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A TRILLION LITTLE SUBSIDIES: The Economic Impact of Tax Expenditures in the Federal Income Tax Code

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ABSTRACT

THIS STUDY DOCUMENTS the economic distortions and inefficiencies that result from a tax system filled with tax expenditures. Tax expenditures are provisions in the U.S. tax code through which individuals and corporations can lower their tax burden by behaving in specific ways. Total tax expenditures in the United States are currently around $1 trillion, with over 80 percent accruing to individuals and the remainder to corporations. We review each of the ten largest tax expenditures for individuals and corporations, focusing on the following distortions of economic activity: spending on goods and services, capital allocation, the distribution of income, and lobbying and rent-seeking. The benefits of tax expenditures accrue disproportionately to higher-income earners, since they are more likely to itemize deductions and can afford to hire accountants to minimize their tax burden. Eliminating tax expenditures would increase economic growth and allow for lower tax rates, further increasing growth.

JEL codes: H20, D72, H30

The United States federal income tax code contains many provisions that exclude certain income and activities from taxation. While not typically regarded as such, these provisions are comparable in many ways to explicit government expenditures, such as discretionary spending and entitlements. The Congressional Budget and Impoundment Control Act of 1974 defines these provisions as "tax expenditures."

Specifically, tax expenditures are "those revenue losses attributable to provisions of the federal tax laws which allow a special exclusion, exemption, or deduction from gross income or provide a special credit, a preferential rate of tax, or a deferral of tax liability."[1] In order to qualify as a tax expenditure, by the Joint Committee on Taxation's methodology, the item must not be a "normal" part of the tax code. The normal tax code is primarily defined as personal exemptions, the standard deduction, and the progressive tax brackets.

Colloquially, tax expenditures are often referred to as *loopholes* (negative connotation) or *tax incentives* (positive connotation), but we follow standard practice in public finance and refer to them as *tax expenditures* in this paper. The name "tax expenditures" and the definition of "revenue losses" imply that these provisions are, in some sense, just another form of federal expenditure. Alternatively, they represent "money on the table" that the Congress is currently forgoing and could take back at any point. In this paper, we reject these ways of thinking and take a different approach.

First, we question the assumption that eliminating a particular tax expenditure would increase government revenue by the amount of that expenditure.[2] As documented throughout this paper, changing the tax code will change individuals'

1. Congressional Research Service, Tax Expenditures—Compendium of Background Material on Individual Provisions, 2010, 111th Cong. 2d sess., United States Senate Committee on the Budget, http://budget.senate.gov/democratic/index.cfm/files/serve?File_id=8a03a030-3ba8-4835-a67b-9c4033c03ec4.
2. In their reports on tax expenditures, both the Office of Management and Budget and the Joint Committee on Taxation caution against directly interpreting tax expenditures as lost revenue, since they do not take into account changes in behavior. See Office of Management and Budget, "Analytical Perspectives, Budget of the United States Government, Fiscal Year 2013," p. 248, and Joint Committee on Taxation, "Background Information on Tax Expenditure Analysis and Historical Survey of Tax Expenditure Estimates," JCX-15-11, March 2011, p. 12.

behavior. For example, subjecting fringe benefits, such as employer-provided health insurance, to taxation will lead to a variety of results: Some employers may continue to provide health insurance as compensation (even though it is now subject to taxation), but others may stop providing health insurance and instead choose to compensate the employee with the dollar equivalent of the former fringe benefit.

In both scenarios, tax revenue would indeed rise, but not by the full amount claimed. One reason for this is that some people will be pushed into higher tax brackets and will choose to spend more time on leisure activities. Another reason is that employers will now face higher costs for employing the same workers, because they face a variety of additional costs based on the amount of wages they pay (e.g., payroll taxes and unemployment insurance). Consequently, employers may lower the wages they pay to employees—assuming that it is a competitive market and that all employers face this new tax structure.

A more general problem with the "lost revenue" claim is that eliminating tax expenditures without simultaneously lowering tax rates amounts to a tax increase for the economy as a whole. This means that, all else being equal, the rate of economic growth in the future would be lower than it otherwise would have been. It follows, then, that future tax collections would also be lower. So any temporary boost in revenue from eliminating these expenditures will be partially offset by lower revenue in the long run.

Rather than focusing on changes in revenue, our analysis addresses the economic distortions that arise from the presence of these provisions in the tax code. Using the health insurance example again, the presence of this particular tax expenditure leads to several distortions. One is that the total resources in the economy devoted to health insurance and health care is greater than it otherwise would be, potentially contributing to the problem of rising health care costs. Another is a phenomenon in the labor market known as "lock-in," in which employees are less likely to switch jobs because they will temporarily be without insurance. These and other distortions are addressed more fully later in this document.

In short, we conclude that tax expenditures should be eliminated, but only if combined with an offsetting reduction in tax rates. Government revenue would thus stay the same, while economic efficiency and fairness would increase for the nation as a whole. Certainly some taxpayers would see a net tax increase from this "broaden the base, lower the rates" strategy, since some taxpayers benefit disproportionately from the current tax code. But the status quo should not be protected because some individuals stand to lose from changing it.[3]

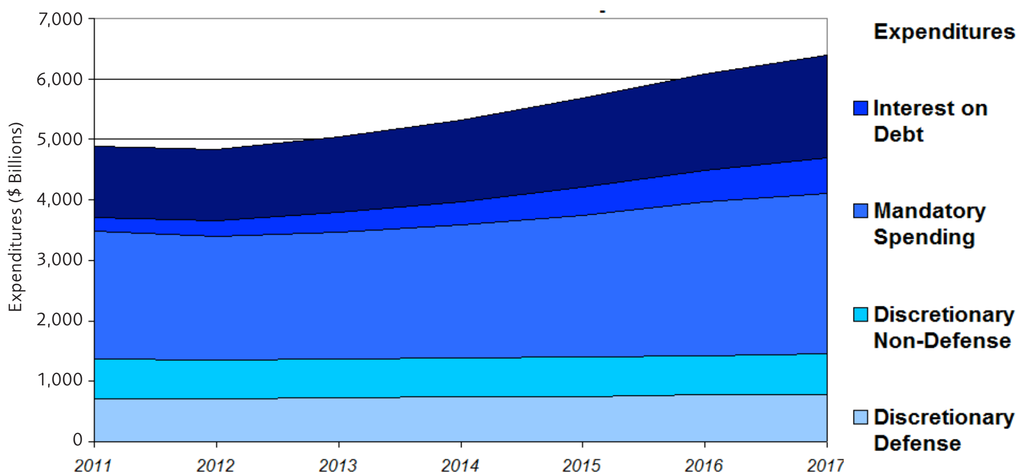
Tax expenditures also add complexity without necessarily adding benefits. Such expenditures are sometimes the result of accident rather than design, but once a provision is part of the tax code, interest groups will be created and perpetuated

3. In economics jargon, the changes we propose would be a Kaldor-Hicks improvement, but not a Pareto improvement.

to keep that provision. Even when tax code expenditures are used for supposedly benevolent purposes, they often result in unintended behavior, such as cronyism. These expenditures are often gamed by those with political connections (or expensive accountants), resulting in the capture of the tax code for private gain.

This subsidizing of the well-connected and well-to-do has substantial costs: The Office of Management and Budget (OMB) reports that in FY 2011 individuals received $891 billion and corporations received $181 billion in tax expenditures.[4] To put these figures in perspective, these totals are nearly equal to all the revenue collected by 2011 federal income tax[5] or to the entire 2011 discretionary budget of the federal government, and they are greater than annual federal spending on Medicare, Medicaid, or Social Security.[6]

FIGURE 1. FEDERAL EXPENDITURES



Note: Authors' calculations from projections by the Congressional Budget Office and the Office of Management and Budget.

Despite this major role in federal expenditures, tax expenditures hold privileged status in American politics: They are treated as tax cuts rather than as government spending. For example, if the federal government were to pay for a service with a $100 refundable tax credit rather than a $100 check, there would be no substantial difference. This privileged status allows government spending to be rhetorically recast as "tax cuts" and obscures the true size of the federal government.

4. Office of Management and Budget, "Budget of the United States Government, Fiscal Year 2013," Supplemental Materials: Tax Expenditure Spreadsheet, http://www.whitehouse.gov/omb/budget/Supplemental.
5. Office of Management and Budget, "Budget of the United States Government, Fiscal Year 2013," Historical Tables: Table 2.1 – Receipts by Source: 1934–2017, http://www.whitehouse.gov/omb/budget/Historicals.
6. Congressional Budget Office, "The Budget and Economic Outlook: Fiscal Year 2011 to 2021," January 2011, http://www.cbo.gov/sites/default/files/cbofiles/ftpdocs/120xx/doc12039/01-26_fy2011outlook.pdf.

Who specifically benefits from these over $1 trillion in tax expenditures? In this paper we address that question in three ways. First, who were the stated, intended beneficiaries when the incentives were passed? Second, who actually benefits from the tax incentives—do the intended beneficiaries receive the full amount of the benefit, or do other groups benefit as well? Finally, we investigate whether the groups benefiting from particular incentives either influenced the inclusion of the incentives in the tax code, or perpetuated them once they were included.

We identify many cases in which people who appeared likely to benefit from a particular tax expenditure, based on the stated legislative intent, benefited less than one might expect. Often other groups derive more benefit from the tax incentives than the stated beneficiaries do; sometimes individuals who are supposed to benefit from a tax incentive are even harmed by it. The job lock-in effect described earlier is an example of this phenomenon, produced by the tax treatment of health insurance.

To investigate these questions, we look at the ten largest tax incentives for both the corporate and individual income taxes as reported by the OMB in FY 2011. This group of tax expenditures represents a large fraction of the total: $580 billion (65.1 percent) for individuals and $164 billion (90.6 percent) for corporations. Tables 1 and 2 list the top 10 tax incentives for individuals and corporations.[7]

TABLE 1: TOP 10 TAX INCENTIVES FOR INDIVIDUALS, FISCAL YEAR 2011

		(in millions)	Percent of total
1	Health insurance (employer-provided)	$163,040	18.3%
2	Retirement and pension contributions	$89,750	10.1%
3	Mortgage interest	$72,240	8.1%
4	State and local taxes	$64,270	7.2%
5	Capital gains and dividends (lower rate)	$63,940	7.2%
6	Imputed rental income	$46,950	5.3%
7	Accelerated depreciation of machinery and equipment	$42,390	4.8%
8	Social Security benefits	$37,760	4.2%
9	Charitable contributions	$34,440	3.9%
10	Making Work Pay credit	$23,528	2.6%
	All others (less than 2.6%)	$252,692	28.4%
	Total	$891,000	

Source: Office of Management and Budget, "Budget of the United States Government, Fiscal Year 2013."

7. The Joint Committee on Taxation produces a similar report with very similar results, the most recent of which is called "Estimates of Federal Tax Expenditures for Fiscal Years 2011–2015," http://www.jct.gov/publications.html?func=startdown&id=4386.

TABLE 2: TOP 10 TAX INCENTIVES FOR CORPORATIONS, FISCAL YEAR 2011

		(in millions)	Percent of total
1	Accelerated depreciation of machinery and equipment	$76,140	42.0%
2	Deferral of income from foreign subsidiaries	$47,590	26.2%
3	U.S. production activities	$9,840	5.4%
4	Research activities	$8,300	4.6%
5	Interest on municipal bonds	$7,570	4.2%
6	Low-income housing investments	$5,840	3.2%
7	Lower tax rates for small corporations	$3,280	1.8%
8	Inventory property sales (taxed at lower foreign rates)	$3,160	1.7%
9	Interest on life insurance savings	$2,420	1.3%
10	Charitable contributions	$2,270	1.3%
	All others (less than 1.3%)	$15,025	8.3%
	Total	$181,435	

Source: Office of Management and Budget, "Budget of the United States Government, Fiscal Year 2013."

It is important to note that many of the credits and deductions are only available if the taxpayer is itemizing deductions (important exceptions are the first two items in table 1).[8] The latest data for the Internal Revenue Service show that only 32.5 percent of taxpayers itemize deductions, with the rest taking the standard deduction. Individuals in high income brackets are much more likely to itemize deductions. On returns showing over $200,000 in adjusted gross income, over 95 percent of taxpayers itemize deductions. In sharp contrast, only 14.7 percent of those with incomes under $50,000 itemize.[9]

There is one more way we can show the size and effect of tax expenditures. Table 3 shows total federal expenditures for FY 2011, both without tax expenditures (the official budget) and with tax expenditures.[10]

8. Many of the deductions are also not available to taxpayers subject to the Alternative Minimum Tax.
9. Data from 2009, the latest year available. From 1990 to 2009, the number itemizing increased from around 28 percent to over 35 percent before decreasing slightly during the latest recession. Calculations are from the Internal Revenue Service, "Individual Income Tax Returns 2009," Publication 1304, Table 1.2.
10. For tax expenditures, see the sources cited above. For the official Federal spending, see Office of Management and Budget, "Budget of the United States Government, Fiscal Year 2013," Historical Tables: Table 3.2 – Outlays by Function and Subfunction: 1962–2017, http://www.whitehouse.gov/omb/budget/Historicals. Our table primarily uses the official function categories from OMB, but two of the functions have been broken down into subcategories. "Income Security" is divided into "Retirement and Disability" and "Other Income Security" (primarily antipoverty programs). "Commerce and Housing Credit" is divided into "Commerce/Financial Institutions" and "Housing."

TABLE 3: FEDERAL EXPENDITURES WITHOUT AND WITH TAX EXPENDITURES, FY 2011 (IN $MILLIONS)

	Official expenditures	% of total	Including tax expenditures	% of total
Social Security	$730,811	19.8%	$768,571	16.1%
National defense	$705,625	19.1%	$718,875	15.1%
Health	$372,500	10.1%	$559,965	11.8%
Medicare	$485,653	13.2%	$485,653	10.2%
Other income security	$466,205	12.6%	$473,937	10.0%
Income security: retirement and disability	$131,147	3.6%	$258,077	5.4%
Education, training, employment, & social services	$101,233	2.7%	$232,711	4.9%
Net interest	$229,968	6.2%	$231,158	4.9%
Commerce/financial institutions	$–26,731	-0.7%	$195,659	4.1%
Housing	$14,156	0.4%	$195,406	4.1%
Veterans benefits and services	$127,189	3.4%	$133,449	2.8%
International affairs	$45,685	1.2%	$103,005	2.2%
Transportation	$92,965	2.5%	$97,015	2.0%
General government	$25,507	0.7%	$92,757	1.9%
Administration of justice	$56,055	1.5%	$56,055	1.2%
Natural resources and environment	$45,470	1.2%	$47,490	1.0%
General science, space, and technology	$29,466	0.8%	$39,026	0.8%
Community and regional development	$23,816	0.6%	$26,896	0.6%
Energy	$12,174	0.3%	$24,604	0.5%
Agriculture	$20,661	0.6%	$21,681	0.5%
Total	$3,689,555		$4,761,990	

Source: Office of Management and Budget, "Budget of the United States Government, Fiscal Year 2013."

As seen in table 3, the official budget presents a somewhat distorted picture of national priorities. Total spending in many categories increases substantially when tax expenditures are included (and consequently decreases for others), roughly doubling for retirement and disability; education, training, employment, and social services; international affairs; and energy. The various tax expenditures that affect these categories are discussed in the next section.

Federal spending on health (other than Medicare) also changes significantly by including tax expenditures, moving up from the fifth-largest expenditure to the third-largest expenditure. Moreover, if we combined the health and Medicare categories it would easily be the largest category, with over $1 trillion in federal expenditures. This is not surprising after looking at table 1, where the tax expenditure for health insurance is by far the largest individual item.

Finally, the increases in spending for commerce/financial institutions and housing are the most dramatic. From under 0.5 percent of the budget (in fact, from being a revenue source for the first category, through TARP repayments), both of these categories exceed 4 percent of the budget when tax expenditures are included, a more than eightfold increase in the "national priority" of these items. The commerce and financial category is mostly affected by two tax expenditures discussed later: accelerated depreciation, and tax treatment of capital gains and dividends. Three tax expenditures factor into the housing increase: mortgage interest, state and local property taxes, and imputed rental income.

The remainder of this paper is divided into four sections. We first provide a discussion of the top ten individual tax expenditures, followed by a section detailing the top ten corporate tax expenditures. We close with a high-level analysis of tax expenditures and a brief conclusion.

I. TEN LARGEST INDIVIDUAL TAX EXPENDITURES

An important nuance to consider in the discussion of tax expenditures is that a considerable percentage of individual tax expenditures is related to businesses known as "pass-through entities," not individuals per se. These pass-through entities are sole proprietorships, partnerships, and S corporations—businesses that do not pay taxes but pass profits onto individuals, who then pay taxes on their profits through their individual income tax. (S corporations thus provide a contrast with C corporations, which pay corporate income tax.) This context helps to explain why the accelerated depreciation of machinery and equipment is both the largest corporate tax expenditure and the seventh-largest individual tax expenditure.

No. 1: Exclusion of employer contributions for medical insurance premiums and medical care

The exclusion of medical spending by employers from taxable income is by far the single largest incentive in the federal tax code; it is almost as large as all corporate tax incentives combined. One could argue that this figure should be even larger than the $163 billion shown in table 1, which shows only the effect on federal income taxes. Payroll tax collections are also reduced by $104 billion from this exclusion.[11]

There is a long history in the tax code related to the exclusion of health insurance. The Revenue Act of 1918 excluded compensation received from health insurance from taxable income, as did the Internal Revenue Code of 1939.[12] In 1942 individuals were allowed to deduct medical expenses (including insurance premiums) on

11. Office of Management and Budget (2013), Table 17-2, footnote 16. Since OMB does not consistently make these calculations for payroll taxes, we note the figure for this tax expenditure (because it is so large) but do not include it in the totals.
12. Revenue Act of 1918, Section 213(b)(6), and Internal Revenue Code of 1939, Section 22(b)(5).
13. There is some indication from legislative debates that this was intended as a temporary measure due to the high wartime tax rates. See footnote 3 in P.B. Konrad Knake, Jr., "'Medical Care': Deductibility of Capital, Transportation, and Food and Lodging Expenses," *Virginia Law Review* 47, no. 2 (June 1961): 858–879.

their tax returns.[13] The Stabilization Act of the same year imposed wartime wage and price controls on the economy, but employers were allowed to offer nonwage benefits, such as health insurance, to compensate employees. An administrative tax court ruling in 1943 excluded these contributions from employees' taxable income.

Following this important 1943 ruling, there was still some uncertainty as to the tax treatment of health insurance received from an employer.[14] The issue was resolved in the Internal Revenue Code of 1954, which explicitly stated that contributions by an employer were not part of taxable income.[15] The 1954 changes appear to be the most significant ones leading to the present situation, in which medical expenditures are the largest single incentive in the tax code.[16]

Thomasson examined a survey of household expenditures that was administered both before and after the 1954 change. She found that the new law had several related effects. First, with regard to the number of individuals covered, the policy change "led workers to purchase more group health insurance coverage from their employer and encouraged the expansion of employment-based, group health insurance." It also increased national health expenditures per individual. This effect was most pronounced for taxpayers in higher tax brackets, due to the bigger return from using health expenditures to exempt income from taxes at higher rates.[17]

There is also evidence that the existence of nonwage benefits makes employees reluctant to quit their jobs, resulting in job lock. Madrian estimates that employment-based health insurance leads to a significant decrease—around 25 percent—in voluntary job turnover. This results in inefficient matches between employers and employees and is harmful to both the individual employees and the labor market at large.[18]

14. "Taxation of Employee Accident and Health Plans before and under the 1954 Code," *Yale Law Journal* 64, no. 2 (December 1954): 222–247.
15. Internal Revenue Code of 1954, Section 106.
16. The rationale for exempting employer-provided medical insurance from taxable income is somewhat unclear. In the legislative debates for the 1954 tax reform, the major testimony given on the matter was given by Clifton Phelan, president of Michigan Bell Telephone Co. and representing the entire Bell system. AT&T was at the time by far the largest employer in the country, with 700,000 employees. At the time AT&T had a plan for employees that today would be called self-insurance: They paid benefits to employees who were sick, but did so in-house rather than through a commercial insurance company. In dispute was the question of whether the benefits they paid to employees should count as taxable income, with the resolution being that benefits received from self-insurance and commercial plans would not be taxed. See *Internal Revenue Acts of the United States: Revenue Act of 1954 with Legislative Histories and Congressional Documents*, ed. Bernard D. Reams, Jr., vol. 3, 364373.
17. Melissa A. Thomasson, "The Importance of Group Coverage: How Tax Policy Shaped U.S. Health Insurance," *American Economic Review* 93, no. 4 (September 2003): 1373–1384.
18. Bridgett Madrian, "Employment Based Health Insurance and Job Mobility: Is there Evidence of Job-Lock?" *Quarterly Journal of Economics* 109, no. 1 (February 1994): 27–54.

No. 2: Retirement and pension contributions

As with employer contributions for health insurance, employer contributions to retirement and pension plans are not included in the employee's taxable income. Employer deductibility of pensions paid to employees dates back to a 1914 ruling, and subsequent regulations broadened that deductibility. The Congressional Research Service states that "the rationale for these early decisions was not clear, since there was no recorded debate," but that they were likely "adopted in part to deal with technical problems of assigning income."[19]

Many other tax incentives have been added over the years to encourage individuals to contribute to their own retirement. Important additions include incentives for self-employed workers (1962; Keogh plans), voluntary contributions beyond employment-based plans (1974; IRAs), and defined-contribution plans set up by the employer (1978; 401[k]s and similar plans).

Employees with employer-sponsored retirement plans potentially benefit from this tax incentive in two ways. They can lower their lifetime tax burden, provided they are in a lower tax bracket when they retire than they were during their working years. They may also benefit from the program if they lack the foresight to save enough for their own retirement in the absence of these incentives. There may also be some benefits to society from the incentive, such as an increase in capital stock, reduced welfare spending on retired individuals, and a higher rate of investment that could accelerate economic growth.

To know if employees and society benefit from the incentives, we can investigate whether households actually increase savings under these programs. The evidence is mixed. A symposium in the *Journal of Economic Perspectives* attempted to address this issue but did not reach a clear conclusion. Poterba, Venti, and Wise compared the assets of people who work for employers offering 401(k) plans with the assets of people who do not, and they argued that the incentives do increase saving. Engen, Gale, and Scholz countered that the incentives crowd out of other forms of saving, perhaps completely. They argue that looking at asset balances overstates the amount of additional saving, because these balances will be taxed when withdrawn. Also, households with more savings may also take on additional debt, meaning that net savings may not increase even though 401(k) balances are increasing.[20]

Although the evidence for increased savings is mixed, there is another interest

19. Congressional Research Service, Tax Expenditures--Compendium of Background Material on Individual Provisions, 2010, 111th Cong. 2d sess., United States Senate Committee on the Budget, http://budget.senate.gov/democratic/index.cfm/files/serve?File_id=8a03a030-3ba8-4835-a67b-9c4033c03ec4, p. 905.
20. The symposium can be found in the Autumn 1996 (vol. 10, no. 4) of the *Journal of Economic Perspectives*. The three articles are as follows: R. Glenn Hubbard and Jonathan S. Skinner, "Assessing the Effectiveness of Saving Incentives"; James M. Poterba, Steven F. Venti, and David A. Wise, "How Retirement Saving Programs Increase Saving"; and Eric M. Engen, William G. Gale, and John Karl Scholz, "The Illusory Effects of Saving Incentives on Saving."

group that stands to benefit from this tax expenditure: the financial services industry, and specifically the subset of this industry that is able to direct the savings into its investments. Individuals with 401(k) and similar plans typically have much less freedom in the investments they choose than do those investing on their own. Thus, even if the incentives do not result in an increase in net national savings, they may still have an impact by changing the form those savings take. If these incentives do cause net savings to increase, the distortion is even larger.

The exclusion of retirement contributions from taxable income may also have consequences for the distribution of income, because it benefits those with higher incomes in several ways. Higher-income individuals are more likely to work for employers that offer such plans. Almost three–quarters of individuals with earnings over $65,000 were covered by 401(k) plans, compared with just 15 percent of those with incomes under $20,000. This is true even within age cohorts: For example, the percentages by income for the group aged 45 to 49 are virtually identical to the overall figures.[21] Higher-income earners also face higher marginal tax rates, so the tax savings are greater for them than for lower-income earners.

No. 3: Deductibility of mortgage interest on owner-occupied homes

The concept of tax-deductible mortgage interest on owner-occupied homes originated not from a grand legislative agenda but from the mechanics of implementing a tax code after the ratification of the Sixteenth Amendment in 1913. The income tax code implemented at that time had a deduction for any interest paid, regardless of the type of expense it represented (business expense, family expense, or other expense).[22]

The major reform to deductions on interest payments came in 1986, when President Ronald Reagan proposed the elimination of tax “loopholes” along with a decrease in marginal tax rates; this ultimately led to the Tax Reform Act of 1986. Under this legislation, consumer interest payments were no longer deductible (car loans, credit card loans, etc.), but the home mortgage interest deduction remained. Limitations, however, were added for the first time.[23] Today, a taxpayer can deduct interest paid on a home mortgage for a loan of up to $1 million and a home equity loan of up to $100,000.

Despite not being the original intent of this deduction, the encouragement of homeownership has become a common justification for the home mortgage interest

21. Congressional Research Service (2010), pp. 904–905.
22. Congressional Research Service, Tax Expenditures–Compendium of Background Material on Individual Provisions, 2010, 111th Cong. 2d sess., United States Senate Committee on the Budget. http://budget.senate.gov/democratic/index.cfm/files/serve?File_id=8a03a030-3ba8-4835-a67b-9c4033c03ec4.
23. Eric Toder et al, “Reforming the Mortgage Interest Deduction,” (Urban Institute, Tax Policy Center, and What Works Collaborative Publication, April 2010), http://www.urban.org/uploadedpdf/412099-mortgage-deduction-reform.pdf.

deduction. The sentiment that homeownership is a crucial part of the American ethos has been a bipartisan staple of U.S. domestic policy: Bill Clinton once stated that "[encouraging homeownership] go[es] to the heart of what it means to harbor, to nourish, to expand the American Dream," Ronald Reagan that "we will preserve the part of the American dream which the home-mortgage-interest deduction symbolizes," and Herbert Hoover that "the sentiment for homeownership is embedded in the American heart [of] millions of people who dwell in tenements, apartments, and rented rows of solid brick … This aspiration penetrates the heart of our national well-being."[24]

However, the home mortgage deduction does not achieve this goal effectively. Consider that only 33 percent of taxpayers itemize deductions and, of the 33 percent who do, only 20 percent claim the home mortgage deduction. Further, of those who do claim the home mortgage deduction, two-thirds make more than $100,000 a year. Consequently, individuals and families who are on the margin and could be motivated to become homeowners by incentives—that is, lower-income individuals and families—are unlikely to use this deduction.[25]

Direct empirical testing has reinforced this conclusion. In a study for the National Bureau of Economic Research, Edward Glaeser and Jesse Shapiro researched the U.S. housing market since the 1960s and found that, while the home mortgage deduction has seen significant increases and decreases throughout this period, there has been little growth in homeownership. They closed by stating that "the home mortgage interest deduction is really not a pro-homeownership policy in any meaningful sense."[26]

One of the most vocal advocates of the home mortgage deduction is the National Association of Realtors, a group with the "core purpose" of "help[ing] its members become more profitable and successful."[27] The organization lobbies for everything from gestures emphasizing the importance of the home mortgage deduction to actual legislative change. For example, a January 2011 letter to the Congress stated:

> We urge you to cosponsor H.Res.25, a bipartisan resolution offered by Rep. Gary Miller and five original bipartisan cosponsors. It

24. United States Department of Housing and Urban Development, *Urban Policy Brief* #2, August 1995, http://www.huduser.org/publications/txt/hdbrf2.txt; Roger Lowenstein, "Who Needs the Mortgage-Interest Deduction?," *New York Times*, March 5, 2006, http://www.nytimes.com/2006/03/05/magazine/305deduction.1.html?pagewanted=print; "The Presidency: Home Sweet Home," *Time*, December 14, 1931, http://www.time.com/time/magazine/article/0,9171,930018,00.html.
25. Dean Stansel and Anthony Randazzo. "Unmasking the Mortgage Interest Deduction: Who Benefits and by How Much?," *Reason Foundation Policy Study* 394, July 2011, http://reason.org/files/mortgage_interest_deduction.pdf.
26. Edward Glaeser and Jesse Shapiro. "The Benefits of the Home Mortgage Interest Deduction," National Bureau of Economic Research Working Paper 9284, October 2002, http://www.nber.org/papers/w9284.pdf?new_window=1.
27. National Association of Realtors website, "NAR Overview," http://www.realtor.org/realtororg.nsf/pages/NAROverview?OpenDocument.

affirms the importance of the mortgage interest deduction (MID). The resolution expresses the sense of Congress that the MID should not be cut back, but rather that current law should be retained.[28]

No. 4: State and local taxes

For taxpayers who itemize deductions, a variety of state and local taxes may be deducted when calculating taxable income. According to the Congressional Research Service, this deduction dates to the beginning of the income tax code in 1913 and was implemented "to avoid taxing income that was obligated to expenditures over which the taxpayer had little or no discretionary control."[29] Billman and Cunningham have documented that the practice was used in the United States, under earlier income taxes, as far back as 1861 and 1894. They also offer another justification for the deduction: State and local taxes reduce an individual's income and ability to pay federal taxes.[30]

The primary state and local taxes that individuals can deduct on their federal return are property, income, and sales taxes, but taxpayers may only choose one of the last two to deduct. In FY 2011, property taxes accounted for about 36 percent of this tax expenditure.[31]

Bartlett argued that this deduction is a subsidy to high-tax states from low-tax states, and high-tax states tend to have higher per capita incomes. He also argues that in general the deduction leads to higher state and local taxes, because the federal government is paying a portion of these taxes, with most estimates suggesting state and local taxes are about 13 to 14 percent higher.[32] This deduction also influences the types of taxes that state and local governments use, biasing them toward choosing taxes that are deductible rather than those that are most efficient.[33]

28. National Association of Realtors, "January 2011 Letter to the United States House of Representatives," http://www.ksefocus.com/billdatabase/clientfiles/172/2/832.pdf.
29. Congressional Research Service (2010), p. 959.
30. Brookes D. Billman, Jr., and Noel B. Cunningham, "Nonbusiness State and Local Taxes: The Case for Deductibility," *Tax Notes* 28 (September 2, 1985): 1105–1120.
31. As is true of most itemized deductions, individuals with higher incomes benefit more from this deduction. The Congressional Research Service reports that in 2009, about 90 percent of the benefits from this deduction went to those earning over $75,000. See Congressional Research Service (2010), p. 958.
32. Bruce Bartlett, "The Case for Eliminating Deductibility of State and Local Taxes," *Tax Notes* 28 (September 2, 1985): 112–125.
33. Martin Feldstein and Gilbert Metcalf, "The Effect of Federal Tax Deductibility on State and Local Taxes and Spending," *Journal of Political Economy* (1987): 710–736.

No. 5: Lower tax rates for certain capital gains and dividends

Although most forms of income are taxed at the same rate, certain types of investment income are currently taxed at lower rates: Capital gains on the sale of assets held for more than one year and qualified dividends are the primary forms of income that qualify for lower rates. By contrast, other forms of investment income, such as interest and short-term capital gains, are taxed as ordinary income. Currently, the lower rate is zero percent for taxpayers in the bottom two tax brackets and 15 percent for those taxed at 25 percent and above. The current rates are set to expire at the end of FY 2012, at which time dividends will be taxed as ordinary income and capital gains will be taxed at 10 percent or 20 percent, depending on the taxpayer's bracket.

Lower rates of taxation for investment income dates back to 1921, when capital gains were taxed at 12.5 percent (the top rate had been raised to over 70 percent to pay for World War I). Numerous changes were made over the years, but the differential treatment of investment income was removed in 1986 as part of the overall approach of lowering the top tax rates. Capital gains were then taxed as ordinary income. Lower rates for capital gains were reintroduced in 1997, and these rates were lowered to current levels in 2003 (the change also applied to dividends).[34]

There are several efficiency-related rationales for taxing investment income at a lower rate. In a steep, progressive tax system, capital gains are treated unfavorably: They are often clustered chronologically, but the tax is only applied in the years when the gains are realized. They would have been taxed at lower rates if annual assessments of the gain were calculated. (This is easy to do for stocks, but not so easy for unique real assets.) Another inefficiency is the lock-in effect of taxing capital gains, in which individuals hold assets for longer than is optimal for the purpose of avoiding taxes. An example of this phenomenon might be waiting to sell an asset until a year when one's wage income is lower or tax rates are lower than they are currently.[35]

A more general reason for taxing investment income at a lower rate is to encourage investment and economic growth, particularly in the context of double taxation of profits from corporate investment. When a corporation earns profits, it is taxed first through the corporate income tax and again (when that profit is distributed to shareholders) through a tax on capital gains and dividends. For example, when a domestic corporation in the United States earns $1,000 in corporate profits, it is subject to $391 (39.1 percent of $1,000) in corporate income taxes and an additional $91.35 (15 percent of $1,000 minus $391) in capital gains or dividends taxation for the shareholders. This is nearly a 50 percent statutory tax rate on corporate profits, even with lower tax rates (temporarily) on capital gains and dividends.[36]

34. Congressional Research Service (2010), pp. 406–408.
35. Martin Feldstein, Joel Slemrod, and Shlomo Yitzhaki, "The Effects of Taxation on the Selling of Corporate Stock and the Realization of Capital Gains," *The Quarterly Journal of Economics* 94 (June 1980): 777–791.
36. The figure of 39.1 percent is calculated from the average of the federal 35 percent corporate tax rate and state and local corporate taxes. Organisation for Economic Co-operation and Development Tax Database, http://www.oecd.org/tax/taxpolicyanalysis/oecdtaxdatabase.htm.

Taxpayers will benefit from these lower rates to the extent that they derive their income from capital gains and dividends. Most estimates show that for both capital gains and dividend income, higher-income earners benefit disproportionately from these lower rates because they earn a larger share of investment income and face higher tax rates.[37]

No. 6: Exclusion of imputed rental income

This tax expenditure does not arise from any particular ruling or aspect of the tax code. Rather, it stems from the simple fact that the rental value of a home is not counted as taxable income. The logic is that if the homeowner were instead renting, the rental payments would be income for their landlord, who would pay taxes on that income. Further, under classic classifications of income, such as the Haig-Simons definition, imputed rent is considered income because it allows the homeowner to consume more than a renter with the same wage income can.[38] The amount counted as imputed rental income is calculated after subtracting costs, such as interest and property taxes.

One objection to taxing imputed rental income is that it poses an administrative challenge. However, many industrialized countries and some U.S. states have taxed imputed rental income in the past (e.g., the United Kingdom and Wisconsin),[39] and it is currently taxed in four European countries: Belgium, the Netherlands, Spain, and Switzerland.[40]

For many households, the tax savings from excluding imputed rental income exceed the savings from the mortgage interest and property tax deductions.[41] This is especially true for those who do not itemize deductions. Higher-income earners are also more likely to benefit from this exclusion—as with most tax expenditures—for two reasons: they face higher tax rates, and they are more likely to own a home.

Many of the effects of this tax expenditure are similar to the effects of the mortgage interest deduction. It encourages home ownership over renting, which some may regard as a benefit rather than a cost. It will also tend to increase the price of housing, since the tax expenditure reduces the cost of home ownership compared to the cost of rental housing and thus increases the demand for owner-occupied

37. Congressional Research Service (2010), "Estimated Distribution of Tax Expenditure" table (see p. 406).
38. Richard Goode, "Imputed Rent of Owner-Occupied Dwellings Under the Income Tax," *The Journal of Finance* 15 (December 1960): 504–530.
39. Goode (1960), 504.
40. Paul Hilbers, Alexander W. Hoffmaister, Angana Banerji, and Haiyan Shi, "House Price Developments in Europe: A Comparison," International Monetary Fund working paper (2008), 58, http://www.imf.org/external/pubs/ft/wp/2008/wp08211.pdf.
41. See Table 1 in James Poterba and Todd Sinai, "Tax Expenditures for Owner-Occupied Housing: Deductions for Property Taxes and Mortgage Interest and the Exclusion of Imputed Rental Income," *The American Economic Review* 98 (May 2008): 84–89.

homes. However, the homeowner may not benefit from this, since some of the benefit is probably capitalized into the price he must pay for the house.

There is good reason to be skeptical about including this expenditure in our list at all. Many household activities produce value for a family, but are untaxed, such as cooking and laundry. And many of these activities can be tied to specific consumer durable goods, such as microwave ovens and washing machines. Should the imputed income from these sources be counted as tax expenditures? This would be a difficult calculation, and it seems patently silly and potentially arbitrary (since no market transaction takes place, the value must be estimated).

So why include imputed rental income? We do so for several reasons. First, our method in this paper is to use the list of tax expenditures provided by OMB, whether or not we think each individual expenditure is valid. Second, the tax code contains several other tax expenditures related to homeownership, primarily the mortgage interest and local property deductions. This means that if all the homeownership-related deductions are combined, they are roughly equal to the largest tax expenditure, employer-provided health insurance, making this an important area in which to document the full effects of the tax code. Finally, unlike household appliances or automobiles, homes tend to retain their value over time rather than depreciate, producing a constant stream of imputed rental income.

No. 7: Accelerated depreciation of machinery and equipment

[Note: This is also the no. 1 tax expenditure for corporations. See corporate tax expenditures for a description.]

No. 8: Partial exclusion of Social Security benefits from taxation

Many forms of retirement contributions can be made out of pre-tax earnings (for examples, see entry no. 2 for individuals). However, nearly all of these contributions are only deferrals of taxes, since the earnings are taxed as income when they are withdrawn at retirement. A major exception to this principle is Social Security benefits: In most cases, they are not taxed as income when they are paid to people in retirement. The same is true for Social Security disability payments.

There is also an exception to this exception: Social Security recipients who also have market income may find that their benefits are taxed. (As combined market income and Social Security benefits increase, an increasing share of the benefits are taxed.) Together with other tax-related factors, this rule can be a strong disincentive to work for older people.[42] Thus, the primary beneficiaries of this tax exclusion are older Americans who choose not to work. The question of whether Social Security

42. Barbara A. Butrica, Richard W. Johnson, Karen E. Smith, and C. Eugene Steurle, "The Implicit Tax on Work at Older Ages," *National Tax Journal* 59 (June 2006): 211–234.

benefits should be treated like other retirement benefits depends on how one views the program (i.e., as a retirement program or a social welfare program).[43] Current tax policy treats it as both, depending on whether or not the taxpayer has a large amount of income in addition to Social Security benefits.

No. 9: Deductibility of charitable contributions

[Note: This is also the no. 10 tax expenditure for corporations.]

Taxpayers were first allowed to deduct charitable contributions in 1917, with the passage of the War Revenue Act.[44] Today, people who choose to itemize deductions can, in most cases, deduct donations up to 50 percent of their adjusted gross income. These donations can be to a wide variety of non-profit organizations, including religious, charitable, educational, fraternal, and governmental groups.[45]

When introducing the charitable contributions amendment to the 1917 War Revenue Act, Senator Hollis stated clearly that wealthy taxpayers would be the primary beneficiaries from this deduction, aside from the charities themselves. Hollis predicted that "when war comes and we impose these very heavy taxes on incomes," donations to charity "will be the first place where the wealthy men will be tempted to economize." The argument that wealthy individuals would cut back on charitable donations was also expressed in editorials from the *New York Times*, the *Washington Post*, and other newspapers.[46]

Non-profit organizations that qualify for tax-exempt status would appear to be an obvious beneficiary of this tax expenditure. But this thinking assumes that charitable contributions are actually greater with the deduction in place. Basic economic theory would suggest that lowering the price of donating would encourage more people to donate. Most research supports this idea, although some studies find that the effects are much smaller than might be expected. For example, Randolph has shown that many charitable donations are timed to coincide with changes in tax rates, suggesting that tax incentives may affect the timing, but not the level, of charitable donations.[47]

43. See discussion in Congressional Research Service (2010), p. 940.
44. War Revenue Act of 1917, Section 1201(2).
45. Internal Revenue Service, "Charitable Contributions," Publication 526 (2011).
46. Both Hollis's statement and the editorials can be found in the Congressional Record, September 7, 1917, pp. 672–829.
47. William C. Randolph, "Dynamic Income, Progressive Taxes, and the Timing of Charitable Contributions," *Journal of Political Economy* 103 (August 1995): 709–738.

No. 10: Making Work Pay credit

The Making Working Pay tax credit was a temporary tax credit that was a part of the American Recovery and Reinvestment Act of 2009 (i.e., "the stimulus"). Unlike many supposedly temporary tax credits, this credit does actually appear to have expired, so FY 2011 will be the last year this credit is included in the top 10 tax expenditures. Nonetheless, it provides an instructive illustration of the intended and actual beneficiaries of tax expenditures.

There are two major rationales for a credit such as this: to provide an economy-wide economic stimulus and to create a benefit for ordinary taxpayers. It provided a tax credit of $400 for individuals ($800 for joint filers), which had a phase-out starting at $75,000 ($150,000 for joint filers). Since this credit is so new, little research has been published on its effects. However, the Economic Stimulus Act of 2008 provided a similar tax rebate ($300–$600 for individuals) and a similar phase-out schedule.

Shapiro and Slemrod conducted a survey about people's primary intended use for their rebate money. They found that about 80 percent of those receiving rebates through the 2008 Act planned to save the money, or pay down debt; only 20 percent planned to spend their rebate.[48] This indicates that one of the intended effects of the tax credit—providing a short-run economic stimulus—was likely to be minimal.

Did the tax credit achieve its other goal of helping individual taxpayers? In the short run, it appears that the recipients of the credit must have benefitted, and the White House claims that this tax cut went to 95 percent of American households.[49] But the story is likely to be different in the long run: Since this tax credit was not paired with any offsetting spending cuts, taxes will have to be increased at some point in the future. It is likely that most of the people who received the tax credit will bear this future tax burden.

II. TEN LARGEST CORPORATE TAX EXPENDITURES

No. 1: Accelerated depreciation of machinery and equipment

[Note: This is also the no. 6 tax expenditure for individuals.]

As the largest tax expenditure by a large margin for corporations (and the sixth largest for individuals—the only category in both top ten lists), accelerated depreciation of machinery and equipment deserves serious attention and scrutiny. In the context of the federal tax code, depreciation refers to deducting the entire cost of a

48. Matthew D. Shapiro and Joel B. Slemrod, "Did the 2008 Tax Rebates Stimulate Spending?," *American Economic Review* 99 (May 2009): 374–379.
49. Jared Bernstein, "Tax Cut Facts: How Obama's Tax Cuts Are Helping American Families," 2010, http://www.whitehouse.gov/blog/2010/10/21/tax-cut-facts-how-obama-s-tax-cuts-are-helping-american-families.

capital asset from taxable income over a given period of time. Under a straight-line method, for example, a capital asset with a five-year recovery period would have 20 percent (100 percent divided by 5) of its cost deducted from taxable income every year for five years. The adjective "accelerated" denotes a depreciation rate faster than straight-line depreciation; that is, it frontloads the deduction of the cost of capital and reduces the overall cost of capital.[50] This expenditure is calculated as the difference between depreciation under the accelerated schedule and acceleration under straight-line depreciation.

The major effect of accelerated depreciation is a distortion of opportunity cost: By lowering the cost of capital, accelerated depreciation benefits capital-intensive industries over relatively labor-intensive industries. Moreover, it creates different effective tax rates across capital assets with different recovery lives.

It should be noted that calculating the actual rate of annual depreciation is very difficult to do, even if the useful life of the goods are known. For most capital goods, secondary markets are very thin or nonexistent, so the market value of the goods in any given year is unknown. There is no reason why an asset would depreciate by an equal amount in each year of its useful life, but the proper economic depreciation may not necessarily be faster than the straight-line method.

At first glance, it appears that accelerated depreciation should benefit no one in particular; it simply reallocates tax deductions over various tax years, while keeping the total deduction the same over the life of the asset (with a minor adjustment for present value differences). However, there is one major effect on firm decision-making: There is an incentive to replace capital goods more often under accelerated depreciation than under either a straight-line or "true" depreciation schedule. The more a depreciation schedule is weighted toward the early years of an asset's life, the lower the cost of purchasing that good, because of the tax benefits. This does not mean that all capital assets will be replaced at a faster rate, but at the margins some effects are likely.

One final word: Despite being the largest tax expenditure for corporations, there is a sense in which this category is overstated and should be viewed with skepticism. Accelerated depreciation looks at static, one-year losses of tax revenue from these depreciation schedules. However, since the total amount of depreciation is the same over the life of the asset, there is likely to be little net loss in tax revenue over the long run.

50. The cost of capital is reduced because of the time value of money: A dollar today is worth more than a dollar tomorrow.

No. 2: Deferral of income from controlled foreign corporations

The historical precedent in the United States for taxing individuals and corporations under separate rules began with the Revenue Act of 1894. Although the income tax provision in this act was struck down by the Supreme Court in 1895, the precedent was repeated in the Revenue Act of 1909, and it was permanently enshrined in the U.S. tax code when it was included in the income tax code implemented after the passage of the Sixteenth Amendment (the Revenue Act of 1913).

As a result of this legislation, a corporation and its shareholders are treated as separate entities, allowing for the possibility of "tax deferral." This means that a U.S. corporation can form a foreign subsidiary, and this subsidiary's foreign income is not—with some exceptions—taxed until it is repatriated to the United States. When the income is repatriated, the U.S. corporation can credit on its U.S. taxes the foreign taxes that the foreign subsidiary has paid.[51] Financial firms are generally excluded from this practice, but a temporary change in tax law has allowed financial firms to defer taxes on certain kinds of overseas income.[52]

A major discussion of this issue did not take place until the 1960s, when the Kennedy Administration attempted first to end this tax expenditure and then to restrict the type of income that qualifies for deferral. It can be argued that tax deferral often turns into tax avoidance: Some foreign income may never be repatriated to the United States. Even if the money is repatriated, the effective tax rate may be near zero, due to the time value of money.[53]

On the other hand, this provision may be necessary for the global competitiveness of U.S. businesses. The United States is one of the few countries to employ a worldwide tax regime; businesses in most countries only have to pay taxes in the country in which their activities occur, but U.S. businesses must still pay U.S. taxes (though the foreign taxes are generally credited against the U.S. taxes). This would not be as burdensome if the United States did not also have an extremely high corporate tax rate, the most onerous in the developed world, which forces American businesses to overcome a higher tax burden on their foreign activity than their foreign competitors do.[54]

51. Congressional Research Service, "Tax Expenditures—Compendium of Background Material on Individual Provisions," 2010, 111th Cong. 2d sess., United States Senate Committee on the Budget, http://budget.senate.gov/democratic/index.cfm/files/serve?File_id=8a03a030-3ba8-4835-a67b-9c4033c03ec4; United States Department of Treasury Office of Tax Policy, "The Deferral of Income Earned Through U.S. Controlled Foreign Corporations—A Policy Study," December 2000. http://www.treasury.gov/resource-center/tax-policy/Documents/subpartf.pdf.
52. Congressional Research Service (2010), pp. 61–64.
53. Craig M. Boise, "Breaking Open Offshore Piggybanks: Deferral and the Utility of Amnesty," *George Mason Law Review* (2007), Case Legal Studies Research Paper No. 06-18. http://www.georgemasonlawreview.org/doc/14-3_Boise.pdf.
54. United States Department of Treasury Office of Tax Policy, "The Deferral of Income Earned Through U.S. Controlled Foreign Corporations—A Policy Study," December 2000, http://www.treasury.gov/resource-center/tax-policy/Documents/subpartf.pdf.; OECD Tax Database: http://www.oecd.org/document/60/0,3746,en_2649_34533_1942460_1_1_1_1,00.html.

The major beneficiaries of tax deferral are U.S. owners of capital, and foreign labor. That is, this tax deferral serves as an incentive for U.S. businesses to over-invest outside the United States, which likely leads to a relatively low level of capital in the United States (leading to lower domestic wages) and a higher level of capital outside of the United States (leading to higher foreign wages).[55] However, this deferral has also been estimated to be responsible for at least 159,000 U.S. jobs ($7.3 billion in payments to workers) and as much as $84.2 billion in investments in U.S. capital.[56]

Currently, the major lobbying coalition for this tax expenditure is Protect America's Competitive Edge, an organization formed partly with the help of the Business Roundtable, the National Association of Manufacturers, the National Foreign Trade Council, and the U.S. Chamber of Commerce.[57]

No. 3: Deduction for U.S. production activities

There has historically been a trade dispute between the United States, which relies heavily on income taxes, and countries that rely more strongly on such consumption-based taxes as a value-added tax. Countries that make use of consumption-based taxes often employ border tax adjustments (BTAs) to remove the tax on exported products; the United States cannot implement such a system, because the World Trade Organization only recognizes consumption-based taxes as eligible for removal by BTAs.[58]

The United States has attempted to create systems comparable to BTAs, but these systems have been repeatedly ruled in violation of international trade laws by the World Trade Organization (or in violation of the General Agreement on Tariffs and Trade, the predecessor to the World Trade Organization). The most recent incarnation is Internal Revenue Code Section 199, enacted through the American Jobs Creation Act of 2004. Section 199 allows all taxpayers a deduction on qualified domestic production activities, with 9 percent as the maximum rate.[59]

55. United States Department of Treasury Office of Tax Policy, "The Deferral of Income Earned Through U.S. Controlled Foreign Corporations—A Policy Study," December 2000, http://www.treasury.gov/resource-center/tax-policy/Documents/subpartf.pdf.
56. Robert Shapiro and Aparna Mathur, "The Economic Benefits of Provisions Allowing U.S. Multinational Companies to Defer U.S. Corporate Tax on their Foreign Earnings and the Costs to the U.S. Economy of Repealing Deferral," *Sonecon*, June 2009, http://www.bsa.org/country/Public%20Policy/~/media/Files/Policy/Trade/Procurement/corporatetax_shapiro.ashx.
57. John McKinnon, "Firms Move to Fight Overseas-Profit Tax," *Wall Street Journal*, April 6, 2009, http://online.wsj.com/article/SB123897085163290813.html.
58. "Overview of the Foreign Sales Corporation/Extraterritorial Income (FSC/ETI) Exclusion," Tax Foundation, January 2, 2002, http://www.taxfoundation.org/news/show/154.html; William P. Orzechowski, "Border Tax Adjustments and Fundamental Tax Reform," Tax Foundation, November 1, 2001, http://www.taxfoundation.org/news/show/118.html.
59. American Jobs Creation Act of 2004, Public Law 108-357.

The intended beneficiaries of this deduction for U.S. production activities are explicitly identified in the Act: "[This is] an act to amend the Internal Revenue Code of 1986 to … make our manufacturing, service, and high-technology businesses and workers more competitive and productive both at home and abroad."[60] So the Act aims to improve the ability of domestic businesses to compete internationally.

Some have noted that countries with BTAs tax imports but not exports, whereas the United States' income-based taxes burden U.S. businesses (exports) but do not tax foreign businesses (imports). The idea that countries that employ BTAs provide their businesses an unfair advantage over U.S. businesses is intuitively appealing, but the majority of economists view it as a myth.[61]

Let us consider what would happen if the United States imposed a BTA in a simple theoretical framework. In a basic model of international trade, identical goods sold under free competition and in the absence of trade frictions[62] must, when expressed in the same currency, sell at the same price. If we suppose there is only one product, Good A, we can represent this as follows:

$$\frac{\text{Real Exchange Rate x Price Abroad of a Good A}}{\text{Domestic Price of a Good A}} = 1$$

Consequently, a reduction of the price abroad of Good A from the United States' BTA would trigger an increase in the real value of the dollar. It follows that this real increase in the dollar would increase the cost of U.S. exports, and decrease the cost of U.S. imports, in direct proportion to changes resulting from implementing a BTA; thus, there is no real effect on international competitiveness.[63]

On the other hand, a tax deduction is not synonymous with a BTA; it is more akin to a subsidy of U.S. businesses that engage in "qualified domestic production activities." In practice, this tax deduction mainly applies to U.S. manufacturing[64] and distorts the market by bringing about over-investment in U.S. manufacturing.

This tax deduction is vigorously supported by organizations like the National

60. Ibid.
61. Alan Viard, "Border Tax Adjustments Won't Stimulate Exports," American Enterprise Institute, March 2, 2009, http://www.aei.org/article/economics/fiscal-policy/border-tax-adjustments-wont-stimulate-exports/; Martin Feldstein and Paul Krugman, "International Trade Effects of Value Added Taxation," in *Taxation in the Global Economy*, eds. Assaf Razin and Joel Slemrod (Chicago and London: University of Chicago Press, 1990), 263–278, http://www.nber.org/chapters/c7211.pdf; H. Shibata, "The theory of economic unions: A comparative analysis of customs unions, free trade areas, and tax unions," in *Fiscal Harmonization in Common Markets: 1. Theory*, ed. C.S. Shoup (New York: Columbia University Press, 1967); and J. Whalley, "Uniform domestic tax rates, trade distortions and economic integration," *Journal of Public Economics* 11 (1979): 213–221.
62. A BTA is not a trade friction but a change in relative prices.
63. There may indeed be an effect in the short run, but the long-term effects are still open for debate. Some—though not a majority—hold that an equalization of the real value of the dollar may take years or decades, or may never materialize. Therefore, a BTA may indeed provide competitive advantages to companies whose countries tax imports but not exports.
64. American Jobs Creation Act of 2004.

Association of Manufacturers (NAM) and the U.S. Chamber of Commerce, the United States' largest industrial trade association and business advocacy organization, respectively.[65]

No. 4: Credit for increasing research activities

The credit for increasing research activities was first passed in 1981 as part of the Economic Recovery Tax Act. This credit allows corporations to deduct certain research activities, but only to the extent that such expenditures are increasing each year. It has never been made a permanent part of the tax code, but has been extended several times up to the present.[66]

The most basic economic justification for encouraging research is that there are large positive spillovers to society from research and innovation. While other policies and legal protections, such as intellectual property, also attempt to encourage innovation, tax credits provide an additional incentive. One concern is that activities that count as "research" may not actually have positive spillovers. The primary reason for the credit stated by the Joint Committee on Taxation in 1981 was the need to counter decline in investment in the United States, both in absolute terms and relative to other industrialized nations, such as Germany and Japan.[67]

For the research credit to be economically justified, there must be large positive spillovers from the credit; in other words, someone other than the firms, their employees, and their customers must benefit. Bloom, Griffith, and Reenen provided evidence that tax credits do increase research and development, but they did not address the question of positive spillovers.[68] Griliches surveyed the literature and found that there are indeed spillovers from research and development.[69] Taken together, these two studies suggest that the credits may be justified to encourage adequate research. However, Goolsbee argued that the main beneficiaries are the scientists and engineers of the subsidized firms. Salary payments are the primary way these credits are spent (about two-thirds of the credits go to salaries), and the supply of labor is fairly inelastic in the short run for these occupations.[70]

65. National Association of Manufacturers, "Letter to the United States House of Representatives," http://shopfloor.org/wp-content/uploads/2010/09/Sec-199-KM-Letter-Pelosi-Boehner-91.pdf; U.S. Chamber of Commerce, "Statement on the Repeal of Section 199," http://www.uschamber.com/sites/default/files/issues/econtax/files/Section%20199%20Repeal%20Talking%20Points2%2024%2011.pdf .
66. Joint Committee on Taxation, "General Explanation of the Economic Recovery Act of 1981," H.R. 4242, 97th Congress; Public Law 97-34: pp. 119–121.
67. Ibid.
68. Nick Bloom, Rachel Griffith, and John Van Reenen. "Do R&D tax credits work? Evidence from a panel of countries 1979–1997," *Journal of Public Economics* 85 (1): 131.
69. Zvi Griliches, "The Search for R&D Spillovers," *Scandinavian Journal of Economics* 94, Suppl. (1992): S29–S47.
70. Austan Goolsbee, "Does Government R&D Policy Mainly Benefit Scientists and Engineers?," *The American Economic Review* 88 (May 1998): 298–302.

No. 5: Exclusion of interest on public-purpose state and local bonds

The income earned from interest on select state and local bonds is not subject to federal income taxation (individual or corporate); certain types of private-activity bonds are also exempt. Governmental bonds are used to construct publicly owned and operated facilities, such as public schools and roads, that aim to serve the general public. Federal law does not place a limit on the issuing of these bonds, though states often impose limits.[71]

Private-activity bonds are issued by the state or local government, but the proceeds from selling the bonds are used by an individual or organization that is not the government. In some cases, these bonds are not granted tax-exempt status under the justification that they provide considerable benefits to private parties. There are two instances in which private-interest bonds can be tax exempt: either 95 percent of the net bond proceeds must be used on "qualified items," or the bond proceeds must be issued to qualified nonprofit organizations. These qualified items include construction of airports and docks, heating and cooling facilities, certain enterprise zones, and qualified residential facilities.[72] Regarding qualified nonprofit organizations, these are charitable, educational, and religious organizations that use the bond proceeds in a manner that is in no way related to the organization's earnings and business activities (if any).[73]

The original justification for this tax expenditure came from the 1896 U.S. Supreme Court decision in *Pollack v. Farmers' Loan and Trust Company*, which stated that the income from interest on state and local bonds had a constitutional protection from federal taxation. Consequently, the authors of the 1913 income tax code refrained from taxing this income. It should be noted that this ruling was overturned in the 1988 U.S. Supreme Court case *South Carolina v. Baker*, though this tax expenditure is still commonly defended with the argument that it encourages state and local investment in public projects.[74]

While the tax-exempt status of applicable state and local bonds purportedly exists to serve the general public, it must be recognized that there are tradeoffs inherent in this scheme: Subsidizing state and local bonds promotes investment in the production of public capital at the expense of labor[75] and private capital that does not qualify for private-activity bonds. Moreover, subsidizing state and local bonds encourages state and local governments to increase their debt. State and local governments can raise revenue today by issuing bonds, but they must pay the money

71. Congressional Research Service, "Tax Expenditures."
72. Internal Revenue Service, "Tax-Exempt Private Activity Bonds: Compliance Guide," IRS Publication, http://www.irs.gov/pub/irs-pdf/p4078.pdf.
73. Internal Revenue Service, "Tax-Exempt Bonds for 501(c)(3) Charitable Organizations" IRS Publication, http://www.irs.gov/pub/irs-pdf/p4077.pdf.
74. Congressional Research Service, "Tax Expenditures."
75. The return to government capital becomes higher relative to labor, creating an incentive to invest in government capital over labor.

back to investors with interest in the future; making many of these bonds tax exempt makes it cheaper to borrow more money today.

Moreover, if there is underconsumption of public capital, and a policy is required to subsidize public capital, a tax exemption for qualified state and local bonds is an extremely inefficient way to solve the problem, because the return an individual or investor makes increases with their marginal tax rate. Consequently, tax-exempt state and local bonds serve as a tax shelter for individuals and corporations facing high marginal tax rates.

To make this clear, consider an example with two investors—corporations or individuals—choosing between a taxed bond with a higher rate of return and a tax-exempt bond with a lower rate of return. The first investor, who faces a 30 percent marginal tax rate, can buy a $10,000 bond with a 10 percent rate of return (with the income being taxed) or a $10,000 tax-exempt bond with an 8 percent rate of return. This investor will choose the tax-exempt bond: With the taxed bond the investor can gross $1,000 in income, pay $300 in taxes, and net $700 in income, whereas with the tax-exempt bond the investor makes $800 untaxed. By contrast, an investor facing the same choice with a 15 percent marginal tax rate will choose to buy the taxed bond and will not benefit from the tax-exempt status of state and local bonds: When buying the taxed bond the investor can gross $1,000, pay $150 in taxes, and net $850 in income, whereas with the tax-exempt bond the investor receives a return of only $800.

The major supporters of the federal income tax exemption for qualified state and local bonds are trade associations whose members are offered a subsidy through tax-exempt bonds; groups that facilitate the purchase and selling of bonds; and organizations of state and local political officials, who can use the tax-exempt bonds to subsidize their issuance of debt. A recent example of active support for this exemption was the way the Senate Committee on Finance was lobbied to keep the tax-exempt status of qualified bonds off the table during budget reform discussions. Two letters were circulated by organizations such as the American Public Gas Association, the Council of Infrastructure Financing Authorities, the National Association of Health & Higher Education Facilities Authorities, Bond Dealers of America, the National Association of Bond Lawyers, and the International City/County Management Association.[76]

No. 6: Credit for low-income housing investments

THE CREDIT FOR low-income housing investments, originating with the Tax Reform Act of 1986, was intended to promote the development or rehabilitation of affordable rental housing. While this credit was initially envisioned as a temporary measure, it

76. Michael Belarmino et al., "Letter to Chairman Baucus and Senator Hatch," April 23, 2012, http://www.bondbuyer.com/pdfs/hear1.pdf; Elizabeth Kellar et al., "Letter to Chairman Baucus and Senator Hatch," April 23, 2012, http://www.bondbuyer.com/pdfs/hear2.pdf.

was repeatedly extended and eventually made permanent in the Omnibus Budget Reconciliation Act of 1993.[77]

Though the program has the laudable goal of providing affordable rental housing for low-income individuals and families, this has hardly been the outcome. Sharp criticism from the Congressional Budget Office (CBO) states why:

> Subsidized housing largely replaces other housing that would have been available through the private, unsubsidized housing market. Moreover, while the new subsidized housing is almost certainly better than the housing it replaces, the improvement in quality is generally worth much less to tenants than its costs to the government.[78]

This criticism has been repeatedly echoed and supported, both in empirical and theoretical terms.[79] The very same CBO study offers an alternative consideration of who may actually benefit:

> [This] tax credit may allow investors to capture much of the benefits for themselves rather than their tenants. Thus, the housing that is subsidized through credits is more suited to the needs of investors than poor renters.[80]

77. This credit is calculated in two steps. First, the qualified basis is derived by multiplying the eligible basis (nearly all development costs) by the applicable fraction (the percentage of units or percentage of square footage reserved for affordable units, whichever is lower). Second, either 4 percent of this value—in the case of "acquisition of eligible, existing buildings and to federally subsidized new construction or rehabilitation"—or 9 percent of this value—in the case of "new construction and substantial rehabilitation projects that are NOT otherwise subsidized by the Federal government"—is awarded annually for 10 years.Generally, the 4 percent credit delivers a subsidy equal to 30 percent of a project's qualified basis, and the 9 percent credit delivers a subsidy equal to 70 percent of a project's qualified basis. See United States Department of Health and Urban Development, "Affordable Housing Tax Credit Information," http://www.hud.gov/offices/cpd/affordable housing/training/web/lihtc/calculating/value.cfm and Congressional Research Service, "Tax Expenditures—Compendium of Background Material on Individual Provisions," 2010, 111th Cong. 2d sess., United States Senate Committee on the Budget. http://budget.senate.gov/democratic/index.cfm/files/serve?File_id=8a03a030-3ba8-4835-a67b-9c4033c03ec4.
78. Congressional Budget Office, "The Cost-Effectiveness of the Low-Income Housing Tax Credit Compared With Housing Vouchers," CBO Staff Memorandum, April 1992, http://www.cbo.gov/sites/default/files/cbofiles/ftpdocs/62xx/doc6216/doc09b.pdf.
79. Stephen Malpezzi and Kerry Vandell, "Does the low-income housing tax credit increase the supply of housing?," *Journal of Housing Economics* 11 (2002): 360–380; David Philip Cohen, "Improving the Supply of Affordable Housing: The Role of the Low-Income Housing Tax Credit," *Journal of Law and Policy* 6 (1998): 537–538.
80. Congressional Budget Office, "The Cost-Effectiveness of the Low-Income Housing Tax Credit Compared With Housing Vouchers."

The low-housing investment projects that qualify for this tax credit have been found to be heavily dependent on private-sector lenders.[81] This is made especially clear through the advocacy of the Mortgage Bankers Association, "the national association representing the real estate finance industry," a group that seeks not just to preserve this tax credit, but to expand it. The intentions of this organization are stated unabashedly: "Make no mistake about it; we are an organization dedicated to helping our members do their business. We actively advocate for our members, and have done so for nearly a century."[82]

No. 7: Lower rates for small corporations (graduated tax rates)

While the U.S. corporate income tax is often viewed as a flat 35 percent tax, this is not completely accurate. The first $50,000 of corporate income is taxed at 15 percent and the next $25,000 at 25 percent. Over this amount, the rates are temporarily higher for certain ranges of income, producing an effectively flat rate of 34 percent for medium-sized corporations (income between $335,000 and $10 million) and 35 percent for large corporations (over $18.3 million).[83] In addition to vague notions of the goodness of supporting small businesses, the primary potential economic justification is that small corporations are the engines of job creation and innovation.[84] While this claim is widely asserted, it is not supported by empirical evidence: Small businesses only create about 30 percent of gross jobs, and less than 13 percent of total net jobs.[85] The net jobs figure is the more relevant one, since it takes account of both jobs created and jobs destroyed.

The real economic question is whether small businesses drive innovation, since this has positive spillovers. Some small businesses indeed do provide important innovations, but many large businesses do as well. There is little evidence to indicate that small businesses would be the primary innovators in an economy if they were treated similarly for tax and regulatory purposes.[86] Further, only a small fraction of small businesses do most of the innovating, so granting a general tax subsidy to small

81. Jean L. Cummings and Denise DiPasquale, "The Low-Income Housing Tax Credit: An Analysis of the First Ten Years," *Housing Policy Debate* 10 (1999): 251–307. http://www.cityresearch.com/pubs/cummings.pdf.
82. Mortgage Bankers Association Website, "About Us," http://www.mbaa.org/AboutMBA; Mortgage Bankers Association Website, "Issue Papers," http://www.mbaa.org/Advocacy/IssuePapers/MRBandLIHTC.htm.
83. Congressional Research Service (2010), 453.
84. For a list of such claims, see Box 1 in Veronique de Rugy, "Are Small Businesses the Engine of Growth?" American Enterprise Institute Working Paper #123, December 2005, http://www.aei.org/files/2005/12/08/20051208_WP123.pdf.
85. See pages 77–79 of Kelley Edmiston, "The Role of Small and Large Businesses in Economic Development," Federal Reserve Bank of Kansas City, *Economic Review* 2 (2007): 73–97.
86. Ibid., 87–90.

businesses is an inefficient policy.[87] Targeted tax policies for innovation are a much more efficient means of encouraging innovation, and such policies already exist elsewhere in the tax code (for example, in the research credits discussed above).

Another approach to supporting small corporations—a more efficient route than going through the tax code—is to decrease market concentration. However, once again there are already laws in place (such as anti-trust laws) to address this concern.

No. 8: Inventory on property sales taxed at lower foreign rate

As discussed earlier, the United States operates under a worldwide income tax system; both individuals and corporations are taxed on their total worldwide income, not just the income earned within U.S. borders (which would be a territorial system). The major exception to this rule is the tax credit for foreign taxes paid, when both U.S. and foreign taxes are paid on the same income. There is a limit to the foreign taxes that qualify, and foreign taxes paid in excess of this amount ("excess credits") typically cannot be used.

A major exception is the sale of inventory, because there is a great deal of flexibility in determining when and where the title passes from the company to the buyer. This allows corporations that export goods to use the excess credits described above to lower their overall tax burden. In the case of inventory that is manufactured and sold for export, half of the income can be counted as foreign. For inventory income that is solely from sales activity, all the income can be exempted from U.S. taxes.[88] Since this is effectively a subsidy to export industries, the primary beneficiaries are likely to be foreign consumers and the owners of domestic capital. This transfer of benefits to foreign consumers likely reduces total welfare in the United States.

No. 9: Interest on life insurance savings

Interest earned on life insurance and similar annuity plans is explicitly excluded from taxable income. The benefits paid from a policy are also not included in taxable income. Although this is a relatively small tax expenditure for corporations, it is a much larger expenditure for individual taxpayers ($19.6 billion), albeit one that did not quite make the top 10 list of individual expenditures. For individuals, this provision is similar to others in the tax code that encourage retirement and pension contributions, and it has similar potential distortions (see individual tax expenditure no. 2).

For corporations, the provision is somewhat different, and it is often a rationale for corporations to take out insurance policies on their employees. Although this is

87. See page 157 of Jane G. Gravelle, "Federal Tax Treatment of Small Business: How Favorable? How Justified?" Papers and Proceedings of the 100th Annual Meeting of the National Tax Association, 2007, http://www.ntanet.org/images/stories/pdf/proceedings/07/017.pdf.
88. Congressional Research Service (2010), 57–58.

a controversial practice, there is a simple economic logic involved.[89] Any corporation with a large number of employees knows that a certain fraction of them will die every year. Without special tax treatment, there would be little reason for corporations to engage in the practice of purchasing insurance, as the premiums they paid out would be, on average, equal to the benefits they received from dead employees (minus the insurance company's profits). But with this special tax rule, employers can earn tax-exempt interest on the insurance policies they purchase.

No. 10: Deductibility of charitable contributions

[Note: This is also the no. 9 tax expenditure for individuals. See above for a description.]

III. DISTORTIONS FROM TAX EXPENDITURES

The summaries in the previous section suggest that the largest tax expenditures distort economic decision-making and activity in a wide number of ways. In this section, we briefly summarize some of these effects.

Spending on goods and services

One major distortion created by tax expenditures is that people tend to alter the types of goods and services that they purchase. Tax incentives have the effect of lowering the price of a particular good below its market price. In some cases, such as incentives related to health insurance, the result is that consumers spend less on a wide variety of goods; in other cases, such as incentives for homeownership, the result is that consumers spend less on a particular good—rental housing.

In fact, for some proponents of certain credits, this is precisely the goal. Without the tax exclusion for compensation in the form of health insurance, consumers would likely purchase less insurance; at the very least, the way they purchase health insurance would be different. Many people would probably opt to purchase health insurance through someone other than an employer if there were no tax benefit to an employer-based system.

Is encouraging individuals to purchase specific goods an appropriate use of the tax code? As a philosophical question, this is difficult to answer. As an economic question, the answer is generally in the negative, with a few possible exceptions. Economic theory generally holds that individuals are in the best position to make decisions with their own money. The classic exception is when there are large spillovers, positive or negative, from an individual's decisions. A more recently developed economic exception is when individuals suffer from a cognitive bias that will

89. Congressional Research Service (2010), p. 308.

lead them to make decisions that are unwise from their own perspective. For these exceptions the tax code may be an appropriate governmental tool, but it should be compared with other available tools.

With this economic framework in mind, we can consider the major tax expenditures to see if they qualify for an economic exception, and we can compare all the tools government has available. A full investigation of this is outside of the scope of this paper. But for the largest tax expenditures, such as encouraging consumers to purchase health insurance and homes, there is little evidence of positive results.

Allocation of capital

Many of the tax expenditures have another distorting effect on taxpayer behavior. The allocation of capital in the economy is affected by a number of provisions in the tax code. By encouraging individuals to behave in certain ways with regard to their investment decisions, tax expenditures can lead to a different allocation of capital in the economy than would otherwise be the case. The different allocations may be based on which industries receive capital, the types of investment (stocks vs. bonds) employed, or the size of the capital stock.

This distortion shows up in both individual and corporate taxes. On the individual side, the tax treatment of retirement contributions, housing purchases, capital gains, and accelerated depreciation all have implications for capital allocation. Almost all of the corporate tax expenditures affect capital allocation in some way by influencing business and investment decisions.

The extent to which capital allocation is influenced by the tax system is difficult to assess. But should that influence, however great it is, concern us? There are several possible consequences—good and bad— of capital misallocation. First, if capital is diverted to different industries, it will tend to be out of line with consumer demand; eventually the distortions will be evident and capital will be reallocated, but that is a costly process (one example: the recent housing bubble). Second, if the types of investment are altered by tax incentives, capital may not flow to its highest valued return, and the financial system may be exposed to greater risk. Finally, however, if the size of the capital stock increases (a side effect of many tax expenditures), there may be some positive social benefits; for example, a larger capital stock should contribute to higher rates of economic growth. It is crucial, though, that the capital is invested in areas that will produce new goods that consumers value, and it is unclear how many of the tax expenditures would accomplish this goal.

Progressivity of tax system/distribution of income

A COMMON FEATURE in many of the tax expenditures is that higher-income earners benefit much more than middle- and lower-income earners. This stems from several causes, several of which have been mentioned throughout this paper. Higher-income earners, for example, face higher tax rates and are more likely to itemize deductions. But there is also the fact that higher-income earners pay most of the taxes and therefore, inevitably, benefit more from the tax breaks. For example, in each year from 2005 to 2009, the top 10 percent of taxpayers paid about 70 percent of federal income taxes, but only earned between 43 percent and 48 percent of income. Similarly, the top 1 percent paid about 40 percent of federal income taxes, but only earned about 20 percent of income.[90] These disproportionate shares of tax payment for high-income earners are, of course, the entire point of a progressive tax. But they also go a long way toward explaining why higher-income earners are the primary beneficiaries of tax expenditures.

These facts point to two more distortions traceable to $1 trillion in tax expenditures: lowering the progressivity of the tax system and altering the distribution of income. From an economic perspective, these tax expenditures reduce progressivity by distorting economic activity in myriad ways, documented throughout this paper. From a political perspective, the tax expenditures are often achieved in a behind-the-scenes fashion rather than the proper democratic processes. The perception that wealthy people and corporations are getting special favors may exacerbate public skepticism about free market capitalism, even if the real enemies are cronyism and rent-seeking (that is, the practice of trying to gain a share of existing wealth rather than creating more wealth).

Lobbying and rent-seeking

ANOTHER MAJOR ECONOMIC distortion and social cost from the current tax code is the existence of lobbying and the economic concept of rent-seeking described above. People are willing to expend both money and time trying to preserve tax expenditures that benefit them.

It is impossible to put an accurate estimate on the cost of rent-seeking, but it is likely to be quite large (though less than the total amount of tax expenditures). As an example, imagine that a taxpayer receives $1,000 in benefits each year from one particular tax expenditure. How much will he spend in an effort to keep that expenditure in place? A first approximation is "up to $1,000," but this is not precisely correct. First, the lobbying game is a difficult one to get into, meaning that those already in lobbying need to spend less than if it were an open-auction process. Second, there is a collective action problem involved, since people know that they will benefit even

90. See Tables 5 and 6 in David S. Logan, "Summary of the Latest Federal Individual Income Tax Data," Tax Foundation, *Fiscal Fact* No. 285, http://www.taxfoundation.org/news/show/250.html.

if someone else does the lobbying. Given these caveats, the correct answer is "less than $1,000, but still a substantial amount."

It is crucial to recognize the rent-seeking costs for several reasons. The primary one is that these costs are mostly hidden from view. Economists themselves generally did not recognize the social cost of lobbying activities until the public choice revolution of the 1960s.[91] And while most Americans are aware of the existence of lobbying in Washington, they likely see it as a zero-sum game. Rather, rent-seeking is a negative-sum game, since the resources used for lobbying are not available for productive purposes. For example, if Microsoft spends $1 billion lobbying for research credits instead of spending that money on research, society suffers from that loss of innovation.

Another reason for concern about rent-seeking was mentioned at the end of the last subsection: public opinion about market economies. If the result of a heavily entrenched, rent-seeking tax code is public ire about "the system," it is unclear exactly where the public's dissatisfaction will be directed. If the public recognizes that rent-seeking is a divergence from free markets, they may call for a return to free markets (for lack of a better term, call this the "Tea Party reaction"). Alternatively, the public may view rent-seeking as an inevitable result of a free market, and demand replacement of the market was another economic system (again, for lack of a better term, call this the "Occupy Wall Street reaction"). These issues make it crucial that the public be given an honest, accurate narrative about the problems of tax expenditures and rent-seeking.

IV. CONCLUSION

Tax expenditures occupy a curious position in the political economy discourse. The language used to describe them is often loaded with political assumptions. No one likes "tax loopholes"—unless those loopholes benefit them or the activities and industries they favor, in which case loopholes are referred to as "tax incentives." Even the official term itself, tax expenditures, implies that the money in question has been spent by the government and therefore lost.

Throughout this paper we took a different approach, focusing on the economy-wide distortions produced by particular tax expenditures. We discussed particular expenditures, looking at who was supposed to benefit and what economy-wide benefits were supposed to result. We found that these provisions add complexity to the code, don't achieve the desired results, benefit the wrong people, and encourage "gaming" by those in a position to take advantage—typically the well-connected

91. The foundational papers on rent-seeking are Gordon Tullock, "The Welfare Costs of Tariffs, Monopolies, and Theft," *Western Economic Journal* 5 (June 1967): 224—32, and Anne O. Kruger, "The Political Economy of the Rent Seeking Society," *American Economic Review* 64 (June 1974): 291–303.

or well-to-do, who can afford accountants who understand all the provisions. The entire economic system is thus distorted in terms of where resources are spent, how capital is allocated, how income is distributed, and how lobbying wastes resources and affects the structure of the tax code.

A simple fix for these problems would be to eliminate all tax expenditures from the code. While such a sweeping change seems unlikely, it is actually more probable than piecemeal reform. Removing one particular tax expenditure, such as the mortgage interest deduction, is unlikely to happen because so many people (particularly high-income taypayers) stand to lose from altering that one piece of the puzzle. Comprehensive tax reform gives everyone some benefit, even if they also experience some losses.

It should also be noted that eliminating all tax expenditures would amount to an enormous tax increase. The tax increase would not be as large as the “lost revenue” perspective of tax expenditures suggests (because people would alter their behavior in response to changes in the tax code), but it would be a tax increase nonetheless, and it would lead to lower economic growth both in the short term and in the long term. This suggests the need for a second tax reform to be coupled with eliminating tax expenditures: lower marginal tax rates across the board.

Precisely how much tax rates should be lowered is an important question. The most likely scenario is a revenue-neutral tax reform, in which rates are lowered but total government revenue is unchanged. With large, permanent budget deficits looming in the near future, however, a reduction in government spending may be warranted as well, with the goal of restoring the government budget to a sustainable, balanced position.

In the end, whatever level of government spending is chosen in the tax-reform process, the main benefit of lowering tax rates is faster economic growth. The benefits of eliminating tax expenditures include less distortion, a simpler tax code, and less money spent on lobbying and rent-seeking. All of these changes would benefit the economy at large, and the nation.