CHAPTER 5

BUSINESS TAX REFORM AND ECONOMIC GROWTH

The U.S. tax system, for both individuals and businesses, is overdue for reform. On the individual side, the system should do more to encourage and reward work, increase the accumulation of human capital, and ensure that economic gains are widely shared. The necessary reforms should also make the system simpler and more efficient and should reduce the deficit. Business tax reform should increase productivity, output, and living standards—complementing other efforts to improve the productivity of the U.S. economy, like additional investments in infrastructure. The focus of this chapter is business tax reform; individual reforms are discussed in Box 5-3.

The U.S. corporate income tax combines the highest statutory rate among advanced economies with a base narrowed by loopholes, tax expenditures, and tax planning strategies. In addition to the corporate income tax, the United States operates a second, parallel system of business taxation for pass-through entities—businesses whose earnings are taxed on the owners' income tax returns rather than a separate entity-level return. The U.S. system of business taxation allows some companies to avoid significant tax liability, while others pay tax at a high rate. It distorts important economic decisions about where to produce, how to finance investments, and what industries and assets to invest in. The system is also too complicated, and that complexity hurts America's small businesses and allows large corporations to reduce their tax liability by shifting profits around the globe.

The current system of business taxation reduces productivity, output, and wages through its impact on the quantity of investment, the location of production and profits, the means of financing new investments, and the allocation of investment across assets and industries. The high statutory rate and complicated rules for taxing income in different countries discourage locating highly profitable investments in the United States. Reduced investment in turn reduces U.S. productivity and output. Loopholes that allow multinational firms to shift profits to low-tax jurisdictions abroad require

higher taxes on domestic businesses and families. The significant tax preference for debt encourages excessive borrowing, which in turn increases bankruptcy costs and financial fragility, and thus reduces macroeconomic stability. Tax expenditures that privilege certain industries and assets encourage investment in low-return, lightly taxed projects while high-return, heavily taxed projects are ignored.

Business tax reform can increase the quantity and quality of investment in the United States by reducing the economic distortions caused by disparities in tax rates across jurisdictions, across industries, across assets, across means of financing, and across different forms of business. The quality of investment refers, not to the dollar value of investment expenditure, but to the kinds of investments American firms make. The quality of investment increases when high-return projects are prioritized over low-return projects. Quality increases when businesses choose to finance their investments using the financial products that best share risk, and not those that generate the largest tax savings. And the quality of investment increases when firms make decisions to invest in one country instead of another based on considerations such as the quality of the workforce, the strength of economic institutions, and the location of customers, rather than where the tax rates are lowest.

Tax reform is not just about removing policy-induced distortions that lead to inefficient decisions by businesses. In some carefully delineated cases, tax policy can play a role in remedying distortions fundamental to private markets that lead firms to, for example, underinvest in research or clean energy because the firm does not capture the full economy-wide benefits of their expenditures. The quality of investment also increases when businesses recognize the benefits and costs their investments create for others, such as the spillovers associated with new research insights or the harm associated with polluting activities.

Improvements in both the quantity and quality of investment increase productivity and, in doing so, increase American living standards. Since 1948, increases in productivity have more than quadrupled the amount of output each American worker generates per hour worked. If a worker has access to the most useful equipment, not the equipment that receives the best tax treatment, she or he will be able to produce more per hour worked. If firms pursue all research for which the benefits exceed the costs, workers will then be able to leverage those new innovations to increase output.

The President's approach to business tax reform reduces disparities in tax rates across jurisdictions, across industries, across assets, across means of financing, and across different forms of business. In doing so, it encourages domestic investment and increases the quality of investment

and productivity. Specifically, the approach broadens the tax base, lowers the top corporate rate, and reforms the taxation of income earned abroad. It moderates the incentives to shift profits to tax havens and encourages high-return domestic investment. This approach significantly simplifies the tax system for small businesses and corrects for externalities—benefits and costs that firms' actions have on unrelated individuals. In addition, the one-time revenue that is generated by reform is used to fund a substantial, six-year increase in public infrastructure investment.

This chapter reviews the role of productivity in long-run growth and summarizes the international context for business tax reform. It then describes the President's approach to business tax reform and examines how that approach can increase productivity and output. The chapter concludes with a consideration of alternative approaches to reform.

The Sources of Productivity Growth

Long-term growth in output comes from two sources: increases in the number of hours worked and increases in the output per hour worked, otherwise known as labor productivity. Large changes in the quantity of labor are typically driven by demographic forces such as births, deaths, and immigration. For example, the movement of the baby boom generation into retirement will be a major driver of changes in the quantity of labor in the next decade (Council of Economic Advisers 2014). However, the longer-term trend in participation will also be affected by Americans' personal choices about family, work, and retirement. Chapter 3 analyzes trend changes in participation as well as other labor market challenges that may affect participation decisions. Chapter 4 examines policies affecting participation among working families in particular, including paid leave and access to more flexible work environments.

Labor productivity depends on three factors: labor quality, the amount of capital workers have at their disposal, and total factor productivity (TFP). Labor quality reflects worker characteristics such as education and experience, which generally allow workers to produce more output per hour worked. The capital stock is the land, buildings, machinery, and equipment workers have at their disposal. Increases in the quantity of capital each worker has at his or her disposal, referred to as capital deepening, also boost output per hour worked. Lastly, TFP determines the amount of output that can be produced from a given amount of capital and labor. TFP includes things like the quality of technology, which allows workers to produce more with less, as well as other difficult to measure aspects of productivity such as the quality of the match between a worker and his or her job and workers'

ability to focus on their work. Put differently, growth in TFP is any increase in output not accounted for by an increase in inputs. TFP increases with scientific breakthroughs, organizational innovations, the development of new applications for existing technologies, and any efficiency improvements not uniquely associated with a single input. Figure 5-1 shows how each of these three factors has contributed to productivity growth over the last 60 years, splitting that growth into the three broad periods discussed in Chapter 1.[1]

Figure 5-1 contains three important lessons:

Productivity has increased tremendously. On average, workers in 2013 could produce more than four times as much as their counterparts more than 60 years ago. This four-fold improvement reflects the cumulative effect of annual productivity growth averaging 2.3 percent each year since 1948. Roughly one-half of the increase in productivity is due to higher TFP, about 40 percent to workers today having more capital at their disposal, and about 10 percent to increased education and training.

Annual productivity growth varied substantially over the last 60 years. Productivity growth was especially rapid in the post-war decades, slowed in the 1970s, and sped up again in the 1990s. As noted in Chapter 1, slower productivity growth since 1973 has had a very large impact on household incomes—in fact, if the 1948 to 1973 productivity growth rate had continued, incomes would have been 58 percent higher in 2013.

Variation in the growth rate of productivity is almost entirely due to variation in the growth rate of TFP. The increase in productivity due to capital deepening and improvements in labor quality varied only modestly across the three periods shown in Figure 5-1. However, variations in the growth rate of TFP were large and economically meaningful. The growth rate of TFP between 1948 and 1973, at its highest, was more than four times the growth rate of TFP between 1973 and 1995, at its lowest.

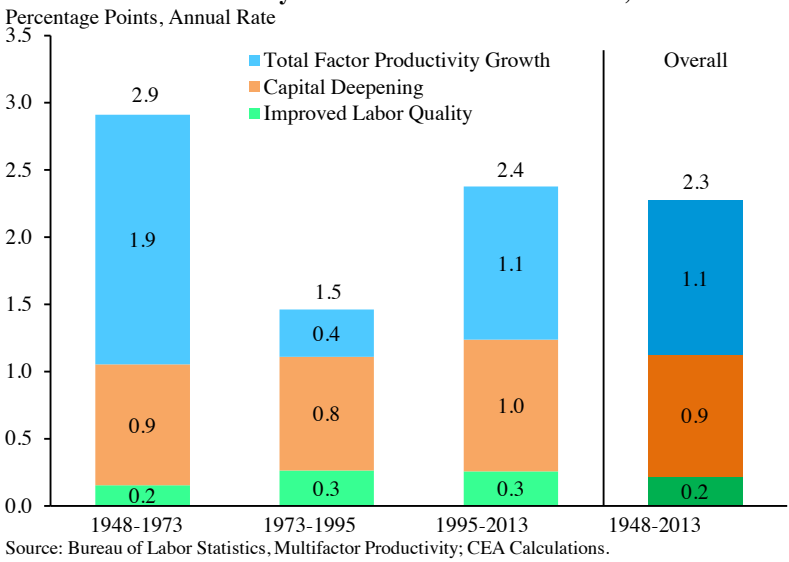
The Historical and International Context for Business Tax Reform

Since the last major reform of the U.S. system of business taxation in 1986, the international environment has changed significantly. In the early 1980s, the top U.S. statutory corporate income tax rate was close to the average for the Organisation for Economic Cooperation and Development (OECD), an association of developed, market economies (Figure 5-2). The United States cut the corporate tax rate well below the OECD average in

[1] The estimates presented in Figure 5-1 differ slightly from those presented in Chapter 1 as they rely on a different data series produced by the Bureau of Labor Statistics (BLS).

Figure 5-1

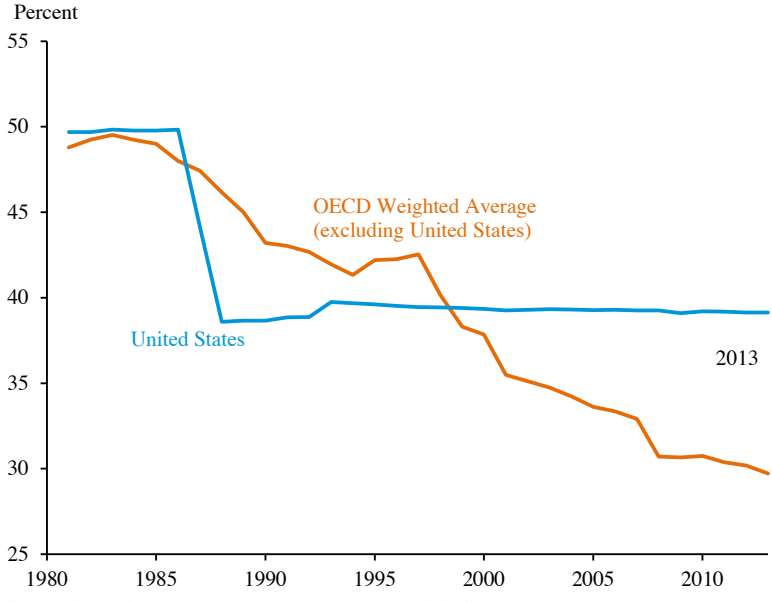
Sources of Productivity Growth Over Selected Periods, 1948–2013



Source: Bureau of Labor Statistics, Multifactor Productivity; CEA Calculations.

Figure 5-2

Statutory Corporate Tax Rates in the U.S. and OECD, 1981–2013



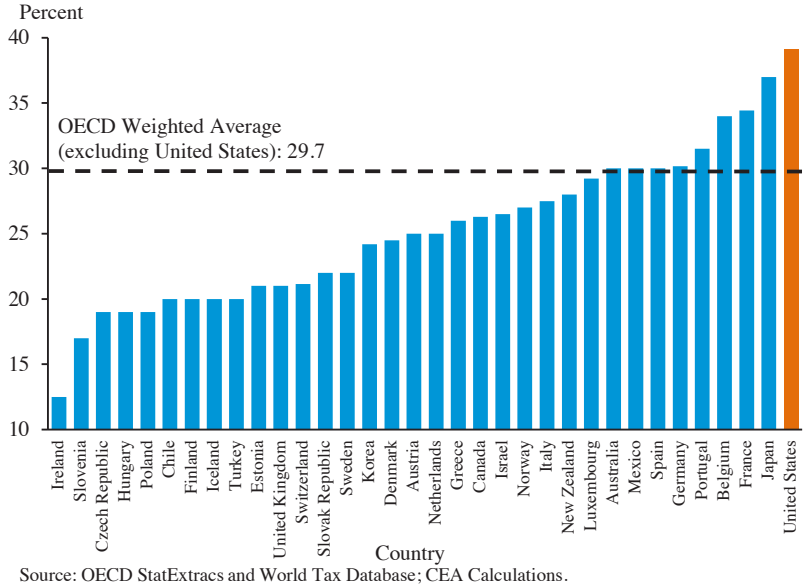
Source: OECD StatExtracts and World Tax Database; CEA Calculations.

1986, but other countries soon followed suit and, by 2014, the U.S. rate was roughly 10 percentage points above the OECD average (Figure 5-3).

This section focuses on international comparisons of corporate income taxes, as the share of large businesses accounted for by pass-through entities in the United States is unusually high relative to the share in other countries; also, the U.S. pass-through regime itself is somewhat atypical (Treasury 2007). The rates presented reflect corporate income taxes imposed by both the central government and sub-central government. In the United States, the Federal statutory corporate tax rate is 35 percent and, after accounting for their deductibility from Federal taxes, State corporate taxes increase the rate by 4 percent.

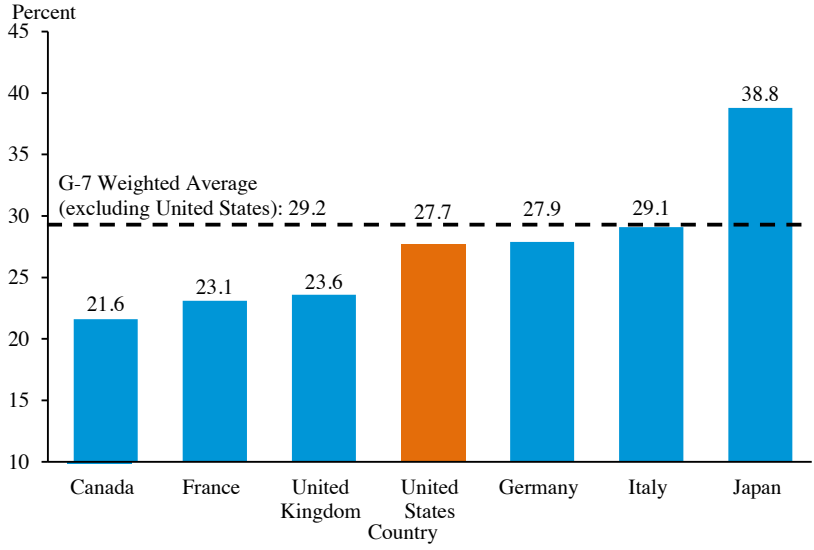
While the top U.S. statutory corporate income tax rate is the highest among OECD economies, other measures of corporate tax rates show a different picture. The effective tax rate, which accounts for differences in the definition of the taxable income across countries, is slightly below the average for the other large, advanced economies of the G-7 (Figure 5-4). The effective tax rate is the ratio of corporate taxes paid to pre-tax income. On average, for the years 2006 to 2009, corporations headquartered in the United States paid an effective tax rate, aggregated across all countries, of 27.7 percent. The average rate for the G-7 over this period was 29.2 percent.

Figure 5-3
Statutory Corporate Income Tax Rates, 2014



Source: OECD StatExtracs and World Tax Database; CEA Calculations.

Figure 5-4
Effective Tax Rates in the G-7, 2006–2009



Source: PwC and Business Roundtable (2011); OECD StatExtracts; CEA Calculations.

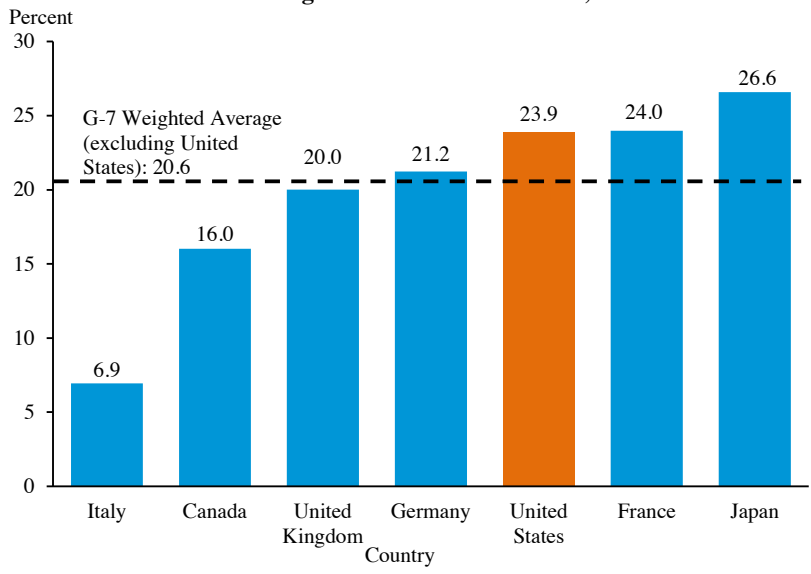
As with the statutory corporate rate, effective tax rates varied substantially across countries from a low of 21.6 percent for Canada to a high of 38.8 percent for Japan. Note, however, that several countries have enacted significant corporate tax legislation since 2006, including Canada, Germany, Japan, and the United Kingdom.

Similarly, the U.S. effective marginal tax rate is only modestly above the average for the other countries of the G-7 (Figure 5-5). The effective marginal tax rate is the tax rate that would apply to a hypothetical project earning the minimum required return sufficient to obtain financing. The U.S. effective marginal tax rate on a domestic investment in 2014 was 23.9 percent, while the average for the other G-7 countries was 20.6 percent. Importantly, the rates presented in Figure 5-5 exclude the effects of temporary policies. For example, the United States has offered a temporary bonus depreciation provision that allows firms to deduct their investment expenses more rapidly in every year since 2008, which is excluded from these estimates. Incorporating bonus depreciation into the analysis would reduce the estimated effective marginal tax rate on new investment.

Each of these tax rates—the statutory rate, the effective rate, and the effective marginal rate—are relevant for different economic decisions:

The *statutory rate* is the amount of additional tax paid on an additional dollar of profit without any accompanying changes in deductions for business expenses. It thus captures the relevant financial incentive for

Figure 5-5
Effective Marginal Tax Rates in the G-7, 2014



Source: U.S. Department of the Treasury; OECD StatExtracts; CEA Calculations.

decisions about tax planning strategies that shift profits between countries without changes in the underlying economic activity. Every dollar of profit moved from the United States, where it is subject to a 39-percent statutory rate, to a country with, for example, a 20-percent statutory rate would reduce corporate taxes by 19 cents.

The *effective rate* is the total amount of tax paid as a share of pre-tax income. If a company could relocate the entirety of its operations and income from one country to another, the effective tax rate would be the relevant one for making such a decision. However, because firms operate and pay corporate taxes in multiple countries, effective tax rates would generally be computed for, and apply to, decisions about locating particular projects or investments in different countries. The effective tax rate for these discrete decisions is known as the *effective average tax rate* and differs for each project depending on its precise characteristics.

The *effective marginal rate* is the effective rate for a project that generates the minimum return sufficient to obtain financing under prevailing market conditions. It is the relevant tax rate for firms deciding precisely when to stop scaling up their investment spending under the assumption that each increase in spending generates a slightly smaller return. Facing such a decision, firms will stop increasing spending when the last dollar spent generates a return just large enough to first pay tax at the effective marginal rate and then to pay investors the required return. This last dollar

of investment is known as the marginal dollar of investment, leading to the label effective marginal rate.

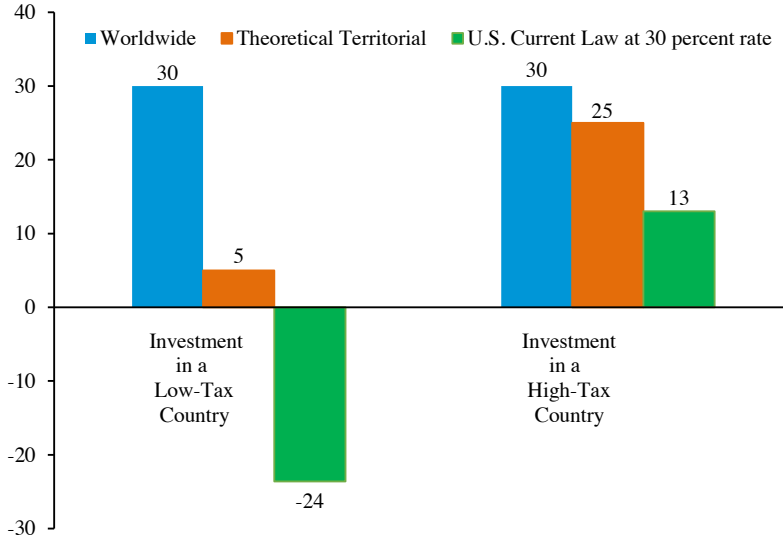
The corporate income tax affects all of these decisions simultaneously, and the analysis of any potential approach to tax reform must consider its impact on each of them. Tax reform that seeks lower rates without reducing revenue—reform financed by closing loopholes and broadening the tax base—must prioritize between lowering the statutory rate, the effective average rate, and the effective marginal rate, as lowering any one rate reduces revenue.

The U.S. corporate income tax is often described as a tax on worldwide income and therefore out of step with the territorial systems used elsewhere. A pure worldwide system would tax all income earned anywhere in the world; in contrast, a pure territorial system would exempt all foreign income from taxation. In practice, all systems—including the U.S. corporate income tax—reflect some combination of worldwide and territorial concepts. While U.S. corporations owe tax on income earned anywhere in the world, this tax is only due if, and when, foreign earnings are paid to a U.S. parent company by its foreign subsidiaries. Taxation of foreign earnings can be deferred indefinitely by keeping the earnings in foreign subsidiaries. This aspect of the U.S. system is known as deferral and means that, in practice, the U.S. approach to corporate taxation is far from that of a pure worldwide system. (For the role of deferral in encouraging the recent wave of corporate inversions, see Box 5-1.)

Incorporating deferral and other complex rules for the taxation of U.S. multinationals into the analysis, simulations by Rosanne Altshuler and Harry Grubert (2013) illustrate how far from a worldwide system the U.S. corporate income tax is. Their analysis assumes a statutory corporate rate of 30 percent, but otherwise matches the features of current U.S. law.[2] The simulations show that the effective marginal tax rate on investments by a hypothetical U.S. multinational in a low-tax country is -24 percent after accounting for shifting of intangibles, and the effective marginal tax rate on investments in a high-tax country is 13 percent after accounting for earnings stripping (Figure 5-6). For these computations, the low-tax country is assumed to have a statutory rate of 5 percent and the high-tax country a rate of 25 percent. The activities in each country and the associated tax planning strategies correspond to typical behavior of U.S. companies in such countries. These simulations suggest that, though the United States

[2] The authors use a 30-percent statutory rate because "[t]here seems to be a growing consensus that the United States should reduce its corporate statutory rate in response to the dramatic and continuing decline in corporate statutory rates abroad." Thus, even though their analysis does not use the current rate, it is particularly relevant to discussions of the U.S. approach to taxing multinational corporations in the context of reform.

Figure 5-6
Effective Marginal Tax Rates in Several Tax Systems



Source: Grubert and Altshuler (2013).

ostensibly imposes a worldwide tax, the difference in effective marginal tax rates between high- and low-tax jurisdictions abroad can look more like a territorial system. Moreover, the tax rates in both high- and low-tax countries can be well below the rates that would apply under either a true worldwide system or even a theoretically ideal territorial system unaffected by base erosion or profit shifting.

Over the last 30 years, the dual challenges of base erosion and profit shifting have increased significantly (Clausing 2009). Base erosion refers to the disappearance of corporate income (the tax base) as a result of tax planning strategies (see Box 5-2). Profit shifting is a particular form of base erosion in which firms report profits in low-tax jurisdictions rather than in high-tax jurisdictions, reducing their global tax liability. The revenue loss attributable to earnings missing from the U.S. corporate tax base as a result of base erosion may amount to 30 percent of corporate tax receipts (Clausing 2011).

Table 5-1 updates the estimates of Gravelle (2013) that show U.S. controlled foreign corporation profits in a particular country as a share of GDP for each country. In 2010, U.S. controlled foreign corporation profits reported in Bermuda were more than 15 times the size of Bermuda's economy. Even in the Netherlands, which has a much larger economy than Bermuda, U.S. controlled foreign corporation profits amounted to 15 percent of GDP. It is unlikely that the high concentration of U.S. profits for

Box 5-1: Corporate Inversions

Under the U.S. corporate income tax system, American firms pay tax on profits earned anywhere in the world. However, these taxes are due only if, and when, the money is paid as a dividend to the U.S parent by its foreign subsidiaries. As a result, American firms have accumulated as much as $2 trillion of overseas profits. The significant and growing value of these profits has spurred interest among U.S. firms in finding ways to use or distribute them without paying tax. One strategy for avoiding tax is an inversion—a maneuver whereby a U.S. parent firm merges with a foreign parent, such that the shareholders of the foreign company own at least 20 percent of the equity in the combined entity, and then declares that the foreign company is the parent company for tax purposes. Because the original foreign subsidiaries of the U.S. firm continue to be subsidiaries of a U.S. firm, such a maneuver does not exempt their future earnings from tax. However, the new foreign parent can facilitate financial transactions that provide low-tax access to the earnings of those subsidiaries. For example, once inverted, the foreign subsidiaries can lend money directly to the new parent company without going through the U.S. parent. These transactions are known as hopscotch loans and, until recently, such loans did not trigger any tax liability since the funds never pass through the U.S. company.

The benefits of an inversion extend beyond low-tax access to the earnings of foreign subsidiaries. For example, inversions can also facilitate earnings stripping, a strategy in which firms shift profits that would be taxed in the United States into other lower-tax countries. One easy way of accomplishing earnings stripping is for an inverted U.S. corporation to borrow from its new foreign parent. The interest payments of the U.S. corporation are deductible at the high statutory rate that applies under the U.S. corporate tax, and the interest income is taxed to the foreign parent at its lower rate. Rules that restrict the ability of U.S. corporations to avoid taxation on passive income abroad limit non-inverted entities' ability to use this strategy. However, the interest income of the foreign parent is not subject to these rules; an inverted firm's ability to use this strategy is limited only by weaker rules restricting interest deductions.

In September 2014, the U.S. Department of the Treasury released a notice announcing forthcoming regulations that would limit some of the benefits of inverting. These rules restricted firms' ability to structure the hopscotch loan transactions described above, as well as making several other changes. While these actions make inversions less attractive, legislation is needed to fully address the incentives to invert—both through broader reforms that reduce the value of post-inversion tax planning strategies and specific measures that limit a company's ability to invert.

The Administration has proposed increasing the ownership threshold that must be met for a foreign affiliate to become the parent of a U.S. company through an inversion from the current 20-percent threshold to a 50-percent threshold. The higher threshold would eliminate inversions—in which a small foreign company becomes the parent of a large U.S. company—that are not justified by business considerations other than the tax benefits.

the countries shown in Table 5-1 reflects the actual business activity of these firms rather than tax planning.

An important limitation of the international comparisons presented in this section is that they focus only on taxes imposed on corporate profits. Other taxes paid by corporations can also significantly affect the profitability of business investments. In particular, real estate taxes on land and buildings, property taxes on equipment and inventories, and sales taxes on purchases of business inputs increase both effective tax rates and effective marginal tax rates. Incorporating these factors into the analysis tends to increase tax rates in the United States relative to other countries.

Table 5-1
U.S. Controlled Foreign Corporation Profits Relative to GDP, 2010

Country	Foreign Corporation Profits Relative to GDP (%)
Bahamas	104
Bermuda	1,578
British Virgin Islands	1,009
Cayman Islands	1,430
Cyprus	13
Ireland	38
Luxembourg	103
Netherlands	15
Netherlands Antilles	25

Source: IRS Statistics of Income; United Nations; CEA calculations.

Box 5-2: Base Erosion and Profit Shifting

The related challenges of base erosion and profit shifting hurt the global economy, weaken government budgets, and heighten public concern about the equitable distribution of tax burdens. Base erosion refers to the disappearance of business income (the tax base) as a result of tax planning strategies. Examples of corporate tax planning strategies include: exploiting differences in how income or residency is defined by different countries; choosing low-tax jurisdictions to hold intellectual property and other assets; and manipulating the terms of intra-firm transactions to control where earnings are taxed. Profit shifting is one form of base erosion in which firms shift profits from one, typically high-tax country to another, typically low-tax country to reduce their overall, worldwide tax liability.

Tax planning strategies hurt the global economy because they lead to socially wasteful expenditures on the accounting, legal, and other advisory services required to structure the financial transactions and legal arrangements that minimize tax payments. Reforms that harmonize the treatment of income and deduction items across countries, as well as address other harmful tax practices, improve productivity and well-being by allowing firms to compete on the merits of their services and not the quality of their tax advisors. Historically, a primary objective for international tax negotiations was to prevent double taxation. Today, countries must solve the problem of double non-taxation, the creation of stateless income that slips through the gaps between tax systems and is not taxed in any country.

In recognition of the challenges posed by base erosion and profit shifting, the G-20 and OECD have led a coordinated international response that seeks to improve tax policy and tax administration. The OECD developed an action plan, released in July 2013 and endorsed by G-20 leaders in September 2013 (OECD 2013). The action plan articulates 15 actions and a series of deliverables—reports, recommendations, and model tax rules—to be completed by December 2015. In September 2014, the OECD released a set of recommendations to address 7 of the 15 actions (OECD 2014). Discussion drafts for the remaining eight items are scheduled to be released over the course of 2015.

Recent announcements show that the OECD Base Erosion and Profit Shifting Project, in combination with other legal and economic developments, is having an impact on international tax policy. In October 2014, Ireland announced policy changes that would effectively shut down a widely used tax avoidance strategy, the Double Irish, which allows some multinational firms to legally pay extremely low effective tax rates (Noonan 2014). The Double Irish and its variants let firms funnel

profits through Ireland into low- or zero-tax jurisdictions and dramatically reduce the tax paid on the associated sales. The strategy relies on a provision of Irish law that allows firms to incorporate in Ireland while being resident for tax purposes in other countries. Like other mismatches between the tax systems that operate in different countries, this mismatch in residence and tax treatment facilitates base erosion and profit shifting.

Subsequently, in November 2014, the United Kingdom and Germany reached agreement on a joint proposal for dealing with preferential intellectual property (IP) regimes. The proposal would require the United Kingdom to close its current preferential IP regime to new entrants in June 2016 and to abolish it entirely by June 2021. Preferential IP regimes can fall under the heading of harmful tax practices: policies that seek to attract highly mobile income with no economic relationship to the taxing country by offering very low rates on that income. Such policies are harmful because they encourage firms to aggressively shift profits between countries solely to reduce tax liability. The agreement between the United Kingdom and Germany endorsed an approach that allows countries to offer reduced rates for IP provided that the property derives from significant economic activity in the country. This approach ensures that countries can implement their preferred policies to promote innovation and economic development, but discourages policies designed primarily to siphon off tax revenue from other countries.

The action plan also includes efforts to neutralize hybrid mismatches, limit treaty shopping, reduce earnings stripping through intra-firm financial transactions, stop the creation of stateless income, and improve dispute resolution, among others. As one example of these efforts, consider the action item on hybrid mismatches. A hybrid mismatch occurs when a particular financial instrument or business entity is treated differently by two different countries. For example, a financial security may be treated as a debt security in one country and an equity security in another. In certain cases, companies can obtain two deductions for one act of borrowing or generate a deduction without a corresponding income inclusion. The Base Erosion and Profit Shifting Project proposes to combat such mismatches by increasing the coherence of international tax laws. Concretely, this action item encourages steps such as drafting model treaties, encouraging member countries to adopt laws that deny domestic deductions for payments also deductible in another jurisdiction, and issuing guidance for tie-breaker rules if multiple countries apply incompatible rules to a single transaction.

The Administration firmly supports the G-20/OECD Base Erosion and Profit Shifting Project and continues to actively engage with the international community to develop new and effective solutions to

the tax compliance challenges raised by our modern economy. The President's Budget for Fiscal Year 2016 also proposes specific changes to U.S. tax law that will make it harder to create stateless income or achieve double non-taxation. These proposals will benefit the American public because, when gaps between tax systems allow firms to shift profits out of the United States and reduce their tax liability, the burden of financing our public programs shifts to other businesses and individuals. Moreover, as home to some of the world's most recognizable and innovative companies, we benefit when companies are able to play by clear, well-defined rules.

The President's Approach to Business Tax Reform

The President's approach to business tax reform seeks to improve the quantity and quality of U.S. investment and thus productivity and output. The reserve for revenue-neutral business tax reform in the President's Fiscal Year 2016 Budget details numerous specific reform proposals, including a comprehensive discussion of the President's international reform proposals. The Administration's overall approach to reform has been described previously in *The President's Framework for Business Tax Reform*, released in 2012. The President's approach would:

Cut the corporate rate to 28 percent, paid for by closing loopholes and structural reforms. At 28 percent, down from 35 percent, the U.S. corporate rate would be generally in line with other large OECD economies. The rate cut would be paid for in part by closing loopholes—provisions that benefit a specific industry without a sound justification in broader spillovers. The special provisions for oil and gas that President Ronald Reagan unsuccessfully targeted for elimination in his tax reform plan are one clear example. Closing loopholes alone, however, would not raise sufficient funds to pay for the rate reduction nor would it sufficiently address the disparities in tax rates across means of financing and different business activities that reduce the quality of investment. As a result, this approach would also require additional structural reforms: addressing accelerated depreciation—deductions for the depreciation of tangible capital at a more rapid pace than the assets lose value—and reducing the tax preference for debt-financed investment. Sound combinations of these measures would result in more similar taxation of different types of investment and forms of financing.

Make permanent, expand, and reform key incentives. The test for any incentive is whether it is motivated by a positive externality, which,

as discussed below, leads to inefficiently low levels of the corresponding business activity in the private economy. The *Framework* identified three categories of incentives as passing this test: incentives for research, for clean energy, and for manufacturing. The reserve for revenue-neutral tax reform in the FY 2016 Budget includes proposals that would make permanent and improve the Research and Experimentation Tax Credit and the Renewable Electricity Production Tax Credit, make permanent the Investment Tax Credit for clean energy projects, and provide a new investment tax credit for projects that provide for carbon capture and sequestration. The Budget also includes a fee on large, highly leveraged financial institutions, to reflect the negative externalities that financial firm size and leverage can impose on the broader economy.

Simplify and reduce taxes for small businesses. Small businesses are disproportionately organized as pass-through entities, and, while many base-broadening reforms apply to both corporate and pass-through businesses, rate reductions only benefit corporations. The reserve for revenue-neutral reform in the FY 2016 Budget includes proposals that would simplify complex accounting rules for small businesses and allow more generous depreciation deductions for tangible investment for small businesses, both simplifying and reducing their taxes. With appropriate reforms for small businesses like these, business tax reform can be implemented on a stand-alone basis without broader individual reform.

Establish a hybrid international system with a minimum tax on the earnings of foreign subsidiaries. The current U.S. system applies the full statutory rate to foreign earnings, but only if, and when, those earnings are repatriated. The President's approach would replace the current system of indefinite deferral with a new hybrid system based on a minimum tax. The minimum tax would apply a 19-percent rate to the active foreign earnings of U.S. companies at the time the income is earned. Once the minimum tax has been paid, earnings could be repatriated without incurring any further tax liability. Foreign tax credits would be allowed only against the minimum tax liability for the country in which the foreign tax is paid and for only 85 percent of the amount of foreign taxes paid. Firms would also receive an allowance for corporate equity. This allowance, a deduction from the minimum tax base, would provide businesses with a modest return on equity invested in active business assets. This system would be more effective at preventing base erosion than the current system and would reduce the importance of tax considerations for some location decisions, while also having the potential to improve the global competitiveness of U.S. corporations. A smarter hybrid reflects a balance of competing neutrality concepts in rejecting both a pure territorial system—one that exempts all foreign income from taxation—and

a pure worldwide system. It would also eliminate the inefficiencies associated with the ability to choose the timing of repatriations under the current system. This comprehensive reform proposal stands in contrast to proposals for a repatriation holiday, which would exacerbate the inefficiencies of the current international system while also losing revenue.

Impose a toll charge on the existing stock of accumulated foreign profits as part of the transition to the new international system and use the revenue to finance infrastructure investment. Under current law, the existing stock of accumulated profits is subject to tax if repatriated but need not be repatriated. Under the new system, repatriation would incur no tax liability. To avoid a windfall from the transition, the President's Budget proposes a one-time toll charge of 14 percent on accumulated foreign profits. The revenue raised by this toll would be used to pay for infrastructure investment.

Add nothing to the deficit in either the short or long run. Most plans consistent with the President's approach generate one-time revenue during the transition to the new system. This transition revenue can obscure significant future revenue loses if reform is viewed from a short-run perspective. It is essential to measure the revenue impact of business tax reform when fully in effect so that reform does not add to the deficit in the longer term. A long-term view is particularly important when reform includes measures like moving to economic depreciation, which shifts the timing of revenue collected but not the total amount of revenue. Since that shift pulls revenue forward into the traditional 10-year budget window, it results in inflated savings. The President's approach to business tax reform would not add to the deficit in either the short or long run.

The Potential for Business Tax Reform to Boost Productivity

Productivity is a primary long-run determinant of living standards, together with factors like how growth is shared and who is able to participate in the economy that are discussed in Chapter 1 and throughout this Report. The President's approach to business tax reform boosts productivity and living standards through four channels: encouraging domestic investment, improving the quality of investment, reducing the inefficiencies of the international tax system, and investing in infrastructure. This section reviews each of these channels in turn.

Encouraging Domestic Investment

Business tax reform can increase domestic investment in two ways. First, reform can reduce effective marginal tax rates for businesses, which

Box 5-3: Improving the Tax Code for Families

The President's approach to business tax reform complements his plan to improve the tax code for individuals and families, making it fairer by eliminating some of the biggest loopholes and using the savings to pay for investments that help middle-class families get ahead—part of an overall approach the President has termed "middle-class economics."

As in previous years, the Budget baseline assumes the continuation of the expansions of the Earned Income Tax Credit (EITC) and the Child Tax Credit enacted in the American Recovery and Reinvestment Act of 2009, benefitting 16 million families with 29 million children. Studies have shown that previous EITC expansions have significantly increased employment among eligible individuals, and the Recovery Act expansions implement the same pro-work model (Executive Office of the President and U.S. Treasury Department 2014). In addition, recent research suggests that the EITC and Child Tax Credit can improve health and educational outcomes for the children whose parents receive the credits (Chetty, Friedman, and Rockoff 2011; Hoynes, Miller, and Simon 2013; Manoli and Turner 2014).

Simplify and expand child care tax benefits. The Budget proposes to make the Child and Dependent Care Tax Credit available in full for families with incomes up to $120,000 and expands the credit for families with children under age five to pay for one-half the cost of care up to $6,000 (a $3,000 maximum credit). This proposal is designed to make it easier for families to afford high-quality child care because that both helps working families manage what is often their largest expense and invests more in the next generation by supporting child development. Under current law, there are two types of tax benefits for families: a tax credit for child and dependent care expenses and employer-provided tax-preferred flexible spending accounts to pay for child care expenses. For some families, obtaining the maximum benefit from current policies requires using both the credit and a flexible spending account. The Budget repeals dependent care flexible spending accounts so that families need not perform calculations to compare tax benefits under multiple competing tax benefits and invests the savings in a single, improved child care tax credit.

Support employment. Building on the EITC and Child Tax Credit expansions enacted in the Recovery Act, the Budget proposes an expansion of the EITC for workers without children and for noncustodial parents. The EITC is a highly effective antipoverty policy, but the maximum credit for workers without children is only about $500. Expanding the credit for this population would benefit 13 million low-income workers and extend the pro-work impacts of the policy to a broader population

(Executive Office of the President and U.S. Department of the Treasury 2014).

The Budget also proposes a tax benefit based on the earnings of the lower-earning spouse in two-earner families. When both spouses work, families incur additional expenses for commuting, professional obligations, child care, and elder care. When layered on top of other costs, including Federal and State taxes, these work-related costs can lead to a high implicit tax rate on work, especially for parents of young children and couples caring for aging parents (Kearney and Turner 2013). This proposal for a new second-earner credit helps ensure that the tax code supports work by offsetting a portion of the additional costs that a family incurs when both spouses are working, such as commuting and child-care expenses. The new $500 second-earner tax benefit would benefit 24 million American families.

Consolidate and improve tax benefits for education. Building on bipartisan Congressional proposals, the Budget proposes a significant simplification of the tax benefits for education combined with an expansion targeted to those individuals least likely to attend college without financial aid. In most cases, students and their families can claim one of three tax benefits based on current educational expenses: the American Opportunity Tax Credit, the Lifetime Learning Credit, and the tuition and fees deduction. Choosing and claiming education tax benefits can require complex calculations and, under current law, the benefits often flow to those families in which children are most likely to attend college even without any additional assistance. One analysis found that 27 percent of individuals claiming the tuition and fees deduction would have received a larger benefit if they claimed a tax credit instead (GAO 2012). The Budget proposes that the three tax benefits based on current educational expenses be combined into a single, improved American Opportunity Tax Credit.

Expand access to workplace retirement savings. The Budget also calls for the creation of a new automatic Individual Retirement Account (IRA) for workers whose employers do not offer another retirement plan. The automatic IRA would guarantee every American working at a firm with more than 10 employees access to easy, payroll-based retirement savings. Americans face a daunting array of choices when it comes to their retirement savings, and, while some workers are automatically enrolled in a retirement savings plan by their employer with an option to opt out, others have to open an account, manage contributions, and research and select investments on their own. However, the evidence is clear: individuals with access to an easy way to save at work will save, and those who lack such access rarely receive any tax benefits for retirement

at all (Choi et al. 2004). The automatic IRA would allow individuals to begin saving for retirement without needing to confront complicated choices about which tax-preferred vehicle to use and what portfolio to select.

Reform the taxation of capital income. The Budget proposes to close the single largest loophole allowing capital income to go untaxed: the step up in basis at death. Families that spend down their wealth during their lifetimes must pay tax on their capital gains as they sell their assets, but the tiny fraction of families wealthy enough that they never need to sell their assets can pass those assets to their heirs without ever paying the tax on the capital gain. Moreover, if the heirs ever sell the assets, the cost at which they are considered to have acquired the assets is the value at the time the assets are inherited. This treatment creates an inefficiency known as the lock-in effect in which older individuals for whom the best course of action would be to sell their assets and invest in a new enterprise, instead hold on to the assets to avoid paying any capital gains tax. In addition, the President's Budget would increase the top tax rate on capital gains and dividends from 23.8 percent under current law to 28 percent.

Close loopholes and limit tax expenditures. Consistent with previous Budgets, the FY 2016 Budget proposes a limit on tax expenditures for high-income families. Deductions and exclusions from income generate a tax benefit for each dollar of the tax-advantaged activity equal to the individual's marginal rate. Because marginal rates typically rise with income, these tax benefits, such as the mortgage interest deduction, charitable deduction, and deduction for State and local taxes, provide more value to high-income families than for middle-income families and can lead to inefficiencies by excessively subsidizing certain taxpayer behavior. The FY 2016 Budget proposes to limit the value of these tax benefits to 28 percent. If a taxpayer's marginal rate is 35 percent—such that under current law a dollar of tax-preferred activity generates 35 cents of tax savings—under the proposal it would generate only 28 cents. By reducing the tax savings associated with these deductions, the proposal reduces the corresponding inefficiencies. In addition, the Budget includes additional proposals that would implement the Buffett Rule, the principle that no household making over $1 million each year should pay a smaller share of their income in taxes than middle-class families pay.

will increase investment, the size of the capital stock, and output. Second, reform can reduce the effective average tax rate on highly profitable business investments, which will encourage firms to locate mobile, high-return investments in the United States.

As discussed above, the effective marginal tax rate is the ratio of tax paid to pre-tax income for a project yielding the minimum required return to obtain financing under prevailing market conditions. When effective marginal rates are higher, potential projects need to generate more income if the business is to pay the tax and still provide investors with the required return. Businesses will therefore limit their activities to higher-return projects. Thus, all else equal, a higher effective marginal rate for businesses will tend to reduce the level of investment, and a lower effective marginal rate will tend to encourage additional projects and a larger capital stock.[3] Increases in the capital available for each worker's use, also referred to as capital deepening, boost productivity, wages, and output.

One approach to business tax reform would prioritize changes that reduce effective marginal tax rates for businesses. The core of such a reform is allowing firms to immediately deduct the full cost of their investments, known as expensing. Expensing reduces the effective tax rate on equity-financed investments that generate the minimum required return to zero. That is, it reduces the effective marginal tax rate on equity-financed investments to zero. However, a corporate tax system with expensing would continue to impose a positive tax on investments that generate a higher return.[4] In contrast, a reform that reduces the effective marginal tax rate to zero by lowering the statutory rate to zero would eliminate taxation on high-return investments as well and thus come at a much greater revenue loss. An additional benefit of an approach oriented around expensing is that it cuts taxes only on new investments. Investments made in the past would be unaffected. Because tax cuts today do not spur additional investment in the past, the revenue loss associated with tax cuts on past investment spurs no additional investment and generates no increase in productivity. (See Box 5-4 for a discussion of the use of expensing as a temporary policy during economic downturns.)

However, while expensing has a number of attractive features, the exclusive focus on the marginal investment misses several critical points that are increasingly important in the modern, global economy. Firms face other important decisions that are also affected by the business tax system. To take one example, consider a firm deciding where to locate a plant. When a project's return substantially exceeds investors' required return, there is no

[3] See, for example, Cummins et al. (1994), Chirinko et al. (1999), Hassett and Hubbard (2002), Hassett and Newmark (2008).

[4] The discussion in this section focuses on business income taxes in isolation. Even with expensing, the effective marginal tax rate could remain positive as a result of other taxes, such as sales and property taxes. While incorporating other taxes into the analysis would affect the level of tax, they would not affect any of the conclusions about the changes in tax rates resulting from the policy changes discussed in this section.

question a firm will pursue the project. But the firm has flexibility over the choice of country. For this decision, the value of accelerated depreciation deductions is small relative to the profit the plan generates. The tax on these higher returns, sometimes referred to as excess returns, will depend largely on the statutory rate. As the excess returns grow in size, the relevant tax rate converges to the statutory rate. These types of investment location decisions are increasingly important in an interconnected global economy, and may be particularly important for the type of investment we most want to attract and retain (Devereux and Griffith 1998, 2003).

An alternative approach to reform therefore focuses on reducing the statutory rate to reduce the effective average tax rate on highly profitable investments. The effective average tax rate is the ratio of taxes paid to pre-tax profits for a particular investment. If an investment yields only enough to pay the required return after taxes, the effective average tax rate on that investment is equal to the effective marginal tax rate. However, if the investment return exceeds that minimum amount, the effective average tax rate on the investment exceeds the effective marginal tax rate. Therefore, reductions in the statutory rate are essential to encourage additional internationally mobile, high-return investments in the United States.

Moreover, many of the disparities in tax rates across industries and assets, across means of financing, and across organizational forms that damage the quality of investment (discussed next) are reduced at lower statutory rates. Lower statutory rates can also relieve some of the otherwise irreducible tension between capital export neutrality and capital ownership neutrality in international taxation (discussed below). Finally, it is worth considering the nearly universal view among business people and tax practitioners that the statutory rate is particularly salient in business decisionmaking.

In total, given the tension between reform that exclusively targets the effective marginal tax rate by accelerating depreciation and reform that lowers the statutory tax rate with an eye toward attracting mobile, high-return investment and reducing other distortions, the President's approach to business tax reform targets the statutory rate. Such an approach encourages additional domestic investment by reducing the disparity in tax rates across jurisdictions and also reduces disparities in tax rates across industry, asset, means of financing, and organizational form.

Improving the Quality of Investment

It is not just the quantity of investment that matters for the economy, but also the quality. Quality does not mean more expensive, higher-tech machinery, but instead means that each dollar is invested in the area where it generates the highest return and in the form that most efficiently allocates

risks and managerial talents.[5] The quality of investment depends, not on the level of taxation, but on its form. In particular, maximizing the quality of investment requires a tax system that does not distort business decisions except in the cases where markets, by themselves, would not result in optimal outcomes.

Reducing Distortions in the Allocation of Investment by Industry and Asset. Targeted tax preferences lead to dispersion in tax rates across industries and assets. According to the Congressional Budget Office (CBO), effective marginal tax rates for businesses subject to the corporate income range from 12 percent for the broadcasting and telecommunications industry to 25 percent for certain manufacturing sectors, motion picture and sound recording, and some financial sectors (CBO 2014). As a result of these disparities, for any given level of the capital stock, firms will pursue lower-return projects in tax-preferred sectors rather than higher-return projects in tax-disadvantaged sectors. These disparities in tax rates also exist across asset types, and the cross-asset disparities can be much larger. CBO estimates that the effective marginal tax rate on mining structures is only 1 percent while the effective marginal tax rate on prepackaged software is 30 percent.

By reducing these distortions, the economy can become more productive even with no change in the level of investment and savings. One recent study concluded that 4 percent of the aggregate capital stock appears to be misallocated as a result of corporate tax distortions (Fatica 2013). Inefficient capital allocation lowers productivity and living standards (Auerbach and Hassett 1992). The President's approach to reform would take significant steps to reduce the disparities in tax rates across industry and asset. For example, the FY 2016 Budget calls for the elimination of numerous fossil fuel preferences that not only advantage fossil fuel production in general, but also pick winners and losers among fossil fuel technologies. The Budget also proposes repeal of an excise tax credit for certain distilled spirits that can lead to distortions even within a relatively small class of production activities.

Reducing Distortions in the Financing of Investment. The current U.S. system of business taxation imposes a substantially higher tax burden on equity-financed investment than debt-financed investment. Tax reform that reduces this disparity can reduce overleveraging, which increases financial fragility since firms have less of a cushion in downturns, and prevent fire

[5] In Chapter 4 and throughout this *Report*, policies are discussed that can help ensure that workers are better allocated to the activities in which they will be most productive. For example, implementing policies that reduce unnecessary distortions in workers' choices, such as improving work-family balance, result in more workers choosing jobs based on where they will be most productive.

Box 5-4: Temporary Countercyclical Policies to Promote Investment

Policies that temporarily reduce effective marginal tax rates can play an important role in increasing the quantity of investment and output in the short run, when the economy is operating below its potential. One example of such a policy is the bonus depreciation provision that was enacted on an emergency basis to help combat the Great Recession. Bonus depreciation accelerates the timing of the depreciation deductions firms take for their tangible investment; it operates as a de facto interest-free loan—firms get larger deductions today, reducing current tax payments, and smaller deductions in the future, increasing future tax payments.

When credit markets seized up during the financial crisis, some businesses had difficulty borrowing at any interest rate. As a result, if they did not have sufficient cash on hand to finance all of their ongoing projects, they had to reduce investment below their desired level. Bonus depreciation moderated the economic damage of dysfunctional credit markets by providing firms making at least some new investment with a substantial infusion of cash that they could use to increase investment further. Research by Eric Zwick and James Mahon (2014) finds that bonus depreciation increased investment by 30 percent between 2008 and 2010, with the largest effects among financially constrained firms. These temporary business tax cuts contributed to the fact that business investment has increased at a 5.3-percent annual rate over the course of this economic recovery, which is notably faster than the pace seen in the 2000s recovery.

Moreover, while firms limited by borrowing constraints could direct every dollar of this cash infusion into new investment, the cost to the Federal Government was only the interest charge incurred by deferring a tax payment that would have been due today into the future. Because interest rates on Federal debt fell at the outset of the crisis and rates have remained low since that time, the cost of financing the implicit loan has been modest. As a result, the impact on output per dollar cost to the government of stimulus policies like this one can be quite high.

This same logic applies to targeted policies that expand expensing for small businesses. Bonus depreciation allows firms to deduct a portion of their investment expenses immediately; expensing allows them to deduct the entire cost. Small businesses are more likely to be credit constrained than large businesses. This logic also helps explain why policies such as extending net operating loss carrybacks, which allows firms to take deductions for operating losses immediately that they would otherwise not be able to claim until future years, may be effective in spurring

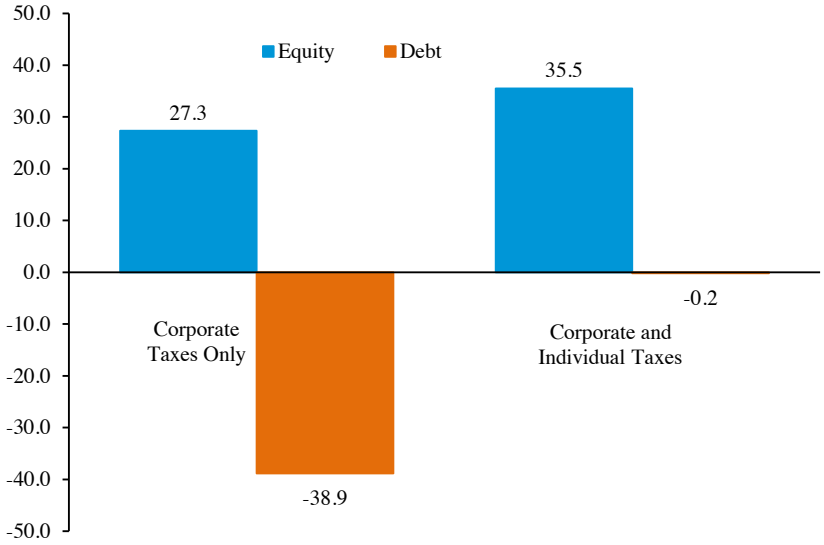
investment in the midst of a financial crisis even though such policies do not affect the effective marginal tax rate in standard economic models.

Permanent business tax reform, however, focuses on long-run growth, not short-term challenges. The overall strengthening of the economy, combined with the fact that more credit is flowing to businesses, means both the effectiveness and desirability of bonus depreciation are considerably less today than they were in the recent past. Moreover, making bonus depreciation permanent—or indefinitely extending it—would cost more than $200 billion over the next 10 years. As a result, the President's Budget would allow bonus depreciation to lapse at the end of 2014.

sales, contagion, and larger and less efficient macroeconomic fluctuations (de Mooij 2011, Slemrod 2009). Firms' decisions with regard to financing their investments also affect bankruptcy risk, the extent to which investment risk is distributed in the population, and potentially also the management quality of the firm itself (Weichenrieder and Klautke 2008). The tax advantage for interest arises because firms can deduct interest payments, but not dividend payments, from taxable income, while individuals must pay tax on both interest and dividend income, though they pay tax on dividends at a reduced rate.

The Treasury Department estimates that the effective marginal tax rate on equity-financed investment is 27.3 percent, while the effective marginal tax rate on debt-financed investment is -38.9 percent (Figure 5-7). (Tax rates can be negative if the tax benefits of the activity, such as additional credits or deductions, exceed the additional tax paid on the associated income. In the case of debt-financed investment, the combination of interest deductions and accelerated depreciation more than offset the tax paid at the corporate level.) The Treasury Department estimates that, as of 2014, the United States had the second-lowest tax rate on debt-financed investment in machinery in the OECD and the largest debt-equity disparity for such investments. Even taking into account individual-level taxes, which tax equity returns more lightly than interest payments, the disparity is still large, with a 35.5 percent tax rate for equity investment and a -0.2 percent rate for debt. By reducing the statutory rate, the President's approach to business tax reform would moderate the debt-equity disparity. Since the statutory rate determines the value of an additional deduction, a reduction in the statutory rate reduces the value of the deduction for interest payments. Additional reforms to the treatment of interest expense could further moderate the disparity.

Figure 5-7
Effective Marginal Tax Rates by Source of Financing, 2014



Source: U.S. Department of the Treasury, Office of Tax Analysis.

Addressing Positive and Negative Externalities of Business Behavior. Business activity often generates spillovers that impact other firms and the general public, even when they are not involved in the activity. These spillover effects are known as externalities, and can be either positive or negative. For example, future generations of Americans benefit from the research and development activity we undertake today in the form of new products and services, which they will be able to enjoy, and the higher wages resulting from increased productivity. Research and development generates positive externalities. Polluting activities, such as burning fossil fuels, generate negative externalities through increases in carbon dioxide emissions and particulate matter.

The quality of American investment is maximized when firms' financial incentives to make particular investments reflect the externalities those investments impose on others. Business tax reform can play a role in aligning the social and private incentives for different activities by appropriately subsidizing or penalizing activities where research conclusively establishes positive or negative spillovers. *The President's Framework for Business Tax Reform* identified three areas where targeted incentives are appropriate: research and development, clean energy, and manufacturing. The FY 2016 Budget identifies one further area where a tax is appropriate: highly leveraged financial firms.

Numerous studies find that the total returns to research and development are significantly larger than the private returns earned by the investors who fund it (Hall, Mairesse, and Mohnen 2010; Tyson and Linden 2012). This evidence suggests that the social returns range from one to two times the private returns, a disparity which leads to private-sector underinvestment in the absence of policies such as the Research and Experimentation Tax Credit. Studies that directly evaluate the Research and Experimentation Tax Credit find that each dollar of foregone tax revenue through the credit generally causes firms to invest at least one dollar in research and development (Hall 1995; Hall and Van Reenen 2000; Executive Office of the President and U.S. Department of the Treasury 2012).

While energy production is essential for the modern economy, polluting activities also pose significant harm. Greenhouse gas emissions will lead to significant environmental costs for future generations and other pollutants, such as particulate matter and ozone, lead to immediate health consequences. Appropriate subsidies for clean energy can help address these challenges and ensure that Americans benefit from high-quality investment in the energy sector. (See Chapter 6 for additional discussion of the Administration's energy strategy.)

Spillovers also provide the argument for policies that focus specifically on the manufacturing sector. Encouraging manufacturing investment and production may support higher-wage jobs. Investment in new production capacity and proximity to the manufacturing process create spillovers across firms and industries, leading to the ideas, capabilities, and technologies that enable innovation (Greenstone, Hornbeck, and Moretti 2010). To the degree these effects are operating in the economy, targeted incentives for manufacturing investment would be justified.

The FY 2016 Budget includes a fee on large, highly leveraged financial institutions. This fee would apply to banks and other financial institutions with assets of at least $50 billion, affecting approximately 100 firms. Excessive leverage entails potentially serious costs to American families and other businesses in cases of default, and the problem is most acute in the financial sector, where balance sheets may be particularly fragile. Excessive borrowing may arise because these costs are not entirely borne by the firms deciding how much to borrow. By increasing the cost to firms and therefore discouraging excessively risky financing decisions for large financial institutions, the financial fee will reduce the resources devoted to addressing the corresponding damages of default and increase American families' wellbeing.

Reducing Distortions in the Choice of Business Form. Business owners can choose between several different legal structures for their operations.

For tax purposes, the primary distinction is between the C corporation, a corporation subject to the corporate income tax, and alternative structures treated as pass-through entities. Many rules, such as those for determining depreciation deductions, are similar for C corporations and pass-through entities. However, there are important differences, the most notable of which are the rate structure and the treatment of distributions. The top Federal corporate tax rate is 35 percent while the top individual tax rate is 39.6 percent. Thus, corporations pay at a maximum rate of 35 percent while owners of pass-through entities pay a maximum rate of 39.6 percent on their business earnings. However, distributions to business owners are tax-free for the owners of pass-through businesses and taxable for the owners of C corporations.

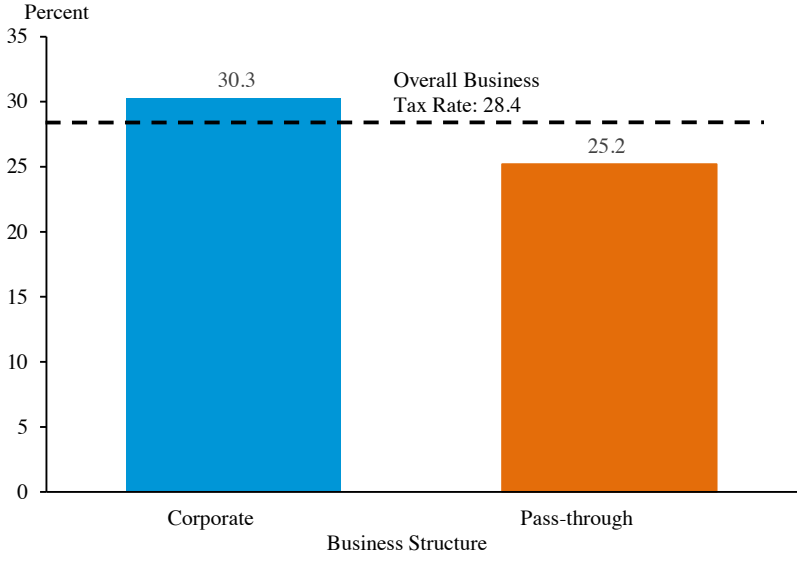
Overall, the tax system currently advantages large pass-through entities over large C corporations. This advantage arises because the combination of corporate income taxes and individual income taxes faced by owners of a C corporation exceeds the single layer of taxation faced by owners of a pass-through entity. As a result, according to the Treasury Department's analysis shown in Figure 5-8, C corporations face a 30.3 percent effective marginal tax rate while pass-through entities face a 25.2 percent rate. Similar estimates by the Congressional Budget Office put the effective tax rate for C corporations at 31 percentage points and the rate for pass-through entities at 27 percentage points (CBO 2014).

As the tax treatment of corporate and pass-through businesses is not identical, the tax system encourages firms to change their corporate structure in order to reduce their tax liability. Empirical research confirms that these differences induce changes in the ownership structure of firms.[6] By changing the legal structures under which businesses operate relative to what they would be in the absence of these taxes, the distortion in business form reduces productivity and output. For example, in most cases, publicly traded businesses are taxed as C corporations. However, the tax bias against C corporations may discourage some businesses from accessing public capital markets and therefore lead to inefficient ownership structures.

The difference between the top corporate tax rate and the top individual tax rate has changed over time, and the increase in this disparity in the late 1980s—when the top corporate rate went from 4 percentage points above the individual rate to 6 percentage points below—led to a large shift in the distribution of revenue across business forms (CBO 2012). The share of business receipts accounted for by C corporations has continued to fall since that time as a result of other tax and non-tax changes in the economy.

[6] See, for example, Goolsbee (1998, 2004), Gordon and MacKie-Mason (1994), and MacKie-Mason and Gordon (1997).

Figure 5-8
Effective Marginal Tax Rates, 2014



Source: U.S. Department of the Treasury, Office of Tax Analysis.

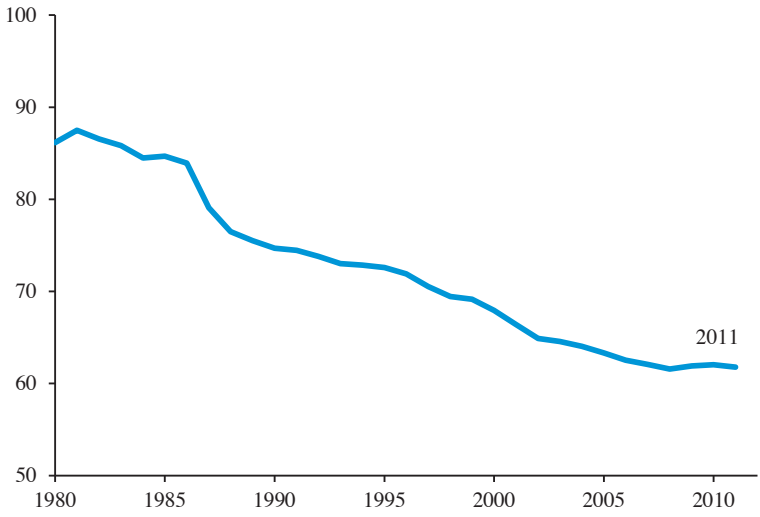
Overall, since 1980, the C corporation share of business receipts has fallen from nearly 90 percent to just above 60 percent (Figure 5-9). To the degree this trend has been driven by tax considerations, it represents an inefficient way for businesses to choose to organize themselves and a bias against the C corporate form. By reducing the statutory rate on C corporations, the President's approach to business tax reform would reduce the current bias against investment in the corporate form.

Reducing the Inefficiencies of the International Tax System

Business tax reform can also increase productivity and output by reducing disparities in tax rates across countries and across activities. The structure of production processes, corporate ownership relations, and intra-firm financing are all influenced by tax considerations. Higher tax rates on corporate earnings in a particular country reduce investment in that country.[7] Because corporate income tax liability can depend on the country of residence of a business's corporate parent, corporate taxes can also affect the ownership structure of firms. One example of this effect is the series of high-profile corporate inversions—rearrangements of the ownership structure of U.S. corporations so as to obtain a foreign parent for tax purposes—that

[7] See, for example, Cummins and Hubbard (1995), Devereux and Griffith (1998, 2003), Desai et al. (2004), Grubert and Mutti (1991, 2000), Hines (1996, 1999).

Figure 5-9
C Corporation Share of Total Business Receipts, 1980–2011



Note: RICs and REITs excluded from both C corporation share and total.
Source: IRS Statistics of Income; CEA calculations.

has received significant press attention over the last year (see Box 5-1). In addition, differences in tax rates across countries can lead firms to engage in complicated financial transactions to shift profits from high-tax countries to low-tax countries (Bartelsman and Beetsma 2003, Huizinga and Laeven 2008, Dharmapala 2014).

Unfortunately, achieving neutrality with respect to all of these business decisions simultaneously is difficult because, for any country acting alone, reforms that move toward neutrality on one dimension often move away from neutrality on another. For example, a firm will structure its production processes in an efficient manner across countries if it pays the same tax rate in every country. This neutrality concept is known as capital export neutrality. On the other hand, a local firm will be owned by the parent that generates the most economic value if all parent companies face the same tax rate on local production regardless of which country the parent firm is based in. This concept is referred to as capital ownership neutrality. Under the first objective, features of the current U.S. tax system such as indefinite deferral—which allows firms to defer paying tax on foreign income until it is repatriated—are a problem and should be eliminated. Under the second objective, foreign income should be exempt from taxation entirely, not just deferred. Moving in either direction makes the other problem worse. Moreover, these two notions of neutrality are only two of many widely discussed notions of neutrality when it comes to the taxation of multinational firms.

The President's hybrid approach to international taxation reflects a sensible compromise between competing neutrality concepts, moderates the challenges of base erosion and profit shifting, and reduces inefficiencies generated by the current system of indefinite deferral. By imposing a minimum level of tax, the value of setting up shell corporations in tax havens with tax rates near zero is dramatically reduced. Under current law, a firm might establish a subsidiary in a low- or zero-tax jurisdiction and then arrange its affairs so that as much income is reported by that subsidiary as possible. However, the President's approach would impose a minimum tax of 19 percent on earnings in every country, paid when the income is earned. Thus, while a firm would see a modest benefit if it shifts profits from a country with a tax rate above 19 percent to a country with a tax rate below that level, the incentive to find tax havens that offer a zero tax rate is substantially reduced.

In isolation, a minimum tax might encourage other countries to target subsidiaries of U.S. multinationals for specific taxes intended to soak up the revenue of the minimum tax. While treaty provisions limit the ability of foreign governments to target American firms by virtue of their being American firms, a modest reduction in the value of foreign tax credits for purposes of the minimum tax computation further protects against efforts by other countries to soak up the minimum tax revenue. This reduction ensures that U.S. corporations are not completely indifferent to the level of tax, while achieving the objective of dramatically reducing the impact of rate differentials across countries.

An allowance for corporate equity for purposes of computing the minimum tax ensures that American firms can compete on an even footing anywhere in the world when it comes to productive investment. Thus, the minimum tax would include a deduction for firms based on their equity investments abroad. This allowance would serve to reduce effective marginal tax rates on American firms when it comes to buying foreign businesses or performing productive activity abroad.

Finally, tax-free repatriation means that firms will no longer have an incentive to stockpile profits in their foreign affiliates. Instead, once they have paid the minimum tax, they could repatriate their earnings at any time without any additional tax liability. Critically, the President's approach to business tax reform would allow tax-free repatriation under a fully reformed system. Allowing a repatriation holiday under the current system would both lose revenue and exacerbate its inefficiencies, compounding our existing challenges.

While the harms of so-called trapped cash can be over-stated, under the President's minimum tax proposal there would no longer be any reason

for it to exist, provided the existing stock of accumulated profits is effectively taxed at the outset. However, allowing tax-free repatriation of existing profits—which would incur tax if repatriated today—would provide an unmerited windfall. To avoid this outcome, implementation of the minimum tax and tax-free repatriation would be accompanied by a toll charge on accumulated profits. These profits could then be repatriated with no additional tax under the new system.

Investing in Infrastructure

Business tax reform is part of the President's broader approach to improving the economy and raising productivity. The transition to a new international system would raise substantial one-time revenue. The President's Budget proposes to use these funds for a six-year investment in infrastructure—ensuring that temporary revenues are matched to temporary costs so that the business tax reform as a whole does not raise the long-run deficit.

A quality transportation network is essential to a vibrant economy. Investments by previous generations of Americans—from the Erie Canal, to the Transcontinental Railroad, to the Interstate Highway System—were instrumental in increasing productivity and generating economic growth. A high-performing transportation network keeps jobs in America, allows businesses to expand, and lowers prices on household goods for American families. Better infrastructure allows businesses to manage their inventories and transport goods more cheaply and efficiently, as well as access a variety of suppliers and markets for their products, making it more cost-effective for manufacturers to keep production in, or move production to, the United States.

The economic benefits of smart infrastructure investment are long-term competitiveness, productivity, innovation, lower prices, and higher incomes (Gramlich 1994, Munnell 1992). The costs of inadequate infrastructure investment are exhibited all around us. Americans spend 5.5 billion hours in traffic each year, costing families more than $120 billion in extra fuel and lost time (Schrank, Eisele, and Lomax 2012). American businesses pay $7.8 billion a year in direct freight transportation costs due to bottlenecks (White and Grenzeback 2007).

Infrastructure investment is a natural partner for business tax reform, as both are motivated by the goal of increasing investment, productivity, and ultimately the well-being of American families. Devoting transition revenue raised by business tax reform to infrastructure investment boosts the overall productivity impact of tax reform.

Four Alternative Approaches to Business Tax Reform

Analysts have offered four primary alternative approaches to reform. This section considers the merits of each approach.

Eliminate the Corporate Income Tax

Numerous commentators have called for complete repeal of the corporate income tax. However, the details of what repeal could plausibly mean vary widely. One version would repeal the corporate income tax and make no other changes to the tax system. Such an approach suffers from insurmountable compliance problems and would lead to revenue losses far in excess of current corporate tax receipts. Income would rapidly shift into the now-untaxed corporate form, allowing individuals to indefinitely defer taxes, and evasion strategies that disguise more heavily taxed wage income as lightly taxed dividend income would become widespread. Moreover, repealing the corporate income tax without increasing the deficit would require massive, deeply damaging cuts to important programs like Medicare, Medicaid, and Social Security, as well as federal investments in areas such as national security, research, and education.

A somewhat more nuanced approach to corporate income tax repeal would combine repeal with an increase in the tax rate on capital gains and dividends to match tax rates on earned income. However, taxing capital gains and dividends at the rate on earned income would be unlikely to raise enough money to cut the corporate rate by even 3 percentage points, let alone 35. Increasing rates on capital gains and dividends can finance only a small reduction in the corporate rate for three primary reasons. First, these forms of income are already subject to partial taxation. Second, individuals can use a variety of strategies, such as timing shifts in financial transactions, to avoid realization-based capital income taxes. And third, substantial capital income avoids individual-level taxation because it is held by tax-exempt entities such as pension funds and foundations. In the presence of a corporate tax, the corporations in which these tax-exempt entities have invested, of course, are subject to tax.

Absent a much larger overhaul of capital taxation—which would need to include accrual accounting for capital gains, retaining the corporate income tax as a withholding tax to address tax-exempt entities and tax evasion, and providing credits or deductions when corporate earnings are distributed to owners who are not tax-exempt—purely individual-level capital taxation is not a viable policy. Eric Toder and Alan Viard (2014) have recently advanced a more fleshed-out proposal that would repeal the

corporate income tax, tax capital gains on accrual for publicly traded companies, and tax companies that are not publicly traded under a pass-through regime. Instead of paying tax on the proceeds of asset sales, shareholders of publicly traded corporations would pay tax on the change in market value of their shares each year and no additional tax when the assets are ultimately sold. However, even if the substantive and political challenges in transitioning to a new system could be overcome, their framework replaces only one-half of the revenue from the corporate tax.

Cut the Top Individual Rate in Parallel with the Corporate Rate

The desire for neutrality with respect to organizational form and the desire to cut taxes on pass-through businesses have been used to justify arguments that individual and corporate tax reform need to be done together and, in particular, that there should be parity between the top individual rate and the top corporate rate. This argument is motivated by valid concerns. Different rates on activities with different labels create opportunities for gamesmanship; for example, building up income inside a corporation rather than paying annual tax on it at the individual level. But overall, this argument suffers from serious economic and practical objections. On the economic merits, it is important to remember that C-corporation income is partially taxed at two levels while pass-through income is only taxed at one level. As a result, C corporations face an effective marginal rate that is 5 percentage points higher than that on pass-through businesses, as discussed above. Although the President's approach would cut and simplify taxes for small business, including small pass-through entities, for larger businesses reform should move in the direction of greater parity—with the goal of equal effective rates for C corporations and pass-through entities when individual and corporate taxes are combined—a goal that would not be served by parallel reductions in individual and corporate tax rates. Meanwhile, lowering the top individual rate across-the-board is both expensive and regressive, while significantly lowering the individual rate only for pass-through businesses—but not for individual taxpayers—would greatly exacerbate the existing compliance problems associated with relabeling wages and salaries as business income by high-income individuals.

Finally, while reducing the top individual rate is often motivated by reference to small business, reducing it is an inefficient way to target small businesses. Already, 96 percent of small businesses pay tax at rates of 28 percent or below (Knittel et al. 2011). Most of the revenue loss from a top rate cut reflects the expense of a tax cut for high-income individuals. Tools like expanding expensing for small businesses and reforming accounting requirements can be used to ensure that reform, taken as a whole, both

simplifies and cuts taxes for small businesses—without cutting the tax rate on high-income professionals and large firms.

Adopt a Territorial Tax System

It is sometimes argued that all other major economies use a territorial tax system, though in practice many of them deviate significantly from a pure territorial system. A country that operates a pure territorial system would tax firms only on the income earned in that country, and exclude from taxation all income earned elsewhere in the world. Territorial taxation ensures that local firms are owned by the parent company that generates the largest economic benefits from ownership. However, this result comes at the expense of an inefficient global allocation of capital and production. Firms operating in a low-tax country pay less tax, and firms will respond by attempting to shift as much production as possible to low-tax countries.

A territorial approach exacerbates the problems of inefficient allocation of capital around the world, with excess capital in countries with low tax rates. Low-return investments are pursued in low-tax countries; however, high-return investments in higher-tax countries are not. In addition, a territorial system exacerbates the challenges of base erosion and profit shifting as it increases the financial rewards of shifting income abroad. Countries around the world are facing difficult questions about how to address base erosion (see Box 5-2). While explicit anti-erosion provisions can moderate these effects, they will not eliminate them. Offsetting the revenue loss arising from base erosion by multinationals will require higher tax rates on domestic U.S. companies, further discouraging investment in the United States, or higher tax rates on individuals. And, while it is often asserted that moving to a territorial system eliminates the incentive for corporations to invert, this is an overstatement. The incentive to relocate abroad is eliminated if the tax system is residence-neutral. Relocating can still be desirable if it facilitates tax-avoidance strategies such as earnings stripping, which can be more effective with a foreign parent even under a territorial system.

Substituting a fully territorial tax system privileges a single neutrality concept above—and at the expense of—all other neutrality concepts and exacerbates several challenges associated with tax avoidance. The hybrid international system in the President's approach reflects a sensible compromise between competing neutrality concepts, moderates the challenges of base erosion and profit shifting, and reduces the economic waste associated with the current system of indefinite deferral.

Allow Expensing for New Investment

Another alternative paradigm for business tax reform would focus on reducing the effective marginal tax rate for businesses with the objective of spurring additional investment and ultimately a larger capital stock. This alternative approach would feature two major components: full expensing and full repeal of interest deductibility. Rather than eliminating accelerated depreciation, this approach would go in the opposite direction by allowing immediate deductions for new investment. Since the combination of expensing and interest deductibility results in negative effective tax rates, this approach would also repeal the tax deduction for net interest.

The primary advantage of this alternative approach is potentially larger impacts on productivity and output, compared to an approach that focuses on reducing the statutory rate. By reducing the effective marginal tax rate on new business investment, it would boost investment, the capital stock, and productivity. In addition, a well-designed tax system based around expensing may be better suited to achieving neutrality between debt and equity financing than reforms within the current corporate tax paradigm. Expensing would also avoid the need to determine depreciation schedules for tax purposes (though not for accounting purposes) and therefore reduce the bookkeeping required to track assets' tax basis.

The primary disadvantage of the proposal is the additional revenue cost associated with more generous depreciation schedules, which would require either a smaller rate reduction or other offsetting tax increases. If the cost of expensing is offset with a smaller rate reduction, the impact of the plan on average tax rates and the ability to attract mobile, high-return investment under the proposal is reduced. This could lead to smaller effects of reform on productivity and a smaller reduction in costly tax avoidance behavior. Moreover, if, as some argue, depreciation provisions have only a modest impact on investment decisions, this alternative paradigm would be bad for investment and growth. It would provide businesses with a large tax benefit that has little impact on their investment decisions (expensing), while taking away a benefit that has a larger impact on their investment decisions (interest deductibility) and providing a smaller rate cut.

In addition, an expensing approach that does not repeal interest deductibility would exacerbate the non-neutralities of the current system by reducing the effective marginal tax rate on debt-financed projects even further below zero—effectively subsidizing them—and thus encouraging investments that are socially wasteful. Finally, shifting to such a system would face significant technical challenges both with structuring the transition and with handling the taxation of financial institutions, and would require corresponding reforms to taxation of capital income at the individual level.

Conclusion

Longer-term economic growth relies on continued increases in productivity that enable each American worker to produce more for every hour on the job. Business tax reform offers the potential to boost productivity by improving the quantity and quality of investment in the United States. However, it can only do this if it is done carefully and does not exacerbate other challenges; for example, by adding to the medium- or long-term deficit or crowding out other public investments. Rather, business tax reform can and should complement the rest of the growth agenda—including by funding investments in infrastructure—as well as a broader agenda involving individual tax reform and a set of other policies that guarantees all Americans can share in this growth.