wages.

The UBT taxes fringe benefits, while the current FICA tax it replaces does not. As a result, the increase in the effective tax on fringe benefits would be larger than that on wages and salaries. This could lead to some reduction in employee demand for certain fringes, but it is difficult to predict the size of such an effect. An earlier GAO report discusses the

incentives to shift toward tax-preferred fringe benefits that exist under the current income tax and some potential effects on coverage and tax revenues if certain tax preferences were reduced.<sup>10</sup>

Replacing the Corporate Income Tax With UBT May Allow Corporate Shareholders to Defer Taxes The current income tax system treats income generated by sole proprietorships, partnerships, and S corporations in an integrated way—that is, such income is included as part of the owner's individual income for tax purposes. However, income generated by C corporations is not granted integrated treatment. Income earned by these corporations is taxed at the company level and then again at the individual level. This lack of integration may mean that the current income tax system encourages investment in noncorporate forms of business organization—investment that might be more productive if done in corporations.<sup>11</sup>

While dividends distributed by C corporations are taxed at both company and individual levels, undistributed earnings are taxed only at the corporate level unless and until they are taxed as realized capital gains. Consequently, there is a tax bias against paying dividends. In addition, because interest payments are deductible by corporations, corporate financial decisions may be biased in favor of debt over equity. Some analysts are concerned that higher debt levels can increase a corporation's exposure to the risks of financial distress. <sup>12</sup>

If the corporate income tax were replaced with the UBT, the effective tax rate on undistributed earnings would be reduced and the combined—company and individual—tax on undistributed earnings would be lower than that on distributed earnings or interest paid. Therefore, moving to a business-level consumption tax like the UBT could generate incentives to use retained profits to finance investments to an inefficiently great extent. Because of the tax consequences of paying dividends or interest, firms may make investments using retained earnings even when shareholders or bondholders could have used the funds to make more productive investments that would earn higher pre-tax rates of return.

<sup>&</sup>lt;sup>10</sup>See TAX POLICY: Effects of Changing Tax Treatment of Fringe Benefits (GAO/GGD-92-43, April 7, 1992).

<sup>&</sup>lt;sup>11</sup>For estimates of the size of the efficiency losses, see Jane G. Gravelle and Laurence Kotlikoff, "The Incidence and Efficiency Costs of Corporate Taxation When Corporate and Noncorporate Firms Produce the Same Good," Journal of Political Economy, Vol. 97, No. 4, August 1989; and Department of the Treasury, Taxing Business Income Once: Report of the Department of the Treasury on Integration of the Individual and Corporate Tax Systems (Washington D.C.: U.S. Government Printing Office, Jan. 1992).

<sup>&</sup>lt;sup>12</sup>See Department of the Treasury for a discussion of the costs and benefits of debt finance.

Table 1 shows how different types of income would be taxed under the resulting tax system for both corporate and noncorporate businesses. Corporations that pay interest or dividends would be at a disadvantage relative to noncorporate business because the owners of noncorporate businesses could credit ubt paid above the ubt minimum against individual tax. Corporate shareholders would not receive this credit. However, corporations that retain earnings would have an advantage relative to corporations that pay dividends or interest. Whether corporations that retain earnings would have an advantage over noncorporate businesses is more difficult to determine. The shareholders of corporations that finance investment with retained earnings could postpone paying tax at the individual level until capital gains are realized. Since the advantage to the owners of noncorporate business depends on the size of the UBT credit above the minimum UBT, the relative advantage to noncorporate forms will depend on the relative importance of this credit versus the importance of retained earnings in corporate finance.

Table 1: Tax Rates Under the UBT System

Type of income	Corp	orations	Noncorporate business		
	Business level	Individual level	Business level	individual level	
Interest	t(u)	t(i)	t(u)	t(i)	
Dividends	t(u)	t(i)	t(u)	t(i) - [t(u)-t(umin)]	
Retained earnings <sup>a</sup>	t(u)	t(g)	t(u)	t(i) - [t(u)-t(umin)]	
Wages (below FICA caps)	t(u)	t(w) + t(i)	t(u)	t(w) + t(i)	
Wages (above FICA caps)	t(u)	t(i)	t(u)	t(i)	

#### Legend:

A comprehensive consumption tax system could be implemented through taxes on individuals only, businesses only, or both. For example, the CSIS Strengthening of America Commission First Report proposed that corporate and individual income taxes be replaced by a comprehensive

t(u) - UBT tax rate, which is 9 percent.

t(i) - individual tax rate.

t(g) - effective tax rate on capital gains income.

t(w) - employee share of payroll tax.

t(umin) - UBT minimum tax rate, which is 7.65 percent of payroll.

<sup>&</sup>lt;sup>a</sup>Dividends and retained earnings include depreciation but deduct investment expenditures.

consumption tax system. 13 The consumption tax system would include an individual-level tax on all wages, interest, rents, and dividends minus savings; and a company-level tax on interest, rents, and all profits—whether distributed or undistributed—minus investment expenditures. Such a combination represents a properly integrated consumption tax system, because the company-level tax is consistent with the individual-level tax. 14 If, instead, the company-level tax were a consumption value-added tax, wages would be taxed at the business level. Consequently, there would need to be an offset at the individual level for wage taxes paid at the company level if the overall system is to be consistent.

Because the UBT would tax businesses on a consumption basis, it would not serve as a company-level tax in an integrated income tax system. Nor, without an offset at the individual level for wage taxes paid at the company level, would it serve as a company-level tax in an integrated consumption tax system. The base of the UBT most closely resembles that of a var. Countries that use vars do not, as a rule, use them as substitutes for a company-level income tax. Rather, these taxes serve to reduce the importance of income taxes.

Replacing the Corporate Income Tax With UBT Could Raise Investment Demand, but Some Financing Will Probably Come From Foreign Sources

The UBT would replace deductions for depreciation of capital assets with expensing, reducing the effective tax rate on new investments to zero. Such a reduction could increase investment demand—at least initially. 15 However, for any increased investment demand to lead to a larger capital stock, there needs to be a corresponding increase in the quantity of resources supplied. Extra resources can come from two sources: (1) greater domestic saving, from the private sector and/or government, and (2) increased borrowing from abroad.

Replacing the corporate income tax with the UBT could raise or lower domestic saving. If the proposal is revenue neutral, it would not increase public sector saving since it would not reduce the government deficit.

<sup>&</sup>lt;sup>19</sup>The CSIS Strengthening of America Commission, First Report of the Strengthening of America Commission (Washington, D.C.: Center for Strategic and International Studies, November 1992).

<sup>&</sup>lt;sup>14</sup>For other examples of consumption tax systems, see Robert E. Hall and Alvin Rabushka, The Flat Tax (Stanford: Hoover Institution Press, 1985); and Henry J. Aaron and Harvey Galper, Assessing Tax Reform, (Washington D.C.: Brookings Institution, 1985). The Aaron and Galper plan includes an tax on annual consumption and a tax on bequests and gifts, so that all income earned over a lifetime is taxed.

<sup>&</sup>lt;sup>15</sup>Under certain assumptions, the current corporate income tax may not reduce investment. For example, if the marginal investment project is bond financed and tax depreciation is equal to economic depreciation, investment may not be reduced by the corporate tax. Under these assumptions, expensing would not increase investment; it may just shift the financing of investment from debt to equity.

Alternatively, if the proposal raised additional revenue and the revenue was used for deficit reduction, public sector saving would increase. Business saving through retained earnings would be likely to rise, but increased saving by corporations may cause the owners of corporations to save less. If the UBT proposal reduced individual income taxes, it might increase household saving. However, the UBT proposal maintains the individual income tax and raises wage taxes paid by households. The result is likely to be a fall in household saving. The net effect on private saving depends on whether higher business saving offsets lower household saving.

Studies that have attempted to compare the effect on saving of consumption taxes versus income taxes have generally focused on comparing vats or consumption expenditure taxes with changes in individual income tax rates. For example, a recent Congressional Budget Office (CBO) study compared the effect of a 6-percent vat on saving with that of an increase in income tax rates that would raise the same revenue. The study found that the consumption tax would raise the savings rate by about 0.5 percentage points. We were unable to find any simulation exercises that modeled the replacement of the corporate income tax with a vat while keeping the individual income tax in place. For this reason, as well as the inherent uncertainty of predicting the effects of such a large change in the tax system, it is difficult to predict the effect on private saving of such a replacement.

If the total additional domestic saving generated is less than the increased demand for saving, the difference might be filled by foreign saving. While some foreign resources may be attracted by higher returns resulting from the increase in investment demand relative to domestic saving, additional resources may be attracted by the prospect of lower taxes.

The shift from the corporate income tax to the UBT would reduce U.S. taxes on the equity income of foreign-owned corporations operating in the United States. Like U.S. companies, foreign-owned companies operating in the United States are also subject to the payroll tax. Since the UBT replaces the employer's share of payroll taxes with a 9-percent tax on all labor compensation, the payroll-based tax liability of these companies should rise. However, most if not all of this tax burden is likely shifted to employees. Regardless of who bears the burden of the UBT, increased taxes

<sup>&</sup>lt;sup>19</sup>The staff of the Joint Committee on Taxation estimates that a 9-percent UBT would raise about \$50 billion more in revenue than the taxes it would replace.

<sup>&</sup>lt;sup>17</sup>See CBO, Effects of Adopting a Value-Added Tax (Washington D.C.: February 1992), p. 53.

on wage income and reduced taxes on capital income will mean larger tax bills for labor-intensive companies and smaller tax bills for capital-intensive companies.

Whether the total tax burden of foreign equity owners would go down and the incentives to invest in the United States increase would depend on the tax policy of the foreign government. If that government uses the residence principle of taxation, foreign investors would still be required to pay taxes on income earned in the United States to their home government. Because of the foreign tax credit system, a reduction in U.S. income tax paid would reduce credits applied to taxes due foreign governments. The reduced U.S. tax revenue would flow to foreign governments rather than foreign investors. If, instead, foreign governments use the source principle, the investors' taxes would likely fall. In the latter case, a foreign investor's incentives to move resources to the United States would be increased even beyond the effect of higher interest rates.

Whether this policy change increases the overall level of investment in the economy, it would tend to lower costs for capital-intensive industries (industries that use a larger-than-average amount of plant and equipment relative to labor to produce their goods) compared to more labor-intensive industries. If the tax change does increase the level of investment and subsequently the level of the capital stock, there may be long-run benefits to workers as well as owners of businesses. A larger capital stock should raise worker productivity in the economy as a whole and, as a result, real wages earned by workers should be higher.<sup>20</sup>

<sup>&</sup>lt;sup>18</sup>Income tax systems use either the residence or the source principle to deal with international income flows. Under the residence principle, the income of residents is taxed no matter where it is earned, while under the source principle income is taxed if it is earned in the taxing jurisdiction, no matter who owns it.

<sup>&</sup>lt;sup>19</sup>A 1991 OECD report shows that most OECD member countries use the residence principle for interest income and about half use the residence principle for dividend income earned by foreign

<sup>&</sup>lt;sup>20</sup>These effects on wages may offset some of the labor supply effects mentioned on pp. 9 and 10.

Replacing the Corporate Income Tax With the UBT Is More Likely to Change the Composition of Trade Than the Size of the Trade Deficit It has often been alleged that the border tax adjustments associated with certain taxes—such as VATS—favor domestic production and improve the trade deficit because they tax imports and rebate taxes on exports. In contrast, the corporate income tax is not rebatable: according to the same logic, it worsens the trade deficit. While this argument may appear to be true from the perspective of a particular company or even a particular industry, it is not necessarily true for the economy as a whole.

If the introduction of a VAT is allowed to raise the price of domestically produced goods, this may have a depressing effect on exports and spur imports. Border tax adjustments serve to offset this increase for exports and to raise the price of imports, keeping these prices in line with domestic goods. However, if the introduction of a VAT is not allowed to raise the domestic price level, border tax adjustments are likely to raise the price of imports compared to domestic goods and lower the price of exports in foreign markets. Increased demand for domestic products and reduced demand for foreign products will increase the demand for dollars and the supply of foreign currencies. This will cause the value of the dollar to increase in foreign exchange markets. As a result, the price of exports will rise in foreign markets and the price of imports fall in domestic markets, tending to counteract any initial reduction in the trade deficit. 23

Thus, if substituting a vat for an income tax improves the trade balance, it would not be the result of border tax adjustments. Rather, such a substitution would improve the trade balance to the extent that it reduced domestic spending compared to output or raised domestic output compared to spending. For example, a switch from a individual income tax to a consumption tax is likely to improve the trade balance to the extent that it reduces current consumption. However, the UBT proposal maintains the individual income tax and eliminates the corporate income tax. Such a tax change may reduce consumption, but may also increase investment spending. Therefore, the effect on the trade balance of a switch

 $<sup>^{21}</sup>$ Whether a VAT tax raises prices depends primarily on the monetary policy that accompanies the introduction of the tax.

<sup>&</sup>lt;sup>22</sup>Without border tax adjustments, increased domestic prices would probably lead to a reduction in the value of the dollar compared to other currencies. Because border tax adjustments have the effect of raising the prices of imported goods in domestic markets and lowering the prices of exports in foreign markets, they are an effective substitute for a devaluation.

<sup>&</sup>lt;sup>23</sup>For more detailed discussion of these issues, see Jane G. Gravelle, "International Tax Competition: Does It Make a Difference for Tax Policy?," National Tax Journal, Vol. 39 (Sept. 1986); and Martin Feldstein and Paul Krugman, "International Trade Effects of Value-Added Taxation," in Assaf Razin and Joel Slemrod, eds., Taxation in the Global Economy (Chicago: University of Chicago Press, 1990).

<sup>&</sup>lt;sup>24</sup>See Feldstein and Krugman.

from the corporate income tax to a UBT depends not only on how national saving is affected by the policy change, but also on whether national saving increases by more or less than investment.

Regardless of the effects of the switch on the size of the trade balance, it would likely alter the composition of international trade. Relative costs of production are the major determinants of which goods are exported and imported. A switch from the corporate income tax to a consumption-based tax may lower the relative cost of producing capital-intensive goods but it will raise the relative cost of producing labor-intensive goods. Therefore, exports of capital-intensive goods may rise and labor-intensive goods may fall, and imports of capital-intensive goods may fall and labor-intensive goods rise.

Whether the tax shift improves or worsens the trade balance may not be the most important issue. Of more policy significance may be whether the switch improves the overall level of economic well-being. Relative levels of productivity across countries are important determinants of comparative standards of living. If the movement away from the corporate income tax to a consumption tax increases the level of domestic investment, it should also raise the level of the national capital stock and eventually increase aggregate labor productivity and real wages. If the level of national savings also rises so that a large part of this increased capital stock is domestically owned, the level of real income per capita should rise even further. <sup>25</sup>

UBT Would Probably Reduce Tax Progressivity Although Extent Depends on Time Horizon The equity or distributional effect of the UBT proposal depends on who bears the current corporate tax burden. If the current corporate income tax is borne primarily by workers or consumers, the overall distribution of the tax burden might not change very much. However, because some—if not all—of the current corporate tax may fall on capital income, the most likely effect of this new tax is a reduction in the overall progressivity of the federal tax system.

Two important issues can affect the distribution of a tax on wages, interest, rent, and profits minus spending on current investment. The first

<sup>&</sup>lt;sup>25</sup>Results from simulation models of replacing an income tax with a consumption tax in an open economy depend on assumptions made about how easily capital can move between countries. The efficiency gains of the switch tend to be reduced and, in some cases, U.S. income may fall if a large portion of the savings generated by the switch flows abroad, where it will be subject to foreign taxes. See Charles L. Ballard, et al., A General Equilibrium Model for Tax Policy Evaluation (Chicago: University of Chicago Press, 1985), ch. 11.

has to do with whether the tax is passed forward and included in the prices of consumer goods or passed back in the form of lower incomes to factors of production. Whether the tax is passed forward or back, it will primarily affect those who earn their income from wages and salaries as well as those who are receiving income from investments made in the past as opposed to those financing new investments. The second issue relates to the time horizon, since a tax on consumption can appear more regressive when measured with respect to annual income than with respect to longer term measures of income.

If we assume that the tax is directly included in the prices of consumer goods and if we measure the effect of the tax compared to annual income, we can construct a table based on a CBO analysis. Table 2 presents estimates of the distribution of the tax burden for the UBT, the corporate income tax, and the employer's share of payroll tax—the latter two under alternative assumptions about who bears the corporate tax. The percentages in the table are estimates of taxes paid as a proportion of family pre-tax personal income for different income groups. The groups are divided into quintiles, with the 20 percent of families having the lowest incomes first and the 20 percent with the highest incomes last.

Table 2: Net Distributional Effect of Replacing Current Business Taxes With the UBT—Consumption Tax **Compared to Annual Income** 

Family income quintile	UBT	Corporate tax passed to capital income	Net effect	Corporate tax passed to labor income	Net effect
Lowest 20 percent	15.4%	3.8%	+11.6%	3.9%	+11.59
Second	10.3	6.0	+4.3	6.6	+3.7
Third	9.0	6.7	+2.3	7.6	+1.4
Fourth	7.4	7.0	+0.4	8.3	(0.9)
Highest 20 percent	4.8	7.5	(2.7)	6.5	(1.7)

Source: CBO and GAO calculations.

Column two of the table shows the distributional burden of a VAT that raises the same amount of revenue as is lost through the repeal of the corporate income tax and the employer share of the FICA tax.<sup>26</sup> Column three shows the distribution of the corporate tax and the FICA tax, under

<sup>&</sup>lt;sup>26</sup>The percentages in this column are simply proportional increases in the percentages represented in a similar table in the CBO report, Effects of Adopting a Value-Added Tax, February 1992. We did this because the revenue required to fund the UBT proposal is greater than that provided by the CBO analysis.

the assumption that the corporate tax is passed back to capital income and the FICA tax is passed back to labor income. Column four shows the net impact of the replacement. Columns five and six show the distribution and net impact, respectively, for the alternative assumption that both the FICA tax and the corporate income tax are passed back to labor income.

The distributional effects of the change to the UBT are most regressive when it is assumed that the corporate tax reduces capital income. The burden on the lowest quintile is raised substantially. The burden on the middle three quintiles is also raised, though more modestly. Finally, the burden on the highest quintile is reduced. If the corporate tax is passed on to workers rather than to the owners of capital, the burden is slightly less regressive.<sup>27</sup>

An alternative way of looking at the distribution of a consumption tax is to look at the relation of consumption to income over a time period longer than a year. Because some people who are in the lower quintiles may not be at that income level every year, they may not behave the same as a person who always has a low income. If people's income is temporarily lower than normal, they may attempt to maintain their consumption level at a "normal" level rather than greatly reduce their standard of living for a year. One way to remove some of these temporary effects is to look at consumption and saving behavior over a longer time period.

Using data for the 3-year period between 1983 and 1985, Bosworth, Burtless, and Sabelhaus calculated savings rates for five quintiles. Using those rates, we have estimated the incidence of a UBT compared with income measured over a 3-year period rather than annually. Table 3 shows that the UBT becomes a much less regressive tax when measured relative to longer term income. The burden is still larger in the bottom two quintiles, but the difference in burden between the bottom two and the top two is not as large as in the previous comparison. It is likely that consumption-to-income ratios are more similar over longer periods of

<sup>&</sup>lt;sup>27</sup>If the corporate income tax is included in the prices of goods rather than passed back in lower incomes to owners and workers, the incidence is much harder to measure. The incidence would depend upon the mix of goods produced by the corporate sector and how important these goods are in the consumption patterns of different income groups. We are not aware of any estimates of such measures of burden.

<sup>&</sup>lt;sup>28</sup>Barry Bosworth, Gary Burtless, and John Sabelhaus, "The Decline in Saving: Evidence From Household Surveys," Brookings Papers on Economic Activity, Vol. 1, 1991.

<sup>&</sup>lt;sup>29</sup>We calculated the ratios of consumption to income implicit in the savings rates for the 3-year period. We used the ratios for each quintile compared with the average for all families to calculate our incidence measures. We have also applied savings rates from 1983-85 to measures that are based on 1988 data.

time, which would make the incidence of the UBT appear more proportional over a lifetime.

Table 3: Net Distributional Effect of Replacing Current Business Taxes With the UBT—Consumption Tax Compared to 3-Year Income

Taxes measured as a percent of family personal income					
Family income quintile	UBT	Corporate tax passed to capital income	Net effect	Corporate tax passed to labor income	Net effect
Lowest 20 percent	8.0%	3.8%	+4.2%	3.9%	+4.1%
Second	8.0	6.0	+2.0	6.6	+1.4
Third	7.0	6.7	+0.3	7.6	(0.6)
Fourth	7.0	7.0	0.0	8.3	(1.3)
Top 20 percent	6.8	7.5	(0.7)	6.5	+0.3

Source: CBO and GAO calculations.

Although the distributional effects of the UBT in this comparison are not as regressive as those shown in table 2, the net effect is the tax burdens of the two lowest quintiles are raised. The signs of the changes in other quintiles depend crucially on the assumptions made about the incidence of the corporate income tax. If the corporate tax is passed on to capital income, all but the highest two quintiles will pay higher taxes under the UBT. Alternatively, if the corporate tax is passed back to labor income, the fourth quintile—which receives relatively more labor income—will have a reduced tax burden, and the top quintile—with relatively less labor income—will pay more.

In summary, the predicted effect of exchanging the UBT for the corporate income tax is highly dependent on the specific assumptions made. If both taxes are passed on to consumption goods, or if much of the corporate income tax is paid out of workers' wages, there will be little net distributional effect from this tax change. However, to the extent that the corporate income tax is borne—at least in part—by capital income and to the extent that the UBT is a tax on consumption expenditure, the net result is likely to be an increased tax burden on lower income groups and a lessened burden on higher income groups. On balance, the change is likely to be regressive.

Administrative and Compliance Costs May Be Lower for Corporations but Higher for Noncorporate Businesses The costs of administering any tax system depend on the number of taxpayers, the extent and intensity of audit and the degree of complexity of the tax. The Internal Revenue Service (IRS) does not ordinarily report costs for administering a particular tax; rather, it reports costs for various functional activities across all taxes. We therefore asked IRS to estimate how much of its total costs were due to the corporate income tax.

IRS estimated that the direct staffing and overhead labor support costs of administering the corporate income tax program in fiscal year 1991 were 13,000 staff years, or \$700 million. Most of this amount—approximately 10,400 staff years and \$529 million—was spent on the direct time of revenue agents examining corporate tax returns, Examination Division clerical support, travel by agents in connection with corporate examinations, and enforcement expenses. Other costs—such as telecommunications, building rent, and supplies—are costs of administering the corporate tax, but cannot be easily allocated to the administration of any one specific tax.

It is unclear whether replacing the corporate income tax and the employer's share of the payroll tax with the UBT would increase or decrease administration costs. For corporations, administration costs may go down, unless audit rates under the UBT are substantially higher than current corporate audit rates. On the other hand, some noncorporate businesses—that is, those that have more than \$50,000 in net business receipts and small businesses that choose to be subject to the UBT-will pay both the income tax and the UBT. UBT returns would have to be processed and examined, resulting in an increase in the cost of administering the tax system for these noncorporate businesses. In 1990, more than 1.6 million nonfarm sole proprietorships and about 330,000 partnerships had \$100,000 or more in gross receipts, so a significant number of noncorporate businesses could be over the threshold amount. Therefore, while any simplification of the taxation of corporations might lead to reductions in administrative costs, these reductions would be offset to some extent by increased costs in administering the UBT for other businesses.

To comply with the income tax rules, companies must calculate income as defined by the tax law. Compliance costs are the costs, in terms of time and money, of preparing and filing returns and keeping records to comply with the tax laws, aside from records kept for other purposes.

Compliance costs for the U.S. corporate income tax have never been reliably measured. Arthur D. Little, Inc., conducted a study of compliance costs for IRS, and the results of this study have formed the basis for most of the discussion of the compliance costs of the corporate tax. Arthur D. Little surveyed businesses on the amount of time they spent complying with federal taxes in 1983. While the study is one of the largest of its kind, it is not statistically valid to project the survey results to the universe of all corporate income tax filers or to any subset of corporations, such as firms in a particular industry or of a certain size. Furthermore, the Little study did not report sample variances or numbers of respondents by type of burden that would allow us to determine the reliability of the results. In addition, since the study used data from 1983, it does not reflect significant changes in the tax law, especially the Tax Reform Act of 1986.

A 1992 study of compliance costs in New Zealand found that the costs of complying with a VAT may be lower than the costs of complying with a corporate income tax. <sup>30</sup> This finding indicates that the UBT might be less costly for corporations to comply with than the corporate income tax. However, because the UBT is a new and separate company tax for noncorporate businesses, the compliance costs for these businesses are likely to rise. As with administration costs, the net effect is difficult to measure.

# Objectives, Scope, and Methodology

Our objectives were to evaluate the effects of replacing the corporate income tax with a broad-based consumption tax. In particular, we evaluated the UBT proposal in terms of (1) its effects on economic efficiency and equity; (2) its effects on tax administration costs; and (3) its effects on tax compliance costs.

To assess the implications of replacing the corporate income tax with a consumption tax or the UBT, we reviewed available literature on alternative tax bases and forms of business taxation. We also discussed issues involving income and consumption taxes and the UBT with tax experts. We then compared these alternatives to the UBT.

Because proposed taxes are often simpler and have a broader base than existing taxes, we were concerned that a comparison of the current corporate income tax and the UBT could be biased in favor of the conceptual and against the actual tax. While the UBT is proposed as a

<sup>&</sup>lt;sup>30</sup>See Cedric Sandford and John Hasseldine, <u>The Compliance Costs of Business Taxes in New Zealand</u> (Wellington: Institute of Policy Studies, Victoria University of Wellington, 1992).

simple and conceptually pure tax, it is difficult to predict how such a proposal might be changed in the legislative process or how it might be transformed over time. Therefore, we focused our comparisons on the most fundamental differences between the current corporate income tax and the UBT. This approach allowed us to distinguish between the UBT and the current corporate income tax from a conceptual standpoint and compare the benefits and costs of each.

To explain fully the economic effects of replacing the corporate income tax with the UBT, it was necessary that the current corporate income tax be placed in the context of the overall income tax system. The corporate tax is a component of the income tax system, and the UBT proposal would leave the individual income tax in place. After explaining how the corporate income tax fits in the overall income tax system, we compared the current overall tax system, including the corporate income tax, to the resulting tax system, which would include both the UBT and the individual income tax.

The staff of the Joint Committee on Taxation estimated that the UBT proposal could raise about \$50 billion, under the assumption that the UBT's broad base remains as proposed. To clarify the effects of the proposal on national saving, we discuss both the case in which the proposal raises revenue as well as the case in which the proposal is revenue-neutral. For the purpose of our distributional analysis, we used the standard economic methodology of comparing the new tax with the taxes it would replace on a revenue-neutral basis.

To assess how the replacement of the corporate income tax with the UBT would affect administration costs, we obtained information from IRS on costs of administering the corporate income tax. To assess whether the proposed tax change would increase or decrease the costs businesses incur to comply with taxes, we also reviewed studies that have attempted to measure these costs for existing taxes.

We did our work in accordance with generally accepted government auditing standards.

We are sending copies of this report to various congressional committees, Members of Congress, the Secretary of the Treasury, and other interested parties. Copies will be made available to others upon request.

The major contributors to this report are listed in appendix I. If you have any questions, please contact me on (202) 512-5407.

Sincerely yours,

Jennie S. Stathis

Director, Tax Policy and Administration Issues

Jennie S. Stathis

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