HIDDEN TAXES

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ABSTRACT

The idea of hidden taxes is as old as John Stuart Mill, but convincing evidence of their existence is new. In this Article, I survey and critique recent studies that claim to show that there are some taxes that can go unnoticed by those who pay them. I also develop the array of unanswered theoretical questions and policy implications that potentially follow from the studies' results.

Probably the central question for hidden taxes is whether they might enable government to raise revenue without also distorting the economy. If so, I argue, they have the potential to radically refashion the architecture of redistributive government. But, as I also show, whether that is true turns on the cognitive mechanisms that might permit taxes to go unnoticed. For example, if hidden taxes are caused not by rational ignorance but by cognitive shortcomings, then it is likely that the burden of a hidden tax will be borne disproportionately by poorer taxpayers, and vice-versa. Thus, I attempt to integrate with the tax literature some recent developments in our understanding of bounded rationality in consumers more generally.

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INTRODUCTION

There is a price to be paid for justice, if conventional economic descriptions of taxation are true. In these accounts, fairness and welfare compete: we can redistribute wealth from rich to poor, but only by making society as a whole worse off.[1] Similarly, it is often said that local governments should not, and typically cannot, redistribute wealth, because those from whom wealth is taken will flee to less generous locales.[2] Both

1. ARTHUR OKUN, EQUALITY AND EFFICIENCY: THE BIG TRADEOFF (1975); Joseph Bankman & Thomas Griffith, *Social Welfare and the Rate Structure: A New Look at Progressive Taxation*, 75 CAL. L. REV. 1905, 1919–21 (1987); Walter J. Blum & Harry Kalven, Jr., *The Uneasy Case for Progressive Taxation*, 19 U. CHI. L. REV. 417, 430 (1952); Louis Kaplow & Steven Shavell, *Why the Legal System Is Less Efficient than the Income Tax in Redistributing Income*, 23 J. LEGAL STUD. 667, 680–81 (1994).

2. Reuven S. Avi-Yonah, *Globalization, Tax Competition, and the Fiscal Crisis of the Welfare State*, 113 HARV. L. REV. 1573, 1631–38 (2000); William W. Bratton & Joseph A. McCahery, *The New Economics of Jurisdictional Competition: Devolutionary Federalism in a Second-Best World*, 86 GEO. L.J. 201, 212, 246 (1997); Charles C. Brown & Wallace E. Oates, *Assistance to the Poor in a Federal System*, 32 J. PUB. ECON. 307, 328 (1987); Kirk J. Stark, *Fiscal Federalism and Tax*

of these accounts depend on the assumption, long thought uncontroversial, that taxes change people's behavior.[3] Yet, as this Article surveys, there is startling new evidence that in some cases taxes do not change behavior at all. Taxes can be "hidden," so that they collect revenue or redistribute wealth without also affecting decisions about whether or where to earn or spend. There are many uncertainties that attend this new field, as I also discuss here. But, depending on what future research reveals, we may need to revisit some basic assumptions of tax policy—as well as of public finance economics—more generally.

The fairness-welfare tradeoff follows from the basic economic assumption that in well-functioning markets the choices made by market participants maximize each person's subjective welfare.[4] In order to fund any government program, including one that furthers some redistributive goal, society must raise revenue, usually through some form of tax. These taxes change the price of the goods that are exchanged in the market, altering consumers' decisions. In some instances, where markets are themselves inefficient, taxes may deflect consumer choice closer to the ideal point. But in the absence of externalities or other market failures, the imposition of a tax that changes taxpayer behavior will reduce overall societal welfare.

Thus, the ideal tax is the one that least affects the behavior of actors in efficient markets.[5] Indeed, there is a tradition in public finance economics, usually associated with Ramsey and Mirrlees, arguing that the most efficient tax is one imposed on "inelastic" behavior—behavior that is relatively insensitive to price.[6]

Progressivity: Should the Federal Income Tax Encourage State and Local Redistribution?, 51 UCLA L. REV. 1389, 1408–10 (2004). *But cf.* Louis Kaplow, *Fiscal Federalism and the Deductibility of State and Local Taxes Under the Federal Income Tax*, 82 VA. L. REV. 413, 478–80 (1996) (arguing that some localities might have wealthy taxpayers with taste for redistribution).

3. *See* Bankman & Griffith, *supra* note 1, at 1909.

4. For a more detailed explanation of these points, see *infra* Part I.

5. RICHARD A. MUSGRAVE & PEGGY B. MUSGRAVE, PUBLIC FINANCE IN THEORY AND PRACTICE 279 (5th ed. 1989).

6. J. A. Mirrlees, *An Exploration in the Theory of Optimum Income Taxation*, 38 REV. ECON. STUD. 175, 175–208 (1971). For a handful of fine overviews, see Alan J. Auerbach, *The Theory of Excess Burden and Optimal Taxation*, *in* 1 HANDBOOK OF PUBLIC ECONOMICS 61, 61–127 (Alan J. Auerbach & Martin Feldstein eds., 1985); Bankman & Griffith, *supra* note 1, at 1945–58; Joseph E. Stiglitz, *Pareto Efficient and Optimal Taxation and the New New Welfare Economics*, *in* 2 HANDBOOK OF PUBLIC ECONOMICS 991, 1023–37 (Alan J. Auerbach & Martin Feldstein eds., 1987). To the extent that this welfare-maximizing tax has undesirable distributive consequences—such as by imposing a heavy tax on food, medicine, and other necessaries—its effects can perhaps be unwound with government grants. Louis Kaplow, *Taxation and Redistribution: Some Clarifications*, 60 TAX L. REV. 57, 70–73 (2007). Additionally, a societal preference for certain distributions can be reflected in

At the risk of making my argument here seem obvious, my claim in this Article hinges on the observation that, in order for a tax to induce behavioral changes from the taxpayer, the taxpayer must usually first be aware of the tax. Similarly, if the size of the behavioral distortion is related to the size of the tax bill, then a diminished awareness of the bill's economic burdens should also diminish the distortion. It follows that an unnoticed tax is, like a tax on highly inelastic behaviors, potentially more efficient than more obvious excises.

These points are academic if taxpayers are perfectly rational and possessed of full information about their own finances. However, a growing literature, both in and outside the laboratory, suggests that, in fact, taxpayers exhibit different responses to taxes that are more or less "salient"—that is, noticeable or easy to process.[7] This is an old idea, but evidence in support of it is new.[8] For example, Amy Finkelstein reports that drivers are less sensitive to toll increases when tolls are debited electronically rather than paid in cash.[9] Similarly, Chetty, Looney, and Kroft find that shoppers are more responsive to sales taxes when those taxes are posted on the shelf, rather than computed at the register.[10] In this paper, I describe any of these tax designs, in which the behavioral effects of the tax are less than predicted by classic economic theory, as a "hidden" tax.[11]

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computation of the social welfare function, leading to a balancing between progressivity and neutrality. Bankman & Griffith, *supra* note 1, at 1950–55.

7. My definition of "salient" taxes follows that in the existing literature. Edward J. McCaffery & Jonathan Baron, *Isolation Effects and the Neglect of Indirect Effects of Fiscal Policies*, 19 J. BEHAV. DECISION MAKING 289, 289 (2006).

8. *See* Wallace E. Oates, *On the Nature and Measurement of Fiscal Illusion: A Survey*, *in* TAXATION AND FISCAL FEDERALISM: ESSAYS IN HONOR OF RUSSELL MATTHEWS 65, 65 (1988) (tracing idea to early-20th century Italian economists); Isaac Martin & Nadav Gabay, Do Visible Taxes Cause Protest? Tax Policy and Tax Protest in Rich Democracies 2, 5 (Sept. 7, 2005) (unpublished manuscript, *available at* http://www.allacademic.com/meta/p_mla_apa_research_citation/1/8/2/8/9/p182898_index.html) (describing history of "visibility hypothesis" as dating to John Stuart Mill).

9. Amy Finkelstein, E-ZTax: Tax Salience and Tax Rates 4 (Sept. 2008) (unpublished manuscript, *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=964887).

10. Raj Chetty et al., *Salience and Taxation: Theory and Evidence*, 1–2 (Nat'l Bureau of Econ. Research, Working Paper No. 13330, 2007).

11. Thus, my usage of the term in this technical sense should be distinguished from earlier mentions in the literature, which tend to use the phrase to refer either to the political salience of a tax or more generally simply to describe costs that other commentators have not acknowledged. *E.g.*, Jennifer Arlen & Deborah M. Weiss, *A Political Theory of Corporate Taxation*, 105 YALE L.J. 325, 332 (1995); George Loewenstein & Ted O'Donoghue, *"We Can Do This the Easy Way or the Hard Way": Negative Emotions, Self-Regulation, and the Law*, 73 U. CHI. L. REV. 183, 199 (2006); Edward J. McCaffery, *Cognitive Theory and Tax*, 41 UCLA L. REV. 1861, 1874–86 (1994); Beverly Moran, *Income Tax Rhetoric (Or Why Do We Want Tax Reform?)*, 1992 WIS. L. REV. 2063, 2066 (1992); Rebecca S. Rudnick, *State and Local Taxes on Nonprofit Organizations*, 22 CAP. U. L. REV. 321, 323

My aim here is to explore the implications of hidden taxes for public policy. It is possible that hidden taxes could revolutionize the design of some government programs. For example, shifting to hidden taxes might permit society to redistribute considerably more wealth to the poor while holding the deadweight losses of tax constant, or, conversely, hold redistribution constant while growing the economy. The relative salience of taxes versus other forms of redistribution, such as regulation, should inform our choice of redistributive instrument. And hidden taxes could alter the conclusion of many pure tax policy questions, such as the choice whether to stimulate the economy through rebate checks rather than reduced payroll withholding, whether to redistribute income locally or nationally, or the choice between sales tax and Value-Added Tax.

I argue, though, that all these outcomes depend on a number of antecedent questions, many of which have not yet even been considered in the literature. Perhaps most importantly, existing models of hidden tax assume what might be termed a rational ignorance or "intentional" model of tax salience. That is, the models assume that taxpayers neglect taxes as a result of a calculated determination that the disutility of calculating tax exceeds the present discounted value of avoiding the tax.[12] However, other contributions to the behavioral economics literature imply that there are alternative explanations, in which individuals are not capable of taking into account the real future utility cost of present decisions.[13] I term these other theories collectively the "unintentional ignorance" model.[14]

(1993); Edward A. Zelinsky, *Unfunded Mandates, Hidden Taxation and the Tenth Amendment: On Public Choice, Public Interest, and Public Services*, 46 VAND. L. REV. 1355, 1336 (1993) (finding the "unfunded mandate phenomenon . . . understandable in public choice terms as a form of *hidden taxation* imposed by poorly monitored, opportunistic legislators") (emphasis added). Prior usages that appear similar to mine include Joshua D. Rosenberg, *The Psychology of Taxes: Why They Drive Us Crazy, and How We Can Make Them Sane*, 16 VA. TAX REV. 155, 235 (1996); Nancy C. Staudt, *Taxation Without Representation*, 55 TAX L. REV. 555, 589–90 (2002).

12. Chetty et al., *supra* note 10, at 28–30. These models are part of a literature that, while emphasizing the rational choice component of taxpayers' decisions, departs from classical economic thought in positing that individuals' reasoning and deliberation are costly. Probably the definitive early work is Herbert A. Simon, *A Behavioral Model of Rational Choice*, 69 Q. J. ECON. 99 (1955); *see also* Patrick Bolton & Antoine Faure-Grimaud, *Thinking Ahead: The Decision Problem* 1–3 (Nat'l Bureau of Econ. Research, Working Paper No. W11867, 2005), *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=872723; *see* Brian E. Dollery & Andrew C. Worthington, *The Empirical Analysis of Fiscal Illusion*, 10 J. ECON. SURVEYS 261, 264 (1996); Wallace E. Oates, "*Automatic" Increases in Tax Revenues—The Effect on the Size of the Public Budget*, *in* FINANCING THE NEW FEDERALISM: REVENUE SHARING CONDITIONAL GRANTS, AND TAXATION 143 (Wallace E. Oates ed., 1975).

13. *See* Roland Benabou & Jean Tirole, *Self-Knowledge and Self-Regulation: An Economic Approach*, *in* THE PSYCHOLOGY OF ECONOMIC DECISIONS 137, 138 (Isabelle Brocas & Juan D. Carillo eds., 2003); Daniel Kahneman, *Maps of Bounded Rationality: Psychology for Behavioral Economics*, 93 AM. ECON. REV. 1449, 1449–70 (2003); Stefano DellaVigna, *Psychology and Economics: Evidence*

As I show here for the first time in the literature, the policy implications of hidden taxes differ radically depending on whether the intentional or unintentional model is more accurate. Under the intentional model, taxes will not remain hidden when the tax bill becomes large, because the benefits of avoiding the tax will eventually exceed the benefits of avoiding having to think about tax. In that case, hidden taxes are probably not a solution to the fairness-welfare tradeoff, because they cannot raise enough revenue. In addition, depending on which model ultimately prevails, hiding a tax may change who pays the tax. Hidden taxes are likely progressive in a rational ignorance model, but regressive otherwise.

Additional possible qualifications to the hidden tax story have been recognized by other scholars, but not explored in any great depth.[15] Thus, another contribution of this Article is to examine in close focus the possibility that taxpayers might anticipate hidden taxes or that learning and experience might over time increase the salience of the hidden tax. In addition, I want to highlight the fiscal federalism aspects of the problem, which thus far also have not been addressed by the literature. Changes in the salience of a tax may affect Tiebout sorting—that is, the choice of which bundle of local taxes and government services we wish to consume.[16] That possibility implies that hidden taxes might best be employed, if anywhere, at the national level.

Finally, I point out that the new findings that hidden taxes change *consumer* behavior distinguish these developments from what has come before. The long-standing view of hidden taxes focused solely on their *political* implications, in particular the possibility that low salience may also present opportunities for self-serving tax increases by public officials,

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from the Field 1–52 (Nat'l Bureau of Econ. Research, Working Paper No. 13420, 2007), *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1014797.

14. I choose the term "unintentional ignorance" rather than "irrational" because only some of these alternatives depend on individuals who are actually irrational; others depend on lack of full information. *See infra* text accompanying notes 55–58. All of them, however, have in common the assumption that when a person fails to take account of tax, he or she has not made an explicit choice to ignore the tax.

15. Chetty et al., *supra* note 10, at 36–47; Finkelstein, *supra* note 9, at 35–36; Amy Finkelstein, *E-ZTax: Tax Salience and Tax Rates* 4–6 (Nat'l Bureau of Econ. Research, Working Paper No. 12924, 2007) [hereinafter Finkelstein, Working Paper].

16. Charles M. Tiebout, *A Pure Theory of Local Expenditures*, 64 J. POL. ECON. 416, 416–24 (1956); *see* Wallace E. Oates, *An Essay on Fiscal Federalism*, 37 J. ECON. LIT. 1120, 1122–23 (1999). For a survey of contemporary extrapolations and responses, see Dennis Epple & Thomas Nechyba, *Fiscal Decentralization*, *in* HANDBOOK OF URBAN AND REGIONAL ECONOMICS 2423, 2423–80 (J. Vernon Henderson & Jacques-Francois eds., 2004).

leading to inefficiently high tax rates.[17] However, as I review here, there has never been any convincing empirical evidence that low salience results in higher taxes. I argue that, in fact, that view rests on several faulty assumptions. For instance, in a world where some voters know that taxes are hidden from others, the usual incentive to free-ride on lobbying efforts of others unravels, so that hidden taxes may actually lead to more anti-tax lobbying and lower taxes.

In short, the fact that some taxes may be less salient than others can be more than a happy accident; it may well be a feature of the tax system we should intentionally seek to develop, just as with other proposals for the optimally efficient tax. However, before we go down that road, with its troubling implications for democratic theory, it might be wise to first consider some possible limits on the efficiency-enhancing potential of hidden taxes.

Part I of this Article offers readers new to the tax literature a short overview of the economics of taxation. Part II explains hidden taxes: their potential forms, existing evidence that they may affect behavior, the welfare implications of these findings, and the uncertain cognitive science behind what we have observed. Part III considers two possible objections to the claim that hidden taxes might increase social welfare: taxpayers may anticipate hidden taxes, or learn to recognize them. Similarly, Part IV analyzes the potential welfare losses from hidden taxes, such as from inefficiently large government, or from redistribution from poor to rich. Part V previews some of the policy implications that would result if hidden taxes genuinely could increase welfare, including the chance that we might face a conflict between open and democratic government and greater social welfare.

I. THE ECONOMICS OF THE FAIRNESS/EFFICIENCY DILEMMA

This Part sketches the economic underpinnings of the progressive tax dilemma. Readers already familiar with the economics of taxation may safely skip to the last paragraph.

Before beginning my analysis of hidden taxes, let me take a step back for a moment and first explain why fairness is said to be costly. Start with the basics of supply and demand. In a well-functioning market, social

17. GEOFFREY BRENNAN & JAMES M. BUCHANAN, THE POWER TO TAX: ANALYTICAL FOUNDATIONS OF A FISCAL CONSTITUTION 24–32, 40 (1980); Susanne Lohmann & Deborah M. Weiss, *Hidden Taxes and Representative Government: The Political Economy of the Ramsey Rule*, 30 PUB. FIN. REV. 579, 579–611 (2002).

welfare is maximized when goods are exchanged at the so-called equilibrium price, the point at which the marginal consumer's willingness to pay for the good is exactly equal to the marginal cost of producing the next unit of it.[18] Every unit sold before that point is sold at profit, and also feels like a "bargain" for the consumer, who (assuming the typical downward-sloping demand curve) was willing to pay more than the equilibrium price.[19] Thus, nearly every exchange increases society's total utility.[20]

Taxes ruin this happy story by increasing the effective price of taxed goods.[21] Because the taxed item now costs more, fewer people want it, meaning that there are fewer utility-enhancing exchanges.[22] Furthermore, since there is only a tax when the good is actually exchanged, this diminution is a pure "deadweight loss"; it reduces welfare, without taking in any revenues for use by the government.[23] Alternatively, consumers may still buy goods similar to those taxed, but they will shift to an item that is less preferred but cheaper after tax, which also diminishes their satisfaction.[24] Figure 1 illustrates these principles.[25]

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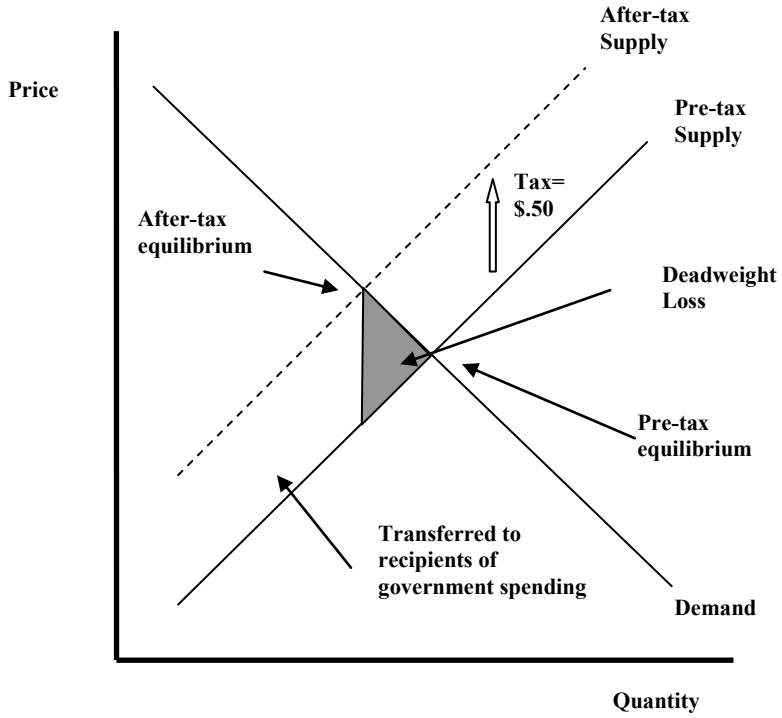
18. MUSGRAVE & MUSGRAVE, *supra* note 5, at 280.
19. *Id*.
20. *Id.*
21. *Id*.; Auerbach, *supra* note 6, at 68.
22. MUSGRAVE & MUSGRAVE, *supra* note 5, at 280.
23. *Id.* at 284. To be clear, the deadweight loss or "excess burden" of the tax is the change in total social welfare resulting from the substitution effect of the tax. The assumption here is that we can hold income constant; taxes are exchanged for government services on a one-for-one basis. Thus, a tax that only collected revenue and did not change any behavior would not create an excess burden. *Id.* at 289. This baseline for comparison is often called the "lump sum" tax, on the assumption that an undifferentiated tax on every individual would be the least distortive of any possible design. *Id*. at 287.
24. It is possible that these distortions might actually increase welfare in a market that was already imperfect. *See* MUSGRAVE & MUSGRAVE, *supra* note 5, at 294; Stiglitz, *supra* note 6, at 1023.
25. *See infra* p. 67.

FIGURE 1



We thus come to the conflict between distributive fairness and overall welfare. Suppose (as I assume for the sake of argument here) that our system of distributive justice requires us to redistribute at least some money from richer to poorer.[26] Every dollar raised through the tax system to carry out this redistribution also creates a deadweight loss. The greater the amount of redistribution a society carries out, the less well off it is.[27] On the other hand, there is a diminishing marginal utility of wealth—a dollar is worth more to those who have fewer of them.[28] The implication is that moving money from richer to poorer can increase overall utility.[29] So,

26. For a wide-ranging overview of different approaches to the imperative for redistribution, see JOHN E. ROEMER, THEORIES OF DISTRIBUTIVE JUSTICE (1996).

27. MUSGRAVE & MUSGRAVE, *supra* note 5, at 83.

28. *Id.* at 78–79.

29. *Id.*

taking this factor into account, there is at best a welfare tradeoff inherent in any redistribution.[30]

The welfare/fairness tradeoff is especially acute in the design of an income tax.[31] A progressive tax, for example, is one in which more of the burden of taxation is borne by wealthier taxpayers.[32] Progressive taxes are inherently redistributive: even if revenues are spent equally on all citizens, progressive taxation ensures that the richest pay more than the per capita value of the spending, while the poorest pay less.[33] The progressive component of a tax system can be greatly enhanced by the use of a progressive rate structure—that is, a structure in which the tax rate also rises with income.[34] However, the substitution effect of a tax rises with the tax rate.[35] Thus, unless the substitution effect distortion is counteracted by an income effect, progressive taxes lead to larger deadweight losses.[36] There is evidence that, at least at very high tax rates, income taxes encourage taxpayers to shift from the taxed good, labor, to the untaxed substitutes: leisure and "off-the-books" labor.[37]

Economists and tax lawyers have proposed to resolve this taxing problem by attempting to impose taxes on decisions that are very unlikely

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30. MATTI TUOMALA, OPTIMAL INCOME TAX AND REDISTRIBUTION 3 (1990). It is worth emphasizing that this account leaves aside any additional welfare gains society might realize from achieving its preference for the ideal distribution of goods, over and above gains from the diminishing marginal utility of wealth. Louis Kaplow & Steven Shavell, *Fairness Versus Welfare*, 114 HARV. L. REV. 961, 990–93 (2001).

31. *See* Bankman & Griffith, *supra* note 1, at 1945.

32. JONATHAN GRUBER, PUBLIC FINANCE AND PUBLIC POLICY 523 (2d ed. 2007).

33. For instance, suppose three citizens, Al, Betty, and Cash. Al earns $100, Betty $1000, and Cash $10,000. There is a 10% tax rate. Obviously, total revenues are ($10 + $100 + $1000) = $1110. If spending is equal, the government spends $370 on each. So Cash has transferred $630 to Al and Betty, with Betty receiving $270 and Al receiving $360.

34. To return to Al, Betty, and Cash, assume now a progressive rate structure in which Al pays 1% tax, Betty 5%, and Cash 10%. Revenues now are ($1 + $50 + $1000) = $1051, and per capita spending roughly $350. Cash has transferred $650, compared to $630 under a flat tax.

35. MUSGRAVE & MUSGRAVE, *supra* note 5, at 290. To reiterate, a "substitution effect" is the change in behavior caused by the change in price of one good relative to other options. It should be contrasted with the "income effect," which is a change in behavior resulting from alterations in an individual's wealth.

36. Although income and substitution effects are not always at cross-currents, they do seem to work in opposite directions in the case of the income tax: taxing labor encourages a substitution towards leisure, while lower income increases the utility value of an additional hour of labor.

37. Bankman & Griffith, *supra* note 1, at 1921–23; Jon Gruber & Emmanuel Saez, *The Elasticity of Taxable Income: Evidence and Implications*, 84 J. PUB. ECON. 1, 1–32 (2002); Mark H. Showalter & Norman K. Thurston, *Taxes and Labor Supply of High-Income Physicians*, 66 J. PUB. ECON. 73, 90–91 (1997) (finding that the response by self-employed physicians to higher marginal tax rates suggests that the zero elasticity of federal revenue with respect to the top end marginal tax rate is in part due to changes in the labor supply).

to change.[38] In slightly more technical language, the prescription is to tax inelastic behavior more heavily. That is the classic account set out by Ramsey, Mirrlees, and others.[39]

Again, though, the typical tax on inelastic behavior does not escape the conflict with distributive justice. For one thing, most inelastic taxes are regressive—that is, they fall disproportionately on poorer taxpayers.[40] Inelastically demanded goods, such as food and prescription drugs, are usually just the things that occupy most of an indigent taxpayer's budget.[41] Other nondistortive taxes, such as a uniform "head tax" on every individual, would raise only a small fraction of the revenue needed for social insurance programs for the indigent.[42]

Thus, as Mirrlees argued, the "optimal" tax would balance efficiency against the need for redistribution.[43] That is, the ideal tax rate would be one that maximizes the tradeoff between the welfare gains from satisfying society's preference for distributive fairness and the deadweight loss of progressive tax rates.[44] In the income tax context, this has included proposals ranging from a mildly progressive rate structure to an outright regressive tax rate, although in the second case the tax would be combined with a flat grant to every citizen to render the system progressive overall.[45]

Mirrlees's solution, although in many ways elegant, has hardly ended debate over progressive taxation. Many commentators continue to advocate for completely flat rates, or even head taxes, pointing again to the distortive effects of taxation on the economy.[46] From the other direction, proponents of more progressive taxation could perhaps argue that optimal

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38. MUSGRAVE & MUSGRAVE, *supra* note 5, at 292–93.

39. *See* sources cited *supra* note 6.

40. GRUBER, *supra* note 32, at 523.

41. *See* Richard M. Bird & Eric M. Zolt, *Redistribution Via Taxation: The Limited Role of the Personal Income Tax in Developing Countries*, 52 UCLA L. REV. 1627, 1680–82 (2005); Chetty et al., *supra* note 10, at 50.

42. *See* Avi-Yonah, *supra* note 2, at 1631–38.

43. Mirrlees, *supra* note 6, at 175.

44. Louis Kaplow, *How Tax Complexity and Enforcement Affect the Equity and Efficiency of the Income Tax*, 49 NAT'L TAX J. 135, 137 (1996).

45. TUOMALA, *supra* note 30, at 8–9, 12–14; Kaplow, *supra* note 44, at 138. The regressive tax plus flat grant is progressive overall because the flat grant amount is more valuable to lower-income taxpayers.

46. *E.g.*, ROBERT E. HALL & ALVIN RABUSHKA, THE FLAT TAX (Hoover Inst. Press 2d ed. 1995); Jeffrey A. Schoenblum, *Tax Fairness or Unfairness? A Consideration of the Philosophical Bases for Unequal Taxation of Individuals*, 12 AM. J. TAX POL'Y 221, 269–71 (1995); ROBERT E. HALL ET AL., AMERICAN ENTER. INST., FAIRNESS AND EFFICIENCY IN THE FLAT TAX (1996), http://www.aei.org/docLib/20021130_70450.pdf; Daniel J. Mitchell, Commentary, *Russia's Flat-Tax Miracle*, The Heritage Foundation, Mar. 24, 2003, http://www.heritage.org/Press/Commentary/ed032403.cfm;.

tax theory is unrealistic to the extent that it depends on flat grants to achieve progressivity. Spending can iron out tax inequalities, but where spending decisions are politically separate from tax determinations, there is arguably a danger that an unfair tax system will simply produce unfair results. But if one is dealing in theoretical ideals, this critique is less than trenchant.

Hidden taxes, in contrast, present a potential challenge both to optimal tax theory as well as to opponents of progressive taxation more generally. If progressive taxes can be imposed in a way that minimizes behavioral responses, and therefore deadweight losses, then the optimal degree of progressivity might shift significantly towards higher rates on wealthier taxpayers. I explore the plausibility of that outcome in the Parts that follow.

II. BEHAVIORAL EFFECTS OF HIDDEN TAXES

This Part introduces the concept of hidden taxes and their potential role in tax economics. After briefly sketching in Part II.A. some possible forms that hidden taxes may take, I then survey in Part II.B. the evidence that some taxes are less salient than others. Part II.C. explores the welfare implications of these findings. Part II.D. then argues that the current literature has not yet offered a convincing account of what mental processes are responsible for diminished consumer response to tax, leaving some major holes in the story suggested by Part II.C.

A. Forms of Hidden Taxation

In order to help the reader develop intuitions for the remaining discussion, it may be useful to survey some of the forms a hidden tax might take on. Marketers and advertisers have spent decades developing techniques for reducing the price consumers perceive for commercial products.[47] In an important paper, Krishna and Slemrod predict that many

47. Edward L. Glaeser, *Psychology and the Market*, 94 AM. ECON. REV. 408, 409–11 (2004); Vicki G. Morwitz et al., The Price Does Not Include Additional Taxes, Fees, and Surcharges: A Review of Research on Partitioned Pricing 6–10 (Feb. 26, 2009) (unpublished manuscript, *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1350004); *see* Aradhna Krishna et al., *A Meta-Analysis of the Impact of Price Presentation on Perceived Savings*, 78 J. RETAILING 101, 101–18 (2002). Salience also affects consumer responses to non-price product qualities. *E.g.*, Kristin Kiesel & Sofia B. Villas-Boas, *Another Nutritional Label—Experimenting with Grocery Store Shelf Labels and Consumer Choice* 16–17 (CUDARE, Working Paper 1060, 2008), *available at* http://ideas.repec.org/p/cdl/agrebk/1060.html.

of these techniques can also lower the perceived cost of taxation.[48]

Among the most important of these "price presentation" tactics is the splitting of a purchase price into a series of small future payments.[49] Consumers may perceive the sum of a series of small payments as considerably less than its actual present value.[50] This idea has a number of ready applications to tax. Sales taxes, for example, are a form of public financing that divides a taxpayer's contribution into many tiny pieces. Classic fiscal federalism theory predicts that citizens will choose where to live based on the basket of public goods received in exchange for total taxes paid.[51] By dividing the total tax "price" for its basket of public goods into many small transactions, a jurisdiction can make itself appear to be a better bargain than its competitors.[52] Similarly, the marginal propensity of an individual to work depends on the rate of tax imposed on that labor, since salary minus tax determines the opportunity cost of enjoying time off instead.[53] If, instead of a single stated tax, the worker confronts a series of small tax payments—for instance, if there is income-tax withholding—she may underestimate the tax she pays and work "too much" relative to her underlying preference for work vs. leisure.[54]

Prices are also difficult for consumers to identify where costs depend in part on future events. Consumers typically have imperfect information about how often these future events will occur, and may systematically underestimate total cost as a result.[55] For instance, a number of credit card

48. Aradhna Krishna & Joel Slemrod, *Behavioral Public Finance: Tax Design as Price Presentation*, 10 INT'L TAX & PUB. FIN. 189, 189 (2003).

49. Krishna & Slemrod, *supra* note 48, at 193–94. On the effect of splitting two simultaneous components of price, see John M. Clark & Sidne G. Ward, *Consumer Behavior in Online Auctions: An Examination of Partitioned Prices on eBay*, 16 J. MARKETING THEORY & PRAC. 57, 57–66 (2008); Tanjim Hossain & John Morgan, . . . *Plus Shipping and Handling: Revenue (Non) Equivalence in Field Experiments on eBay*, 6 ADVANCES ECON. ANALYSIS & POL'Y 1, 1–4 (2006); Vicki G. Morwitz et al., *Divide and Prosper: Consumers' Reactions to Partitioned Prices*, 35 J. MARKETING RES. 453, 453–63 (1998).

50. Jerry A. Hausman, *Individual Discount Rates and the Purchase and Utilization of Energy-Using Durables*, 10 BELL J. ECON. 33, 33–34 (1979); *see* Loewenstein & O'Donoghue, *supra* note 11, at 196.

51. Oates, *supra* note 16, at 1122–23.

52. *See* Dollery & Worthington, *supra* note 12, at 264; *cf.* Krishna & Slemrod, *supra* note 48, at 192 (projecting that governments will prefer to use sales taxes).

53. *See* sources cited *supra* note 37. On the other hand, as Joe Bankman suggested during a presentation of this paper, if people choose their career or their residence on the basis of a rough estimate of the lifestyle the job or venue provides, perceived tax rates are unlikely to affect those kinds of choices.

54. ANDREA LOUISE CAMPBELL, HOW AMERICANS THINK ABOUT TAXES: PUBLIC OPINION AND THE AMERICAN FISCAL STATE (forthcoming 2010) (manuscript at 25–26, on file with author).

55. *See* Oren Bar-Gill, *Informing Consumers About Themselves* 2, 14 (N.Y. Univ. Law and Econ. Research Paper Series, Working Paper No. 07-44, 2007), *available at* http://ssrn.com/abstract=

contracts permit the issuer to charge late and default fees.[56] In recent studies, many consumers appear wrongly to have assumed that they will not incur such fees, and as a result have selected cards whose expected cost, including fees, is higher than the optimal choice.[57]

Taxes, too, may appear to be lower at the time of a relevant decision than their true future cost because of taxpayer misestimates of future events. A citizen may vote to approve a carbon tax on the assumption that she will bike to work and insulate her home, but later lack the willpower to give up her car, or lack the cash (as a result of other consumption decisions) to hire a carpenter. Individuals or businesses may relocate to a jurisdiction with user fees expecting to be able to avoid those fees, but then find that they are unable to do so. Others may plan to submit claims for optional refunds, as in the U.S. Earned Income Tax Credit or the European VAT system, but never do so.[58]

These scenarios are all plausible extrapolations from existing consumer studies. It is worth emphasizing that no studies have yet confirmed that these precise forms of cognitively challenging taxes in fact change taxpayer behavior. But these fact patterns are suggestive of the many ways in which hidden taxes might be deployed.

B. Evidence on Tax Salience

While there are no studies directly confirming the price presentation theory, there is now a substantial literature suggesting that individuals are less than fully aware of the extent of their fiscal obligations to the state. A number of early studies, likely sparked by the Nobel-winning economist James Buchanan, simply posited the hypothesis that less-salient tax systems permit higher levels of taxation.[59] The researchers then attempted

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56. Bar-Gill, *supra* note 55, at 29.

57. Lawrence M. Ausubel, *Credit Card Defaults, Credit Card Profits, and Bankruptcy*, 71 AM. BANKR. L.J. 249, 263 (1997); Lawrence M. Ausubel, *The Failure of Competition in the Credit Card Market*, 81 AM. ECON. REV. 50, 75–76 (1991); Stefano DellaVigna & Ulrike Malmendier, *Contract Design and Self-Control: Theory and Evidence*, 119 Q. J. ECON. 353, 377–79 (2004); David B. Gross & Nicholas S. Souleles, *Do Liquidity Constraints and Interest Rates Matter for Consumer Behavior? Evidence from Credit Card Data*, 117 Q. J. ECON. 149, 171 (2002); Sha Yang et al., *Unrealistic Optimism in Consumer Credit Card Adoption*, 28 J. ECON. PSYCHOL., 170, 181 (2007).

58. *See* Krishna & Slemrod, *supra* note 48, at 194. For evidence on the low rate of rebate claims, see Matthew A. Edwards, *The Law, Marketing, and Behavioral Economics of Consumer Rebates*, 12 STAN. J.L. BUS. & FIN. 362, 368–69 (2007) (collecting sources); Tim Silk & Chris Janiszewski, Managing Mail-in Rebate Promotions 5 (unpublished manuscript, *available at* http://www.cba.ufl.edu/mkt/docs/janiszewski/Rebate.pdf).

59. James M. Buchanan, *The fiscal illusion*, *in* PUBLIC FINANCE IN DEMOCRATIC PROCESS:

to measure relationships between putatively less-visible taxes and the size of government.[60] These studies were inconclusive.[61] It therefore is unclear from the size-of-government studies whether voters respond differently to low-salience taxes. For example, it is possible that voters do react differently to a less-noticeable tax, but political officials are still unable or unwilling to raise taxes in response.

McCaffery and Baron advanced the debate through a series of laboratory simulations of tax setting.[62] Test subjects were willing to tolerate higher overall tax levels when the tax was imposed through many smaller taxes, rather than through a single large tax.[63] McCaffery and Baron dubbed this phenomenon the "disaggregation bias"; subjects appeared unable to hold together in their minds the cumulative effects of several separate, overlapping tax regimes.[64] And subjects seemed to resist income taxes more than payroll or business taxes, which McCaffery and Baron thought were more hidden.[65]

Other recent laboratory studies are similar. Sausgruber and Tyran report that their subjects were willing to accept higher taxes when the tax was nominally imposed on sellers rather than buyers, even though the ultimate economic burden of the tax did not change.[66] And Blumkin et al. find that lab subjects who were paid a small reward worked harder when the tax on the reward was presented as a sales rather than income tax.[67]

FISCAL INSTITUTIONS AND INDIVIDUAL CHOICE 135, 135 (1967).

60. Dollery & Worthington, *supra* note 12, at 293–94.

61. Oates, *supra* note 8, at 66; Dollery & Worthington, *supra* note 12, at 293–94.

62. McCaffery & Baron, *supra* note 7, at 289; Edward J. McCaffery & Jonathan Baron, *Thinking About Tax*, 12 PSYCHOL. PUB. POL'Y & L. 106 (2006); Edward J. McCaffery & Jonathan Baron, *The Political Psychology of Redistribution*, 52 UCLA L. REV. 1745 (2005) [hereinafter McCaffery & Baron, *Political Psychology*]; Edward J. McCaffery & Jonathan Baron, *The Humpty Dumpty Blues: Disaggregation Bias in the Evaluation of Tax Systems*, 91 ORGANIZATIONAL BEHAV. & HUM. DECISION PROCESSES 230 (2003).

63. McCaffery & Baron, *Political Psychology*, *supra* note 62, at 1765–68, 1773–80.

64. Although McCaffery and Baron term this a "bias," one could argue that the preference the subjects were expressing was rational. After all, deadweight losses typically are increasing in proportion to the amount of tax on any given base. We can therefore minimize distortions by spreading the incidence of taxation widely. Subjects might thus have been opting for a less distortive tax regime. However, there is little indication that these considerations were motivating the subjects. For example, many shifted their preferences towards the lower, unitary tax after counseling.

65. McCaffery & Baron, *Political Psychology*, *supra* note 62, at 1761–64.

66. Ruper Sausgruber & Jean-Robert Tyran, *Tax Salience, Voting, and Deliberation* 2 (Univ. of Copenhagen Dept. of Econ., Working Paper No. 08-21, 2008), *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1292731.

67. Tomer Blumkin et al., *Are Income and Consumption Taxes Ever Really Equivalent? Evidence from a Real-Effort Experiment with Real Goods* 4–14 (Ctr. for Econ. Studies, IFO Inst. for Econ. Research, Working Paper No. 2194, 2008), *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1079784.

These results dovetail with real-world studies of bounded voter rationality, which is said to result in a "fiscal illusion": voters misperceive taxing and spending systems.[68] For instance, the "flypaper effect" literature reports numerous instances in which local government entities received grants but failed to reduce their own revenue efforts in response to the infusion of outside cash.[69] That result is contrary to what we should likely expect of fully rational actors in the absence of matching grants.[70] Although the flypaper literature is still evolving, one powerful explanation consistent with much of the data is that local voters are unaware of the new, improved fiscal condition of their government, or misconceive the relationship between the grant and the opportunity to reduce their own tax expenditures.[71] Similarly, some unpublished studies report that individual taxpayers behave in unexpected ways in response to the federal tax

68. Oates, *supra* note 8, at 65.

69. Katherine Baicker, *Government Decision-Making and the Incidence of Federal Mandates*, 82 J. PUB. ECON. 147, 177–78 (2001); Rebecca J. Campbell, *Leviathan and Fiscal Illusion in Local Government Overlapping Jurisdictions*, 120 PUB. CHOICE 301, 324 (2004); Radu Filimon et al., *Asymmetric Information and Agenda Control: The Bases of Monopoly Power in Public Spending*, 17 J. PUB. ECON. 51, 60–61 (1982); Nora Gordon, *Do Federal Grants Boost School Spending? Evidence from Title I*, 88 J. PUB. ECON. 1771, 1773 (2004); Peter M. Mitias & Geoffrey K. Turnbull, *Grant Illusion, Tax Illusion, and Local Government Spending*, 29 PUB. FIN. REV. 347, 361 (2001); Geoffrey K. Turnbull, *The Overspending and Flypaper Effects of Fiscal Illusion: Theory and Empirical Evidence*, 44 J. URB. ECON. 1, 15–232 (1998); Byron F. Lutz, *Taxation with Representation: Intergovernmental Grants in a Plebiscite Democracy* 24 (Fin. & Econ. Discussion Series, Working Paper No. 2006–06, 2006), *available at* https://www.federalreserve.gov/Pubs/FEDS/2006/200606/200606pap.pdf. *But see* Brian Knight, *Endogenous Federal Grants and Crowd-out of State Government Spending: Theory and Evidence from the Federal Highway Aid Program*, 92 AM. ECON. REV. 71, 88 (2002) ("[F]ederal highway grants crowd out state highway spending, leading to little or no increase in net spending.").

70. David F. Bradford & Wallace E. Oates, *The Analysis of Revenue Sharing in a New Approach to Collective Fiscal Decisions*, 85 Q.J. ECON. 416, 420–23, 434 (1971) (explaining how a lump sum distributed to a group may have diffuse economic benefit to all individuals through revenue sharing); David F. Bradford & Wallace E. Oates, *Towards a Predictive Theory of Intergovernmental Grants*, 61 AM. ECON. REV. 440, 443 (1971) (suggesting that given certain conditions, a system that gave grants to individuals could "lead[] via the political process to precisely the same equilibrium state of the community as does the grant to the collectivity"); Ronald C. Fisher, *Income and Grant Effects on Local Expenditure: The Flypaper Effect and Other Difficulties*, 12 J. URB. ECON. 324, 325–26 (1982). That is, the grant shifts the state's demand curve for government services outward without changing its shape. For example, if I want my government to spend $100 on roads, I will vote in favor of $100 in road spending, regardless of whether someone else gives me another $50. Thus, when my government receives the $50 grant, I will expect it to spend $100 on roads and cut my taxes by $50. Or, I may be willing to spend slightly more than $100, as a result of the additional wealth represented by the grant. Fisher, *supra*, at 328. But that will simply shift my demand curve for all normal goods, including roads, outwards slightly. This analysis does not work perfectly for matching grants, which for obvious reasons tend to encourage the state to spend more than it would otherwise prefer on the matched expenditure. ROBERT D. COOTER, THE STRATEGIC CONSTITUTION 116–19 (2000).

71. For a more thorough discussion of the fiscal illusion explanation for observed flypaper data, see Brian Galle, *Federal Grants, State Decisions*, 88 BOSTON UNIV. L. REV. 875, 926–30 (2008).

system, most likely because they do not understand the concept of marginal tax rates.[72]

Finally, a set of quite recent results provides stronger evidence yet that taxpayers not only vote differently in response to hidden taxes, but also change their consumption decisions. In one of these studies, purchasers were more sensitive to after-tax prices when the amount of the sales tax was posted.[73] Surveys of the shoppers studied found that the shoppers knew to a fairly high degree of precision the amount of sales tax in their jurisdiction at the time they entered the store.[74] A possible implication is that in the absence of a posted notice of the sales tax, consumers make consumption decisions before they get to the register, without computing the likely sales tax, and do not change their minds once they see the tax-inclusive bill.[75] This may suggest that, because the unposted sales tax has a relatively low salience, it has lower behavioral effects than the exact same tax when the tax rate is posted. As Chetty et al. argue, consumers may engage in a kind of cognitive loafing: they know of the tax but simply don't bother to compute the tax-inclusive price of an individual item, perhaps because the utility of avoiding that calculation is higher than the value of the savings.[76]

Another economist, Amy Finkelstein, has made similar findings. In her study, she observed that where tolls were collected electronically, and therefore somewhat beneath the notice of the toll payers, the demand for driving on toll roads was less elastic.[77] That is, drivers were less sensitive to toll increases than they had been at the same facility before the electronic toll collection and less sensitive than other contemporaneous

72. Naomi Feldman & Peter Katuščák, *Should the Average Tax Rate be Marginalized?* (Ctr. For Econ. Research & Graduate Educ., Working Paper No. 304, 2006); Jeffrey B. Liebman & Richard J. Zeckhauser, Schmeduling (Oct. 2004) (unpublished manuscript, *available at* http://www.hks.harvard.edu/jeffreyliebman/schmeduling.pdf); *cf.* Krishna & Slemrod, *supra* note 48, at 196–97 (describing phenomenon whereby consumers erroneously evaluate savings based on percentages rather than absolute dollar amounts).

73. Chetty et al., *supra* note 10, at 10–18.

74. *Id*. at 26–28.

75. This result is subject to two interpretations, only one of which supports my thesis here. One conclusion, as I suggest in the body text, is that the increased salience of the sales tax increases the consumer's response to the tax. An alternative conclusion is that consumers are tax-averse; that is, they are less willing to pay a given price knowing that some portion of it is a "tax" rather than simply a "price." That may not be irrational. For example, the fact that some of the cost of a good is known to be tax might indicate that the good could be purchased more cheaply in a jurisdiction with a lower tax, and the consumer prefers to postpone purchase until she finds the low-tax opportunity. Again, though, the consumers knew the sales tax rate before shopping. This implies that the consumers were willing to shop in a jurisdiction where their purchases would be subject to tax.

76. Chetty et al., *supra* note 10, at 28–35.

77. Finkelstein, Working Paper, *supra* note 15, at 2.

drivers at facilities without electronic collection.[78] In this case, survey data suggested that drivers who used electronic payment not only did not know their total periodic toll costs; they also did not know the toll rate.[79]

Gallagher and Muehlegger also claim to have observed a salience effect in their study of tax incentives for fuel-efficient cars, but there are a number of potential questions with their results.[80] According to Gallagher and Muehlegger, consumers were much more responsive to sales tax incentives to buy hybrid cars than they were to income tax breaks for the same purpose. Since sales tax benefits are immediate, while income tax benefits do not accrue until the following year when the purchaser files her income tax return, we should expect some preference for sales taxes. But Gallagher and Muehlegger also found that the effect of the income tax incentive was largest in the second quarter of the year, around tax filing season, whereas on a pure time-value-of-money calculation the best time to buy would be in December.[81] They argue that this timing result suggests that the greater salience of the income tax around filing season improves the efficacy of the income tax incentive, even though a purchase in April will not be deductible until the following year.

There are a number of factors that Gallagher and Muehlegger do not appear to control for that could confound their salience result.[82] For one, the greater efficacy of the more immediate sales-tax discount could be caused by a higher than average time-discounting rate among some consumers. Next, if we should expect a spike in an income tax incentive's efficacy around filing season, there should also be a spike in the fourth quarter caused by taxpayers who obtained six-month extensions. Gallagher and Muehlegger report instead that the effect of the incentive declined "monotonically with each successive quarter" after the first.[83] Unobserved characteristics of buyers could also be driving their result. The study did not observe advertising by dealers, which may have been more intensive

78. Finkelstein, *supra* note 9, at 18–30.

79. *Id*. at 14–16.

80. Kelly Sims Gallagher & Erich Muehlegger, *Giving Green to Get Green: Incentives and Consumer Adoption of Hybrid Vehicle Technology* 22–24, 28 (Harvard Kennedy Sch. of Gov't, Working Paper No. RWP08-009, 2008), *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1083716.

81. *Id.* at 23–24. December is ideal because it is closest to the end of the tax year. The best time to buy would be the day before filing taxes, since that would minimize the time cost of waiting for the deduction. But of course income taxes are usually calculated annually, so for taxpayers on a calendar-year tax year, December is the closest one can come to the buy-today, file-tomorrow optimum.

82. To be fair, the public version of the Gallagher and Muehlegger draft is still at the working paper stage.

83. Gallagher & Muehlegger, *supra* note 80, at 24.

during "tax season" in areas offering income tax incentives. Finally, perhaps the second quarter is a time when purchasers who are especially price-sensitive are disproportionately in the market: students, those anticipating extensive summer travel (with accompanying trips to the pump), or model-year-end bargain hunters.[84] Since those individuals would have more elastic demand, they would make it look as though the tax incentive were more effective.[85] Thus, although this latest study is suggestive, it is not yet a significant advance over Chetty et al. and Finkelstein.

Notwithstanding some doubts about "green" incentives, the evidence so far seems to be generally in line with the intuition I laid out at the outset. Where individuals do not fully perceive the burden of a tax, or where not all individuals perceive it, the total behavioral changes in response to the tax, whether in voting or consumption, are smaller.

C. Hidden Taxes and Welfare

Both the Chetty et al. and Finkelstein papers suggest a provocative conclusion that may follow from their data: hidden taxes may be more efficient than others.[86] The basic premise is deceptively simple. As I explained in Part I, taxes that change behavior of rational actors in efficient markets reduce overall welfare, because by definition the undistorted choices of self-maximizing actors represent their best possible subjective outcome.[87] In the case of hidden taxes, however, there is a smaller behavioral response than in a perfectly visible tax.[88] Thus, the

84. Gallagher and Muehlegger do control for quarter fixed-effects, which might soak up some of these variations. Gallagher and Muehlegger, *supra* note 80, at 27.

85. Although this elasticity-of-demand story would also likely be true of sales taxes, it is unclear from the public version of Gallagher and Muehlegger whether sales tax effectiveness varies by quarter. In e-mail with this author, Prof. Muehlegger reports that the study did not observe any changes in sales tax effectiveness.

86. Chetty et al., *supra* note 10, at 36–51; Finkelstein, *supra* note 9, at 4.

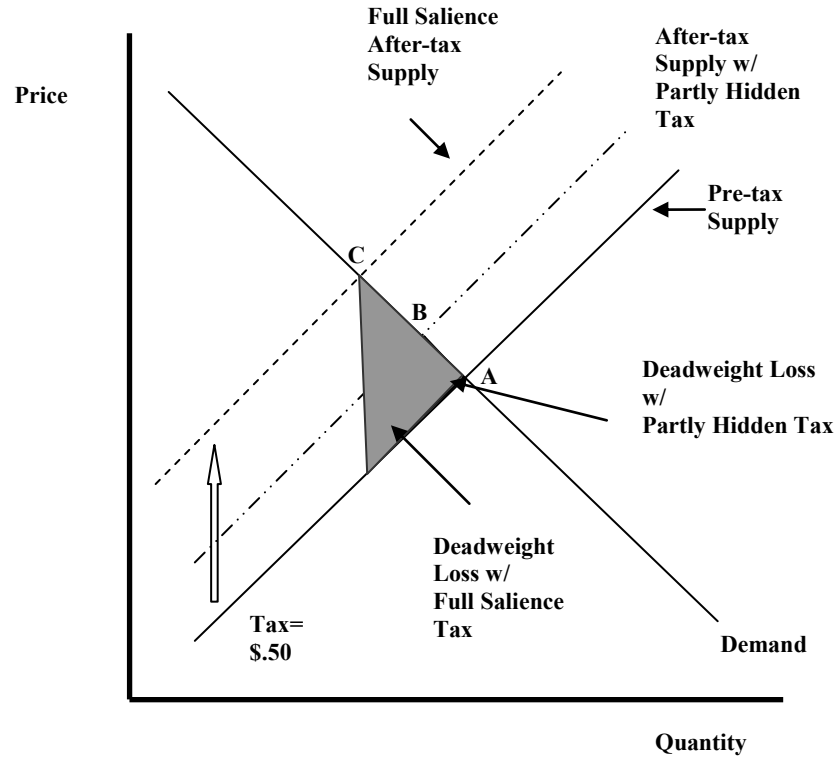
87. *See supra* text accompanying notes 18–25.

88. Blumkin et al., *supra* note 67, at 16. It might be argued that the significance of this point is much diminished to the extent that all potential substitutes for the good are subject to tax. That is, if the consumer will pay a comparable amount of tax no matter what she decides, then there is no substitution effect (although there is still an income effect). (I am grateful to Joe Dodge and Steve Salop for this point.)

In practice, though, this situation almost never arises. For example, even if all goods are subject to sales tax, a consumer can save instead, or purchase on the black market. *Cf.* Kaplow, *supra* note 44, at 146 (noting estimates of $100 billion U.S. tax revenue lost to blackmarket transactions). Both of these alternatives become less attractive if taxes are hidden. Likewise, even if all labor earnings are taxed similarly, a consumer can substitute leisure for work.

distortion away from the social optimum point is smaller.[89] This is illustrated by figure 2.

FIGURE 2



Indeed, the welfare gains from reduced distortions increase dramatically as the amount of distortion diminishes. That is because the deadweight loss from tax (or, conversely, the welfare gains from eliminating deadweight loss) increase in proportion to the square of the

89. Chetty et al., *supra* note 10, at 38–40. This description assumes a market that would be efficient if not for tax. In the case of distortions that might be offset by tax, such as Pigouvian taxes on externalities, a diminished behavioral effect would actually reduce welfare. Thus, cigarette taxes, carbon taxes and the like should be designed to be as visible as possible. *See* Finkelstein, *supra* note 9, at 12–13.

Also, readers attentive to technical detail should be aware that for expositional purposes my description here assumes that compensated and uncompensated demand coincide. Chetty et al. also discuss situations where that is not the case, as I will address shortly.

size of the distortion.[90] Figure 2 also illustrates this point. Notice that the area of deadweight loss is a triangle with legs comprised of the shift along the supply and demand curves.[91] Thus, since the area of a right triangle is one-half the product of its two legs, and the two legs here are of the same length, the area of deadweight loss increases with the square of the distance that the tax shifts the supply curve.

One important complication, as both studies acknowledge, is that hidden taxes may not necessarily increase welfare for consumers.[92] In essence, the hidden tax causes the consumer to buy an item she would not otherwise have purchased at that price, so that she experiences a loss to the extent she overpays. However, since the amount of the overpayment is exactly equal to the amount of additional tax collected, society as a whole comes out even.[93] At least, society comes out even if taxes are not wasted, and recipients of spending on average are no wealthier than the misled customers.

Another wrinkle in this story arises where there are distortions not only from the substitution effect but also from income effects.[94] That is, at times the mere fact that a taxpayer has less money will change what she buys or the amount of work she does. For instance, if the consumer doesn't realize her bank account is low, she may find at the end of the month she doesn't have enough cash for the things she planned to buy.

Chetty et al. attempt to minimize this problem by arguing that the consumer's welfare losses may be small, depending on how she orders her purchase decisions.[95] That is, the reason the consumer loses welfare when she overpays is because she has lost an opportunity to buy other goods with her available funds. The size of that second-order welfare loss depends on which goods are crowded out by the hidden tax. If the

90. Auerbach, *supra* note 6, at 74.

91. The figure depicts the deadweight loss triangles caused by a first distortion, from point A to point C, and a second, smaller distortion resulting when the equilibrium point is shifted back to point B.

92. Chetty et al., *supra* note 10, at 41–47; Finkelstein, *supra* note 9, at 10. Blumkin et al. argue that a laborer's utility can be unchanged even under a totally opaque consumption tax, because consumption remains constant in the shift from income to consumption taxation. Blumkin et al., *supra* note 67, at 16–18. But to obtain that result, the worker has to work more, giving up leisure. That should reduce the worker's welfare. As best this author can discern, Blumkin et al. appear not to include a term for welfare losses from foregone leisure in their proof.

93. Chetty et al., *supra* note 10, at 38.

94. *Id.* at 42–43.

95. *Id.* at 41–46; *see also* B. Douglas Bernheim & Antonio Rangel, *Beyond Revealed Preference: Choice Theoretic Foundations for Behavioral Welfare Economics* 23–24 (Nat'l Bureau of Econ. Research, Working Paper No. 13737, 2008), *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1086986 (modeling generalized version of the Chetty et al. theory).

consumer gives up only the least-preferred item she would otherwise have bought, her loss is much smaller than if she gives up the first. In other words, if paying too much because of hidden taxes leaves us without money for a pack of gum or a fifth DVD per month from Netflix, we're not so bad off, but if it leaves us at the end of the month just short of making rent, the tax hurts us pretty badly. Thus, Chetty et al. argue that the amount of welfare loss for consumers will depend on their ability to recognize that they are paying hidden taxes and to order their purchases accordingly.[96] Whether or not this is a plausible possibility is a subject I will return to shortly.

Irrespective of consumer losses, hidden taxes may still on net increase welfare because they also create both producer surplus and government revenues. That is, under a hidden tax producers make additional, profitable sales beyond those that they would have made at the perfectly transparent post-tax equilibrium.[97] And there will be more transactions subject to tax, the proceeds of which can be used for welfare-enhancing projects, transfers to the poor, and so on. This is not the venue for detailed mathematical proofs, but in general we should expect these two effects to often be larger than the consumer's welfare loss, assuming that consumers and producers are of comparable wealth.[98] That result is magnified if Chetty et al. are correct in claiming that consumer welfare losses are only second-order.[99]

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96. Chetty et al., *supra* note 10, at 42–44. For a summary of studies of consumer capacity to allocate their budgets across purchases, see Daniel Read et al., *Choice Bracketing*, 19 J. RISK & UNCERTAINTY 171, 185 (1999). In general, "[m]oney saved in one category will be recycled into that category." *Id.* This supports the Chetty et al. story: expenditures in, say, grooming products are unlikely to affect choices of health care or food.

97. Technically, whether these additional sales are profitable will depend on the extent to which the producer bears the incidence of the tax or instead is able to shift the cost of the tax to consumers. I assume that hidden taxes will typically be shifted somewhat from producers to consumers, so that there will be at least some producer surplus. *See* Chetty et al., *supra* note 10, at 47–50 (projecting that incidence of hidden taxes will be shifted towards those who are unaware of tax).

98. For those who want slightly more detail, this welfare-increasing result assumes that, as we move from a perfectly transparent tax equilibrium to some hidden tax equilibrium, $\Delta S_p + \Delta U_t > \Delta S_c$; that is, that the new utility resulting from transfer of the additional tax from payors to beneficiaries of government spending, combined with the changes in producer surplus, exceed any losses in consumer surplus. Under a benevolent government where taxes and spending increase welfare, this means that hidden taxes will sometimes overall improve social welfare even where consumers are harmed more than producers are benefitted by the hidden tax.

Because of the diminishing marginal utility of wealth, the tradeoff will become less attractive as producers or government beneficiaries become wealthier than consumers. One obvious way to help ensure that the ledger balances between beneficiaries and consumers is to include compensation for hidden taxpayers as part of the resulting government expenditure.

99. Chetty et al., *supra* note 10, at 41–46.

This analysis also leads to my own policy prescription for hidden taxes, which I believe is new to the literature. The shape of the supply and demand curves will affect the size of consumer and producer surplus: for inelastically demanded goods, where the demand curve is fairly flat, consumer surplus is smaller than producer surplus, and vice versa.[100] Thus, we can predict that hidden taxes are more likely to be welfare-increasing for inelastically demanded goods. Relatedly, we can minimize any welfare losses resulting from transfers from relatively poorer consumers to comparatively richer producers by reserving hidden taxes for markets where those who benefit from hidden taxes are no wealthier than those who might lose welfare.[101]

In short, under our working set of assumptions there is a significant possibility that many hidden taxes will on net increase social welfare. Unfortunately, those assumptions have a large hole in them. It is possible that, depending on what drives the behavioral changes associated with hidden taxes, those taxes in fact might become more visible as they grow larger, which would make any potential welfare gains rather small. Thus, I turn now to considering the possible mechanisms that lead taxpayers to overlook hidden taxes.

D. Conflicting Theories of Taxpayer Cognition

At present it is unclear what mental processes are driving the behavioral effects of hidden taxes. Taxpayers may neglect to consider tax unintentionally—for example, because they simply cannot carry out the mental computations required to assess the tax accurately. Alternatively, taxpayers might deliberately ignore tax, as a way of avoiding the disutility they would experience from taking the time to weigh their options. I call these possibilities the "unintentional" and "intentional" models of hidden taxes, respectively. As we shall see, the question of which model is more accurate proves to be highly important in making predictions about the effects of hidden taxes outside areas that have currently been subjected to empirical study.

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100. In the instance where there are income-effect distortions, it is not technically accurate to refer to a single "consumer surplus," but the description here still captures the essence of what is going on in that scenario, as well.

101. I use "consumers" and "producer" in my discussion here, but the reader should understand that in a given market it may be producers who fail to recognize the existence of a hidden tax. In those markets, there will be producer, rather than consumer, surplus. The labor market seems a likely example here.

Chetty et al. outline a rational ignorance model of hidden taxes.[102] In their description, ignoring tax is rational where the utility cost of computing the tax is greater than the discounted present value of making a decision informed by the correct tax amount. Take a purchaser shopping in a drug store, who must decide whether or not to buy a comb on display by the register, with a posted price of $1.89. He is aware that there is an additional sales tax on the comb of 6.5%. He is willing to pay $2.00 for the comb, but not more. The value to him of making the correct consumption decision here is tiny; if he overpays, it is only by a few cents. Quite plausibly, our shopper is willing to pay a few cents to avoid the mental effort of multiplying 1.89 by .065.

While Chetty et al. do not emphasize time discounting, that, too, is an important factor.[103] The main cost to the shopper of overpaying is that his budget for other consumption is now smaller. However, that other consumption in all likelihood will happen hours, days, or months after the comb decision. So, arguably, the rational consumer should discount the value of making a "correct," tax-informed consumption decision to account for the fact that it arrives much later than the cost of computing the tax.

On the other hand, studies of consumer behavior suggest strongly that individuals respond to cognitively complex pricing in ways that are difficult to explain as having been rationally chosen.[104] For example, there are very large gaps in the price of credit between those who receive the best and worst rates, even controlling for credit risk and similar factors.[105] Under a rational model, that would imply that the disutility of thinking about finances is on the order of thousands of dollars for many of the disadvantaged borrowers, which seems an implausibly large figure.[106]

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102. Chetty et al., *supra* note 10, at 41–42. This is also the approach taken, albeit with less detail, by Lohmann & Weiss, *supra* note 17, at 609.

103. *See* Bolton & Faure-Grimaud, *supra* note 12, at 3–4 (explaining significance of time discounting for costly decision making models).

104. *See* B. Douglas Bernheim & Antonio Rangel, *Behavioral Public Economics: Welfare and Policy Analysis with Non-Standard Decision Makers*, *in* BEHAVIORAL ECONOMICS AND ITS APPLICATIONS 7, 28 (Peter Diamond & Hannu Vartiainen eds., 2007); Kahneman, *supra* note 13, at 1468–69; DellaVigna, *supra* note 13, at 19; Morwitz et al., *supra* note 47, at 11–13.

105. Paul S. Calem & Loretta J. Mester, *Consumer Behavior and the Stickiness of Credit-Card Interest Rates*, 85 AM. ECON. REV. 1327, 1327 (1995); David Laibson et al., *A Debt Puzzle*, *in* KNOWLEDGE, INFORMATION, AND EXPECTATIONS IN MODERN MACROECONOMICS: IN HONOR OF EDMUND S. PHELPS 228, 228–29 (Phillippe Aghion et al. eds., 2003); Sumit Agarwal et al., The Age of Reason: Financial Decisions Over the Lifecycle 38 (Feb. 11, 2008) (unpublished manuscript, *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=973790); *see also* sources cited supra note 57.

106. *See* James H. Carr & Lopa Kolluri, *Predatory Lending: An Overview*, *in* FANNIE MAE

Alternatively, as some behavioral economists have posited, these results make sense if the borrowers have extremely high discount rates—that is, they value current gains and losses much, much more than those even in the near future.[107] Indeed, there is now extensive evidence that most people are disproportionately sensitive to small, immediate costs; that is one of the reasons we procrastinate even essential tasks.[108] There is considerable debate among economists and others whether we should view these behaviors as irrational in the sense that they do not maximize subjective welfare.[109] For my purposes here, it is not hugely important whether these kinds of irrational decisions reduce subjective welfare; the point is that the taxpayer's response to a hidden tax may not be the result of considered reflection at the time of her decision, and may instead be difficult for her to control.[110]

There are a variety of mental processes that might cause individuals unintentionally to ignore a tax. Most simply, taxpayers may know the tax rate but lack the computational skills to compute its effects.[111] Or, as with the credit card story, they may be "hyperbolic" discounters who place little value on future events, so that the current mental effort of computing tax

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FOUNDATION, FINANCIAL SERVICES IN DISTRESSED COMMUNITIES: ISSUES AND ANSWERS 31, 37 (2001) (reporting that individuals who could qualify for lower-cost loans took out subprime loans at high rates); DellaVigna, *supra* note 13, at 19 (estimating that cost of biased choice of investment was approximately $6,000); *id.* at 30–31 (noting that fact that information individuals overlooked was available for nothing make "a rational interpretation of the findings less plausible"); Agarwal et al., *supra* note 105, at 38.

107. GEORGE AINSLIE, PICOECONOMICS: THE STRATEGIC INTERACTION OF SUCCESSIVE MOTIVATIONAL STATES WITHIN THE PERSON Ch.3 (1992); Gregory Berns et al., *Intertemporal Choice—Toward an Integrative Framework*, 11 TRENDS COG. SCI. 482, 483 (2007); Jonathan Gruber & Sendhil Mullainathan, *Do Cigarette Taxes Make Smokers Happier*, 5 ADVANCES IN ECON. ANAL. & POL'Y 1, 2 (2005).

108. George A. Akerloff, *Procrastination and Obedience*, 81 AM. ECON. REV. 1, 1–19 (1991); David A. Laibson, *Golden Eggs and Hyperbolic Discounting*, 112 Q. J. ECON. 443, 443–77 (1997); DellaVigna, *supra* note 13, at 9; *see also* Carl A. Kogut, *Consumer Search Behavior and Sunk Costs*, 14 J. ECON. BEHAV. & ORG. 381, 381 (1990) (stating that consumers appear overly sensitive to costs of conducting search for right choice).

109. *See* Bernheim & Rangel, *supra* note 104, at 8–9; Bernheim & Rangel, *supra* note 95, at 1–2; *compare* Richard Epstein, *The Neoclassical Economics of Consumer Contracts*, 92 MINN. L. REV. 803, 823–31 (2008) *with* Oren Bar-Gill, *The Behavioral Economics of Consumer Contracts*, 92 MINN. L. REV. 749, 763 (2008). My own view is that while these behaviors may be "rational" in the sense that they reflect consumers' short-term expressed preferences, from the middle- or long-term perspective they reduce overall welfare.

110. Of course, since my overall inquiry here is whether hidden taxes can increase social welfare, it does matter whether unintentional tax decisions reduce the subjective welfare of the taxpayer. But, as I argue *supra* text accompanying notes 86–101, any diminution in welfare the taxpayer suffers as a result of a "wrong" purchase decision is likely to be relatively small compared to other social welfare gains that result.

111. Bernheim & Rangel, *supra* note 104, at 25; Kahneman, *supra* note 13, at 1453, 1459, 1464; Read et al., *supra* note 96, at 187; Agarwal et al., *supra* note 105, at 39.

looms much larger in their decision than the later benefit of paying a lower price.[112] The framing of a hidden tax may make it seem smaller.[113] Alternatively, people may keep separate "mental accounts" of retail prices and taxes, as in the McCaffery and Baron studies, and therefore struggle to integrate the two when they have to make a purchase decision.[114] Finally, taxpayers may form their decision to buy based on the first price they see, perhaps in order to avoid internal conflict with their desire to make a purchase.[115] What these scenarios have in common is that in all of them it makes little difference whether the expected utility of avoiding the tax exceeds the disutility of calculating it.

There is no clear-cut evidence to establish either of these models as more prevalent than the other. Again, there is some limited real-world evidence that irrational behaviors persist regardless of the financial stakes in some non-tax situations.[116] Laboratory studies are probably of limited use, because the stakes are generally too low to induce rationally ignorant participants to exert effort. For example, some marketing laboratory studies have found that participants whose test performances indicated that they found cognition less effortful also were better at spotting hidden fees.[117] Others find the opposite.[118]

Whether the intentional or unintentional model better depicts taxpayer behavior is central to many important questions about hidden taxes. Most crucially, the rational model likely implies that hidden taxes cannot be a major component of government budgets. Unless taxpayers place an extremely high premium on avoiding tax calculations, any large tax savings will motivate the rational taxpayer to haul out their calculator or

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112. *See* Berns et al., *supra* note 107, at 482–83; Shane Frederick et al., *Time Discounting and Time Preference: A Critical Review*, 40 J. ECON. LIT. 351, 352–401 (2002); DellaVigna, *supra* note 13, at 3–5.

113. *See* Krishna & Slemrod, *supra* note 48, at 190–91; McCaffery & Baron, *supra* note 7, at 290; Morwitz et al., *supra* note 47, at 15–16 (noting studies in which consumers were less responsive to surcharges they had to remember, to surcharges listed in percentages, and to surcharges shown in a small font).

114. McCaffery & Baron, *supra* note 7, at 290–91; *see* Kahneman, *supra* note 13, at 1459.

115. Juan D. Carrillo & Thomas Mariotti, *Strategic Ignorance as a Self-Disciplining Device*, 67 REV. ECON. STUD. 529, 529, 531, 541 (2000); Morwitz et al., *supra* note 47, at 30–31 (suggesting that consumers "anchor" on base price as explanation for why they ignore even fees that are stated right next to the base price); *see also* Kahneman, *supra* note 13, at 1469 (arguing that individuals may prefer to invest effort in bolstering their wrong decision rather than analyzing it).

116. *See supra* note 106.

117. Amar Cheema, *Surcharges and Seller Reput*ation, 35 J. CONSUMER RESEARCH 167, 173 (2008). Note that the fact that participants find cognition effortful does not mean that they are unskilled at reasoning, and vice-versa. So these studies probably suggest little about the unintentional model.

118. Morwitz et al., *supra* note 47, at 20–22.

call their accountant.[119] This suggests in turn that hidden taxes would not be a solution to the dilemma of progressive taxation. By definition, progressive taxes impose large burdens on high-earners, and under a rational model hidden taxes do not change behavior when the stakes are large. Which model is accurate also informs other crucial questions about hidden taxes, as I will now attempt to show.

III. ARE HIDDEN TAXES REALLY HIDDEN?

To this point we have a provisional theory that hidden taxes may overall increase social welfare. Although the most basic story for why hidden taxes reduce deadweight losses is straightforward, there are at least two important potential complications. First, even if taxpayers sometimes fail to notice taxes at the point of sale, it remains possible that hidden taxes will not overall have any significant effect on the net burden of taxation because taxpayers expect that there *will be* a hidden tax and act accordingly. In addition, taxpayers may quickly learn to recognize hidden taxes, so that any efficiency gains would be short-lived.

A. Do Taxpayers Anticipate Hidden Taxes?

If taxpayers anticipate that the government will have a later opportunity to impose unnoticed taxes, the taxpayers may behave as if tax is imposed, regardless of whether they can identify the subsequent tax.[120] Indeed, we can extend this analysis to the possibility that if the government can give no guarantees that it will limit the tax it imposes, and the taxpayer believes she will be unable to discern tax, she may behave as though tax is imposed even where it is not. Thus, a universe in which the taxpayer is aware of the potential for hidden taxes may be even *less* efficient than one in which all taxes are visible.

To understand this possibility it is helpful to consider the context in which hidden taxes are likely to produce different behavior than obvious taxes. Notwithstanding the startling Chetty et al. study, we should expect that where taxes form a component of price they will not likely affect short-run consumption decisions.[121] If I am willing to pay $400 for my

119. Bar-Gill, *supra* note 109, at 758; Chetty et al., *supra* note 10, at 35, 40.

120. Finkelstein, Working Paper, *supra* note 15 (manuscript at 3).

121. Justin Marion & Erich Muehlegger, *Measuring Illegal Activity and the Effects of Regulatory Innovation: Tax Evasion and the Dyeing of Untaxed Diesel*, 116 J. POL. ECON. 633, 635 n.2 (2008).

iPhone, I am probably willing to pay $400, whatever the components of the final price tag.[122]

The more plausible scenario, then, is one in which prices are hidden at the time of the relevant decision.[123] When I invest in developing my potential for future revenue—say, by obtaining a J.D. degree—I may be unaware of the effects of the AMT, payroll taxes, credit and deduction phaseouts and the like on my supposedly greater earning capabilities.[124] At the time I decide whether or not to move to Florida, I may be unaware that the combination of the state's dozens of separate sales taxes and excises may exceed the total tax burden, for me, of an income tax in Georgia. Because Georgia's tax is more salient, it has a larger effect on my decision about where to relocate. But I won't incur either state's tax until after my decision is already complete.

This latter scenario may bring to mind the literature on the competition for corporate charters. As Roberta Romano explains, states cannot induce a firm to relocate simply by offering an opportunity for superior returns, as through a corporate charter.[125] Rational firms will be aware that, once having moved, they may be subject to being held up by the state for the rents (i.e., extra profits) produced by the superior charter. Accordingly, in order to bring in new firms, the state must credibly commit not to later impose confiscatory taxes.[126]

Something of this sort may be afoot with taxpayers facing the possibility of low-salience taxes on future investment returns. If the taxpayer is aware that taxes can be hidden, but unsure if she herself is able to detect a tax on her decision, she may well act as if the decision would be subject to tax. As Finkelstein notes, the government can overcome this tendency by offering a credible commitment that the decision in fact is not taxed to the extent the taxpayer has assumed.[127] But, in the absence of such assurances, taxpayers may abstain from efficient investment even if that

122. This Article takes no position on whether shelling out 400 bucks for a telephone with some cool gadgets is rational behavior. But they are very, very cool gadgets.

123. This story is consistent with Chetty et al. if the relevant time of decision for most consumers is in the aisle, rather than at the register.

124. Relatedly, Professor Oates surveys the limited data on whether the future tax burden of existing debt is fully impounded in housing prices. Oates, *supra* note 8, at 76–77.

125. Roberta Romano, *Law as a Product: Some Pieces of the Incorporation Puzzle*, 1 J.L. ECON. & ORG. 225, 235–50 (1985). For later elaboration, see Oren Bar-Gill et al., *The Market for Corporate Law*, 162 J. INST. & THEORETICAL ECON. 134, 150 (2006); Douglas J. Cumming & Jeffrey G. MacIntosh, *The Role of Interjurisdictional Competition in Shaping Canadian Corporate Law*, 20 INT'L REV. L. & ECON. 141, 147–48 (2000).

126. Romano, *supra* note 125, at 235–36.

127. Finkelstein, Working Paper, *supra* note 15 (manuscript at 3–4).

investment in fact is not taxed, just as corporations may refuse to reincorporate in Delaware, irrespective of potential gains.

In the absence of central coordination, credible commitments may be rare. As a general rule, individual politicians cannot credibly commit not to raise taxes, because the immediate rewards of fulfilling their personal policy goals are likely to be larger than any discounted future reputational costs.[128] Further, if local officials are judged by the yardstick of the tax/service basket offered by neighbors, each jurisdiction will have incentives to hide their own taxes to appear to be a better bargain to their electorate and potential investors.[129] Political parties, which are long-term repeat players dependant on their reputations, are more believable.[130] But there is a large degree of slack between parties and their elected officials, especially between national parties and local officials.[131] If the public is aware of this slack, then at first cut we should expect taxpayers to respond anticipatorily to taxes they cannot directly perceive.

In fact, though, there are other significant problems with the anticipation story, especially if the unintentional theory of hidden taxes proves the most prevalent one. First, if taxpayers do not compute the effect of tax because the computation is beyond their cognitive ability, they probably cannot perform the computation anticipatorily, either.

Second, where taxpayers are irrational the anticipation scenario appears to assume taxpayers in a strange twilight of partial self-awareness. In order to anticipate a hidden tax that may never arise, the taxpayers must be aware of the likelihood of their own inability to accurately process tax information. At the same time, they must expect that they will not be able to in turn leverage that awareness into an effective strategy for "de-biasing," or overcoming the cognitive shortcoming.[132] Still, this may not be wildly implausible. Some data indicate that individuals may be aware both of their own self-control problems and their inability to overcome them.[133] Rather than curbing the self-indulgent behavior, the individual

128. *See* Gilat Levy, *A Model of Political Parties*, 115 J. ECON. THEORY 250, 251 (2002); *see also* Enriqueta Arigones et al., Political Reputations and Campaign Promises 3 (Jan. 10, 2007) (unpublished manuscript, *available at* http://www.ssc.upenn.edu/~apostlew/paper/pdf/APP09-2005.pdf).

129. *See* Timothy Besley & Anne Case, *Incumbent Behavior: Vote-Seeking, Tax-Setting, and Yardstick Competition*, 85 AM. ECON. REV. 25, 26 (1995). On yardstick competition generally, see Andrei Shleifer, *A Theory of Yardstick Competition*, 16 RAND J. ECON. 319, 319–27 (1985).

130. Levy, *supra* note 128, at 253, 269; *see also* Daron Acemoglu, *Why not a Political Coase Theorem? Social conflict, commitment, and Politics*, 31 J. COMP. ECON. 620, 622 (2003).

131. James M. Snyder, Jr. & Michael M. Ting, *An Informational Rationale for Political Parties*, 46 AM. J. POL. SCI. 90, 91 (2002).

132. Bar-Gill, *supra* note 109, at n.49, 779.

133. Benabou & Tirole, *supra* note 13, at 139; Read et al., *supra* note 96, at 189–90.

pre-commits to a second-best outcome in which she will not be tempted.[134] A decision not to invest, in the face of potential hidden and undiscoverable tax liability, could be a form of binding oneself to the mast. Other taxpayers, though, may never be aware that they underestimate their taxes.[135] For decisions made by these taxpayers, at least, hidden taxes should reduce deadweight losses.

Turning to intentional tax-ignorers, here again only a select few taxpayers will likely anticipate a hidden tax. Recall that consumer/taxpayers may reduce their response to an opaque tax out of a desire to avoid cognitive effort.[136] If so, and this response is simply a rational comparison of the utility of mental effort against the expected value of fully-informed consumption decisions, then a taxpayer's anticipation of the tax will do little to change the result. Either the calculation is worth the effort, or it is not. If anything, anticipation would reduce the likelihood that the taxpayer will undertake any effort, since the present discounted value of the correct consumption decision will diminish with the greater lead time between the calculation and the time of consumption and resulting budget changes.[137]

On the other hand, if it is possible to economize on future calculations with an anticipatory calculation, then of course anticipation might increase responsiveness to the tax. This is a difficult scenario for which to imagine examples, but perhaps it might describe a choice to reside in a jurisdiction with low or no sales taxes, or a selection of a business method that demands fewer rather than more purchases. In those rare cases, the taxpayer can economize on a large bundle of later calculations by making one gestalt estimate in advance.[138] However, the mental process of determining when anticipation would be worthwhile is itself costly, so that taxpayers may sometimes pass up chances to make effort-saving anticipatory calculations.[139] Thus, the degree to which taxpayers anticipate hidden taxes, and the forms of tax they anticipate, may depend on what causes the behavioral effects of hidden tax for that individual.

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134. George Ainslie & Nick Haslam, *Self-Control*, *in* CHOICE OVER TIME 187–88 (George F. Loewenstein & Jon Elster eds., 1992); Gruber & Mullainathan, *supra* note 107, at 20; DellaVigna, *supra* note 13, at 5–6. On pre-commitment strategies generally, see JON ELSTER, ODYSSEUS AND THE SIRENS 36–111 (1979).

135. *Cf.* Gruber & Mullainathan, *supra* note 107, at 20–21 (arguing that the authors' findings fit best with models in which individuals are unaware of the extent of their own self-control problems).

136. *See supra* text accompanying notes 102–10.

137. *See* Bolton & Faure-Grimaud, *supra* note 12, at 4.

138. For analysis of a similar possibility in the context of legislative decisions, see Brian Galle, *Tax Fairness*, 65 WASH. & LEE L. REV. 1323, 1366–67 (2008).

139. Bolton & Faure-Grimaud, *supra* note 12, at 5.

In any event, if we can expect any taxpayers to anticipate hidden taxes, it remains possible that they will estimate fairly small tax increases. Under this theory, taxpayers should change their behavior in response not to the current perceived tax rate, but the largest anticipated hidden tax. As I explore in the next section, we can likely expect, at most, relatively small increases in overall tax levels as a result of hidden taxes. If that is accurate, it likely will cabin, but probably not eliminate, the potential for taxpayer anticipated responses to hidden taxes. Taxpayers may still be deterred from committing to behaviors that would be subject to tax, to an extent similar to the distortions that would attend a fully visible tax. By reducing the size of the largest likely hidden tax, the constraints make it somewhat less likely that hidden taxes will significantly *magnify* distortions.

In short, there is thus far a theoretical possibility that hidden taxes can reduce deadweight losses. Taxpayer anticipation of hidden taxes would eliminate these welfare gains. But it is unclear whether any significant number of taxpayers in fact are aware of their own irrationality and are capable of acting rationally in response. Moreover, the danger of very large welfare losses from anticipated hidden taxes appears somewhat limited.

In addition, if anticipatory responses prove a major barrier to the usefulness of hidden taxes, there are policy interventions that can mitigate the anticipation problem. For example, we might require each jurisdiction to disclose its total tax burden, broken down by taxpayer demographics. This would keep individual tax instruments hidden, while setting an upper limit on the degree to which any given activity is subject to tax. The disclosure regime would also largely remove the negative externality hidden taxes impose (via yardstick comparisons) on neighboring officials, increasing the credibility of official promises not to impose such taxes.

B. Learning and De-biasing

Another possible qualification to the basic claim that hidden taxes increase welfare is the possibility that taxes might not remain hidden. Individuals who bear economic burdens as a result of their biases have an incentive to correct their misperceptions.[140] If individuals can readily de-bias themselves then any welfare gains from hidden taxes are likely to be

140. Jonathan Klick & Gregory Mitchell, *Government Regulation of Irrationality: Moral and Cognitive Hazards*, 90 MINN. L. REV. 1620, 1647–48 (2006); Libor Dušek, Do Governments Grow When They Become More Efficient? Evidence from Tax Withholding 12 (Feb. 12, 2002) (unpublished manuscript, *available at* http://www.cerge.cuni.cz/pdf/events/papers/030225_t.pdf).

fleeting. Obviously, this is a qualification that is most pertinent for the unintentional model of hidden tax.

The possibility of de-biasing rests on taxpayer access to good sources of feedback.[141] Absent some hint that their perceptions are inaccurate, biased taxpayers have no way of knowing that they are misperceiving reality. At present, we do not know how self-aware biased taxpayers are. There is, though, some limited empirical data from other related fields, which I will return to momentarily.

Of course, people can learn by word of mouth as well as through their own experiences.[142] This mechanism, too, has its problems. Peers who are not biased can be cross-subsidized by those who are; that is, the unbiased may benefit at the expense of their fellows.[143] For example, the general public may pay a lower overall rate because some subgroup disproportionately fails to avoid the tax. As a result, those who see clearly may have financial incentives to keep their knowledge to themselves.[144] And where learning depends on personal characteristics of the taxpayer, such as their own willpower, information from others may not be very useful.[145]

Even with feedback, taxpayers may misunderstand the lessons of their experience. Some signals are "noisy"—they arrive mixed together with other information.[146] Taxpayers who do not fully understand what happened to them, whether because the signal is noisy or because their own perception is faulty, may not recognize feedback or may fail to use it properly.[147] Confirmation bias, the tendency to take in new information selectively to reinforce prior decisions, in particular may be a serious obstacle to learning.[148]

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141. *See* Benabou & Tirole, *supra* note 13, at 139; Klick & Mitchell, *supra* note 140, at 1632–34; Sumit Agarwal et al., Learning in the Credit Card Market 3, 17 (Feb. 8, 2008) (unpublished manuscript, *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1091623).

142. Bernheim & Rangel, *supra* note 104, at 40; Sausgruber & Tyran, *supra* note 66, at 3.

143. *See* Agarwal et al., Age of Reason, *supra* note 105, at 37 n.29.

144. Agarwal et al., Age of Reason, *supra* note 105, at 37 n.29. This dynamic points up one problem with some of the laboratory studies. For instance, in Sausgruber & Tyran, *supra* note 66, at 3, the authors find that group deliberation sometimes improves participants' ability to spot a hidden tax. But, unlike the real world, participants in the study did not have any way to benefit from the fact that they were better at spotting taxes than their fellows. *E.g.*, *id.* at 6 (noting that participants were told that tax revenues were not returned to them or anyone else in study).

145. Bar-Gill, *supra* note 55, at 8–9.

146. Klick & Mitchell, *supra* note 140, at 1633; DellaVigna, *supra* note 13, at 50–51; *see* Jennifer L. Romich, *Difficult Calculations: Low-Income Workers and Marginal Tax Rates*, 80 SOC. SERV. REV. 27, 52 (2006) (setting out factors that make learning difficult for low-income workers, such as multiple overlapping phaseouts and highly individualized rules determining them).

147. Sausgruber & Tyran, *supra* note 66, at 3.

148. Jeffrey R. Kling et al., Misperception in Choosing Medicare Drug Plans 18 (Aug. 25, 2008)

Taxpayers who lack feedback cues can potentially also be de-biased by others, such as policy entrepreneurs. Political rivals of the incumbent tax-setters may reveal hidden taxes in order to activate opposition to the existing distribution of tax burdens.[149] On the other hand, in commercial settings, competitors have sometimes chosen not to de-bias their rivals' clienteles.[150] Rivals may prefer not to de-bias in order to maintain their own opportunities for extracting rents from the biased consumer.[151] Conceivably, this same dynamic could be true in the political market.[152] Additionally, to the extent that de-biasing does create market opportunities for competitors, it likely creates those same opportunities for all competitors, giving rise to a free-rider problem.[153] In that instance, there is no market actor with an incentive to provide consumers with more accurate information about the costs and benefits of their consumption choices.

This free-rider story may be somewhat less true of political actors. As with voter ignorance more generally, taxpayer biases create opportunities for political entrepreneurs to supply information to the voter in exchange for political rewards.[154] Free rider effects at times will be diminished in the political context because of the limited space for competition.[155] For instance, if I am running to oust an incumbent governor, I may well wish to reveal to the public the full extent of their tax burden. There will be

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(unpublished manuscript, on file with the Washington University Law Review) (stating that elderly medicare recipients tended not to switch from suboptimal plans, partly due to confirmation bias).

149. *See* Donald Wittman, *Why Democracies Produce Efficient Results*, 97 J. POL. ECON. 1395, 1400 (1989). Thus, in the likely event that hidden taxes are not perfectly distributed throughout the population (about which more in Part IV), entrepreneurs may opportunistically de-bias even in the event that hidden taxes do not change the overall tax level.

150. Xavier Gabaix & David Laibson, *Shrouded Attributes, Consumer Myopia, and Information Suppression in Competitive Markets*, 121 Q. J. ECON. 505, 506–07 (2006).

151. *See id.* at 508–09 & n.9, 519–20; Jon D. Hanson & Douglas A. Kysar, *Taking Behavioralism Seriously: A Response to Market Manipulation*, 6 ROGER WILLIAMS U. L. REV. 259, 336–37 (2001) (noting that a manufacturer that educates consumers about safety features of rival products can also reduce demand for its own).

152. Brian Galle, *Federal Fairness to State Taxpayers: Irrationality, Unfunded Mandates, and the "SALT" Deduction*, 106 MICH. L. REV. 805, 820–21 (2008). *But see* Stephen Coate & Stephen Morris, *On the Form of Transfers to Special Interests*, 103 J. POL. ECON. 1210, 1212 (1995) (arguing that voters cannot be persistently fooled). Note that in order for hidden taxes to persist, they need not fool the *same* people over time; all that is needed is for new taxpayers to encounter and fail to recognize the hidden tax.

153. Howard Beales, Richard Craswell & Steven C. Salop, *The Efficient Regulation of Consumer Information*, 24 J.L. & ECON. 491, 527 (1981); Gabaix & Laibson, *supra* note 150, at 525–27; Bar-Gill, *supra* note 55, at 10. For some qualifications to the free-rider story, see Richard A. Epstein, *Behavioral Economics: Human Error and Market Corrections*, 73 U. CHI. L. REV. 111, 120 (2006).

154. *See* Coate & Morris, *supra* note 152, at 1230; Wittman, *supra* note 149, at 1400.

155. *Cf.* Gabaix & Laibson, *supra* note 150, at 527 ("[S]hrouding is more pervasive when the market is less competitive.").

relatively few other politicians (assuming, as is almost universally true in the United States, that there is no serious third-party candidate) who can benefit in the near term from that disclosure to nearly the degree I would, so there is no one upon whose efforts I can free ride. Even where there is potential for free riding, being among the first to reveal information about hidden taxes might be valuable as a form of branding, in much the same way that being seen as an "innovator" might be a spur to local officials to be first movers even in the presence of large beneficial spillovers.[156]

Entrepreneurs do, however, face a credibility problem. False claims about hidden taxes are so difficult to discern that entrepreneurs cannot credibly commit to telling the truth.[157] This is likely the case under both the intentional- and unintentional-tax-ignorer theories of hidden taxes. Unintentional taxpayers by definition lack the ability to verify the entrepreneurs' claims. If they are aware of their shortcomings, they will distrust claims by would-be entrepreneurs. Rational taxpayers, too, will not engage in the effort to verify entrepreneurs' claims, because, also by definition, it is not worth the necessary mental effort to do so. And both groups will be subject to the usual free-rider problems of public choice theory.[158]

Of course, not all voters will themselves recognize this dynamic. But even those who do not will typically be confronted with conflicting claims from entrepreneurs and their political targets.[159] The taxpayers' inability to recognize which denials are true will greatly diminish the effectiveness of any efforts at de-biasing.

In sum, this is yet another theoretical point with no clear conclusion, and room for important empirical work. The evidence so far, in studies of other forms of consumer behavior, implies a fair bit of learning among consumers; although learning is slow, often forgotten, and eventually

156. Susan Rose-Ackerman, *Risk Taking & Reelection: Does Federalism Promote Innovation?*, 9 J. LEGAL STUD. 593, 614 (1980). For some qualifications to the reputational story, see Brian Galle & Joseph Leahy, *Laboratories of Democracy? Policy Innovation in Decentralized Governments*, 57 EMORY L.J. 1333, 1346–98 (2009).

157. Coate & Morris, *supra* note 152, at 1230. That is, voters may simply refuse to credit politicians who in effect must ask, "Who you gonna believe? Me, or your own eyes?" DUCK SOUP (Paramount Pictures 1933).

158. In brief, the theory is that there is a free rider effect among voters, which diminishes as the affected group shrinks, information becomes more readily available, and the size of the effect of a given policy on the relevant group increases. MANCUR OLSON, THE LOGIC OF COLLECTIVE ACTION: PUBLIC GOODS AND THE THEORY OF GROUPS 21–2, 31, 35 (1971). Thus, voters who stand to gain a large benefit at the expense of a small, hidden, widely dispersed cost to other voters are likely to prevail, as they will be very active lobbyists while the victims of the policy will be indifferent. *Id.*

159. That is, in all likelihood politicians accused of imposing hidden taxes will deny it.

swamped by the cognitive effects of aging.[160] For example, Agarwal et al. report that consumers learn well in the short term, forget the lessons of the recent past in the medium term, but over the long term cumulatively do manage to lower their costs of borrowing.[161] In a separate study, they find that, controlling for income, individual fixed effects, and the like, the average price consumers pay for credit is U-shaped over an age distribution.[162] That is, young and old pay more for similar credit products than those who are middle-aged. They argue that this pattern can be explained by a combination of learning over a lifetime and declining cognitive powers, producing a peak point in middle age.[163] Whether these results translate to the tax field remains an open question.

On the whole, it appears as though the basic story of efficient hidden taxes holds up reasonably well. The contours of the story do vary considerably depending on the rationality or irrationality of taxpayers. But tax-anticipatory behavior seems somewhat limited, and there are both theoretical and empirical bases for concluding that a fair segment of the taxpaying public will neglect the effects of hidden taxes.

IV. POTENTIAL WELFARE LOSSES FROM HIDDEN TAXATION

While low-salience taxes have the potential to diminish deadweight losses, there are also several possible countervailing effects. I have already mentioned that, as the literature has recognized, hidden taxes can cause consumers to misallocate their budgets, resulting in welfare losses.[164] In this Part, I add two additional sources of potential welfare losses. First, because government policy is not set by unanimous consent, distortions in the decisions of the outcome-determining voters can reduce welfare for everyone. Or, put in a more familiar way, where taxes are hidden,

160. James J. Choi et al., *Reinforcement Learning and Savings Behavior* 4 (Yale Int'l Ctr. For Fin., Working Paper No. 09-01, 2007), *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1014655; Agarwal et al., Age of Reason, *supra* note 105, at 2, 27; Agarwal et al., *supra* note 141, at 2–3, 17; *see also* Morwitz et al., *supra* note 47, at 9 (discussing growing consumer awareness of hidden fees). In several studies of consumer response to shipping fees, more experienced customers performed no better than beginners at spotting hidden fees. Cheema, *supra* note 117; Clark & Ward, *supra* note 49.

161. Agarwal et al., *supra* note 141, at 3.

162. Agarwal et al., Age of Reason, *supra* note 105, at 2; *see also* Gabaix & Laibson, *supra* note 150, at 522–23.

163. Agarwal et al., Age of Reason, *supra* note 105, at 27–29. Alternatively, they mention in passing that their results may be at least partly driven by access to advice from an individual's social network. *Id.* at 29 n.22. Which story proves right does not seem to be important to the hidden tax results.

164. *See supra* text accompanying notes 92–96.

government may be larger than optimal. Second, this paper adds to the literature by considering possible welfare effects of the incidence of hidden taxes. If hidden taxes are mostly paid by the poor, they will likely reduce overall social welfare; I argue here that whether that is true turns on the cognitive mechanisms that drive hidden taxation.

A. Too Much Government?

So far we have assumed that hidden taxes do not affect the total tax revenues taken in by government. It has long been argued, though, that where taxes are less salient, political opposition to self-serving tax increases by government officials will also decline, leading to over-provision of government.[165] This argument is quite similar to the Chetty et al. claim about distortions in consumer choice: here, the distortion is in the voter's choice of how much government expenditure to consume. The difference is that it is not only the individual consumer who is affected by excess government, but also everyone who pays taxes. Moreover, if government power to tax is limited by competition with other governments, then excess taxation in one jurisdiction or tier of government may lead to over-taxation in others.[166] In short, in the special case of consumption of government services, the individual's failure to observe a tax creates a possible negative externality for others.[167] There are a number of uncertainties behind this hypothesis, however.

First, the externality argument assumes that the decision by one person to consume a certain amount of government services affects the amount of services others receive. This is a plausible assumption in many cases for government provision of public goods in democracies. For example, a common model of how governments determine the amount of government goods to provide is that they attempt to match the preferences of the median voter, the voter exactly in the middle of the range of all voter preferences.[168]

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165. *See supra* note 7.

166. *See* Michael J. Keen & Christos Kotsogiannis, *Does Federalism Lead to Excessively High Tax Rates?*, 92 AM. ECON. REV. 363, 364–65 (2002).

167. Thus, we should predict that intentional tax-ignorers will ignore taxes where it would maximize social welfare for them to pay attention. Similarly, unintentional tax-ignorers will under-invest (from a societal perspective) in de-biasing efforts.

168. For a general discussion and a review of the empirical evidence supporting the median voter theory, see Roger D. Congleton, *The Median Voter Model*, *in* 2 THE ENCYCLOPEDIA OF PUBLIC CHOICE 382, 382–86 (Charles K. Rowley & Friedrich Schneider eds., 2004).

Yet median voter theory is ambiguous as to whether a change in salience will alter tax levels. Imagine that voters are aligned left to right in order of increasing preference for tax. Lower salience will tend to shift voters to the left. However, if these shifts do not move any voters across the unbiased median—for instance, if everyone who is biased is to the left or far to the right of the median—then there will be no change in the expressed preferences for the size of government.

Alternatives to the median voter model are also theoretically indeterminate on the effect of hidden taxes. Buchanan argues, famously, that under so-called "public choice" assumptions, in which intensity of voter interest matters to the political outcome, lower tax salience will increase tax rates.[169] He claims that diminished visibility of taxes will increase the likelihood that individual taxpayers will free-ride on the efforts of others to oppose any tax increase.[170]

But this analysis overlooks two key points. For one, Buchanan appears to assume that voters will be unaware that taxes are hidden from others. If a rational voter predicts that others will not act because they do not notice the tax, that rational voter will conclude she cannot free ride on the efforts of the ignorant others and thus will be more motivated to act herself. Thus, if taxes are hidden from some but less than all of the population, political opposition might actually rise.[171]

Secondly, Buchanan takes for granted that hidden taxes will only deactivate tax opponents. Some voters, though, might prefer higher

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169. Buchanan, *supra* note 59, at 135.

170. *Id.*; *see also* BRENNAN & BUCHANAN, *supra* note 17, at 24–32 (making this argument about voter ignorance of taxes more generally).

171. It might be argued in response that in a repeated lobbying game, taxpayers will still not lobby. The idea is that if I lobby, you will be able to observe my lobbying behavior, and therefore learn that there are hidden taxes. We then will be back in a world where taxes are not hidden, and neither of us lobbies. Anticipating this, I do not lobby.

The game plays out differently, however, if (as seems likely) it is possible for me to hide my lobbying activity from you. In that case, my best strategy is both to lobby and to hide my lobbying. The reason is that, if we cannot observe one another's mental states, you may think that taxes are hidden from me. If you do not see me lobby, you, too, might lobby. Hiding my lobbying from you therefore increases the chances you will provide me with additional lobbying against an unwanted tax. However, since there is only a possibility that you will lobby, I still must exert some lobbying effort myself.

Another possible objection to my lobbying analysis in the main text is that those who do lobby may do so only for their own benefit. Thus, special interests from whom taxes are not hidden might lobby simply for carve-outs for themselves, shifting the tax burden to those from whom tax is hidden. (I am grateful to Tom Griffith for making this point). This strikes me as entirely plausible. A possible solution, though, would be to make special-purpose carveouts more difficult, as by requiring them to be enacted through very clear statutory language. *See* Brian Galle, *Interpretative Theory and Tax Shelter Regulation*, 26 VA. TAX REV. 357, 381–85 (2006). In that way, any special-interest lobbying would be more likely to benefit the population as a whole.

taxes—for example, those who know that they themselves will pay little. Hiding taxes from these voters will diminish public support for these kinds of redistributions, thereby reducing tax levels.

A second set of uncertainties is centered around the possibility that lower tax salience may interfere with some of the mechanisms thought to constrain government opportunities to impose higher taxes. Under the so-called "Leviathan" theories of government tax-setting, competition between governments for mobile citizens limits the rate at which government officials can self-interestedly expand the tax base.[172] Evidently the assumption is that at least some citizens who individually lack the power to exercise their political voice in opposition to a tax may nonetheless be alert enough to their fiscal situation to exit an undesirable regime.[173] A low-salience tax would arguably diminish the efficacy of this exit constraint, either by further reducing the degree to which taxpayers became aware of their own jurisdiction's high taxes, or increasing the likelihood that they would unwittingly relocate to another jurisdiction that itself had high, hidden taxes. On the other hand, hidden taxes might diminish the rewards, if any, for a jurisdiction that sought to attract those that preferred higher taxes. Similarly, if voters determine the appropriate size of their own government by reference to "yardsticks" in other jurisdictions, the prevalence of hidden taxes at home or in neighboring locales would distort accurate measurements.[174] Some, but not necessarily all, of these distortions might be in the direction of higher taxes.

Hidden taxes can potentially also interfere with tax-setting in a pure Tiebout model, under which government officials are not necessarily self-interested.[175] Rather, the officials simply are the first-movers in a Lindahl-like tax-setting mechanism, with officials in each jurisdiction offering a basket of goods and services, and in which taxpayers reveal their

172. BRENNAN & BUCHANAN, *supra* note 17, at 203–12. For overviews of the literature, see John Douglas Wilson, *Theories of Tax Competition*, 52 NAT'L TAX J. 269, 291, 296–98 (1999); Jeffery S. Zax, *Is There a Leviathan in Your Neighborhood?*, 79 AM. ECON. REV. 560, 560–67 (1989).

173. *See* BRENNAN & BUCHANAN, *supra* note 17, at 206–07 (assuming that taxpayers can exit regime in response to tax). One argument offered in defense of this assumption is that free-riding is more pervasive for "voice" than for "exit." *See* Ilya Somin, *Foot Voting, Political Ignorance, and Constitutional Design*, 28 SOC. PHIL. & POL'Y (forthcoming 2011) (manuscript at 11–15, on file with the Washington University Law Review). That is, voting or otherwise participating in local government produces externalities for others, leading to free riding. A migrant who learns negative information about her government, on the other hand, can act on that information by moving to a new jurisdiction, thereby capturing for herself most of the gains from that information. *Id.* If, however, out-migration is an important source of information to those who remain or might follow, there is still a large positive externality even for exit.

174. On yardstick competition generally, see Besley & Case, *supra* note 129, at 26.

175. *See supra* note 16.

preferences by selecting their most preferred basket.[176] As I have argued elsewhere, hidden taxes, taken in combination with other frictions on relocation, can create complex interactions with the Tiebout mechanism.[177] In general, it is likely that taxpayers will end up in a jurisdiction that fails to match their preferences. It is entirely possible that in some cases this distortion may be in the direction of too little government rather than too much government.

Adding to these uncertainties is that it can be argued in response to the Leviathan, yardstick, and Tiebout points that government services, too, can have low salience.[178] Certainly the variety of benefits individuals receive from government is broken up into hundreds of different programs. There is experimental evidence that the disaggregation bias also results in undervaluation of government benefits.[179] Thus, perhaps the low salience of some taxes in effect restores, rather than itself breaking, the politics of tax setting.[180]

Whatever the reality of these possibilities, there may be still yet other limits on the size of government that could mitigate any externality from hidden taxes. If voters vote based on their overall welfare, and hidden taxes permit taxation at a level higher than the voters would otherwise have preferred, then even if they do not observe tax levels directly they may still punish officials for diminishing their basket of private goods. There is mixed evidence, though, about whether voters in fact engage in this form of "retrospective" voting.[181]

Finally, even if hidden taxes do pose a danger of a government sector that is too large, or otherwise inefficiently allocated, that danger can be mitigated by other policy tools. Again, detailed disclosure of the total tax burden could improve inter-jurisdictional competition; certainly it would reduce the danger that voters will not be aware of the cost of their basket of government services.[182] States might also adopt fairly stringent

176. MUSGRAVE & MUSGRAVE, *supra* note 5, at 446–56.

177. Galle, *supra* note 152, at 824–30.

178. MUSGRAVE & MUSGRAVE, *supra* note 5, at 100.

179. McCaffery & Baron, Political Psychology, *supra* note 62, at 1768–72.

180. *See* MUSGRAVE & MUSGRAVE, *supra* note 5, at 100 (making this point about "fiscal illusion" more generally).

181. *See* Alberto Alesina & Alex Cukierman, *The Politics of Ambiguity*, 105 Q. J. ECON. 829, 842 (1990); Guido Suurmond et al., *On the Bad Reputation of Reputational Concerns*, 88 J. PUB. ECON. 2817, 2830 (2004); *see generally* R. MICHAEL ALVAREZ, INFORMATION AND ELECTIONS (1998) (surveying theories of how voters collect and apply information about candidates); MORRIS P. FIORINA, RETROSPECTIVE VOTING IN AMERICAN NATIONAL ELECTIONS (1981) (same).

182. Admittedly, there is substantial room for gamesmanship in any such disclosure. Officials could shift taxes to other forms, such as user fees or regulatory burdens, in an effort to evade identifying them. The best that one can say at this stage is that effective implementation would likely

balanced-budget requirements, super-majority rules for new taxes, or the like. If these tools prove ineffective, we might employ hidden taxes only at the federal level. By most accounts, the various tax competition methods are rather less significant at the national scale, because the costs of exit, at least for individuals, are too large.[183] Using only national-level hidden taxes would thus avoid a number of the allocational distortions I have mentioned.

B. Empirics on Size of Government

Given the confusing state of our theoretical predictions about the effect of hidden taxes on the size of government expenditures, it would be helpful to have good empirical data on the question. Unfortunately, the literature on whether the saliency of taxation affects the size of government is inconclusive.

In his comprehensive 1988 survey, Oates found that "the existing empirical literature has not as yet made a persuasive case for the[] existence" of what he called "fiscal illusion—the notion that the systematic misperception of key fiscal parameters may significantly distort fiscal choices by the electorate."[184] Oates noted that some studies had found that more "complex" tax systems were correlated with high tax burdens.[185] But he argued that the causation might run in the opposite direction from that suggested by fiscal illusion. Preferences for high taxes produced complex tax structures, he said, because each jurisdiction competes with its neighbors, so that high sales or property taxes would drive away consumers or home-buyers, respectively.[186] Thus, to obtain large revenues, a local jurisdiction necessarily had to have a complex, many-pronged financing system. One could extend Oates's argument further, by noting that low marginal rates on many sources are more efficient than a single, high rate on one source.[187] These alternative explanations thus far confound efforts to show any relation between voter confusion over complex tax schemes and high taxes. And other empirical

require a vigilant, neutral third party. That is not, in my view, the same as saying that there will be no effective implementation.

183. *E.g.*, WALLACE E. OATES, FISCAL FEDERALISM 8 (1972).

184. Oates, *supra* note 8, at 65–66.

185. *Id*. at 69–70.

186. *Id.* at 70–71.

187. *Cf*. Chris William Sanchirico, *Deconstructing the New Efficiency Rationale*, 86 CORNELL L. REV. 1003, 1006–1011 (2001) (making this point in support of argument for using non-tax redistributive tools).

efforts, Oates reported, were simply too mixed to draw strong conclusions.[188]

Dollery and Worthington, too, after surveying the literature find no convincing connection between the visibility of a public finance system and the size of government.[189] A common theme they report is the difficulty of specifying an accurate measure of tax salience. For example, both the complexity of the revenue system and the ease with which revenues can be increased without rate hikes ("revenue-elasticity") have eluded easy measurement.[190] And they conclude that the so-called "renter illusion," in which property taxes are higher where there are more renters (putatively because renters are less attentive to the tax rate), can also be explained by rational behavior by renters.[191]

Finkelstein frames her discussion as an inquiry into whether electronic toll collection increases the size of government but in her more detailed discussion is careful to limit her claim to showing only that toll rates increased.[192] Without more complete budget information about the toll-imposing jurisdictions, we do not know whether increased toll revenue was offset with tax reductions elsewhere.

Martin and Gabay suggest a possible reason for these inconclusive results. In order for low salience to translate to higher tax rates and bigger government, they argue, citizens must fail to connect their tax burden to their vote for office.[193] Taxes that have no effect on purchases may still alter voting.[194] For example, sales taxes included in the posted price, such as U.S. gas taxes, are taken into account at purchase but may not inform voters about the extent of their tax burden. Earlier studies may have considered all hidden taxes together, confounding their results.[195] Moreover, the possibility that taxes are hidden from consumers but not voters implies that, whatever the welfare effects of taxes that are hidden politically, a tax that was hidden from consumers but not voters could be purely welfare-increasing.

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188. Oates, *supra* note 8, at 72–78.
189. Dollery & Worthington, *supra* note 12, at 293–94.
190. *Id.* at 270, 277.
191. *Id.* at 287–89.
192. Finkelstein, *supra* note 9, at 36.
193. Martin & Gabay, *supra* note 8, at 4–5.
194. *Id.* at 5; *see also* Finkelstein, *supra* note 9, at 5 (making same point).
195. Martin & Gabay, *supra* note 8, at 6–7. However, a major problem with Martin & Gabay's own findings on the connection between government size and visibility, *id*. at 13, is that they appear not to control for the regressivity of the tax. It seems a fair bet that highly regressive taxes would be highly unpopular with the general public, as suggested by their own anecdote about British efforts to impose a poll tax, *id*. at 3.

In short, there is presently no conclusive evidence to suggest that hidden taxes in fact increase the size of government. However, that is not to say that this possibility has been disproven, either.

C. Distributional Questions

A second major welfare question involves the likely distribution of the burden of hidden taxation. Increasing the difficulty of identifying the burden of a tax may shift its incidence, if different taxpayers differ in their willingness or ability to identify the tax. For instance, if the likelihood that a consumer will pay sales taxes rather than shift to a consumption decision that is not taxed correlates with lower income, then imposing hidden sales tax will result in a more regressive tax structure. This is similar to the possibility that cross-subsidization between purchasers of bundled consumer goods has distributive consequences.[196] In addition to the obvious fairness implications these shifts in incidence raise, in the presence of the declining marginal utility of money they may also have welfare effects. In other words, if hidden taxes shift the tax burden to the wealthy, that shift may increase welfare, or vice-versa.

Again, though, there are gaping holes in our current information about the incidence of hidden taxes. First, we do not know for certain whether the behavior effects of hiding taxes are largely intentional or unintentional. Neither do we know, if taxpayers are acting mostly unintentionally, how taxpayers might adapt to their own shortcomings. Both questions are important to the distributive inquiry. Indeed, the distributional results would seem completely different depending on the answers.

1. Distribution in a Rational Loafing Model

Consider on one hand the distributive implications of the theory that taxpayers rationally decide not to incur the cognitive costs of computing their likely tax. Once more, the central premise of that claim is that the taxpayer expects to come out ahead in terms of her well-being, on the assumption that the disutility of having to compute her tax is larger than the subjective present discounted value of the tax.[197] This equation implies two possible reasons that hidden taxes might actually bear more heavily on higher-income or wealthier taxpayers, respectively.

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196. Bar-Gill, *supra* note 55, at 38.
197. *See supra* text accompanying notes 102–10.

For one, higher-income taxpayers by definition have higher opportunity costs. Time, after all, is money.[198] In the abstract all of the time a higher-income taxpayer devotes to non-income-producing activity, such as pondering her tax, is time she doesn't spend earning money. Since her time is worth more, she is more reluctant to spend it thinking about her taxes, so she pays more in hidden tax. Except in the case of major life decisions, though, this probably is a minor consideration; most tax computations would take such a tiny amount of time that the value of that time is largely irrelevant.

Second, the fact that taxes make less of an impact on the budgets of wealthier taxpayers should affect their decision whether or not to compute the tax. Assume for the moment that the disutility of engaging in the computation is either identical for all taxpayers or, as I sketched in the last paragraph, larger for those with higher incomes. We will engage in a calculation where the expected value of doing the numbers—the tax savings—is larger than the disutility of the calculation. When we translate the tax savings from dollars into utility, the diminishing marginal value of additional dollars will tend to shrink the welfare benefits of loafing for the wealthy. More plainly, to a millionaire, ten dollars in sales tax is not worth the effort of thinking hard, but if that ten dollars is the difference between buying our meds or not, we will think long and hard.

Cutting somewhat against this second point is the possibility of differential time discounting. Recall that there is a time-discounting factor that we have to apply to the tax savings on the right-hand side of our equation. While we have to do our computation now, we get to enjoy the money we save later. If we depart somewhat from the purely rational model to note, as empirics suggest, that low-income taxpayers may have *irrationally* high discount rates, then this time-discounting may have distributive effects.[199] Higher-wealth individuals would have a lower discount rate, value their future tax savings more, and therefore engage in less loafing.[200] As the time between the computation and the tax savings

198. *See* Bar-Gill, *supra* note 55, at 40 (noting that opportunity cost of time is higher for "wealthier" consumers).

199. On the greater patience of the wealthy, see Gary S. Becker and Casey B. Mulligan, *The Endogenous Determination of Time Preference*, 112 Q.J. ECON. 729, 750–51 (1997).

200. To illustrate, imagine two taxpayers, Apple and Orange. Apple has a high discount rate; the value to her at time T1 of a future T2 savings of $10 is $8. Orange has a lower discount rate; the value to her at T1 of a future T2 savings of $10 is $9. Both would experience a disutility of $1.50 from engaging in a calculation that would enable them to avoid tax and an additional disutility of $7 from switching to the less-preferred, non-taxed product. Orange engages in the calculation, buys the second-best widget, and gets a discounted present value of $9 in tax. She comes out $.50 ahead. If Apple did

increases, these effects grow in significance, although for the most part they likely will only undercut, rather than exceed, the general effects of the diminishing marginal utility of wealth.

Another regressive influence is the likelihood that the disutility of engaging in calculations diminishes as wealth increases. More precisely, it seems likely that the difficulty of carrying out mathematical operations declines with education, and education correlates with wealth.[201] Wealthier individuals may also have computational aids, such as an accountant on speed-dial, that are unavailable to those of more modest means.[202]

As with all my speculations here, it is hard to put numbers on any of these factors. However, it is plausible that, in the case where taxpayers rationally loaf on cognitive effort, hidden taxes can be more progressive, and hence increase overall welfare. Even if time-discounting and ease of computing reduce the costs of thinking about tax for the wealthy, it will remain the case that the utility value of cognitive effort will be very large for the very poor, and tiny for the very rich.

2. Distribution in an Unintentional Ignorance Model

We have a rather different set of factors to weigh in a world in which taxpayers neglect the effects of hidden taxes because at the time of the transaction they are incapable of noticing them, and not because they choose to ignore them. Here the differences between richer and poorer taxpayers are likely to arise, if at all, because of differences in learning and de-biasing.

Most obviously, wealthier taxpayers are more likely to be able to pay for help in overcoming their cognitive limitations. There is at least anecdotal evidence that accountants, financial planners, and even

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the same, she would lose by $.50, since her tax savings would be only $8, and the costs of computing and switching is $8.50. So Apple pays tax and Orange does not.

Of course, the reader who has labored through this example may well wonder at the assumption that the cost of computing the cost of computing is itself costless. The literature so far has no particularly satisfying resolution to this iterativeness problem. Xavier Gabaix et al., *Costly Information Acquisition: Experimental Analysis of a Boundedly Rational Model*, 96 AM. ECON. REV. 1043, 1043, 1055 (2006). One might hope that taxpayers will have a good gut sense of when they can loaf in a way that improves their utility; possibly they would only loaf where the calculations were obviously very hard relative to the tax savings. *Cf. id.* at 1055 ("[A] crude myopic solution . . . may be reasonable."); Bolton & Faure-Grimaud, *supra* note 12, at 5 (suggesting that decisionmakers can avoid a deliberation cost spiral by simply proceeding on their "best guess").

201. *See* Marianne Bertrand et al., *Behavioral Economics and Marketing in Aid of Decision Making Among the Poor*, 25 J. PUB. POL'Y & MARKETING 8, 13 (2006). On the connection between computational power and education, see Gabaix & Laibson, *supra* note 150, at 529.

202. Bar-Gill, *supra* note 109, at 789.

consumer services such as Consumer Reports have helped individuals to make better decisions about the ideal set of consumer purchases, notwithstanding efforts on the part of sellers to confuse them.[203] Few of these services are free. On the other hand, it probably is not worthwhile or practical to obtain counseling for small transactions, so that if hidden taxes are used only in that context there may be little distributional effect.[204] Still, education seems likely to improve taxpayers capacity to observe and compute taxes, and, again, education is strongly correlated with wealth.[205]

On the other hand, de-biasing depends on feedback.[206] Individuals must first become aware that they are making mental errors before they can begin to correct them. Arguably, higher-wealth individuals might be better positioned to obtain feedback on the effects of their decisions by virtue of repetition—they simply engage in more transactions that might be subjected to tax, and so have more opportunities for learning.

However, a given transaction might provide minimal information about tax for wealthier taxpayers because the individual is too far from her budget constraint.[207] That is, it may be that what really triggers recognition of the impact of a hidden tax for us is the sudden realization that there isn't enough money in the checking account to pay the next bill—that something, we know not what, has depleted our resources faster than we thought. Lower-wealth individuals are much closer to hitting the budget wall, this theory goes, and hence are more sensitive to hidden tax effects. This may simply be another way of saying that, because the marginal value of each taxed dollar is higher for those who have fewer of them, the feedback effect of suffering a hidden tax is larger.[208]

This hypothesis assumes, though, that there is no external source of de-biasing, such as political entrepreneurs, that might educate taxpayers about their misperceptions. Political de-biasing, if it occurs, can have a distributive valence.[209] Even if the incidence of hidden taxes is distributed evenly or progressively across the population, de-biasing efforts by politicians might be skewed towards wealthier constituencies. These groups might be smaller and more cohesive, which would tend to make

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203. *See* Epstein, *supra* note 109, at 813; Bar-Gill, *supra* note 55, at 9.

204. Bar-Gill, *supra* note 109, at 758.

205. *Cf.* Epstein, *supra* note 109, at 812 n.48 (observing that financial advice is more useful to the better educated).

206. *See supra* note 140.

207. *Cf.* DellaVigna, *supra* note 13, at 50 (noting that individuals can misinterpret feedback when its results are hard to distinguish from overlapping signals).

208. *See supra* text accompanying notes 198–99.

209. *See* Krishna & Slemrod, *supra* note 48, at 189–90.

them more politically powerful, and in any event obviously would be able to afford to pay larger political rents.[210]

Thus, it is likely under the unintentional model that hidden taxes are regressive. That obviously complicates the story in which hidden taxes are a remedy for the fairness/welfare dilemma. Again, though, we do not know for what portion of the population the unintentional model is an accurate description of taxpayer cognition. Under the rational model, hidden taxes could actually be progressive, aiding the redistributive project.

V. IMPLICATIONS

Right now hidden taxes offer mostly caveats and unknowns. In this Part, I will try to suggest why these unknowns loom as potentially critical questions of public policy. To be sure, right now this is speculative fiction. But my goal here is start arguments, not necessarily to finish them.

A. Fairness vs. Welfare

If hidden taxes do have the potential to reduce deadweight losses from taxation, they would transform the landscape of economic thinking about redistribution and tax progressivity. Existing optimal tax theory, as I noted at the outset, suggests that redistribution should be sharply limited in order to avoid changing the behavior of high-earners.[211] If hidden taxes can mitigate the behavioral response of those at the top of the bracket, tax rates can be made much more steeply progressive without concomitant welfare losses. Whether or not this is feasible on a large scale, again, turns largely on how taxpayers will respond to substantial taxes; under a rational ignorance model, gains from hidden taxes will likely be modest.[212]

Even under the unintentional model, the potential for welfare gains is complicated by several tradeoffs uncovered by my analysis here. Where taxpayers do not rationally ignore taxes, hidden taxes are likely to be regressive, because richer individuals will be better educated and can better afford unbiased tax advice.[213] Depending on the extent of this regressivity and the rate at which the marginal utility of wealth decreases, this transfer from poor to rich may outweigh the efficiency or fairness

210. *See* Elizabeth Garrett, *Harnessing Politics: The Dynamics of Offset Requirements in the Tax Legislative Process*, 65 U. CHI. L. REV. 501, 518–19 (1998).

211. *See supra* text accompanying notes 18–37.

212. *See supra* text accompanying notes 102–10.

213. *See supra* text accompanying notes 202–11.

gains of hiding an otherwise progressive tax. Thus a hidden progressive tax may need to direct additional government spending to the poor in order to achieve the preferred level of redistribution.

Another complication of the irrational model is that increasing taxpayer self-awareness about the fact that there are hidden taxes both increases and decreases welfare. Higher self-awareness increases welfare because it reduces the second-order loss to the consumer from paying too much for the taxed good.[214] If Tran Taxpayer knows that some of his budget is lost to hidden taxes, he can plan his purchases to make sure he buys his essentials before the checking account balance gets close to zero. Thus, it is more likely that the welfare gains from producer surplus and tax on each additional transaction Tran and his compatriots enter will outweigh the consumer losses, making hidden taxes more efficient. At the same time, self-awareness helps taxpayers to de-bias, which makes the taxes less hidden over time, ultimately diminishing their effectiveness.[215] Possibly this conflict could be minimized by imposing hidden taxes primarily on behaviors that are rarely repeated, such as home sales, or on taxpayers who have little time to put their lessons to use—students[216] or the elderly.[217] But that would greatly limit the universe of useful applications.

While the ultimate verdict for the fairness/efficiency tradeoff is not all rosey under the unintentional model, it also is not completely hopeless under the intentional model. This project flies in with a bit of tailwind, since under the rational model hidden taxes probably are inherently progressive.[218] As a result it might be possible to impose a large number of small taxes, each of which would then be mildly progressive. Targeting the tax to activities that correlate with wealth—an array of small luxury taxes, for example—would help a bit more.

B. National vs. Local Redistribution

Hidden taxes may also transform one of the central tenets of fiscal federalism, namely the idea that redistribution can only be carried out

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214. *See supra* text accompanying notes 92–96.

215. *See supra* text accompanying notes 140–63.

216. That is, the hidden tax would fall on students only while they were students. For example, there might be phase-outs or other complex wrinkles in tax benefits for higher education that would make a student's ultimate tax burden higher than it appears.

217. *See* Bar-Gill, *supra* note 55, at 8 n.16 ("Generally, infrequent mistakes or mistakes that generate infrequent feedback are less susceptible to correction by learning."); DellaVigna, *supra* note 13, at 50–51; *cf.* Epstein, *supra* note 109, at 811, 814 (noting that feedback is more effective for standard, repeated transactions).

218. *See supra* text accompanying notes 102–10.

efficiently by central governments.[219] Mobile taxpayers with little taste for income equality will relocate in response to efforts to impose redistributive tax, leading to a race to the bottom among jurisdictions competing for those taxpayers.[220] Hidden taxes may slow this race by concealing the effects of tax not only in the origin jurisdiction, so that potential migrants are less inclined to think of their current home as a bad deal. In addition, in a world where taxes are hidden, the costs of acquiring enough information to move to the right jurisdiction are higher, so that "locational rents" are higher.[221] Each jurisdiction, in other words, can charge a higher tax rate before it is worthwhile for individuals to flee.

Of course, taxes can also be hidden in the rival jurisdictions. Rivals, too, might look more enticing if the person choosing between them does not notice all their taxes. But that is my point, as well as the point of some of the existing "Leviathan" literature: jurisdictions might compete more vigorously to hide their tax than to reduce it.[222] The Leviathan scholars argue, though, that this dampened competition reduces welfare because it permits rent-seeking politicians to impose a tax level higher than the population would prefer.[223] I return to that argument later in this Part, but for now I will note that it also is possible that even under rent-seeking hidden taxes are second-best efficient. When tax competition between two

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219. MUSGRAVE & MUSGRAVE, *supra* note 5 at 455; Brown & Oates, *supra* note 2, at 328; William F. Fox & John A. Swain, *The Federal Role in State Taxation: A Normative Approach*, 40 NAT'L TAX J. 611, 615 (2007); Stark, *supra* note 2, at 1408–10.

220. Fox & Swain, *supra* note 219, at 614–15. If mobility is correlated with wealth, local taxation may also tend to be regressive. *Id.* at 615.

221. *Cf.* Galle, *supra* note 152, at 823 (arguing that cognitive biases increase costs of choosing correct jurisdiction). These costs are iterative. That is, a rational migrant will not incur the costs of a first move if she is aware that, after arriving at her destination, the second jurisdiction may respond by increasing taxes. Since the second jurisdiction's opportunity to raise taxes is limited mostly by the migrant's cost of exit, as exit costs rise, the risk of higher taxes in the second jurisdiction rises as well. That will, in turn, make the first move less attractive.

Locational rents are the total value a taxpayer realizes by living in her current jurisdiction rather than the next best choice. Bhajan Grewal, *Locational Surplus and its Relevance for Subnational Taxation and Inter-governmental Grants in a Federation* 166, 167–69, *in* TAXATION AND FISCAL FEDERALISM: ESSAYS IN HONOR OF RUSSELL MATTHEWS (1988). To the extent that rents measure the amount of tax the jurisdiction could extract, *see id*. at 173, they can also include the value of not having to move to another jurisdiction. *See* Saul Levmore, *Interstate Exploitation and Judicial Intervention*, 69 VA. L. REV. 563, 601–02(1983).

222. *See* MONICA PRASAD, THE POLITICS OF FREE MARKETS: THE RISE OF NEOLIBERAL ECONOMIC POLICIES IN BRITAIN, FRANCE, GERMANY, AND THE UNITED STATES 282 (2006); *see also* Fox & Swain, *supra* note 219, at 623 (arguing, albeit not in "Leviathan" context, that jurisdictions have incentives to mutually export taxes to conceal tax levels from their citizens). As I explained earlier, it will likely be difficult for one state to compete with another by pointing out the rival's hidden taxes, rather than simply hiding its own.

223. Michael Keen & Christos Kotsogiannis, *Leviathan and Capital Tax Competition in Federations*, 5 J. PUB. ECON. THEORY 177, 177 (2003).

states is fierce enough, both will be obliged to impose rates much lower than either would prefer. If hidden taxes allow officials to put higher rates in place, these higher rates could still be *lower* than the noncompetitive preference of either.[224]

It might be argued that this story is largely irrelevant for entities. Businesses, the claim would go, typically have tax advice, and so will not be subject to hidden taxes.[225] That is somewhat true under the irrational model. There are data, though, suggesting that executives even in large firms are plagued by cognitive biases in their managerial decisions.[226] Slack in the market for corporate control may allow these inefficiencies to persist even in a competitive environment.[227] Further, under the rational model, hidden taxes could still be hidden when the value of computing them is outweighed by the disutility of the computation. Presumably, the corporation will hire someone to give it tax advice. Its reserve price for that service will be whatever its managers are willing to pay to avoid having to do the computation themselves. Or, put another way, trash hauling is a lucrative business, and some trash may be too small to be worth paying someone to take it away.

C. Redistributive Instruments: Tax vs. Substantive Law

Another aspect of redistributive theory impacted by hidden taxes is the question whether legal rules directly regulating conduct should be designed with redistributive goals, or whether instead redistribution should take place solely within the tax system. Kaplow and Shavell and Weisbach argue for the latter, asserting that the welfare losses from drafting inefficient but redistributive conduct rules are larger than the welfare

224. *Cf.* Galle, *supra* note 71, at 899–900 (noting the indeterminacy of offsetting incentives for officials either to meet local preferences or exploit voter's fiscal illusions in accepting federal grants).

225. *See* On Amir & Orly Lobel, *Stumble, Predict, Nudge: How Behavioral Economics Informs Law and Policy*, 108 COLUM. L. REV. 2098, 2123 (2008); DellaVigna, *supra* note 13, at 42.

226. Mathew L.A. Hayward & Donald C. Hambrick, *Explaining the Premiums Paid for Large Acquisitions: Evidence of CEO Hubris*, 42 ADMIN. SCI. Q. 103, 103–27 (1997) (finding that CEO hubris has a significant effect on the price paid for corporate acquisitions); Ulrike Malmendier & Geoffrey Tate, *Who Makes Acquisitions? CEO Overconfidence and the Market's Reaction*, 89 J. FIN. ECON. 20, 42 (2008) (finding that "overconfident CEOs are unambiguously more likely to make lower-quality acquisitions when their firm has abundant internal resources").

227. Troy A. Paredes, *Too Much Pay, Too Much Deference: Behavioral Corporate Finance, CEOs, and Corporate Governance*, 32 FLA. ST. U. L. REV. 673, 721 (2005); s*ee* Donald C. Langevoort, *Organized Illusions: A Behavioral Theory of Why Corporations Mislead Stock Market Investors (and Cause Other Social Harms)*, 146 U. PA. L. REV. 101, 149–51 (1997) (arguing that, even if market mechanism is effective, it may lag many years behind management errors).

losses from redistributive taxation.[228] Sanchirico posits the opposite, pointing out that deadweight loss triangles increase in area in proportion to the square of the absolute size of the distortion, so that to minimize welfare losses from redistribution we should enact many small redistributions, rather than one large one.[229] McCaffery and Baron have weighed in by noting that, to the extent that voters are irrationally averse to tax, it may be more efficient to redistribute using substantive legal rules.[230]

Hidden taxes may undermine McCaffery and Baron's recommendation. If taxes are easier to hide than redistributive substantive rules, or if the behavioral effects of hiding taxes are more pronounced than in other legal areas, then the tax system should be a more appealing site for redistribution. The reverse is also possible. This analysis implies, in turn, a need for future empirical work on the salience and incidence of the redistributive aspects of redistributive legal rules.[231]

D. Prices: Tax-Inclusive or Tax-Exclusive?

On a more pragmatic note, this project sheds some light on current controversies over the design of sales taxes and the VAT here and in

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228. LOUIS KAPLOW & STEVEN SHAVELL, THE EFFICIENCY OF THE LEGAL SYSTEM VERSUS THE INCOME TAX IN REDISTRIBUTING INCOME 1–15 (1993); Louis Kaplow & Steven Shavell, *Why the Legal System Is Less Efficient than the Income Tax in Redistributing Income*, 23 J. LEGAL STUD. 667, 669 (1994); David A. Weisbach, *Should Legal Rules Be Used to Redistribute Income?*, 70 U. CHI. L. REV. 439, 446–53 (2003); *see also* ROBERT COOTER & THOMAS ULEN, LAW AND ECONOMICS 8–10, 111–13 (4th ed. 2003); Lior Jacob Strahilovitz, *Wealth Without Markets?*, 116 YALE L.J. 1472, 1509–11 (2007).

229. Sanchirico, *supra* note 187, at 1006–11; *see also* Anthony T. Kronman, *Contract Law and Distributive Justice*, 89 YALE L.J. 472, 508–10 (1980); Daphna Lewinsohn-Zamir, *In Defense of Redistribution Through Private Law*, 91 MINN. L. REV. 326, 331 (2006); Richard S. Markovits, *Why Kaplow and Shavell's "Double Distortion Argument" Articles are Wrong*, 13 GEO. MASON L. REV. 511, 550–55 (2005); Brett McDonnell, *The Economists' New Arguments*, 88 MINN. L. REV. 86, 111 (2003) (pointing out that it may be easier to enact redistribution through judicial rules than through tax legislation).

230. Edward J. McCaffery & Jonathan Baron, *The Political Psychology of Redistribution*, 52 UCLA L. REV. 1745, 1748–90 (2005). For evidence suggestive of tax antipathy, see *id.* at 1759–61; Bernheim & Rangel, *supra* note 104, at 40. I take no position here on whether a person's desire to avoid paying tax is best characterized as an "irrational" aversion to tax, such that a government planner should not take that desire into account in measuring social welfare, or whether instead it is simply a "preference" not to pay taxes. On preferences for the way in which goods are delivered, see Douglas A. Kysar, *Preferences for Processes: The Process/Product Distinction and the Regulation of Consumer Choice*, 118 HARV. L. REV. 525, 580–624 (2004).

231. Christine Jolls has made a similar point about the redistributive potential of low-salience substantive rules. Christine Jolls, *Behavioral Economics Analysis of Redistributive Legal Rules*, 51 VAND. L. REV. 1653, 1669–73 (1998). For more on "sneaky redistribution," see Coate & Morris, *supra* note 152, at 1212, 1227.

Europe.[232] In the United States, prices (other than prices for gasoline) are usually stated exclusive of tax; in Europe, the norm is often that posted prices include VAT.[233] My discussion here implies that the welfare-maximizing rule would be a mix of tax-inclusive and exclusive prices for different goods.[234] Under either the rational or irrational model, hidden taxes may either increase or decrease welfare, depending on the relative elasticities of supply and demand and the progressivity or regressivity of the tax once hidden. A blanket rule therefore will hide taxes in some cases where it would increase welfare to reveal them, or vice-versa.

E. Democracy vs. Welfare

Another fertile area for debate occasioned by hidden taxes will be in government theory. Hidden taxes, after all, amount to government by deception. A rich literature already explores the basic questions of transparency and government paternalism: the wisdom and legitimacy of government decisions made out of public sight but supposedly for the public good.[235] In many cases this debate is waged on what amount to pure welfare or other instrumentalist grounds. Opaque government is usually rejected because it is corrupt or self-serving, or, by frustrating citizen input, may lack full information about public preferences and policy alternatives.[236] These are welfarist, or at least instrumentalist, arguments.

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232. For a discussion of the debate, see Richard F. Bird, *Value-Added Taxes and Excises: Commentary*, *in* REPORT OF A COMMISSION ON REFORMING THE TAX SYSTEM FOR THE 21ST CENTURY (forthcoming Oxford University Press 2009). Additionally, there are differing rules in the U.S. and Europe concerning the advertising of prices for air travel. In Europe, airlines must include all taxes in their posted base price, while U.S. posted ticket prices need not include tax. Morwitz et al., *supra* note 47, at 10. After this Article was in production, but before it went to press, Jacob Nussim posted a thoughtful and detailed analysis of the sales-tax question. Jacon Nussim, Taxes, Prices, and Consumer Protection (Bar-Ilan Univ. Pub. Law Working Paper, 2009), *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1397643.

233. Alan Schenk, *Choosing the Form of a Federal Value-Added Tax: Implications for State and Local Retail Sales Taxes*, 22 CAP. U. L. REV. 291, 308–09 (1993).

234. I assume, in line with the Chetty et al. study, that a tax-exclusive price results in the tax being hidden.

235. JOEL FEINBERG, HARM TO SELF: THE MORAL LIMITS OF THE CRIMINAL LAW, 3–374 (1986); Cary Coglianese & Gary E. Marchant, *Shifting Sands: The Limits of Science in Setting Risk Standards*, 152 U. PA. L. REV. 1255, 1264–73 (2004); Jim Rossi, *Participation Run Amok: The Costs of Mass Participation for Deliberative Agency Decisionmaking*, 92 NW. UNIV. L. REV. 173, 196–98 (1997); Wendy E. Wagner, *The Science Charade in Toxic Risk Regulation*, 95 COLUM. L. REV. 1613, 1650–73 (1995); Eyal Zamir, *The Efficiency of Paternalism*, 84 VA. L. REV. 229, 237–54 (1998); *see also* Krishna & Slemrod, *supra* note 48, at 198–99 (asking "Should we be fooling ourselves into underestimating the tax burden?"); *cf.* Cass Sunstein, *Legal Interference with Private Preferences*, 53 U. CHI. L. REV. 1129, 1143–45, 1171 (1986) (noting potential for paternalism where decisions about what constitutes welfare-increasing regulation are made by elected officials).

236. Rossi, *supra* note 235, at 184–87, 213; Wagner, *supra* note 235, at 1640–42; *see* Jerry L.

But supposing it were the case that hidden taxes unambiguously were welfare-increasing, what would political theory then imply about their sharp conflict with participatory democracy? There obviously is much to say on this front, but I will suggest here only a few preliminary points.

In all likelihood, our view of the welfare/democracy tradeoff will depend on whether we have an instrumentalist or deontological view of democracy. That is, suppose (in the deontological approach) that our view of democracy is that it is inherently valuable, irrespective of its welfare effects. Perhaps democracy and deliberation are fundamental expressions of human identity.[237] Or perhaps participation rights are primary goods so fundamental to our well-being that we would not, ex ante, willingly trade off them against any other instrumental gains.[238] These approaches would probably be fairly hostile to hidden taxation. But as others have observed, many theories of democracy are rather indeterminate in their prescription for just how thoroughly democratic government must be.[239] Can elected officials delegate decisions to others? Some decisions but not others? Rawls's view, for example, apparently was that participation rights are satisfied so long as citizens would agree that the overarching structure of democratic decision-making is fair and representative; decisions made within that framework then are presumptively also fair.[240]

The instrumentalist democracy advocate may be more accepting of hidden taxes, although her view may depend on the surrounding government structure. The welfarist worry about hidden taxes (aside from the possible welfare losses I canvassed earlier) is that they facilitate self-dealing by officials.[241] If citizens do not know they are paying money to

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Mashaw, *Law and Engineering: In Search of the Law-Science Problem*, 66 L. & CONTEMP. PROBS. 135, 153 (2003).

237. 1 COLLECTED WORKS OF JOHN DEWEY: THE EARLY WORKS, THE MIDDLE WORKS, THE LATER WORKS 248 (Jo Ann Boydston ed., 1991) (arguing that democratic participation is an ethical ideal embodying norm of self-actualization); 1 *id.* at 218 (describing democratic participation as part of the "truly human way of living"); 1 JÜRGEN HABERMAS, THE THEORY OF COMMUNICATIVE ACTION: REASON AND THE RATIONALIZATION OF SOCIETY 273–337 (Thomas McCarthy trans., 1987) (1981); *see also* HANNAH ARENDT, ON REVOLUTION 115 (1963); MARK TUSHNET, RED, WHITE, AND BLUE: A CRITICAL ANALYSIS OF CONSTITUTIONAL LAW 10 (1988); Cass R. Sunstein, *Beyond the Republican Revival*, 97 YALE L.J. 1539, 1556 (1988).

238. JOHN RAWLS, POLITICAL LIBERALISM 291 (1996).

239. Matthew D. Adler, *Judicial Restraint in the Administrative State: Beyond the Countermajoritarian Difficulty*, 145 U. PA. L. REV. 759, 785–806 (1997); Edward Rubin, *The Myth of Accountability and the Anti-Administrative Impulse*, 103 MICH. L. REV. 2073, 2091–98 (2005).

240. RAWLS, *supra* note 238, at 332–38; *see* Frank I. Michelman, *Ida's Way: Constructing the Respect-Worthy Governmental System*, 72 FORDHAM L. REV. 345, 355–57 (2003); T.M. Scanlon, *Adjusting Rights and Balancing Values*, 72 FORDHAM L. REV. 1477, 1479–82 (2004).

241. On the other hand, hidden taxes probably reduce lobbying effort. *Cf.* Dušek, *supra* note 140, at 8 (claiming that lobbying effort increases with perceived tax burden).

the government, it is much easier for officials to use that money for their own purposes.[242] Note, though, that the problem is not with the tax system itself, but instead with the use of the tax proceeds. Thus, assuming we could remedy self-dealing on the spending side, hidden taxes might still be preferable to others. So a regime of hidden taxation should be accompanied by a set of strict rules for disclosure of government spending, penalties for corruption, judicial rules interpreting statutes against any apparent official self-dealing, and the like.

The possibility of arranging other government rules to maximize the usefulness of hidden taxes leads me to one final point, that another avenue for future research opened by the analysis here lies in the area of institutional design. It is possible that some of the negative features of hidden taxes can be overcome with careful design of each tax instrument. For instance, while hidden taxes may make it difficult for citizens to consume their most-preferred level of public goods, this problem might be overcome by disclosing the exact amount and incidence of a jurisdiction's tax alternatives to voters without identifying the precise source of the funds. To make hidden taxes more transparent and participatory, the administrators of hidden taxes could include representative citizen panels or other forms of participatory, rather than electoral, oversight.[243] These forms of "transparency engineering" have their own complications and tradeoffs, including the potential for corruption and self-dealing.[244] But if the welfare gains from hidden taxes are large enough, some experiment with non-traditional governance forms is likely worthwhile.

F. Fixing What is Broken

Even if further study ultimately concludes that hidden taxes overall reduce welfare, a close attention to their operation is important, because our current revenue system already results in many taxes that are largely or partially hidden.[245] Tax-exclusive sales taxes and tolls, as we now know,

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242. This point is similar to the argument that a reason to treat similar taxpayers similarly is that it makes it more difficult for politicians to favor their preferred interest group. *See* BRENNAN & BUCHANAN, *supra* note 17, at 45, 227.

243. Michael C. Dorf & Charles F. Sabel, *A Constitution of Democratic Experimentalism*, 98 COLUM. L. REV. 267, 316–38 (1998); Jody Freeman, *The Private Role in Public Governance*, 75 N.Y.U. L. REV. 543, 547, 551–56 (2000); *see id.* at 664–71 (proposing that a participatory model replace electoral accountability with other forms of responsiveness to public input).

244. ADRIAN VERMEULE, MECHANISMS OF DEMOCRACY: INSTITUTIONAL DESIGN WRIT SMALL 192–200 (2007); Rossi, *supra* note 235, at 213–17, 244–45.

245. Krishna & Slemrod, *supra* note 48, at 199.

both change taxpayer behavior.[246] Many commentators believe that income tax withholding makes the income tax less visible, although there are no data to support that intuition as yet.[247]

Suppose, then, that we wish to avoid hidden taxes. For example, suppose it turns out that hidden taxes increase the regressivity of the tax system, and that is an undesirable result. That finding would justify efforts either to make taxes more transparent or, if reengineering is impracticable,[248] to adjust tax rates to offset the distributive effects of the tax system's design. Perhaps the fact that we know some present taxes are hidden offers a stronger justification for greater transparency in government spending, along the lines I suggested in the last subpart. More dramatically, if hidden taxes are irremediably anti-democratic, and withholding hides taxes, we must decide whether our aversion to opacity is worth giving up the very substantial administrative and fraud-reducing benefits of withholding.[249]

CONCLUSION

It remains theoretically uncertain whether hidden taxes can increase welfare. Taxes with low salience can diminish deadweight losses from taxation. At the same time, shrouding taxes from consumers may result in inefficient allocation of scarce dollars, including inefficient choices about where to live and which public officials to entrust with public funds. If hidden taxes prove to be regressive, that would further diminish overall welfare. Furthermore, taxpayers may, but probably will not, anticipate that there will be hidden taxes. And while some individuals can learn to recognize a hidden tax, others will struggle to obtain feedback or forget the lessons of the past.

While there remains a need for further empirical work, my analysis here has identified several key questions upon which that work should focus. The foremost of these is whether or how often the diminished behavioral response to a hidden tax is a deliberate choice on the part of most taxpayers. As I have explained, that question's answer in turn will

246. *See supra* text accompanying notes 7–10.

247. Krishna & Slemrod, *supra* note 48, at 194; Lawrence Zelenak, *The Myth of Pretax Income*, 101 MICH. L. REV. 2261, 2271 (2003); Dušek, *supra* note 140, at 12.

248. One prominent example of an instance where it might prove difficult to reengineer the tax system to increase salience is income tax withholding. Again, withholding has long been said to reduce taxpayers' awareness of their total tax bill, but it is hard to imagine how one could implement a modern income tax without withholding. Krishna & Slemrod, *supra* note 48, at 194.

249. On the benefits of withholding, see *id.*; Dušek, *supra* note 140, at 11–12, 24.

determine whether hidden taxes can be "scaled up" to raise large portions of a government's revenues, as well as impacting the distributive effects of a given hidden tax. I expect to report the results of my own investigation of that question in future work.

As a result, the largest policy debates that could be triggered by hidden taxes remain just over the horizon. But, considering the difficulty and importance of some of those questions, it seems a good idea to get a head start on how they should best be resolved.