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Three Essays On Tax Salience:
Market Salience and Political Salience

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I. INTRODUCTION

Should the United States introduce a value added tax? How should we manage budget deficits? Should we abolish the alternative minimum tax? Why does the United States conduct most of its social-welfare policy through tax expenditures? Should we automate and simplify income tax filing? Tax salience is key to these and other important debates.

The behavioral economics revolution has finally reached the study of taxation. Tax salience refers to how the presentation of tax prices affects taxpayer behavior. In other words, tax salience measures how taxpayer behavior departs from key assumptions of neoclassical economic theory.

In a sense, scholars and policymakers have debated questions about tax salience for centuries. Naïve notions about tax salience have ex-
erted a powerful force on tax policy. Many reforms that would improve the efficiency of taxation have been opposed because of concerns about a "less visible tax system" or "fiscal illusion." Yet despite the ardent political rhetoric over tax salience, social science has only just begun to produce concrete results on the behavioral economics of tax perception. There is a wide disparity between political rhetoric and the findings of the empirical literature.

This Article contains three essays on tax salience. The essays are distinct in both style and analytic approach, and each essay presents a separate argument. We collect the essays in a single Article because each of the essays builds on the prior, such that the whole of the collected Article is more than the sum of its three parts.

Our first essay—in Part II of this Article—assesses the empirical literature on both market salience and political salience. Market salience refers to how tax presentation affects market decisions and economic activity; Deborah Schenk labels this phenomenon "economic salience." Political salience refers to how tax presentation affects voting behavior and political outcomes. We argue that these two dimensions of tax salience should be thought of as separate concepts; tax design techniques that reduce market salience may increase political salience, and vice versa. We further conclude that the empirical literature does not support the strong claims about either form of tax salience that frequently are made with respect to real-world policy.

Nevertheless, we disagree with scholars who suggest ignoring tax salience until the empirical literatures are more advanced. We stress pays at all. If all taxes were direct, taxation would be much more perceived than at present; and there would be a security which now there is not, for economy in the public expenditure."); see also Susanne Lohmann & Deborah M. Weiss, Hidden Taxes and Representative Government: The Political Economy of the Ramsey Rule, 30 Pub. Fin. Rev. 579 (2002); Robert Sausgruber & Jean-Robert Tyran, Testing the Mill Hypothesis of Fiscal Illusion, 122 Pub. Choice 39 (2005). Or, as put recently and colorfully by Grover Norquist: "Then we get to the issue of visibility, which I think is the key thing here. We want people to be aware of what they're paying and how much it costs. The idea that one of the benefits [of a reform proposal, the ReadyReturn] is to reduce the psychic costs of tax filing reminds me of the argument for the guillotine, which was that it was more humane. It also meant that it would be used more frequently." Grover Norquist, President, Americans for Tax Reform, Testimony Before the President's Advisory Panel on Federal Tax Reform (May 17, 2005), available at http://govinfo.library.unt.edu/taxreformpanel/meetings/docs/transcript_05172005.doc.

6 See, e.g., Richard A. Epstein, Second-Order Rationality, in Behavioral Public Finance 355, 358 (arguing that "the [behavioral finance] studies' heavy reliance on decisions college students made in laboratory conditions makes it hard to generate any theory about which of these biases operate . . . in well-defined social contexts"). Note the most important recent empirical studies of tax salience are not based on laboratory results. See generally
the need to improve policymakers' understandings in order to combat
the pernicious influence that naïve notions about tax salience cur-
cently exert over fiscal politics. And, as the empirical and theoretical
literatures continue to develop, we expect these literatures to yield
new tools with the potential for greatly improving tax efficiency.

Our second essay—in Part III of this Article—evaluates the norma-
tive implications of market salience. We argue for a general presump-
tion in favor of reducing market salience. Our assessment contrasts
with the conclusions of much of the recent literature. Although the
benefits of reducing market salience are well understood, it is fre-
cently argued that these benefits may be overwhelmed by concerns
related to: (1) distortionary income effects, (2) externalities, and (3)
distribution. We conclude that the recent literature has overstated all
three of these concerns.

We first argue that the nature of how taxpayers learn from experi-
ence implies that the advantages of reducing market salience usually
should overpower any harm caused by distortionary income effects.7
We then explain how most of the concerns related to externalities and
distribution can be resolved by the strategy of offsetting tax-rate ad-
justments. Overall, with some noted exceptions, we hold that it is gen-
erally desirable to decrease the market salience of taxation. As
theorists develop new tools for exploiting market salience, we urge
policymakers to use these tools to improve the efficiency of revenue
collection.

Our third essay—in Part IV of this Article—evaluates the norma-
tive implications of political salience. We dispute the common as-
sumption that it is wrong for governments to decrease the political
salience of taxation.8 The essence of our argument is that increasing
the political salience of taxation is akin to providing voters with false
or arbitrary information about tax costs. Neither the fields of philoso-
phy nor of voter psychology are sufficiently developed to guide us as
to what information voters ought to focus on when assessing real-
world fiscal policies. Democratic values thus provide no indication as
to whether political salience should be made higher or lower.

7 We more fully explain the concept of "distortionary income effects" (and our argu-
ment related thereto) in Section III.B.
8 Schenk, note 5, at 255 ("Some work has been done to untangle the cognitive biases
that result in less attention being paid to low-salience taxes. Normative argument with
respect to such taxes, however, is quite limited; there is almost a universal assumption that
increased salience is preferred and that the intentional use of low-salience taxes by the
government is undesirable. This distaste is manifested in the term often used to describe
such taxes: 'hidden taxes.'").
To foreshadow our argument, voters' assessments of tax costs are primarily determined by starting with some notion of pretax resources (for example, gross income) and then subtracting taxes paid. Yet all existing measurements for pretax resources depend on the operation of government in its current form, which in turn depends on tax payments. No philosophical theory is sufficiently well developed to measure with the needed precision how pretax resources would differ without government (that is, in the state of nature). Lacking such a theory, we cannot assess the normative implications of altering how voters understand pretax resource measurements. The problem is then further confounded by uncertainty regarding the political salience of government spending and by the apparent shallowness and malleability of voters' expressed preferences about fiscal policy. Again, democratic values provide no support for either increasing or decreasing political salience. We thus argue against the numerous scholars and policymakers who oppose reforms that would improve tax efficiency because these reforms might reduce political salience.

Together, our three essays argue for improving policymakers' understanding of tax salience. The need is great. Many analysts predict that the United States is charting a course toward a massive budget crisis that could result in another Great Depression. Meanwhile, coinciding with recent breakthroughs in the academic study of tax salience, the rapid spread of tax-filing software and related technology promises many new opportunities for designing tax systems to exploit tax salience. We suspect that our best hopes for avoiding the looming fiscal catastrophe may be for: (1) policymakers to begin utilizing new tools for reducing market salience and (2) for policymakers to stop opposing existing tax reform proposals for fear of reducing political salience.

II. UNDERSTANDING THE MULTIPLE DIMENSIONS OF TAX SALIENCE

In this Part, our first essay, we assess the empirical literature on two distinct forms of tax salience—which we label as market salience and political salience. We argue that tax design techniques that reduce salience along one of these dimensions may increase salience along the other dimension. We further conclude that the existing empirical find-

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10 See, e.g., Lawrence Zelenak, Essay, Complex Tax Legislation in the TurboTax Era, 1 Colum. J. Tax L. 91, 92 (2010) ("With few returns now prepared by hand, however, the computational complexity constraint on the income tax rules applicable to large numbers of taxpayers has virtually disappeared.").
ings on both forms of tax salience are tentative. Despite the ardent beliefs that many commentators express about tax salience, we cannot currently predict with any confidence how tax-design techniques affect tax salience within real-world environments. Yet, although we caution against overenthusiastic speculation about how tax salience operates in the real world, we do not agree that normative scholars should ignore tax salience until better empirical results are available. Naïve notions about tax salience already dramatically influence tax policy debates. Improving policymakers' understanding of tax salience is thus necessary in order both to combat the pernicious influence of current naïve notions about tax salience and hopefully to guide the direction of future tax reforms as the literatures on tax salience continue to develop.

As we use the term, "tax salience" refers to the extent to which taxpayers account for the costs imposed by taxation when the taxpayers make decisions or judgments. The concept of tax salience is thus meant to abstract from taxpayers' values or preferences with respect to taxation—from how the taxpayers might wish to account for tax costs were they not subject to cognitive limitations. Our concept of tax salience would be meaningless in a world of complete information in which taxpayers had unlimited time and resources and were not subject to any cognitive biases. Thus, our concept of tax salience is meant to capture any systematic differences between how taxpayers would perceive the costs of taxation in this hypothetical world of perfect economic rationality and how taxpayers actually perceive the costs of taxation in the real world.

11 For example, Milton Friedman has stated:

The value added tax is a very efficient tax. That's its virtue. And it's also its vice because it makes the tax appear invisible and thus it's always tempting to raise it.

I once examined the situation for all the European countries that had installed—instituted a value added tax and every single country that had instituted a value added tax subsequently raised the rate, and every one of the countries, government spending went up sharply after they introduced a value added tax.


13 The adjective "systematic" is emphasized so that taxpayer confusion is not thought to be synonymous with tax salience unless the confusion leads taxpayers to consistently err in the same direction. A tax instrument has low salience (on some dimension) when taxpayers consistently underestimate its tax price, or high salience when taxpayers consistently overestimate its tax price; but a random mixture of some taxpayers underestimating and
To use a simple example: If every taxpayer knew at all times that all their retail purchases were subject to a 10% sales tax—and always acted on that knowledge—then our concept of tax salience would be a mere theoretical curiosity because actual taxpayers would not make errors based on the presentation of the tax at the moment of any important decisions. So too, our concept of tax salience would be of little interest if sometimes actual taxpayers believed they were paying less than 10% in sales tax, and other times more than 10%, with the two categories of errors counteracting so that taxpayers’ average perceptions were roughly accurate. Tax salience is important because of the common intuition, confirmed by some evidence, that taxpayers consistently perceive themselves as paying less (or more) in taxes in response to certain forms of tax presentation.

There are multiple dimensions to tax salience. Potentially, tax salience could operate differently with respect to every judgment or decision taxpayers make for which tax costs are relevant, such that each tax-relevant decision could be viewed as a separate dimension of tax salience. This Article focuses on two categories of tax-relevant decisions: tax salience with regard to market decision-making (for example, consumer purchasing) and tax salience with regard to political-judgment formation (for example, individual voting). We label the first dimension as the “market salience” of taxation and the second dimension as the “political salience” of taxation.

Literatures related to tax salience frequently use alternative terms such as “fiscal illusion” or “hidden taxes.” We avoid both terms because they strike us as emotion laden and potentially misleading in the intuitive responses they invoke. We instead refer to the “market salience” and “political salience” of taxation, as we consider these terms to be both more neutral and more precise.

For both market salience and political salience, we intend the concept of tax salience to indicate whether taxpayers would make system-
atically different market or political judgments when faced with equivalently sized tax liabilities depending on how the tax liabilities are presented.\textsuperscript{15} Our definition for tax salience is therefore not meant to include any changes to taxpayer behavior that result from shifting tax burdens among different groups of taxpayers or from otherwise increasing or decreasing the actual tax burden faced by any individual taxpayer. If taxpayers make market and political judgments about taxation solely based on their aggregate tax burdens and thus are not impacted by the manner in which tax burdens are presented, then all forms of taxation would be equally salient. This Article's analysis of tax salience is concerned with the many ways in which the presentation of a taxpayer's aggregate tax burden has been argued to impact the judgments made by the taxpayer.

We proceed in this Part by analyzing the existing empirical literatures on both the market salience and the political salience of taxation. We emphasize that these should be considered two distinct dimensions of tax salience. Many tax design techniques that we expect to reduce market salience are likely to increase political salience, and vice versa.\textsuperscript{16} Again, although our discussion focuses exclusively on market salience and political salience, there undoubtedly exist other additional dimensions to tax salience.\textsuperscript{17} Even tax design techniques that reduce both market salience and political salience may nonetheless increase tax salience along other dimensions.\textsuperscript{18}

\textsuperscript{15} As our inquiry focuses on the presentation of tax prices, our concerns are distinct from—and logically prior to—the related issues of tax-averse or tax-accepting preferences. For further discussion of tax-averse and tax-accepting preferences—with a focus on distinguishing the concepts of tax-averse and tax-accepting preferences from the political salience hypothesis of tax-label aversion, see Subsection II.B.6.

\textsuperscript{16} See Section II.C.

\textsuperscript{17} In general, any categorization schema for tax salience must necessarily be somewhat artificial—lumping together some concepts that could be distinguished and excluding some dimensions of tax salience that could be made part of the analysis. In particular, it is always possible to make a categorization schema more granular (thereby adding greater precision at the expense of simplicity) or less granular (thereby sacrificing exactness for tractability). As this Part should make clear, we believe that lumping all forms of tax salience into a single concept leads to analytical error that is not justified by the pursuit of simplicity. We are less certain of whether our schema of distinguishing market salience and political salience should be further subdivided. We suspect that additional precision may be helpful for some research questions but may produce unnecessary complexity for others.

\textsuperscript{18} Another dimension, which we only address in passing, is that of the salience of various taxes in deciding where to live. Property taxes, for example, might be more or less salient depending on how they are presented; if, for example, one automatically pays property taxes along with a mortgage or not. See Marika Cabral & Caroline Hoxby, The Hated Property Tax: Salience, Tax Rates, and Tax Revolts (unpublished manuscript), available at http://www.stanford.edu/~mcabral/Tax_Salience.pdf. Note that the issues of presentation, timing, indirection, and relation to benefits will all be relevant to the two types of salience we discuss. The interplay of these modes of salience, however, may be different in the case
A. Reviewing the Empirical Literature on Market Salience

The empirical literature on the market salience of taxation is relatively recent, with most of the important studies being less than a decade old. This literature has grown as a subfield of behavioral economics and as an offshoot of a literature on consumer-purchasing behavior largely developed within the marketing departments of business schools. The vast majority of economic analyses of taxation continue to assume that taxpayers respond solely to after-tax prices—that all taxes are fully market salient. Yet a number of recent empirical studies have concluded that taxpayers do not always fully factor the price effects of taxation into their market decisions, thus making any ignored (or partially ignored) tax instruments less market-salient.

Employing terminology developed by Jeffery Liebman and Richard Zeckhauser, we divide the empirical literature on market salience into two broad categories: “spotlighting” and “ironing.” When taxpayers can easily understand the aggregate price of engaging in a market transaction, taxes should typically be fully market salient. Tax instruments generally should only have reduced market salience when tax prices are complicated or obscured in some fashion, such that it becomes more difficult to calculate the aggregate price of engaging in a market decision. The two categories of the empirical literature—spotlighting and ironing—examine two different hypotheses for how taxpayers may respond to obfuscated tax prices.

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of deciding where to live. In particular, the question of the salience of property taxes is bound up with the so-called Tiebout hypothesis, which posits, roughly, that competition among jurisdictions produces efficiency in the production of local public goods. If this hypothesis is correct, then, as Galle notes, lessening salience might lessen efficiency. Galle, note 14, at 96-97. The Tiebout hypothesis, however, is controversial on many dimensions; in particular, it may not be descriptive of many (any) actual decisions, and Tiebout sorting may not be normatively desirable in any event. See, e.g., Darien Shanske, What the Original Property Tax Revolutionaries Wanted (It Is Not What You Might Think), Cal. J. Pol. & Pol’y (2009), http://www.bepress.com/cjpp/voll/iss1/18 (reviewing Isaac William Martin, The Permanent Tax Revolt: How the Property Tax Transformed American Politics (2008)). Note that one of us (Shanske) plans to return to the relationship between tax salience and Tiebout sorting.

19 See Chetty et al., note 6, at 1145. (“A central assumption in public economics is that agents optimize fully with respect to tax policies.”).

20 Jeffrey B. Liebman & Richard J. Zeckhauser, Schmeduling 2 (Oct. 2004) (unpublished manuscript), available at http://www.hks.harvard.edu/jeffreyliebman/schmeduling.pdf. Although we use Liebman and Zeckhauser’s terminology, we do not restrict ourselves to using these terms in precisely the same manner as do Liebman and Zeckhauser. In particular, our use of the term “spotlighting” is broader.
1. **Spotlighting**

The most developed hypothesis in the market salience literature predicts spotlighting behavior. As Liebman and Zeckhauser define the term, “spotlighting occurs when consumers respond to immediate or local prices and ignore the full schedule that they face.” More broadly, spotlighting involves taxpayers focusing only on certain components of an aggregate price and thereby underestimating the aggregate price. Simply dividing an aggregate price into a tax price and a pretax price, however, may not be enough to induce spotlighting. In most of the empirical studies on spotlighting, an additional element also comes into play—a separation of the tax assessment from the market decision.

The seminal paper on the market salience of taxation—written by Raj Chetty, Adam Looney, and Kory Kroft—examines spotlighting with respect to sales and excise taxes. Their paper includes two empirical studies showing that consumers do not always fully factor the price effects of retail sales taxes into their purchasing decisions. It is hard to overstate the importance of the Chetty, Looney, and Kroft paper to the emerging literature on market salience; hence, it is worth briefly discussing both of the studies reported therein.

Chetty, Looney, and Kroft’s first study examined consumer decision-making in grocery stores. They convinced a Northern California grocery to include sales tax information and post-tax prices on the tags listing the prices for some goods displayed on the store's aisles, while continuing the standard practice of displaying only pretax prices for other goods. The study found that consumers were significantly less likely to purchase goods for which the tax information was posted, even though later consumers at the same stores displayed accurate knowledge about the sales tax when later surveyed. Chetty, Looney, and Kroft reasonably concluded that simple ignorance of the sales tax was not the issue. Instead, the taxpayers appeared to simply not factor the price effects of the sales tax into their purchasing decisions.

In their second study, Chetty, Looney, and Kroft examined responses to alcohol excise taxes over time as opposed to sales taxes on

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21 Id. at 3.
23 Chetty et al., note 6.
24 Id. at 1146-47.
25 Id. at 1150-58, 1165-66.
26 Id.
alcohol, where the former taxes are incorporated into the prices for alcohol displayed on the aisles, but the latter taxes are only added in at the register. Consistent with the grocery store experiment, they found significantly higher elasticities for the alcohol excise taxes than for the sales taxes.27 In both studies, Chetty, Looney, and Kroft found that consumers were more responsive to taxes that were incorporated into the prices posted in the aisles than to the taxes that were not added until the register.28 The consumers appeared to spotlight on the prices posted in the aisles, thus (at least partially) ignoring the nonposted prices of the sales taxes.

Several other papers have reported results consistent with Chetty, Looney, and Kroft's.29 Richard Ott and David Andrus found that consumers do not fully take account of vehicle personal property taxes when making automobile purchasing decisions.30 And Kelly Gallagher and Erich Muehlegger report that sales-tax waivers given at the time of purchase have a much larger effect on hybrid-vehicle purchases than do similarly sized income tax credits.31 Like retail sales taxes, vehicle personal property taxes and income tax credits are not assessed until after purchasing decisions are made, thus apparently making their price implications less market salient.

27 Id. at 1158-66.
28 Id. at 1175.
29 See Liebman & Zeckhauser, note 20 at 6-13, 39-43 (discussing both the broader literature on spotlighting in the tax context and their own empirical study examining spotlighting by food stamp recipients). The empirical literature on spotlighting in the tax context is sparse, as is the entire empirical literature on the market salience of taxation. We cite in this paper all of the studies on the market salience of taxation of which we are aware. The conclusions of these tax-focused studies correspond with similar findings in the much larger non-tax-focused consumer behavior literature. For instance, E-bay shoppers have been shown to be less sensitive to shipping costs than to bidding prices. Tanjim Hossain & John Morgan, . . .Plus Shipping and Handling: Revenue (Non) Equivalence in Field Experiments on eBay, Advances Econ. Analysis & Pol'y 1 (2006) http://www.bepress.com/bejeap/advances/vol6/iss2/art3/. For general reviews of the relevant studies in the consumer behavior literature, see Xavier Gabaix & David Laibson, Shrouded Attributes, Consumer Myopia, and Information Suppression in Competitive Markets, 121 Q.J. Econ. 505 (2006); Hyeong Min Kim & Luke Kachersky, Dimensions of Price Salience: A Conceptual Framework for Perceptions Of Multi-Dimensional Prices, 15 J. Product & Brand Mgmt. 139, 139-40 (2006); Morwitz et al., note 22.
30 Richard L. Ott & David M. Andrus, The Effect of Personal Property Taxes on Consumer Vehicle-Purchasing Decisions: A Partitioned Price/Mental Accounting Theory Analysis, 28 Pub. Fin. Rev. 134, 144-45 (2000). Interestingly, Ott and Andrus' respondents opined that the vehicle personal property taxes were "too high." Id. at 150. This result thus supports our argument about the difference between market salience and political salience with respect to excise taxes. See Section II.C.
In another related study, Amy Finkelstein examined how driving behavior reacts to the introduction of electronic toll collection. She found that the elasticity of driving with respect to toll rates (the degree to which increasing toll rates leads to decreased driving) declined significantly with the introduction of electronic toll collection. Finkelstein’s study suggests that drivers spotlight on toll amounts that are actually handed over while driving, as compared to toll amounts paid separately through electronic toll collection.

Extrapolating across the studies discussed above, the evidence appears to suggest that taxpayers often discount taxes that are not assessed until after a market decision has been made. In other words, taxpayers appear to spotlight on the prices charged (or displayed) at the time of market decision-making.

Although it is easiest to understand how spotlighting might reduce tax salience with respect to consumer purchasing decisions, Jacob Nussim has argued that spotlighting might also affect labor-supply decisions. If workers make job choices based primarily on posted pretax salary information, rather than on their aggregate post-tax salaries, then even the income tax may have low-market-salience. Theoretically, almost any tax instrument could be constructed to induce spotlighting by delaying tax assessment until some time period after the relevant market decisions.

Nussim’s argument that spotlighting also might affect labor-supply decisions is supported by two laboratory experiments. First, Tomer Blumkin, Bradley Ruffle, and Yosef Ganun conducted an experiment comparing a wage tax (assessed when income is earned) to an otherwise-equivalent consumption tax (assessed when income is spent).

32 Finkelstein, note 4.
33 Id. at 986-90.
34 Electronic toll collection does not strictly involve spotlighting, as there is no base price to toll collection, only a tax price. As in the other spotlighting studies, however, electronic toll collection creates a separation between the market decision (driving on a toll road) and the tax assessment (the toll payment). In a sense, the base price of driving on a toll road becomes zero with electronic toll collection, plus a toll surcharge added separately when taxpayers add money to their electronic-toll-collection accounts.
37 There is also a related literature on how tax salience affects compliance decisions. See, e.g., Christoph Watrin & Robert Ullman, Comparing Direct and Indirect Taxation: The Influence of Framing on Tax Compliance, 5 Eur. J. Comp. Econ. 33 (2008).
Contrary to the predictions of standard economic theory, the experimental subjects' labor-supply decisions were significantly more responsive to the wage tax than to the consumption tax. Second, David Gamage, Andrew Hayashi, and Brent Nakamura, studied the labor-supply choices of experimental subjects faced with economically equivalent compensation amounts displayed using different tax-salience frames. The experimental subjects were much less willing to work when their compensation was presented as a lower base wage plus a bonus than when their compensation was presented as a higher base wage minus a tax. These two experimental studies thus suggest that spotlighting may reduce the market salience of how taxes affect labor-supply decisions, in addition to affecting consumer purchasing decisions.

Nevertheless, it is important to emphasize that the spotlighting literature is still at an early stage of development. Care should be taken in speculating about spotlighting behavior outside of the narrow contexts of the existing studies. In particular, it should be kept in mind that spotlighting may be limited by factors like taxpayers learning through experience, or taxpayers' aversion to being manipulated. Market abstract=1079784 ("Our results reveal that the temporal separation between an individual's labor market allocation and subsequent consumption decisions leads individuals to work longer when faced with a consumption tax than with an equivalent wage tax."). Blumkin, Ruffle, and Ganun claim that their results have implications for the debate over income and consumption taxation. Id. at 1-2. Their experiment, however, does not incorporate savings or investment behavior, so their wage tax is not really an "income tax" as income taxes are traditionally defined. Indeed, their wage tax resembles a form of cash-flow consumption tax. Instead, their results suggest that—for both income taxes and consumption taxes—market decisions may differ depending on whether the tax is assessed at the point where income is earned or at the point where income is spent. Id. at 3.

39 Id.


41 This result may have implications for the design of the Earned Income Tax Credit and similar tax-based bonuses, potentially implying that direct wage subsidies could be more effective at increasing labor supply. Id. at 16.

42 See, e.g., Oren Bar-Gill & Franco Ferrari, Informing Consumers About Themselves, 3 Erasmus L. Rev. 93, 97-98 (2010) (evaluating effects of interpersonal learning, use-pattern information, and seller reputation); Alexander L. Brown, Zhikang Chua & Colin F. Camerer, Learning and Visceral Temptation in Dynamic Saving Experiments, 124 Q.J. Econ. 197, 198 (2009) (explaining experimental results where subjects at first saved too little, but then learned to save more optimally after social learning).

43 There is ample evidence from the consumer behavior literature that consumers may react negatively if they perceive themselves as being manipulated. Field studies have shown that the impact of price-presentation techniques can disappear if consumers become skeptical of vendor's intentions or come to believe that vendors are using misleading price-presentation strategies. Indeed, the empirical evidence suggests that moderate use of techniques for reducing price salience is often more effective than high use, as high use can lead to consumer backlash. See, e.g., Yih Hwai Lee & Cheng Yuen Han, Partitioned Pricing in Advertising: Effects on Brand and Retailer Attitudes, 13 Marketing Letters 27, 37-
mechanisms might also develop over time to assist taxpayers in overcoming some tax-design elements that initially result in reduced market salience. The existing literature—especially the Chetty, Looney, and Kroft article—suggests that these potentially limiting factors do not always counteract spotlighting behavior. But further empirical research will still be needed to determine the importance of spotlighting within different tax contexts.

2. Ironing

The second strand of empirical research on the market salience of taxation examines “ironing” behavior. According to Liebman and Zeckhauser, “ironing arises when an individual facing a multipart schedule perceives only the average price to the point where he consumes.” In other words, ironing occurs when taxpayers incorrectly use their average tax rates when making market decisions rather than their effective marginal tax rates.

We expect that ironing behavior is important in its own right. But it is also worth discussing ironing to illustrate the many possible ways in which taxpayers might respond to complexity in tax-price schedules. In essence, ironing is a form of spotlighting behavior wherein taxpayers spotlight on their average tax rates instead of using their effective marginal tax rates. When pricing schedules are complex, it can be
hard to predict which components of a price schedule taxpayers may spotlight on. Indeed, taxpayers may be as likely to spotlight on aspects of their tax-price schedules that cause them to overestimate their effective tax rates (thus making the taxes overly market-salient) as on ones that reduce market salience. The spotlighting hypothesis is easiest to operationalize for instruments like sales taxes where there is a straightforward pretax price posted at the time of market decision-making. For complex tax schedules—like those in the income tax—the spotlighting hypothesis on its own does not generate useful predictions. Numerous empirical studies demonstrate that taxpayers find the income tax confusing and often do not know their effective income tax rates. Yet merely showing that taxpayers are often confused tells us little about the market salience of taxation.

Hence, the spotlighting hypothesis does not predict what taxpayers will spotlight on of the many price components embedded in the income tax. The ironing hypothesis is important because it does predict how taxpayers are likely to respond to a specific form of confusion regarding complicated tax rate schedules. Specifically, the ironing hypothesis predicts how taxpayers may respond to nonlinear schedules of multiple rates, as in the progressive tax rates of the income tax.

In an early experimental study of ironing, Charles de Bartolome found that experimental subjects often use their average tax rates

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48 For analogous results with respect to consumer reactions to private-sector pricing strategies, see Kim & Kachersky, note 29, at 139-40; Morwitz et al., note 22, at 36 ("[F]irms need to understand that partitioned pricing benefits firms in many situations, but certainly not in all situations . . . . If some or all of these factors are absent, however, partitioned pricing can have no positive impact, or even a negative one.").

49 Nussim's speculation that the income tax may have reduced market salience to the extent that workers focus on pretax salaries when making job choice decisions might be an exception. See note 35 and accompanying text. But note that even this prediction concerns the market salience of the income tax as a whole as compared to the market salience of pretax salaries. Most of the debate about the market salience of the income tax has concerned specific provisions like the alternative minimum tax or the use of phase-outs. For the most part, the spotlighting hypothesis is not sufficiently nuanced to yield straightforward predictions about the market salience of specific provisions of the income tax.


51 Under our definition, tax salience only refers to when taxpayers systematically underestimate or overestimate their tax liabilities. See note 13 and accompanying text.
when making market decisions rather than their marginal tax rates. Liebman and Zeckhauser later confirmed de Bartolome's results by econometrically studying taxpayers' reactions to the introduction of the child tax credit. Most recently, Naomi Feldman and Peter Katuscak provide further support for these conclusions, additionally demonstrating that taxpayers make market decisions partially based on their average tax rates from prior years, even controlling for the relationship between prior and current year tax status.

We earlier concluded that the spotlighting literature is still in its adolescence. The ironing literature is at an even earlier stage of development. There is substantial evidence that complicated tax schedules can induce taxpayer confusion and error. But the market salience literature only provides limited means for predicting the direction of complexity-induced taxpayer error. Further empirical work is needed before the ironing hypothesis should be used to guide real-world tax policy. Yet the ironing hypothesis remains the second most demonstrated finding of the market-salience literature (after the spotlighting hypothesis). The ironing hypothesis is thus worth considering both in its own right and as an illustration of our limited understanding of the relationship between tax complexity and market salience.

B. Reviewing the Empirical Literature on Political Salience

Numerous scholars have claimed that certain tax instruments or certain forms of tax design have low political salience, such that voters

53 Liebman & Zeckhauser, note 20, at 33-42.
55 See Subsection II.A.1.
56 Notably, Ed McCaffery has suggested based on his teaching experience that some taxpayers may confuse marginal and average tax rates in the opposite direction, using their highest marginal rates in place of their average rates when making decisions for which more than just the highest marginal rate is applicable. Edward J. McCaffery, Cognitive Theory and Tax, 41 UCLA L. Rev. 1861, 1890 (1994). Note that McCaffery's writing pre-dates the empirical work on the ironing hypothesis. His views may have since changed. Nevertheless, McCaffery's discussion supports the need for further empirical work to explore the contours of the ironing hypothesis.
57 See note 50 and accompanying text.
discount tax costs imposed through these forms of taxation. The literature on political salience is over a century old, dating back at least to John Stuart Mill. Only a portion of this literature has attempted to empirically test any of the ways in which taxes have been alleged to have low political salience. Nevertheless, even the empirical portion of the political salience literature is many times larger than the entire literature on market salience. In this Section, we review the major themes of the empirical literature on political salience, but our coverage is by no means exhaustive.

It is important to emphasize at the outset that most of the ways in which scholars have hypothesized that tax instruments may have low political salience remain unconfirmed empirically. The political salience literature has yet to produce any results as clear as Chetty, Looney, and Kroft’s spotlighting finding for the market salience of sales taxes. Indeed, it has been notoriously difficult to test hypotheses for political salience. According to Robert Sausgruber and Jean-Robert Tyran, the main reason for this inconclusiveness in the empirical literature is that most studies have been unable to disentangle the effects of political salience on voting behavior from other reasons why voters might prefer different levels of taxation (or differing use of specific forms of tax design). For the most part, we have only a tentative understanding for how any of the factors discussed in the political salience literature affect actual voting behavior.

Nevertheless, the political salience literature has identified a number of hypotheses that seem plausible (even if their plausibility is based on anecdotal evidence), and the intuitions underlying these hypotheses are widely held. We thus review a number of factors that have been hypothesized to influence the political salience of taxation,

59 For a partial review of this literature (focused on studies by economists and some political scientists), see Oates, note 13, at 65-82.
60 Mill, note 3, at 237.
61 We do aim for a mostly comprehensive discussion of the major themes in the empirical literature on political salience, as we hope that later scholars will find this Section useful as a reference, but the literature on political salience is simply too extensive to be exhaustively reviewed within a single article.
62 Arguably, Finkelstein’s results for electronic toll collection and Cabral and Hoxby’s results for anti-property tax referenda might be exceptions, but these contexts strikes us as much narrower than Chetty, Looney, and Kroft’s sales and excise taxes. See notes 77-79, 93-96, 106-07 and accompanying text.
63 E.g., Finkelstein, note 4, at 2 (“Empirical evidence of the impact of tax salience on tax rates, however, has proved extremely elusive.”); Oates, note 13, at 66 (“[T]he detection and measurement of fiscal illusion is a difficult enterprise...the existing empirical literature has not as yet made a persuasive case for the existence and importance of the elements of fiscal illusion.”); Sausgruber & Tyran, note 3, at 40 (“[I]t is difficult to measure a misperception of the tax burden...”).
including: (1) indirect taxes, (2) tax-system complexity, (3) withholding, (4) deficit financing, (5) sticky baselines, and (6) tax-label aversion. Scholars have cited each of these as support for the conclusion that voters discount certain tax costs. Much of the existing political salience literature has been concerned with the notion that these factors might lead voters to discount the aggregate costs of all taxes collected by a government (the so-called “size-of-government” question). We include within our discussion, however, hypotheses for how tax design might affect voters’ perceptions of the costs imposed by only specific forms of taxation, even when the hypotheses are not alleged to increase the overall size of government.

1. Indirect Taxes

That the use of indirect taxes may reduce political salience is perhaps the most cited of the political salience hypotheses. The term “indirect taxes” refers to tax instruments for which the statutory incidence falls on businesses or other intermediaries rather than on individual taxpayers. For example, economists generally agree that the incidence of value added taxes (VATs) primarily falls on consumers. Yet consumers do not directly remit VAT costs. Instead, VAT costs are simply incorporated into the final prices paid by consumers in the same fashion as are the other costs of producing goods.
In addition to VATs, other indirect taxes include corporate income taxes (and most other business-level taxes), the employer-paid portion of the U.S. payroll tax, most tariffs, most excise taxes, and property taxes with respect to renters. The economics literature generally finds that at least a portion of the economic burden of these taxes falls on consumers in the form of higher prices paid for purchased goods. Yet all of these tax instruments are remitted by intermediaries, rather than by consumers, such that most voters do not personally experience the payment of these tax revenues to the government. Because voters do not personally remit indirect taxes, numerous scholars have argued that indirect taxes have low political salience and that the use of indirect taxes leads voters to support higher levels of taxation and government spending.

A number of empirical studies report evidence suggesting that individuals sometimes discount indirect tax burdens as compared to equivalent direct tax burdens. Yet other studies have failed to find a significant relationship between the use of indirect taxes and higher government spending. In any case, the intuition underlying the indirect costs.

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71 The notion that property taxes have low political salience for renters has spawned its own sub-literature. E.g., Oates, note 13, at 72-73.


Note that these tax instruments are indirect regardless of who ultimately bears the incidence. For example, the economic burden of the corporate tax is divided between consumers, workers, and investors, since corporations cannot ultimately bear the economic incidence of taxation. To the extent the incidence of the corporate income tax falls on consumers through higher prices for purchased goods, the corporate income tax is an indirect tax on consumers. But to the extent the tax falls on workers (through lower wages) or on investors (through lower return to capital), the corporate income tax is an indirect tax on workers or on investors. Regardless of its incidence, the corporate income tax is still an indirect tax and those bearing the incidence of the tax may find it less politically salient as a consequence.

73 See, e.g., Friedman, note 11, at 116.

74 E.g., Norman Gemmell, Oliver Morrissey & Abuzer Pinar, Tax Perceptions and the Demand for Public Expenditure: Evidence from UK Micro Data, 19 Eur. J. Pol. Econ. 793, 793-94 (2003); Michael Keen & Ben Lockwood, Is the VAT a Money Machine?, 59 Nat'l Tax J. 905, 911 n.9 (2006) (though the authors in this case explicitly disclaim that this effect is necessarily related to the VAT being “hidden”); Edward McCaffery & Jonathan Baron, Thinking About Tax, 12 Psychol. Pub. Pol'y & L. 106, 119-20 (2006); Werner W. Pommerehne & Friedrich Schneider, Fiscal Illusions, Political Institutions and Local Public Spending, 31 Kyklos 381, 383 (1978); Sausgruber & Tyran, note 3, at 39. Note that the empirical results suggesting that the use of VATs may lead to higher government spending levels could be due to VATs being more efficient, rather than to their being indirect taxes. E.g., Becker & Mulligan, note 68, at 304.

75 E.g., Oates, note 13, at 72-73; Erik Schokkaert, Preferences and Demand for Local Public Spending, 34 J. Pub. Econ. 175, 187 (1987). Indirect taxes may have low political salience even if their use does not result in higher government spending, but the
rect taxes hypothesis strikes many as convincing. As George Lowenstein, Deborah Small, and Jeff Strnad write:

[T]he psychology and thus the politics of taxation may turn on who appears to pay the tax rather than who actually bears the burden. The public tends to ascribe the burden to the nominal payor and to ignore taxes that they do not explicitly pay. For example, to most consumers, the VAT tax is simply part of the purchase price of an item. The nominal payors are businesses. One argument against adopting a VAT tax in the United States has been the worry that there would be too little resistance to raising taxes exactly because it is hidden.76

To fully evaluate the hypothesis that the costs of indirect taxes have less political salience, it is necessary to consider how the businesses and intermediaries charged with remitting these taxes interact in the political domain. Just because the statutory incidence of a tax falls on a narrow group does not necessarily mean that the tax has low political salience. Even considering only individual voting behavior—excluding lobbying by business interests—a business group charged with remitting a tax might still plausibly engage in sufficient political advertising so as to significantly affect the voting behavior of individuals who indirectly bear the burden of the tax.77 Expanding the discussion to include lobbying and other forms of political activity by business groups would provide even further grounds for questioning whether the costs of indirect taxes necessarily have less political salience.78

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76 George Loewenstein, Deborah A. Small & Jeff Strnad, Statistical, Identifiable and Iconic Victims, in Behavioral Public Finance 52, 39 (Edward J. McCaffery & Joel Slemrod eds., 2006).

An alternative intuition for why the use of indirect taxes might reduce political salience relates to the endowment effect. In regard to taxation, whether taxpayers perceive taxes as losses from their pretax endowments, or as reduced gains from engaging in market transactions, may determine whether the endowment effect comes into play. Indirect taxes may often be viewed as forgone gains whereas equivalent direct taxes would be viewed as losses. See Edward J. McCaffery & Jonathan Baron, Isolation Effects and the Neglect of Indirect Effects of Fiscal Policies, 19 J. Behav. Decision Making 289, 290 (2006); McCaffery, note 56, at 1874-76.

77 See Joel Slemrod & Jon Bakija, Taxing Ourselves: A Citizen's Guide to the Debate over Taxes 140 (4th ed. 2008) ("[W]henever any kind of tax increase or elimination of tax preference is threatened, those who perceive themselves to be losers immediately produce and publicize a study purporting to show how many jobs it will cost.").

78 Indeed, it has often been argued that narrow interest groups have disproportionate influence on the legislative agenda as compared to diffuse interest groups. See generally, Mancur Olson, The Logic of Collective Action: Public Goods and the Theory of Groups (1971). It is not clear, however, to what extent intermediaries charged with remitting an
Ultimately, the question of whether indirect taxes have lower political salience than equivalent direct taxes can only be answered through empirical study, and the empirical literature on this question remains inconclusive. Yet despite the lack of conclusive empirical findings, political commentators frequently criticize the use of indirect taxes on political salience grounds, and many important political actors argue against increased use of indirect taxes based primarily on the contention that these taxes have low political salience. As Bruce Bartlett provocatively writes:

The *Wall Street Journal*, for example, continually argues against the VAT on the grounds that if we were ever to adopt such an insidious form of taxation we would very quickly become just like Europe, as if the entire continent is one big Gulag instead of someplace where by and large the people are just as free and prosperous as Americans.

2. Tax System Complexity

Another frequently cited political salience hypothesis concerns tax system complexity. Of particular focus has been the notion that the use of multiple smaller tax instruments (as opposed to having only a single comprehensive tax instrument) may lead voters to underestimate their aggregate tax burdens. For example, James Buchanan has indirect tax face incentives to lobby or campaign against the tax when they do not bear the economic burden of the tax.

79 Finkelstein, note 4, at 970. Note that laboratory-style experiments—which so far have provided the best evidence in support of the indirect-taxes hypothesis—cannot fully control for the possible countervailing effects of the political activity of business groups. A particularly interesting recent experimental study by Sausgruber and Tyran found that their experimental subjects initially preferred indirect taxes over equivalent direct taxes; however, in subsequent rounds of the experiment, Sausgruber and Tyran found that the combination of allowing their subjects to experience the impact of the indirect taxes on prices (in an admittedly simplistic design), and allowing their subjects to deliberate, dramatically reduced the subjects' preferences for indirect taxes over direct taxes. Rupert Sausgruber & Jean-Robert Tyran, Tax Salience, Voting, and Deliberation (Univ. of Copenhagen Dep't of Econ., Discussion Paper No. 08-21, 2008), available at http://ssrn.com/abstract=1292731. In another important recent experimental study, Edward McCaffery and Jonathan Baron found that their experimental subjects initially preferred indirect business taxes to direct income taxes, but that priming the subjects to think about the progressivity of the tax instruments alleviated this effect. McCaffery & Baron, note 76, at 294. There is thus reason to conclude both that the use of indirect taxes may initially reduce political salience and that voter learning and the political activities of business groups may decrease this effect over time.

argued that "[t]o the extent that the total tax load on an individual can be fragmented so that he confronts numerous small levies rather than a few significant ones, illusionary effects may be created." 81 Similar arguments have been made about tax instruments (like sales taxes) that are paid in small amounts over time, as compared to tax instruments (like the property taxes in some states, or income taxes in the absence of withholding) for which taxpayers make lump-sum payments of their aggregate tax liabilities on an annual basis. 82

As another argument related to tax system complexity, many theorists have speculated that reducing compliance costs may lower the political salience of taxation. 83 Of course, to the extent that increasing compliance costs raises the real burden imposed by taxation, this effect is unrelated to tax salience. If voters oppose taxation only to the extent taxes impose real economic burdens, raising compliance costs to increase political salience would be normatively equivalent to hiking tax rates and then throwing away the revenues generated so that the revenues cannot be used to fund government spending. 84 Such an approach can only be defended if one views government spending as creating negative value even when the government financing is costless. Merely believing that government spending is wasteful does not in itself justify destroying economic resources for the purposes of depriving the government of those resources.

Hence, most sophisticated arguments for increasing compliance costs depend on the assumption that doing so heightens political salience beyond the direct effects of the compliance costs. The intuition appears to be that complexity-induced compliance costs lead taxpayers to spend more time thinking about tax calculations—or to develop more negative feelings about taxation—and that this increases the political salience of taxation. For instance, incurring compliance costs such as by filling out income tax forms may force taxpayers to think

83 E.g., Lawrence Zelenak, Justice Holmes, Ralph Kramden, and the Civic Virtues of a Tax Return Filing Requirement, 61 Tax L. Rev. 53, 57 (2007) ("Some small-government conservatives argue that taxes should be as visible and as painful as possible, on the theory that the public will resist high levels of visible and painful taxes."); see also Finkelstein, note 4, at 969-70; H. Geoffrey Brennan & James M. Buchanan, Towards a Tax Constitution for Leviathan, 8 J. Pub. Econ. 255, 256 (1977).
84 See Daniel Shaviro, Do Deficits Matter? 103 (1997) ("[The adherents of making taxes painful] show their misunderstanding when they treat the imposition of excess burden through taxation as an alternative to feeding Leviathan rather than as an example of Leviathan at work.").
about their tax burdens even if they would prefer not to do so. Although forcing taxpayers to make painful tax calculations harms the taxpayers, a small-government advocate might view this harm as justified if it then leads voters to become more opposed to taxation and spending to a sufficient degree that the resulting "benefit" of increased voter opposition to taxation exceeds the harm from the compliance costs. As Finkelstein explains:

[C]ompliance costs impose a deadweight burden on society. Yet policies that would reduce these costs are frequently opposed by policy makers and economists who believe that compliance costs play an important role in keeping taxes visible and salient to the electorate, who then serve as an important check on attempts to raise the scale of government activity beyond what an informed citizenry would want.85

As with the indirect taxes hypothesis, the empirical literature on how tax system complexity affects voting behavior remains indeterminate.86 The most important line of empirical research on this question began with Richard Wagner in 1976.87 Wagner devised a measure of aggregate tax system complexity and found a strong correlation between this measure and government expenditure levels.88 Wagner viewed this result as confirming that tax system complexity leads voters to underestimate their tax burdens, and thus to support higher levels of tax-financed spending.89 Subsequent studies have pointed out limitations in Wagner's approach.90 Correcting for these limitations, some empirical studies have found results similar to Wagner's,91 while others have failed to find any significant correlations between measures of tax system complexity and government expenditure levels.92

85 Finkelstein, note 4, at 969.
86 For a review of this literature, see Dollery & Worthington, note 64, at 264-71.
88 Id. at 53-59.
89 Id. at 57-59.
90 Oates, note 13, at 69-70 (summarizing studies).
As the most important recent empirical study of the tax system complexity hypothesis, Finkelstein examined how toll rates respond to the introduction of electronic-toll collection. Finkelstein found that "drivers are substantially less aware of tolls paid electronically" and that implementing electronic-toll collection results in tolls that "are 20 to 40 percent higher than they would have been" otherwise. Importantly, Finkelstein distinguishes between the political salience effects of electronic-toll collection and effects due to making toll collection more efficient such as by reducing compliance costs. In our view, Finkelstein's study reports the most clear empirical support for any of the political salience hypotheses. Nevertheless, as Finkelstein emphasizes, her results "leave open the question of how tax salience affects tax rates" outside of the electronic-toll collection context.

3. Withholding

Another tax design element that has been hypothesized to reduce political salience is withholding. Milton Friedman famously regretted his role in creating the system of withholding for federal income taxes, arguing that income tax withholding has played a major role in the growth of U.S. government spending during the twentieth century. In his words: "It never occurred to me at the time that I was helping to develop machinery that would make possible a government that I would come to criticize severely as too large, too intrusive, too destructive of freedom."

The existing literature is not entirely clear as to what it is about withholding that is thought to reduce the political salience of taxation. It sometimes has been posited that breaking tax remittances into smaller regular payments—as opposed to a single larger payment—may reduce the political salience of the tax liabilities. If breaking up large payments is the dominant way in which withholding affects political salience, then withholding probably should be thought of as a sub-factor of the tax system complexity hypothesis. Yet other accounts

93 We earlier discussed the implications of Finkelstein's study for the spotlighting market salience hypothesis. See note 62 and accompanying text.
94 Finkelstein, note 4, at 969.
95 Id. at 1002-08.
96 Id. at 1009.
97 Friedman, note 11, at 113-14; see also Dick Armey, Why America Needs the Flat Tax, in Fairness and Efficiency in the Flat Tax 96, 99 (1996) ("If America had not accepted withholding . . . the government could never have grown as large as it has.").
98 Milton Friedman & Rose D. Friedman, Two Lucky People 123 (1998).
99 E.g., Krishna & Slemrod, note 82, at 193-94; Cabral & Hoxby, note 18, at 3-4.
100 See Subsection II.B.2 (discussing the argument that numerous smaller tax liabilities may have less political salience than fewer larger tax liabilities).
appear to suggest that voters may not fully pay attention to amounts taken out of their salaries prior to the receipt of their paychecks. Thus, it could be that withholding serves to manipulate the framing of tax liabilities, such that tax liabilities subject to withholding are viewed more like money that is never received, and less like coercive extractions from a taxpayer's income. If this is the operative mechanism, then the withholding hypothesis may bear more relation to the indirect-taxes hypothesis, and particularly to the endowment effect, than to the tax system complexity hypothesis. Because it is unclear whether withholding is best thought of as a subfactor of the tax system complexity hypothesis, or of the indirect-taxes hypothesis, or as a combination of both of these hypotheses, we discuss withholding as an independent hypothesis for how tax design may reduce the political salience of taxation.

Although numerous studies have reported that taxpayers often withhold more than seems optimal—in effect giving "interest free loans to the government"—only one paper has reported evidence directly supporting the intuition that withholding reduces political salience. That paper, by Marika Cabral and Caroline Hoxby, found that the use of a form of withholding for property taxes (called "tax escrow") results in less voter support for state referenda limiting property taxes. Cabral and Hoxby did not find, however, that use of tax withholdings...

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101 See Armey, note 97, at 99 ("Only by taking people's money before they ever see it has the government been able to raise taxes to their current height without sparking a revolt."); see also Subsection II.B.1, for discussion of an analogous intuition with respect to indirect taxes.

102 Along these lines, it has been suggested that withheld income may not be incorporated into taxpayers' endowments—as in the endowment effect—such that taxpayers may be more politically averse to paying additional taxes at the end of the year than to having amounts withheld regularly from their paychecks. See Kyle D. Logue & Joel Slemrod, Of Coase, Calabresi, and Optimal Tax Liability, 63 Tax L. Rev. 797, 848-49 (2010); see also Shaviro, note 66, at 23-25 (for a more general discussion of the endowment effect and taxation); note 76 (for a discussion of the endowment effect in relation to the indirect-taxes hypothesis).


105 For some additional suggestive evidence that withholding may lead to larger government, which may be due to withholding increasing the efficiency of income taxation rather than due to political salience, see Libor Dusek, Are Efficient Taxes Responsible for Big Government? Evidence from Tax Withholding 26-27 (May 9, 2006) (unpublished manuscript), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1585119. For a general discussion, see Krishna & Slemrod, note 82, at 193-94.

106 See Cabral & Hoxby, note 18, at 36-42.
escrow led voters to underestimate the magnitude of property taxes when answering survey questions; instead, tax escrow appears to increase confusion regarding property taxes, which then reduces voter support for anti-property tax referenda.\textsuperscript{107} A form of tax presentation that affects voting on property tax limitations in a referendum is an example of tax presentation impacting political salience. It is unclear, however, whether Cabral and Hoxby's results can be generalized to other forms of tax-related political decision-making.

Regardless, there appears to be widespread agreement that withholding generally reduces political salience.\textsuperscript{108} As Kyle Logue and Joel Slemrod explain, "many conservatives dislike withholding because it reduces the visibility of tax collection and thus reduces the perceived cost of government."\textsuperscript{109} Several conservative legislators have even proposed legislation to end income tax withholding, arguing for this position on political salience grounds.\textsuperscript{110}

4. Deficit Financing

Another hypothesis for how tax design may reduce political salience concerns the use of deficit financing.\textsuperscript{111} Paying for government expenditures with deficit financing can delay the need to levy taxes to fund those expenditures.\textsuperscript{112} If voters discount their future tax liabilities in assessing the desirability of government spending, then deficit financing may lead voters to support higher levels of government expenditures by reducing the political salience of the increased future tax liabilities that the voters eventually will need to incur to pay off the accumulated debt. Or, more simply, the costs of deficit financing may be less politically salient than the costs of financing with current taxes.

\textsuperscript{107} Id. at 42.
\textsuperscript{108} Another anecdotal piece of evidence relates to the recent cut to federal income taxes administered through reducing the amount of required withholding. Many taxpayers apparently scarcely noted their (slightly) increased income (the intended result from a macroeconomic policy perspective), and not surprisingly most voters did not credit federal policymakers for a tax cut. Michael Cooper, From Obama, the Tax Cut Nobody Heard Of, N.Y. Times, Oct. 19, 2010, at A1.
\textsuperscript{109} Logue & Slemrod, note 102, at 849.
\textsuperscript{110} Id.
\textsuperscript{111} As we discuss further in Section II.C., deficit financing may reduce market salience as well as political salience.
\textsuperscript{112} Alternatively, financing current expenditures with deficits could be thought of as delaying the need to reduce spending on other programs. We focus on delayed taxation for ease of exposition.
The political salience hypothesis of deficit financing thus may operate much like the market salience hypothesis of spotlighting. Both hypotheses predict that taxpayers discount tax liabilities that are not imposed until after the time in which the relevant decisions are made. In regard to the political salience of deficit financing, this prediction is based on the separation in time between the current voting decisions and when the future tax liabilities are imposed.

Even if the use of deficit financing does lead voters to support higher levels for government spending, however, the reason may not be due to the reduced political salience of the future tax liabilities. If deficit financing delays the imposition of future tax burdens for a sufficiently long time, it can potentially shift tax burdens to future generations of taxpayers. Deficit financing may thus have intergenerational distribution effects as well as tax salience effects. There are also other nonsalience related reasons that could explain a correlation between deficits and government growth (if they are even correlated). It is textbook public finance that certain capital projects should be financed over several generations, and such investments may well turn out to increase the productivity of future workers, making the resulting debt burden much more manageable. For these reasons and others, empirical studies have yet to produce conclusive evidence in support of the deficit-financing hypothesis. Nevertheless, many scholars appear to believe that deficit financing reduces the political

113 See Subsection II.A.1. Alternatively, and more speculatively, the endowment effect could lead voters to discount future tax liabilities if current taxes are viewed as losses and future taxes as merely forgone gains. See note 76 (discussing the endowment effect as a potential explanation for the indirect-taxes hypothesis).

114 For political salience, scholars have typically used the terms "isolation effect" or "focusing effect," in place of "spotlighting," but the underlying idea is the same. See, e.g., McCaffery & Baron, note 76, at 290.

115 To the extent that deficit financing merely delays the imposition of a tax burden without shifting the taxpayers who eventually will need to pay the burden, deficit financing is properly thought of as a factor affecting the political salience of taxation and can be analyzed along with the other factors. But to the extent that deficit financing shifts tax burdens to future generations (or shifts the tax burden amongst existing age cohorts), deficit financing should be thought of as redistributing the tax burden rather than reducing its political salience. As noted previously, our definition for the political salience of taxation refers only to how altering the presentation of an individual's tax burden (including shifting the time period in which the tax burden will be incurred) affects the individual's voting behavior. See notes 12-15 and accompanying text. The distributional impact of shifting tax burdens among generational cohorts can undoubtedly affect voting behavior—and undoubtedly is important—but is beyond the scope of this Article.


118 Dollery & Worthington, note 64, at 290-93; Oates, note 13, at 71.
salience of taxation, and there is some suggestive empirical support for this hypothesis, as well as a great deal of anecdotal support.

5. Sticky Baselines

We use the label "sticky baselines" to group a number of related sub-hypotheses for how the setting of default fiscal policy outcomes may influence the direction of actual fiscal policy choices. The sticky-baselines hypothesis can be expressed as the prediction that forgone tax cuts are less politically salient than are actual tax hikes (with the difference between "forgone tax cuts" and "actual tax hikes" determined by the setting of the baseline for default fiscal policy outcomes). It is useful to begin by discussing the literature on some discrete instances of this hypothesis, including: (1) the flypaper effect, (2) bracket creep, (3) income elasticity, and (4) the fiscal-volatility effect.

a. The Flypaper Effect

Arthur Okun coined the term "flypaper effect" to describe the notion that the money that governments send out "sticks where it hits." Numerous studies have investigated the flypaper effect with regard to intergovernmental grants and generally have found that subnational governments "use the grants they receive from the federal government to increase local spending." This finding is potentially inconsistent with standard economic models based on full political salience. From the perspective of local residents, the receipt of a lump sum grant from the federal government "is the equivalent of an increase in income. The residents of the local jurisdiction should spend

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119 E.g., Shaviro, note 84, at 303 ("In the end, concern about the size of government provides the most powerful reason for disliking [deficit financing]. [Deficit financing] tends to increase government spending because of fiscal illusion plus current voters' indifference to costs that they can pass forward."). But note that Shaviro also emphasizes "the empirical uncertainties" underlying this conclusion, such that "one ultimately must make a leap of faith about a broad and indeterminate issue." Id.

120 E.g., Jonathan Baron & Edward J. McCaffery, Starving the Beast: The Psychology of Budget Deficits, in Fiscal Challenges: An Interdisciplinary Approach to Budget Policy 221, 237-38 (Elizabeth Garrett, Elizabeth A. Graddy & Howell E. Jackson eds., 2009). ("[W]e found that the public does not support deficits... [y]et the status quo bias will make it difficult to restore balance once a deficit is created.").

121 E.g., Shaviro, note 84, at 71-78.


123 Id. ("Numerous studies have investigated the actual effect on spending of various types of grants to state and local governments. By and large, these studies tend to support Henry Clay's prediction: spending is stimulated by much more than theory predicts.").
this increase in income just like any other increase . . . ."\textsuperscript{124} That is, if a local government is spending $2 million on services and then the federal government gives that government an unrestricted $1 million grant, then the government should not dramatically increase spending and should instead return the majority of the extra money to the local taxpayers. But this is not what is found in these studies; the total size of local government spending increases, perhaps not by a full million dollars, but by a much larger amount than would be predicted by traditional economic models based on full political salience.

Like the other instances of the sticky-baselines hypothesis, the flypaper effect may result from voters focusing on changes to their tax liabilities rather than on the absolute levels of their tax liabilities.\textsuperscript{125} In other words, local government taxpayers might be more likely to notice the federal government distributing money directly to the taxpayers, with the local government subsequently raising taxes in order to appropriate this money for increased spending, as compared to the federal government distributing the money directly to the local government so that spending could be increased without the money ever passing through the hands of the taxpayers. Hence, a plausible political salience explanation for the observed flypaper effect is that the forgone tax cuts used to finance local government spending when grants are given directly to local governments are less politically salient than would be the tax hikes needed to fund increased local government spending were the grants instead given to the local government's taxpayers.

\textbf{b. Bracket Creep}

Even in the absence of economic growth, inflation can result in progressive income taxes generating more revenue over time due to "bracket creep" causing taxpayers to move into higher income tax rate brackets. This effect was thought to be very important in the United States during the 1970's before the federal income tax brackets were indexed for inflation as part of the 1981 tax reform.\textsuperscript{126} Accord-

\textsuperscript{124} Id.

\textsuperscript{125} See David Gamage, Preventing State Budget Crises: Managing the Fiscal Volatility Problem, 98 Cal. L. Rev. 749, 801 (2010) (concluding that "[e]mpirical studies of the ‘flypaper effect’ buttress these theoretical explanations for why baselines matter"—such as the theoretical explanation that the endowment effect makes forgone tax cuts less politically salient).

ing to Michael Graetz, “These inflation adjustments [enacted in the 1981 tax reform] eliminated the sizeable automatic income tax increases that had been produced even at relatively low levels of inflation. The lasting revenue impact of this change is dramatic—far greater than is generally known.”

Bracket creep relates to the sticky-baselines hypothesis to the extent the “automatic income tax increases” generated by inflation have less political salience than would equivalent tax increases enacted through tax-rate hikes. Concern over the bracket-creep phenomenon is thus consistent with the intuition that forgone tax cuts may be less politically salient than actual tax hikes.

c. Income-Elasticity

Variation in the extent to which the revenue generated by a tax instrument increases with economic growth is measured by the “income-elasticity” of the tax instrument. For instance, income taxes generally have higher income-elasticity than do sales taxes, such that economic growth generally will produce more additional revenues over time from an income tax than from a sales tax. The use of tax instruments with higher income-elasticity consequently generates “automatic tax increases” in a similar fashion to the effect of bracket creep in the absence of inflation indexing.

It often has been argued that the use of tax instruments with high income-elasticity tends to increase the size of government over time, as voters are presumed to be less averse to additional spending financed through the extra revenues generated by high income-elasticity tax instruments, as opposed to raising tax rates to supplement the lower revenues generated by low income-elasticity tax instruments.

127 Michael J. Graetz, Tax Policy at the Beginning of the Clinton Administration, 10 Yale J. on Reg. 561, 563 (1993).
128 See Gamage, note 125, at 796-97 (“After 1981, these ‘automatic tax increases’ were abolished, and Congress was no longer able to obtain the same yearly revenue increases without explicitly voting to raise taxes. The adoption of this new tax baseline through inflation indexing dramatically altered the dynamics of the federal tax policy debate.”).
129 We refer here to the long-term elasticity of revenues with respect to personal income growth. In some tax policy contexts, such as in regard to state-budget crises and fiscal volatility problems, it is important to distinguish between long-term and short-term income elasticity. See, e.g., Mark W. Nichols & Mehmet Serkan Tosun, The Income Elasticity of Gross Casino Revenues: Short-Run and Long-Run Estimates, 61 Nat’l Tax J. 635, 636-37 (2008); Jon David Vasche & Brad Williams, Revenue Volatility in California, 36 St. Tax Notes 35, 37 (Apr. 4, 2005); see generally Subsection II.B.5.d.
130 E.g., David Gamage, Managing California’s Fiscal Roller Coaster, 49 St. Tax Notes 659, 660 (Sept. 8, 2008) (explaining that income tax revenues vary more with changing economic growth rates than do most other sources of tax revenue).
131 E.g., Steven M. Sheffrin, Tax Reforms and the Growth of Government, 24 Empirical Econ. 655, 664 (1999) ("The increased use of the income tax enacted in California in the
The higher income-elasticity of income taxation has been cited as a potential partial cause for California's dramatically increased reliance on income taxation, as opposed to other state tax instruments, over time. Both with respect to the impact of income-elasticity on aggregate state spending, and with respect to the increased use of income taxation as compared to tax instruments with lower income-elasticity, these arguments appear to assume that forgone tax cuts have less political salience than actual tax hikes.

d. The Fiscal-Volatility Effect

In addition to having different long-term elasticities with respect to personal income growth, tax instruments may also differ in their revenue volatility with respect to shorter-term business cycles. For instance, income tax revenues (and particularly the revenues from taxing capital gains) are particularly volatile across economic booms and busts, while property tax revenues tend to remain more constant. Based on the hypothesis that forgone tax cuts are less politically salient than are actual tax hikes, one of us has proposed a framework for altering the baseline for how states manage the fiscal-volatility effect as a means of mitigating the harm from state budget crises.

e. Sticky Baselines—Conclusion

There is substantial empirical support for the flypaper effect, and we view as plausible the other sub-hypotheses of income-elasticity, bracket creep, and the fiscal-volatility effect. Nevertheless, these

1930's] put into place an extremely elastic tax system, thereby permitting a rapid expansion of government in California since the 1930s . . . . (In retrospect it is clear that the tax reform of the early 1930s had the unintended consequence of allowing revenue to grow more rapidly than under the old tax structure.).

132 Id.
134 Gamage, note 125.
136 Analogously, with respect to government spending, it has long been understood that budgetary baselines matter. There are occasional proposals for zero-base budgeting—for continually reevaluating the funding for different spending programs, rather than relying on baselines or on prior year funding. But most scholars of the budgetary process have concluded that zero-base budgeting is not feasible in practice, such that budgetary baselines are of central importance in determining actual spending priorities. See Aaron Wildavsky, Budgeting: A Comparative Theory of Budgetary Processes 11 (4th ed. 2002)
effects may not result from political salience. Consider one competing explanation, that most democratic political systems are characterized by numerous veto points, such that the policies supported by the majority of voters (or legislators) do not always become law. Even if baselines have no influence on how voters perceive the costs of taxation (that is, on the political salience of taxation), default policy outcomes may still be sticky if those who oppose the default outcomes cannot overcome the veto points preventing policy change.

The empirical literature relevant to the sticky-baselines hypothesis mostly does not attempt to distinguish explanations related to political salience from competing explanations—such as those related to veto points. Yet anecdotal review of how tax politics are discussed suggests that political salience is at least part of the explanation. As Mathew Rabin has written, “[a] core feature of humans is that we are highly attuned to changes in our circumstances, not merely the absolute levels.” And, as one of us concluded in an earlier article, “[r]arely do politicians try to convince voters about the proper size of taxation or spending as a percent of GDP. Instead, politicians accuse their opponents of wanting to ‘raise your taxes’ and the media dutifully reports the number of times a politician has voted for ‘tax cuts’ or ‘tax hikes.’”

6. Tax-Label Aversion

In this final political salience hypothesis that we discuss, we group a number of related sub-hypotheses under the heading of “tax-label aversion.” At least within the current U.S. political context, govern-
ment intervention in the economy that comes in the form of raising taxes appears to often have more political salience than equivalent (or at least highly similar) interventions enacted through alternative mechanisms.\textsuperscript{142}

We distinguish the tax-label aversion political salience hypothesis from the related concept of tax-averse preferences (and from the opposed concept of tax-accepting preferences).\textsuperscript{143} Tax-averse preferences describe when taxpayers dislike paying taxes more than they dislike paying other price components, or when taxpayers are otherwise willing to bear more than a dollar in costs in order to avoid paying a dollar in taxes.\textsuperscript{144} Both tax-averse preferences and tax-label aversion can be grouped under the general heading of tax aversion.\textsuperscript{145} Only tax-label aversion, however, is properly considered a form of tax salience, as tax-averse preferences are triggered by substantive characteristics of fiscal policies rather than by variations in their presentation.\textsuperscript{146} One can imagine a tax-averse voter not being any more averse to policies labeled as taxes as compared to similar policies not labeled as taxes, just as one can imagine a tax-averse voter being even more averse to any instrument labeled as a tax.

In other words, the tax-label aversion hypothesis is based on the notion that the mere labeling of a policy as a “tax” can reduce voter support for the policy (by increasing the political salience of the costs of the policy).\textsuperscript{147} Many have argued that policy interventions that are essentially equivalent to tax-financed government spending become more politically palatable if the policy interventions can avoid the “tax” label. Examples include: (1) taxes versus other extractions, (2) tax-financed spending versus tax expenditures, and (3) tax-financed spending versus regulation.

\textsuperscript{142} Shaviro, note 66, at 12, 23-27 (discussing both the endowment effect and particularities of U.S. antitax sentiments as potential explanations for U.S voters’ aversion to policies that are labeled as “taxes” as compared to similar policies that avoid the “tax” label).

\textsuperscript{143} For a more in-depth discussion of tax-averse preferences, and of tax aversion more generally, see Christopher C. Fennell & Lee Anne Fennell, Fear and Greed in Tax Policy: A Qualitative Research Agenda, 13 Wash. U. J.L. & Pol’y 75 (2003).

\textsuperscript{144} Id. at 79. Conversely, tax-accepting preferences describe taxpayers who do not view paying taxes as a pure cost, such as when taxpayers consider government spending as worth supporting (and taxes as partially akin to a charitable contribution).

\textsuperscript{145} For empirical studies demonstrating tax aversion, see, e.g., David J. Hardisty, Eric J. Johnson & Elke U. Weber, A Dirty Word or a Dirty World?: Attribute Framing, Political Affiliation, and Query Theory, 21 Psychol. Sci. 86, 86-91 (2010); McCaffery & Baron, note 74, at 117-19.

\textsuperscript{146} More complicated interactions may arise if backlash to a government’s use of techniques for reducing political salience results in taxpayer preferences becoming more tax-averse.

\textsuperscript{147} See Hardisty et al., note 145, at 86 (“The literature on attribute framing suggests that labels make a big difference . . . .”).
Three Essays on Tax Salience

a. Taxes Versus Other Extractions

A few studies have reported evidence that labeling a fiscal extraction as something other than a "tax" may reduce its political salience. For instance, David Hardisty, Eric Johnson, and Elke Weber conducted three experiments comparing their experimental subjects' reactions to "carbon taxes" as opposed to "carbon offsets." They found that subjects identifying as Republicans were significantly more opposed to the "carbon taxes" than to the equivalent "carbon offsets." There is thus at least anecdotal support for the notion that labeling extractions as "taxes" can sometimes result in at least some voters becoming more opposed to the policies than were they instead labeled as alternatives such as "offsets," "fees," "penalties," or "service charges." 1

b. Tax-Financed Spending Versus Tax Expenditures

The idea that tax expenditures have less political salience than tax-financed government spending has played a central role in the tax legal literature. Although the definition of "tax expenditures" is somewhat controversial, the term generally is used to refer to tax preferences—such as tax credits, deductions, or exclusions—used to encourage certain taxpayer behaviors or to otherwise regulate economic...
activity. According to Edward Kleinbard, “our extraordinary reliance on tax expenditures explains the central paradox of the American tax system, which is why the United States is a low-tax country with relatively high marginal tax rates. More fundamentally, tax expenditures dissolve the boundaries between government revenues and government spending.”

That tax expenditures have less political salience than tax-financed spending is often inferred from the degree to which the U.S. government relies on tax expenditures. According to the Congressional Research Service’s calculations, the sum of U.S. tax expenditures equaled $1.2 trillion in 2008—an amount larger than both the revenue raised by the individual income tax and the sum total of all federal discretionary spending. In addition to this inferential support, an experimental study by Edward Zelinsky found that survey respondents significantly preferred to pay firefighters through tax expenditures rather than through direct spending. In a similar experimental study of negative tax expenditures, David Walker found that his survey respondents were more willing to support denying tax deductions for “excessive” executive pensions as compared to imposing direct penalties. In an even broader study based on 498 anonymous respondents, Jake Haselswerdt and Brandon Bartels found “that the delivery mechanism of a government program can have a dramatic effect . . . In general, Americans seem to be much more favorably disposed toward government interventions through the tax code than through more direct channels.” Although there has been relatively

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155 E.g., Kornhauser, note 148, at 264.
157 Kleinbard, note 154, at 13 (citing Cong. Budget Office, A Preliminary Analysis of the President’s Budget and an Update of CBO’s Budget and Economic Outlook 3 tbl.1-2 (2009)).
158 Zelinsky, note 152, at 815-21.
160 Jake Haselswerdt & Brandon L. Bartels, Comparing Attitudes Toward Tax Breaks and Spending Programs: Evidence from a Survey Experiment, at *20 (unpublished manuscript on file with the Tax Law Review). Note that this study was based on asking respondents about the mortgage interest deduction, a major tax expenditure, and the preference for tax expenditures was more pronounced among the respondents that were classified as economically conservative.
little empirical study of the political salience of tax expenditures, there are still grounds for inferring that tax expenditures may often have less political salience than tax-financed direct spending.

c. Tax-Financed Spending Versus Regulation

Like tax expenditures, regulations can also substitute for tax-financed government spending. For instance, many Democrats began to support mandates that employers provide health insurance to employees because the Democrats' favored policy of government-provided healthcare was not considered politically feasible. Similarly, some environmentalists have called for climate regulations as a more politically feasible alternative to carbon taxes. Regulations can impose real burdens on taxpayers, just as can taxation. As with taxation, the parties on whom the regulations are initially imposed may not bear the final burden, which depends on the economic incidence of the regulations. Nevertheless, voters may not appreciate the burdens imposed by regulation to the same degree as they would the burdens imposed by taxes, such that using regulation as a substitute for tax-financed spending may have less political salience.

d. Tax-Label Aversion—Conclusion

Whereas most of the political salience hypotheses suggest mechanisms whereby governments might reduce the political salience of taxation, the tax-label aversion hypothesis suggests alternatives to “taxation” for enacting government policies. To the extent these alternatives are available as effective substitutes to taxation, restrictions on governments’ abilities to raise “taxes” cannot meaningfully reduce the “size of government” nor prevent government actors from enact-

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161 See id at *4-8, 20 (summarizing other related studies, but maintaining that “[t]o our knowledge, this is the first experimental study to document the impact of delivery mechanism on citizens’ reactions to a government policy”).


165 See Shaviro, note 66, at 27-28 (discussing minimum wage laws as an alternative to taxation); see also Geoffrey Brennan & James M. Buchanan, The Power To Tax: Analytical Foundations of a Fiscal Constitution 166 (1980) (“It is relatively easy to envisage a federal budget making up no more than 20 percent of GNP that would reflect more interference with personal liberties than an alternative budget of 40 percent of GNP, but with substantially less direct regulation.”).
ing their policy goals. Of course, there are limits to the extent to which these alternatives can substitute for tax-financed direct spending and there might be good reasons other than political salience to prefer these other mechanisms. Because there also can be other reasons to prefer these alternatives, we again know of no study that convincingly disentangles the supposed lower political salience of these alternatives to show that their use increases the size of government. Nevertheless, no normative discussion of political salience can be complete without considering alternatives to extractions labeled as “taxes.”

C. Analyzing How Market Salience and Political Salience May Interact

A key thesis of this Article is that there are multiple dimensions to tax salience. Tax-design techniques that reduce market salience may increase political salience, and vice versa. This point has been occasionally noted by prior scholars. Yet many commentators—in particular tax-legal scholars—persist in viewing tax salience primarily as a unitary concept, analytically treating tax instruments with high salience in one domain, and low salience in another, as rare exceptions.

Indeed, by treating tax-salience as a unitary concept, at least one commentator has alleged that policymakers face a specified tax-salience tradeoff: less market salience, which is considered desirable, can only be achieved with less political salience, which is considered undesirable. In Part III we agree with the conclusion that reducing market salience should generally be considered desirable. In Part IV we dispute the notion that reducing political salience should be considered harmful. Regardless, we emphasize in this Section that policy-

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166 See, e.g., Shaviro, note 66, at 11 (arguing that “[w]e propose that the structural fiscal language, rather than being dictated from on high by Big Brother, involves formal rules of the game that participants can manipulate but not openly flout. It tilts and constrains real policy choices, and induces political actors to befuddle themselves even as they labor to befuddle constituencies whose support they need.”); David A. Weisbach & Jacob Nussim, The Integration of Tax and Spending Programs, 113 Yale L.J. 955, 957-61 (2004) (arguing that tax expenditures may sometimes be the most efficient means to fund government initiatives).

167 E.g., Finkelstein, note 4, at 972 (first misleadingly discussing tax salience as a single concept with respect to both “economic and political decisions,” but then allowing in her model for tax salience to differ between the time of consumption and the time of voting); Schenk, note 5, at 21-22.

168 E.g., Nussim, note 35, at 229-31 (citing the literature on political salience—that is, fiscal illusion—as support for the market-salience-related behavior of consumer undervaluation of tax-exclusive prices); Galle, note 14, at 109-11 (analyzing an alleged conflict between “democracy” and “welfare”).

169 E.g., Galle, note 14, at 109-11. Note that although we agree with Galle’s conclusion that it is generally desirable to reduce market salience, this conclusion contrasts with much of the recent literature. See Sections III.B and III.C.
makers generally do not face this form of a tax-salience tradeoff—the choice to use tax instruments with low market salience does not necessarily require also choosing tax instruments with low political salience.

Consider Chetty, Looney, and Kroft's well-known study of the market salience of U.S. retail sales taxes. They found that grocery store customers do not fully factor retail sales taxes into their purchasing decisions when these taxes are not included in the prices posted on the store’s aisles, even when the grocery store customers appeared to be fully aware of the sales taxes and their effects on the goods' final prices. What caused the retail sales taxes to have low market salience in their study was thus presumably not a factor of whether the consumers knew about the tax in a manner that would allow for informed voting, but appeared instead to be a result of the tax information not being included in the posted prices that the consumers relied on when making their market purchasing decisions. Notably, Richard Bird has argued that this very feature of retail sales taxes makes them especially politically salient:

RSTs such as those in Ontario (as well as four other provinces and most US states) are invariably stated as a separate explicit charge imposed on the posted price when the consumer arrives at the cash register. While this process is no doubt both cumbersome and often unwelcome—no one ever has the correct change ready!—the very fact that it is annoying may perhaps be considered good for democracy, if one believes that citizens should be fully aware of the cost of government. On the other hand, such transparency clearly makes it more difficult to raise the tax rate because everyone is instantly aware of any increase.

Now consider the indirect taxes political salience hypothesis. Even were consumers completely unaware of the existence of indirect tax instruments—like most VATs—the costs of these tax instruments are still typically incorporated into the prices vendors post on store aisles. The intuition that voters discount the costs of indirect taxes because the voters do not remit these taxes themselves does not imply that consumers do not respond to the costs of indirect taxes when

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170 Chetty et al., note 6.
171 Id. at 1165-66.
172 Bird, note 68, at 68.
173 See Subsection II.B.1.
174 Chetty et al., note 6, at 1169 ("Taxes levied on producers are more likely to be included in posted prices than taxes levied on consumers because producers must actively 'shroud' a tax levied on them in order to reduce its salience.").
making purchasing decisions. How tax costs are perceived when voting can differ from how tax costs are perceived when making market purchases.

To generalize, political salience is lessened when voters underestimate the tax components of market prices. The use of indirect taxes is hypothesized to reduce political salience by making it more difficult for voters to differentiate the price effects of taxation on the cost of purchased goods from the nontax prices of those goods. But market salience is only reduced when consumers underestimate post-tax prices. Making it more difficult to distinguish between the tax components of a price and the nontax components of a price should thus not affect market salience, as the post-tax price remains unchanged. The indirect-taxes hypothesis predicts that the use of indirect taxes reduces political salience, but—at least as compared to retail sales taxes—Chetty, Looney, and Kroft's results suggest that the use of indirect taxes should increase market salience.175

Within the market salience literature, the spotlighting hypothesis has received the most empirical support.176 Nearly all of the studies demonstrating the spotlighting hypothesis have involved a separation in time between when market decisions are made and when the tax components of a price are assessed.177 Yet voting decisions are not usually made at the same point in time as are market decisions.178 The political salience equivalent of spotlighting behavior should thus only reduce political salience when tax assessments are delayed until after voting (or perhaps scheduled long before voting). When tax assessment occurs after market decision-making, but prior to voting decisions, spotlighting should only reduce market salience, not political salience.179 Consider a stylized version of Ott and Andrus' finding

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175 See notes 20-23 and accompanying text.
176 See Subsection II.A.1.
177 Id.
178 We are grateful to Ilan Benshalom for pointing out that our discussion glosses over ways in which the distinction between market salience and political salience can be mapped onto the distinction between private and public goods. We use a narrow definition for political salience in this Article in order to keep our analysis tractable. We appreciate the need for further work to improve our understanding of the nature of political salience. Nevertheless, the distinction between private and public goods cannot capture the entire difference between market salience and political salience, because of the point we make here about the role of timing. Market salience and political salience are distinct in part because of when these kinds of decisions are made and this issue of timing is only distantly related to the nature of private versus public goods.
179 Moreover, delaying tax assessment until after market decision-making, but prior to political decision-making, may increase political salience due to the triggering of an endowment effect. See text accompanying note 76; see also Sherman, note 70, at 843 ("In theory, members of the public may want to know about the taxes they are paying; in practice, however, they do not want to be reminded of it by paying a higher-than-advertised price every time they make a purchase.").
concerning the personal property tax on automobiles.\textsuperscript{180} At the time of purchase, consumers do not take into account their future tax liability because these taxes will be levied in the future, and thus these taxes have low market salience. As voters, however, these consumers do receive personal property tax bills, and, assuming these bills arrive before an election (as they must since assessed annually), personal property taxes would seem to have higher political salience—or at any rate the level of political salience of these taxes is not directly related to their market salience. To be sure, significantly delaying tax assessment—such as, perhaps, through certain types of deficit financing—might reduce both market salience and political salience.\textsuperscript{181} But most spotlighting techniques for reducing market salience do not involve such long-time delays, and thus should not reduce political salience.

Indeed, we might expect tax-design techniques that reduce market salience by inducing spotlighting behavior to generally increase political salience. If taxpayers fail to fully consider a tax when making market decisions—because the tax price is not assessed until after the market decision—the taxpayers may become all the more irked when they later have to pay the taxes. More formally, we might imagine that taxpayers perceive taxes that are not assessed until after a market decision as losses or as nonvoluntary extractions—thus triggering the endowment effect—but that taxes assessed at the time of market decision-making are understood to be part of the costs of making the market decision.\textsuperscript{182} This logic may explain why the estate tax appears to have high political salience, but low market salience.\textsuperscript{183}

To be sure, declines in both forms of tax salience can be correlated. For instance, we might expect the use of phase-outs for tax credits and deductions to reduce both market salience and political salience. When tax credits and deductions phase out as taxable income increases, this raises the effective tax rates faced by taxpayers in the phase-out range. To the extent taxpayers focus on their statutory tax

\textsuperscript{180} See Ott & Andrus, note 30.

\textsuperscript{181} The spotlighting hypothesis thus runs directly counter to Barro’s Ricardian Equivalence hypothesis. See generally Robert J. Barro, Are Government Bonds Net Wealth?, 82 J. Pol. Econ. 1095 (1974) (hypothesizing that there is no difference between debt and tax financing for a given amount of public expenditure). That most scholars appear to have rejected the Ricardian Equivalence hypothesis supports the inference that scholars tend to accept the intuitions underlying the spotlighting market-salience hypothesis. See Shaviro, note 84, at 66-78, 145 (discussing the Ricardian equivalence hypothesis and concluding that it is implausible in its strong form).

\textsuperscript{182} See Shaviro, note 66, at 23-25.

\textsuperscript{183} See Lee Ann Fennell, Death, Taxes, and Cognition, 81 N.C. L. Rev. 567, 567 (2003) (“The Article is structured around two puzzles that have been frequently identified in the estate tax literature: first, why popular opposition to the tax is so great . . . and second, why those whose estates are likely to be subject to the tax often do not take advantage of the opportunity to lighten the transfer tax burden . . . ”).
rates, phase-outs could reduce both the market salience and the political salience of taxation. Similarly, we might predict that the Alternative Minimum Tax (AMT) reduces both market salience and political salience in the same manner as might phase-outs. To the extent that taxpayers focus on their statutory tax rates under the regular income tax—rather than on their effective tax rates as modified by the AMT—then the AMT could reduce both the market and political salience of taxation.

The existing literatures on market salience and political salience are both tentative. Considerably more empirical work will be needed to confidently assess how market salience and political salience interact. Nevertheless, it should be clear that market salience and political salience are distinct phenomena. Tax-design techniques that reduce one form of tax salience may increase salience along the other dimension. This relationship is perhaps most clear when comparing indirect taxes and retail sales taxes, yet we expect that market salience and political salience work in opposite directions with respect to many (if not most) tax-design techniques. Although some tax-design mechanisms may reduce both market salience and political salience, we see no reason to expect that market salience and political salience work together more often than they work apart.

D. Understanding the Multiple Dimensions of Tax Salience—Conclusion

Tax salience is a messy concept. In this Part, we reviewed the existing empirical literature on both the market salience and the political salience of taxation. The empirical literature on market salience remains small, although it is expanding rapidly. The literature finds support for the spotlighting and (to a lesser extent) the ironing hypotheses for market salience. However, the literature does not yet offer clear predictions for how these hypotheses relate to real-world tax instruments. In particular, the literature does not fully analyze potential limiting factors to these hypotheses and thus cannot determine

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184 This argument regarding phase-outs is a variant of the spotlighting market-salience hypothesis insofar as taxpayers underestimate their effective marginal tax rates when making market decisions. The argument is also a variant of the tax-system complexity political-salience hypothesis insofar as phase-outs lead taxpayers to underestimate their effective tax burdens when making voting decisions.

185 Note that these examples are only meant to illustrate how market salience and political salience might be correlated. The actual impact of phase-outs or the AMT on either form of tax salience is far from certain. For instance, the AMT could have high political salience if voters become irked by surprising increases to their income tax liabilities and then express their anger in the voting booth.
whether increased use of techniques for reducing market salience would have the intended effect.

Existing empirical studies of the major political salience hypotheses are even less conclusive. We discussed common claims regarding political salience made within the literature and indicated that many of these claims strike us as at least somewhat plausible, whether because of suggestive empirical evidence or anecdotal evidence. However, as with market salience, a number of limiting factors may restrict (or even counteract) attempts to reduce political salience within real-world contexts.

Finally, we argued that market salience and political salience should be thought of as distinct concepts. In particular, we argued that the spotlighting hypothesis for market salience and the indirect-taxes hypothesis for political salience tend to work in opposite directions. Although some tax design techniques undoubtedly reduce both market salience and political salience, we expect that these two concepts work in opposite directions more often than not.

We have not of course reviewed all of the empirical findings potentially related to tax salience. In particular, we have not analyzed sources of voter confusion regarding taxation that governments cannot readily exploit to manipulate taxpayers’ perceptions of tax costs. The salience of taxation may also change over time, as the structure of markets evolve or as taxpayers become accustomed to new price-presentation techniques.

It may thus be tempting to conclude that policy debates should ignore intuitions about tax salience until (or unless) these intuitions receive more satisfactory empirical support. Yet it must be recognized that intuitions about tax salience already significantly influence debates over tax policy. So long as important political actors (and perhaps also the voters on whose support they depend) make tax policy decisions based on naive intuitions about tax salience, scholars must continue to analyze these intuitions based on whatever evidence can be mustered—no matter how inconclusive the evidence might be.

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186 For instance, as we discuss further in notes 277-84 and accompanying text, empirical studies on "the metric effect" suggest that voters perceive the costs of taxation differently depending on whether tax information is displayed in dollar amounts or as percentages.

187 See Campbell, at 28 (reporting that voter attitudes about the U.S. federal income tax have changed over time).

188 See, e.g., text accompanying notes 3, 80, and 97 (citing to a number of strong political positions advocated for based on the political salience hypotheses discussed in Section II.B).
III. ANALYZING THE NORMATIVE IMPLICATIONS OF MARKET SALIENCE

In this Part, our second essay, we argue that it is generally desirable to reduce the market salience of taxation. Our argument contrasts with the conclusions reached in much of the recent literature. In particular, many contend that the advantages from reducing market salience may be overwhelmed by harms created from distortionary income effects. Scholars also frequently cite concerns related to externalities and distribution. We argue that all three of these concerns have been overstated. To be clear, we agree with other recent scholars that these concerns are potentially important. Nevertheless, we argue that in most circumstances these concerns should be overpowered by the benefits produced from decreasing market salience. We thus support a general presumption in favor of reducing the market salience of taxation.

Readers versed in public finance economics can probably anticipate the primary benefits generated by reducing market salience. Taxes decrease economic welfare to the extent that market participants perceive the costs imposed by taxation and alter their market decisions in order to avoid those costs. Hence, inducing taxpayers to ignore some of the costs of taxation when making market decisions—that is, by reducing market salience—alleviates the economic harm caused by raising tax revenues. Perhaps because the advantages of reducing market salience are so readily understood, most of the recent normative literature on market salience has focused on questioning this simple case for reducing market salience. We conclude that the simple normative case for reducing market salience will usually be robust to all three of the potential limitations discussed in the literature.

Nevertheless, we should emphasize that not all mechanisms for reducing market salience are normatively attractive; as in most things, the ends do not justify all potential means. For instance, some techniques for reducing market salience may involve making tax assessments more complex. To the extent additional complexity poses real costs for taxpayers who must calculate their taxes, these costs must be weighed against any social welfare advantages that result from reducing market salience. The argument we present in this Part for why

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189 See, e.g., Chetty et al., note 6, at 1173-76.
190 See id.
191 See, e.g., id., at 1164; Galle, note 14, at 61, 78, 100-03; Nussim, note 35, at 244-47, 249-53.
192 Establishing a scholarly reputation, after all, requires making nonobvious contributions.
193 To the extent that additional complexity causes some taxpayers to forgo calculating their post-tax prices—thereby reducing the market salience of the tax instrument—the impact of the additional complexity on compliance costs is not straightforward. On the one
it is generally desirable to reduce the market salience of taxation does not account for any negative side effects created by specific mechanisms for reducing market salience.\(^{194}\) Instead, this Part takes as its question whether the end of reducing market salience should in and of itself be considered normatively attractive. This abstract inquiry is analytically prior to consideration of specific means of reducing market salience.\(^{195}\)

Moreover, we focus our arguments in this Part on evaluating the consequences of reducing market salience. We do not consider whether there is anything inherently wrong with reducing market salience even if doing so generates desirable consequences. We do not believe there is anything inherently wrong with reducing market salience, but we leave evaluation of that question for future research.

As a final cautionary note, we should reemphasize that we do not mean to imply that governments actually can reduce the market salience of taxation. Our arguments in this Part are entirely theoretical. If future research provides governments with tools capable of clearly reducing market salience, we argue for a general presumption in favor of employing those tools.

\(\text{A. The Simple Case for Reducing Market Salience}\)

Most forms of taxation affect ("distort") taxpayer behavior, resulting in what economists refer to as "excess burden" or "deadweight

\(^{194}\) As another potential negative side effect, some scholars have suggested that certain mechanisms for reducing market salience may produce "psychic costs" to the extent that taxpayers would prefer an easy aggregation of tax costs and nontax costs. See, e.g., Bird, note 68, at 67-70 (reporting that Canadians express displeasure at having to pay taxes at store registers that are not posted on the prices displayed on store aisles); Amotz Morag, On Taxes and Inflation 21 (1965) ("An important factor in the realities of the limits of taxation are the psychic costs of paying tax, costs which politicians will carefully heed because they are clearly relevant to the prospects of re-election.").

\(^{195}\) As a further related caveat, we note that our argument in favor of reducing market salience assumes that market salience would be lessened equally across all relevant transactions. It might not be desirable to reduce market salience with respect to only some tax-relevant transactions. For example, if market salience were reduced only for grocery store purchases, but not for other purchases, this might induce taxpayers to increase their grocery store consumption at the expense of consumption for which tax prices remain more market salient. Yet most mechanisms for reducing market salience should affect the majority of taxed transactions rather than just a small subset. Hence, we view this concern more as a caveat than as a central limitation to the simple case for reducing market salience. (We thank Eric Zolt for bringing this concern to our attention).
loss.” As a starting point, it is typical to envision the economic decisions taxpayers would have made in a hypothetical pretax world. The next step is to calculate how taxpayers deviate from this behavior as a result of taxation. For instance, if there is a tax on one good (for example, hamburgers), but not on another substitute good (for example, hot dogs), then Jane Taxpayer might shift her consumption from hamburgers to hot dogs even if she would have preferred hamburgers in the absence of taxation. To the extent Jane Taxpayer continues to consume hamburgers—while paying the tax—the tax merely transfers resources from Jane to the government (which then may be transferred back to Jane or to other taxpayers through government spending). But to the extent that Jane shifts her consumption from hamburgers to hot dogs, Jane loses utility equal to the amount by which she would have preferred the hamburgers over the hot dogs, and the government derives no revenue from Jane’s consumption of the untaxed hot dogs. The loss to taxpayer utility that results from taxpayers shifting away from taxed activities for the purpose of paying less in taxes, is the excess burden or deadweight loss.

Generalizing from this simple example, a similar logic applies to taxes on income, under the assumption that leisure generally cannot be taxed, and to any other taxes that can be avoided by engaging in less of the taxed activities. For example, sales taxes generate excess burden to the extent taxpayers reduce their retail purchases, capital income taxes generate excess burden to the extent taxpayers reduce their savings, and corporate income taxes generate excess burden to the extent individuals shift their investments out of the corporate form. Again, the key insight is that when taxation deters individuals from engaging in taxed activities, the individuals derive less utility while the government receives no additional revenues.

Our discussion so far has considered only “substitution effects”—shifts in taxpayer behavior that occur due to taxes altering the relative prices of goods or activities. In addition to substitution effects, taxpayer behavior may also adjust through “income effects”—shifts in taxpayer behavior that occur due to taxation reducing the taxpayers’ overall budgets. For example, if the imposition of a new income tax reduces the amount of money a taxpayer has to spend on consumer

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196 Slemrod & Bakija, note 77, at 144.
197 The following discussion roughly follows Harvey Rosen & Ted Gayer, Public Finance 331-52 (8th ed. 2008). Similar accounts can be found in most other introductory texts on public economics. See, e.g., Gruber, note 72, at 35-37, 590-601; Bernard Salanié, The Economics of Taxation 35-44 (2003).
198 Of course, the listed tax instruments can also generate excess burden by affecting taxpayer behavior on margins other than those mentioned.
199 See Rosen & Gayer, note 197, at 337-38.
goods, she may reduce her consumption of luxury items (for example, designer clothes and entertainment) more than of necessary items (for example, food and more basic clothing), even if the tax affects the prices of all goods equally.

When tax instruments are fully market-salient, whether the tax instruments produce income effects depends on what the governments do with their collected tax revenues. For instance, if a government collects $100 from a taxpayer in aggregate taxes, and then immediately returns the $100 to the taxpayer as a cash payment (or gives to the taxpayer exactly what she would have purchased anyway), there would be no income effects. The taxpayer's aggregate income would be identical both before and after the counteracting tax and cash payment. Although governments use revenues for purposes other than cash payments, the more general point remains that the net effect of taxation on a taxpayer's budget depends on how the government uses the tax revenue. In order to factor out considerations related to governments' use of tax revenues, economists frequently measure the distortionary impact of a tax instrument by comparing the behavioral effects of the tax instrument to the behavioral effects that would result if the government instead collected the same revenues through a lump sum tax and then immediately returned those revenues to the taxpayers through direct cash payments. Through this mechanism—known as "equivalent variation"—it is possible to isolate the substitution effects of a tax instrument from the income effects. For many questions of tax policy, only the substitution effects are normatively relevant when measuring excess burden, as income effects depend on how the governments use collected tax revenues.

200 See generally id. If government spending is wasteful, then net taxing and spending will reduce taxpayers' budgets. Conversely, if government spending is more valuable than forgone private consumption (for example, if the government spending provides valuable public goods), net taxing and spending may increase taxpayers' budgets. Even in this latter case, however, there may be income effects if the government spending is not a perfect substitute for the forgone private consumption (or if it is not perceived as such by taxpayers). Moreover, if net taxes and spending have distributional effects, the resulting income effects may differ among taxpayers.

201 A "lump sum tax" is defined as a tax instrument "whose value is independent of the individual's behavior." Id. at 334.


203 See Rosen & Gayer, note 197, at 338. To be more precise, although income effects do have normative relevance, the analytic technique of factoring out income effects through equivalent variation allows a policy analyst to make normative statements about taxation without the need to evaluate how tax revenues are used. This approach is some-
The above discussion summarizes the standard economics approach for measuring excess burden (aka, deadweight loss) when tax instruments are assumed to be fully market salient. As we elaborate momentarily, income effects may have additional implications for excess burden when tax instruments are not fully market salient. But first, the impact of market salience on substitution effects supports a simple normative case for reducing the market salience of taxation.

By definition, reducing the market salience of a tax instrument lessens the substitution effects that result from the tax instrument, as the concept of market salience refers to the extent to which taxpayers factor tax prices into their market decisions. Replacing a higher market-salience tax instrument with an otherwise identical lower market-salience alternative thus alleviates the excess burden caused by substitution effects. Intuitively, if the market-price effects of a tax become less salient, then the tax should have less distortionary impact on taxpayers' market behavior. Indeed, Raj Chetty has developed formulas for measuring the excess burden of low market-salience taxes by comparing the differences in how individuals respond to tax prices as compared to nontax prices.

Consequently, economic theory provides a useful baseline for determining full or neutral market salience. When comparing any two tax instruments, we can say that the instrument for which the tax costs are most apparent has higher salience. But to say that a tax instrument has “low” or “high” salience we need a baseline for what is meant by “full” or “neutral” salience. For market salience, we can use as a baseline taxpayers’ perceptions of the nontax costs of making market decisions. When taxpayers evaluate tax costs the same as they do nontax costs (for example, the prices charged by private-sector ven-

times called using “compensated responses,” “compensated demand curves,” or “compensated elasticities.” See id. All of these terms refer to the approach of factoring out income effects to focus solely on substitution effects.

204 See Chetty et al., note 6, at 1173.
205 See Section III.B.
206 See Section II.A.
207 See Chetty et al., note 6, at 1173 (“As the degree of attention to taxes rises, excess burden rises at a quadratic rate . . .”); Galle, note 14, at 62 (“[I]f 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.”).
208 See Chetty et al., note 6, at 1171-72.
209 Not all nontax costs need be equally market salient, particularly to the extent that private-sector vendors engage in price-shrouding practices. Consequently, it will not always be clear which nontax costs should be used as the baseline for determining the market salience of taxation. But for most normative questions regarding market salience, this level of precision should not be necessary, and perceptions of tax costs can be compared to a baseline of a rough average of perceptions of nontax costs.
dors), we can say that the tax costs are fully market salient. Hence, a tax instrument has “low” market salience when taxpayers discount its tax costs as compared to nontax costs, and a tax instrument has “high” market salience when taxpayers weigh its tax costs more heavily than they do nontax costs. When tax instruments are fully market-salient, taxpayers generally respond identically to both tax prices and nontax prices. Conversely, a completely non-market-salient tax instrument would result in no excess burden from substitution effects, being equivalent in this regard to a lump sum tax.

The standard economic notion that substitution effects result in normatively undesirable excess burden thus supports a simple case for reducing the market salience of taxation. By alleviating the tendency for taxpayers to shift away from taxed activities, low market-salience taxes can raise revenue while producing less deadweight loss. Were substitution effects the only concern, this simple case for reducing market salience would be quite rigorous from an economic perspective. The remainder of this Part evaluates the robustness of the simple case to concerns beyond substitution effects.

B. The Impact of Distortionary Income Effects

Of the primary limitations to the simple case for reducing market salience, the problem of distortionary income effects has received the greatest attention in the recent literature. In the following discussion, we argue that concerns over distortionary income effects have been overemphasized; we argue that distortionary income effects are only likely to defeat the simple case for reducing market salience under a limited set of conditions—namely, either when taxes are imposed on irregular purchases made by credit-constrained taxpayers, or when there are long time delays between market decisions and tax assessments.

We do not mean to suggest that distortionary income effects are not important. We only mean to argue that the recent literature has overstated concerns related to distortionary income effects. We conclude that, for most mechanisms for reducing market salience, any harm

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210 Of course, there often will be heterogeneity in how individual taxpayers respond to tax costs as compared to nontax costs. To keep the scope of our discussion manageable, we mostly gloss over heterogeneity by discussing the salience of tax instruments based on taxpayer reactions in the aggregate.

211 See Chetty et al., note 6, at 1171. An exception to this rule is when taxpayers have tax-averse or tax-accepting preferences. See Subsection II.B.5. Following the approach of most optimal tax models, Chetty’s formulas assume away the possibility of tax-averse or tax-accepting preferences.

212 See Chetty et al., note 6, at 1173.

213 See, e.g., id. at 1173-76.
caused by distortionary income effects should be overwhelmed by the benefits resulting from reduced substitution effects.

1. The Problem of Distortionary Income Effects

As we noted previously, in standard optimal tax models wherein taxes are assumed to be fully market salient, income effects typically are factored out because decreases to individuals' budget capacities are counteracted by increases to the government’s budget capacity.\(^{214}\) When taxes reduce individuals' budgets, the standard models assume that the individuals optimally allocate their (now smaller) after-tax budgets across goods and time periods.\(^{215}\) Individuals, however, may not allocate their after-tax budgets optimally when taxes have low market salience.\(^{216}\)

Consider a taxpayer who needs to allocate her income between purchasing a car and saving funds to pay for food and rent. If a non-market-salient car registration tax is levied after automobile purchases, such that the taxpayer decides which car to purchase based on the pretax price, the taxpayer may select a more expensive automobile than she would have desired if she understood the full cost.\(^{217}\) After buying the expensive car and paying the non-market-salient tax, the taxpayer may be left with too little funds remaining to cover her expenses for food and rent.

Thus, the very feature that supports the simple normative case for reducing market salience may also produce distortionary income effects.\(^{218}\) To the extent that a car registration tax induces taxpayers to purchase less expensive automobiles, this generates deadweight loss through substitution effects.\(^{219}\) Yet to the extent that reducing the market salience of the car registration tax would return the taxpayers to purchasing the more expensive automobiles, this may generate deadweight loss through distortionary income effects. Completely non-market-salient tax instruments can only mimic lump sum taxes in producing no deadweight loss if taxpayers realize they have smaller budgets due to the tax but then ignore the price effects of the tax.

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\(^{214}\) See Section III.A.

\(^{215}\) See, e.g., Chetty et al., note 6, at 1145.

\(^{216}\) See id. at 1145-46, 1175-76.

\(^{217}\) This example is adapted from Chetty et al., note 6, at 1174. The empirical assertion that car registration taxes may have low market salience is supported by Richard Ott and David Andrus' study of vehicle personal property taxes. See Ott & Andrus, note 30, at 137, 149-51.

\(^{218}\) See Chetty et al., note 6, at 1173-74.

\(^{219}\) The taxpayer would have derived greater utility from purchasing the more expensive car in the absence of the tax, and the government receives less revenue from the taxpayer purchasing the less expensive car (as compared to her purchasing the more expensive car).
when allocating their smaller budgets. When low market-salience taxes result both in lesser substitution effects and in distortionary income effects, the simple case for reducing market salience may no longer hold.220

Chetty, Looney, and Kroft model different ways in which individuals may allocate their budgets when faced with low market-salience taxes.221 They conclude that the welfare implications of reducing market salience depends critically on how taxpayers adjust their budgets.222 If taxpayers fail to account for tax costs when allocating their budgets, and purchase luxury items before necessities, the taxpayers may end up being forced to primarily reduce consumption of necessities once they run out of funds.223 In this case, the social welfare losses caused by the distortionary income effects may overpower the social welfare benefits from lessened substitution effects, thereby making the net consequences of low market salience undesirable.224 In contrast, if taxpayers respond to low market-salience taxes by primarily reducing their consumption of luxury goods, distortionary income effects can be avoided. This conclusion holds even when the reason taxpayers primarily reduce consumption of luxury goods is happenstance rather than the taxpayers rationally allocating their reduced after-tax budgets. If the taxpayers spend their funds first on necessities, and only later on luxuries, the taxpayers may stumble into a near-optimal budget allocation even when the taxpayers cannot accurately predict the size of their after-tax budgets.225 Likewise, if taxpayers reduce their consumption of all goods equally, distortionary income effects might create only small excess burden.226 Consequently, distortionary income effects should only defeat the simple case for reducing market salience when taxpayers purchase luxury items before necessities and are thus forced to disproportionately cut their consumption of necessities once they run out of funds.

220 Cf. Chetty et al., note 6, at 1173-74.
221 Id.
222 See id. at 1174.
223 We use the term "necessities" here to indicate goods for which the taxpayers have highly curved utility functions—those items the deprivation of which can cause a huge loss in utility (for example, water)—and "luxuries" to refer to goods for which taxpayers have less curved utility functions (for example, champagne). Distortionary income effects result when taxpayers reduce consumption of goods for which their utility functions are more curved, leading to a greater overall loss of utility. See id.
224 See id. The net social welfare implications of low market salience in this case, that is, whether the negative implications of distortionary income effects in fact overpower the positive implications of lessened substitution effects, is an empirical question. Of course, one need not adopt a social welfare perspective to find such substitutions problematic, as they would clearly impact a wide variety of theories of justice in distribution.
225 See id.
226 See id.
In the following Subsection, we argue that this scenario is only likely to occur under two limited sets of conditions: first, when low market-salience taxes affect the irregular expenditures and activities of credit-constrained taxpayers, and, second, when there are long time delays between market choices and tax assessments.

2. The Limited Importance of Distortionary Income Effects

Our argument for the limited importance of distortionary income effects depends on the nature of how taxpayers learn from experience. For taxes imposed on regular expenditures or activities—in the absence of long time delays—we expect that taxpayers generally should learn to approximate the size of their budgets through experience. Even when taxpayers cannot accurately assess a tax instrument directly, taxpayers may still note the connections between tax-relevant decisions and at least some of the tax consequences that follow from those decisions.227 Through repeated exposure to the tax consequences of decisions, taxpayers may develop a rough sense of how decisions affect their expected future tax liabilities, even without understanding the tax law mechanics of how these liabilities are calculated.

Crucially, we expect that taxpayers find it much easier to learn from experience that allocating one’s pretax budget based on pretax prices will produce budget shortfalls than to learn the precise mechanics of how taxes cause these shortfalls. In a world with numerous taxes, fees, and complex pricing by private-sector firms, the exact cause of observed budget shortfalls may be difficult to determine. The effect on a taxpayer’s budget of each individual tax, fee, and pricing technique is bundled with the effects of all of the other taxes, fees, and pricing techniques.228 Therefore, when low market-salience taxes are

227 See, e.g., Louis Kaplow, The Theory of Taxation and Public Economics 144 (2008) (“Especially in the long run, it seems plausible that individuals would come to associate certain levels of earnings or after-tax income with a given standard of living, so significant earned-income illusion seems unlikely.”); B. Douglas Bernheim, Taxation and Saving, in 3 Handbook of Public Economics 1173, 1201 (Alan J. Auerbach & Martin Feldstein eds., 2002) (claiming that the view that unsophisticated individuals may learn to behave optimally “is particularly plausible when . . . the activity in question is frequently repeated (so that the individual has the opportunity to experiment and learn”); Bar-Gill & Ferrari, note 42, at 97 (noting that consumers adjust their conduct to correct for prior purchasing mistakes). Contra Raj Chetty, Adam Looney & Kory Kroft, Salience and Taxation: Theory and Evidence 46-47 (NBER, Working Paper No. 13330, 2007), available at http://www.nber.org/papers/w13330 (assessing the possibility of distortionary income effects without taking into account the likelihood that most taxpayers will learn to approximate the size of their budgets for regular expenditures and activities).

228 For a discussion of how bundled consequences from decisions can interfere with learning from experience, see Liebman & Zeckhauser, note 20, at 4.5. See also Colin F. Camerer, Comment on Noll and Krier, “Some Implications of Cognitive Psychology for
assessed on regular expenditures and activities, we expect that taxpayers generally should learn to approximate the size of their budgets well before they learn to estimate post-tax prices.\footnote{If the size of a low market-salience tax liability is made large enough, taxpayers eventually should learn to estimate the effects of the tax on both their budgets and on prices. But short of the point where the size of the tax liability makes the tax completely market salient, we expect learning to be more powerful with respect to budgets than with respect to prices.}

Assuming our analysis of taxpayer learning is mostly accurate,\footnote{We are also assuming here that the learning process is not too long or expensive such that relying on it triggers distributional concerns. We discuss distributional concerns in Subsection III.C.2.} reducing the market salience of taxation generally should have a much greater impact through lessened substitution effects than through distortionary income effects. To the extent that taxpayers can roughly estimate the size of their after-tax budgets, but partially ignore the effects of taxation on relative prices, the simple normative case for reducing market salience is robust to concerns about distortionary income effects.

\subsection{Irregular Purchases by Credit-Constrained Taxpayers}

The first set of conditions wherein we expect that distortionary income effects might still defeat the simple normative case for reducing market salience occurs when taxes are assessed on irregular purchases or activities by credit-constrained taxpayers. In the extreme case of one-time purchases, taxpayers cannot learn from their own experience, as any learning will occur too late to be of use. Taxpayers may still learn from the tax experiences of others, perhaps even employing agents or third-party tools to help with estimating after-tax costs.\footnote{When making housing purchases, for instance, there are numerous financial calculators that can be used to estimate the total cost after all taxes and fees. E.g., Mortgage Tax Deduction Calculator, Bankrate.com, http://www.bankrate.com/calculators/mortgages/loan-tax-deduction-calculator.aspx; Monthly Cost of Buying a First Home, Homebuying-tips.net, http://www.homebuyingtips.net/Calculator_TotalMonthly.htm.}

Yet this form of learning involves taxpayers estimating the impact of discrete market decisions on their budgets, rather than just learning to approximate the after-tax size of their budgets. Hence, for taxes on irregular purchases and activities, learning facilitates taxpayers estimating both post-tax prices and after-tax budgets simultaneously.

We thus expect the simple case for reducing market salience to hold more often for regular purchases and activities, as distortionary income effects are mitigated by taxpayer learning. We do not expect taxpayer learning to play an equivalent role with respect to irregular
purchases and activities. Taxpayers, however, may still be able to borrow or use prior savings to smooth their consumption over time, thereby alleviating distortionary income effects even for irregular purchases and activities.\textsuperscript{232} Distortionary income effects occur when taxpayers overspend on luxury goods and are thus forced to disproportionately cut consumption of more necessary goods.\textsuperscript{233} But if the taxpayers can smooth their consumption over time through borrowing or using savings, the taxpayers can instead reduce their consumption of future luxury goods, minimizing the need to reduce consumption of necessities.\textsuperscript{234}

\textbf{b. Long Time Delays Between Market Choices and Tax Assessments}

The second set of conditions wherein we expect that distortionary income effects may defeat the simple case for reducing market salience operates much like the first. Long time delays between market choices and tax assessments may interfere both with taxpayers learning about their after-tax budgets and with taxpayers smoothing their consumption over time. If market salience is reduced by delaying tax assessments for long time periods, taxpayers are likely to spend more during the period prior to the tax assessment, leaving fewer resources for spending after the tax assessment. A portion of this front-loaded spending may represent lessened substitution effects to the extent taxpayers are discounting how the tax affects the relative prices of goods and activities. Whether such front-loaded spending also represents sizeable distortionary income effects depends on whether the purchases during the early time period are more like luxuries or like necessities as compared to purchases in the later time period.

In particular, if tax assessments with long time delays lead taxpayers to save less than they otherwise would wish for retirement, then distortionary income effects may well overpower lessened substitution effects.\textsuperscript{235} We thus expect that the simple case for reducing market salience may not hold with respect to long time delays.

\textsuperscript{232} See Chetty et al., note 6, at 1174.
\textsuperscript{233} See id. See also notes 221-26 and accompanying text for a discussion of the potential welfare losses caused by low market-salience taxes.
\textsuperscript{234} See Chetty et al., note 6, at 1174. Of course, here too, there may well be a correlation between taxpayers who are credit-constrained and those who have difficulty in self-educating, potentially raising distributional concerns. We discuss distributional issues explicitly in Subsection III.C.2.
\textsuperscript{235} Note that individuals seem ill-equipped for long-term decision-making like retirement planning even in the absence of low market-salience taxes. Bernheim, note 227, at 1201.
C. The Impact of Externalities and Distribution

Besides distortionary income effects, the most frequently discussed limitations to the simple case for reducing market salience involve externalities or distribution. In this Section, we argue that the evaluation of both of these factors requires the consideration of offsetting tax-rate adjustments. We expect that offsetting tax-rate adjustments can alleviate most potential conflicts between the efficient revenue-raising advantages of reducing market salience and concerns related to externalities. In theory, we expect that offsetting tax-rate adjustments can also alleviate most conflicts between the efficient revenue-raising advantages of reducing market salience and concerns related to distribution, but we are uncertain of the extent to which the needed offsetting tax-rate adjustments will be politically feasible in practice. Regardless, even when offsetting tax-rate adjustments cannot fully alleviate concerns related to externalities or distribution, we still argue that meaningful evaluation of the relationship between market salience and externalities or distribution requires an understanding of the limitations of offsetting tax-rate adjustments.

Our argument in this Section is an extension of the "unifying conceptual framework for the normative study of taxation and related subjects" developed in its most complete form by Louis Kaplow. As Kaplow describes his proposed framework:

[I]n order to analyze a given policy ... the policy is combined with a distributively offsetting adjustment to the income tax. The net result is a reform package that is distribution neutral, which, as will be seen, holds much constant and leaves in play the distinctive effects of the policy instrument under consideration, ones that can then more readily be evaluated.

As applied to the market salience of taxation, Kaplow's framework suggests a mechanism for alleviating conflicts between the efficient revenue-raising advantages implied by the simple normative case for reducing market salience and competing concerns like externalities or distribution. In many circumstances, offsetting tax-rate adjustments

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236 See, e.g., Schenk, note 5, at 276 n.101 ("Low-salience taxes or provisions would be counterproductive with respect to Pigouvian taxes that are intended to change behavior."); Chetty et al., note 6, at 1170-76; Galle, note 14, at 61, 78, 100-03; Nussim, note 35, at 244-47, 249-53.


238 Kaplow, note 227, at xviii.
suffice to counteract any negative consequences of reducing market salience related to externalities or distribution, while preserving at least some of the efficient revenue-raising advantages of reducing market salience. Only when offsetting tax-rate adjustments cannot be used to alleviate concerns related to externalities or distribution should these concerns be viewed as limitations to the simple case for reducing market salience. The following paragraphs develop this argument first with respect to externalities and then with respect to distribution.

1. Externalities

When market decisions produce externalities—costs or benefits to parties other than those making the market decisions—social welfare generally can be enhanced by imposing taxes equal to negative externalities or subsidies equal to positive externalities. The goal is to cause market decision makers to internalize the social costs or benefits of their decisions. In the case of Pigouvian taxes (that is, taxes imposed for the purpose of correcting negative externalities), the externality correcting features of the tax depend on market decision makers' understanding the price implications of the tax. In the absence of tax-rate adjustments, making a Pigouvian tax less market salient would undermine the externality correcting potential of the tax.

With offsetting tax-rate adjustments, however, it often should be possible to preserve both the externality correcting advantages of the Pigouvian tax and the efficient revenue-raising advantages of reducing market salience. For example, imagine that a tax on pollution can be made less market salient such that polluters would perceive only one-half of the cost of the tax. In this example, making the appropriate tax-rate adjustments would require doubling the rates of the pollution tax in order to achieve the same externality correcting effect as before. If a tax could be made more market salient with respect to the choice to pollute, without affecting the market salience of the tax with respect to any other market decisions, then increasing the market salience of the tax might improve social welfare.
tax. For simplicity, assume that the extra revenue generated by doubling the rates of the pollution tax would be used to fund reductions in other (non-Pigouvian) taxes. With the tax rates increased to offset the reduction in market salience, the tax can be set to optimally correct for externalities while generating revenue in a manner that minimizes excess burden (as the less distortionary low market-salience tax replaces other more distortionary taxes). All that is needed in this example is to gross up the rates of the Pigouvian tax to offset for the reduction in the market salience of the tax instrument. 244

Of course, it will not always be possible to adjust the rates of Pigouvian taxes so as to completely correct for externalities while preserving the full efficient revenue-raising potential of low-market-salience. Some tax instruments may be less market salient with respect to the decisions producing negative externalities than with respect to other market decisions. And political or administrative constraints may sometimes prevent the rates of Pigouvian taxes from being raised beyond a certain level. 245 In these circumstances, it may still be necessary to trade off between the externality-correcting advantages of keeping a Pigouvian tax fully market salient and the efficient revenue-raising advantages of reducing the market salience of the tax.

Nevertheless, the first analytic step should still be to consider offsetting tax-rate adjustments. 246 We expect that in most circumstances offsetting tax-rate adjustments should be capable of at least partially alleviating conflicts between the goals of externality correction and of

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244 The optimal setting of a low market-salience Pigouvian tax is somewhat more complicated than this example would suggest, as the efficient revenue-raising advantages of reducing market salience may support increasing the tax above the optimal level for controlling externalities. Nevertheless, the example should suffice to demonstrate how offsetting tax-rate adjustments can alleviate conflicts between the goals of minimizing externalities and of generating revenue efficiently by exploiting low market-salience.

245 But see David A. Weisbach, Should Legal Rules Be Used to Redistribute Income?, 70 U. Chi. L. Rev. 439, 451-52 (2003) (critiquing the idea that political and/or administrative constraints tend to prevent modifications to the tax system).

246 There are many possible interactions between market salience and externalities beyond those we address here. For instance, under Chetty, Looney, and Kroft's bounded-rationality model for market salience, increasing the rate of a tax is assumed to make the tax more market salient. See Chetty et al., note 227, at 28-35. If externalities were added to this model, the optimal tax rate sometimes might fall below the level that fully corrects for externalities, as raising the tax rate above the optimal point could eliminate more social welfare benefits from efficient revenue-raising than it would create from preventing externalities.

The simple case for reducing market salience can still be preserved, however, even within a Chetty-Looney-Kroft-style model with externalities, to the extent there exists other more market salient tax instruments that can also be used to correct for externalities. The optimal tax mix would then require reducing the market salience of the original Pigouvian tax instrument, while increasing the use of secondary (fully market salient) Pigouvian tax instruments in order to correct for the externalities.
efficient revenue-raising through exploiting low market salience. To the extent offsetting tax-rate adjustments can be made, the simple normative case for reducing market salience should apply even for Pigouvian taxes. Often, all that will be needed is to gross up the rates of the Pigouvian tax so as to offset any reduction to its market salience.

2. Distribution

As with externalities, meaningful evaluation of the interactions between market salience and distribution must consider the potential for offsetting tax-rate adjustments. Evaluating the impact of distributional concerns, however, involves additional complexities. Notably, distributional analysis requires understanding how market salience affects tax incidence. We do not address the tax incidence question in this Article. In our view, the existing empirical literature on market salience is not yet sufficiently developed to allow for even grounded speculation about the distributional impact of market salience. Instead, we argue that with offsetting tax-rate adjustments, the simple normative case for reducing market salience may hold even when reducing market salience would have negative distributional implications in the absence of offsetting tax-rate adjustments.

For further qualifications to Kaplow's framework that may also apply to our discussion of market salience and externalities, see, e.g., Kaplow, note 227, at 135-48. Although a full discussion of how the qualifications to Kaplow's framework apply in the context of market salience and externalities is beyond the scope of this Article, we believe that Kaplow's general assessment of the importance of the major qualifications should generally hold: "Most of the qualifications, although they may require important adjustments in particular settings, do not systematically favor moving away [from the central conclusions of the framework]. . . . Instead, the optimal adjustments tend to be more subtle and context specific. They can readily be in either direction . . . ." Id. at 136.

Conversely, when market decisions produce positive externalities, such that subsidization may be in order, the subsidies generally should be made as market salient as possible (with the amount of the subsidy adjusted as appropriate). Of course, in either case, adjusting the levels of Pigouvian taxes or subsidies to account for salience requires some ability to estimate the extent to which a tax has high or low market salience. But being able to (at least roughly) estimate the magnitude of salience effects is necessary to account for salience under any approach. Consider an exception that proves our general point: If polluters would remain completely unaware of a Pigouvian tax regardless of any amount of gross-up, then grossing up the tax would not cause the polluters to fully internalize their pollution externalities. However, in this (implausible) case, the government could essentially raise its entire budget from taxing these polluters without affecting their behavior. We thus expect that grossing up the amount of a tax will suffice to counteract low market salience in nearly all real world scenarios.

For existing discussions of market salience and tax incidence, see Chetty et al., note 6, at 1167-69; Galle, note 14, at 100-03; Nussim, note 35, at 244-47.
If reducing the market salience of a tax instrument would have negative distributional implications, these distributional implications may be at least partially offset by adjusting the rates of the income tax or of other available tax instruments. The reason is that the income tax typically will be better at measuring characteristics relevant for distribution.

As a starting point, imagine that taxpayers’ ability to earn income is the only characteristic of taxpayers that is relevant for distributional analysis. Further imagine that the income tax near perfectly measures taxpayers’ ability to earn income, with the sole limitation being that taxpayers may substitute from work to leisure as a result of the income tax reducing the returns to work as opposed to leisure. Finally, assume that—controlling for taxpayers’ income—any heterogeneity in taxpayers’ susceptibility to means for reducing market salience is uncorrelated with the taxpayers’ preferences for leisure as opposed to work.

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250 Typically, a tax policy change is thought to have negative distributional implications when it reduces the progressivity of the tax system by shifting the tax burden from wealthier taxpayers to less wealthy taxpayers.

251 See Kaplow, note 227, at 21.

252 The description of the starting point in this paragraph is intended as a simplified articulation of Kaplow’s framework.

253 Welfare-enhancing redistribution then entails transferring resources from high-ability taxpayers to low-ability taxpayers, except for the limitation that such redistribution may lead high-ability taxpayers to work less (to mimic the observable behavior of low-ability taxpayers). This tradeoff is the intuition behind Okun’s “leaky bucket”—the essential tradeoff between redistribution and efficiency that underlies much of optimal tax theory. See Joel Slemrod, Fixing the Leak in Okun’s Bucket: Optimal Tax Progressivity When Avoidance Can Be Controlled, 55 J. Pub. Econ. 41, 41-42 (1994).

Note that the assumption that the income tax “near perfectly measures taxpayers’ ability” is meant to imply the absence of administrative or compliance costs or of any other distortionary responses to the income tax other than labor-to-leisure substitutions. One of us (Gamage) has an early-stage working paper arguing that Kaplow’s framework should be expanded to incorporate a wider range of distortionary responses, and that expanding the framework in this fashion implies that the income tax probably should not be the sole tax instrument used for redistribution. David Gamage, Toward a Theory for the Optimal Tax Mix (unpublished manuscript on file with the Tax Law Review). This argument potentially implies that, even with offsetting tax-rate adjustments, the simple normative case for reducing market salience is not completely robust to distributional concerns.


Chris Sanchirico has strongly critiqued the use of the separability assumption in Kaplow’s framework and in other optimal taxation literature. Chris William Sanchirico,
Under these assumptions, any concerns related to distribution can be completely alleviated through offsetting income tax-rate adjustments, such that the simple case for reducing market salience is robust to distributional concerns. Reducing the market salience of any tax instrument for which such income tax-rate adjustment is possible alleviates labor-to-leisure distortions, which are the only costs to redistribution under these assumptions. Hence, reducing market salience lowers the costs of enacting redistribution. With offsetting income tax-rate adjustments, reducing market salience can thus achieve greater redistribution at lower efficiency costs.

Consider a brief and stylized example. Suppose that a state makes its sales tax less market salient. Further suppose that this reform improves the efficiency of the state’s tax system, by reducing substitution effects, but that the reform leads to poorer taxpayers shouldering a greater portion of the tax burden and wealthier taxpayers a reduced burden. Without offsetting tax-rate adjustments, the negative distributional consequences of the reform might overpower the positive efficiency gains. By combining the reform with offsetting tax-rate adjustments—for example, reducing the income tax rates facing poorer taxpayers, and raising the rates facing wealthier taxpayers—the state can improve the welfare of all taxpayers.

There are numerous qualifications to this strong result, which depends on the narrow assumptions noted above. Perhaps most imp-

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255 For discussions of qualifications to the strong result from Kaplow’s framework—as explained in a simplified form above—see, e.g., Kaplow, note 227, at 135-48; Christine Jolls, Behavioral Economic Analysis of Redistributive Legal Rules, 51 Vand. L. Rev. 1653,
importantly, if a technique for reducing market salience does not affect all taxpayers equally, there may be correlations between a taxpayer’s susceptibility to the technique for reducing market salience and characteristics of the taxpayer that are relevant for distributional analysis (that cannot be perfectly controlled for by the income tax). As an example of such a confounding correlation, heterogeneity in taxpayers’ general cognitive ability could be associated with both taxpayers’ ability to earn income—controlling for the actual income earned—and with taxpayers’ susceptibility to the means for reducing market salience.\(^{256}\) If so, reducing market salience would increase the revenues raised from lower-ability taxpayers more than from higher-ability taxpayers.\(^{257}\) The income-tax-rate adjustments required to offset these negative distributional consequences of reducing market salience might then counteract only some of the efficient revenue-raising advantages of reducing market salience.\(^ {258}\)

Furthermore, as with our discussion of externalities, even when offsetting tax-rate adjustments are theoretically capable of resolving distributional concerns, political or administrative limitations may prevent the implementation of the offsetting tax-rate adjustments. In particular, if the rates of the income tax are set based on voters’ or politicians’ aesthetic judgments, such that these judgments are not updated when the distributional impact of other parts of the tax system

\(^{256}\) For instance, susceptibility to market salience might be correlated with taxpayers’ “willpower.” See generally Lee Anne Fennell, Willpower Taxes, 99 Geo. L.J. 1371, 1371 (2011) (discussing “effects of existing and proposed tax policy measures on people with different self-control levels”).

\(^{257}\) Both Galle and Nussim discuss the relationship between general cognitive ability and the distributional implications of market salience. Both authors also discuss the potentially countervailing factor of the relationship between the opportunity cost of taxpayers’ time and the distributional impact of market salience. Galle, note 14, at 100-04; Nussim, note 35, at 244-47.

\(^{258}\) This is equivalent to “tagging” in the wrong direction. Kyle Logue & Joel Slemrod, Genes as Tags: The Tax Implications of Widely Available Genetic Information, 61 Nat’l Tax J. 843, 848-49 (2008).
are changed, then this "isolation effect" in the judgments made by voters or politicians may interfere with the enactment of the appropriate offsetting tax-rate adjustments.259

Despite these qualifications, we continue to expect that offsetting tax-rate adjustments should often suffice to (at least partially) alleviate distributional concerns. Our primary doubt in this regard is whether the offsetting tax-rate adjustments needed to alleviate distributional concerns will prove politically feasible. We hope to analyze this question further in future research. For now, although we doubt that offsetting tax-rate adjustments will always prove politically feasible, we see no reason for concluding that politics will always (or even generally) prevent the implementation of offsetting tax-rate adjustments. Ultimately, meaningfully evaluating concerns related to distribution requires some understanding of the potential for and limits to offsetting tax-rate adjustments.

In any case, the magnitude of distributional concerns is primarily an empirical question. The existing empirical literature does not provide cause for thinking there are strong negative distributional implications to reducing market salience,260 and most of the existing discussions of market salience and distribution do not evaluate the potential for offsetting tax-rate adjustments to alleviate these concerns. We cannot rule out the possibility of future empirical research demonstrating strong distributional concerns that cannot be alleviated through offsetting tax-rate adjustments. But in the absence of such findings, we expect that, with offsetting tax-rate adjustments, the simple normative case for reducing market salience generally should be robust to concerns related to both externalities and distribution.

D. Analyzing the Normative Implications of Market Salience—Conclusion

We conclude that in most circumstances it is desirable to reduce the market salience of taxation. First, we expect that the benefits of lessened substitution effects should generally overwhelm the harm from distortionary income effects. Second, with offsetting tax-rate adjustments, the simple case for reducing market salience should also be generally robust to concerns related to externalities and distribution. Overall then, we consider the case for reducing market salience generally should be robust to concerns related to both externalities and distribution.

259 See McCaffery & Baron, note 76, at 300-01 (reporting empirical results that suggest the existence of this form of "isolation effects"). But see Kaplow, note 227, at 32 (arguing that "as a matter of political reality, there is some gross plausibility" to using an analytic framework based on offsetting tax-rate adjustments).

260 See Galle, note 14, at 100; Schenk, note 5, at 295-96.
tions to this case. In some circumstances these limitations may over-power the advantages from reducing market salience. Nevertheless, we argue that scholars should advocate a general presumption in favor of reducing market salience.

IV. Analyzing the Normative Implications of Political Salience

In this Part, our third essay, we dispute the commonly espoused notion that it is wrong for governments to reduce the political salience of taxation. We do not claim that it is desirable to reduce political salience. We argue instead that scholars lack any basis for evaluating whether manipulating political salience in either direction is good or bad. Numerous political commentators argue against tax reforms that are alleged to reduce political salience, even when the commentators agree that the reforms would otherwise improve the efficiency of taxation.261 These arguments sometimes are made by liberals and moderates as well as by conservatives.262 We conclude that these commentators are in error. Contrary to standard beliefs, democratic values provide no support for rejecting tax reforms because the reforms might reduce political salience.263

It is revealing to contrast the normative analysis of political salience with the normative analysis of market salience. We can evaluate the normative implications of market salience because economic theory provides a meaningful baseline for conducting this analysis.264 By defining full market salience to be when taxpayers perceive the dollar costs imposed by tax prices equivalently to the dollar costs charged by private-sector vendors, we can generate a theoretical benchmark that gives meaning to notions of “high” and “low” market salience.265

261 See, e.g., notes 3, 80, 97, and accompanying text (citing to a number of strong political positions advocated for based on the political salience hypotheses discussed in Section II.B).

262 Rosanne Altshuler & Jacob Goldin, The Opacity of Marginal Tax Rates, 125 Tax Notes 335, 335 (Oct. 19, 2009) (arguing that tax policy should be discussed using effective rates because “statutory and effective rates differ so haphazardly that most taxpayers would probably not be able to identify how much tax they owe on an additional dollar of income”); Galle, note 14, at 60-63 (arguing that unnoticed taxes are more efficient because they do not change a taxpayer’s behavior); McCaffery, note 56, at 1943 (“I must confess, as the above comments no doubt indicate, to being uneasy at the prospect of exploiting cognitive error as a general approach, even though I count myself a liberal.”).

263 Our argument in this Part is in many ways similar to Schenk’s. See Schenk, note 5, at 287-90. We mostly composed this Article before Schenk’s writing was made publicly available; hence, although we cite to Schenk’s work in a number of instances, we do not fully evaluate her contributions.

264 See notes 209-12 and accompanying text.

265 Id.
Most of the normative writings on political salience assume that a similar baseline can be used to evaluate the normative implications of political salience. For political decision-making, however, we lack a reference point equivalent to the market prices charged by private-sector vendors. Our current understanding of voter psychology and of political philosophy are insufficient to provide us with a useful baseline that can be applied to the real-world fiscal policy debates for which political salience is relevant. Lacking a useful baseline, we cannot ascertain the normative implications of raising or lowering political salience. We simply do not know enough about how voters reach political judgments (or how they ought to do so) for us to say anything meaningful about the normative implications of political salience with respect to real-world fiscal policy debates.

Nevertheless, our argument has limits. We would oppose the government sneaking money out of taxpayers’ wallets in the middle of the night. We would also oppose a government brainwashing its citizens so that they ignored tax costs. In short, we would oppose secret forms of taxation.\(^{266}\)

But secret taxes are the stuff of academic musings and of libertarians’ nightmares; there are no secret taxes in the real world of fiscal policy.\(^{267}\) The instruments critiqued as being “hidden taxes” (as having low political salience) do not present the same concerns as would truly secret taxes. It might well be, for instance, that VATs and corporate income taxes are less politically salient than individual income taxes.\(^{268}\) But in no sense are these tax instruments truly secret. Any American desiring to learn about the corporate income tax is free to do so. Indeed, both governmental and nongovernmental actors provide a wealth of statistical information to assist in evaluating the corporate income tax and other tax instruments alleged to have low political salience.\(^{269}\)

Arguably, the administration of individual income taxes results in more taxpayers confronting these taxes directly. Because the individual income tax is pushed more in the face of a typical taxpayer, it is thought to have higher political salience.\(^{270}\) But shoving a tax instru-

\(^{266}\) We develop this distinction further in Section IV.C, drawing in particular on Schenk’s discussion of the differences between salience and transparency. See Schenk, note 5, at 256-64.  
\(^{267}\) See Lohman & Weiss, note 3, at 584-86; Schenk, note 8, at 262-63.  
\(^{268}\) See Subsection II.B.1.  
\(^{270}\) See Subsection II.B.1.
ment in taxpayers' faces is not necessarily desirable. Just as we would oppose extreme forms of secret taxes, we would also oppose extreme forms of forced-attention taxes.

Even if we think it desirable for voters to pay attention to their tax burdens, how much attention is sufficient? Do we want voters to get one large bill every year aggregating their liabilities under all forms of taxation? Even if they did, we might worry that voters would not take sufficient note of this aggregate tax figure. Should we then go further and require voters to spend several hours a day reciting their tax liability figures as a form of mantra? Or perhaps we should demand that voters calculate at the end of each work day how much of that day's earnings are remitted to the government in combined tax payments? To enforce these measures, would we need tax-salience police to randomly surprise voters with pop quizzes, jailing those voters who fail to study their tax burdens with sufficient care?

These examples are purposefully silly. But they highlight the point that, unless we somehow cause voters to ponder their tax liabilities for every minute of every day, any tax instrument can be considered to have low political salience as compared to some hypothetical alternative.

Of course, the converse of this point is that any tax instrument might also be considered to have too high political salience as compared to a different hypothetical alternative. Just as there is always a hypothetical tax instrument with higher political salience than any existing tax instrument, there will also always be a hypothetical tax instrument with lower political salience as compared to any existing tax instruments. And just as we might worry about biases to voting resulting from too little political salience, we might also worry about biases resulting from too much political salience. After all, private-sector businesses hardly make their customers sing a daily mantra about the cost of the services they provide. Nor are voters required to recite mantras about the benefits they receive from public spending. Furthermore, because the current system itself is of a given political salience, there is unavoidable circularity in trying to assess the political salience of a tax system based on current voter perceptions of that tax system.

Hence, in contrast to market salience, we lack a baseline for full or neutral political salience. We might be able to compare two tax instruments, but we would need a baseline for comparison. 

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271 But see, e.g., John Kass, Yes We Can: Surefire Plan to End Bickering over Taxes, Chi. Trib., Apr. 18, 2010, § 2, at 2 (proposing abolishing withholding and holding elections immediately after income taxes are due).

272 Furthermore, at some point we do not know how to achieve maximum salience anyway since it is likely that a daily tax mantra would just recede in importance as routine because voters have many concerns besides their taxes.
struments and conclude that one has higher political salience than the other. But outside of hypothetical extremes like secret taxes or forced-attention taxes, we cannot say in the abstract whether any specific tax instrument has high or low political salience. Without a useful baseline for neutral political salience, we cannot evaluate whether the political salience of any real-world tax instrument is too high or too low.

Stated differently, we might think it generally laudable to provide voters with as much information as possible relevant to political decision-making. But it should be noncontroversial that providing such information is only desirable when the information is accurate. Democratic values do not support offering voters false or arbitrary information about their tax burdens. The essence of our argument in this Part is that attempts to increase the political salience of taxation are akin to providing voters with false or arbitrary information about their tax burdens.

Apart from the hypothetical extremes of secret taxes or forced-attention taxes, we lack grounds for determining whether increasing or decreasing political salience would provide voters with more accurate information. With respect to the real-world tax policy debates for which political salience is relevant, we simply cannot say whether democratic values would be furthered by using tax instruments with higher or lower political salience.

Before developing our arguments in this Part further, we should repeat some of the caveats to our analysis that we previously explained with respect to market salience.273 First, some mechanisms for manipulating political salience may clearly have harmful or beneficial effects. We consider only the end of reducing political salience, not potential means for achieving that end. Second, we evaluate only the consequences of manipulating political salience. Although we do not believe that there is anything inherently problematic about manipulating political salience apart from consequences, we leave consideration of that question for future research. Finally, we do not mean to imply that governments actually can manipulate political salience with any likelihood of success. Our arguments in this Part are entirely theoretical. Even if future research provides mechanisms that are clearly capable of manipulating political salience, we argue that our current theoretical understanding is insufficient for determining whether governments should employ those mechanisms. And of more immediate importance, we argue against those who oppose existing tax reforms that could improve the efficiency of taxation on the grounds that these reforms might reduce political salience.

273 See Section III.D.
A. The Lack of a Useful Normative Baseline for Measuring Political Salience

In evaluating potential baselines for political salience, we begin with the traditional assumption that democratic institutions should be structured so as to effectuate the voters' collective will, and political information should thus be assessed based on how well it enables voters to make political judgments based on their "true" preferences.274 This notion of a political-salience baseline is attractive not only as a matter of political theory, but also seems to provide the underpinnings for most existing normative discussions of political salience.275 There are, however, devastating problems in proceeding with any normative argument based on such a notion of a baseline determined by voters' "true" preferences. In their current states of development, neither the fields of psychology nor philosophy can provide a useful baseline for evaluating political salience.276

Beginning with psychology, as to the presentation to voters of questions related to taxation, it turns out that how researchers ask questions of voters can dramatically affect the answers received.277 And we have no means for assessing the correct manner in which questions should be asked. For example, in experiments conducted by McCaffery and Baron, the experimental subjects expressed significantly different preferences regarding fiscal policies depending on whether tax prices were expressed in dollar values or as percentages.278 In particular, subjects tended to prefer more progressive tax structures when the tax system was represented in percentage terms rather than using dollar values.279 This evidence suggests that voters often support tax-rate progressivity without having a strong sense about what progressivity means or about how much progressivity they favor.280 Under the standard definitions, a "flat tax" is defined as when all taxpayers pay

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275 See id.

276 See McCaffery & Baron, note 74, at 107.


278 Id. at 113-14.

279 Id.

280 See id.
the same percentage of their incomes in taxation, and a "progressive tax" as when higher-income taxpayers pay a greater percentage of their incomes in taxation than do lower-income taxpayers. But, when tax liabilities are displayed in dollar values, rather than as percentages, higher-income taxpayers are shown as paying more tax dollars than lower-income taxpayers even under a flat tax. It perhaps should come as no surprise then that displaying tax information in dollar values appears to dramatically reduce voters' support for progressivity.

It is not clear whether voters' "true" preferences are better reflected by the opinions voters express when shown percentage-based tax information or when shown dollar-value-based information. Indeed, we might infer from the experimental evidence on voters' tax preferences that voters frequently make aesthetic judgments about taxation based on superficial characteristics of tax systems. One might even question whether it is useful to think of voters as having "true" preferences.

Furthermore, there is no particular reason to expect political competition to alleviate voter confusion rather than to exacerbate it. A single vote is almost never decisive, and individual voters thus face little incentive to work through difficult concepts like taxation rather than just voting based on their passions and surface-level understandings. As McCaffery and Baron argue:

Arbitrage against heuristics and biases is a private good in private markets, but a public good in public markets. The private actor, noticing an anomaly in private markets, can profit from her insight: The invisible hand of competition works to effect marginal cost pricing, for example. In the public sphere, in contrast, an actor who notices an inefficient...

282 See id. at 2-3.
283 See McCaffery & Baron, note 74, at 114.
284 Lawrence Zelenak, The Conscientious Legislator and Public Opinion on Taxes, 40 Loy. U. Chi. L.J. 369, 374 (2009) ("It is far from clear that either frame—dollars or percentages—is more revealing of true preferences than the other."); see also Epstein, note 6, at 358-59 (discussing whether absolute tax liability or percentage of total liability is more relevant to determining true preference).
285 See Edward McCaffery & Jonathan Baron, The Political Psychology of Redistribution, 52 U.C.L.A. L. Rev. 1745, 1749 (2005) ("We argue that public finance systems have a psychological dimension, such that ordinary citizens will react inconsistently based on a system's appearance.").
286 See, e.g., Bryan Caplan, The Myth of the Rational Voter: Why Democracies Choose Bad Policies 2 (2007) ("The central idea is that voters are worse than ignorant; they are, in a word, irrational—and vote accordingly.").
287 Brennan & Lomasky, note 274, at 36-37.
tax or spending program—a violation of the first prong of the optimal welfare-economics analysis—cannot thereby capture any gains for herself or even her party. Public goods are predictably undersupplied.288

Our initial problem in determining a baseline for the political salience of taxation is, thus, that voter preferences appear to be unstable and easily manipulated. Our next—and related—challenge is that survey after survey confirms the commonsense intuition that voters have only the most attenuated sense of how our current fiscal system works or about their preferences for how the system ought to work.289 Absent a future revolution in the study of voter psychology, examination of voters’ expressed preferences is unlikely to yield a useful baseline for political salience. We simply cannot trust voters to tell us what they want with sufficient precision to illuminate the real-world fiscal policy debates for which political salience is relevant.

Moreover, turning to philosophical inquiry, the research demonstrating that voters are deeply confused about taxation only begins to illustrate a more fundamental problem. There is reason to be skeptical of the very notion that tax-burden measurements provide meaningful information for making political judgments, thus implying that most of the tax-burden information that can be made available to voters is fundamentally flawed.290 According to a powerful argument most associated with Liam Murphy and Thomas Nagel, when voters directly assess their tax burdens they elevate artificial measurements for pretax resources.291

288 McCaffery & Baron, note 285, at 1788-89.
289 E.g., Larry M. Bartels, Homer Gets a Tax Cut: Inequality and Public Policy in the American Mind, 3 Persp. on Pol. 15, 26 (2005) (“Other observers, while a bit more circumspect about stipulating what people would do if they knew what was good for them, have still managed to raise significant doubts about the capacity of the American public to reason effectively about tax policy.”); Steven M. Sheffrin, What Does the Public Believe About Tax Fairness?, 46 Nat'l Tax J. 301, 306 (1993).
290 It is important to note that political salience is not necessarily about voters’ perceptions of their own tax burdens. Tax instruments with low political salience may function by reducing voters’ perceptions of their own tax burdens at the time of political decision-making. But they might also function by reducing voters’ perceptions of the tax burdens borne by other taxpayers whom the voters find sympathetic. In other words, nothing in this discussion should be taken as implying that voters care only about their own tax burdens when making political decisions. The political salience of a tax instrument matters regardless of whose tax burdens voters are concerned with.
291 Murphy and Nagel have made this argument most forcefully in recent years, but the argument has a long pedigree. See Liam Murphy & Thomas Nagel, The Myth of Ownership: Taxes and Justice 31-37 (2002). For instance, Michael Graetz made essentially the same argument in 1995. See Michael Graetz, Paint-By-Numbers Tax Lawmaking, 95 Colum. L. Rev. 609, 619 (1995) (“The most interesting questions—the overall effects of government action . . . on the distribution of income—are impossible to evaluate, even in principle. This is because the point for comparison, namely, the distribution of income
For instance, within the context of the current U.S. federal income tax, a voter's income-tax liability is defined by first calculating the voter's pretax gross income. The calculated amount for pretax income is merely an artificial accounting concept. Yet the manner in which income taxes are structured makes it seem as though pretax gross income measurements have independent meaning outside of tax accounting. In what they label as "everyday libertarianism," Murphy and Nagel contend that voters frequently come to believe that they have some entitlement rights to their pretax income measurements (for example, gross income) and that the tax liabilities calculated from these measurements indicate how much the voter is personally sacrificing in order to fund state spending programs. Yet, as the economist Carl Shoup explained decades ago,

To say, for example, that households with before-tax incomes between $2,000 and $5,000 pay 12 percent of that income in taxes, directly and indirectly, is to make a statement without significance because it is conceptually invalid. It is conceptually invalid because it postulates, for implicit comparison, a state of affairs in which there are no taxes whatever, and no government borrowing or creation of new money, hence implicitly no government services, not even the minimum type and amount necessary to assure the existence of the society.

Shoup viewed this objection as "conclusive," and we agree.

Crucially, any amounts calculated as gross income—or as other pretax resource measurements—are dependent on the existence of government in its current form. In order for a pretax income measurement to have moral weight independent of the existing structure of government, the measurement would need to be based on something independent of the operation of state spending programs. The amount a taxpayer calculates as her gross income is highly unlikely to be exactly equivalent to the amount of gross income she would have received in any hypothetical state of nature. Were it possible to subtract from pretax income the amount by which a taxpayer's income is higher due to the effects of government expenditures, then this net

absent any government, is unknowable, indeed unimaginable.") Graetz attributed this argument to an earlier public finance treatise by Carl Shoup. Id. (quoting Carl S. Shoup, Public Finance 577-78 (1969)).

292 See IRC § 61.
293 Murphy & Nagel, note 291, at 31-37.
294 Shoup, note 291, at 577-78.
295 Id.
measurement arguably might have moral relevance. But for existing measurements of pretax resources, we cannot easily divorce the extent to which pretax resources are higher due to the operation of state spending programs from the amount of pretax resources that would still be enjoyed in the absence of state-funded spending programs.

By acknowledging the power of their argument, we do not mean to endorse all of the conclusions that Murphy and Nagel reach based on their critique of pretax income measurements. Murphy and Nagel suggest that the government's contribution to pretax resource measurements should be considered in relation to a minimal version of the state of nature—such as that associated with Hobbes. Without state spending programs, like the police and military, they argue, there would be little income or wealth as life would be nasty, brutish, and short. Hence, for Murphy and Nagel, almost the entirety of pretax income measurements should be viewed as dependent on the operation of state spending programs.

A more sophisticated libertarian (in contrast to an “everyday libertarian”) could reasonably argue that the appropriate baseline for fiscal policy is more “Lockean” than “Hobbesian,” and therefore that governments should largely defer to the distributive (and allocative) outcomes of voluntary market exchanges. Libertarian-minded voters might further specify that the appropriate baseline should be measured based on a minimalist night-watchman state. Under this libertarian view, the morally relevant pretax income measurement might be the amount of pretax income one would have had if we lived in an actual night-watchman state. Any taxes taken from the night-watchman pretax income measurement could then be considered sacrifices the taxpayer is making (or is forced to make) in order to fund additional state spending programs.

297 Id.
298 Id.
299 Perhaps the most famous example of such a libertarian is Robert Nozick, who claims, with little qualification, that “[t]axation of earnings from labor is on par with forced labor.” Robert Nozick, Anarchy, State and Utopia 169 (1974); see also Richard Epstein, Taxation in a Lockean World, 4 Soc. Phil. & Pol'y, no. 1, 1986, at 49.
300 See Kevin A. Kordana & David H. Tabachnick, Tax and the Philosopher's Stone, 89 Va. L. Rev. 647, 651 (2003) (book review) (“It seems to us that a proponent of the view that market outcomes have prima facie moral weight (e.g., a Lockean liberal) might agree with Murphy and Nagel that one's ultimate entitlements are a post-institutional matter. The Lockean liberal would, however, have quite a different view of the appropriate content of the distributive scheme. Presumably, the Lockean liberal holds that the institutional distributive scheme should, in some measure, mirror the outcomes of consensual economic transactions by respecting the prima facie weight of natural rights in property.”).
301 See Richard A. Epstein, The Ubiquity of the Benefit Principle, 67 S. Cal. L. Rev. 1369, 1406 (1994) (“Improvements from the state of nature become vested as a matter of private right: They establish a new baseline against which further action is measured.”).
Hence, although a sophisticated libertarian must acknowledge that the details of any existing pretax income measurements are not sacrosanct, she could still insist that these numbers have some general normative significance. We acknowledge the abstract plausibility of such a position and agree that pretax income measurements arguably might provide some information about the amounts taxpayers contribute to fund government spending. Yet where does this insight get us in terms of practical tax policy?

Without a political system to define and protect property, it is hard to decide just which pretax property has moral weight. Arguably, if we wish to protect property within a modern capitalist framework, we might need a state that looks an awful lot like the status quo. There is considerable evidence that governments in more economically free countries tend to be bigger, not smaller—not only must such governments provide public services that are clearly related to property protection (for example, police and courts), but wealthy governments invest in public goods that make existing wealth possible (for example, roads, water supply) and spur still more (for example,

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302 Of course, libertarians can and do criticize taxation. Libertarians can also justifiably preach that others should resist the government “taking your money.” But even within a libertarian conception of justice, it would be mistaken to claim that tax liabilities calculated based on existing pretax resource measurements are an accurate reflection of how much of “your money” the government is taking in taxes. Even a libertarian should recognize that the amounts taxpayers calculate for their pretax incomes within the current system of taxes and government spending depend partially on the existence of government spending. Were taxes and spending lower, pretax income measurements would be different. See David G. Duff, Private Property and Tax Policy in a Libertarian World: A Critical Review, 18 Can. J. of L. & Jurisprudence 23, 32-34 (2005) (noting that libertarian theories of taxation do not even indicate an appropriate tax base); Epstein, note 299, at 66-68 (conceding that following Locke does not help us choose between an income or consumption base and that the current Code is full of unjustifiable tax expenditures); Barbara H. Fried, The Puzzling Case for Proportionate Taxation, 2 Chap. L. Rev. 157, 191-95 (1999) (arguing, among other things, that the libertarian commitment to proportionate taxation is strategic and not principled and that libertarianism is more consistent with a regressive tax system).

303 See Stephen Holmes & Cass R. Sunstein, The Cost of Rights 63-64 (1999) (discussing how even a hands-off state must spend to protect private property). A famous example from Nozick involves our right to pay to see Wilt Chamberlain and Chamberlain’s right to be paid more than anyone else as a result. Nozick, note 299, at 160-64. Yet Nozick does not explain that the whole reason Chamberlain can command this income is surely thanks not only to our desires, but to our joint production of a world in which there is professional basketball—hardly the kind of thing popular in the state of nature. See generally Barbara Fried, Wilt Chamberlain Revisited: Nozick’s “Justice in Transfer” and the Problem of Market-Based Distribution, 24 Phil. & Pub. Aff. 226 (1995).

There is even a libertarian argument for some level of redistribution by the government.\textsuperscript{305}

For the purposes of this Article, we take no position on these debates. Our argument does not rely on any particular version of libertarianism or other political philosophy being more correct. To the contrary, our general point applies to all approaches to political philosophy that we know of, and our point is that no such philosophy is fine-grained enough to provide guidance as to real-world questions about political salience.\textsuperscript{307} Put broadly, if one has a well-developed conception of the nature of a just fiscal state, it might theoretically be possible to create a measurement for how much more (or less) a citizen is paying in taxes (or receiving in state-funded benefits) within the existing state than she would have in the just state. With such a measurement in hand, one could then evaluate proposals for increasing or decreasing the political salience of taxation. Any proposal that shifted voters' understandings of tax costs toward the measurement deemed appropriate by the governing theory of distributive justice could be judged desirable, and any proposal that shifted voters' understandings away from that baseline could be considered undesirable.

\textsuperscript{305} See Douglass C. North, John Joseph Wallis & Barry R. Weingast, Violence and Social Orders: A Conceptual Framework for Interpreting Recorded Human History 10-12 (observing that relatively wealthy "open access" governments are characterized by relatively large governments (particularly at the subnational level)).

\textsuperscript{306} Eric Mack, Non-Absolute Rights and Libertarian Taxation 23 Soc. Phil. & Pol'y 109, 109 (2006) (arguing how a libertarian can justify a minimal safety net for individuals).

\textsuperscript{307} For instance, our argument applies with equal force to thinkers associated with deliberative democracy. See, e.g., Joshua Cohen, Deliberation and Democratic Legitimacy, in Deliberative Democracy: Essays on Reason and Politics 72 (James Bohman & William Rehg eds., 1997) ("The notion of a deliberative democracy is rooted in the intuitive ideal of a democratic association in which the justification of the terms and conditions of association proceeds through public argument and reasoning among equal citizens."). In emphasizing that democratic decisions must be the product of a legitimate process, and a process that would involve consulting with experts, such theorists problematize the search for a simple stable baseline as to what the "people" want. See id. at 73; Josiah Ober, Democracy and Knowledge: Innovation and Learning in Classical Athens 118-67 (2008) (describing institutional processes by which democratic Athens "aggregated" the knowledge, including expert knowledge, of its citizens). And so, following these thinkers, what is desired by the people of a democracy is what the people have arrived at through a democratic process, not polling about bare preferences. That democratic process involves considering possibly complex tradeoffs, like, for example, between more political salience and other values, such as efficiency, fairness, federalism, and the like. Cf. Jürgen Habermas, Between Facts and Norms 362 (William Rehg trans. 1996) ("Political opinion polls provide a certain reflection of 'public opinion' only if they have been preceded by a focused public debate and a corresponding opinion-formation in a mobilized public sphere."); James S. Fishkin, The Voice of the People 142-43, 169 (1995) ("In the mass society we have created there are ... incentives for rational ignorance and for citizens to report, in opinion polls, a surface impression of sound bites and headlines ... Institutions that speak for the people need to be both representative and deliberative."). Thus, theories of deliberative democracy do not offer us an off-the-rack baseline for political salience either; all such theories (quite reasonably) demand is that we engage in appropriate practices to determine the baseline.
Yet without a meticulously well-developed conception of the nature of a just fiscal state, one cannot determine a useful baseline for evaluating political salience. The differences between the baselines implied by more Hobbesian-style theories and more Lockean-style theories dwarf the variation in political salience likely to result from any real-world fiscal policy choices. Even if we could agree on a specific political philosophy, for instance libertarianism, different variations of that philosophy might yield dramatically different normative baselines. And even if we could further agree on a particular variation of a specific political philosophy, we would still need to determine what resources individuals would enjoy within the relevant version of the state of nature and then measure the differences between these hypothetical resource measurements and real-world pretax incomes. In short, the task is impossible.

We think it manifestly obvious that American voters do not share a well-developed conception of the nature of a just fiscal state. But without such a shared conception, we cannot ascertain whether the political salience of any existing tax system is “too high” or “too low.” That is, assuming we could even determine how a tax-design technique would impact political salience, the normative implications of altering political salience would be completely different depending on whether one adopted a more Hobbesian view of political justice or a more Lockean view. And even if political philosophers could somehow convince the electorate to agree upon a particular notion of the just fiscal state, none of the existing notions advanced by philosophers are sufficiently developed to generate a useful baseline for political salience.

Put slightly differently, any policy proposal that increases or decreases political salience must alter either pretax income measurements or how taxpayers understand pretax income measurements. To determine whether this is normatively desirable or problematic, we must know whether the policy proposal improves or detracts from the meaningful information provided by the pretax income measurements, and any sort of metric for this information is what is elusive. Suppose, for example, that it could be proven that introducing a VAT would reduce voters’ assessments of tax costs; how are we to know whether this would move voters closer or further away from their true preferences as to taxation (or even their true preference as to the political salience of taxation)?

Lacking a rigorous answer for what information voters should use to assess the costs of taxation, we cannot develop a useful normative baseline for measuring voter preferences, a precondition for evaluating political salience. The empirical evidence on voter psychology
suggests that voters' preferences with regard to the (problematic) information about taxation that can be made available are shallow and unstable. Social science has not developed a commonly accepted theory for how voters want to understand tax information. And there is no philosophical approach to taxation that we know of that is fine-grained enough to provide a baseline for policymakers to use when considering political salience. Consequently, we simply do not know enough about the nature of voters' true preferences to ascertain whether the political salience of any real-world tax system is too high or too low.

B. Comparing the Political Salience of Taxation to that of Public Spending

Even if we could somehow answer the question of what information voters should use when politically assessing the costs imposed by taxation, this information alone would not solve the analytic challenge of arriving at a baseline for political salience. We would still need to know the political salience of government expenditures—the extent to which voters accurately understand the benefits produced by government spending.\(^{308}\) If voters could be made to accurately understand the costs of government, but not the benefits, we would still lack a baseline capable of honoring voters' true fiscal preferences.

So far, our discussion has primarily focused on the problem of understanding voters' preferences with regard to the distributional aspects of fiscal policy. Yet if we could somehow abstract from distributional questions, we might attempt to evaluate only the allocative dimension of political salience.\(^{309}\) For example, imagine a simplified model of politics in which all taxpayers are identical, thus ignoring any redistributive effects of taxes and of government spending. Within this model, we might imagine taxpayers voting on tax issues based on elementary cost-benefit analyses wherein the benefits of public spending are compared against the tax costs required to fund the spending. Under this model, if the government used price-shrouding techniques to reduce the political salience of taxation, voters might underweight tax costs as compared to the benefits of public spending and thus vote for "too much" government spending.

This implausibly simplified model of politics appears to be what many of the scholars who criticize the use of tax instruments with low

\(^{308}\) See Cullis & Jones, note 68, at 219.

political salience have in mind. Yet even within this overly simplified model, the argument that taxes should be made as politically salient as possible falls apart once we begin questioning how salient the benefits produced by public spending are. The use of tax instruments with low political salience can only be said to distort voters’ cost-benefit analyses if we know that the benefits of public spending have higher political salience. To facilitate voters’ cost-benefit analyses, we should strive to make the costs of taxation and the benefits of public spending equally politically salient.

Just as there are reasons to think that existing tax instruments might cause voters to sometimes underestimate their tax burdens, there are also reasons to think that existing fiscal policies might cause voters to sometimes underestimate the benefits of public spending. There is no analytical reason to expect that the forces that might lead voters to underestimate their tax burdens generally overpower the forces that might cause voters to underestimate the benefits of public spending. Voters simply do not start with a baseline of complete information about either the benefits of public sector spending or about the impact of taxes. Tax instruments with lower political salience can only be said to distort voter preferences if these preferences would have been undistorted in the absence of such tax instruments.

Consider the indirect taxes political salience hypothesis. Like the costs of taxation, the benefits of government spending are often indirect. A prime example is the whole class of benefits that are provided in order to remedy what are perceived as market failures. In a society where the primary decisions as to resource allocation are left to the market, the role of the government generally recedes to the background—for instance, deterring crime, regulating the food and water supply, and providing national defense. For many government

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310 See, e.g., Cabral & Hoxby, note 18, at 10-13 (advancing a similar model with the addition that the government uses its agenda-setting power to increase its size); Anthony Downs, Why the Government Budget Is Too Small in a Democracy, 12 World Pol. 541, 559 (1960) (“Thus, insofar as taxation can be concealed from the electorate, the government budget will tend to be larger than the ‘correct’ one.”).

311 Cullis & Jones, note 68, at 220 (discussing arguments made by Anthony Downs and John Kenneth Galbraith).

312 The comparison made here is intended to be completely hypothetical. Although we do find many of the political salience hypotheses persuasive, we see no reason for concluding that voters underestimate the aggregate costs of taxation. It seems equally likely that voters overestimate these costs. We are similarly agnostic about whether voters underestimate or overestimate the aggregate benefits produced by government spending.

313 See Subsection II.B.1.

314 And, by design, because governments often specifically provide those services that cannot be provided through a standard market mechanism. See Downs, note 310, at 547-59 (“I believe the actual budget will still be smaller than the ‘correct’ budget because even indirect taxation is much more apparent than many remote government benefits.”).
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services, a taxpayer often may only focus on the services when the government has failed.\footnote{315 For instance, we are likely to remain ignorant of the specialist regional agency that may be responsible for our water or public transportation until something has gone wrong.}

Consider next our second political salience hypothesis of tax-system complexity.\footnote{316 See Subsection II.B.2.} One argument we discussed for how existing tax systems can be made complex noted that tax systems may be composed of multiple smaller tax instruments instead of a single aggregate tax instrument.\footnote{317 See notes \textit{81-82} and accompanying text.} Yet government spending programs are also frequently disaggregated. If disaggregation obscures the costs of taxation, then it is hard to see why it should not similarly obfuscate the benefits produced by government spending.\footnote{318 In commenting critically on the proposal that the government send tax bills out to taxpayers (a change that, intuitively, would lessen political salience), Grover Norquist essentially made the same point: “On my Visa bill, I get a list of all the things that I got with my money in addition to what I paid. We don’t tend to get that from the government at any level.” Norquist, note \textit{3}, at 121. The reformist response is that maybe tax bills could include benefits, but to the extent they cannot (certainly with the same level of precision), then this suggests that voters are undercounting governmental benefits relative to private ones.}

Without reviewing how all of the political salience hypotheses might apply to the benefits of public spending, the general theme should be clear. There is neither empirical nor theoretical support for the claim that the benefits of public spending are more salient than are the costs of taxation.\footnote{319 See Cullis \& Jones, note \textit{68}, at 226. And this is even assuming that the notion of “government spending” is well understood. The dominant thinking among economists is that the public sector has a footprint the size of its intervention in the market economy. See, e.g., Marc Labonte, \textit{The Size and Role of Government: Economic Issues}, Congressional Research Service, June 14, 2010, at 13, 26 available at http://digital.library.unt.edu/ark:/67531/metadc26213/m1/1/high_res_d/RL32162_2009Jul01.pdf (“Most economists judge the economic merit of any government program based on its effect on economic efficiency. . . . In sum, there is not an economic rationale for either “big” or “small” government, \textit{per se}. It is not so much the size of government as what government does with its spending, transfer, tax, and regulatory policies that affects economic efficiency and growth.”); Gruber, note \textit{72}, at 18-20 (introductory public finance textbook warning students not to overlook the regulatory role of government); Shaviro, note \textit{66}, at 30 (“[A] more promising approach than seeking any such measure is to evaluate the size of government on particular dimensions, one at a time.”). This sophisticated approach is not necessarily consistent with typical political rhetoric, which is likely to focus on crude measures, like the size of the government budget relative to GDP. Furthermore, there are good reasons for one’s intuitions here to be confused. As Olson recognized, the most “traditional,” and often least controversial, government functions are done via some form of coercion. Thus a government that sticks to so-called traditional roles (such as police), eschewing intervention in the market whenever possible (say through entering the market itself), will likely operate on citizens by means of coercion more often and this may well make the government seem larger. Olson, note \textit{78}, at 95-96.} Indeed, we suspect that those theorists who argue that governments generally strive to reduce the political salience of taxa-
tion to the extent possible have at least partially misunderstood the nature of government. It is questionable whether any individual politician benefits when the political salience of taxation is reduced. Although politicians as a class might benefit if reducing political salience expands the politicians’ joint scope for action, collective action problems may nevertheless prevent individual politicians from acting in the interests of this common pool. As John Cullis and Philip Jones conclude, “if circumstances were such that political agents sought to minimize resistance by engineering a situation of equal visibility across taxes, they have apparently failed.”

For instance, although the U.S. federal government has instituted withholding for federal payroll and income taxes, the government still requires an annual filing that necessitates an annual encounter with the ever more forbidding Internal Revenue Code. Proposals for making annual filing potentially less politically salient have received little support from the political establishment, even when there are strong arguments for these proposals on administrative efficiency grounds. Other important tax instruments are implemented without withholding, such as the taxation of most dividends and capital gains, not to mention property taxes. Strikingly, to the extent that property taxes are sometimes subject to a kind of withholding, it is the choice of many taxpayers to use this technique, one offered by the private sector. Any lessening of political salience resulting from this innovation seems to be the responsibility of taxpayers themselves, not the government.

And this raises a further confounding issue; if voters compare the benefits of tax-funded government spending to the benefits of privately-funded market consumption, then the use of price shrouding techniques by private-sector firms is also relevant for constructing a baseline for political salience. Tax instruments with low political salience should only lead voters to prefer government-provided services to market-provided services when the tax prices are more

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320 Jean-Baptiste Colbert is often quoted as having said: “Taxation is the art of plucking the goose so as to obtain the largest amount of feathers with the smallest amount of hissing.” Salanić, note 197, at 157 n.105 (2003). A sizeable branch of the political economy literature has taken this notion as one of its basic postulates. See, e.g., Walter Hettich & Stanley Winer, Democratic Choice and Taxation: A Theoretical and Empirical Analysis (1999).

321 Cullis & Jones, note 68, at 226.

322 See generally Joseph Bankman, Simple Filing for Average Citizens: The California ReadyReturn, 107 Tax Notes 1431 (June 13, 2005) (discussing California’s pilot program where the state prepared a tentative return for certain taxpayers); Zelenak, note 83, at 53-56 (discussing the pay-as-you-earn system and a tax agency reconciliation system where the agency creates a tentative return for the taxpayer, who then reviews the return).

323 See Cabral & Hoxby, note 18, at 3, 16 (discussing tax escrow accounts).

324 See, e.g., Kim & Kachersky, note 29, at 139-40.
shrouded than are the prices of the private-sector consumption. And whereas collective action problems may obviate individual politicians' incentives to reduce political salience, private-sector actors do not face equivalent obstacles. Unlike governments, private-sector businesses generally can be expected to reduce the salience of the prices they charge to the extent that doing so increases profits.

In sum, the existing literature does not provide grounds for concluding whether the costs of taxation or the benefits of public spending are more politically salient. Assuming that voter preferences ought to be respected, our initial problem in assessing the political salience of taxation is that voter preferences appear to be unstable, easily manipulated, and analytically ambiguous. This problem is then amplified when confused voter preferences on government spending are taken into account.

C. Analyzing the Normative Implications of Political Salience—Conclusion

How are democratic institutions to function in the face of such widespread voter confusion and ignorance? What does it mean to be respectful of voter preferences when voters’ fiscal beliefs appear to lack any strong foundations? These are difficult questions. Our purpose is to draw attention to these questions and to discuss their implications, rather than to answer them. Nevertheless, and even in the absence of sound empirical or analytic evidence, numerous scholars and political commentators appear to believe that existing fiscal institutions bias voter preferences in the direction of favoring larger levels for taxation and government spending. It is with this notion that we take issue.

We do not mean to advocate fiscal nihilism. Democracy requires that voters assess tax policies. We reiterate our opposition to secret forms of taxation. A government should not be permitted to brainwash its citizens so that they forget about the existence of taxes. More realistically, we would also oppose reducing the political salience of taxation to the point where voters seemed to clearly underestimate tax costs. Noteworthy on this point is Deborah Schenk’s distinction between reducing political salience (in her words “exploiting the sali-

325 See, e.g., Cullis & Jones, note 68, at 226 (“There is, on this evidence, no clear-cut support for the dominance of overall optimistic or pessimistic tax illusions. The general lack of knowledge supports only the argument that rational voters will not invest time and effort in the accumulation of information . . . .”).

326 See, e.g., Schenk, note 5, at 290-94 (discussing scholars and commentators who express this belief); see also our survey of different political salience theories in Section II.B.
ence bias") and reducing “transparency.” For Schenk, transparency refers to a feature of the political process, namely that the process is sufficiently open for voters to be able to learn how tax decisions are made so as to hold politicians accountable for the resulting tax policies. Schenk argues that the goal of transparency does not preclude the use of tax instruments with low political salience.

A particularly intriguing argument made by Schenk is that voters may sometimes want taxes to be collected in a less politically salient way so as not to confuse or aggravate themselves because they also want the services that taxes fund. This argument is generally consistent with the observation that voters seem to want both more spending and less taxes. This argument is generally consistent with the observation that voters seem to want both more spending and less taxes. It is also (arguably) normatively appealing because it gives voters credit for a kind of self-debiasing. That is, voters may know that when it comes to taxes they do not want to know. This is also perhaps a curious implication of the Cabral and Hoxby study on property tax withholding. The primary form of property tax withholding studied by Cabral and Hoxby was provided by the private sector, and thus chosen by the voters through their market decisions, rather than imposed on the voters by governments. We might thus speculatively infer that these voters desired property tax withholding to control their known irrational aversion to property taxation.

Nevertheless, at the extreme, choosing a tax instrument only because of its lower political salience could, at least eventually, undermine the related value of political transparency. Just as we oppose secret taxes, we think a plausible argument can be made against reducing the political salience of a tax instrument to the point of threatening transparency.

327 Schenk, note 5, at 256-63.
328 Id. at 260.
329 Id. at 256-60, 285.
330 Id. at 289.
332 Schenk, note 5, at 272, 289.
333 See Cabral & Hoxby, note 18.
334 Note that Cabral and Hoxby do not seem to challenge the traditional economic argument in favor of property taxes and also cite survey evidence that taxpayers are particularly happy with spending on local public goods despite particular unhappiness with the property tax, thus further suggesting that the use of property tax escrows is a kind of voluntary self-commitment device. See id. at 13, 19-20.
Yet these precepts offer little guidance with respect to the real-world tax policy debates for which political salience is relevant. For instance, even if it could be proven that introducing a VAT would reduce voters' assessments of tax costs, how are we to know whether this would move voters closer or further away from how they would ideally like to perceive the political costs of taxation were they free of cognitive biases and limitations? We are unaware of any argument for why financing government through a VAT would threaten Schenk's concept of transparency. Or, even if we knew that abolishing the alternative minimum tax—and raising income tax rates to offset the revenue loss—would increase political salience, how can we determine whether this would shift the overall political salience of the tax system in the right or the wrong direction?

It might someday be possible to answer these questions. But existing arguments for increasing the political salience of taxation have failed to do so. Instead, the existing arguments rely on a naïve and unexamined notion of a baseline wherein voters are assumed to fully understand fiscal policies with the sole exception being when tax design reduces political salience. As we have argued, this notion of a baseline for political salience is fatally flawed.

We finish by restating the central argument of this Part. To reiterate one of our initial caveats, our discussion in this Part has proceeded on consequentialist grounds. We have analyzed the implications of manipulating political salience with respect to the impact of doing so on voter decision-making. Our use of this mode of analysis is no accident. The scholars who argue for increasing the political salience of taxation base their arguments on similar consequentialist grounds. Our goal has been to demonstrate the hollowness of existing arguments against reducing political salience, and our discussion has thus followed the approach underlying these arguments.

Alternatively, it might be possible to analyze the normative implications of manipulating political salience on nonconsequentialist grounds. Even if we cannot say whether the political salience of existing tax instruments is too high or too low, might we nevertheless criticize attempts to purposefully manipulate political salience? Is there anything wrong with consciously designing tax instruments so as to induce voters to favor one's preferred policy outcomes?

For the most part, we leave these questions for future research. We note, however, that any nonconsequentialist critique of purposefully manipulating political salience should consider devices like tax expenditure budgets and deficit measurements—devices purposefully designed to manipulate political salience, but advocated for on the grounds of improving voter decision-making. A developed nonconsequentialist account may need to distinguish between attempts to manipulate political salience with the aim of inducing voters to support more controversial political objectives (such as one's preferences about the size of government) and those aimed at furthering more generally agreed upon objectives.
might reduce political salience because such reforms are thought to frustrate voter preferences as to taxation and to the size and nature of government. We conclude that this conventional wisdom rests on analytic feet of clay. In contrast to market salience, we lack a baseline for determining full or neutral political salience. Lacking such a baseline, we simply cannot evaluate whether the political salience of any real-world tax instruments is too high or too low.

V. Conclusion

Our primary objective in these essays has been to facilitate better discussions of tax salience. We began by analyzing the empirical literature on both market salience and political salience. We concluded that these literatures are tentative and that they do not support the strong claims frequently made about tax salience with regard to real-world policy debates. We continued by evaluating the normative implications of market salience, arguing that it is generally desirable to lessen market salience to the extent possible. Contrary to the conclusions of much of the recent literature, we determined that the benefits of reducing market salience should usually overpower concerns related to distortionary income effects, externalities, and distribution. Finally, we assessed the normative implications of political salience. Disputing the conventional wisdom, we explained that democratic values provide no support for increasing political salience.

The late twentieth century saw the triumph of neoclassical optimal tax theory. 337 In addition to becoming the dominant mode of analysis by tax scholars in economics departments and in elite law schools, this neoclassical approach profoundly influenced tax reforms in the U.S. and in other nations. 338 We hope that the early twenty-first century will similarly bring the triumph of behavioral public finance through the study of tax salience.

The need is great, as improving policymakers' understandings of tax salience may be our best hope for preventing the looming U.S. fiscal apocalypse. 339 Because we believe the current path of unsustainable budget deficits is at least partially due to tax salience, 340 it would be particularly appropriate if deeper insight into tax salience helped usher in a new period of more reasonable fiscal policy.

(such as counteracting politicians' arguably perverse incentives to overuse tax expenditures or deficit financing).

337 See, e.g., Edward McCaffery & James R. Hines, Jr., The Last Best Hope for Progressivity in Tax, 83 S. Cal. L. Rev. 1031, 1037 (2010).
338 See id.
339 See, e.g., notes 9-10 and accompanying text; Schenk, note 5, at 297-310.