Corporate Taxation

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Abstract

This paper reviews the economic impact of corporate taxation, first surveying the principle features and recent history of corporate taxation, followed by considering the incentives that tax systems provide for the behavior of corporations. Tax systems encourage firms to use debt rather than equity finance and more generally to economize on dividend payments to shareholders. Taxation reduces corporate investment and directs investment to assets receiving favorable tax treatment. Tax considerations influence particularly strongly the operations of multinational corporations, due in part to their ability to choose between jurisdictions with different tax features. The location and magnitude of foreign direct investment respond to tax rate differences, as does international tax avoidance through financial and other means. But in spite of growing knowledge of the effect of taxation on corporate activity, it is still not known whether owners of corporations or others in the economy ultimately bear the burden of corporate taxes.

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Corporate taxation is an important source of government revenue around the world and a major consideration in planning business activities. This article identifies the economic incentives created by the taxation of corporate income and reviews available evidence of their behavioral impact.

1. Scope and history

Corporate tax obligations consist chiefly of fractions of corporate income. The corporate income tax rate structure is usually progressive, meaning that average tax rates rise with income, typically reaching a maximum rate rapidly enough that almost all of the income of large corporations is subject to tax at the highest rate. In the United States in 1999, corporations earning net income up to $50,000 paid a 15 percent tax; this tax rate rose to 34 percent on income over $100,000, and was 35 percent on incomes above $10 million. Other countries tax corporate income at similar rates that can vary according to the size, location, and industry of the corporate taxpayer. Thus, desires to rectify geographic income disparities lead Germany, Italy, and others to offer tax concessions for investments in depressed regions, while mineral-rich countries such as South Africa and Papua New Guinea subject mineral extraction to taxation at supranormal rates.

Much popular and public policy attention is devoted to the tax planning activities and corporate tax obligations of big businesses – and with good reason, since corporate income tends to be concentrated in a relatively small number of large companies. For example, in 1997 there were 4.7 million active corporations in the United States, of which approximately 9,000 had assets exceeding $250 million. These 9,000 large corporations accounted for 86 percent of total U.S.

corporate assets, 80 percent of net corporate income, and 78 percent of total corporate tax payments.

The American federal corporate income tax was introduced in 1894 but found unconstitutional the following year; it reappeared as a gross receipts tax in 1909, and was modified to become a genuine income tax following ratification of the 16th amendment to the U.S. constitution in 1913. The U.S. corporate tax rate in 1913 was one percent. The corporate tax rate rose over time, though it remained below 15 percent until World War II, at which point it rose sharply. The corporate tax was a major revenue source for the U.S. federal government between World War II and the late 1960s, when corporate tax collections consistently represented more than 20 percent of federal government revenue. Corporate tax collections have fallen as a fraction of total government revenue since then, though they exceeded $188 billion in 1998, representing approximately 11 percent of U.S. federal government revenues, or 2.2 percent of U.S. gross domestic product. This pattern is repeated in other high-income countries, many of whose corporate income tax rates and tax provisions are remarkably uniform. In a typical recent year (1994), top marginal corporate tax rates among the twelve member countries of the European Union ranged from a low of 33 percent to a high of 45 percent, with just a single country (Germany) taxing corporate income at a rate in excess of 40 percent.

2. Impact on economic behavior

The taxation of corporate income encourages entrepreneurs and managers to structure and conduct their business operations in ways designed to avoid taxes. Corporations generally reduce their tax obligations, and those of their shareholders, by using debt rather than equity finance, investing in assets that can be rapidly depreciated for tax purposes and those for which generous tax credits are available, and avoiding dividend payments or other tax-disadvantaged distributions to investors.

The major tax consideration in corporate finance is that interest payments to bondholders are deductible from taxable income, while dividend payments to corporate shareholders are not deductible. As a result, corporations generally have tax incentives to issue more debt than they would otherwise, and there is ample evidence (Auerbach, 2001) that debt/equity ratios are higher as a result. Since dividend payments generate tax obligations for recipients, corporations also have incentives to buy back shares or use other non-dividend methods of distributing income to shareholders.

Tax incentives to issue debt are mitigated in situations in which firms anticipate nonrefundable tax losses, or in which there is strong investor preference for returns in the form of capital gains and dividends rather than interest income. The strength of investor preference for stock ownership depends on circumstances. Individual investors most strongly prefer owning a firm's stock to owning its bonds if they reside in countries (such as Australia, France, or the United Kingdom) that permit dividend recipients to claim credits for corporate taxes paid on income generating dividends. In countries without such personal and corporate tax integration, the favorable tax treatment of accruing capital gains means that some investors, typically those in the highest tax brackets, prefer stock ownership (despite the associated corporate tax obligations) to holding interest-bearing debt. With sufficient numbers of such investors, it follows that asset markets will price stocks and bonds so that the economy's debt/equity ratio increases with the corporate tax rate, while any individual corporation is indifferent between debt and equity finance (Miller, 1977).

Taxation influences the timing, magnitude, and composition of corporate investment in plant and equipment, inventories, research and development, and other business assets. Higher tax rates generally reduce investment, though this depends on tax treatment of investment expenditures. Investors generally do not reduce taxable income immediately by the full amount of spending on business investment, instead amortizing the cost of investment spending over a period of years in which "depreciation allowances" are permitted. These depreciation allowances are most valuable if claimed soon after an investment is undertaken, since they are seldom adjusted for inflation and the time value of money. Hence governments that seek to encourage business capital formation often do so by permitting investors to depreciate their investments for tax purposes over short periods of time. Governments also often provide special tax credits for investments in selected asset categories such as research and development (available in Canada, Japan, Spain, the United States, and elsewhere). Depreciation allowances and investment credits together have the potential to stimulate investment by reducing required rates of return (Hall and Jorgenson, 1967). These tax considerations are succinctly captured by "effective tax rates" (Auerbach and Jorgenson, 1980) on business investment, which can be usefully compared over time and between countries (King and Fullerton, 1984). The available evidence indicates that rates of business investment are inversely related to effective tax rates (Hassett and Hubbard, 2001).

Corporate taxation also affects business organization by discouraging the incorporation of profitable businesses that can be organized in noncorporate form. In the United States, business organizations whose income is not subject to the corporate income tax include small ("S") corporations, partnerships, sole proprietorships, and limited liability companies.

3. The taxation of multinational corporations

Multinational corporations – those with active business operations in more than one country – pose special problems for tax systems, since it is necessary to determine the location and character of taxable income, as well as the means by which double tax relief is to be provided. Double tax relief is essential because a corporation's home country claims the right to tax all of its income, including the income earned by its foreign affiliates, while host countries in which foreign affiliates are located insist on their rights to tax affiliates' incomes. In the absence of special tax relief, income earned by foreign affiliates would be subject to taxation both by host countries and by home countries at cumulative rates that might approach or exceed 100 percent.

There are two practical systems of international double tax relief, both of which permit countries to tax fully any income earned by economic activity undertaken within their borders. Double taxation is avoided whenever home countries forego taxing multinational corporations on income earned by their foreign affiliates, or else when home countries tax the incomes of foreign affiliates but permit taxpayers to claim credits for foreign taxes paid. Use of the credit method effectively subjects income earned by foreign affiliates to home-country taxation at a rate equal to the difference between home and foreign tax rates. Actual methods of double tax relief often resemble a combination of these two methods. A majority of the world's countries exempt from tax most of the income earned by foreign affiliates of domestic multinational corporations, though several major capital exporting countries, including the United States, Japan, the United Kingdom, Italy, and others, subject such income to taxation but permit credits to be claimed for foreign taxes.

There is ample evidence that international tax rate differences influence the timing and location of investment by multinational corporations (Hines, 1999). Countries and subnational jurisdictions that tax corporate income at low rates receive unusually large volumes of foreign direct investment, particularly from countries that do not tax foreign income. Furthermore, multinational firms arrange their business transactions to avoid international taxes. Thus, foreign affiliates located in high-tax countries tend to be financed with higher debt/equity ratios than are investments in low-tax countries, and are more likely to remit profits in the form of (deductible) royalty payments than (nondeductible) dividends. Only a small fraction (16 percent in 1984) of the foreign affiliates of American companies pay dividends to their parent companies each year, those that do tending to have particularly tax advantaged situations (Hines and Hubbard, 1990). And the pretax profitability of foreign affiliates is negatively correlated with host country tax rates (Hines and Rice, 1994), which is suggestive of tax-motivated transfer pricing and unlikely to be the outcome of ordinary investment responses to tax rate differences.

4. Incidence of the corporate income tax

The requirement that corporations pay taxes does not mean that owners of corporations necessarily bear the burden of the corporate tax, since this burden might be partially or entirely shifted to consumers in the form of higher prices, or to workers in the form of lower wages. Indeed, there are reasonable situations in which the existence of the corporate tax actually enhances returns to capital owners, including owners of corporations (Harberger, 1962).

Corporate tax obligations contribute to the cost of investment and thereby encourage substitution of other productive factors (such as labor) for capital used by corporations. Labor expenses are deductible against taxable income, so the corporate tax does not affect the marginal condition characterizing a firm's decision of whether or not to employ additional labor. While the substitution of labor for capital depresses the demand for capital and thereby reduces its after-tax market return, there exists a separate effect of corporate taxation that stems from its induced intersectoral reallocation of resources.

Corporate taxation increases the cost of producing corporate output, thereby raising output prices, depressing demand, and shifting output from the corporate sector of the economy to the noncorporate sector. This reallocation affects factor demands to the extent that factor input ratios differ between the corporate and noncorporate sectors of the economy. If the corporate sector of the economy has a lower capital/labor ratio than the noncorporate sector, then the introduction of a corporate tax shifts resources into the noncorporate sector and thereby raises the demand for capital. If this effect is large enough, then it has the potential to exceed in magnitude the countervailing impact of factor substitution, thereby implying that higher rates of corporate tax are associated with greater after-tax returns to capital – including capital invested in corporations. It would then follow that labor bears the burden of the corporate tax in the form of lower wages. The distribution of the corporate tax burden is an important area for future empirical research. The limited available statistical evidence is inconclusive (Krzyzaniak and Musgrave, 1963), thereby leaving open the possibility that corporate taxation ultimately improves the after-tax profitability of owning corporations.

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