3

Options for Business Taxation

As part of a package of sacrifices to avert a fiscal crisis, a significant rise in business taxes seems inevitable, even if payroll and individual taxes do most of the heavy lifting. Business tax revenue would be raised through either the corporate income tax—the current workhorse of federal business taxation—or a new tax. Let us briefly review the most likely candidates for raising additional business tax revenue.

Corporate Income Tax

Since its introduction in 1909,[1] the corporate income tax has gone through many definitions of "taxable income." Congress now changes the tax base almost biennially. Initially conceived as a tax on corporate profits, the tax's myriad of deductions and exemptions from corporate income has altered the tax base beyond recognition. The gap between "book" profits and "tax" profits is often cited as evidence of corporate tax evasion, earnings exaggeration, or both,[2] but even if the tax base were defined in an understandable way, legislated tax credits would ensure a jagged profile of effective tax rates. The IRS reports that credits for various investments

1. Corporate income tax predates the Sixteenth Amendment, which was enacted in 1913 to permit federal taxation of individual income.

2. In fact, the gap between book income and taxable income reflects both differing reporting rules and opposing motives. Corporate taxpayers typically want to report the lowest possible tax base to the IRS but the highest possible earnings to shareholders.

and for other policy goals were introduced in the 1960s and have continued to the present; in 2002, there were more than a dozen credits that could reduce the stated tax rate. Because they interact with one another and with other features of the tax system, it is not even possible to estimate what the tax rates would be if they were taken into account (IRS 2003a).

There have been several efforts to reform the corporate income tax, most recently in the Tax Reform Act of 1986. They tend to unravel over time, however, as Congress amends the tax law to meet immediate concerns. Graetz (2002a) has joined the chorus that seeks to correct distortions in the tax base by insisting on a close correspondence between financial statement earnings and tax return earnings for publicly traded corporations. This seems like a good idea, but we doubt that it can carry the dual load of reforming business taxation and raising additional revenue.

The fiscal realities of the United States insist on a substantial increase in business taxes. But competitive realities argue against a sharp rise in corporate income taxes. Left to fill the gap are alternative business taxes: retail sales, VAT and its cousins, and excise taxes.[3] Before examining these alternatives, we need to look at US taxation of US corporations doing business abroad, the political "fellow behind the tree," as in Senator Russell Long's famous aphorism, "Don't tax you, don't tax me, tax the fellow behind the tree." If there's a pot of money behind the tree, it will make a most attractive tax target for Congress.

Taxation of US Multinationals

As a matter of fiscal integrity, Congress has long objected to abusive tax planning that shifts passive income out of the US Treasury's reach to tax havens abroad. In 1938, it passed legislation to curtail wealthy individuals' use of foreign holding companies to avoid taxes.[4] In 1962, it passed Subpart F of the Internal Revenue Code to limit corporate avoidance revolving around foreign source interest, dividend, and royalty income (Hufbauer and van Rooij 1992). In 2003 and 2004, Congress attacked the abuses *du jour* of corporate inversions, hybrid structures, and infrastructure leases (Hufbauer and Assa 2003, Hufbauer and Grieco 2004).

Tax shenanigans make for entertaining newspaper copy and play a considerable role in shaping US tax laws (Rosenbloom 2001), but more consequential tensions are at issue in the taxation of US corporations

3. We exclude higher customs duties from the mix ($20 billion was collected in 2000), assuming that future WTO negotiations and free trade agreements will reduce tariffs.

4. Such abuses led to the Foreign Personal Holding Company legislation of 1938, which served as a template for Subpart F in 1962.

doing business abroad. Since the Revenue Act of 1962, the international provisions of successive US tax acts have sought to balance three conflicting goals while simultaneously closing loopholes. First, Congress wants to ensure that its taxes do not place US-based multinational enterprises (MNEs) at a competitive disadvantage compared to foreign-based multinationals. US-based MNEs are good for the American economy: They typically pay better wages in the United States (Richardson and Lewis 2001), grow their US payrolls faster (Hanson, Mataloni, and Slaughter 2003; Slaughter 2004), and export more than other US firms (Richardson and Lewis 2001). At the same time, US lawmakers are uncomfortable when they detect tax motives for "runaway plants" (the 1974 buzzwords) or "offshore outsourcing" (the 2004 phrase). Congressional anxiety translates into periodic calls to level the playing field between the taxation of corporate income earned at home and abroad, regardless of the competitive consequences to US-based MNEs.[5] Third, the US Treasury has historically retreated from initiatives that might spark a tax battle with US trade and investment partners. This partly reflects the Westphalian ideal that each country should be sovereign in tax matters. It also reflects concern that if the United States introduces taxes that harm foreign firms doing business within its borders, other countries might retaliate by taxing US firms doing business abroad. Finally, it reflects the fact that other foreign policy issues usually trump tax disputes.[6]

None of the three goals can be totally achieved without trampling on one or both of the others. The pragmatic answer has been an ever more complex tax code that attempts to balance all three goals. In evaluating whether substantial revenue can be raised from the foreign operations of US-based MNEs, two basic propositions must be kept in mind.

The first is that taxes on the foreign income of US-based MNEs have never been, and are unlikely to become, a large source of revenue for the US Treasury, unless the United States abandons any pretense to competitive tax equality between US-based and foreign-based MNEs. In 2000, US-based multinationals took in about $200 billion in dividends, interest, and royalties from foreign subsidiaries (before foreign taxes), netting $151 billion after paying foreign corporate taxes. The tentative US federal tax liability on this, calculated at a 30 percent average effective rate, was about $60 billion. After subtracting $49 billion in credits for foreign

5. In an effort to create political wind behind their cause, advocates of the level playing field sometimes equate lower taxes abroad in all circumstances to tax loopholes and tax abuse. This characterization is obviously overdrawn and has not been effective in recent years.

6. Hence the United States retreated when it lost the domestic international sales corporation (DISC) and foreign sales corporation (FSC) cases (Hufbauer 2002). Moreover, US bilateral tax treaties are negotiated to smooth rough edges at the interface of tax systems, not to converge systems or rates.

Box 3.1 Senator Kerry's plan for taxing US multinationals

In the 2004 presidential campaign, Senator John F. Kerry proposed to tilt the balance somewhat against US firms' competitive position of production abroad, and somewhat toward popular fears about runaway plants and offshore outsourcing. The Kerry plan was designed to be revenue-neutral, reducing corporate taxes on operations at home by increasing the corporate tax burden on operations abroad.

As its central feature, the Kerry plan would have significantly limited "deferral," the tax practice whereby profits earned by foreign subsidiaries[1] are not taxed until they are repatriated as dividends to the US parent company.[2] Kerry estimated that annual US revenue gain would be $12 billion.[3] This would be used to reduce the US statutory corporate tax rate from 35 percent to 33.25 percent. In addition, Kerry proposed a time-limited window for US-based multinational enterprises (MNEs) to repatriate foreign profits at a special tax rate of 10 percent.

Kerry emphasized that US firms often pay higher corporate taxes than their competitors abroad (as shown in tables 4.2, 4.3, and 4.4 in the next chapter) and that some MNEs engage in tax abuse. The location and abuse problems that captured Kerry's attention are a consequence of differences in national corporate tax practices in an open world economy. Firms are not only free to produce in one location and sell in another, but they also have some latitude in choosing where profits are booked. Other things being equal, an MNE will prefer to produce or book profits in a country with a low tax rate rather than to a country with a high tax rate.

It is worth noting that the American Jobs Creation Act of 2004 achieved some of Kerry's goals. The corporate tax rate on "manufacturing" (broadly defined) will be lowered to 32 percent, and a one-year window was opened for US-based MNEs to repatriate foreign profits at a tax rate of 5.25 percent, further reduced by allowable foreign tax credits.

---

1. In tax parlance, these subsidiaries are known as controlled foreign corporations (CFCs), when the US parent firm controls, directly and indirectly, more than 50 percent of voting shares or, alternatively, holds more than 50 percent of the total value of all classes of shares.

2. In 1962, Subpart F was added to the Internal Revenue Code to end deferral for "passive" CFC income such as interest, dividends, and royalties, when lodged in "tax haven" countries (e.g., Bermuda, Netherlands Antilles, and the Cayman Islands). Since its enactment, Subpart F has been progressively expanded (especially with respect to the definition of passive income), and is now exceedingly complex; see Hufbauer and van Rooij (1992). The Kerry plan would extend Subpart F to all CFC profits, except those earned by production and sale within the CFC's own country.

3. We believe the potential revenue is exaggerated. See Hufbauer and Grieco (2004).

corporate taxes, net revenue was not more than $11 billion—around 0.1 percent of GDP—and probably less.[7]

The US Treasury estimates that completely ending deferral might raise an additional $10.2 billion in 2008; the Joint Committee on Taxation puts the number at only $5.4 billion.[8] Based on these figures, the complete end of deferral, going beyond the proposals advanced by Senator John F. Kerry (box 3.1), might raise between $5 billion and $10 billion annually. For affected MNEs, this would be a large sum, with potentially serious adverse consequences on their competitive position in markets abroad. However, compared with the US fiscal deficit, which was $413 billion in 2004, an additional $5 to $10 billion annually is rather modest.

The second basic proposition is that the competitiveness of US firms in tax terms depends far more on how the United States taxes business activity at home than how it changes the taxation of US business activity abroad. The reason is straightforward: Any corporate tax regime that Congress imposes on the foreign activity of US-based MNEs will have comparatively little impact on the corporate tax rates imposed on total production outside the United States, given that the United States has little control over the corporate tax rates levied by other countries. By contrast, the federal government is the most significant arbiter of the tax environment within the United States, for both US- and foreign-based firms.

Comparing the worldwide sales of US- and foreign-based MNEs illustrates this simple but fundamental point. In 2001, measured by total foreign assets, only 25 of the world's 100 largest MNEs were based in the United States; these 25 firms accounted for only 34 percent of total sales of the top 100 MNEs (UNCTAD 2003). Just considering giant multinational corporations, even if US-based MNEs paid US taxes on all their operations at US rates, the preponderance of world production would not be taxed at similar rates. When smaller MNEs and other firms are taken into consideration, US-based MNE share of production outside US territory shrinks much further. Thus, aligning taxes on what US firms produce at home and what they produce abroad would do little or nothing to level total taxes on production abroad and production in the United States. However, to the extent that the US government wants production at home to compete effectively with production abroad, it can tailor its domestic tax regime to enhance US competitiveness relative to the prevailing tax environment abroad.

---

7. These very rough estimates are based on figures from US Census (2003) and IRS (2004). Analysis by Grubert and Mutti (2001) suggests that net US tax revenue may be considerably less than $11 billion.

8. See OMB (2004, Analytical Perspectives, table 6-1) and JCT (2003, table 1).

Energy Taxes

In other OECD countries, energy taxes have both raised revenue and promoted conservation—the dual roles advocated by the Clinton administration when it briefly floated the possibility of a British thermal unit (BTU) tax. But styles of energy taxation differ enormously within the OECD. The United Kingdom raises 2.2 percent of GDP through a single hydrocarbon excise tax. Japan collects an array of separate taxes on petroleum, gasoline, electricity, natural gas, aviation fuel, and other energy sources, which combined amount to 1.0 percent of GDP. The United States collects about 0.6 percent of GDP in fuel taxes, about half of that by state and local governments (calculated using data from OECD 2003). The federal government could possibly boost its collection of energy taxes by as much as 1.0 percent of GDP. However, the likelihood of high oil and energy prices for the indefinite future makes additional energy taxes even tougher to sell politically now than in the 1990s, when the Clinton administration tried and failed (Verleger 2005). In our judgment, energy taxes will help but cannot contribute decisively to closing the gap in the federal budget.[9]

Value-Added Taxes

Over the past 40 years, more governments worldwide have turned to broad-based consumption taxes to pay for public needs, particularly entitlement programs. Until the 1960s, VATs were relatively unknown; they were introduced in France in 1954, Brazil and Denmark in 1967, and Germany in 1968.[10] By 2004, however, only the United States among OECD countries did not have a VAT or its close cousin, the goods and services tax (GST). Table 3.1 summarizes current data on standard VAT rates and collections, both as a percentage of total tax revenue and as a percentage of GDP. VAT revenues typically take in 4 to 8 percent of GDP in OECD countries.

---

9. Federal excise taxes have been around since the founding of the Republic—first alcohol, later tobacco. Once in place, they tend to stay, but new ones are seldom added and specific rates are raised at infrequent intervals. We think this chapter of tax history will be repeated in the energy arena.

10. In Europe, VAT was introduced to replace the turnover tax, which taxed a percentage of all business-to-business and business-to-consumer transactions. The cascading effect of a turnover tax—taxing the same production each time it is sold as an input to another firm—clearly distorts business incentives toward vertical integration and against specialization. The European Community adopted VAT as its common form of sales tax in the late 1960s both to end this distortion and to facilitate accurate border adjustments between member states.

Table 3.1 Current VAT and VAT-variant rates

Country	Year introduced	Basic VAT rate[a] (percent)	VAT revenue[b]	
			Percent of total revenue	Percent of GDP
Developed countries				
Australia	2000	10.0	12.8	3.9
Canada	1991	7.0	7.2	2.5
Denmark	1967	25.0	19.5	9.7
Finland	1994	22.0	17.8	8.2
France[c]	1954	20.6	16.2	7.3
Germany	1968	16.0	18.2	6.7
Iceland	1990	24.5	25.9	9.4
Ireland	1972	21.0	23.0	6.9
Italy	1973	19.0	14.8	6.2
Japan	1989	5.0	8.9	2.4
Netherlands	1969	17.5	18.8	7.4
New Zealand	1986	12.5	25.7	8.7
Norway	1970	23.0	18.8	8.1
South Korea	1977	10.0	17.2	4.7
Spain	1986	16.0	17.1	6.0
United Kingdom	1973	17.5	18.3	6.8
Large emerging markets				
Brazil	1967	20.5	31.2	8.6
China	1994	17.0	27.9	3.9
Indonesia	1985	10.0	19.3	2.7
Mexico	1980	15.0	19.1	3.6
Russia	1992	20.0	36.0	4.8
South Africa	1991	14.0	24.0	5.9

a. Listed rates are tax-exclusive basic rates. Many countries have a tiered-rate structure taxing certain goods, such as food and medicine, at lower rates. All or almost all have a zero rate for exports.
b. For most recent year available (2001 for OECD countries).
c. Ebrill et al. (2001) indicate that France introduced the VAT in 1968. However, other sources, including CFE (2004), state that the French VAT was first introduced in 1954, while the entire European Community adopted the VAT in 1968.

Sources: Ebrill et al. (2001), OECD (2003).

There are two main methods to assess VATs: the credit-invoice method, practiced by most countries, and the subtraction method, used by Japan and, through a variant, Italy. The credit-invoice VAT is akin to a transaction tax, such as the retail sales tax (RST). Each sale right up to the final consumer is taxed at the assigned VAT rate. The selling firm can use a trail of invoices to claim credits for whatever VAT it paid on eligible purchased inputs. The subtraction-method VAT is akin to an entity tax, such as the corporate income tax. Firms deduct all eligible purchased

inputs from all qualified receipts and pay tax at the VAT rate on the difference. In other words, the difference between qualified receipts and eligible deductions is the tax base. Unlike the credit-invoice VAT, there is no credit for taxes paid on inputs and no trail of invoices. However, the firm must still document its receipts and allowable deductions.

Practitioners of each method can choose among several permutations for deferring or disallowing tax credits and deductions, exempting sales and receipts, or differing tax rates. Under the credit-invoice method, a credit can be allowed immediately for VAT paid on the total cost of investment outlays, or the credit can be prorated over the useful life of the investment. Under the subtraction method, similar choices can be expressed by prorating deductions for investment outlays over a period of years.

Over time, countries have found relatively simple ways to limit and extend credits and exemptions to their VATs for goods traded both within their borders and internationally. Some countries disallow credits or deductions for items that lend themselves to private consumption under the guise of business activities, such as automobiles and vacation resorts. To adjust VATs at the border for imports, neither a credit nor a deduction is allowed for a VAT paid to another jurisdiction on inputs from abroad. To adjust VATs at the border for exports, sales are taxed at a rate of zero (called zero-rating).[11] Food, medical care, books, and education are often considered "merit goods" and are therefore exempt or zero-rated.

As shown in table 3.1, many countries maintain VAT rates in excess of 15 percent, making VAT a major source of revenue. VAT's advantage lies in a broad base and relative ease of administration. Businesses serve as collection points, and a paper trail of tax invoices or business receipts between firms limits tax fraud.

Because of VAT's broad base, it might be expected that VAT revenues would keep pace with GDP, or in more formal terms, that VAT's revenue elasticity with respect to nominal GDP would be approximately unity. That is, controlling for other changes, a 1 percent rise in nominal GDP would yield a 1 percent rise in VAT revenue. However, using a regression model that controlled for individual country effects, we found only a weak relationship between VAT revenues and nominal GDP. With OECD data from 1970 to 2000 for six European VAT countries, we found that total VAT revenue, both national and local, had an elasticity of only 0.03 with respect to GDP. In other words, a 10 percent rise in GDP yielded

11. By documenting a VAT sale in an amount equal to the export value, zero-rating permits an exporter to avoid tax on the entire value of the good. The exporting firm collects a rebate for VAT paid on inputs, and pays no tax on the export sale. If exports were merely exempted from VAT, the VAT chain would be broken, and the exporting firm would only escape tax arising from its own value-added contribution (Ebrill et al. 2001). For complete border adjustment, VAT should thus be zero-rated on exports.

only a 0.3 percent rise in VAT revenue.[12] The coefficient is so small that we are unable to reject the hypothesis that total VAT revenue is independent of GDP. On the other hand, the term in the model following changes over time indicated that VAT revenue for these countries rose at a robust rate of 9.9 percent per year, controlling for national income.[13]

At first glance, these results are counterintuitive, as they indicate that VAT revenue is more strongly tied to time than nominal GDP.[14] One possible explanation is governments' tendency to increase VAT rates over time: Assuming that Laffer curve effects are weak, rate increases will have the direct effect of increasing VAT revenue, and only a rather mild indirect effect on reducing GDP. Another possible explanation is that GDP growth in Europe has been concentrated on sectors not covered by VAT—notably the public sector and lightly taxed services.[15]

Among the OECD countries, only European economies have used VAT for long enough to be included in the model, and due to these data restrictions, we are reluctant to predict that their VAT experiences would be replicated in the United States. However, the model does support VAT critics who warn that VAT, once installed, almost automatically tends to rise over time. On the other hand, if rising entitlement expenditures will require rising business taxes, it may be seen as a blessing rather than a curse as the need to avert fiscal crisis grows.

National Retail Sales Taxes

Like VAT, the NRST is a broad-based tax on consumption. However, its political pedigree differs substantially from that of VAT. While VAT is

---

12. The countries included were France, Germany, Ireland, Norway, Sweden, and the United Kingdom. Observations were taken at five-year intervals. In 1970, no observation was taken for the United Kingdom or Ireland, as these countries had not yet instituted VAT. A total of 40 observations were used.

13. The dependent variable was the log of VAT revenue; the independent variables were the log of nominal GDP, a time trend, and country dummies. The time trend coefficient is statistically significant with a confidence level above 99 percent. The adjusted R-squared of the model was 0.95.

14. When the time trend was removed from the model, the estimated revenue elasticity rose: The new estimate indicated that a 10 percent rise in nominal GDP would yield a 6.2 percent rise in VAT revenue. Even so, the hypothesis that the revenue elasticity of VAT with respect to national income equals unity is rejected with 95 percent confidence. The adjusted R-squared for the model without the time trend is 0.71. The difference between the explanatory power of this model and the model when the time trend is included (adjusted R-squared of 0.95) appears to support the premise that VAT revenue is more closely tied to time than nominal GDP.

15. While services tend to be taxed at concessional rates under VAT systems, they are more likely to be taxed under VAT than RST systems.

widely used overseas, the NRST concept comes from US states. Mississippi introduced the first state RST in 1932, and the format quickly became a staple of state revenue regimes.[16] Rather than taxing value added at each stage of production, the RST is assessed on the full value of goods sold in just the final transaction, sales to household consumers. Since the final cost of a good is equal to the sum of the value added in each stage of production, VAT and the RST have a similar economic impact. In fact, as explained in appendix A, if both are implemented in their "pure" form—that is, with perfectly uniform rates across all goods and services and primary factors—their effects are practically identical.

There are, however, several fundamental differences in the way the two taxes are assessed and the way the public perceives them. The RST is only imposed on final goods sold to households in retail transactions. Any final good that is not part of a retail transaction, through, say, avoidance or evasion, slips the tax net. On the other hand, there is no need for the daisy chain of tax invoices from one supplier to another that the credit-invoice VAT requires. There is also no need for businesses to document their deductions, as they must for the corporate income tax and the subtraction-method VAT.

Although the RST is designed to tax final services, such as health care, education, and legal and financial services, it has seldom been extended to them comprehensively.[17] While all states that impose an RST include some services, none attempt to tax a wide range of them (FTA 1997). Florida attempted to expand its RST to many (though still not all) services in 1987,[18] but political backlash forced the state to repeal the measure six months after its introduction.[19]

Since all goods under the RST are taxed at the point of sale, border adjustment is implicit; there is no need to rebate the tax on exports or impose it on imports. The RST simply does not cover exports, and is collected on any import that is eventually retailed to households. Many

16. Alaska, Delaware, Montana, and Oregon have no sales tax. Hawaii, New Mexico, and South Dakota tax gross business receipts. The gross receipts tax is equivalent to a turnover tax, not an RST, since intermediate goods are included in the base (Siegfried and Smith 1991). Michigan and New Hampshire employ VAT-type taxes (Hufbauer and Gabyzon 1996, 17).

17. Hawaii, New Mexico, and South Dakota do successfully tax services, but this is accomplished through a tax on gross receipts, which is akin to a turnover tax, rather than an RST.

18. Medical, health, educational, and social services were exempted. Construction and many professional services, such as accounting and legal services, were included, and this sparked the backlash.

19. The tax was opposed by a politically savvy coalition composed largely of lawyers, realtors, homebuilders, and advertisers. Florida replaced the RST on all services at a rate of 5 percent by raising the RST on goods by 1 percent. According to Siegfried and Smith (1991), the repeal actually made Florida's tax system more regressive.

states attempt to collect a "use tax" on goods purchased by local residents outside the state for final consumption within the state's borders, but compliance with this tax is dismal.[20]

Like VAT, the RST can be tinkered with to lower or eliminate rates for merit goods such as food and medicine. Such adjustments are advocated to redress the regressive impact of VAT or the RST, though other and better ways exist to do this.[21] A grant can be issued to low-income (or all) households that effectively eliminates the RST on the first tranche of consumption expenditure. For example, if there is a 10 percent RST on goods and services in place, each household can receive a grant of $500 to make the first $5,000 of consumption essentially tax-free. Alternatively, low-income households can receive income tax relief through exemptions or refundable credits. Regardless of how the regressivity of the RST is offset—by cash grants, income tax relief, or some other method—the effect on the RST rate is the same: The tax rate must be raised to collect enough money to pay for the rebate. Our analysis skirts the contentious political issue of how the rebate might be distributed.

State RST rates are generally in the range of 5 to 7 percent. Significant enforcement questions would arise if NRST rates were to exceed 10 percent, on top of current state sales taxes. Retail business would continue to collect taxes, but a combined state RST and federal NRST above 15 percent would dramatically increase the temptation to evade them through obvious loopholes, such as "nonretail" sales to households via pass-through business entities that are exempt from sales tax.

To address the enforcement problem, NRST advocates have suggested paying "commissions" to both state governments and retail outlets.[22] We question whether the federal government can delegate its tax collecting function to the states and still maintain its dominant role in national politics. The temptation on the part of each state to underreport retail sales

---

20. Manzi (2003, table 2) found that the participation rate is 1.49 percent among 14 of the 16 states that explicitly provide a line for use tax liability on their income tax returns. It is worth noting that, in the 1990s, Maine found a way to make people comply with the use tax: it imposed a use tax liability of 0.04 percent of income if no use tax liability was reported (i.e., if the use tax line was left blank on state income returns). This practice was discontinued in 1999. Since then, use tax "participation" has plummeted, yet Maine still leads the nation in use tax collection per capita—83 cents. The national government would have an advantage in collecting use taxes over state governments, since returning tourists must clear customs when entering the country. Imposing use taxes on international services purchased electronically would pose an enforcement nightmare.

21. Because this approach identifies merit goods rather than low-income purchasers, a portion of the revenue lost through low or zero rates will flow to high-income households. This is not an efficient way to address regressivity, but it may be more politically popular than targeting tax relief to low-income households.

22. Tauzin (1998, 105), for example, advocates that 1 percent of the tax collected be paid to the states, and 0.5 percent be paid to the retail outlet or other collection points.

and undercollect federal taxes would be enormous.[23] In our view, something like the IRS, perhaps with a new name and different organization, would be required to ensure the flow of federal revenue under an NRST.

Using OECD data from 1965 to 2000, we modeled the effect of changes in national income on RST revenue (both local and national) on the basis of the experience of six countries.[24] In contrast to VAT, RST revenue elasticity of income is estimated at slightly above unity: A 10 percent increase in nominal GDP increased RST revenue by 10.5 percent.[25] The time trend of RST revenue is positive and statistically significant, but small, as RST revenue tended to increase by only 1.2 percent per year, controlling for income growth.[26]

These results suggest that as a share of GDP, RST revenue is likely to remain roughly constant. It tends to keep pace with increases in GDP, despite concerns about base erosion, but does not seem likely to grow independently of an increase in income. This possibly reflects the great political difficulty of raising RST rates, or bringing new goods and services within the tax net. As with our VAT model of revenue elasticity, it is important to put these results in their proper context. Many scholars would argue that a unit revenue elasticity would not hold for significantly higher RST rates than those imposed by the six countries analyzed in the model. Iceland collected the largest portion of GDP through the sales tax—7.4 percent—but all other countries in the model collected significantly less, between 1.8 and 3.9 percent of GDP. The United States collected 1.9 percent of GDP on average over the period.

If, to avert a fiscal crisis, US business firms will be required to pay substantially higher taxes, the crucial question is how revenue can be raised in a politically acceptable manner doing the least economic damage. The next chapter evaluates the corporate income tax against the NRST and VAT with a view both to their economic costs and political acceptability.

---

23. Under the Articles of Confederation, the states were supposed to remit revenue to the federal government, which was denied the power to collect taxes. That experiment in delegation obviously failed.

24. The countries used in this study were Australia, Canada, Iceland, New Zealand, Switzerland, and the United States. Observations were taken at five-year intervals, and only included when a VAT was not imposed (all but the United States have replaced sales tax with a VAT-like tax). There were a total of 36 observations. Adjusted R-squared for this model is 0.99.

25. Statistically, this result is highly significant. We are unable to reject the hypothesis that the NRST revenue elasticity of income is equal to unity.

26. Nominal data were used, so this rate includes the rate of inflation. Thus, the real rate of RST revenue growth over time is probably negative. When the time trend is dropped from the model, there is very little effect on the estimated revenue elasticity.