
Corporate Taxation

Unlike in Europe and elsewhere, in the United States, both the taxation of international business income and the international implications of taxing domestic business income have traditionally derived from the corporate income tax. Whereas other industrial countries customarily pay careful attention to the international consequences of business taxation (see Tanzi and Bovenberg 1990), the United States has historically regarded such consequences as an afterthought. If the corporate tax is the dog, the international consequences are the tail. In US tax battles, the main contest has been waged between two domestic objectives—growth versus fairness. President John F. Kennedy’s Tax Act of 1962 and President Ronald Reagan’s Economic Recovery Tax Act of 1981 may be characterized as growth oriented, whereas the tax reforms of 1976 and 1986 were fairness oriented. In all four episodes of legislation, international questions were a tertiary concern. Similarly, President George W. Bush’s signature tax bills, the Economic Growth and Tax Relief Reconciliation Act (EGTRRA) of 2001 and the Jobs and Growth Tax Relief Reconciliation Act (JGTRRA) of 2003, were hailed by the president as pro-growth and derided by congressional Democrats as giveaways to the rich; the international implications of the bills were not a major part of the debate.

Despite US tax history, the linear tussle between growth and fairness could still morph into a triangle with international competitiveness as a third point. In recent years, popular concern about the US position in the international marketplace has grown substantially, as US citizens worry about the long-term loss of manufacturing jobs and intense competition from Mexico, China, India, and other emerging countries.

The international dimension played a leading role in the latest episode of corporate tax legislation; to comply with World Trade Organization (WTO) rulings, Congress passed and the president signed the American Jobs Creation Act of 2004 (AJCA). The act repealed the Foreign Sales Corporation (FSC) Act and the Extraterritorial Income (ETI) Exclusion Act, both of which the WTO characterized as prohibited export subsidies (roughly \$5 billion per year), and instead compensated manufacturing firms—broadly defined—by reducing their statutory corporate tax rate. The rate fell from 35 to 34 percent beginning in 2005, and ultimately fell to 32 percent in 2010. The act also provided a tax holiday during calendar year 2005, when firms were allowed to repatriate earnings held overseas in controlled foreign corporations (CFCs) at a special tax rate of 5.25 percent.¹

Historical Background

Federal taxation of corporate income debuted in the United States with the Revenue Act of 1894. In the following year, however, in the landmark decision *Pollack v. Farmers Loan and Trust Co.*, the Supreme Court declared the 1894 act unconstitutional. The corporate income tax then lay dormant until the Revenue Act of 1909, when it was revived as a legally permissible excise tax on gross receipts. When the 16th Amendment was ratified in 1913, net income taxes could be levied on all persons and firms, which the Revenue Act of 1913 proceeded to do at the “confiscatory” rate of 1 percent.

Almost since its inception, the tax on corporate income has been criticized as an inefficient, inherently complex, and deceptive vehicle for raising public revenue.² Its endurance in the face of overwhelming economic opinion that its purposes could be better served by other taxes attests to five facts in the political economy of revenue collection:

- The corporate income tax is widely perceived as a way of taxing the rich. Whatever its flaws, for this reason alone the corporate tax has enjoyed popular support for almost a century.
- The corporate income tax disguises who is paying. This may be a vice to economists, but it is a virtue to Congress. Moreover, it is far less

1. At the time of enactment, analysts estimated that between \$300 and \$350 billion would be repatriated during 2005, much of it by pharmaceutical companies (*Wall Street Journal*, January 27, 2005, C1). However, based on the Federal Reserve’s flow of funds account, extra repatriations in 2005 (above the 2004 level) were about \$182 billion. According to some tax experts, the Federal Reserve data missed a substantial amount of extra repatriations.

2. See, for example, Pechman (1987) and Edwards (2003b).

intrusive to collect a given amount of revenue by taxing firms than by taxing individuals directly.³

- Without a corporate income tax, retained corporate income would have to be constructively distributed to individual shareholders as deemed distributions. Otherwise, wealthy individuals would simply establish incorporated pocketbooks to avoid individual income taxes.
- The corporate income tax makes the corporation, from the viewpoint of the Internal Revenue Service (IRS), a most welcome associate tax collector, determining and paying its own corporate tax liability as well as withholding personal income tax for its employees and collecting Social Security and various excise taxes. From an efficiency standpoint, it is much easier to collect a given amount of tax from corporations than households.
- Finally, and more subtly, the corporate tax is almost the only way for the federal government to collect revenue from the vast endowments and annual earnings of tax-exempt organizations.⁴

Given the appeal of these arguments, it is surprising not that the corporate tax endures but that it does not supply an even larger share of public revenue. On the contrary, since 1960 the corporate tax has accounted for a stable or diminishing fraction of central government revenues, not only in the United States, but in many other industrial countries. Between 1965 and 2005 the share of US corporate taxes, both federal and subfederal, dropped from just over 16.4 percent to 10.9 percent of total tax revenue. Canada has seen a similar decline in the contribution of corporate taxes. By contrast, corporate taxes continue to contribute over 20 percent of total revenue in Japan and over 15 percent in Australia, with no apparent trend. The share of corporate taxes has

3. It is no accident that Proposition 13 in California and the Economic Recovery Tax Act of 1981 (the Kemp-Roth federal tax cuts) crystallized around cuts in the property tax and the personal income tax, respectively—taxes that visibly reach into the pockets of ordinary people. The same spirit animated President Bush’s personal tax cuts in 2001—the EGTRRA—and the California revolt against the automobile license fee, which helped vote Governor Gray Davis out of office in 2003. The corporate income tax furnishes the paramount illustration of Senator Russell Long’s (D-LA) famous aphorism about the definition of tax reform: “Don’t tax you, don’t tax me. Tax that fellow behind the tree.”

4. According to the IRS, nonprofit organizations (excluding private foundations, most churches, and certain types of religious organizations) with tax exempt status under code section 501(c)(3) reported about \$1.9 trillion in total assets and \$1.1 trillion in revenue for the year 2003. Organizations under section 501(c)(3) include religious, educational, charitable, scientific, and literacy organizations. Other tax-exempt organizations under sections 501(c)(4) through 501(c)(9) reported about \$393 billion in total assets and \$273 billion in total revenue for the year 2003.

likewise remained stable in the major European nations, within a range from 5 percent (France) to almost 10 percent (United Kingdom) of total revenues (table 2.1).

The flat or declining trend of corporate taxation in most industrialized countries reflects pro-business attitudes and an awareness of the realities of international tax competition. More often today than in the past, countries wishing to maintain their entitlement programs—mainly health care and retirement pensions—are turning to broad consumption taxes rather than higher taxes on business income.⁵ Since 1957, when the value added tax (VAT) was first applied in France, over 100 countries have adopted VATs. The European Union, Japan, and Canada have embraced either the VAT or a similar broad-based consumption tax. The United States remains the only country of the 30 members of the Organization for Economic Cooperation and Development (OECD) that does not have a national VAT.⁶ Moreover, general consumption taxes of all types (VAT, retail sales, and excise) account for a very low percentage of GDP and total tax revenue in the United States (table 2.2).

Incidence of the Corporate Income Tax

Arnold Harberger (1962) pioneered the modern general equilibrium theory of corporate tax incidence. Starting with a closed-economy model—that is, no trade in goods, services, or capital—Harberger (1983) subsequently extended his framework to an open economy. One way to understand Harberger’s analysis is to portray the corporate income tax as a sales tax on corporate output.

The argument that the corporate income tax works like a sales tax goes as follows. In the long run, plant and equipment expenditures become variable costs, just like labor, materials, and energy. When a firm raises equity capital to finance new plants and equipment, it does so

5. The term “consumption tax” is a generic description for systems that tax purchases for current use. The term encompasses value added taxes, goods and services taxes, and retail sales taxes.

6. See Merrill (2002) and Hufbauer and Grieco (2005). Several proposals for fundamental tax reform have been put forward in recent years. Some proposals would replace the federal income tax with a consumption tax collected from business firms, such as the retail sales tax or the VAT. So far, Congress remains skeptical of all of the proposals. Among other leading journals, the editorial pages of the *Wall Street Journal* regularly denounce the VAT as a European-style tax, a French tax, or a money machine. As table 2.2 shows, countries with higher consumption tax revenues tend to devote a larger percentage of GDP to the public sector. But it is wrong, we think, to ascribe causation to the correlation between consumption taxes and public spending. In our view, insistent demands for the government to undertake social obligations lead to consumption taxation, rather than the other way around.

Table 2.1 Corporate income tax revenues as shares of GDP and total tax revenues, selected countries, 1965–2005 (percent)

Country	1965		1970		1980		1990		2000		2005	
	As share of: GDP	Total taxes	As share of: GDP	Total taxes	As share of: GDP	Total taxes	As share of: GDP	Total taxes	As share of: GDP	Total taxes	As share of: GDP	Total taxes
North America												
United States	4.0	16.4	3.6	13.2	2.8	10.8	2.4	8.9	2.6	8.7	2.9	10.9
Canada	3.8	14.9	3.5	13.6	3.6	11.6	2.5	7.0	4.3	12.2	3.5	10.5
Europe												
France	1.8	5.3	2.1	6.3	2.1	5.1	2.2	5.3	3.1	6.9	2.8	6.3
Germany	2.5	7.8	1.8	5.7	2.0	5.5	1.7	4.8	1.8	4.8	1.8	5.2
Italy	1.8	6.9	1.7	6.5	2.3	7.8	3.8	10.0	2.9	6.8	2.8	6.9
Netherlands	2.6	8.1	2.3	6.7	2.8	6.6	3.1	7.5	4.0	10.1	3.9	9.8
Spain	1.4	9.2	1.3	8.2	1.1	5.1	2.9	8.8	3.1	8.6	3.9	10.8
United Kingdom	1.3	4.4	3.2	8.7	2.9	8.4	3.6	9.8	3.6	9.7	3.4	9.2
Asia and Pacific												
Japan	4.0	22.2	5.2	26.3	5.5	21.8	6.5	21.6	3.7	13.5	4.1	24.4
Australia	3.4	16.3	3.6	17.0	3.2	12.2	4.0	14.1	6.3	20.3	5.7 ^a	18.2 ^a

a. 2005 data unavailable. Substituted with 2004 data.

Note: The figures in the table include federal, state, and provincial taxes on corporate income.

Sources: OECD (2006a, 2006b).

Table 2.2 Consumption tax revenues and public spending, selected countries, 2005 (percent)

Country	General consumption taxes		Total government expenditures as share of GDP
	As share of GDP	As share of total taxes	
North America			
United States	4.6	17.2	36.4 ^a
Canada	8.5	25.9	40.5 ^a
Europe			
France	11.3	25.5	53.8
Germany	10.1	29.0	46.7
Italy	10.1	26.4	48.2
Netherlands	12.5	31.7	45.7
Spain	9.9	27.5	38.2
United Kingdom	11.2	30.3	45.5
Asia and Pacific			
Japan	5.3	31.3	37.3 ^a
Australia ^a	8.9	28.5	35.0

a. 2004 data.

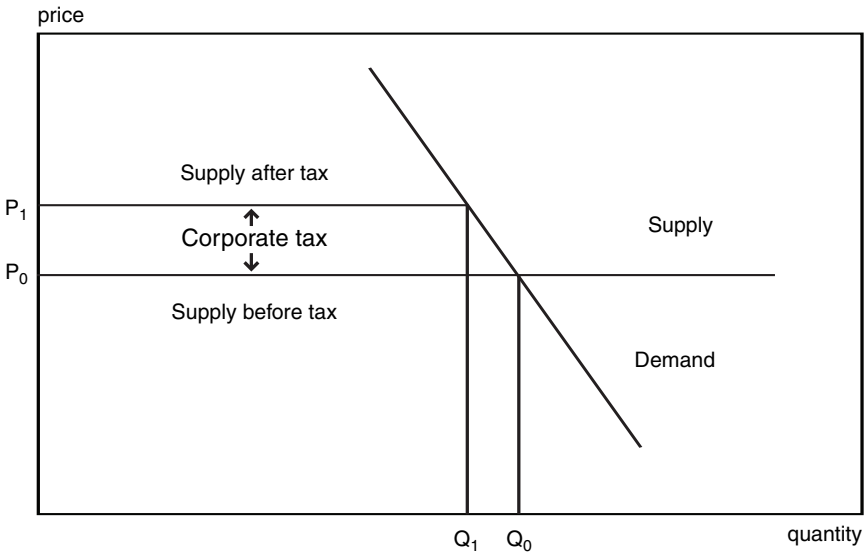
Note: The figures in the table include all taxes and spending at the federal, state, and provincial levels of government.

Sources: OECD (2006a, 2006b, 2006c).

anticipating that the project will earn a profit; in other words, it plans on paying both the corporate income tax and dividends on newly issued shares.⁷ Hence each firm's long-run supply schedule is shifted upward by the amount of the tax, because each firm must earn the amount of the tax as income before it is taxed in order to realize the same after-tax return on equity capital. If the industry is competitive, if all firms in the industry rely on equity to the same extent, and if they all face the same rate of corporate income tax, the long-run supply schedule for the industry as a whole will be shifted upward to reflect the tax cost of attracting equity capital (see figure 2.1).

7. The same story could be told if the firm mixed debt and equity capital in constant proportions; however, in that case only the equity portion of finance would be burdened by the corporate income tax. On the other hand, if the corporation could rely solely on debt capital to finance new plants and equipment, the corporate income tax would not be a factor because interest payments are deducted in calculating taxable corporate income.

Figure 2.1 Corporate tax as a sales tax



Usually, it is further assumed that the long-run supply curve of corporate output is rather elastic. This reflects a presumption that the corporate sector can readily attract capital, labor, materials, and energy from other sectors of the economy or that such factors can be expelled from the corporate sector to other sectors. It also reflects an important implication about the supply of equity capital to the corporate sector in a closed economy: When corporate equity offers slightly higher returns, it can readily draw large amounts of capital from other sectors, notably real estate.

The story as developed by Harberger (1962) leads to two interesting conclusions about the incidence of the corporate tax. In a closed economy, the burden is felt by all capital, both in the corporate and noncorporate sectors. Through the workings of the price system, the corporate tax pushes up the price of capital-intensive goods more than it does the price of labor-intensive goods; production of capital-intensive goods declines relative to labor-intensive goods; so-called unemployed capital then seeks work elsewhere in the economy, depressing its relative return.

In a closed economy the corporate income tax is inefficient: It is unevenly applied across business sectors, distorting the pattern of production. Too much production occurs in sectors with low taxes and too little in sectors with high taxes. Uneven application of the corporate tax comes about in two main ways. First, the capital intensity of production varies widely from sector to sector; hence sectors with more capital per unit of output usually pay more tax for each dollar of sales. Second, the taxes

actually paid—the effective rate—are different across sectors because of varying tax-rate depreciation schedules, tax credits, and other factors.

In his original analysis, Harberger (1962) suggested that the inefficiency cost of the corporate income tax could be as much as 0.5 percent of GNP annually, a figure that translates to about \$62 billion in 2005.⁸ Later Shoven (1976) estimated that the inefficiency cost is 12 percent of the amount of corporate tax collected, a figure that translates to about \$44 billion in 2005. Jorgenson and Yun (2001, table 6.10) estimated an average cost of 24 cents per dollar collected, equivalent to \$88 billion in 2005. Feldstein (2006) argued that the deadweight loss of taxes on investment income for both personal and corporate taxes is as high as 76 percent of revenue tax collected. Whatever the precise inefficiency cost—and the estimates offered by respected scholars have progressively increased—the logical conclusion is that the corporate income tax should be replaced in a revenue-neutral fashion by more efficient forms of taxation.⁹

In the 1970s Harberger began to examine the incidence of the corporate tax in an economy open to both international trade and capital flows. Later Harberger (1983) presented the results of his open-economy model as Mutti and Grubert (1985) developed a similar model that distinguished between personal and corporate taxes on investment income. The striking result from the family of open-economy models is that, when nations determine their tax policies independent of one another, the incidence of any one country's tax on investment income falls far more heavily on labor than on capital. In extreme versions, capital income is not affected at all, but labor income drops by 100 percent or more of the revenue collected. This finding exactly reverses the outcome of a closed-economy model, in which capital bears the entire burden of the tax. The reason, of course, is that the corporate income tax shrinks the national capital stock, so that fewer tangible and intangible assets are available to assist each employee in his daily work.

8. In 1962 Harberger argued that the corporate tax is entirely borne by capital, in both the incorporated and unincorporated sectors of the economy. By distorting capital allocation between the two sectors, the corporate tax works like a sales tax on the corporate sector and imposes an efficiency cost on the economy. In a later article, Harberger (1983) argued that, in an open international economy, the corporate tax would be shifted to the immobile factors of production—land and labor—rather than depressing the income of capital. We assume that the later model is more accurate, and in this case, the cost to the economy of the corporate tax is the inefficient allocation of land and labor between low-taxed and high-taxed sectors and the overall reduction in the capital stock.

9. Other taxes entail their own efficiency costs, but they could be much smaller. Using data from simulations in Jorgenson and Yun (2001, table 8.12a), Hufbauer and Grieco (2005) estimate that the average efficiency cost of a consumption tax large enough to replace the corporate income tax would be 5.5 cents per dollar. Under this assumption, replacing the corporate income tax would save 18.7 cents per dollar of tax revenue (24.2 cents minus 5.5 cents), a savings of \$68 billion in 2005.

Randolph (2006, 44–45) nicely summarized the outcome of Harberger’s open-economy model:

[The] distribution of burdens is quite different from the predictions of Harberger’s (1962) closed-economy analysis, which implies that domestic capital owners bear the entire burden of the U.S. corporate income tax in the long run. These closed-economy predictions still apply to the world as a whole. But in an open economy, the tax causes income to be redistributed internationally between foreign and domestic owners of capital, and internationally between the labor and capital owners resident within each country. Foreign owners of capital bear the domestic corporate income tax roughly in proportion to their ownership of the world capital stock. Foreign labor benefits by about that same amount.

In a recent paper, Harberger (2006) summarized four decades of his own thinking about the incidence of the corporate tax in closed and open economies. His most recent open-economy model has four sectors: manufactures, agriculture, public utilities and transportation services, and other services, including real estate. The economy’s three factors are capital, labor, and landowners. Manufactures and agriculture are traded internationally; public utilities, transportation, and other services are not traded. Unlike agricultural goods, US domestic and foreign manufactures are not perfect substitutes. To keep the model simple, manufactures, public utilities, and transportation are produced entirely in the corporate sector, whereas agriculture and other services are produced entirely in the noncorporate sector.

Applying his model to stylized parameters of the US economy, Harberger (2006) calculated the following illustrative results. About 25 percent of corporate tax receipts are reflected in lower returns to US capital, whereas about 125 percent of corporate tax receipts are reflected in lower returns to US labor. However, US consumers benefit through lower prices of noncorporate services, to the extent of about 42 percent of corporate tax receipts.

To paraphrase, the US corporate income tax hurts US labor, helps foreign labor, and drives capital abroad. As surprising as these results seem, they rest on simple assumptions. In an open economy, both foreign and US asset owners can react to higher taxes on investment income by moving their capital to other parts of the world. Because the US economy loses capital, average capital intensity per worker falls and US wages correspondingly drop. However, because the US economy is a large part of the world economy, the US corporate tax depresses the global return to capital, and US asset owners feel part of that burden.

What about the impact on consumers? The average price that US consumers pay for agriculture does not rise because foreign goods are perfect substitutes. However, the average price for manufactures rises somewhat, because US and foreign manufactures are not perfect substitutes. The average prices that US consumers pay for public utilities and

transport services rise because, in these nontraded, capital-intensive corporate sectors, part of the corporate tax gets passed on in higher prices. However, the average price that US consumers pay for other services declines—both because other services are produced by noncorporate firms (e.g., real estate) that benefit from lower borrowing costs, thanks to the corporate tax’s effect on global capital returns, and because the corporate tax depresses US wages. In Harberger’s stylized model, the decline in the average price of other services substantially outweighs the rise in the average prices of manufactured goods and public utilities and transport services, leading to net consumer benefits.

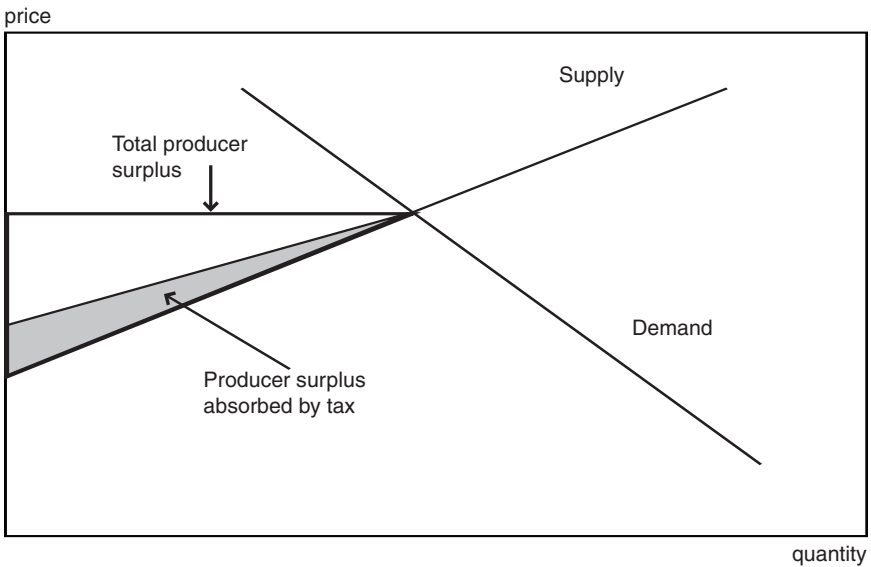
Few US citizens think of the corporate tax as a device to lower the average price level to favor consumers. Even fewer think of it as a means to lower US wages and raise foreign wages. Like most voters, most congressmen strongly believe that the incidence of the corporate tax falls heavily on owners of corporate shares, not on US workers. The popular view rests on the belief that the corporate tax has little if any effect on corporate output, but instead simply claims income that would otherwise accrue to shareholders, either as dividends or retained earnings. Among respected economists, one proponent of this view is Auerbach (2005). In a review article, while acknowledging Harberger’s insights, Auerbach concludes:

Our journey beyond the Harberger model through the more recent literature takes us both forward and backward: forward in considering issues not previously studied, but backward in reestablishing the relevance of the shareholder incidence approach. For a variety of reasons, shareholders may bear a certain portion of the corporate tax burden. They may be unable to shift taxes attributable to a discount on “old” capital, taxes on rents, or taxes that simply reduce the advantages of corporate ownership. In the short run, they may also be unable to shift taxes on corporate capital. (Auerbach 2005, 40)

The Corporate Tax as a Shareholder Income Tax

The older view of the corporate income tax, echoed by Auerbach (2005), holds that the burden is not passed along to consumers as higher prices on corporate output but instead falls on shareholder income. This argument combines two propositions. The first is that a large fraction of corporate income is earned not in competitive markets but in quasi-monopoly niches. By conventional analysis, corporate behavior in quasi-monopoly niches is not affected by a tax on profits because the tax does not affect the profit-maximizing intersection of marginal revenue and marginal cost. The second proposition is that, at the equilibrium price at which the industry supply schedule intersects with the industry demand schedule, firms that pay little or no corporate tax on their own marginal output disproportionately supply the industry’s marginal output, for several reasons: because they are high-cost firms, because they enjoy rapid

Figure 2.2 Corporate tax as a shareholder income tax



depreciation allowances on newly installed equipment, because they rely largely on debt to finance additional output, or because they import intermediate inputs that are free from corporate tax in the country of production.

Together the two arguments suggest that the impact of the corporate tax might be depicted as in figure 2.2. The tax absorbs a large wedge of so-called producer surplus on early, high-profit units of output—those made by firms with superior manufacturing or distribution techniques—but very little producer surplus on later, low-profit units of output.¹⁰ Accordingly, the tax little affects the market-clearing price of goods and services produced by the corporate sector. The tax claims a part of corporate earnings that would either have been distributed as dividends or retained to build up corporate equity, but it has little effect on product markets.

Defects of a Shareholder Tax

If the corporate tax does indeed work as a tax on shareholder income, it has one main defect in the international context: It taxes success, penalizing firms that earn large returns by both creating new goods and

10. Producer surplus is defined as the difference between the single equilibrium price and the rising cost of production for each unit of output, added up across all units sold.

services and producing them cheaply.¹¹ Such firms make a disproportionate contribution to economic growth, and the corporate income tax deprives them of resources to finance the next generation of products and future expansion.

Double Taxation of Equity Earnings

Under the US system, profits on corporate equity are taxed twice, first at the corporate level and again at the individual shareholder level, when earnings are paid out as dividends or when they are realized as capital gains upon the sale of shares. The classical system of double taxation has been a feature of the US federal income tax system since its inception. Since 1980, however, the United States has lessened the double taxation of equity earnings in several pieces of legislation.

The Economic Recovery Act of 1981, the Tax Reform Act of 1986, the EGTRRA of 2001, and the JGTRRA of 2003 all enhanced the attractions of equity capital by reducing the corporate income tax rate and lowering the highest marginal tax rate on dividend income from 70 percent in 1970, when dividends were taxed as ordinary personal income, to 15 percent, putting dividend-income taxation on the same footing as capital gains taxes for the years 2003 to 2010. With the JGTRRA, the United States has partially and temporarily merged corporate and individual taxation, as in the integrated systems implemented in most OECD countries. One consequence is to improve the tax competitiveness of US firms compared with their industrial-country competitors.¹² Moreover, for firms that meet the broad definition of manufacturing under the AJCA, the corporate rate will be reduced to 32 percent in 2010.

Despite reforms, however, the US tax system still maintains its historical bias for debt over equity capital, though the JGTRRA has almost eliminated the tax preference for capital gains over dividend income.¹³ These features are illustrated in table 2.3, which shows the amount of income

11. The corporate tax has other defects, such as the distortion between consumption now and consumption later, but these defects are more important in the domestic context. See Boskin (1988a).

12. The JGTRRA's preferential tax rates, which apply to dividends from domestic or qualified foreign corporations, were initially set to expire at the end of 2008. The Tax Increase Prevention and Reconciliation Act (TIPRA) of 2005 extended the JGTRRA's preferential rate to the end of 2010. Like almost all other countries, the United States provides for relief against double taxation of intercorporate dividends: Within an affiliated group, a 100 percent deduction is allowed for dividends received from another group member, and for other intercompany dividends, the deduction is either 80 or 70 percent. Investment companies (mutual funds and real estate investment trusts) are not taxed on dividends received from other corporations, provided that the dividends are paid out to their shareholders.

13. Capital gains are taxed only when realized; thus, if assets are held more than a year, they enjoy the benefit of deferred taxation compared with dividends.

Table 2.3 United States: Pretax corporate earnings required to pay (in various forms) individual debt and equity holders \$100 after all federal taxes (dollars and percent)

	Interest		Dividend		Sale of shares ^a	
	After JGTRRA	Before JGTRRA ^b	After JGTRRA ^b	Before JGTRRA ^b	After JGTRRA ^b	After JGTRRA ^b
Required corporate earnings before corporate tax	154	250	174	188	165	
Corporate tax of 35/32 percent ^b		87	56	66	53	
Income received by a top-bracket taxpayer before personal tax	154	163	118	122	112	
Personal tax of 35 percent on interest (after JGTRRA)	54					
Personal tax of 38.6 percent on dividends and 20 percent on capital gains (before JGTRRA)		63		22 ^a		
Personal tax of 15 percent on capital gains and dividends (after JGTRRA)			18		12 ^a	
Income received by a top-bracket taxpayer after corporate and personal taxes	100	100	100	100	100	
Overall tax rate (corporate and shareholder)	35	60	43	47	39	

JGTRRA = Jobs and Growth Tax Relief Reconciliation Act of 2003

a. This calculation assumes that retained earnings are entirely reflected in share prices, that shares are held roughly five years, and that the relevant discount rate is about 5 percent. Under these assumptions, the pre-JGTRRA 20 percent tax on realized gains had about the same impact as an 18 percent tax on earnings that are distributed year-by-year as dividends. Likewise, the 15 percent tax on realized gains under the JGTRRA has about the same impact as an 11 percent tax on earnings distributed year-by-year. These calculations ignore tax on that part of capital gains that are purely attributable to inflation. The “inflation tax” adds to the tax burden on capital gains.

b. Before the enactment of the JGTRRA, the top tax rate bracket for dividend and interest income for an individual was 38.6 percent and 20 percent for capital gains. After the JGTRRA, the top-bracket rates for dividends and capital gains were both 15 percent. The top-bracket individual rate on interest dropped to 35 percent after the JGTRRA. The JGTRRA also prospectively lowered the corporate rate for “manufacturing” firms to 32 percent in 2010.

Note: State and local income taxes are not reflected in these calculations.

Source: Authors’ calculations.

that a corporation must earn to pay, in various forms, \$100 of after-tax income to the individual investor. Provided that the corporation and individual pay tax at the highest statutory rate, the rates describe the position at the margin, even though average rates are usually lower. Table 2.3 reflects tax rates before and after the JGTRRA of 2003. Before the JGTRRA, the relevant highest rate was 38.6 percent on individual income (including dividend income) and 20 percent on capital gains. At that time, to pay \$100 after all taxes in the form of dividends, the corporation had to earn \$250, a tax burden of 60 percent.

After the JGTRRA, the highest rates initially became 35 percent on corporate income and individual salaries, but 15 percent on capital gains and dividends. By 2010 the highest rate on manufacturing firms, as defined in the AJCA of 2004, will drop to 32 percent. We assumed that, on average, retaining \$100 of corporate earnings increases the value of shares by \$100. Thus under present law, to pay out \$100 after all taxes in the form of interest, the corporation must earn \$154; to pay \$100 in either dividends or capital gains, it must earn \$174 or \$165, respectively.¹⁴

Table 2.4 summarizes the position of US firms versus their major competitors before and after the JGTRRA was enacted in 2003 and the AJCA in 2004. Accounting for federal but not state and local taxes, since the enactment of the JGTRRA and the AJCA, US manufacturing firms have had to earn \$174 in gross income to pay out net income of \$100 to the individual shareholder. That is significantly less than the amount a US firm was required to earn under the previous law (\$250). Still, among OECD countries, only Japanese and UK firms are worse off in this respect than their US counterparts: They must earn \$196 and \$184, respectively, to pay a net income of \$100 to the individual shareholder.¹⁵ German and French firms must earn \$174 and \$154, respectively. These calculations apply only at the margin because even in OECD countries, most corporations pay average tax rates well below the statutory maximum. To be sure, the advertised tax rates in several emerging countries are higher, as table 2.4 shows, but through special tax holidays and other incentives the advertised rates are rarely collected, even at the margin.

14. To illustrate the calculations in tables 2.3 and 2.4, the JGTRRA (as extended by TIPRA) reduced the highest individual tax rate from 38.6 percent in 2002 to 35 percent for 2003 to 2010 and to 15 percent for dividends. Hence, total tax on corporate earnings paid out as dividends in 2003 can be calculated as follows. Before-tax corporate income of \$100 is taxed at 35 percent for a tax of \$35, leaving after-tax corporate income of \$65. If this \$65 was distributed as dividends, the highest-bracket shareholder in 2003 paid personal tax of 15 percent, or \$9.75. The total tax was \$44.75 (\$35.00 plus \$9.75), and the after-corporate-tax, after-personal-tax income to the shareholder was \$55.25.

15. However, unlike US corporations, UK corporations are subject to tax only on the national level (see table 2.5).

Table 2.4 Pretax corporate earnings required to pay individual shareholders \$100 of dividends after all central government taxes at statutory rates, selected countries (dollars and percent)

	United States ^a										
	Before JGTRRA	After JGTRRA	Japan ^b	United Kingdom ^c	Germany ^d	France ^e	Brazil ^f	China ^g	India ^h	Mexico ⁱ	
Required corporate earnings before tax	250	174	196	184	174	154	184	260	223	216	
Corporate taxes	88	56	59	55	44	51	46	78	80	69	
Income received by a top-bracket taxpayer before personal taxes	163	118	137	129	131	103	138	182	143	147	
Personal taxes on dividend income	63	18	51	42	31	54	38	82	43	47	
Relief from double taxation	0	0	14	13	0	51	0	0	0	0	
Income received by a top-bracket taxpayer after corporate and personal taxes	100	100	100	100	100	100	100	100	100	100	
Overall tax rate (corporate and shareholder)	60	43	49	46	43	35	46	62	55	54	

(notes and sources next page)

Notes to table 2.4

AJCA = American Jobs Creation Act of 2004

JGTRRA = Jobs and Growth Tax Relief Reconciliation Act of 2003

- a. The US federal statutory corporate tax rate is assumed to be 35 percent before the JGTRRA and 32 percent after the JGTRRA and AJCA (the 2010 rate for “manufacturing” firms). The individual tax rate on dividends is assumed to be 38.6 percent before the enactment of the JGTRRA and 15 percent after.
- b. The national statutory corporate tax rate is assumed to be 30 percent; the individual tax rate on dividends is assumed to be 37 percent. The dividend relief is 10 percent of dividends received.
- c. The national statutory corporate tax rate is assumed to be 30 percent; the individual tax rate is assumed to be 32.5 percent. The dividend relief is 10 percent of the dividend received.
- d. The federal statutory corporate tax rate is assumed to be 25 percent. Starting in 2002, dividends are taxed at the shareholder level at a rate of 50 percent of the individual tax rate (i.e., 23.5 percent). No other relief is available.
- e. The national statutory corporate tax rate is assumed to be 33.3 percent; the individual tax rate is assumed to be 52.5 percent (in 2003). The dividend relief is assumed to be 50 percent of dividends received.
- f. The federal statutory corporate tax rate is assumed to be 25 percent (including a surcharge of 10 percent on income in excess of \$85,000); the individual tax rate on dividends is assumed to be 27.5 percent.
- g. The national statutory corporate tax rate is assumed to be 30 percent; the individual tax rate is assumed to be 45 percent.
- h. The federal statutory corporate tax rate is assumed to be 35.875 percent. This rate is applicable to Indian companies. The rate for foreign companies is 41 percent. The individual tax rate on dividends is assumed to be 30 percent. A surcharge of 10 percent of the tax liability applies to taxable income exceeding Rs.850,000.
- i. The national statutory corporate tax rate and the individual tax rate on dividends are assumed to be 32 percent (since 2005).

Note: Central government taxes are those imposed by the federal or national government. State and local taxes are not reflected in these calculations. Individual taxes are calculated at the top marginal rates.

Sources: Authors’ calculations based on data obtained from Keidanren USA (www.kkc-usa.org); Bond and Chennels (2000); Avi-Yonah (2002a); PricewaterhouseCoopers (2004); KPMG (2006).

To summarize, when the AJCA rate of 32 percent on manufacturing profits takes effect in 2010, the tax position of this large subset of US firms will be improved relative to foreign competitors, unless foreign countries reduce their own rates in the meantime. Based on recent experience and proposals under debate in Germany, the United Kingdom, and elsewhere, it seems unlikely that major US competitors will freeze their corporate tax rates. Unlike the United States, nearly all European countries lowered their average corporate tax rates between 2000 and 2006.¹⁶ The same is probably true of emerging countries.

Appeal of the Corporate Income Tax

Set against the corporate tax's inefficiency are several politically powerful arguments that support that, the most important being the argument that the corporate tax effectively reaches the rich. Without the corporate income tax, it is widely believed that affluent families would enjoy an even more luxurious lifestyle at the expense of middle- and low-income families. This argument, convincing to successive Congresses and presidents throughout the 20th century, has acquired greater salience thanks to the huge gains that the wealthiest Americans have enjoyed since the 1990s.¹⁷

In an era of foreseeable budget stress, when Congress will be faced with the unpleasant task of capping entitlement programs and raising tax revenue, the prospect of abolishing the corporate tax or sharply lowering its rate seems remote. Given such realities, this book takes the corporate income tax as a bedrock feature of US political economy for at least the next decade and explores possible reforms in its application to taxing foreign income.

Relevance to International Tax Issues

In the domestic context, the main concern of incidence theory is who pays the tax. By contrast, in the international context, the analysis of incidence raises three quite different concerns:

- How much is the nation's capital stock reduced on account of corporate income tax?

16. See Marcus Walker, "Europe Competes for Investment with Lower Corporate Tax Rates," *The Wall Street Journal*, April 17, 2007, A12.

17. To cite just one study, Dew-Becker and Gordon (2005, figure 8) calculate that the top 0.1 percent of families garnered 7.7 percent of total productivity gains in the four years between 1997 and 2001. This top 0.1 percent—some 130,000 individual tax returns—is studded with CEOs, entertainment and athletic stars, and beneficiaries of inherited wealth. To cite another study, Piketty and Saez (2006) calculate that the average federal tax rate on the top 0.01 percent of American families fell from over 70 percent in 1960 to about 35 percent in 2005.

- What effect does the corporate tax exert on US firms operating in global markets?
- What is the effect of the global system on corporate taxation?

We do not attempt to measure the reduction in the US capital stock that can be attributed to the US corporate income tax. Whatever the adverse impact of the US tax system on the capital stock, in recent times it has been more than offset by other forces in the world economy, as the United States has run a huge capital account surplus for the past five years. We focus instead on the adverse effects of US taxation on US-based multinational enterprises (MNEs) and the systemic consequence of international tax competition.

Impact on US Firms Operating in Global Markets

Consider first the impact on US-based MNEs. To the extent that the corporate tax raises the prices of goods and services produced by the US corporate sector, it has two adverse effects:

- When the US corporate tax is imposed on income earned abroad through US subsidiaries or branches, the foreign operations of US firms will shrink relative to competitors who do not pay such a tax. Holding all other factors constant, higher tax costs translate into higher prices and smaller market shares.
- When the US corporate tax is levied on income derived from exports, it renders US firms less competitive in third-country markets than competing foreign firms that pay lower tax rates on their exports.

Because most countries tax their corporations, what matters is the comparison between tax burdens abroad and tax burdens in the United States. That comparison leads to the specter of tax competition in a competitive global economy.

Corporate Tax Rates and Tax Competition

Tax competition can start when one country lowers its tax rates to attract outside investment,¹⁸ but also when one country seeks to make its domestic firms more competitive in import and export markets. If other

18. Ireland slashed its corporate tax rate over the past two decades, reaching a record low of 12.5 percent in 2003. Low Irish corporate tax rates are credited as a driving force in attracting inward FDI—especially in knowledge-intensive industries—and generating strong economic growth. Ireland’s GNP grew 62 percent in real terms between 1993 and 1999. Unemployment fell from more than 14 percent to just 5.5 percent during the same period. Ireland accounts for

countries lower their rates in turn, the tax battle is on. Supporting this story, empirical evidence suggests that countries tend to lower their corporate tax rates when they exceed the average of comparable countries (Devereux, Lockwood, and Redoano 2002).

Before turning to the policy dimensions of tax competition, it is worth commenting on the evidence concerning the effects of corporate taxation on direct investment flows.¹⁹ Gorter and Parikh (2003) examined the sensitivity of foreign direct investment (FDI) to differences in corporate income taxation within the European Union. The study argues that investors from EU member state A will increase their FDI position in EU member state B by approximately 4 percent if state B decreases its effective corporate income tax rate by one percentage point relative to the European mean. Gropp and Kostial (2001) compared a group of countries with the lowest tax rates (“low-tax group”) to a group of countries with the highest tax rates (“high-tax group”) from 1988 to 1997. The study found that countries in the low-tax group experienced half the FDI net outflows that countries in the high-tax group did.

An earlier study conducted by Slemrod (1989) found, for the period 1956-84, an elasticity of 1.16 for inward FDI with respect to the US marginal effective tax rate on corporate investment. This elasticity can be interpreted as follows. If the base flow of inward investment in a particular year is \$50 billion, a cut in the effective marginal tax rate from 46 percent to 34 percent (a 26 percent reduction) would stimulate an additional \$15 billion (30 percent) in inward direct investment ($1.16 \times 26 \text{ percent} = 30 \text{ percent}$; $30 \text{ percent} \times \$50 \text{ billion} = \$15 \text{ billion}$) over a period of several years. Further, Slemrod found that the impact was concentrated on FDI financed by the transfer of funds (debt and equity) rather than retained earnings.

In a more recent study, Mutti (2003) concluded that corporate income taxes are an important determinant of the production of US MNEs’ foreign affiliates and the parent firm’s decision about where to locate an affiliate. Mutti found that a tax policy change that reduces the before-tax cost of capital by 1 percent is associated with an increase of MNE foreign affiliates’ production by 0.6 percent. Mutti also pointed out that a 1 percent decline in the cost of capital due to a tax reduction increases the probability that a location will be chosen by 0.12 percent.

just 1 percent of the European Union’s total GDP, but it accounts for 6 percent of Europe’s inward FDI flows. Even more impressive, exports have grown at an average rate of 17 percent for each year since 1994, with US firms accounting for 70 percent of Irish industrial exports. Ireland’s tax regime has attracted fire from other EU members, which claim that the low Irish tax rate unfairly competes with their higher tax rates. See Hodge (2001).

19. In addition to its impact on FDI flows, tax policy may affect portfolio flows by altering the yield on financial investments (see chapter 4).

Analyzing French FDI, Mayer, Méjean, and Nefussi (2007) likewise found a strong and statistically negative effect of the average effective tax rate. Such findings lend credibility to the proposition that corporate taxation can affect FDI flows.²⁰ The inevitable result is tax competition between jurisdictions.

Corporate taxes in the United States fell in the mid-1980s with the Reagan tax cuts, particularly after the enactment of the US Tax Reform Act, which cut the federal corporate tax rate from 46 percent to 34 percent in 1986. Industrial competitors subsequently emulated the US lead and cut their own corporate tax rates in the late 1980s and again in the late 1990s.²¹ However, the United States raised its corporate tax rate from 34 percent to 35 percent in 1993, and on balance, states have not cut their corporate taxes in the past 15 years. By 2003 the US statutory corporate tax rate—federal and state—was the second-highest among 30 major industrial countries. As of 2006 the combined US federal and state corporate income tax was about 40 percent, almost 12 percentage points higher than the average OECD combined national and local corporate tax rate (see table 2.5).²² Among OECD members, only Japan has higher combined national and local corporate tax rates than the United States does (KPMG 2006).

20. In theory, exchange rate changes offset tax differentials so that lower corporate taxes do not improve the domestic industry's global competitive position. Because exchange rates are highly unpredictable and reflect many forces in the global economy, however, corporations that are heavily taxed find little solace in the exchange rate offset story, described in more detail below.

21. In the past 15 years, many countries in Europe and elsewhere have cut their corporate rates. This was true of the United Kingdom, France, Ireland, Germany, Poland, Portugal, Denmark, Japan, and Australia. Japan reduced its national income tax rate from 43.3 percent in 1987 to 30 percent in 1999. Germany reduced its federal corporate tax on retained profits from 56 percent to 50 percent in 1990, from 50 percent to 45 percent in 1994, and from 45 percent to 25 percent in 2001. France reduced its corporate income tax rate from 50 percent to 33.3 percent between 1985 and 1993 and gradually eliminated the surtax on corporations, from 10 percent to 6 percent in 2001 and to zero percent in 2003. The United Kingdom reduced its tax rate from 52 percent to 35 percent between 1982 and 1986; it reduced it again to 33 percent in 1997 and to 30 percent in 1999.

22. In the United States the highest corporate federal tax was 35 percent in 2001. State corporate tax rates vary from zero to 12 percent and are deductible when calculating the federal corporate taxes. Thus the statutory state corporate tax, net of the federal deduction, varies from zero to 8 percent. Accounting for both the federal and state statutory tax rates, the total statutory corporate income tax rate in 2002 varied from 35 to 43 percent. The unweighted average was 39 percent (see Engen and Hassett 2002) but accounting for the economic importance of high-tax states, the weighted average was 40 percent (see PricewaterhouseCoopers 2002). Although the AJCA will cut the corporate rate for manufacturing firms to 32 percent in 2010, the figures reported in the text are based on the current standard rate of 35 percent.

Table 2.5 Federal and subfederal corporate income tax rates, selected countries (percent)

Country	National statutory rates			National plus state and local statutory rates		Effective average corporate tax rates ^a	
	1977	1990	2006	1990	2006	1990	2002
North America							
United States	48	34	35	38	40	32	29
Canada	46	28	22	37	36	n.a.	29
European Union							
France	50	34	33	37	33	30	27
Germany	56	50	30 ^b	58	38	50	32
Italy	25	36	33	46	37	40	34
Netherlands	48	35	29 ^c	35	29 ^c	30	26
Spain	36	34	35	35	35	31	32
United Kingdom	52	34	30	34	30	29	24
Asia and Pacific							
Japan	40	38	30	51	41	n.a.	36
Australia	50	39	30	39	30	n.a.	22
Average OECD	n.a.	35	25 ^c	n.a.	28	n.a.	n.a.
Average EU	n.a.	36	25 ^c	40	25	33	25

n.a. = not available

a. These figures are effective average corporate tax rates in the manufacturing sector. They include both federal and subfederal (state and local) taxes and corporate surcharges.

b. Including the corporate surcharge of 5.5 percent.

c. Authors' calculations.

Sources: KPMG (2006), PricewaterhouseCoopers (2004), Engen and Hassett (2002).

The figures cited are statutory rates and can be interpreted properly as the marginal rates applicable to future earnings. As table 2.5 illustrates, the effective average corporate income tax rate in the United States in 1990 was 32 percent, one percentage point less than the EU average. In 2002, however, the effective average corporate income tax rate was 29 percent, four percentage points above the EU average.²³ Thus the United

23. The effective average tax rate expresses the ratio of corporate tax paid to pretax profits. It reflects both the corporate tax rate and the corporate tax base (e.g., accounting for amortization and depreciation allowances). By contrast, the statutory corporate tax rate may come closer to reflecting the anticipated marginal rate on future profits. In making investment-location decisions, firms probably consider both the average effective rate and marginal statutory rate. See Devereux, Griffith, and Klemm (2002) and Engen and Hassett (2002).

States has become a relatively high-tax country in both statutory and effective rates.²⁴

The traditional economist's answer to the specter of tax competition is a simple one: Different national regimes of corporate taxation can coexist, notwithstanding the political logic of tax wars, because compensating exchange rate adjustments ensure the survival of export- and import-competing activities in high-tax countries. Put bluntly, some traditional economists characterize tax competition as an uninformed response to an imaginary problem. In their view, a small depreciation of the currency automatically offsets the burden of higher corporate taxation.²⁵ Thus no country should have to engage in tax competition for its industrial self-preservation.

The economists' answer plays better in academic circles than among policymakers. Currency depreciation is linked in the public mind to inflation and the loss of real wealth, making it hard for public officials to recommend depreciation to solve burdensome national tax rules. Moreover, exchange rate movements are often disconnected from the fortunes of export- and import-competing activities because capital flows more often than not drive the foreign exchange markets. Also, exchange rates frequently move opposite to the direction that would push the trade balance toward zero, making it harder to argue that burdensome tax rules are necessarily offset by compensatory changes in the exchange rate. Finally, when the exchange rate redresses the trade imbalance, it exerts an uneven effect across sectors. Export sectors that depend on imported inputs are affected by exchange rate changes to a lesser extent²⁶ and a deeper depreciation is required to compensate these sectors for an adverse corporate tax rate.

Convergence of Corporate Taxation?

For all of the above reasons, the exchange rate adjustment answer has become less than satisfactory as a political answer to the competitive problems created by disparate national systems. This is true whether the

24. The same point is made by the Congressional Budget Office (CBO 2005b), Sullivan (2006), and Graetz (2007)

25. An example illustrates this proposition. On average, in 2002, US corporate profits before federal taxes were about 5.3 percent of sales. If the corporate income tax were raised from 35 percent to 50 percent, then corporate profits would have to rise to 6.9 percent of sales to ensure the same amount of after-tax profit. If a 1.0 percent depreciation of the dollar translates into a 0.5 percent rise in dollar prices relative to dollar wages, for both home and export markets, then a 3.2 percent depreciation would, on average, supposedly compensate for the tax increase (calculated as $[6.9 - 5.3] \times 2$).

26. Thus, an assembly operation that imports 80 percent of its cost structure through purchased components and relies only on the local supply of nontraded inputs for 20 percent of its cost structure will not be much affected by a 5 percent change in the exchange rate. The induced change in its international competitive position will be only 1 percent (20 percent of 5 percent).

system in question is that of environmental regulation, social security taxes, health benefits, or corporate taxation. As a result, political pressure has shifted to another arena, namely, convergence of national systems and business taxation. There are two roads to convergence, or approximation, to use the European term that suggests an alignment that stops short of making the systems identical. One is competitive approximation; the other is planned approximation.²⁷

In a system of competitive approximation, each country simply cuts its corporate tax rate or enlarges its deductions unilaterally, to both make its own firms more competitive and attract firms from other countries. OECD countries have been harmonizing their corporate tax regimes through a process of competitive approximation since the mid-1980s, as evidenced by the reduction and convergence in statutory corporate tax rates.²⁸ Proponents of competitive approximation sometimes argue that reducing corporate tax rates is a boon to the world economy, promoting capital formation and supply-side growth.

Others—including the authors—are not so sure. Tax competition need not be confined to a simple reduction in the statutory rate, but can spill over into subsidy schemes and special preferences.²⁹ Unbridled tax competition provides MNEs greater opportunities to exploit differences between tax rules and rates to reduce their tax bills.³⁰ That said, for the

27. Approximation pressure is particularly noticeable in the European Union. The drama between competitive approximation and planned approximation is playing out not only in taxation but also in environmental policy, product standards, antitrust policy, bank regulation, and a variety of other public systems.

28. Appendix B summarizes features of US corporate taxation that have led to lower effective tax rates and might be characterized as contributing to competitive approximation. Between 1988 and 2006, the OECD average statutory corporate tax rate declined from 44 percent to about 28 percent. Countries have converged to this rate, as the dispersion around the average, measured by the standard deviation, also declined during the same period. The reduction in statutory rates, with a concurrent reduction in the standard deviation, suggests that governments redesigned their tax policies at least in part to counter the threat of FDI outflows and to attract FDI inflows.

29. In 2004 public subsidies to industrial firms in the European Union amounted to 3.5 percent of GDP (European Commission 2005), whereas corporate tax collections averaged 3.2 percent of GDP for the European Union at 15 members (OECD 2005).

30. Two simple examples can be cited: manipulated transfer prices for transactions between affiliated companies, with the effect of shifting profits from high-tax to low-tax jurisdictions; and intragroup borrowing and lending, with the effect that interest payments are deducted against corporate income in a high-tax country and interest receipts are lodged in a low-tax country. These practices can result in a redistribution of the tax burden from mobile capital onto less mobile factors or from large multinational groups to small national firms (Gropp and Kostial 2001). Moreover, to the extent that investment is attracted by the promise of low taxes rather than low production costs, location decisions will be less efficient (Bond and Chennells 2000, Bond et al. 2000).

foreseeable future, tax competition rather than planned approximation will be the route to any corporate tax convergence witnessed in the world economy.

Nevertheless, a brief review of the planned approximation route to convergence is in order. Under such an approach, major trading countries would agree on comparable definitions of corporate income, and each country would levy its corporate tax within a range of upper and lower bound rates. This approach finds its greatest support in the European Union. Two major attempts to coordinate corporate income taxation in Europe—the first in 1975 and the second in 1992—failed because the EU Council did not approve them unanimously.³¹ In the most recent attempt in February 2004, Frits Bolkestein, EU tax commissioner, suggested that interested member states should harmonize their tax base definitions under the new “enhanced cooperation” mechanism, which allows a group of core countries to forge ahead with harmonizing policies. Under this arrangement, he predicted, tax rates would naturally converge due to competition between equivalent bases.³² Bolkestein’s proposal met resistance from Ireland, the United Kingdom, the 10 new member states, and members of the newly appointed European Commission.

Thus in 2006 the call for planned approximation seems utopian even in the European Union. The Commission’s ambition is now limited to seeking a common corporate tax base in five years, not a common tax rate.³³

31. The second attempt at EU coordination was done by the Ruding Committee, which delivered a comprehensive report (European Commission 1992) identifying a number of distortions and proposing a common EU corporate tax system as a long-term target, to be approached in three stages. Primary targets in the first two stages were extending the nondiscrimination directives (adopted in 1990) to all enterprises, harmonizing national corporate income tax bases, and aligning statutory tax rates within a range of 30 percent to 40 percent. The design of a common corporate tax system was to be postponed to the third and final stage. In response to the Ruding report, the European Commission took up only two relatively minor proposals aimed at exempting cross-border income flows within multinationals from source taxation. The Commission denied that further harmonization was needed.

32. See *Financial Times*, February 21, 2004, 4.

33. See “Common Cross-Border Tax Base in ‘Five Years,’” *Financial Times*, November 27, 2006, 4. For a detailed survey of the corporate tax harmonization movement in Europe, see Bond et al. (2000). This history does not mean that EU members ignore the challenge of tax competition. All members have adjusted their corporation tax systems, but they refuse to have their room for maneuver restricted by Community law. See Genser (2001). At the January 2005 World Economic Forum in Davos, Switzerland, José Manuel Barroso again rejected the call to harmonize European corporate tax rates: “Some member countries would like to use tax harmonization to raise taxes in other countries to the high-tax levels in their own countries. We do not accept that. And member states will not accept it” (*Wall Street Journal*, January 31, 2005, A17).

Meanwhile, serious academic doubts have been raised about the welfare consequences of eliminating tax competition.³⁴

Up to now there has been little planned approximation of corporate tax systems anywhere in the world, even within the European Union. Instead, mindful of the competitive pressures of the global economy, yet well aware of the political popularity of taxing large firms, many countries, including countries in Europe, have responded with competitive tax measures that recall the Cheshire Cat of *Alice in Wonderland*: As the cat vanished, he left behind a grin. In much the same spirit, alternative paths to competitive taxation are getting heavy use in do-it-yourself tax reduction; integration of corporate and shareholder taxation is especially popular. In appendix B we discuss these paths in greater detail. We conclude this chapter with the observation that tax competition, rather than planned approximation, is the order of the day.

34. Conconi (2006) argues that global tax harmonization leading to the complete elimination of tax competition is a bad idea because it would prompt the adoption of higher-than-optimal capital taxes. According to Conconi's theoretical analysis, partial harmonization is preferable to global harmonization.

