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# The Last Best Hope for Progressivity in Tax 

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## Recommended Citation

Hines, James R., Jr. "The Last Best Hope for Progressivity in Tax." E. J. McCaffery, co-author. S. Cal. L. Rev. 83, no. 5 (2010): 1031-98.

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# THE LAST BEST HOPE FOR PROGRESSIVITY IN TAX 

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#### Abstract

We argue that a spending tax, as opposed to an income or wage tax, is the last best hope for a return to significantly more progressive marginal tax rates than obtain today. The simple explanation for this central claim looks to incentive effects, especially for rich people. High marginal tax rates under an income tax fall on and hence deter the productive activities of work and saving. High marginal rates under a wage tax fall on and hence deter the productive activity of work alone. But high marginal rates under a spending tax fall on and hence deter high-end spending, which is arguably a social bad, and do not necessarily deter the social goods of work and saving; indeed, a progressive spending tax may increase saving.


[^0]The idea is that because one can escape or defer paying taxes under a progressive spending tax by saving, an activity with positive social externalities, the efficiency costs of high marginal rates under a spending tax can be mitigated. A spending tax can bear more steeply progressive rates with less cost in efficiency or social wealth than an income or wage tax. A progressive spending tax also holds out the possibility of sorting the rich or high-ability into two groups, elastic savers and inelastic spenders: separating the two types of taxpayers could yield welfare gains unavailable under income or wage taxes, which under current technologies can only sort the high-ability into workers and nonworkers. Progressive spending taxes also fall on consumption financed by windfall gains, doing so with diminished adverse incentive effects.

Most of the Article sets out analytic possibilities. In the final part, we add a sketch of both a welfarist and a fairness-based argument for progressive spending taxes and conclude with a call for a major new research agenda.

## TABLE OF CONTENTS

## I. INTRODUCTION 1033

II. THE LOGIC OF TAX ..... 1040
III. TAX BASES ..... 1041
A. Income Tax ..... 1041
B. Two Consumption Taxes ..... 1042
C. The Traditional Income-versus-consumption tax Debate ..... 1045
D. Three Types of Tax ..... 1046
IV. Tax Rates ..... 1047
A. Vocabulary ..... 1047
B. Adding Demogrants to the Mix ..... 1049
C. What Matters About Rates? ..... 1050
D. A Short Exploration of Optimal Tax Theory ..... 1053

1. The Basics ..... 1053
2. Qualifications, Questions, and Caveats ..... 1057
V. BASE-RATE PAIRS: A NEW LOOK ..... 1059
A. Three Uses of Savings ..... 1060
B. Bases and Savings ..... 1063
C. A Hint of Normativity ..... 1064
VI. THE LIMITS OF "HYBRIDS" ..... 1065
VII. THE UNEASY CASE FOR PROGRESSIVE SOURCE-BASED TAXES ..... 1068
VIII. THE EASIER CASE FOR PROGRESSIVE SPENDING TAXES ..... 1070
A. A Note on a Parallel ..... 1071
B. Why Do People Save? The Rational Story ..... 1072
C. A WindFall Benefit? ..... 1076
D. A Possible Sort? ..... 1077
E. BEHAVIORAL MODELS ..... 1078
IX. THE WORLD AS WE KNOW IT ..... 1081
A. TAX TODAY ..... 1082
B. On Not Adding Demogrants to the MiX ..... 1085
C. Progression Without Demogrants ..... 1087
X. CONCLUSIONS AND SUGGESTIONS FOR FURTHER RESEARCH ..... 1090
A. Paths to a More Progressive Future ..... 1091
B. The Welfarist Argument ..... 1093
C. A FAIRNESS ARGUMENT ..... 1094
D. OUR Last Words: A Research Agenda ..... 1096

## I. INTRODUCTION

Pity President Obama. Pity tax. Pity the dreams of progressives everywhere.

Barack Obama's presidential campaign gave believers in redistribution a brief shining moment of hope. Obama's candidacy featured stirring calls for the richest Americans to give back and share more with their less fortunate fellow citizens. Yet even then, beneath the high-flying rhetoric, lay reason for despair, for there was little talk about any kind of significant return to progressivity in the tax system, the main policy instrument for effecting redistribution in America. Deep into Obama's presidency, the Obama Administration has been unable to enact the most progressive element in Obama's tax program: a partial repeal of President George W. Bush's 2001 and 2003 tax cuts, largely meaning a restoration of the two top marginal rate brackets under the federal income tax from 33 and 35 to 35 and 39.6 percent, respectively. ${ }^{1}$ The President has consistently

[^1]underscored that no one earning under a $\$ 250,000$ income-that is, no one not among the top few percentage points of earners ${ }^{2}$-would see a tax increase, and no one at all would see his or her rates raised above the level they reached by $1999 .{ }^{3}$ And the President is persistently at pains to stress that he would not actually even be raising anyone's tax rate, simply letting the Bush tax cuts expire for top earners. ${ }^{4}$ Yet it is far from clear that even

[^2]Senator Barack Obama \& Senator Hillary Clinton, Democratic Presidential Candidates Debate from the Kodak Theatre in Los Angeles (Jan. 31, 2008) (first two ellipses in original) (transcript available at http://www.cnn.com/2008/POLITICS/01/31/dem.debate.transcript/).
2. Emmanual Saez suggests that $\$ 250,000$ per year would cover 3-4 percent of earners. See Emmanuel Saez, Striking It Richer: The Evolution of Top Incomes in the United States (Updated Using 2006 Preliminary Estimates) 1 (Mar. 15, 2008) (unpublished note), available at http://elsa.berkeley.edu/ ~saez/saez-UStopincomes-2006prel.pdf. That figure may be too high. Census publications indicate that the ninety-fifth percentile of income earners in 2007 began at $\$ 177,000$ of household income. See Carmen Denavas-Walt, Bernadette D. Proctor \& Jessica C. Smith, U.S. Census Bureau, P60-235, Income, Poverty, and Health Insurance Coverage in the United States: 2007, at 40 (2008). Census Bureau data for 2008 indicate that households earning over $\$ 250,000$ per year constitute 2.11 percent of the total population. See U.S. Census Bureau, Current Population Survey, Table HINC-6. Income Distribution to $\$ 250,000$ OR MORE FOR Households: 2008, available at http://www.census.gov/hhes/www/cpstables/032009/hhinc/new06_000.htm.
3. In March 2009, President Obama announced the formation of a Tax Reform Panel led by former Federal Reserve Chairperson Paul Volcker. See Meg Shreve, White House Announces Formation of Tax Reform Panel, 122 Tax Notes 1539, 1539 (2009). The "constraints" imposed on the panel were that there could be no tax increases at all in 2009 and 2010, and that no one earning less than $\$ 250,000$ would ever see any tax increase. See id.

The story of the possible taxation of bonuses received by AIG executives at 90 percent rates hardly belies our general theme. See Administration: Changes May Be Needed in 90-Percent Tax on AIG Bonuses, FOXNEWs.COM, Mar. 22, 2009, http://www.foxnews.com/politics/first100days/2009/03/ 22/administration-changes-needed-percent-tax-aig-bonuses/. For one thing, this potential tax was clearly intended to send a special and harsh message. For another thing, President Obama, in part because of concerns over incentive effects moving forward, ultimately failed to support the idea and it was quietly tabled. See id.
4. See Ross Colvin, Obama to Allow Bush Tax Cuts to Expire on Schedule, Revters, Feb. 21, 2009, http://www.reuters.com/article/idUSTRE51K1ZF20090221.
this modest change will happen. Alternative tax reform plans, such as the Bipartisan Tax Fairness and Simplification Act of 2010, sponsored by Senators Judd Gregg (R-N.H.) and Ron Wyden (D-Ore.), tellingly feature a top marginal rate bracket of 35 percent. ${ }^{5}$

Yet a 39.6 percent top rate is far below one-half of the highest marginal rate in the less-than-century-long history of the contemporary income tax, a rate of 94 percent obtained in the midst of World War II. ${ }^{6}$ Tax rates persisted as high as 90 percent throughout the 1950s until President Kennedy cut the top rate to 70 percent in $1964 .^{.}$That rate, in turn, obtained until 1981 when President Reagan first cut it to 50 percent before bringing it down to 33 or 28 percent (depending on how one looked at things) in $1986 .{ }^{8}$ President Obama is advocating to raise the top rate on highest income earners by a mere 4.6 percentage points in absolute terms, resulting in a final top rate more than 54 percentage points lower than the historical peak, and far below the rate that obtained for more than four decades from 1941 to 1986.

This is hardly radical stuff. Yet the last days of the presidential campaign, featuring Senator John McCain's whole-hearted embrace of "Joe the Plumber," showed that even Obama's extremely modest proposal was extremely controversial. ${ }^{9}$ McCain sneeringly called Obama "Redistributionist in Chief," ${ }^{10}$ even as Obama himself tried to distance

[^3]himself from the word "redistribution" or any of its cognates. ${ }^{11}$ Obama continues to insist that his proposals would not actually raise any tax rate; letting the Bush tax cuts expire would simply restore the status quo obtaining before Bush took office. Still, the attacks on the marginal tax rate proposals come swiftly and furiously. ${ }^{12}$ While an existing fiscal crisis makes a return to 1999 , at least for the very top income earners, quite possible, it is too early to tell on that score. Attempts to interject more progressivity, as in the quickly aborted "surcharge" under health care reform, appear utterly unrealistic. ${ }^{13}$

What are we doing? Where are we headed? Are we forever set in a post-Reagan mindset when it comes to tax rates? What has happened to the argument for more steeply progressive marginal rates? Why does a country that seems to believe in redistribution not seek it more forcefully in its major policy instrument devoted to doing so?

There are many aspects of an acceptable answer to these puzzling questions, involving politics, perception, and more. ${ }^{14}$ This Article adds one important piece from the teachings of neoclassical economics and traditional tax policy. It explains that the case for more progression in tax rates has been fatally hampered by the choice of tax base. This is, in part, a story of how academics, ordinary politics, popular understanding, and inertia can lead a democracy to a place far removed from its initial hopes and dreams. We wanted a progressive tax system over a century ago, ${ }^{15}$ and

[^4]we continue to say that we want one. ${ }^{16}$ Yet somehow we are unable to get what we want. Indeed, we are unable to take even baby steps in the direction of what we say we want.

Why? Simply put, there are compelling economic reasons for avoiding more steeply progressive rates under an income or a wage tax, such as we have in America today. People and politicians have figured this out. President Reagan successfully made the case over thirty years ago, and there was already powerful academic and intellectual support for it in the writings of Nobel laureate James Mirrlees and others. ${ }^{17}$ Political rhetoric picked up and tracked the economic fundamentals. The journalist David Leonhardt, in a long profile of Obama's economic philosophy published in The New York Times shortly before the election, reflected the prevailing view:

When Reagan was elected, in 1980, tax rates on top incomes were so high that even liberal economists now say the economy was suffering. There simply wasn't enough of an incentive for rich people to start new companies or expand existing ones, because so much of their profits would have gone to the federal government. ${ }^{18}$

By 1980, "even liberal economists" had come to fret over the effects of high tax rates on productive incentives. But note that Mirrlees's important academic analysis, Reagan's political rhetoric and accomplishments, and Leonhardt's journalistic conclusion all relate to taxing income. Here is where inertia plays its pivotal role: by failing to rethink initial premises regarding the appropriate tax base, we have doomed the prospects for more progressive tax rates. In this Article, we argue that switching to a spending tax base holds out the possibility for a new analysis and a return to more steeply progressive marginal tax rates. Hence our title: we believe that a spending tax is the last best hope for progressivity in tax.
the Service of Order: Origins of the Federal Income Tax, 1861-1913, at 176-229 \& passim (1993) (discussing the role of progressive thought and movement leading up to the enactment of the Sixteenth Amendment).
16. See Frank Newport, Americans More in Favor of Heavily Taxing Rich Now Than in 1939, Gallup News Service, Apr. 16, 2007, http://www.gallup.com/poll/27208/americans-more-favor-heavily-taxing-rich-now-than-1939.aspx (reporting that half of Americans favor heavy taxes on the rich to redistribute wealth).
17. See J.A. Mirrlees, An Exploration in the Theory of Optimum Income Taxation, 38 REV. ECON. STUD. 175, 208 (1971) (concluding that " $[t]$ he income-tax is a much less effective tool for reducing inequalities than has often been thought"). We discuss optimal tax theory at greater length in Part IV.D.
18. Leonhardt, supra note 11. See also Alan D. Viard, The Trouble with Taxing Those at the Top, TAX Pol'y OUTLOOK, June 2007, at 1,1 (arguing that raising the marginal tax rate for the top income earners is "an inefficient and undesirable way to generate revenue").

The simple explanation for this central claim looks to the pattern of incentive effects, especially on rich people, as both economists and commentators such as Leonhardt tend to focus. ${ }^{19}$ High marginal tax rates under an income tax fall on and hence deter the productive activities of work and saving. High marginal rates under a wage tax fall on and hence deter the productive activity of work alone. But high marginal rates under a spending tax fall on and hence deter high-end spending, which is arguably a social bad, and do not necessarily deter the social goods of work and saving. Indeed, high marginal tax rates under a spending tax may even promote more private saving. Hence it is possible to have higher marginal rates under a spending tax than under a wage or income tax with equivalent or lower efficiency costs.

This is a possible empirical result. In this Article, we present the analytic arguments for it and sketch out a research agenda that might verify it. The idea is that because one can escape or defer paying taxes under a progressive spending tax by saving-an activity with positive social externalities-the efficiency costs of high marginal rates under a spending tax can be mitigated. Unless people work only in order to be able to spend on themselves, and even then only if they fully internalize in their present labor-supply decisions the ultimate tax they will pay-and we argue that each of these assumptions is unlikely to hold in the extreme-a spending tax can bear more progressive rates with less cost in efficiency or social wealth than can an income or wage tax. A progressive spending tax also holds out the possibility of sorting the rich or high-ability ${ }^{20}$ into two groups: elastic savers and inelastic spenders. ${ }^{21}$ This could yield welfare gains unavailable under income or wage taxes, which, given present technologies, can only sort the high-ability into workers and nonworkers. Finally, progressive spending taxes, unlike wage taxes, fall on consumption financed by windfall gains, as to which unexpected good fortune ex ante incentive effects are likely to be weak-and hence such taxes should have lower efficiency costs.

We know that our central claim will seem counterintuitive to many, perhaps most, readers. How can a spending tax be more progressive than an income tax? Since most income is spent, the two tax bases are obviously similar, indeed identical for the vast majority of American taxpayer-

[^5]worker-spenders. Any differences follow from the fact that a spending tax base does not include income that is earned and not spent-that is, savings. Since the rich do most of the saving, it would seem as if their incomes are the ones that are most exempted by a spending tax. Therefore, at first blush it appears that a spending tax would have to be less progressive than an income tax.

This initial take on the matter, however, fails fully to factor in the effect of the choice of tax base on the pattern of feasible tax rates. If tax rates under a spending tax are considerably more progressive than those under an income tax - and there is ample reason to think this can be the case-then a spending tax can be the more progressive alternative. That is the project for this Article.

What about the comparison between a spending tax and a wage tax? While these tax systems are commonly lumped together in the economics and tax policy literatures as roughly equivalent variants of consumption taxes, ${ }^{22}$ and in fact have clear analytic similarities, there are nonetheless important practical differences. One especially important difference is that a wage tax does not attempt to tax unexpectedly high returns on capital investments, sometimes known as "windfalls." It is not only the case that the rich save; it is also the case that the "ex post rich"-those who turn out to be rich, looking backward through time - tend to be those whose capital investments earned extremely high, indeed unexpectedly high, returns. Most of Warren Buffett's or Bill Gates's income has come from capitalspecifically, the capital appreciation in the price of Berkshire Hathaway or Microsoft stock-and hence would be exempt from wage taxation. ${ }^{23}$ Yet the same income would be taxed under a spending tax when consumed. A spending tax alone among feasible alternatives can collect significant tax revenue from the propertied, capitalist classes in a way that does not necessarily undercut their incentives to become propertied in the first place.

The Article begins with an overview of the logic of tax, progresses to separate consideration of the base and rate issues, and then, in combining bases and rates, turns to an explanation of why more progressive rates
22. See David F. Bradford \& U.S. Treasury Tax Policy Staff, Blueprints for Basic TAX REFORM 110-11 (1984) [hereinafter BRADFORD, BlUEPRINTS]; SLEMROD \& BAKIJA, supra note 6, at 199-200 (discussing the general equivalence of a consumption tax and a wage tax); SLEMROD \& BAKIJA, supra note 6, at 231-68 (discussing various consumption tax alternatives).
23. The payroll tax does not apply to capital gains at all. Tax on capital appreciation is also easily deferred or avoided altogether under the current income tax. See Edward J. McCaffery, A New Understanding of Tax, 103 Mich. L. REV. 807, 885-99 (2005) [hereinafter McCaffery, A New Understanding]; infra Part IX.A.
under wage or income taxes are unlikely and unwise, but possible-and possibly desirable-under a spending tax. We end with a call for more research, and hope.

## II. THE LOGIC OF TAX

Any tax is the product of a base-what is being taxed-and a ratehow much the base is being taxed. The government must choose both, a base-rate pair. Tax policy for decades, and by some measures centuries, has exhaustively considered the base question, where a debate has raged over income versus consumption taxes. ${ }^{24} \mathrm{~A}$ far quieter debate has taken place on the rate structure, where proponents of progressivity-the norm of expecting the rich (or those with greater "ability to pay") to pay more, in percent terms, than the not-rich-have been hanging on, fighting back political and, to some extent, intellectual arguments for flat-rate taxation. ${ }^{25}$ The dominant framework for the analysis of tax rates has become the optimal income tax literature, most importantly owing to Mirrlees's work starting in the early 1970s. ${ }^{26}$

For the most part, the base and rate issues have not been well joined. Where they have been connected, a basic misunderstanding haunts the
24. The fountainhead for the debate can be found in John Stuart Mill, Principles of Political Economy (Jonathan Riley ed., Oxford Univ. Press 1994) (1848). Subsequent contributions include Irving Fisher \& Herbert W. Fisher, Constructive Income Taxation: A Proposal for Reform 3-5 (1942); and Nicholas Kaldor, An Expenditure Tax 46-53 (1955). The classic argument in an American law review context was presented in William D. Andrews, A ConsumptionType or Cash Flow Personal Income Tax, 87 HARV. L. Rev. 1113 (1974) [hereinafter Andrews, A Consumption-Type or Cash Flow Personal Income Tax]; Alvin C. Warren, Jr., Fairness and a Consumption-Type or Cash Flow Personal Income Tax, 88 HaRV. L. REV. 931 (1975); William D. Andrews, Fairness and the Personal Income Tax: A Reply to Professor Warren, 88 HARV. L. REV. 947 (1975); and Alvin Warren, Would a Consumption Tax Be Fairer Than an Income Tax?, 89 Yale L.J. 1081 (1980). For more recent discussion, see Joseph Bankman \& David A. Weisbach, The Superiority of an Ideal Consumption Tax over an Ideal Income Tax, 58 Stan. L. Rev. 1413 (2006); Joseph Bankman \& David Weisbach, Consumption Taxation Is Still Superior to Income Taxation, 60 Stan. L. Rev. 789 (2007); and Daniel Shaviro, Beyond the Pro-Consumption Tax Consensus, 60 Stan. L. Rev. 745 (2007). For a summary of the intellectual history of the debate, with many citations, see McCaffery, A New Understanding, supra note 23, at 838-44.
25. The classic argument for progressive tax rates is found in Walter J. Blum \& Harry Kalven, Jr., The Uneasy Case for Progressive Taxation (1953). Other works include Seligman, supra note 15, at 101-09; Joseph Bankman \& Thomas Griffith, Social Welfare and the Rate Structure: A New Look at Progressive Taxation, 75 CAL. L. Rev. 1905 (1987); and Harvey S. Rosen, Income-Tax Progressivity: A Century-Old Debate, Fed. Res. Bank Phila. Bus. Rev., Jan./Feb. 1990, at 3. For recent statements in favor of flat-rate or proportionate taxation, see Robert E. Hall \& Alvin Rabushka, The Flat Tax (1985). For counterarguments, see Joseph Bankman \& Barbara Fried, Flatness and Fairness, Boston Rev., Summer 1996, at 3, available at http://bostonreview.net/BR21.3/Bankman.html.
26. Mirrlees, supra note 17.
analysis. The case for consumption taxation, gaining adherents at an accelerating pace in the academy, has been unnecessarily linked in the intellectual history of tax with flat or proportionate tax rates. ${ }^{27}$

While tax bases and tax rates are analytically distinct subject matters, logically separable, they are connected politically, rhetorically, and economically. The choice of base affects the arguments for and the economic effects of the degree of progression in the tax rate structure, and vice versa. Our primary purpose in this Article is to press a positive, descriptive argument that, in general, the nature of the effects of tax rates depends on the tax base and, in particular, the case for significant increases in the progressivity of the marginal rate structure is stronger under a certain form of consumption tax-namely (and all equivalently), a "postpaid," expenditure, or spending tax-than it is under either an income or a wage tax. We turn next to explore those tax bases.

## III. TAX BASES

## A. Income Tax

We begin with an income tax, the most commonly thought of comprehensive individual tax system. An income tax falls on all presentperiod earnings, from "whatever source derived," in the language of the Sixteenth Amendment to the U.S. Constitution ${ }^{28}$ and $\S 61(a)$ of the U.S. Internal Revenue Code ("I.R.C.") ${ }^{29}$-that is, from labor or capital (and, arguably, from beneficent transfers as well). As Henry Simons put it in an influential definition named after him and his predecessor Robert Murray Haig: "[I]ncome may be defined as the algebraic sum of (1) the market value of rights exercised in consumption and (2) the change in the value of the store of property rights between the beginning and end of the period in question. ${ }^{330}$ We can restate this definition, in reality a simple accounting relation or tautology, as:

$$
\text { Income }=\text { Consumption }+ \text { Saving }
$$

This tells us little more than the facts that inputs or incomes must equal outputs or outflows, or that all wealth (Income) must be either spent

[^6](Consumption) or not (Saving).
From the Haig-Simons definition we can see that saving is at a disadvantage compared to immediate consumption under an income tax. Wealth is taxed when it first comes into a household, typically via wages. For wealth that is not immediately consumed, a further tax is levied on the yield to capital, as when interest is credited to a bank account, or stocks or real estate rise in value. As John Stuart Mill first pointed out in 1848, the inclusion of the yield to capital in the income tax base makes it a double tax on saving. ${ }^{31}$

## B. Two Consumption Taxes

In part to avoid the income tax's double-tax sting and its attendant distortions, critics have long advocated some form of consumption tax that would exempt taxes on saving from the tax base, on both economic efficiency and fairness grounds. ${ }^{32}$ The efficiency case against taxing the yield to capital is strong. An income tax creates a bias in favor of present consumption over deferred consumption, that is, saving. The bias of the tax widens over time. Compound interest implies that the tax system's distortions loom larger as the time horizon lengthens, thereby making even a very low rate tax on the yield to capital highly distortionary over a lifetime perspective. A 30 percent tax on the yield to capital, for example, increases the cost of tomorrow's consumption relative to today's, but it much more dramatically increases the cost of consumption ten years from now compared to today's.

The case for consumption taxation is not just a matter of efficiency or traditional welfare economics analysis. Taxing saving at a time of low aggregate national and individual saving strikes many as an unwise ideaone that is unfair to the vast numbers of middle-class Americans attempting to save for retirement, buy a house, put their children through college, hedge against economic misfortune, and so on. It should not therefore be surprising to learn that the so-called income tax is replete with nominally prosaving provisions, reflecting the ambivalence of policy. ${ }^{33}$

The case for consumption taxation has deep roots, going back to

[^7]Thomas Hobbes in the seventeenth century and Adam Smith in the eighteenth, before moving on to Mill in the nineteenth and Irving Fisher, Nicholas Kaldor, and others in the twentieth. In contemporary times, however, the case for moving to a consumption tax has been held back by analytic confusion: it seems as if a standard consumption tax must be more regressive than an income tax. This is so both for reasons of the basebecause a consumption tax is thought not to include the yield to capital, the virtually exclusive domain of the rich, at all-and of rates-because it is further thought that a certain form of consumption tax, in order to be a consumption tax at all, must feature flat rates.

To see this latter point, it helps to understand the two canonical types of consumption taxes. Tax policy theorists have noted the equivalence of two forms of consumption-based taxes under plausible assumptions, namely the "prepaid" or "yield-exempt" tax model and the "postpaid," cash-flow, or expenditure tax model. ${ }^{34} \mathrm{We}$ shall hereafter refer to these two forms of consumption tax by their most commonly known incarnations: wage and spending taxes, respectively. If tax rates do not change and there is no uncertainty, then levying a tax upfront, and never again, as with a wage tax, is equivalent to deferring the tax and levying it at the single time of ultimate private preclusive use, as with a spending tax. ${ }^{35}$ This point is evident algebraically, which we set out in the notes, ${ }^{36}$ and through a simple example.

Suppose that Ant, the iconic saver, earns \$200 from labor efforts, the tax rate is $50 \%$, and the yield to capital is $10 \%$. Ant will save for two full years then consume. Under a wage tax, Ant's $\$ 200$ is reduced to $\$ 100$ right away. This grows to $\$ 100+\$ 10$, or $\$ 110$ after one year, and $\$ 110+\$ 11$, or $\$ 121$ after two years. Ant spends away.

[^8]Under a spending tax, Ant gets to save the full $\$ 200$ without any initial tax. This sum grows to $\$ 200+\$ 20$, or $\$ 220$, after one year, and $\$ 220$ $+\$ 22$, or $\$ 242$, after two years. When Ant goes to spend, the government comes to assert its $50 \%$ stake under the spending tax. This reduces Ant's $\$ 242$ to $\$ 121$, just as under the wage tax model. The algebraic formulation set out in the notes proves that this result is not simply an artifact of the numbers chosen for the example, but a fully general result, as long as the tax rate is constant. It is straightforward to show as well that the result continues to hold with a predictable or fully anticipated, varying rate of return.

We can see the same idea more graphically. Return to the basic HaigSimons definition of Income:

$$
\text { Income }=\text { Consumption }+ \text { Saving }
$$

This basic identity identifies sources with uses. The income tax is a classic source-based tax, looking, in the language of the Constitution, to all "incomes, from whatever source derived. ${ }^{37}$ Consider what the sources of income might be, in broad terms: payments for labor or for capital. Ultimately, all income derives from one or both of these two factors of production, one's own or another's (in the case of gifts and bequests). In short:

$$
\text { Labor }+ \text { Capital } \rightarrow \text { Income }=\text { Consumption }+ \text { Saving }
$$

A wage tax gets to be a single tax on saving by exempting capital as a source of income on the left-hand side of the equation, as it were. A wage tax, like an income tax, is source-based, but systematically ignores the return to financial capital as a source. Think of the payroll tax or Social Security / Medicare contribution system, which make no attempt to tax saving. A spending tax, on the other hand, exempts saving as a use, that is, on the right-hand side of the equation, as it were, following the simple logic of

$$
\text { Income }- \text { Saving }=\text { Consumption }
$$

Think of a common sales tax, which does not apply to money saved in a bank account. Both wage and spending taxes are single taxes on a household's flow of funds, whether saved or spent, and are broadly equivalent at constant rates.

## C. The Traditional Income-Versus-Consumption Tax Debate

The income-versus-consumption tax debate has taken place in the shadows of Mill's critique of the income tax as a double tax on saving or (equivalently) nonconsumed wealth, and the analytic understanding just sketched out. Wage taxes exempt capital returns by design. For spending taxes to produce the same result, they must feature flat tax rates. This traditional view of tax has been unfortunate, because the systematic nontaxation of the return to financial capital is only one reason for moving to a consumption tax, and not necessarily the best reason. Our central claim in this Article is that restoring or increasing progressivity in the marginal rate structure is another reason to adopt a consumption tax of the right sort-a spending tax. ${ }^{38}$ To see this point, it is important to understand the traditional income-versus-consumption tax debate, and then to get beyond it. ${ }^{39}$

It is easy enough to see that a wage tax avoids the double-tax sting of the income tax. Such taxes have, indeed, been the most popular form of tax reform proposal coming from conservative political factions of late: the most common "flat-tax" plans, as from Robert E. Hall and Alvin Rabushka, feature a two-bracket wage tax with no additional taxation of saving. ${ }^{40}$ In order for the second form of consumption tax, the spending tax, to be equivalent to a wage tax and thus to avoid any taxation of saving, it must, as the Ant example illustrates, feature constant or relatively flat rates. Hence, the "Fair Tax," a widely publicized proposal for a national retail sales tax, features a flat-rate spending tax. ${ }^{41}$ Whether we want a spending

[^9]tax to be equivalent to a wage tax, however, depends on why we want spending taxes, a decision that must be foundational to the inquiry. Hence we arrive at the following important general points: (1) if the principal aim of a consumption tax is to avoid any additional taxation of saving, the choices come down to wage or flat spending taxes, which are broadly equivalent; but (2) if we have another reason for moving to a consumption tax, particularly one looking to the rate structure, wage and spending taxes are no longer equivalent and more analysis must be done. A progressive spending tax emerges as a distinct option for comprehensive tax reform.

## D. Three Types of Tax

The traditional income-versus-consumption tax debate-centered on the yield to capital-in essence eliminated an important base-rate pair from further analysis: the progressive spending tax. Those who want to tax the yield to capital came to favor an income tax; those who thought it unfair or inefficient to ever tax saving favored a wage or a flat spending tax. Under progressive marginal rates, the automatic, analytic equivalence of wage and spending taxes disappears. The tax rate at the time of initial earnings may not be the same as that at the time of spending. Saving could be "subsidized" or "penalized" vis-à-vis an income or a wage tax. ${ }^{42}$ This analytic fact led many to argue for flat- or constant-rate spending taxes because they thought it a norm not to tax capital or its yield at all-they bought into Mill. ${ }^{43}$ This argument, typically generated by policymakers invoking conceptions of fairness-and hence parallel to, but distinct from, the efficiency-based arguments-presumes that the principal normative reason for choosing a consumption tax turns on the principled nontaxation

[^10]of the yield to capital. It need not be so. Policymakers might desire a progressive tax on spending for reasons unrelated to the nontaxation of capital or its yield, or at least not precommitted to such nontaxation.

Consider two distinct arguments. One, a progressive spending tax might generate a welfare-maximizing outcome: it might be the "best" baserate pair in a specifically welfarist sense. This could be so, as we explain further below, because individuals in the face of such a tax may continue to work and save, avoiding present-period taxation but improving social welfare both by the positive externalities of their contributions to the capital stock and by the implicit deferred tax on saving. We call this the welfarist argument. Two, policymakers might consider it fair and appropriate to tax some but not all of the yield to capital, and a progressive spending tax is a particularly good and principled way to do so. We call this the fairness argument. We shall explain and explore these two arguments further below, and return to them especially in Part X, when we discuss normative implications of our analysis and call for further research.

The critical descriptive, analytic point is that, with progressive marginal tax rates, there are three distinct choices for a comprehensive tax base: income, wage, and spending. Each affects the taxation of saving differently. A progressive income tax double taxes all saving, whatever the use of the savings. A progressive wage tax exempts all saving, whatever the use. A progressive spending tax splits the difference. To understand all this more fully, we need a richer understanding and vocabulary of different uses of savings, which is provided in Part V.A. We first leave tax base matters aside temporarily to develop a better vocabulary and understanding of tax rates, the other half of any base-rate pair. Progressivity is the main focus of the Article, and it is progressive rates that destroy the equivalence of wage and spending taxes and give us three, not two, choices for progressivity's future.

## IV. TAX RATES

## A. Vocabulary

Tax rates form a function over the relevant range: income, wages, or spending, depending on the base. These rates can be progressive, meaning increasing; flat or proportionate; or regressive, meaning decreasing-and, indeed, any tax can be all three of these shapes over differing ranges of its base.

There are two different meanings of "tax rates." The income tax in the United States and most developed nations around the world depends on a system of progressive marginal rates that work like a step function. Thus, and to simplify, for a family of four there might be a "zero bracket" reaching up to $\$ 20,000 ;{ }^{44}$ a $15 \%$ bracket extending from $\$ 20,000$ to $\$ 60,000$; and a $30 \%$ bracket over that, as presented in table 1:

Table 1. Sample Marginal Rate Schedule

| Income | Marginal Tax Rate $(\%)$ |
| :--- | :---: |
| $\$ 0-\$ 20,000$ | 0 |
| $\$ 20,000-\$ 60,000$ | 15 |
| Over $\$ 60,000$ | 30 |

This means that the family's "first" $\$ 20,000$ is not taxed, and its "next" $\$ 40,000$ - the income that takes it from $\$ 20,000$ to $\$ 60,000-$ is taxed, on the margin, at $15 \%$. It does not mean that all of the family's income is taxed at $15 \%$. So, for example, a family making $\$ 40,000$ would pay $\$ 3000$ in taxes under this simplified rate structure: $0 \%$ on its first $\$ 20,000$, plus $15 \%$ of $\$ 40,000-\$ 20,000$. An interesting aside is that virtually all flat-rate tax plans that have been proposed in the United States are in fact "two-rate" plans, hence featuring progressive marginal rates: the plans typically have an exempt level or zero bracket, followed by a positive tax bracket, of somewhere between $15 \%$ and $30 \%{ }^{45}$

Average or (equivalently) effective tax rates, in contrast, equal the total taxes paid by a taxpayer divided by his or her total income or other base. Using the same simplified example from table 1, a family of four would face an average tax rate of $0 \%$ on its first $\$ 20,000$ of income. At $\$ 30,000$ of income, the family would pay $\$ 1500$ in taxes ( $15 \%$ of $\$ 30,000-\$ 20,000$ ), for an average tax rate of $5 \%$ ( $\$ 1500 / \$ 30,000$ ); at $\$ 40,000$, the family would pay $\$ 3000$ in taxes, as calculated above, for an average tax rate of $7.5 \% ~(\$ 3000 / \$ 40,000)$.

Under a system of progressive marginal rates, average tax rates, after

[^11]the initial zero bracket range, keep increasing, asymptotically approaching the highest marginal rate as the base goes out to infinity. That is, again in the simple example, the taxpayer family will eventually face an average tax rate of practically $30 \%$ as its income increases, so that the "benefit" of the initial $0 \%$ and $15 \%$ rate brackets becomes a trivial part of the whole. As long as the marginal tax rate is higher than the average, the average is increasing-the higher marginal tax rate pulling it up.

## B. Adding Demogrants to the Mix

While progressive marginal rates necessarily mean progressive average tax rates, the converse does not hold. Progressive average rates can also be obtained with a system of proportionate or even declining marginal tax rates, as long as the marginal rate exceeds the average. This is an important aspect of optimal tax analysis, explained more fully below. The idea is easiest to understand together with a common feature of optimal tax models: the use of a lump-sum rebate or "demogrant." ${ }^{46}$

Consider adding to the simple illustration in table 1 a demogrant of $\$ 750$ per person, or $\$ 3000$ total for our family of four. With no other changes, there would now be negative average tax rates: a family earning $\$ 10,000$, for example, would pay $-\$ 3000$, because it would get the rebate without paying any tax, for an average rate of $-30 \%$. The family earning $\$ 40,000$ would net out at a rate of $0 \%$, and so on. Table 2 summarizes, adding in a $\$ 100,000$ household:

[^12]Table 2. Average and Marginal Tax Rates with Demogrant

| Family <br> Income | Tax | Demogrant | Tax- <br> Demogant | Average <br> Tax | Marginal <br> Rate <br> Bracket |
| :--- | :---: | :---: | :---: | :---: | :---: |
| $\$ 10,000$ | $\$ 0$ | $\$ 3000$ | $-\$ 3000$ | $-30 \%$ | $0 \%$ |
| $\$ 40,000$ | $\$ 3000$ | $\$ 3000$ | $\$ 0$ | $0 \%$ | $15 \%$ |
| $\$ 100,000$ | $\$ 18,000$ | $\$ 3000$ | $\$ 15,000$ | $15 \%$ | $30 \%$ |

Suppose finally that we changed the rate structure from table 1 to be a flat $20 \%$, but kept the demogrant of table 2 in place. The family at $\$ 10,000$ would net out at $-\$ 1000$, a $-10 \%$ average tax rate; at $\$ 40,000$, the family would pay a positive $\$ 5000$, for a $12.5 \%$ average tax rate; by $\$ 100,000$, the family would pay $\$ 17,000$, on net, for a $17 \%$ average. Table 3 summarizes:

Table 3. Average and Marginal Tax Rates with Demogrant and Flat Tax

| Family <br> Income | Tax | Demogrant | Tax- <br> Demogant | Average <br> Tax | Marginal <br> Rate <br> Bracket |
| :--- | :---: | :---: | :---: | :---: | :---: |
| $\$ 10,000$ | $\$ 2000$ | $\$ 3000$ | $-\$ 1000$ | $-10 \%$ | $20 \%$ |
| $\$ 40,000$ | $\$ 8000$ | $\$ 3000$ | $\$ 5000$ | $12.5 \%$ | $20 \%$ |
| $\$ 100,000$ | $\$ 20,000$ | $\$ 3000$ | $\$ 17,000$ | $17 \%$ | $20 \%$ |

Under the tax system represented in table 3, there are progressive average tax rates without progressive marginal rates. Indeed, the average rate for each family in table 3 has gone up compared with table 2 , although this would not continue to be true for wealthier families. The asymptote for table 3 is $20 \%$, compared with table 2 , which was at $30 \%$. The insight that progressive marginal rates are not needed to obtain progressivity in average tax burdens is especially important to optimal tax analysis, where a core finding of almost all models is declining marginal tax rates at the upper ranges of income. ${ }^{47}$

## C. What Matters About Rates?

Most policy discussions of tax in a welfare economics tradition define
47. See Matti Tuomala, Optimal Income Tax and Redistribution 14 (1990). We discuss optimal tax analysis more extensively in Part IV.D.
progressivity as referring to average tax rates. ${ }^{48}$ This definition follows simply enough if one is looking at a snapshot of distributive outcomes, measuring income (or wages or spending) pre- and posttax. In the fullest and most complete statement of optimal tax analysis, as Louis Kaplow has forcefully pointed out, all government tax and transfer programs would be considered together and aggregated, just as demogrants and marginal tax rates are in the classic Mirrlees formulation, and as we did in tables 2 and 3.4 ${ }^{49}$ In more philosophical terms, average rates point to end-state distributive justice: the resources people have after all government programs are considered.

In the standard welfarist conception, marginal tax rates matter only for their incentive effects at the individual level, that is, for their effects on efficiency. In a very crude nutshell, the project for optimal tax, at least assuming a redistributive social welfare function, is to generate progressive average tax (net tax and transfer) rates while minimizing the marginal disincentives to work, especially among the most able. This division of labor between the two types of rates ultimately leads to different patterns. Marginal rates decline over high ranges, often ending in zero on the highest able worker (and sometimes even going negative at the top). Average rates tend to increase, however, with demogrants doing the work of ensuring the redistributive result. ${ }^{50}$

Further investigation, however, suggests that marginal rates can matter-both to conceptions of fairness and to efficiency-independent of their contribution to average tax rates, once we consider changing the tax base along with the rate structure. The basic insight is simple: because optimal income tax has developed considering an income or wage tax, marginal rates have affected only the decisions to work or save. The disincentives generated by high rates lead to a socially inefficient substitution of present consumption for saving and leisure for labor. If the base is allowed to vary-to include exclusions for charitable contributions,

[^13]for example, as suggested by Peter Diamond, ${ }^{51}$ or for saving, as is our principal theme here-high marginal tax rates can push people to give to charity or to save, as well as or in lieu of engaging in leisure. These activities-saving and philanthropy-have very different equity and efficiency characteristics than do consumption or leisure. Both philanthropy and saving can be seen as public goods, which benefit all. In such cases, marginal rates, independent of their influence on average rates, can shape matters of concern to both efficiency and fairness advocates.

This is a different argument than one pressed by others, such as Lawrence Zelenak and Kemper Moreland in the legal literature. ${ }^{52}$ Zelenak and Moreland argue that marginal tax rates are relevant because they are related to average tax rates, and, in fact, are necessary to achieve any form of progressivity in tax once demogrants are ruled out. ${ }^{53}$ These are analytically correct claims: without some kind of demogrant, progressive marginal rates are for all practical purposes needed for progressive average rates. ${ }^{54}$ But this is still an argument about average tax rates, given a political constraint-no demogrants. We agree that America is unlikely to engraft a significant new demogrant onto the existing government spending platform, as we discuss below. ${ }^{55}$ But our argument for the relevance of marginal tax rates extends beyond their impact on average tax rates.

[^14]55. See infra Part IX.B.

In brief, marginal incentives matter. Obtaining average rate progression by maintaining steep marginal rate progression under an income or wage tax means sacrificing efficiency-welfare or wealth-to obtain equity. This is what politicians, commentators, and ordinary citizens have noticed ever since Ronald Reagan's presidency—and it is what haunts President Obama today. ${ }^{56}$ Minimizing the tradeoff between efficiency and equity is why optimal income tax models accept declining marginal tax rates on the upper income. These declining rates can be justified on the Paretian principle that it is better for the most able to work than not to work. ${ }^{57}$ But then these declining marginal rates under a wage or income tax—reaching zero in many models for the most able ${ }^{58}$ —mean that society must sit by and watch as its most highly compensated citizens, at the margin, get richer while paying little or no additional taxes, and are free to spend what they earn. This pattern is what bothers Zelenak and Moreland, along with many, if not most, ordinary citizens. ${ }^{59}$ The philosophers Liam Murphy and Thomas Nagel in their work on tax policy make a similar point, which we comment on below. ${ }^{60}$ Resolving the dispute by insisting on progressive marginal rates under an income tax, however, means choosing equity over efficiency. Changing the tax base changes the tradeoff.

## D. A Short Exploration of Optimal Tax Theory

We have already introduced the idea of optimal tax, the dominant contemporary analytic framework for considering tax rates. It is time to explain the idea more fully.

## 1. The Basics

Beginning with a seminal paper in 1971, Mirrlees famously led the development of optimal income tax theory, building on the much earlier

[^15]optimal commodity tax work of Frank Ramsey. ${ }^{61}$ Ramsey had demonstrated that an optimally efficient government should set differential commodity tax rates based on the demand for different goods, generally leading to the "inverse elasticity rule" whereby inelastically demanded goods should be most highly taxed. ${ }^{62}$ Mirrlees situated the optimal income tax problem in a welfare and information economics setting, analyzing the properties of income taxes designed to redistribute income in the most efficient possible manner, given the information limits facing governments. ${ }^{63}$

Importantly, because there is only a single period in Mirrlees's model, there is no saving. ${ }^{64}$ All income comes from wages and is spent in the single period. This is a wage tax. Taxes generate revenue for the government in the model that is simply turned back over to the people via demogrants. Given a social welfare function with declining marginal utility of money income, a Mirrlees-style model can lead to a large amount of redistribution. In a certain limiting case, where taxes have no distorting effects, the government would tax all wages and return demogrants to all to equalize after-tax wealth. But of course taxes do distort, and therein lies the rub.

The specific problem facing the government in a Mirrlees model is an informational one: individuals know their abilities-which, in the model, represent their abilities to cash their native talents out into wages-but the government cannot observe this information. In the face of high marginal tax rates, taxpayers, as the agents to the government's principal, might "shirk," substituting leisure for labor, earning less, and thereby appearing to be, in the government's eyes, of lesser ability than they in fact are. This formulation is analogous to the perhaps more familiar language of "substitution effects." Tax rates distort the allocation of resources, which ought, in standard welfare economics theory, to be set efficiently by the pretax price system. Looking at wages, or the payment for labor, taxes on them cause after-tax wages to fall, and so people find work less attractive. This tax-induced distortion causes taxpayers to substitute untaxed leisure

[^16]for taxed labor, all else equal.
The major implications of the Mirrlees model and its considerable progeny ${ }^{65}$ are that, given a redistributive social welfare function with certain restrictions on technology, skills, and individual utility functions, the marginal tax rate on labor earnings should (1) attain its peak in the middle of the income range and decline at the upper ranges of income for workers with high wage-earning ability, and (2) reach zero on the last dollar earned by the highest ability wage-earner (though Mirrlees himself did not have this top rate of zero). ${ }^{66}$ While there is great disagreement about the precise contours, there is little argument that marginal tax rates should decline over the upper income (or ability) range. Matti Tuomala, a prominent proponent of the optimal tax tradition, has put it simply that "[o]ne of the main conclusions to be drawn from the Mirrleesian optimal non-linear income tax model is that it is difficult (if at all possible) to find a convincing argument for a progressive marginal rate structure throughout." ${ }^{67}$

Mirrlees included simulations in his seminal 1971 paper that featured peak (that is, highest tax rates, typically on the lower-middle income class) and highest-end (that is, tax rates for the most able or highest income) marginal tax rates of 26 and 16; 21 and 15; 28 and 19; 34 and 20; 39 and 21 ; and 60 and $49 .{ }^{68}$ These peak/highest-end rate pairs show not only the considerable range of possible outcomes under an optimal tax analysis (depending on the social welfare and individual utility functions used), but also the general pattern of peaking then falling. Later analysis pushed the case out to finding a zero rate - in the case of one model advanced by Nobel laureate Joseph Stiglitz, a negative rate-for the highest earner / most able citizen. ${ }^{69}$ In all optimal tax models, progressivity in average tax rates is achieved by means of demogrants, combined with the pattern of often increasing (over low to middle income ranges), but intermittently decreasing (especially over upper income ranges), marginal rates.

The intuitions behind the complex mathematics of optimal income tax models are simple enough to state. The pattern of tax rates once again

[^17]reflects the tradeoff between the distorting effects of taxes on labor supply decisions on the one hand, and the benefits of producing and then redistributing income via the tax system on the other. While higher marginal tax rates at low income levels have the undesirable feature of discouraging work effort by low-ability taxpayers-one aspect of many of the models is that some citizens will rationally chose not to work ${ }^{70}$-such rates also offer the prospect of raising significant tax revenue from all taxpayers, including the high-income or high-ability taxpayers, for whom the higher rates are inframarginal. That is, the high tax rates on low levels of income occur well "before" the high-income or high-ability taxpayers make their marginal decisions about additional work effort. If a welleducated lawyer can earn $\$ 250,000$ a year, for example, her marginal work decisions - should she work those extra hours toward the end of the year to get a larger bonus, say-are unlikely to be affected by a high marginal rate on her first $\$ 50,000$ of income. Higher rates on the lower and middle income brackets raise money from all or most taxpayers, which the government can then redistribute to all citizens, including the poor, via demogrants.

High marginal tax rates at upper incomes and abilities, in contrast, while they also distort the labor supply of high-income or high-ability taxpayers, raise only modest amounts of revenue because they apply only to a small fraction of the labor force. Unless the labor supply of the rich is unusually unresponsive to taxes, that is, inelastic-and the opposite is likely to be the case-tax rates applying to upperincome levels attempt to tax what is a very elastic and a very small base. Hence optimal income taxation entails declining marginal tax rates over the upper ranges of the income distribution. Suppose that our well-paid lawyer faces a 90 percent rate on any earnings over her $\$ 250,000$ pay. Would she work those extra hours, giving up time with family and friends in order to keep 10 cents on the dollar? In the limiting case, it is better-for all, under the standard Paretian condition-for a worker to work than not to work simply for tax reasons, hence the zero tax rate on the last dollar earned by the otherwise fully-deterred highest potential wage earner. Another way to express the same concept is that there is nothing for society to gain by imposing a positive marginal tax rate on the most able worker, thereby distorting his or her labor supply, since such taxes yield no greater revenue than less distorting alternatives. It is always better to eliminate the taxation of the

[^18]last dollar earned by the most affluent taxpayer, paying for this reduction by increasing the taxation of income just below that level, since doing so creates fewer labor market distortions.

## 2. Qualifications, Questions, and Caveats

That is the basic framework for optimal income tax analysis, which has been highly influential in the academy and beyond. There are several important qualifications.

One, optimal tax models are extremely sensitive to changes in key assumptions and parameters, as the simulations from Mirrlees's initial article itself suggest. The most important variable in a public policy setting is labor supply elasticity. This is typically found to be low for men, ${ }^{71}$ at least, suggesting that tax rates can be higher than some models would otherwise suggest. ${ }^{72}$ In the face of this empirical observation, the literature has generally shifted from the elasticity of labor income per se to the elasticity of taxable income. ${ }^{73}$ Here, scholars have typically found more dramatic effects, suggesting that while people may continue to work in the

[^19]face of high tax rates, they devote more time and effort to shielding their income from tax. ${ }^{74}$ This can, of course, be a "bad" thing, if the shifts are to illegal noncompliance or to socially distorting decisions, such as the substitution of untaxed capital income for taxable ordinary wages. ${ }^{75}$ But the shift can also be a "good" thing if the reason for the diminished labor effect of high marginal tax rates is that taxpayers are responding to socially beneficial incentives in the tax law-such as by making charitable contributions, as suggested by Diamond, ${ }^{76}$ or via a generalized saving incentive, as developed in the central insight of this Article.

Two, and more particularly, there is considerable disagreement about how general the Mirrlees results are and what the precise details should be-where, exactly, the marginal rate should begin to decline and where (if at all) it should reach zero. For example, in a 1998 article, Diamond reports that the top marginal rate does not reach zero in his model with a bounded distribution of individual types. ${ }^{77}$ Later scholars have argued that Diamond's result follows from the very particular form of the utility function that Diamond (and some subsequent authors) adopted for modeling convenience. ${ }^{78}$ In a 1982 article, Stiglitz showed that the top income tax rate can be negative in a setting in which labor of different types is not perfectly substitutable. ${ }^{79}$ There are yet other generalizations of the basic Mirrlees result, in a flourishing optimum income tax literature. ${ }^{80}$

Three, the optimal tax analysis in its classic incarnation depends crucially on demogrants. Without demogrants, average tax rates cannot increase over significant ranges with declining marginal tax rates. The difficulty is that demogrants are unlikely to happen on any scale-and certainly not on the scale countenanced by the optimal tax models - any time soon, or perhaps ever. ${ }^{81}$ We nonetheless draw significantly different analytic conclusions from this apparent fact than have others, as we discuss below.

[^20]Four, it is worth noting that there is certain angst even within the optimal tax literature that important variables might be missing. Mirrlees himself, at the conclusion of his 1971 article, reflected that he would "hesitate to apply the conclusions regarding individuals of high skill," because he surmised that, "apart from the possibilities of migration," the highly able find that "their work is, up to a point, quite attractive," and are thus inelastic. ${ }^{82}$ This is surmise on Mirrlees's part, explicitly wishful thinking. Mirrlees felt compelled to qualify his speculation with the phrases "up to a point" and the "possibilities of migration." Mirrlees was clearly not thinking at the level of detail of substituting nontaxable for taxable income, where a high elasticity is plausible (that is, taxpayers are likely to respond highly to incentives to shelter income from taxes when tax rates are high). Mirrlees concluded that " $[t]$ he income-tax is a much less effective tool for reducing inequalities than has often been thought," and ended his article sounding a plaintive plea for the "great desirability of finding some effective method of offsetting the unmerited favours that some of us receive from our genes and family advantages." ${ }^{83}$

Finally, it bears stressing that the optimal income tax has been developed in the context of an income tax base, which is, indeed, a wage base in Mirrlees's precise formulation, because there is no time and hence no saving. The central point of this Article is that the project of choosing optimal tax rates must be connected to the project of choosing a tax base.

## V. BASE-RATE PAIRS: A NEW LOOK

We now combine the discussion of bases and rates to consider baserate pairs. Because our project considers the case for progressivity in tax specifically more steeply progressive marginal as well as average tax rates-we consider three pairs: progressive income, wage, and spending taxes. As explained above, the equivalence of wage and spending taxes, a key plank in the traditional income-versus-consumption tax debate, holds only for regimes without uncertainty and then only for essentially flat taxes. The three bases differ under progressive rates. We must consider each, especially as to how each affects saving, the critical difference among the bases. ${ }^{84}$

[^21]To review, an income tax double taxes all saving, whatever the source and use of the savings, by design. A wage tax exempts all saving, again whatever the source and use, again by design. A progressive spending tax splits the difference, taxing some but not all uses of savings. To understand this point, and to get a sense of how to characterize the saving that a progressive spending tax does and does not tax, we need a better understanding of the uses of savings.

## A. Three Uses of Savings

Consider in financial terms how most of us live out our lifetimes. As any parent knows, we spring forth into the world nearly fully formed as consumers: we cost money from the get-go. But (as any parent also knows) we do not earn anything for quite some time. When we do start earning, it is necessary to earn more than we spend to pay off the debts of youth, including school loans, and then to set aside funds for retirement so that we do not have to work all the days of our lives. Our time on earth looks like one fairly steady consumption profile, from cradle to grave, financed by a lumpy period of labor market earnings concentrated in midlife.

If we lived as islands, by ourselves, we would have to balance the books on our own account, borrowing in youth, first paying off debts and later saving for retirement in midlife, spending down in old age. Financial intermediaries such as banks and insurance companies would facilitate this process. In reality, many families work more or less as informal annuities markets, across generations. ${ }^{85}$ Our parents pay for our spending in youth, and we pay for our children's youths; we also stand ready to pay our parents back, should their needs exceed their resources in old age, and so on.

The figure below is meant to be a very simple picture of this pattern. The curved line indicates earnings from work. The horizontal lines represent spending. The lower, solid horizontal line is a crude approximation of a fully self-financed taxpayer, whose lifetime spending equals (in present value terms) his or her lifetime earnings. The dotted line represents a taxpayer who has been able to live "better"-a more expensive lifestyle-than his or her labor earnings alone, smoothed across time, would seem to allow.
uneven spending. See McCaffery, A New Understanding, supra note 23, at 873-78.
85. See Laurence J. Kotlikoff \& Avia Spivak, The Family as an Incomplete Annuities Market, 89 J. PoL. ECON. 372, 388-89 (1981).

Figure. Earnings and Spending Across Time


In this perhaps atypical characterization of a typical life, note three broad uses of savings. One is to smooth out consumption profiles within lifetimes or across individuals - to translate uneven labor market earnings into level consumption flows. We do this by borrowing in youth and saving for retirement in midlife. ${ }^{86} \mathrm{We}$ can do this using third-party financial intermediaries or by borrowing and saving within the family. Economists call this use of savings "life cycle savings." ${ }^{87}$

A second use of savings is to provide for periods of emergency, such as heightened medical or educational needs, or times of low income due to un- or underemployment. These are exceptional needs, off the usual plan

[^22]for living shown in the figure. Economists call this use of savings "precautionary savings. ${ }^{788}$ Such savings are significant in our analysis because provisions in the tax's base may carve out the attendant uses for lower or even no taxation; we return to this theme below as another application of the significance of viewing bases and rates in conjunction.

This then leaves as a third use of savings essentially all else, the analytic complement of smoothing: capital transactions can shift consumption profiles, up or down. An upward shift occurs when the fruits of our own or another's (via beneficence) savings allow us to live a "better" lifestyle than we could on the basis of our own labor market earnings, alone, smoothed out over time. Suppose that we inherited wealth, or got lucky in the capital markets and made a high return on our investments (received windfalls), as Warren Buffet or Bill Gates: our spending could increase. This scenario is what the dotted line in the figure illustrates. A downward shift occurs when our own beneficence or bad fortune means that we will live at a lower lifestyle than we otherwise could, again on the basis of our smoothed-out labor market earnings profile alone.

Economists tend not to have a handy phrase for this type of shifting transaction, in part because the issue has not arisen under the traditional income-versus-consumption tax debate. Economists write instead about "bequest savings," by which they mean private capital handed over to the next generation. ${ }^{89}$ This phrase does not necessarily get at the ex ante motivation for such saving, and ex ante motivations are key to understanding the possible incentive effects of various tax regimes. Individuals may be saving for life cycle or precautionary reasons and simply end up with leftover funds to pass on-what some economists call "accidental bequests." ${ }^{90}$ Others, as we discuss below, may actively desire to leave bequests to their heirs or to save for charity, or they may simply get a consumption value from owning stores of capital.

We will use both the standard economics vocabulary of savings and our own terminology of shifting and smoothing. The traditional breakdown of life cycle / precautionary / bequest does not distinguish between smoothing and shifting savings within a lifetime. Smoothing reflects an ordinary yield to capital and the use of savings to even out typically uneven

[^23]earnings from the labor market. Shifting, in an upward direction, refers to those extraordinary returns, as well as bequests and inheritances, that tend to characterize the lifestyles of the rich, such as Warren Buffet and Bill Gates: these fortunate few are living better than they could be on the basis of their labor earnings alone, narrowly defined, spread over time at normal interest rates. Hence we use the vocabulary of smoothing/precautionary/shifting. These terms ultimately account for all uses of capital, distinguish between smoothing and shifting intragenerationally, and work perfectly well intergenerationally as well: capital passed between generations can be used to smooth out familial spending patterns, provide for emergencies, or enable later generations to live more expensive lifestyles than they otherwise could (that is, to shift up). Most important, smoothing transactions lower the burden of taxation under progressive marginal spending rates, whereas upward shifts increase such burdens, as we continue to explore below.

## B. Bases and Savings

Under progressive marginal rates, a tax is constantly increasing in the base: that is, the tax rate is rising on the implicit $y$-axis in the figure. Now we can see, visually, that the three tax systems-income, wage, and spending-affect patterns of work, saving, and spending differently.

Both income and wage taxes, as source-based taxes, apply to the curved earnings line in the figure. Thus, both penalize taxpayers with uneven earnings-highly educated professionals, for example, who must wait while their education progresses to earn back their keep, and then have a period of high earnings concentrated in midlife. ${ }^{91}$ Further, an income tax double taxes all saving, come what may. An ideal income tax would add to the tax on wages-reflected in the curved line-a second tax on the yield to the saving needed to smooth labor earnings out into retirement. An income tax would also double tax all precautionary saving and burden taxpayers who had to borrow, as for their education, in their youth.

A wage tax also falls on all current labor effort. It has the same problem with "lumpy" earnings as does an income tax. But a wage tax simply ignores all capital transactions, again whatever their use. It does nothing to get at upward shifts, whereby certain taxpaying citizens can live a better lifestyle than their labor market earnings alone support. Bill Gates
91. For a discussion of William Vickrey's lifetime averaging, see McCaffery, A New Understanding, supra note 23, at 880-84.
and Warren Buffet would pay little or nothing under a wage tax today.
A progressive spending tax, which is a uses-based tax, in contrast, differentiates among uses of savings. Such a tax falls on the straight linesolid or dotted depending on whether the taxpayer received extra wealth to shift his or her lifestyle upward-in the figure. Smoothing saving under a progressive spending tax lowers the burden of taxation, compared to nonsaving, because it moves material resources, income, from a period of high earnings into a period of a lower level of spending. So too, precautionary saving-presuming that the precautionary use, such as for medical or educational needs, is tax-favored, somehow-also brings down the level of taxation. These uses of savings are taxed more like a wage tax, and less like an income tax. Upward shifts, in contrast, increase the level of tax, measured off the baseline of the smoothed consumption pattern. The taxpayer living out the dotted line in the figure is paying a higher effective tax under a spending tax than the taxpayer living out the solid line. It does not matter how, exactly, the extra spending occurred: through luck in the capital markets, successfully disguising labor as capital, or someone else's beneficence. All that matters is higher material consumption. These materially lifestyle-enhancing uses of savings are taxed like an income tax, not like a wage tax, which would ignore them. In other words, a progressive spending tax burdens the yield to capital when this yield is used to finance a greater material lifestyle, but not when that yield is used to smooth out labor market earnings or for tax-favored emergencies.

## C. A Hint of Normativity

The analytics hint at a normative position. Perhaps we are, indeed, of two minds about the taxation of saving. Society sometimes wants to tax the yield to financial capital, Mill be damned. But other times it does not: sympathetic to the Ants of the world, we want to avoid an antisaving bias, a double-tax sting. Society may even want to encourage certain types of saving, while reserving the right to impose a higher tax burden on those fortunate few living off the yield to capital.

It makes intuitive sense that one would want to tax saving, in the spirit of redistribution and fairness, when the yield to capital allows individuals to live better, in material terms: the case of upward shifts. It similarly makes sense that one would not want to burden saving with a double-tax sting when an individual is simply moving around, in constant presentvalue terms, her labor market earnings, or is prudently providing for some emergency: the cases of smoothing and precautionary savings.

Note that these are norms about the uses of savings: they are not norms about where the yield came from, whether it be from stocks or bonds, farms or small businesses, and so on. These are quite general norms, applying to most people in the course of their financial lives. We term the two norms the "yield-to-capital" norm, which holds that the yield to capital is an element of value that ought to be taxed, and the "ordinary-savings norm," which holds that the use of savings in the ordinary course of a typical life, for retirement or certain urgent uses and needs, ought not be double taxed. ${ }^{92}$ When we put the two norms together, we in essence subtract out smoothing and precautionary savings, the domain of the ordinary-savings norm, from all of savings, the domain of the yield-tocapital norm, leaving what we have called shifting savings as the item being taxed. This would operate both intra- and intergenerationally: capital that finances enhanced lifestyles, whether it be own-generation or that of an heir, will bear a positive burden of taxation under progressive spending tax rates. A consistent progressive spending tax effects this result by design.

A final note on the two norms just articulated: the current tax system reflects just such norms, in its theoretical commitment to double taxing all saving, by means of the choice of an income tax (the yield-to-capital norm), combined with the plethora of exceptions for smoothing and precautionary savings, as in the provisions for retirement accounts, or medical or educational savings accounts (the ordinary-savings norm).

## VI. THE LIMITS OF "HYBRIDS"

We pause in the ongoing analysis of tax base-rate pairs to consider the subject of "hybrid" income-consumption tax bases, now joined by the comments on the taxation of saving. Given that society may quite plausibly have mixed and even conflicting thoughts and moral intuitions about taxing saving, it may appear as if some kind of mixed solution, between the income tax's double tax and the consumption tax's presumed utter nontaxation of saving, is the appropriate choice for comprehensive tax policy. Thus, indeed, the current tax has come to be known by tax policy experts as a "hybrid" income-consumption tax. ${ }^{93}$

The first difficulty is in sorting out precisely what a "hybrid" tax

[^24]means. There are three possibilities.
First, "hybrid" can refer to a single comprehensive taxparadigmatically the current U.S. income tax-containing within itself aspects of both an income and a consumption tax. This is how the term is most commonly used in the tax policy literature. The income tax today has both wage and spending tax provisions-prepaid and postpaid consumption tax elements-designed to favor saving by avoiding the income tax's double-tax burden. Traditional Individual Retirement Accounts ("IRAs") work on the spending tax model: no tax is paid now, when sums are contributed, only later, when the value is withdrawn, presumably to be spent. ${ }^{94}$ The initial deduction for savings follows the simple logic of the Haig-Simons definition of Consumption, as Income - Saving, just as the more general progressive spending tax does. In addition to IRAs, traditional 401(k) plans work this way. In contrast, "Roth" IRAs work on the wage-tax model; there is no deduction up front, but the accounts, properly maintained, are free from all further taxation. ${ }^{95}$ Such treatment is the preferred means for a growing trend of tax-favored provisions, as in the recently introduced Roth $401(\mathrm{k})$ s, the special educational savings plans blessed by I.R.C. § 529 , medical savings accounts, and so on.

The trouble is that this type of hybrid, aside from being oxymoronican income tax that exempts the yield to capital is not an income tax-is also incoherent and counterproductive. There is, for example, no reason why a mishmosh of income, wage, and spending tax provisions would result in any new saving at all.

Consider first an income-plus-spending tax, as with the traditional IRA structure under the income tax. An income tax does not include debt within its base: borrowing is literally outside the Haig-Simons definition of Income, as the asset of cash is offset by the liability of the obligation to repay, such that there is no change in one's net wealth when one borrows. ${ }^{96}$ A taxpayer can put money into a traditional IRA with one hand, generating a tidy tax deduction, and borrow with the other hand, resulting in no net saving but plenty of consumption. ${ }^{97}$ Why might a taxpayer do such a thing?

[^25]Presumably because he or she is myopic, eager to spend now and hesitant to save. In other words, the very traits leading many supporters to propose traditional IRAs are the traits likely to undercut the efficacy of the plan. It is, after all, a fact of the matter that the era of IRAs, begun in the 1970s, has featured rising consumer debt and declining American saving rates. ${ }^{98}$

Consider next an income-plus-wage tax, as derives from the increasingly common Roth-style IRAs and savings accounts. These plans offer no current benefit for new savers, who get no cash-flow relief today, because there is no immediate deduction for the saving. This lack of current benefit is thus no help at all to the middle classes struggling to save for ordinary-saving reasons, such as for their retirement or extraordinary medical or education needs. The Roth-style savings plans also have no mechanism to assure that "old" capital is not simply moved into the wagetax model accounts.

In sum, hybrid income-consumption taxes breed complexity and confusion while offering little relief to new savers and no enduring incentives for new saving.

The second possibility is that "hybrid" might mean alternative comprehensive tax bases running side by side, as we in fact have in the United States with the payroll and income tax systems, or as Michael Graetz (and others) have proposed with a value-added tax ("VAT") replacing the income tax for those of relatively modest incomes. ${ }^{99}$ We have no objections, in principle or otherwise, to any of a number of taxes raising revenue from most workers/taxpayers. For people who do not save, or do not save much, income equals consumption, after all, and the choice of a tax base and system for the masses might best be made out on transaction costs grounds. ${ }^{100}$ This second sense of hybrid is not incoherent and counterproductive, as was the first, and most common, sense. But this Article is about finding the last best hope for progressivity in tax, if there is such a thing. A hybrid tax system that combines a VAT, sales, or wage tax for the masses is still left with the question of what kind of tax to have for

[^26]high-income or high-ability taxpayers. A highly progressive income or wage tax on these fortunate few will be difficult to obtain, for reasons we have pressed throughout.

This then leaves the third possibility, a progressive spending tax as a hybrid: a possibility that few seem to have considered. Yet this is precisely what such a tax base-rate pair is, if by "hybrid" we mean a tax that sometimes does, and sometimes does not, tax the yield to capital. A progressive spending tax, as the prior part illustrated, allows some uses of savings-smoothing or life cycle and precautionary-to lower taxes, whereas savings used to finance greater material lifestyles, via shifting, raise the burden of tax. This is, or can be, as we shall argue below, the most logical, principled, and attractive hybrid tax system to consider.

## VII. THE UNEASY CASE FOR PROGRESSIVE SOURCE-BASED TAXES

A progressive marginal rate, source-based tax-income or wage-is swimming against the tides of both economic theory and popular opinion. We can discern this conclusion on both optimal tax grounds, where we recall Mirrlees's own lament that " $[\mathrm{t}]$ he income tax is a much less effective tool for reducing inequalities than has often been thought," ${ }^{101}$ and on notunrelated political-rhetorical grounds.

To begin, we can group together both wage and income taxes and consider primarily the former. An income tax, after all, is a wage tax with a second tax on saving engrafted onto it. If the case for steeply progressive rates under a wage tax is weak, it is unlikely that a steeply progressive income tax would be appealing in theory. Indeed, the most common analysis of the taxation of saving in an optimal income tax framework suggests a zero rate of capital taxation. ${ }^{102}$ The most common flat-tax plan,

[^27]owing to Hall-Rabushka, is in fact for a flat "income" tax with no taxation of capital: a wage tax. In practice, as we explain further in Part IX, the socalled income tax in the United States is largely a wage tax. Mirrlees himself, in modeling an "optimal income tax," chose to make it into a wage tax by having but a single period in his model. ${ }^{103}$ But a wage tax is limited in its ability to bear significant progressivity.

In a crude nutshell, we never need get very far beyond a popular instinct that the government should tax "bads" not "goods." When it comes to broad-based taxes such as the income tax or any likely alternative, the language of "goods" and "bads" is surely too simplistic and blunt, so we can use the phrases "socially productive" and "private-regarding" in their stead. Work and saving are socially productive; they increase the size of the celebrated social pie. Since government policies-including taxation, regulation, and expenditures-make work and saving generally underprovided for as compared to a hypothetical no-tax state, marginal contributions to work and saving are preferable, on collective welfarist grounds, to their complements, leisure and consumption. By directly taxing work and saving, wage and income taxes discourage individuals from partaking in these activities. Because society might especially want the work effort of the most highly able, the case for declining marginal tax rates under optimal income or wage tax analysis is straightforward.

That simple fact limits how progressive, in marginal as well as average rate terms, a source-based tax can be. Note that Mirrlees's own lament about the redistributive capabilities of an income tax came after he had modeled the problem using demogrants to transfer resources back to the poor. ${ }^{104}$ As we discuss more fully in Part IX, America does not have a general program of cash grants back to all, and is unlikely to engraft such a program onto a status quo in which government spending already exceeds government revenue and has been notoriously "sticky" or hard to cut. ${ }^{105}$

[^28]Even if we were to create a massive program of pure redistribution, it is apparent that it simply could not be funded strictly by tax increases on the most able. ${ }^{106}$ These high-ability sorts are too few, and their labor decisions too elastic, to bear the burden. As long as we have wage taxes, we are going to have relatively flat, likely declining, marginal tax rates. As long as we have limited or no demogrants, the same goes for average tax rates, because we are left without the two best mechanisms for average rate progressivity: demogrants and marginal rate progression.

These are not simply abstract claims. At least since the time of Ronald Reagan's presidency, a political and rhetorical argument against high tax rates on high-ability taxpayers has been powerfully made in the public culture by such advocates as Martin Feldstein and, in the 2008 presidential election campaign, Joe the Plumber. The progressivity of the U.S. income tax has fallen since 1980. Recall that the journalist David Leonhardt observed that "even liberal economists" had come to view the pre-Reagan top marginal tax rates of 70 percent-themselves a significant drop from the 90 percent bracket in place from World War II through 1963-as unreasonably high. ${ }^{107}$ As we noted in Part I, the debate between Senators Obama and McCain, as played out in the real-world politics of the Obama Administration, is over restoring the top marginal tax rate, on individuals earning over $\$ 250,000$, to 39.6 percent from its current 35 percent, and it is far from clear that this restoration will happen as we write. Simply put, it is highly unlikely that we will ever see a return to significantly progressive tax rates under an income or wage tax.

## VIII. THE EASIER CASE FOR PROGRESSIVE SPENDING TAXES

Changing from a source-based tax, namely an income or a wage tax, to a uses-based spending tax offers the last best hope for returning to significant marginal rate progressivity in tax. The reason for this is straightforward. Whereas a wage tax deters work and an income tax deters work and saving, a progressive spending tax deters, in the first instance, only spending. If all people work only to be able to spend, and in the present period no less, there will be no difference between income, wage, and spending taxes: Income $=$ Consumption + Saving, so if Saving $=0$, all three taxes are the same.

But this equivalency is not generally the case: people, especially the

[^29]high-income and wealthy, do save. This means that they do not spend all that they can, nonconsumption being the same thing, analytically, as saving.

A key technical question for optimal spending tax analysis concerns what the labor-supply elasticity of marginal spending tax rates is. There are also capital-supply elasticities to the marginal spending tax rate to consider, to pick up the effects of the saving-spending decision. In other words, what is the effect on today's work (or saving) effort of tomorrow's high spending tax rates? This is largely a question for an ambitious new research agenda, one that has not generally been pursued in part because of the confusion in the traditional income-versus-consumption tax debate, ${ }^{108}$ and in part because of simple inertia-scholars tend to study what we have. We sketch out this agenda more fully in Part X; the present part discusses a number of reasons why the labor supply effect of high marginal tax rates under a spending tax might be muted.

## A. A Note on a Parallel

We want first to mark an important parallel to work by Peter Diamond, a prominent public finance economist and leading light in the optimal tax tradition. In a 2006 journal article, Diamond argued that optimal tax analysis could better support higher marginal tax rates under an income tax with a deduction for charitable contributions than under an income tax without the deduction. ${ }^{109}$ Characteristically, Diamond's analysis is mathematically complex and subject to various particular specifications. The core insights revolve around the following ideas: (1) for the philanthropically minded, the option of giving to charity dampens the effects of high marginal tax rates on labor; and (2) the philanthropic contributions themselves are public goods, benefiting the wider societyunlike the leisure that is the only behavioral response to a high marginal tax rate under a pure income or wage tax.

Diamond's paper concerned a modification to the tax base. The same argument could well apply to other base exclusions, such as lower or even zero rates on medical or educational uses under a spending tax. These uses correspond to the category of precautionary savings noted above. In short,

[^30]if a taxpayer is saving in order to provide for future medical or educational needs, the taxpayer will rationally calculate that he or she faces a lower, or even zero, rate of taxation on the labor supply effort that goes into those savings. Thus the anticipated tax rate is declining, even to zero, without a nominal declension in the rate structure: it is as if there is a "shadow" rate structure for medical and educational spending affecting the taxpayer's marginal work decisions.

Saving for medical emergencies or educational uses may be special and limited cases, and may also lack the general feature of public goods. Under a progressive spending tax, however, all saving has the structure of Diamond's charitable contribution deduction. If high-ability taxpayers are motivated to continue saving under a spending tax, they will not be deterred from productive labor effort under high marginal spending tax rates, except to the extent that the taxpayers incorporate future spending tax liabilities into their current work decisions. The wider society benefits from their continued work effort, the positive externalities of the private capital or saving, and the implicit deferred taxation on the ultimate use of the funds.

It should be evident that the case for more steeply progressive rates under a spending tax turns on why people save. In particular, the technical question is what ex ante incentives to work will exist under a progressive spending tax (for the labor effort comes today, whereas ultimate spending-and the taxes along with it-come later)?

## B. Why Do People Save? The Rational Story

The question for analyzing optimal spending tax rates is how the socially productive decisions to work or save would be affected by high marginal tax rates on the private-regarding act of spending. ${ }^{110}$ Because a saver is, by definition, not spending all that he or she could in the present period, the ultimate tax rate the saver might face-as well as the conceptually different tax rate he or she might anticipate ultimately

[^31]facing-depends on why he or she is saving. In this part, we consider various possible motives for saving consistent with a traditional "rational" actor model. Our main task for now is to sketch the possibilities.

Recall the economist's triad of life cycle, precautionary, and bequest uses of savings. Consider how each use of savings affects the labor supply decisions of rational taxpayers under a progressive spending tax.

A traditional life cycle saver-what we call a "smoother"-will anticipate during his or her peak earning years that his or her tax rate at the time of ultimate spending will be lower than it is today, by the definition of smoothing. Recall the figure. The deterrent effect of the tax rate schedule will be dampened, down to his or her anticipated level of spending. This reflects a smoothing process that makes spending exhibit less annual variation than does labor income, such that average tax burdens under a spending tax will be lower than those under a wage or income tax, with a progressive tax imposed on an annual basis, given the same rate schedule. The nominal marginal tax rates can increase without necessarily deterring present-period labor-no one need pay the higher marginal rates. Note also that the rational life cycle saver will not be expecting any "windfall" yield to capital, and so such unanticipated good fortune will not, by definition, affect his or her labor supply decisions today. ${ }^{111}$

Suppose, to make intuitions sharp, that a high tax rate of 50 percent or more kicked in at $\$ 250,000$ of spending. A taxpayer with the opportunity to earn $\$ 300,000$ a year would not be affected by that highest bracket if he or she planned on saving at least $\$ 50,000$, perhaps to fund a constant material lifestyle at $\$ 250,000$ of pretax spending through retirement, or if he or she were paying off student loans, which would be deductible under a consistent spending tax (the tax having come due when the borrowed funds were spent in youth). ${ }^{112}$ The progressive spending tax might push the taxpayer to save more or might allow him or her to do what he or she wants to do anyway, all without affecting additional labor supply decisions today.

Note, however, that a progressive spending tax could affect the rational taxpayer's retirement decision. Picking up the prior example, after years of saving $\$ 50,000$ or more, once the taxpayer's savings account was sufficiently large such that, on an annuitized basis, his or her lifetime spending needs were met, the purely rational, self-regarding life cycle saver

[^32]might stop working. But of course that is also true under a wage or income tax: once anticipated lifetime consumption is fully funded, the rational taxpayer lacking any other motive for amassing capital would cease to work. Bill Gates knows this. And retirement savings today are already generally taxed under a wage or spending tax model. ${ }^{113}$

The rational precautionary saver need not be deterred at all from work effort today by a progressive spending tax that exempted the precautionary uses from its base. This lack of deterrence is parallel to the effect of the charitable contribution deduction under the Diamond analysis discussed above. In essence, anticipated precautionary expenditures that are exempt face a zero rate of taxation, without such a rate being explicitly in the rate schedules. This result follows, again, from the combined consideration of bases and rates. There are of course complex and contestable policy questions as to whether private medical or educational expenditures should be fully or even partially excludable from a spending tax base. We take no position on that set of arguments here. We simply note that a further reason to exempt certain expenditures in whole or in part from a spending tax base is that, to the extent taxpayers might rationally save for such needs, the effect of the exemptions can be to diminish the labor supply disincentive effects of progressive marginal spending tax rates.

But most uses of savings seem to be for something other than life cycle or precautionary uses. Studies using this traditional economics vocabulary consistently show that a significant percentage of private capital is passed on intergenerationally, in what economists call "bequest savings." ${ }^{114}$ This is simply a residuum category, and possibly less responsive to ex ante labor incentives than are other economic decisions to be considered by optimal spending tax analysis. Perhaps savings that get passed on were intended to be used for life cycle or precautionary purposes, but the rainy day never came, or death came too early. These may be referred to as "accidental bequests." ${ }^{115}$ In such cases, the analysis is as

[^33]above because the labor supply effect looks to the ex ante incentives: if a taxpayer thinks that he or she will need funds for life cycle and precautionary needs, she will rationally factor in the tax consequences of such uses at the time of his or her labor supply decisions. Hence a general risk aversion might favor social welfare under a progressive spending tax, as some individuals might continue to save beyond a more risk-neutral perception of their need.

Given what we know of the wealthy, however, it seems unlikely that all or even most of bequest savings comes from miscalculations of owngeneration life cycle or precautionary needs: both annuities and insurance markets allow for fairly precise life cycle and precautionary savings these days, ${ }^{116}$ and much evidence shows that the wealthy continue to save, not fully dissave, until the end of their lives. ${ }^{117}$ What is going on? Intergenerational or bequest savers might be motivated to pass wealth on to their heirs. Then the question becomes what, if any, tax rates on the heirs do these dynastic savers internalize in their labor supply decisions today? ${ }^{118}$ All of this discussion is speculation, and thus forms part of the new research agenda we aim to be announcing, but it is possible that many wealthy benefactors will expect their heirs to live as they did: that is, somewhat frugally, leaving a bequest at the end of their days. Such potential benefactors might even welcome a progressive spending tax, which would form a kind of social "spendthrift trust" for their heirs. Some evidence to support this possibility is the fact that many wealthy individuals now privately create just such trusts, limiting access to wealth to set levels of income and certain urgent needs of the beneficiaries. ${ }^{119}$

[^34]Accidental and intentional bequests do not exhaust the potential reasons for "excess" savings that have some individuals leaving this earth with private capital in tow. It is possible, perhaps even likely, that many wealthy individuals simply get a consumption value from owning capital itself: they enjoy having large stores of wealth, take comfort in it, enjoy making investment decisions, and so on. Some may even have ultimate philanthropic motives, as in the Diamond analysis, or in the real-world cases of Bill Gates and Warren Buffet. The critical point is that, from the evidence we now have at hand, many wealthy people seem motivated to save for reasons other than presently anticipated own-consumption, and these motivations might make them continue to work in the face of more steeply progressive marginal spending tax rates, which they-quite rationally-would not anticipate ever paying.

## C. A WindFall Benefit?

There is another reason to believe that labor market earnings might not be as responsive to high marginal spending tax rates as they are to wage or income tax rates. It derives from uncertainty in the yield to labor as well as the yield to capital. Such uncertainty has multiple origins: individuals do not know exactly what effect today's labor effort will have on ultimate labor compensation (in the form of bonuses, subsequent promotions and raises, job satisfaction that encourages delayed retirement, and so on), and they do not know what rate of return they will receive on their savings. Individuals who are lucky, whose returns ultimately exceed their expectations-such as Bill Gates and Warren Buffet-tend to have the greatest spendable wealth, the highest spending levels, and therefore will face the highest spending tax rates. Since these high spending tax rates were unanticipated at the prior time of earning labor income-the good luck or windfall by definition being unexpected-it follows that the high spending tax rates will not have had the same discouraging effect on labor supply that they would have if known at the time of earning, as would by definition be the case under wage or income taxes. Lucky returns or windfalls of some sort are apt to be a major source of funding-enhanced material lifestyles or upward "shifts" in the perspective of the figure. Recall that a progressive spending tax, but not a wage tax, falls on such resources when consumed.

Uncertainty in the yield to labor and yield to capital gives yet another
of out-of-state trusts to avoid the rule against perpetuities so as to control trust assets for lengthened periods).
reason-aside from the motivations for private saving and capital accumulation, canvassed above-why it can be possible to design a spending tax with sharply redistributive marginal tax rates that nonetheless does not excessively discourage labor effort. In such a setting, a major function of a progressive spending tax system is to redistribute the unexpected portion of spending power-positive and negative-among laborers. Spending taxes offer a type of insurance against uncertain returns, and while the same is true of almost any progressive tax system, progressive spending taxes have the advantage that they partially insure all consumption risks. By contrast, a progressive wage tax partially insures against uncertainties in wages but not capital returns, and a progressive income tax partially insures against income uncertainties but does so at the cost of discouraging saving. Spending taxes uniquely offer the prospect of significantly redistributing unexpected returns without discouraging saving and without excessively discouraging labor supply ex ante.

## D. A Possible Sort?

We have been discussing why people work and save, more or less slipping into a standard academic conceit that all people are the same. Of course, they are not. We have no doubt that people are heterogeneous, such that high-ability taxpayers-the main focus of both optimal tax analysis and any call for greater progressivity in tax today-have a mix of motives for their work, saving, and spending decisions. Here we note another possibly beneficial effect of a progressive spending tax: its intrinsic ability to treat two types of taxpayers differently.

Under a wage tax such as Mirrlees modeled, taxpayers face only one decision margin: to work or not. The fear that high-ability taxpayers may reduce their labor supply drove the analysis of declining marginal tax rates. Even if there were some inelastic high-ability workers, who would continue to work no matter what tax rate they faced at the margin, the tax rates on high-ability types would have to be low if there were a suitably high number of elastic taxpayers, such as, presumably, Joe the Plumber. In such a case, the inelastic high-ability taxpayers would get a windfall, as it were. This problem has led some to look for "markers" of elasticity (or ability), such that an income or wage tax could better differentiate among highability types. ${ }^{120}$ But there are practical, political, legal, and moral questions
with any such approach.
Under a progressive spending tax, in contrast, there are two decision margins: to work or not, and to spend or save. This leads to a natural "sort" among high-ability types, based on their propensities to spend currently.

Imagine that there are two types of high-ability earners. Type one, captured in such contemporary bestsellers as The Millionaire Next Door, ${ }^{121}$ is a frugal sort, inclined to save-a noble Ant to the end. Type two, as described in such contemporary analysis as Robert Frank's Luxury Fever, ${ }^{122}$ is a Grasshopper type, addicted to spending his wealth in a showy fashion. Although, once again, more analysis is needed, it is at least possible-dare we say likely? - that the Ant is more elastic in his or her labor supply than the Grasshopper. The Ant is frugal, after all, and hence more likely to be concerned with prices and taxes. He or she might well stop working under high labor tax rates. The Grasshopper, in contrast, looks like a consumption addict: a lamentable personality type, to be sure, but just the kind of person that optimal tax advocates should want to tax. A progressive spending tax, by design, would fall more heavily on Grasshopper than on Ant. Such a tax holds out the possibilities for sorting the rich and highly able into elastic and inelastic segments, based on their propensities to spend, allowing society to extract a higher tax burden from spenders while continuing to enjoy the benefits of the productive activity of both savers and spenders as well as the thrift of the worker-savers.

## E. BeHAVIORAL MODELS

The analysis in this part, including that contained in the Diamond paper, has been predicated on a traditional "rational actor" model. There is nothing irrational about saving for one's retirement, for precautionary needs, for one's heirs, or simply to enjoy the psychic pleasures of owning independent stores of capital. There is no disputing tastes, after all, in traditional economics analysis. ${ }^{123}$ Certainly a spend-it-all-and-die-broke mindset is not irrational. But a growing field of research, behavioral economics, has challenged the assumptions of the rational model. Much of this literature has focused on saving and other behaviors with intertemporal consequences. Richard Thaler and colleagues, for example, have famously

[^35]argued for a "behavioral life-cycle hypothesis" 124 to supplant the rational life cycle hypothesis of Franco Modigliani ${ }^{125}$ and others. Under a behavioral view, ordinary persons make a variety of "mistakes" in their saving behavior, on account of such heuristics and biases as myopia, timeinconsistent preferences, the use of mental accounts, and so on. ${ }^{126}$

What might be the relevance of behavioral insights to our analysis here? Once again, we hope to be opening up a research agenda. We believe it important that such an agenda have a behavioral component. Here we simply sketch some possibilities.

The most common finding from behavioral economics on point is that people save too little. ${ }^{127}$ This myopic tendency to live for the day has led to the types of saving vehicles within the income tax that make it a "hybrid," as discussed above in Part VI, and as are featured in President Obama's budget proposals. ${ }^{128}$ Yet myopia also gives reason to doubt the efficacy of these ad hoc patches. ${ }^{129}$ The myopic tricked into opening an IRA can just as easily run up credit card debt or take out home equity loans. To put the matter generally and simply, a system such as the income tax that does not tax borrowing when incurred will face a difficult task in getting myopic people to save. A consistent spending tax, in contrast, eliminates the arbitrage opportunity, not by taxing saving-which it systematically does not do-but rather by taxing the debt-financed consumption. ${ }^{130}$ There is thus some reason to hope that the systematic exemption of saving under a progressive spending tax will encourage greater and more enduring saving than the ad hoc approaches under current law. ${ }^{131}$

[^36]We also suspect, and have found some confirmation in the literature, that the activity being taxed has salience. ${ }^{132}$ An income tax leads one to think about one's income, and thus to avoid the tax via leisure, or to convert it to "nonincome," or to hide it. A progressive spending tax ought to get one to think about his or her spending. We suspect tax-induced behavioral changes under a spending tax are more likely to come in regard to marginal decisions to spend or save rather than to work or not, although, rationally, today's work will usually affect tomorrow's spending.

There are other places in the analysis of a progressive spending tax in which behavioral heuristics and biases might play a role. A persistent myopia, combined with self-serving optimism, may lead many people highly and perhaps completely to discount any tax on their saving. This result possibly obtains today: on a casual survey of friends and colleagues, almost all give some indication of the amounts in their tax-favored retirement accounts without discounting for the inchoate tax liability. This tendency could lead to a "money illusion" under a consistent spending tax that might, ironically, lead to less saving. ${ }^{133}$ People would believe that they are wealthier, in after-tax terms, than they are: they will not be able to consume as much as they think they can. This "behavioral income effect," as it were, of the savings accounts under a consistent progressive spending tax could then lead to less saving. ${ }^{134}$ On the other hand, the substitution effect would cut in the other direction, as spending faces an increasing marginal tax rate whereas saving, more so under a behavioral perspective, faces a low or even zero rate of taxation. ${ }^{135}$ And the money illusion generated by the pretax accounts under a consistent spending tax ought to be less problematic than it is under the so-called income tax today because there would not be any ability to borrow tax-free with the pretax accounts in mind. People using "mental accounts" ${ }^{136}$ seem generally reluctant to invade capital, a phenomenon perhaps connected to the well-studied

[^37]"endowment effect," ${ }^{137}$ another reason to hope that the saving under a consistent progressive spending tax will be especially stable and enduring.

Again, far more research is needed, but these are the kinds of questions that are worth asking. As a crude guess, we suspect that the optics of placing the tax on the act of spending will have beneficial effects in that people will not be as deterred from working or saving because of the logical remoteness of the tax, but that at least the wealthy will be deterred from additional high-end spending-which ought to be an effect desired by advocates of progressivity and redistribution. A progressive spending tax gets its redistribution, and seeks its relative equality, in the private consumption space of personal material lifestyles, what arguably ought to matter most to advocates of redistribution in the first place.

## IX. THE WORLD AS WE KNOW IT

We have discussed the relatively abstract analytics of tax, considering income, wage, and spending tax bases with progressive marginal rate structures. We turn now to a consideration of the real world of tax today, in the United States in particular. Three strong themes emerge.

One, looking to the tax base, we see that we largely have a wage tax. This is so, both in regard to the so-called income tax alone-because this tax's commitment to taxing the yield to capital is highly porous, at bestand when we widen the perspective to consider also the payroll or Social Security / Medicare tax system, a close second in total revenue to the income tax. ${ }^{138}$ The payroll tax does not even attempt to be anything other than a wage tax.

Two, looking to the rate structure, we observe that it is highly compressed-indeed, it is quite close to being an optimal tax rate schedule, with low and declining rates on the most able and wealthy citizens. It would seem as if, despite its highly abstract quality and nearly four decades

[^38]of qualifications, questions, and refinements, the optimal income tax tradition has had a strong influence in contemporary tax systems. Perhaps as important, the political and rhetorical arguments against high marginal tax rates on high earners have had enormous real-world traction, at least since the presidency of Ronald Reagan in the 1980s through the rise of Joe the Plumber. ${ }^{139}$ The economics, as mediated through political and popular processes, have led to what might be called "everyday optimal tax theory," borrowing and adjusting from Murphy and Nagel's term of "everyday libertarianism." ${ }^{140}$

Three, the United States does not have anything close to a lump-sum program of redistribution or demogrants, and is all but certain never to have one. ${ }^{141}$

Combining these themes leaves us with a relatively flat-rate wage tax, with declining tax rates on the high ability, limited redistribution today, and little hope for more tomorrow. The balance of this part explores these claims and comments further.

## A. TAX TODAY

The so-called income tax in the United States is in reality largely a wage tax, for structural and ad hoc reasons. The structural reasons relate to such deep-seated features of the income tax as the "realization requirement" and the nontaxation of debt, which in turn render such features as low tax rates on capital gains and corporate dividends virtually inevitable. ${ }^{142}$ The ad hoc reasons include the panoply of ostensibly prosaving provisions, modeled along both wage and spending tax lines, such as traditional and Roth IRAs, § 529 plans, ${ }^{143}$ and so on, considered above. ${ }^{144}$ When we add the increasingly important payroll tax systemwhich does not purport to be anything other than a wage tax -onto the income tax, the theme is clear enough.

Turning from base to rate issues, table 4 combines income and payroll

[^39]rates for an individual in 2009. ${ }^{145}$

TABLE 4. Payroll and Income Tax Rates (approx.), Single Person, 2009

| Income | Payroll Tax (\%) | Income Tax (\%) | Combined (\%) |
| :--- | :---: | :---: | :---: |
| $\$ 0-\$ 10,000$ | 15.3 | 0 | 15.3 |
| $\$ 10,000-\$ 18,000$ | 15.3 | 10 | 25.3 |
| $\$ 18,000-\$ 43,000$ | 15.3 | 15 | 30.3 |
| $\$ 43,000-\$ 92,000$ | 15.3 | 25 | 40.3 |
| $\$ 92,000-\$ 106,000$ | 15.3 | 28 | 43.3 |
| $\$ 106,000-\$ 181,000$ | 2.9 | 28 | 30.9 |
| $\$ 181,000-\$ 382,000$ | 2.9 | 33 | 35.9 |
| $\$ 382,000$ and above | 2.9 | 35 | 37.9 |

This rate structure begins to look like an optimal income tax. It features marginal tax rates that peak in the middle income ranges and then gradually decline. Looking at just these two taxes combined, for now, marginal tax rates peak at 43.3 percent over the $\$ 92,000-\$ 106,000$ range of incomes. Marginal rates then fall, to 30.9 percent, before rising a bit at the end, to wrap up at 37.9 percent over $\$ 382,000$ of taxable income.

This is well on its way to being an optimal income tax rate structure, as suggested by Mirrlees. Note that President Obama's proposed changes would only raise the last two income tax brackets, the final one to 39.6 percent, for a combined 42.5 percent rate on income-still below the middle-class peak. A fuller, richer understanding of the status quo suggests that the true picture is even closer to Mirrlees, and more dramatic in its peak-and-trough structure than this quick sketch. Consider three further factors.

One, the earned income tax credit ("EITC") of I.R.C. § $32^{146}$ adds to the "hump" effect in table 4 by placing a high marginal tax rate burden on the working poor. This provision is the key element in the "workfare" that largely replaced "welfare" under President Clinton's reform, although the

[^40]EITC dates back to the early 1970s. ${ }^{147}$ The credit works like a negative tax, giving the working poor additional resources. The problem is, it is repaid by the near-poor via a "phase-out" that works just like a positive marginal rate bracket. This is an effort to minimize the cost of the program by preventing upper-middle income taxpayers from receiving benefits. Thus, a single parent with two children, having received a benefit of approximately $\$ 4000$ on her first $\$ 10,000$ of labor market earnings, must pay this benefit back by facing an additional tax of some 21 percent on her earnings between approximately $\$ 20,000$ and $\$ 40,000$ dollars. This EITC phase-out puts her in a 50 percent combined marginal rate bracket over this range, adding the EITC phase-out onto the rates in table 4.

Two, in addition to the phase-out range of the EITC, there are a host of other phase-outs of means-tested programs facing the working lowermiddle income class. In a paper published in 1999, Daniel Shaviro showed that marginal tax rates facing some working poor can equal or exceed 100 percent, an astonishing if unintended feature of overlapping programs, but one that has been well verified (and left largely unchanged) since then. ${ }^{148}$

Three, at high levels of income, the actual marginal taxes individuals face depend critically on sources of income and avoidance possibilities: the gap between "income" and "taxable income" generally grows with income. ${ }^{149}$ Many wealthy taxpayers in fact face marginal rates of 15 percent or even 0 percent on the last dollar that they earn, because they are able to gain wealth in the form of taxable capital gains or untaxed capital appreciation. Hedge fund managers fall into the former camp; Bill Gates, Warren Buffet, and other billionaires into the latter. ${ }^{150}$ This is, of course, a perfectly understandable - even satisfying - state of affairs to those steeped in the Mirrlees model and tradition.

Thus, we conclude that the "real world" in the United States looks roughly like a Mirrlees optimal income tax both in its base-that is,
147. See generally Anne L. Alstott, The Earned Income Tax Credit and the Limitations of TaxBased Welfare Reform, 108 HARV. L. REV. 533 (1995) (discussing the historical background of the EITC, inter alia); Edward J. McCaffery, The Burdens of Benefits, 44 VILL. L. Rev. 445 (1999) (discussing inter alia the reform of the EITC under President Clinton).
148. Daniel N. Shaviro, Employment Policies Inst., Effective Marginal Tax Rates on LOW-INCOME HOUSEHOLDS 7 (1999), available at http://www.epionline.org/studies/shaviro_021999.pdf. See also Stephen D. Holt \& Jennifer L. Romich, Marginal Tax Rates Facing Low- and Moderate-Income Workers Who Participate in Means-Tested Transfer Programs, 60 NAT'L TAX J. 253, 260 (2007) (finding a marginal rate exceeding 100 percent).
149. Slemrod, supra note 75, at 165-66, 173-74.
150. On the former problem-the ability of sophisticated financiers to receive compensation taxed at favorable capital gains rates-see Victor Fleischer, Taxing Blackstone, 61 TAX L. REV. 89 (2008).
wages-and in its rate structure. The implementation is not precise, at least in part because there are no generally accepted precise findings from optimal tax itself. Some of the imprecision also no doubt derives from pragmatic and practical constraints: for example, and perhaps most important, there is a single rate structure that applies to all individuals, without excessive particularization. The only way to particularize taxes today is through the base, where taxpayers indeed often face decision margins-whether to give to charity, save, spend on medical needs, and so on. This continues to be the principal theme in this Article, namely, the need to consider the base and rate aspects of tax systems hand-in-hand. But individuals do not face particular rate structures based on their characteristics: the government does not attempt to tax I.Q. or look to genetic "markers" to individuate taxes. ${ }^{151}$ Taxes are collected on an annual basis using accounting information, and reflect other practical and realistic considerations.

Other features of the real rate structure seem to reflect pragmatic and political compromises. For example, a perceived popular political desire not to allow high-income taxpayers to pay nominally zero taxes led to the adoption of the alternative tax minimum, ${ }^{152}$ although Congress has never changed any of the structural elements of the income tax that allow those living off of stores of financial capital to pay little or no taxes by showing little or no taxable income. ${ }^{153}$ Yet when all is said and done, what is remarkable is how much reality follows abstract theory. As John Maynard Keynes put it, "Practical men, who believe themselves to be quite exempt from any intellectual influences, are usually the slaves of some defunct economist, ${ }^{154}$ in this case, the not-defunct James Mirrlees and his followers.

## B. On Not Adding Demogrants to the Mix

We just noted that the United States tax system, in its base and its general rate structure, looks like an optimal tax model. For the system fully to conform to Mirrlees's sketch of the ideal, however, there would also need to be demogrants, or lump-sum transfers to all. This step is necessary

[^41]to bring about average rate progression and hence redistribution given the pattern of quickly rising then gradually declining marginal tax rates.

But we have no demogrants. As others have pointed out, the United States is highly unlikely ever to offer demogrants on anything close to the scale contemplated by the standard optimal income tax model. ${ }^{155}$ Certainly only very modest government support is currently available to Americans without other sources of income. On a quick impression, the EITC might look like a demogrant. But on closer inspection, it is far from it and, in fact, constitutes significant evidence that America is unlikely ever to have a major demogrant-like program. The EITC, after all, is set as a percentage of earned income: it is not a lump sum, but, in effect, a negative marginal tax rate. This was an important, consciously chosen design feature of the program. The significant expansion of the EITC under President Clinton formed the lynchpin of the "end [of] welfare as we know it," 156 "making work pay," ${ }^{157}$ and moved "welfare to workfare." ${ }^{158}$ Far from the optimal tax result that demogrants plus high marginal tax rates on the poor deter the least able from working-a feature that Mirrlees himself found attractive, at least during times of high unemployment, ${ }^{159}$ and which others, such as Louis Kaplow, are willing to accept as a perhaps inevitable byproduct of other desirable properties ${ }^{160}$ —American social policy seems to have a strong principle of encouraging the low-income to work.

There are also perfectly strong rational reasons to stay away from demogrants. Quite apart from a prevailing political orthodoxy that is skeptical of demogrants even if they did not trigger costs, lump-sum transfers are of course not costless. Money given unconditionally to citizens is money that the government either must raise with taxes or else divert from other spending priorities. Presumably the public likes the other spending programs now in place, many of which have redistributive and "social safety net" components to them. There is a tremendous "stickiness" in the status quo: a reluctance to cut spending programs already in place, a social fact that might relate to certain well-known cognitive biases and tendencies such as the endowment effect. ${ }^{161}$

[^42]Even if there were a political will to provide significant demogrants, how then would they be financed? Higher marginal tax rates on middleincome taxpayers, the most likely source of significant tax revenue, create unappetizing disincentives and thereby likely greater efficiency losses than even the average dollar of tax revenue does currently. ${ }^{162}$ Engrafting more taxes-perhaps significantly more taxes-onto the status quo discussed above runs the risk of pushing inframarginal rates, already above 100 percent for some, as we pointed out in the prior section, even higher. This result would then run counter to the pro-work principle in American social policy. There can also be no iron-clad guarantee that a government composed of flesh-and-blood human beings, having found a means to raise revenues, would in fact remain committed to the spending program of the demogrant system: there is a great deal of evidence bred of experience-as with the supposed dedication of lottery proceeds to education or in the socalled flypaper effect-that spending programs can go askew. ${ }^{163}$ Further, in times of budgetary stringency, a demogrant would be the easiest expenditure to cut, or not to increase. The reality of political and social life is that every epoch is an age of budgetary stringency. Demogrants would be a frail social safety net on which to depend.

And so, although it does not have the status of analytic truth, it appears unrealistic that the United States would adopt a major demogrant program. It is important, therefore, to consider the significance of this absence of demogrants.

## C. Progression Without Demogrants

It comes down to this: we have, roughly, an optimal tax base and rate structure with no demogrants and hence limited redistribution and progressivity in average tax rates. What to do?

Many scholars seem to assume that the optimal tax findings are all of a piece, such that it is somehow illegitimate or inappropriate to take arguments for and analysis of the rate structure and divorce these from the case for demogrants. In sum, without demogrants, optimal tax has nothing to say to the public political discourse. The philosophers Murphy and Nagel characteristically state this case in the strongest and most colorful

224 (Elizabeth Garrett, Elizabeth A. Graddy \& Howell E. Jackson eds., 2008).
162. See Martin A. Feldstein, The Effects of Taxes on Efficiency and Growth, 111 Tax Notes 679, 679-80 (2006).
163. Charles T. Clotfelter \& Philip J. Cook, Selling Hope: State Lotteries in America 163-66, 227-28 (1989); Hines \& Thaler, supra note 105, at 223-24 (flypaper effect).
language:
But there is one very important point to make about economists' lessons on the distinction between ends and means. If we are told that lower marginal rates coupled with a demogrant would be better even from the point of view of a strongly egalitarian theory of justice than graduated rates with a high marginal rate at the top, that gives us absolutely no reason to abandon high marginal rates without introducing a demogrant. This is blindingly obvious. But in practice the point is frequently ignored. It is frequently claimed, for example by Joseph Stiglitz, that the conclusions of optimal tax theory were an influence on the trend to much lower marginal tax rates in the 1980s. This trend has been linked not with a greater role for cash transfers, but rather the reverse. No one concerned with welfare, not even utilitarians, can regard the growing inequality that has characterized the last two decades in the United States as an improvement from the point of view of justice. It is possible that, in its short-run practical consequences, economists' interest in the behavioral effects of taxation has done more harm than good to the cause of social justice. ${ }^{164}$

It may be "blindingly obvious" to Murphy and Nagel that there is "absolutely no reason to abandon high marginal rates without introducing a demogrant," but we fail to see it. The critical point is that the revenue raising and expenditure aspects of optimal tax theory are analytically separate. They may be, and are, in the hands of the optimal tax theorists themselves, normatively connected. That is, there is or can be a reason to make the move Murphy and Nagel suggest, and argue for high marginal tax rates if demogrants are off the table: that reason is a foundational commitment to redistribution, come what may, such that advocates would be willing to choose progressive marginal rates without demogrants if demogrants were ruled out. We comment further on this set of policy prescriptions below. For now we simply note that there is no necessary reason why the government or wider society must accept the social welfare function used by the theorist, or even the general social welfarist framework. Having a revenue need, derived from whatever source, the optimal tax framework teaches a policymaker how most efficiently to meet it. And so there is, indeed, a reason-a compelling one-why policymakers should choose a pattern of declining marginal tax rates under a wage tax, even without demogrants. That reason is efficiency or wealth-maximization. Optimal tax's insight that a "high marginal rate at the top" can be socially inefficient-wasteful-has nothing logically to do with the use or nonuse of demogrants.

[^43]Consider, to drive intuitions home, the social logic at least implicit in Murphy and Nagel's case for supporting high progressive marginal rates under an income tax in a world without demogrants. In order for this position to be coherent, people must accept a welfarist, utilitarian, or other argument for the degree of redistribution manifest in the optimal tax models: they want to redistribute. If they did not want to redistribute, they already would disagree with Murphy and Nagel, and Mirrlees for that matter. But then by stipulation the people have rejected demogrants, or the best means for achieving the ends of redistribution. Next, then, the people would have to support some inefficiency, or waste-perhaps some considerable waste, if the top marginal rate is high enough - in order to get more redistribution without the demogrants. ${ }^{165}$ In sum, under the structure of this logic, when people are committed to a significant level of redistribution or equity, they are willing to pay a high price-in inefficiency-not simply to get more equity or redistribution, but to get it without using the best means to do so, namely, demogrants. This willingness is possible - there is no disputing tastes, as the saying goesbut certainly a bit odd. In a move familiar from the work of Louis Kaplow and Steven Shavell, a Pareto improvement-of potentially large magnitude-would be possible because the more efficient means of achieving the same ends could bring vast wealth to the table. ${ }^{166}$

Here is a different interpretation of the status quo, and the possible inchoate principles of the people. Society does not quite agree on any one social welfare function. It collectively chooses government programs, many of which are indeed redistributive, though redistributive in kind: education, national defense, environmental regulation, Social Security, Medicare, public health, and so on. Having chosen these expenditure programs with at least an eye toward equity, society seeks to raise revenues in the most efficient way. It experiments with high marginal tax rates,

[^44]which might actually work better during war times, when first imposed, ${ }^{167}$ but, over time, the people learn that such high tax rates distort labor supply decisions and lead to vast complexities and waste. Policymakers fret that people might stop working, migrate to other places, or spend time and resources converting the economists' potentially taxable income into untaxed, or lightly taxed, forms. In fact, they are right to have such concerns. Mirrlees and his contemporaries come along to give a formal gloss to these intuitions, and the people listen to and learn from the teaching of formal economists, even if they reject some of their more precise findings. The public does not want a top nominal tax rate of zero; we do not generally want to create incentives for people not to work; we do not want a massive tax and transfer program in a demogrant fashion engrafted onto what we are already spending money on. But voters do not want pure, spiteful waste, either-they do not want the most able and productive citizens sitting idly on the beach. So the government adopts a modified form of optimal taxation, particularly its general rate structure. The polity develops, that is, an everyday optimal tax. Joe the Plumber emerges from the hustings.

The challenge is where to go next. How do we get more equity and redistribution, and more progressive marginal rates-which the public does seem to want-without abandoning major current public expenditure programs or instituting a massive new demogrant system, and without simply sacrificing wealth en masse on the altar of these preferences? Our answer-what we think is the last best hope for obtaining progressivity in tax-is to change the tax base.

## X. CONCLUSIONS AND SUGGESTIONS FOR FURTHER RESEARCH

This final part turns to normative considerations: why a progressive spending tax might, indeed, be a good policy option for the United States. It is not for scholars to dictate the good, of course. We simply sketch out how a progressive spending tax might be the ideal tax base-rate pair under a traditional welfarist conception, or how certain advocates of socialcontractarian or fairness-based perspectives might come to see it as the best alternative. In all this discussion, there are many empirical claims and issues that need to be developed: certain important questions have not yet been asked, or asked well and often enough, in part because a traditional analytic view of tax has impeded them.

We first sketch out four distinct paths for tax's future, then we turn to the normative arguments for a progressive spending tax, and conclude with a call for more research.

## A. Paths to a More Progressive Future

The prior part stressed three themes: America has (1) essentially a wage tax base; (2) a relatively flat, nearly "optimal" tax rate structure; and (3) no demogrants. This combination leaves us with limited redistribution today and limited hopes for more tomorrow. Let us continue to assume, along with Murphy and Nagel and many others, that America right now is far from having obtained the redistributive goals and ambitions of optimal tax theory in the tradition of Mirrlees and others. ${ }^{168}$ We are a land of great inequality. How might we be transformed to a promised land of greater redistribution, in the spirit of optimal tax? There are four general approaches, looking at the tax and spending sides of the ledger, playing with different combinations of tax base, tax rates, and demogrants.

One, the United States could eliminate or reduce all or most existing spending programs and substitute demogrants in their place. We humbly suggest once more that this is not going to happen. For better or worse, current spending programs are deeply entrenched. No American president or political party has succeeded in significantly reducing spending - the Republican Presidents Ronald Reagan and George W. Bush certainly did not-and there is precious little reason to count on significant reductions any time soon. Indeed, the chief fiscal obstacle confronting the federal government is to reduce the rate of increase in government spending, especially on Social Security and, even more so, Medicare. ${ }^{169}$

Two, the United States could engraft demogrants onto the existing spending platform. But, as we discussed in the prior part, this is not only

[^45]nearly as infeasible as cutting existing spending programs, it is also unwise, in part because it would ratchet up revenue-raising demands far beyond the capacity of the system to bear.

Three, we could, without demogrants, change the marginal rate structure under the existing tax structure to create progressivity, perhaps even with high marginal rates at the top. This is the suggestion of Murphy and Nagel, Zelenak and Moreland, and at least a handful of liberal political commentators. ${ }^{170}$ It makes sense in theory, but we are skeptical in practice, for reasons we have detailed and built up throughout this Article. The efficiency losses from high marginal rates exist regardless of whether there are demogrants. Americans, since at least the 1980s, seem to have figured this fact out, as our quick survey of the political environment now and over the last several decades points out. Ignoring the lessons of optimal tax because the political system is not willing or able to adopt demogrants means being committed to accepting waste-burning money or psychic value-to achieve greater "equity." The country might indeed be willing to do this, to some small extent, at the margin: perhaps President Obama will get his way, and the top marginal rate under the income tax will return to 39.6 percent. But that raises the troubling question that, if the United States is not willing to generate equity or greater redistribution efficiently, why would it be willing to do so inefficiently? And could we ever go any further than those modest steps sought by President Obama?

This leaves the fourth option: to change the way the country taxes, specifically the tax base. Some might consider the possibility posed this way fundamentally inconsistent with the general approach. This Article has argued throughout that the way things are reflects a certain widespread and popular acceptance of the way things should, and hence must, be; this acceptance is the essence of "everyday optimal tax theory." We apply this logic, after all, to existing spending programs, as we just discussed, taking not only the status quo spending programs off the table for reform options, but also refusing to put a new demogrant program on the table. And we also apply this "best of all possible worlds" logic to the structure of marginal tax rates under an income or wage-based tax.

But we are not, after all, hard and fast skeptics for all reform. How can this be: how can we believe that the way things are reflects deeply entrenched policy preferences, positions, and practicalities, and yet there is still room for seemingly radical change?

[^46]Our answer lies in the different economic effects and politicalrhetorical properties of a progressive spending tax: a public policy option that has not been well enough studied or considered, in significant part because it has not been well enough understood, ${ }^{171}$ hence the descriptive task throughout most of this Article. Existing policy options, centered on the income tax, have forced the people to make a choice between equity and efficiency. The people have shown that they care about efficiency, at least to some considerable degree. Under a progressive spending tax, the nature of the tradeoff changes. The people might well be able to have their cake and eat it too: progressivity without deleterious effects on the productive activities of work and saving. If the research bears out our hopes and suppositions, we submit that this would be a set of policy outcomes that many Americans might well endorse.

We now turn to the two normative arguments sketched out above.

## B. THE WELFARIST ARGUMENT

The goal of policy in a social welfare tradition is to maximize some specified index of aggregate individual well-being using a utilitarian calculus. The intuition that a progressive spending tax might score best under such an approach is that, of all base-rate pairs, such a tax might lead to the highest welfare in a classical welfare economics sense: that is, it gives a "better," more utility-maximizing optimal tax result than did optimal income tax analysis for Mirrlees and followers. We have developed the components of this argument throughout the Article. Partly it follows the Diamond approach, which itself is an example of formal welfarist analysis. ${ }^{172}$ Diamond showed that an income tax with a charitable contribution deduction can support higher marginal rates than such a tax without the deduction, both because the deduction diminishes the labor supply disincentive of the tax rates and because the charitable contributions are themselves public goods. ${ }^{173}$ Our argument in this Article discusses a generalized saving deduction rather than the charitable contribution deduction. Depending on why people save, how rational and risk averse they are, and what behavioral biases they might have, high spending tax rates need not deter ex ante labor supply decisions, and the overall private capital stock-a public good—will likely increase.

[^47]A progressive spending tax falls on windfalls, which are likely to have diminished ex ante effects on labor supply efforts. Further, under a progressive spending tax, there is an intrinsic way differentially to tax inelastic high spenders, who will continue to work and pay the spending tax, on account of their inelasticity, while getting more saving with diminished work disincentive from elastic worker-savers. These were the hopes intimated in Part VIII, though they depend on data yet to be gathered and analysis yet to be done. The idea is to model plausible ranges of optimal spending tax structures and to compare them with the optimal income and wage tax structures produced thus far by scholars and in the real world. Once again, we believe that there is at least hope for greater progressivity under a spending tax, bearing in mind that Mirrlees himself, the progenitor of the optimal income tax field, found his own efforts at generating progressive income tax structures rather disheartening.

## C. A Fairness Argument

Aside from efficiency or wealth-maximizing, the concern of a welfarist approach, many might accept a progressive spending tax for its fairness properties. Perhaps the simplest way to sketch out such an argument is to look at the various treatments of saving, where the differences among the various progressive tax base-rate pairs are most stark.

An income tax, in theory, double taxes all saving. It is important to note that we have never come very close to an ideal income tax in the United States, as we noted in the prior part. This fact is both because it is practically difficult to tax many forms of saving-unrealized appreciation comes to mind-and because we seem to lack the will to double tax all saving-the nonincome taxation of most retirement savings within the nominal income tax comes to mind.

A wage tax taxes no saving, by design.
A progressive spending tax splits the difference, by design, and on principle, in particular taxing any unexpected yield to capital.

With these analytic facts before us, we ask the normative question: What should be done about taxing saving? Mill's claim that the income tax is a double tax on saving is simply descriptive. It is true both within the income tax's own base, in which savers are penalized vis-à-vis spenders, and relative to a hypothetical no-tax world, in which the income tax destroys the equivalence, in present value terms, between savers and spenders, Ants and Grasshoppers. Yet neither of these facts exerts a strong
pull on moral intuitions; it is hard to get from Mill's is to any compelling ought.

A strong sense of a compelling normative, fairness-based argument in contrast can be gleaned from the near century of experience with the income tax in the United States. At the dawn of the comprehensive individual tax system, reformers wanted an income tax because it included the yield to capital and thus would impose an added burden on financiers and the like. ${ }^{174}$ Those were, however, simpler times. As the income tax expanded in both scale, becoming a higher burden and more steeply sloped in its rate progression, and scope, reaching the majority of earners in the United States and elsewhere, things changed. ${ }^{175}$ Lawmakers began to have second thoughts about double taxing the yield to capital anywhere and everywhere. Exceptions to the income tax's theoretical commitment to double taxing saving have been piled on one another, whether by happenstance, inertia, deliberate policy plan, or mere mistake. The result is hybrid taxes, perched-typically uneasily-between an income tax model, with its double tax, and a consumption tax model, with its principled nontaxation of saving. But the compromises to bring about this state of affairs have been effected without much normative or practical reflection, resulting in a tax system in which the lucky and the well-endowed-the capitalist class-can live well and consume away, tax-free. The system neither favors new saving nor effects a fair distribution of tax burdens across taxpayers; individuals who can live off the yield to capital quite simply need pay no tax.

On reflection, however-what we hope to have brought to bear in this Article - the seemingly divergent strands in contemporary tax systems are not random. Settled reflection reveals that ordinary moral intuitions may in fact reasonably reach different normative judgments about different uses of savings. How one uses his or her savings seems more important, from a political, moral, and social point of view, than the sources of such savings, which can be morally arbitrary: luck in many cases. On the one hand, one is sympathetic to the noble Ant, especially when she is manifest as a middle-aged wage-earner, struggling to make ends meet while paying her taxes and setting aside some funds for her later retirement, or for medical

[^48]or educational needs within her family. Why should we punish her, with a second tax, for her prudence? And so the country has tax-favored retirement, medical, and educational savings accounts. On the other hand, one is haunted by the specter of the socially privileged, such as a second- or third-generation rich child, living well off the fruits of someone else's prior capital accumulation. Surely this "trust-fund baby" should be taxed at least as much as the hard working Ant. Surely his or her income, in the form of rents, royalties, interest, dividends, and the like, should count in the tax base, at least as much as the product of Noble Ant's blood, sweat, and tears.

These simple insights and intuitions cash out into the two norms about saving we introduced above. The yield-to-saving norm holds that capital that enables a higher, better lifestyle should bear a burden, one at least commensurate with normal wage earnings. The ordinary-saving norm holds that capital transactions (borrowing, saving, investing) that are simply used to move around uneven labor market earnings in time, allowing people to save for their retirements or for periods of high spending needs / low earnings-such as times of education or medical urgency-should not be double taxed or otherwise discouraged and burdened. Fitting these norms into our preferred vocabulary for saving, smoothing affects the ordinarysaving norm, shifting the yield-to-saving norm. Indeed, shifting transactions are what are left once smoothing and precautionary uses have been subtracted out from the universe of all uses of savings. The net idea is that society ought not to burden smoothing transactions with a double tax, but that the yield to capital is an element of value that can properly be taxed when used to enable a "better," more expensive lifestyle. A progressive spending tax gives this result.

We suggest that many might find this the "fair" set of norms and principles to govern the taxation of saving, regardless of the efficiency arguments canvassed above. But we also cling to the hope that a progressive spending tax could deliver greater equity and efficiency than the alternatives. To sustain that claim, however, considerably more research is needed.

## D. Our Last Words: A Research Agenda

We did not come to offer definitive answers. We came rather to pose important questions. We believe that a great many citizens are interested in obtaining more progressivity from the tax system. We also believe that income and wage taxes-and we believe that the income tax is well on its
way to being a wage tax-are intrinsically limited in their abilities to bear any more progressivity than what they already obtain. Indeed, this was an insight that Mirrlees had at the dawn of the optimal income tax movement in the early 1970s. For both sound economics and not-unrelated political and rhetorical reasons, the current tax system offers only very limited hope for greater progression. See Joe the Plumber. Or see the Obama Administration's modest proposals to increase progressivity in tax and the utter failure to enact them to date.

We believe that the best-possibly the only-way out of the bind, for those who want more progressivity, is to change what we are taxing: the tax base. There are good reasons to believe that a progressive spending tax could support higher and more steeply sloped marginal rates than could an income or wage tax. Many people in the face of progressive spending taxes will react by saving more rather than working less, an action that could be fully rational, depending on why they are saving and their anticipated tax rates on ultimate consumption. Greater saving under a progressive spending tax may also be consistent with certain behavioral biases. Society will benefit from the work effort, the increased saving, and the inchoate tax on ultimate consumption. Others, inelastic spenders-consumption addicts-may continue to work and spend, paying the high tax rates. Society will benefit from the greater tax revenue. Still others will see some considerable tax fall on their spending out of life's good fortune, windfall gains having little or no ex ante deterrent effects on their labor supply. Meanwhile, tax rates on lower- and middle-class consumption can be lowered. A progressive spending tax holds out hope for greater efficiency and equity.

As of now, this is just hope: what we believe is the last best hope for progressivity in tax. To make it more real, we need more and better analysis of why people save, under both plausible rational and behavioral models. We need to understand more precisely how work effort might respond to progressive marginal spending tax rates. We also need to understand how the various practical forms of implementing a progressive spending tax would affect opportunities for evasion and noncompliance, and how these opportunities might undercut whatever gains could otherwise be expected. We suspect that a mixture of theoretical, applied, experimental, and other types of research will be needed. This research will all take some time.

It is our final hope in this Article that such time be taken, such work be done. It is important work, which has been obscured by
misunderstandings about the analytics of taxation and a limited sense of the appropriate argument structure for consumption taxes. Putting aside metaphysical arguments about the double taxation of saving, yieldexemption, and "neutrality" between present and deferred consumption, and focusing instead on the end of redistribution, a spending tax might well be the last best hope for progressivity in tax.

As we have said throughout, we came, not to save progressivity in tax itself, but to save the argument for others to have out. This is the fiscal agenda for the future.


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[^1]:    1. For the budget proposal, which restates the President's never-enacted proposal in regard to marginal tax rate increases, see Jackie Calmes, In Proposal, Obama Takes the Long View, N.Y. Times, Feb. 2, 2010, at A17; Sam Goldfarb, With Economy Still Unsettled, Obama's Budget Treads Carefully, Tax Notes Today, Feb. 2, 2010, available at 2010 TNT 21-1 (LEXIS); Chuck O'Toole, Obama Scales Back Tax Agenda in Fiscal 2011 Budget, Tax Notes Today, Feb. 2, 2010, available at 2010 TNT 21-2 (LEXIS). For illustrative campaign rhetoric, consider, for example, the following exchange in the Democratic presidential debate before "Super Tuesday." Moderator Wolf Blitzer of CNN asked
[^2]:    candidates Hilary Clinton and Obama to clarify their positions on income tax reform:
    BLITZER: . . . I just want to be precise. When you let-if you become president, either one of
    you-let the Bush tax cuts lapse, there will be effectively tax increases on millions of
    Americans.
    OBAMA: On wealthy Americans.
    CLINTON: That's right.
    OBAMA: And look...
    BLITZER: And you are willing to go into . . .
    (CROSSTALK)
    OBAMA: I'm not bashful about it.
    CLINTON: Absolutely. Absolutely.
    OBAMA: I suspect a lot of this crowd-it looks like a pretty well-dressed crowd-potentially
    will pay a little bit more. I will pay a little bit more.
    CLINTON: But Wolf, it's just really important to underscore here that we will go back to the tax rates we had before George Bush became president. And my memory is, people did really well during that time period.
    (APPLAUSE)

[^3]:    5. See Bipartisan Tax Fairness and Simplification Act of 2010, S. 3018, 111th Cong. § 101(a) (2010); Diana Furchtgott-Roth, Miracle on the Potomac: A Bipartisan Tax Proposal, 126 Tax Notes 1543, 1543 (2010).
    6. See Steven A. Bank, Kirk J. Stark \& Joseph J. Thorndike, War and Taxes 84 (2008). For historical background on tax rates, see id.; C. Eugene Steuerle, Contemporary U.S. Tax Policy (2d ed. 2008); and Joel Slemrod \& Jon Bakija, Taxing Ourselves: A Citizen’s Guide to the Debate over Taxes 16-28 (4th ed. 2008).
    7. Steuerle, supra note 6 , at 46.
    8. Id. Tax Reform Act of 1986, Pub. L. No. 99-154, 100 Stat. 2085 (codified as amended in scattered sections of 26 U.S.C.), introduced a top individual tax rate of 28 percent and many individual tax changes, including one that required high-income individuals to reduce their exemptions and deductions as their incomes rose over a range. Steverle, supra note 6, at 122-23; Edward J. McCaffery, Cognitive Theory and Tax, 41 UCLA L. Rev. 1861, 1898 (1994). Due to the reduction in exemptions and deductions, an individual's total tax burden rose by $\$ 33$ for every additional $\$ 100$ of earnings within this range, which can therefore be interpreted as a marginal tax rate of 33 percent.
    9. Foon Rhee, McCain: Joe the Plumber Right About Obama's Socialist Tax Plan, Boston.COM, Oct. 18, 2008, http://www.boston.com/news/politics/politicalintelligence/2008/10/ mccain_joe_the.html.
    10. McCain: Obama "Redistributionist in Chief," UPI.com, Oct. 28, 2008, http://www.upi. com/Top_News/2008/10/28/McCain-Obama-redistributionist-in-chief/UPI-62821225212571/. See also Michael Cooper, "Spreading the Wealth" as Both Accusation and Prescription, N.Y. Times, Oct. 20, 2008, at A20.
[^4]:    11. See David Leonhardt, A Free-Market-Loving, Big-Spending, Fiscally Conservative Wealth Redistributionist, N.Y. Times, Aug. 24, 2008, at MM30.
    12. See Richard Wolf, Obama's Budget Draws Rapid Fire; Lawmakers Lament Spending, Want to Lower Deficit More, USA Today, Feb. 2, 2010, at A8.
    13. Congress first proposed the surcharge in the summer of 2009. See The Small Business Surtax, Wall St. J., July 14, 2009, at A12. But there was widespread opposition, and Congress soon backed off. See Pelosi: Reducing Health Care Surcharge for Wealthy a Possibility, Talk Radio News SERVICE, July 16, 2009, http://talkradionews.com/2009/07/pelosi-reducing-health-care-surcharge-for-wealthy-a-possibility/ (stating that House Speaker Nancy Pelosi suggested that a high-income surcharge could be reduced). The idea appears not yet dead. See Obama's Health Care Proposal, Kaiser Health News, Feb. 22, 2010, http://www.kaiserhealthnews.org/Stories/2010/February/22/Obama-Health-CareProposal.aspx.
    14. See Larry M. Bartels, Unequal Democracy: The Political Economy of the New GILDED AGE 2 (2008) (exploring the "political causes and consequences of economic inequality in America"); Jonathan Baron \& Edward J. McCaffery, Masking Redistribution (or Its Absence), in Behavioral Public Finance 85, 85-87 (Edward J. McCaffery \& Joel Slemrod eds., 2006) (showing how redistributive effects of law changes can be hidden and underconsidered by subjects in Web-based experiments); Larry M. Bartels, Homer Gets a Tax Cut: Inequality and Public Policy in the American Mind, 3 PERSP. ON POL. 15, 22-23 (2005) (suggesting that confusion and the salience of narrow selfinterest over ideology lead people to oppose redistribution).
    15. See Edwin R.A. Seligman, Progressive Taxation in Theory and Practice 101-09 (2d ed. 1908) (describing mechanisms of progressive taxation); Robert Stanley, Dimensions of Law in
[^5]:    19. Leonhardt, supra note 11.
    20. The term "high-ability" is used in the optimal tax literature to refer to taxpayers who could earn high incomes, regardless of whether they choose to do so. See infra Part IV.D.
    21. "Elastic" and "inelastic" are also terms of economic art. An "elastic" taxpayer reacts to a taxlaw change, and an "inelastic" taxpayer does not. See infra Part IV.D.
[^6]:    27. See McCaffery, A New Understanding, supra note 23, at 841-44.
    28. U.S. CONST. amend. XVI.
    29. I.R.C. § 61(a) (2006).
    30. Henry C. Simons, Personal Income Taxation: The Definition of Income as a Problem of Fiscal Policy 50 (1938) ("Haig-Simons definition").
[^7]:    31. Mile, supra note 24, at 179-80.
    32. See, e.g., id. at 179-81; FISHER \& FISHER, supra note 24, at 3-5; KALDOR, supra note 24, at 14-15; Andrews, A Consumption-Type or Cash Flow Personal Income Tax, supra note 24, at 1115, 1122-23.
    33. For our discussion of "hybrids," see infra Part VI. For our discussion of the real-world tax system, see infra Part IX.
[^8]:    34. See David F. Bradford, Untangling the Income Tax 67-68, 72-73 (1986); BradFord, Blueprints, supra note 22, at 110-11; Andrews, A Consumption-Type or Cash Flow Personal Income Tax, supra note 24, at 1126.
    35. See Andrews, A Consumption-Type or Cash Flow Personal Income Tax, supra note 24, at 1126; McCaffery, A New Understanding, supra note 23, at 824-27; Edward J. McCaffery, Three Views of Tax, 18 CAN. J.L. \& Jurisprudence 153, 156 (2005).
    36. Consider the formula for the future value $(\mathrm{FV})$ of a present amount $(\mathrm{P})$, invested over a number of periods ( n ) at a rate of return (r):

    $$
    F V=P(1+r)^{n}
    $$

    Since the rate of return is predictable and the tax rate is constant, it does not matter when the government reduces potential consumption by a tax rate $(t)$, leaving the taxpayer to consume $(1-t)$. Under the commutative principle of multiplication, which holds that $a b=b a$ :

    $$
    (1-\mathrm{t}) \mathrm{P}(1+\mathrm{r})^{\mathrm{n}}=\mathrm{P}(1+\mathrm{r})^{\mathrm{n}}(1-\mathrm{t}) .
    $$

    This identity holds as long as $t$ is constant.

[^9]:    38. We state that a spending tax is the "right" sort of consumption tax not for normative reasons-that a spending tax is "better" than a wage tax-but for the analytic reason that the case for progressive marginal rates under a spending tax is stronger than under a wage or income tax: the central positive claim of this Article. We discuss in the concluding Part X whether this reason might lead to a normative argument for a progressive spending tax.
    39. An income tax is, by design, a tax on wages combined with a double tax on saving. As Mill pointed out, the saver is left worse off than the immediate consumer under an income tax, and worse off than he or she would be under a consumption tax. Mill, supra note 24, at 179-80. The above equations can help us to see this, with a second tax ( t ) levied on the yield to capital (r) under an ideal income tax. The inequality below adds an income tax, on the left, to the wage and spending taxes, on the right:

    $$
    (1-t) P(1+(1-t) r)^{n}<(1-t) P(1+r)^{n}=P(1+r)^{n}(1-t)
    $$

    The addition of the second $(1-\mathrm{t})$ on the left-note that there are two $t$ 's for the income tax-reduces the after-tax yield to capital under an income tax below 100 percent, and thereby makes the income tax less favorable to savers than either a wage or a spending tax, at constant rates.
    40. Hall \& Rabushka, supra note 25, at 45-46, 55-58 (featuring an exempt level or "zero bracket" and a positive tax bracket); Edward J. McCaffery, Fair Not Flat: How to Make the Tax System Better and Simpler 51-53 (2002); Slemrod \& Bakija, supra note 6, at 235-36.
    41. See generally Neal Boortz, John Linder \& Rob Woodall, Fairtax: The Truth:

[^10]:    ANSWERING THE CRITICS (2008) (discussing a federal tax proposal featuring a flat-rate spending tax that would "revolutionize" the American tax system); FairTax.org, Americans for Fair Taxation: The Basics, http://www.fairtax.org/site/PageServer?pagename=about_basics_main (last visited July 14, 2010) (proposing a national retail sales tax of 23 percent). See also Laurence J. Kotlikoff \& David Rapson, Comparing Average and Marginal Tax Rates Under the FairTax and the Current System of Federal Taxation, in Fundamental Tax Reform: Issues, Choices, and Implications 421, 424-25 (John W. Diamond \& George R. Zodrow eds., 2008) (indicating that "the FairTax's tax rate is 23 percent").
    42. See, e.g., Anne L. Alstott, The Uneasy Liberal Case Against Income and Wealth Transfer Taxation: A Response to Professor McCaffery, 51 TAx L. REv. 363, 364-65 (1996); McCaffery, A New Understanding, supra note 23, at 814.
    43. Others seem to take this fact as a semantic matter: namely, that a consumption tax must not include the yield to capital or it will not be a "consumption" tax. Being semantics, one could have this fact any way one wants, as long as terms are consistently defined and used. In the interest of keeping semantics close to ordinary language, we define a postpaid consumption or expenditure-a spendingtax as a "consumption" tax, even if its rate structure means that the yield to capital will sometimes be taxed, by design.

[^11]:    44. The U.S. income tax is not completely transparent in its zero bracket, which does not appear directly in I.R.C. § 1 (2006), which generally sets out the marginal rate structure. A family's range of nontaxable income depends on whether the family itemizes (as most families do not), the number of personal credits including dependents, and whether the family is subject to the alternative minimum tax. See id. §§ 21-26, 55, 161.
    45. HALL \& RABUSHKA, supra note 25 , at $45-46$ (proposing a positive tax bracket of $19 \%$ after an initial exempt level); MCCAFFERY, supra note 40, at 51-53.
[^12]:    46. The word "demogrant" combines "demo," or people, and "grant," in this case money. True demogrants must be "lump-sum," that is, calculated without regard to income. Otherwise they easily collapse into combinations of grants and marginal taxes, since grant amounts that decline with income have the same features as income taxes. Put another (equivalent) way, lump-sum payments (or taxes) have no substitution effects. See Bankman \& Griffith, supra note 25, at 1950.
[^13]:    48. Louis Kaplow, The Theory of Taxation and Public Economics 17 n .7 (2008); Liam Murphy \& Thomas Nagel, The Myth of Ownership: Taxes and Justice 17 n .* (2002); Slemrod \& BAKIJA, supra note 6, at 43; Bankman \& Griffith, supra note 25, at 1907-08. But cf. Lawrence Zelenak \& Kemper Moreland, Can the Graduated Income Tax Survive Optimal Tax Analysis?, 53 Tax L. REV. 51, 56 (1999) (distinguishing between "average rate progresivity" and "marginal rate progresivity").
    49. See Louis Kaplow, Public Goods and the Distribution of Income, 50 Eur. Econ. REV. 1627 (2006) (requiring that all of the benefits and burdens of all government policies are netted out to get an accurate sense of distributional effects).
    50. For average rates to increase constantly, they must always be below the marginal rate, which is not true with a zero (or negative) rate at the highest end.
[^14]:    51. Peter Diamond, Optimal Tax Treatment of Private Contributions for Public Goods with and Without Warm Glow Preferences, 90 J. Pub. ECON. 897, 901-03 (2006).
    52. Zelenak \& Moreland, supra note 48. Zelenak and Moreland do a nice job of setting out the centrality of average tax rates in other analyses, particularly Bankman and Griffith's. See id. at 55-58 (discussing Bankman \& Griffith, supra note 25). They then list as the first reason why marginal rates might still matter: the political infeasibility of demogrants. Id. at $60-61$. We discuss this argument below, in the context of Liam Murphy and Thomas Nagel's similar argument. See infra note 155 and accompanying text. Zelenak and Moreland's other reasons why progressive marginal rates might matter are that envy might figure into the social welfare function; taxation might serve as insurance against wage uncertainty; high-income taxpayers might be more inelastic than generally assumed (a qualification also noted by Mirrlees in 1971, see Mirrlees, supra note 17, at 207-08); the distribution of abilities in society might differ from the usual assumptions (there is a "thick" upper tail); or there might be "winner take all" markets. See Zelenak \& Moreland, supra note 48, at 57. These qualifications typically fit the standard models and are indeed often made in the literature; they also all come in the context of an income or wage tax. Our argument, in contrast, is that society might have reasonable concerns over the patterns of behavior of its richest citizens, especially a pattern of unchecked, high-end consumption. We develop these arguments next.
    53. See Zelenak \& Moreland, supra note 48, at 56-57.
    54. Technically, average rates will constantly-monotonically-increase as long as marginal rates are above average rates; this could be obtained even with some intervals of declining marginal rates. In table 2, for example, imagine that the top marginal rate fell from 30 to 25 percent before the average tax rate had obtained 25 percent; we would have at least episodically declining marginal rates while steadily increasing average ones.
[^15]:    56. See Leonhardt, supra note 11.
    57. The Paretian principle, named after the political economist Vilfredo Pareto, stands for the idea that society should adopt any change that improves at least one person's welfare while harming no one’s. See Louis Kaplow \& Steven Shavell, Fairness Versus Welfare 54 n. 75 (2002).
    58. Indeed, Nobel laureate Joseph Stiglitz even has an optimal tax model wherein marginal tax rates on the most able are negative. See Joseph E. Stiglitz, Self-Selection and Pareto Efficient Taxation, 17 J. Pub. ECON. 213, 215 (1982).
    59. See Zelenak \& Moreland, supra note 48, at 54-56. For example, Warren Buffett famously noted that his own average tax rate was considerably lower than those of his employees, including his secretary, and conjectured that the same was true of every other wealthy investor. See David Ellis, Buffett Talks Tax Reform with Sen. Clinton, CNNMONEY.COM, June 27, 2007, http://money.cnn.com/2007/06/26/news/newsmakers/clinton_buffett/index.htm.
    60. See infra note 164 and accompanying text.
[^16]:    61. Mirrlees, supra note 17. For further commentary on optimal tax analysis, see 3 Alan J. Auerbach \& James R. Hines, Jr., Taxation and Economic Efficiency, in Handbook of Public ECONOMICS 1347, 1361 (Alan J. Auerbach \& Martin Feldstein eds., 2002); Bankman \& Griffith, supra note 25, at 1946-65; and Peter A. Diamond \& James A. Mirrlees, Optimal Taxation and Public Production II: Tax Rules, 61 AM. Econ. Rev. 261 (1971).
    62. See Frank P. Ramsey, A Contribution to the Theory of Taxation, 37 Econ. J. 47, 56-57 (1927).
    63. See Mirrlees, supra note 17, at 175-76.
    64. See id. at 175 ("The economy discussed below is timeless.").
[^17]:    65. For a review of major contributions to the Mirrlees tradition, see Auerbach \& Hines, supra note 61.
    66. The zero top marginal rate was first identified by Efraim Sadka, On Income Distribution, Incentive Effects and Optimal Income Taxation, 43 REV. ECON. STUD. 261, 266 (1976); and J. K. Seade, On the Shape of Optimal Tax Schedules, 7 J. Pub. Econ. 203, 205-06 (1977).
    67. Tuomala, supra note 47 , at 14.
    68. Mirrlees, supra note 17, at 202-04 tbls.II, IV, VI, VIII, X \& XII.
    69. Seade, supra note 66, at 205-06 (finding a zero rate); Stiglitz, supra note 58, at 215.
[^18]:    70. See KAPLOW, supra note 48, at 69 n.24; Kaplow, supra note 49, at 1629-30; Mirrlees, supra note 17, at 207; Emmanuel Saez, Optimal Income Transfer Programs: Intensive Versus Extensive Labor Supply Responses, 117 Q.J. Econ. 1039, 1051-52 (2002).
[^19]:    71. This fact raises puzzling questions about why we do not have better mechanisms to lower the taxable burden on women, especially married women, who typically register higher labor supply elasticities, but we leave that puzzle for another day. See Edward J. McCaffery, Taxing Women 267-69 (1997).
    72. See, e.g., 4 Alan B. Krueger \& Bruce D. Meyer, Labor Supply Effects of Social Insurance, in HANDBOOK OF Public ECONOMICS, supra note 61, at 2327, 2384-85 (estimating that "the labor supply elasticities typically found for men in studies of the effects of wages or taxes on hours of work . . . are centered close to zero"). One interesting quirk of the literature is that most of the studies of labor supply elasticities look at "uncompensated" elasticities: that is, how labor supply responds to a change in the after-tax wage. In standard welfare economics, however, economists look to compensated elasticities. The difference arises because any tax has two effects. One, the substitution effect, alluded to above in the text, arises because the tax affects the price, and thus leads to a substitution away from higher priced goods or activities. But taxes also take money away from taxpayers, leading to the second effect, the income effect. Because individuals need income, they might work more in the face of a tax on wages. A "compensated" elasticity corrects for the income effect, to look at the distortion caused by the substitution effect alone. An uncompensated elasticity, in contrast, looks at the real behavior, the amalgam of income and substitution effects. This can often be low, because the two effects roughly cancel each other out, although there can be a high utility loss from the tax. Interestingly, although a strong case can be made that economists should look to compensated elasticities, the government, as an institution concerned with real revenues, would typically look to uncompensated elasticities. Hence uncompensated elasticity may, in fact, be the more relevant variable for "everyday optimal tax" theory.
    73. Raj Chetty, Is the Taxable Income Elasticity Sufficient to Calculate Deadweight Loss? The Implications of Evasion and Avoidance, 1 Am. Econ. J.: ECON. PoL'Y 31, 31 (2009); Martin Feldstein, Tax Avoidance and the Deadweight Loss of the Income Tax, 81 REv. EcON. \& Stat. 674, 679 (1999) [hereinafter Feldstein, Tax Avoidance]; Martin Feldstein, The Effect of Marginal Tax Rates on Taxable Income: A Panel Study of the 1986 Tax Reform Act, 103 J. PoL. ECON. 551, 551-52 (1995) [hereinafter Feldstein, The Effect of Marginal Tax Rates].
[^20]:    74. See, e.g., Chetty, supra note 73, at 45-46; Feldstein, Tax Avoidance, supra note 73, at 674.
    75. See Chetty, supra note 73, at 45-46; Wojciech Kopczuk, Tax Bases, Tax Rates and the Elasticity of Reported Income, 89 J. Pub. Econ. 2093, 2095 (2005); Joel Slemrod, Optimal Taxation and Optimal Tax Systems, 4 J. Econ. Persp. 157, 171-74 (1990).
    76. See Diamond, supra note 51, at 901-03.
    77. Peter A. Diamond, Optimal Income Taxation: An Example with a U-Shaped Pattern of Optimal Marginal Tax Rates, 88 Am. Econ. Rev. 83, 93 (1998).
    78. See, e.g., Momi Dahan \& Michel Strawczynski, Optimal Income Taxation: An Example with a U-Shaped Pattern of Optimal Marginal Tax Rates: Comment, 90 AM. ECON. REv. 681, 681 (2000).
    79. Stiglitz, supra note 58, at 215.
    80. For surveys of these works, see Kaplow, supra note 48, 53-79; Auerbach \& Hines, supra note 61.
    81. See infra Part IX.B.
[^21]:    82. Mirrlees, supra note 17, at 207-08.
    83. Id. at 208.
    84. The tax bases under progressive marginal rates also differ in how they affect uneven flows: progressive income and wage taxes burden "lumpy" or uneven earnings relative to even earnings, whereas progressive spending taxes are neutral as to the timing of earnings but burden "lumpy" or
[^22]:    86. Note that a spending tax consistently subtracts saving, under the simple formula (a rearrangement of the Haig-Simons definition), Consumption $=$ Income - Saving. This means that a spending tax will include debt within its base as a form of negative saving. Debt that is used to save ends up being a "wash": an inclusion qua debt minus a deduction qua saving. But debt that is used to finance spending is taxed currently. This feature may sound odd, but it need not. Consider a basic sales tax: you pay this tax when you buy an item on credit, as with a credit card; you do not pay the tax again when you pay off your credit card balance. So too, debt to finance personal spending is within a spending tax base; repayments of principal debt, which in fact reflect positive saving, are not. Students and others often consider that this feature means a progressive spending tax will hurt them. In fact, allowing the tax to come due in the period of spending lowers average tax rates across a lifetime for students, under progressive rates, compared to the income tax treatment of ignoring both debt and its repayment. Note also that borrowing under a progressive spending tax works like retirement savings in reverse: it pulls down the level being taxed. For a more detailed discussion, see McCaffery, A New Understanding, supra note 23, at 878-80.
    87. See Franco Modigliani, The Role of Intergenerational Transfers and Life Cycle Saving in the Accumulation of Wealth, 2 J. ECON. PERSP. 15, 16-17 (1988); Franco Modigliani \& Richard Brumberg, Utility Analysis and the Consumption Function: An Interpretation of Cross-Section Data, in PostKeynesian Economics 388, 390-91 (Kenneth K. Kurihara ed., 1962).
[^23]:    88. Laurence J. Kotlikoff, John Shoven \& Avia Spivak, Annuity Insurance, Savings, and Inequality, in LaUrence J. Kotlikoff, What Determines Savings? 109, 109 (1989).
    89. See Laurence J. Kotlikoff, Intergenerational Transfers and Savings, in Laurence J. KotLikoff, What Determines Savings?, supra note 88, at 68, 81-83.
    90. See Wojciech Kopczuk, Economics of Estate Taxation: Review of Theory and Evidence, 63 TAX L. REV. 139, 145 (2009).
[^24]:    92. Id. at 860-61.
    93. Andrews, A Consumption-Type or Cash Flow Personal Income Tax, supra note 24, at 1120; Michael S. Knoll, Designing a Hybrid Income-Consumption Tax, 41 UCLA L. Rev. 1791, 1792 (1994); Edward J. McCaffery, Tax Policy Under a Hybrid Income-Consumption Tax, 70 TEX. L. Rev. 1145, 1152-55 (1992).
[^25]:    94. See I.R.C. § 408 (2006).
    95. See id. § 408A.
    96. See McCaffery, A New Understanding, supra note 23, at 827-29, 878-80.
    97. See Edward J. McCaffery, Behavioral Economics and Fundamental Tax Reform, in Fundamental Tax Reform: Issues, Choices, and Implications, supra note 41, at 455, 473-74 [hereinafter McCaffery, Behavioral Economics and Fundamental Tax Reform]; Edward J. McCaffery, Good Hybrids/Bad Hybrids, 107 TAX Notes 1699, 1701-02 (2005); Roger Gordon, Laura Kalambokidis \& Joel Slemrod, Do We Now Collect Any Revenue from Taxing Capital Income?, 88 J. Pub. ECON. 981, 982-87, 1000-01 (2004) (analyzing the ability of the tax system to collect revenue
[^26]:    from capital taxation in the presence of various "tax arbitrage" possibilities involving the use of debt).
    98. Elizabeth Bell, Adam Carasso \& C. Eugene Steuerle, Retirement Saving Incentives and Personal Saving, 105 TAX Notes 1689, 1689 (2004).
    99. Michael J. Graetz, 100 Million Unnecessary Returns: A Simple, Fair, and Competitive Tax Plan for the United States 200-01 (2008); Michael J. Graetz, 100 Million Unnecessary Returns: A Fresh Start for the U.S. Tax System, 112 Yale L.J. 261, 282-83 (2002). A VAT is essentially a sales tax, with a tax being added at each stage of a manufacturing and production process, such that the ultimate price paid by consumers includes a tax on the full before-tax price.
    100. Slemrod, supra note 75 , at 157.

[^27]:    101. Mirrlees, supra note 17, at 208.
    102. See, e.g., Christophe Chamley, Optimal Taxation of Capital Income in General Equilibrium with Infinite Lives, 54 ECONOMETRICA 607, 619 (1986); Kenneth L. Judd, Redistributive Taxation in a Simple Perfect Foresight Model, 28 J. Pub. Econ. 59, 81 (1985). But see Mikhail Golosov, Narayana Kocherlakota \& Aleh Tsyvinski, Optimal Indirect and Capital Taxation, 70 REV. Econ. Stud. 569, 575-78 (2003) (criticizing Christophe Chamley's and Kenneth Judd's analyses on zero-rate capital taxation); Mikhail Golosov, Aleh Tsyvinski \& Ivan Werning, New Dynamic Public Finance: A User's Guide, 21 NBER MACROECONOMICS ANN. 317, 317 (2006) (same). To show the underdeterminacy of optimal tax analysis, as well as its sometimes starkly counterintuitive findings, note that a recent trend in dynamic optimal tax analysis has been to support a very high tax on saving. See Golosov, Kocherlakota \& Tsyvinski, supra; Golosov, Tsyvinski \& Werning, supra; Emmanuel Saez, Optimal Progressive Capital Income Taxes in the Infinite Horizon Model (Nat'l Bureau of Econ. Research, Working Paper No. 9046, 2002). The intuition behind this result is in part motivated by the idea that it
[^28]:    is easier for those with stores of financial capital to adjust their labor supplies in response to steep wage or income tax rates because, if necessary, they can resort to living off of their savings. To prevent tax avoidance of this form, and thereby to permit the government to impose a broader range of tax rates, certain dynamic optimal tax models would tax private capital highly and discourage subsequent capital accumulation. See Chamley, supra, at 616 (discussing the possibility of a confiscatory tax on saving in the initial period: "The policy is either to tax as much as possible or not at all"). However attractive its properties in certain optimal tax frameworks, this is not a politically viable option in the United States. We thank Jeff Strnad for discussing the literature and analysis with us.
    103. See supra note 64 and accompanying text.
    104. See supra notes $82-83$ and accompanying text.
    105. Cf. James R. Hines, Jr. \& Richard H. Thaler, Anomalies: The Flypaper Effect, 9 J. Econ. PERSP. 217, 217-18 (1995) (discussing congressional revenue sharing in 1835 when the federal

[^29]:    government's budget was in surplus and there was no federal debt).
    106. Feldstein, The Effect of Marginal Tax Rates, supra note 73, at 570.
    107. See Leonhardt, supra note 11.

[^30]:    108. We are aware of just one draft asking a related question in an experimental context. See Tomer Blumkin, Bradley J. Ruffle \& Yosef Ganun, Are Income and Consumption Taxes Ever Really Equivalent? Evidence from a Real-Effort Experiment with Real Goods (CESifo, Working Paper No. 2194, 2008), available at http://ssrn.com/abstract $=1079784$.
    109. See Diamond, supra note 51, at 901-03.
[^31]:    110. We understand the usual objection that "consumption is good," the so-called "engine of our economy." See MCCAFFERY, supra note 40, at 118-19. We offer only two quick responses here. One, saving is also good, and saving is the analytic complement of consumption: saving is nonconsumption, as the Haig-Simons definition helps us to see. Two, the hope for at least the welfarist argument for a progressive spending tax is that the change from the status quo be revenue-neutral and preserve at least as much total spending. The idea is that the behavioral responses of the rich or high-ability-both toward more saving and, for those who continue to spend, toward more tax-will enable a welfare gain that will lead to lower spending tax rates (compared to the status quo ante) and hence more spending among the lower and middle classes. Put another way, the hope for a progressive spending tax is that the wealthy save more in part so that the not-wealthy can spend more.
[^32]:    111. See infra Part VIII.C.
    112. See McCaffery, A New Understanding, supra note 23, at 828 (discussing the treatment of debt).
[^33]:    113. For example, a Roth-style IRA, I.R.C. § 408A (2006), applies a wage-tax model to retirement savings, which, especially in the case of "windfall" returns, see infra Part VIII.C, would encourage earlier retirement.
    114. 3 B. Douglas Bernheim, Taxation and Saving, in Handbook of Public Economics, supra note 61 , at 1173,1195 (surveying the literature and finding between 25 and 50 percent of total wealth is due to intergenerational transfers); Wojciech Kopczuk \& Joseph P. Lupton, To Leave or Not to Leave: The Distribution of Bequest Motives, 74 Rev. Econ. Stud. 207, 230 (2007) ("We estimate that about $75 \%$ of a representative sample of elderly single households has a desire to leave an estate with positive net worth. . . . [A]lmost four-fifths of household wealth we estimate will be bequeathed, [and] about half will be due to a bequest motive.").
    115. See Bernheim, supra note 114, at 1196; Kopczuk, supra note 90, at 145-46; Kopczuk \& Lupton, supra note 114, at 209.
[^34]:    116. Kopczuk \& Lupton, supra note 114 , at 146
    117. Michael D. Hurd, Savings of the Elderly and Desired Bequests, 77 AM. Econ. Rev. 298, 298 (1987) (noting that most research suggests that wealth increases with age).
    118. Another question, or set of questions, would look to the work incentive effects on these heirs from receiving the bequest; note that under a progressive-spending-without-estate tax, the bequest might come late in these heirs' lives, when their lifetime patterns of work and saving have largely been set. One of us has argued separately that a consistent progressive spending tax needs no separate gift and estate tax, for the simple reason that "dead men don't spend." See, e.g., Edward J. McCaffery, Tax Reform to Die For, Wall St. J., Nov. 21, 2003, at A12. A consistent spending tax of the sort considered in the text makes ultimate spending the measure for taxation. Death or any other time of wealth transfer preserves the private savings in the capital stock and would not trigger a tax: spending by the heirs or donees would. In essence, this is a "carryover basis" regime for bequests as for gifts, although there is no "basis" under a spending tax, as saving has not been taxed. See I.R.C. § 1014(a) (granting a "stepped-up basis" on bequests); id. § 1015(a) (mandating a "carryover basis" on gifts). So, heirs take wealth with a basis of zero, in effect. See MCCAFFERY, supra note 40, at 103. This feature of the analysis is logically separate, so we take no position on an estate tax vel non here.
    119. See Robert H. Sitkoff \& Max M. Schanzenbach, Jurisdictional Competition for Trust Funds: An Empirical Analysis of Perpetuities and Taxes, 115 Yale L.J. 356, 360-61 (2005) (discussing the use
[^35]:    121. Thomas J. Stanley \& William D. Danko, The Millionaire Next Door: The Surprising Secrets of America's Wealthy (1996).
    122. Robert H. Frank, Luxury Fever: Money and Happiness in an Era of Excess (1999).
    123. See George J. Stigler \& Gary S. Becker, De Gustibus Non Est Disputandum, 67 Am. Econ. Rev. 76, 89 (1977).
[^36]:    124. Hersh M. Shefrin \& Richard H. Thaler, The Behavioral Life-Cycle Hypothesis, 26 Econ. INQUIRY 609, 609, 636-37 (1988).
    125. See Modigliani \& Brumberg, supra note 87.
    126. See generally Richard H. Thaler et al., The Effect of Myopia and Loss Aversion on Risk Taking: An Experimental Test, 112 Q.J. Econ. 647 (1997) (myopia); Stephen J. Hoch \& George F. Loewenstein, Time-Inconsistent Preferences and Consumer Self-Control, 17 J. Consumer Res. 492 (1991) (time-inconsistent preferences); Richard Thaler, Mental Accounting and Consumer Choice, 4 MARKETING SCI. 199 (1985) [hereinafter Thaler, Mental Accounting] (mental accounts).
    127. See, e.g., Bernheim, supra note 114, at 1200-08; James J. Choi et al., Saving for Retirement on the Path of Least Resistance, in Behavioral Public Finance, supra note 14, at 304, 308 ("So far our data shows a familiar pattern. Respondents report that they save too little . . . .").
    128. See Martin A. Sullivan, A Comparison of the 2010 and 2011 Budget Proposals, TAX Notes TODAY, Feb. 8, 2010, available at 2010 TNT 25-4 (LEXIS) (providing revenue estimates for automatic enrollment IRAs).
    129. McCaffery, Behavioral Economics and Fundamental Tax Reform, supra note 97, at 474.
    130. See Lawrence Zelenak, Debt-Financed Consumption and a Hybrid Income-Consumption Tax, 61 TAX L. REV. (forthcoming 2010) (manuscript at 2), available at http://ssrn.com/abstract= 1487582.
    131. See supra Part VI.
[^37]:    132. This is the suggestion of the experiments reported in Blumpkin, Ruffle \& Ganun, supra note 108. Analytically equivalent income and consumption taxes induce different behavioral responses: individuals cut back on earning under an income tax and on spending under a spending tax.
    133. Technically, "money illusion" refers to the tendency to view economic matters in nominal rather than real terms, that is, crudely, to ignore the effects of time and inflation on real purchasing power. See Eldar Shafir, Peter Diamond \& Amos Tversky, Money Illusion, 112 Q.J. Econ. 341, 341 (1997). We use it, somewhat idiosyncratically, to refer to what we believe is the common tendency to view pretax retirement savings accounts as if they were after-tax accounts.
    134. See supra note 72 (discussing income versus substitution effects).
    135. We say "behavioral" here again because of what we take to be a common tendency to ignore or overly discount an ultimate tax; this tendency would be related to common heuristics and biases such as myopia, present-bias, and hyperbolic discounting.
    136. Thaler, Mental Accounting, supra note 126.
[^38]:    137. See Daniel Kahneman, Jack L. Knetsch \& Richard H. Thaler, Experimental Tests of the Endowment Effect and the Coase Theorem, 98 J. PoL. ECON. 1325, 1326 (1990) ("[T] he increased value of a good to an individual when the good becomes part of the individual's endowment [is] the 'endowment effect.'").
    138. In fiscal year 2009, individual income taxes accounted for 43.5 percent of all federal revenues; payroll taxes for 42.3. See U.S. Gov’t Printing Office, Historical Tables: Budget of the United States Government: Fiscal Year 2011, at 31 tbl.2.1 (2010), available at http://www.gpoaccess.gov/usbudget/fy11/pdf/hist.pdf. This means that payroll taxes raised almost as much as personal income taxes, in part reflecting recession-induced declines in income tax collections. See id.; Andrew Mitrusi \& James Poterba, The Distribution of Payroll and Income Tax Burdens, 197999, 53 NAT'L TAX J. 765, 771 tbl. 2 (2000).
[^39]:    139. See Steuerle, supra note 6, at 79-83 \& passim; Bartels, supra note 14; Leonhardt, supra note 11; Viard, supra note 18.
    140. MURPHY \& NAGEL, supra note 48, at 31.
    141. See infra Part IX.B.
    142. See McCaffery, A New Understanding, supra note 23, at 886-92. See generally Gordon, Kalambokidis \& Slemrod, supra note 97 (discussing the role of doubt in undercutting capital taxation under actual income tax).
    143. I.R.C. § 529 (2006) (qualified tuition programs).
    144. See McCaffery, A New Understanding, supra note 23, at 899-900.
[^40]:    145. I.R.C. $\S \S 1,63,3101$. Since benefit formulas tie ultimate Social Security benefits to payroll tax payments, it follows that payroll tax burdens differ in kind from income tax burdens for which the government does not offer individual taxpayers anything in return. Nevertheless, the highly incomplete matching of benefits to an individual's tax payments during the working lifetime gives payroll taxes an important tax aspect.
    146. Id. § 32 .
[^41]:    151. See, e.g., Logue \& Slemrod, supra note 120, at 844-45.
    152. See, e.g., Michael J. Graetz \& Emil M. Sunley, Minimum Taxes and Comprehensive Tax Reform, in Uneasy Compromise: Problems of a Hybrid Income-Consumption Tax 385, 388 (Henry J. Aaron, Harvey Galper \& Joseph A. Pechman eds., 1988).
    153. McCaffery, A New Understanding, supra note 23, at 885-91, 903-08.
    154. John Maynard Keynes, The General Theory of Employment Interest and Money 383 (1936).
[^42]:    155. See KAPLOW, supra note 48, at 175-78 \& passim; MURPHY \& NAGEL, supra note 48, at 13839; Zelenak \& Moreland, supra note 48, at 60-61.
    156. Helping the Poor: From Welfare to Workfare, ECONOMIST, July 29, 2006, at 71.
    157. Preston Lerner, Making Work Pay, WASH. Monthly, Apr. 1994, at 27.
    158. Helping the Poor: From WelfarWelfare to Workfare, supra note 156.
    159. Mirrlees, supra note 17, at 207.
    160. Kaplow, supra note 49, at 1649.
    161. Jonathan Baron \& Edward J. McCaffery, Starving the Beast: The Political Psychology of Budget Deficits, in Fiscal Challenges: An Interdisciplinary Approach to Budget Policy 221,
[^43]:    164. MURPHY \& NAGEL, supra note 48, at 138-39 (endnotes omitted).
[^44]:    165. Zelenak and Moreland give other reasons for supporting high marginal tax rates without demogrants. See Zelenak \& Moreland, supra note 48, at 56-57. But, aside from their main argumentthat, without demogrants, high progressive marginal rates are the only means for achieving progressive average rates as well (the argument that is "blindingly obvious" to Murphy and Nagel)—Zelenak and Moreland's other arguments have nothing logically to do with the absence of demogrants, and thus are refinements that can be made in the traditional optimal tax literature. See id. at 56. Thus, for example, if the high-ability are inelastic, marginal rates can be high "at the top" even without demogrants. See id. at 57. The fact that optimal tax models can but typically do not make these other assumptions is relevant.
    166. See generally Kaplow \& Shavell, supra note 57 (pressing the argument that laws of contract, tort, and so on, should be set with Paretian efficiency alone as a goal, and that the tax system should then redistribute increased wealth to serve "fairness" objectives).
[^45]:    168. MURPHY \& NAGEL, supra note 48, at 138-39. See also editorial commentary from Robert H. Frank, Hey, Big Spender: You Need a Surtax, N.Y. Times, Mar. 19, 2010, http://www.nytimes.com/ 2010/03/21/business/economy/21view.html (advocating for a progressive spending tax); Paul Krugman, Lies, Damned Lies, and Growth, N.Y. Times, May 24, 2010, http://krugman.blogs.nytimes.com/ 2010/05/24/lies-damned-lies-and-growth/ (advocating for higher tax rates); and Robert Reich, Why Democrats Are Afraid to Raise Taxes on the Rich, SALON.COM, Oct. 25, 2007, http://www.salon.com/ news/opinion/feature/2007/10/25/taxes (advocating for more progressive taxation). The purpose of our Article is to show the way, as a positive matter, toward more redistribution or progressivity in tax, not to make the logically separate normative argument that such movement is necessary or desirable.
    169. Alan J. Auerbach \& William G. Gale, The Economic Crisis and the Fiscal Crisis: 2009 AND BEYOND: AN UPDATE 16-17 (2009), http://www.brookings.edu/~/media/Files/rc/papers/2009 /06_fiscal_crisis_gale/06_fiscal_crisis_gale_update.pdf.
[^46]:    170. See sources cited supra note 168.
[^47]:    171. See Frank, supra note 168 (discussing the idea of a progressive spending tax on high spenders).
    172. See Diamond, supra note 51, at 901-03.
    173. Id.
[^48]:    174. For two among many sources of good political history of the income tax, see SHELDON D. Pollack, The Failure of U.S. Tax Policy: Revenue and politics (1996); and Stanley, supra note 15, at 15-176.
    175. See Carolyn C. Jones, Class Tax to Mass Tax: The Role of Propaganda in the Expansion of the Income Tax During World War II, 37 BuFF. L. Rev. 685, 685-86 (1988/89).
