On Tax Salience:
Market-Salience and Political-Salience

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[Preliminary and Incomplete Draft]

For well over a century, scholars have worried about “hidden taxes” and “fiscal illusion.” Of primary concern has been the notion that “hidden taxes” might undermine government accountability to voters, thereby distorting political economy decisions about the size of government or about which tax and spending instruments are adopted. These notions have had a major impact on debates over U.S. tax policy. The United States is the only OECD nation that has not adopted a value added tax, primarily because conservatives in the U.S. fear that value-added-tax burdens are less salient to voters. At the state level, concerns about how the revenue-elasticity of tax instruments affects voters’ perceptions play a major role in tax reform debates. Perhaps most of all, although the U.S. federal debt is rapidly approaching dangerous levels, voters appear largely unconcerned about the future tax hikes that will likely be

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1 This draft was written before Deborah Schenk’s new paper, Exploiting the Salience Bias in Designing Taxes (http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1670157) was made available. The draft thus does not discuss Schenk’s analysis.

2 See, e.g., John Stuart Mill, Principles of Political Economy at 237 (original 1848, reprinted 1994, Oxford University Press) (“Perhaps ... the money which [the taxpayer] is required to pay directly out of his pocket is the only taxation which he is quite sure that he 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 Robert Sausgruber and Jean-Robert Tyran, Testing the Mill Hypothesis of Fiscal Illusion, 122 PUBLIC CHOICE 39 (2005); Susanne Lohmann & Deborah H. Weiss, Hidden Taxes and Representative Government: The Political Economy of the Ramsey Rule, 30 Public Finance Review 579 (2002). 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.” President's Advisory Panel on Federal Tax Reform, Transcript of Ninth Meeting 120-21 (May 17, 2005) (testimony of Eric Toder, Joseph Bankman, and Grover Norquist), available at http://govinfo.library.unt.edu/taxreformpanel/meetings/docs/transcript_05172005.doc.

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needed to restore fiscal balance.\textsuperscript{5} Proposals for addressing unsustainable federal debt levels are stymied by the political incentives created by voter unconcern.\textsuperscript{6}

In addition to this older literature on tax salience with respect to voting decisions, a more recent literature has begun to analyze how tax salience affects market decisions. Contrary to the predictions of neoclassical economic theory, a number of studies have demonstrated that consumers do not always fully factor tax prices into their market decisions.\textsuperscript{7} Although this newer literature is still in its infant stage, it has already inspired a debate about how to reform the structure of tax systems so as to reduce market distortions.\textsuperscript{8} If revenue can be raised without distorting market decision making, then studies of the market salience of taxation could revolutionize the economic theory of taxation.\textsuperscript{9}

Until recently, constraints imposed by tax complexity have limited governments’ ability to manipulate the presentation of tax prices in order to influence tax salience. Although existing tax systems are far from simple and straightforward, taxes have nevertheless been designed so that individuals can assess their tax burdens through the use of a calculator and tax forms. Rapidly increasing use of tax filing software (such as TurboTax) threatens to change this dynamic. As Lawrence Zelenak argues, “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. With . . . computers available to perform calculations of any degree of complexity in milliseconds, the practicalities of return preparation impose virtually no limitations on the computational complexity to which Congress may subject the average taxpayer.”\textsuperscript{10} In Zelenak’s view, developments like the explosion of the Alternative Minimum Tax and the increased use of phase outs for tax credits and deductions would not have occurred without software reducing the complexity constraint on tax design.\textsuperscript{11} As the use of software becomes even more widespread, Zelenak predicts Congress may experiment with complex forms of tax price presentation beyond anything in our current experience.

As the increased use of software creates new tools with which governments can manipulate tax salience, developments in the fields of behavioral economics and cognitive theory have greatly enhanced our understandings of how tax salience may operate. The newer literature on how tax salience affects market decision making is only a small part of a much larger literature on cognition with respect to economic decision making. Drawing on this new literature, private sector firms have greatly expanded their use of price presentation techniques developed by marketing scholars within business schools. As compared to the use of price

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presentation techniques by private sector firms, the potential for governments to manipulate tax salience creates both additional challenges and opportunities.

This Article analyzes the normative implications of tax salience. The Article argues that tax salience occurs on multiple dimensions. Tax instruments with low salience on one dimension may have high salience on other dimensions. In particular, the Article focuses on salience with respect to market and political decision making, which the Article labels as “market-salience” and “political-salience” respectively.

In analyzing market-salience, the Article concurs with other analyses that have concluded that, all else being equal, it is normatively desirable to reduce the market-salience of taxation. The Article discusses potential complications to this basic story such as taxpayers misallocating their budgets, distributional considerations, and externalities and pigouvian taxes. Although more empirical work needs to be done before we can confidently assess the impact of these factors, the Article tentatively concludes that none of these complications defeats the general story whereby reducing market-salience is normatively desirable. Instead, the main drawbacks to employing techniques for reducing market-salience are that these techniques can backfire if overused, due to factors like taxpayer learning and aversion to being manipulated. Overuse of techniques for reducing market-salience in a manner that triggers these limiting factors can undermine taxpayer confidence in the tax system, leading to a host of potentially undesirable behaviors.

In analyzing political-salience, […]

I) UNDERSTANDING THE MULTIPLE DIMENSIONS OF TAX SALIENCE

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.\(^\text{12}\) 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. Our definition for tax salience is meant to capture any systematic differences between how taxpayers would perceive the costs of taxation in this hypothetical world of perfect

\(^{12}\) For a broader discussion of the distinction between economic agents’ observed actions and their “normative preferences” or “actual interests,” see John Beshears, James J. Choi, David Laibson, and Brigitee C. Madrian, How Are Preferences Revealed?, 92 J. OF PUB. ECONOMICS 1787 (2008).
economic rationality and how taxpayers actually perceive the costs of taxation in the real world.¹³

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 (e.g., consumer purchasing) and tax salience with regard to political-judgment formation (e.g., 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 like “fiscal illusion” or “hidden taxes.”¹⁴ 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 systematically different market or political judgments when faced with equivalently sized tax liabilities depending on how the tax liabilities are presented.¹⁵ Our definition for tax salience is therefore not meant to include any changes to taxpayer behavior that result from shifting tax burdens amongst 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

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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 others overestimating a tax price is not indicative of tax salience. See Wallace E. Oates, On the Nature and Measurement of Fiscal Illusion: A Survey, in TAXATION AND FISCAL FEDERALISM: ESSAYS IN HONOUR OF RUSSELL MATHEWS at 65 (G. Brennan, B. Grewel, and P. Groenwegen eds., ANU Press, 1988) (“Imperfect information is not, however, synonymous with fiscal illusion. It is a necessary, but not a sufficient condition for its existence. More specifically, fiscal illusion refers to systematic misperception of fiscal parameters. . .”).


¹⁵ The terms “hidden taxes” and “fiscal illusion” are typically used to refer to what we label as taxes with low political-salience. However, Brian Galle also uses the term “hidden taxes” to refer to tax instruments which we label as having low market-salience. Brian Galle, Hidden Taxes, supra note __, at 62.

¹⁶ 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 Part I.B.6 infra.
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.

In this Part, we review 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 reduce market-salience are likely to increase political-salience, and vice versa. Although our discussion focuses exclusively on market-salience and political-salience, there undoubtedly exist other additional dimensions to tax salience. Even tax design techniques that reduce both market-salience and political-salience may nonetheless increase tax salience along other dimensions.

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 should generally only have reduced market-salience when tax prices are complicated or obscured in some fashion.

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16 See Part I.C.
17 For instance, Brian Galle discusses tax salience with respect to Tiebout sorting, which we view as an additional dimension of tax salience – distinct from both market-salience and political-salience, although highly related to both. Galle, supra note __, at 44-46.

Any categorization schema for tax salience must necessarily be somewhat artificial – lumping together some concepts that would ideally be distinguished and excluding some dimensions of tax salience that would ideally 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.

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.

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.”20 In other words, spotlighting involves taxpayers focusing only on certain components of an aggregate price and thereby underestimating the aggregate price.21 However, simply dividing an aggregate price into a tax price and a pre-tax price 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 (hereinafter, CLK) – examines spotlighting with respect to sales and excise taxes. CLK’s paper includes two empirical studies showing that consumers do not always fully factor the price effects of retail sales taxes into their purchasing decisions.22 It is hard to overstate the importance of CLK’s paper to the emerging literature on market-salience; hence, it is worth briefly discussing both of the studies reported therein.

CLK’s first study examined consumer decision making in grocery stores. CLK convinced a Northern California grocery store 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 pre-tax prices for other goods. CLK 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.23 CLK 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.24

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20 Id. at 3.
23 Id. at 26-28.
24 See Id. This phenomenon of consumers’ ex-post ability to accurately answer questions about the tax rates that should have influenced their purchases earlier, but apparently did not, is very suggestive as to the many ways philosophers and more recently psychologists have considered the question of what it means “to know.” Particularly
In their second study, CLK examined responses to alcohol excise taxes over time as opposed to sales taxes on 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, CLK found significantly higher elasticities for the alcohol excise taxes than for the sales taxes. In both studies, CLK found that consumers were more responsive to taxes that were incorporated into the prices posted on the aisles than to the taxes that were not added until the register. The consumers appeared to spotlight on the prices posted on the aisles, thus (at least partially) ignoring the non-posted prices of the sales taxes.

Several other papers have reported results consistent with CLK’s. Richard Ott and David Andrus found that consumers do not fully take account of vehicle personal property taxes when making automobile purchasing decisions. And Kelly Gallagher and Erich Muehlegger report that sales-tax waivers given at the time of purchase have a much larger effect on hybrid-


noteworthy are Aristotle’s distinctions between different kinds of knowledge in Book VI of the Nicomachean Ethics, including his attempt in Book VII to answer how an individual can know the right thing to do and yet fail to do it—a puzzle for Plato as well (see, e.g., Protagoras 345e). A modern Aristotelian like Heidegger might explain that in our ordinary goings on about the world we simply rely on informal knowledge, perhaps wrongly, until confronted with an obstruction that forces reflection—here, the survey explicitly asking for information on the tax rate. See Martin Heidegger, Sein und Zeit § 16 (1927). Other modern philosophers also distinguish knowledge proper from “tacit knowledge” or “practical knowledge.” See generally, Matthias Steup, The Analysis of Knowledge, Stanford Encyclopedia of Philosophy, available at http://plato.stanford.edu/entries/knowledge-analysis/ (summarizing contemporary debates and noting in particular the seeming intractable puzzle of deciding whether it matters more for one’s definition of knowledge that someone with knowledge internally believe true things [as CLK’s customers seem to do] versus externally acting on the truth [as CLK’s customers seemingly do not]). Many psychologists, whom CLK seem to follow, view the sometimes inaccurate heuristics that we live by as generally functional with respect to the tasks for which they were developed, but potentially problematic in different contexts. For a broader discussion of heuristics as applied to law—primarily from a psychological decision theory or behavioral economics perspective—see Heuristics and the Law (Gerd Gigerenzer & Christoph Engel eds., 2006).

CLK, Salience and Taxation, supra note __, at 21-26.


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. However, 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. T. Hossain and J. Morgan, Plus Shipping and Handling: Revenue (Non) Equivalence in Field Experiments on eBay, 6 ADVANCES IN ECONOMIC ANALYSIS AND POLICY (2006). For general reviews of the relevant studies in the consumer behavior literature, see Morwitz, Greenleaf, and Johnson, supra note __; Xavier Gabaix and David Laibson, Shrouded Attributes, Consumer Myopia, and Information Suppression in Competitive Markets, 121 QUARTERLY J. OF ECONOMICS 505 (2006); Hyeong Min Kim and Luke Kachersky, Dimensions Of Price Salience: A Conceptual Framework For Perceptions Of Multi-Dimensional Prices, 15 J. OF PRODUCT AND BRAND MANAGEMENT 139, 139-140 (2006).

Richard L. Ott and David M. Andrus, The Effect of Personal Property Taxes on Consumer Vehicle Purchasing Decisions: A Partitioned Price/Mental Accounting Theory Analysis, 28 PUBLIC FINANCE REV. 134 (2000). Interestingly, Ott and Andrus’s respondents opined that the vehicle personal property taxes were “too high.” Id. at __. This result thus supports our argument about the difference between market-salience and political-salience with respect to excise taxes. See Part I.C.
vehicle purchases than do similarly sized income-tax credits. 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.

In a 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. Electronic toll collection does not strictly involve spotlighting, as there is no base price to toll collection, only a tax price. However, as in the other spotlighting studies, 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. 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 pre-tax 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

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29 Amy Finkelstein, *E-ZTax: Tax Salience and Tax Rates*, 124 QUARTERLY J. OF ECONOMICS 969 (2009). Finkelstein’s results also have implications for the political-salience of taxation as we will discuss further in Part I.B.2.
30 *Id.* at 2.
31 Electronic toll collection can also function as a form of schedule complexity to the extent that taxpayers contribute to electronic toll accounts in amounts larger than the individual toll payments. If payments are made in amounts larger than toll payments, the tax-price of each toll becomes bundled with other tolls, thus potentially making the price of each individual toll less salient.
induce spotlighting by delaying tax assessment until some time period after the relevant market decisions.\textsuperscript{34}

Nussim’s argument that spotlighting might also affect labor-supply decisions is supported by two laboratory experiments.\textsuperscript{35} 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).\textsuperscript{36} 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.\textsuperscript{37} 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.\textsuperscript{38} The experimental subjects were much less willing to work when their compensation was presented as a lower base-wage plus a bonus then when their compensation was presented as a higher base-wage minus a tax.\textsuperscript{39} 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,\textsuperscript{40} or taxpayers’

\textsuperscript{34} For instance, we discuss the relationship between deficit financing and spotlighting in notes ___ supra and accompanying text.

\textsuperscript{35} There is also a related literature on how tax salience affects compliance decisions. E.g., Christoph Watrin and Robert Ullman, \textit{Comparing Direct and Indirect Taxation: The Influence of Framing on Tax Compliance}, 5 \textit{The European J. of Comparative Economics} 33 (2008).

\textsuperscript{36} Tomer Blumkin, Bradley Ruffle, and Yosef Ganun, \textit{Are Income and Consumption Taxes Ever Really Equivalent? Evidence from a Real-Effort Experiment with Real Goods}, CESIFO WORKING PAPER SERIES 2194, available at http://ssrn.com/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. \textit{Id.} at __. However, their experiment 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.

\textsuperscript{37} \textit{Id} at .


\textsuperscript{39} 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. \textit{Id} at 16.

aversion to being manipulated. Market 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 CLK's paper -- 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. For example, an individual earning $80,000 and therefore in the 30 percent marginal tax bracket might observe that his taxes are $16,005, iron to a constant rate of 20 percent, and make decisions as if he kept 80 percent of marginal earnings.” 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.

41 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. E.g., Morwitz, Greenleaf, Shalev, Johnson, supra note __, at 25-27; Shibin Sheng, Yeqing Bao, and Yue Pan, Partitioning or Bundling? Perceived Fairness of the Surcharge Makes a Difference, 24 PSYCHOLOGY & MARKETING 1025 (2007); Robert Schindler, Maureen Morrin, and Nada Beechwati, Shipping Charges and Shipping-Charge Skepticism: Implications for Direct Marketers’ Pricing Formats, 19 JOURNAL OF INTERACTIVE MARKETING 41 (2005); Yih Hwai Lee and Cheng Yuen Han, Partitioned Pricing in Advertising: Effects on Brand and Retailer Attitudes, 13 MARKETING LETTERS 27 (2002).


43 But see Nussim, supra note __, at 234 n. 77 (“The results of [CLK’s] study are presumably sensitive to its design. First, the study was conducted in a ‘tax-exclusive environment.’ That is, U.S. consumers are used to tax-exclusive price presentation and may have been confused by the mere change in the environment rather than the form of price presentation. Second, the study was conducted over a limited set of products, and in particular, over a limited period of time. These facts exacerbate the mentioned effect. Overall, Chetty et al. might have only measured a ‘shock’ effect or the reaction of consumers to new transaction costs in analyzing a new pricing system.”).

We find Nussim’s cautionary notes somewhat persuasive with respect to CLK’s grocery store experiment, but not with respect to CLK’s study of alcohol sales and excises taxes.


45 However, we stick with Liebman and Zeckhauser’s approach of discussing spotlighting and ironing as two distinct hypotheses.
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 pre-tax 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 non-linear 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 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

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46 For analogous results with respect to consumer reactions to private-sector pricing strategies, see Kim and Kachersky, supra note __, at 139-40; Morwitz, Greenleaf, Shalev, and Johnson, supra note __, 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.”). Nussim’s speculation that the income tax may have reduced market-salience to the extent that workers focus on pre-tax salaries when making job choice decisions might be an exception. See note __ supra 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 pre-tax salaries. The spotlighting hypothesis is considerably harder to apply when making predictions about the market-salience of specific components of the income tax as compared to the market-salience of other income-tax components.


48 Under our definition, tax salience only refers to when taxpayers systematically underestimate or overestimate their tax liabilities. See note __ supra.


tax rates from prior years, even controlling for the relationship between prior and current year tax status.\textsuperscript{52}

We earlier concluded that the spotlighting literature is still in its adolescence.\textsuperscript{53} The ironing literature is at an even earlier stage of development.\textsuperscript{54} There is substantial evidence that complicated tax schedules can induce taxpayer confusion and error.\textsuperscript{55} But the market-salience literature only provides limited means for predicting the direction of complexity-induced taxpayer error. Further empirical work will probably be 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.

\textbf{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 discount tax costs imposed through these forms of taxation.\textsuperscript{56} The literature on political-salience is over a century old, dating back at least to John Stuart Mill.\textsuperscript{57} 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.\textsuperscript{58}

\textsuperscript{52} Naomi E. Feldman and Peter Katuscak, \textit{Should the Average Tax Rate Be Marginalized?}, CERGE Working Paper No. 304 (2006).
\textsuperscript{53} Note __ supra and accompanying text.
\textsuperscript{54} 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 McCaffery, \textit{Cognitive Theory and Tax}, 41 UCLAL. 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.\textsuperscript{55} Note __ supra and accompanying text.
\textsuperscript{57} JOHN STUART MILL, PRINCIPLES OF POLITICAL ECONOMY 237 (original 1848, reprinted 1994, Oxford University Press) (“Perhaps ... the money which [the taxpayer] is required to pay directly out of his pocket is the only taxation which he is quite sure that he 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.”)
\textsuperscript{58} 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.
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 CLK’s spot-lighting 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 tentative understandings 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, 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). However, we include within our discussion 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.”

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59 Arguably, Finkelstein’s results for electronic toll collection might be an exception, but electronic toll collection strikes us a much narrower context than CLK’s sales and excise taxes. See notes infra and accompanying text.

60 E.g., Finkelstein, supra note __, at 2 (“Empirical evidence of the impact of tax salience on tax rates, however, has proved extremely elusive.”); Rupert Sausgruber and Jean-Robert Tyran, Testing the Mill Hypothesis of Fiscal Illusion, 122 PUBLIC CHOICE 39, 40 (2005) (“it is difficult to measure a misperception of the tax burden”); Wallace Oates, supra note __ at 66 (1988) (“the detection and measurement of fiscal illusion is a difficult enterprise . . . . the existing empirical literature has not yet made a persuasive case for the[] existence and importance [of fiscal illusion].”).


In Part III, we argue that the literature lacks a baseline for full political-salience equivalent to the standard models of economic rationality used as a baseline for full market-salience. This imprecision in the very concept of political-salience has undoubtedly interfered with the empirical study of political-salience. However, the absence of a baseline for full political-salience needn’t interfere with the empirical study of how variance in tax design characteristics affects the relative political-salience of different forms of taxation.

62 See DANIEL SHAVIRO, TAXES, SPENDING, AND THE U.S. GOVERNMENT’S MARCH TOWARD BANKRUPTCY at 15 (2007) (“It rarely occurs to either side that they may misunderstand the basic relationship here between means and ends - that is, between tax and spending cuts and the size of government.”).

63 In particular, our discussion of the tax-label aversion hypothesis notes that voter opposition to only those forms of government activity that are labeled as “taxes” can result in this activity simply being shifted into other forms such as tax expenditures or regulation. See Part I.B.6.
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.

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65 [add cite]

66 Canada’s VAT (called the goods and services tax or GST) is apparently something of an exception, as vendors post prices on store aisles that do not include the vendors’ GST costs. David Sherman, Policy Forum: Tax-Included Pricing for HST—Are We There Yet?, 57 CANADIAN TAX J. 839, 856 (2009) (“Canada is apparently the only VAT/GST country in which prices are advertised exclusive of tax.”).

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

68 See [articles on incidence]. 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 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.

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 taxes hypothesis strikes many as convincing; as George Lowenstein, Deborah Small, and Jeff Strnad write: “the psychology and therefore the politics of taxation may turn on who appears to pay the tax as opposed to who actually bears the burden. The public will tend 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 U.S. has been the worry that there would be too little resistance to raising taxes via the VAT exactly because it is ‘hidden.’”

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

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71 E.g., Oates, supra note __, at 72-73; Erik Shokkaert, Preferences and Demand for Local Public Spending, 34 J. OF PUB. ECON. 175 (1987). Indirect taxes may have low political-salience even if their use does not result in higher government spending, but the econometric study of the political-salience of indirect taxes requires the use of some dependent variable, and government spending levels are a commonly used choice.


An alternative intuition for why the use of indirect taxes might reduce political-salience relates to the endowment effect. Under the standard endowment effect, individuals have been shown to assign more disutility to “losses” then utility to equivalent “gains.” Whether a change in circumstances is coded as a “loss” or as the absence of “gains” depends on the framing of the individual’s endowment. In regard to taxation, whether taxpayers perceive taxes as losses from their pre-tax endowments, or as reduced gains from engaging in market transactions, may determine whether the endowment effect comes into play. Jonathan Baron and Edward McCaffery, Isolation Effects and the Neglect of Indirect Effects of Fiscal Policies, 19 JOURNAL OF BEHAVIORAL DECISION MAKING 289, 290 (2006); Edward McCaffery, Cognitive Theory and Tax, 41 UCLA L. REV. 1861, 1875 (1994).

To illustrate the possible connection between the endowment effect and political-salience, compare the political-salience of the employer-paid and employee-paid portions of the payroll tax. The employer-paid portion of the payroll tax is taken out before workers are told their salaries and thus is likely coded as smaller gains from working. In contrast, the employee-paid portion of the payroll tax is presented with the employees first seeing pre-tax salary totals and then being shown how much the government takes out of the pre-tax salary. The employee-paid portion of the payroll tax is thus more likely to be coded as a loss. Income tax payments may be even more likely to be coded as losses, as taxpayers are instructed to calculate their aggregate pre-tax incomes before being told that the government will take a portion of this income figure from them. Hence, the endowment effect provides an alternative potential operative mechanism for the indirect taxes political-salience hypothesis, beyond the notion that individual voters simply fail to understand that they bear the burden of indirect taxes.
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.73 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.74

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.75 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.”76

2. Tax-System Complexity

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73 See SLEMROD AND BAKIJA, supra note __, at 140 (“whenever 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. For example, during the debate over the Tax Reform Act of 1986, when eliminating the deductibility of business lunches was being considered, the restaurant industry association warned that thousands of jobs would be lost in the restaurant business.”).

74 Indeed, it has often been argued that narrow interest groups have disproportionate influence on the legislative agenda as compared to diffuse interest groups. E.g., MANCUR OLSON, THE LOGIC OF COLLECTIVE ACTION: PUBLIC GOODS AND THE THEORY OF GROUPS (1965). However, it is not clear to what extent intermediaries charged with remitting an indirect tax face incentives to lobby or campaign against the tax when they do not bear the economic burden of the tax.

75 Finkelstein, supra note __, 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 Rupert Sausgruber and Jean-Robert 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. Sausgruber and Tyran, Tax Salience, Voting, and Deliberation, supra note __. 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. Jonathan Baron and Edward McCaffery, Isolation Effects and the Neglect of Indirect Effects of Fiscal Policies, 19 JOURNAL OF BEHAVIORAL DECISION MAKING 289, 294 (2006). 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.

76 Bruce Bartlett, The VAT and the Money-Machine Argument (blog post on file with authors, April 10, 2010).
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 argued that “to 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.”  77 Similar arguments have been made about tax instruments (like sales taxes) which 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.  78

As another argument related to tax-system complexity, many theorists have speculated that reducing compliance costs may lower the political-salience of taxation.  79 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.  80 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 about their tax burdens even if they would prefer not to do so. Although forcing taxpayers to make painful

78 E.g., Aradhna Krishna and Joel Slemrod, Behavioral Public Finance: Tax Design As Price Presentation, 10 INTERNATIONAL TAX AND PUBLIC FINANCE 189 (2003); Campbell, book manuscript, p. 7
79 E.g., Lawrence Zelenak, Justice Holmes, Ralph Kramden, and The Civic Virtues Of A Tax Return Filing Requirement, 61 Tax. L. Rev. 53, 56 (2008) (“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.”). Also, e.g., Finkelstein, supra note __, at 1; H. Geoffrey Brennan & James M. Buchanan, Towards a Tax Constitution for Leviathan, 8 J. Pub. Econ. 255, 256 (1977).
80 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. The example of tariffs on foreign goods, set at such punitive levels that no goods are imported and thus no revenue raised, helps to make their error clear. Is a government that in effect bars imports through punitive tariffs-or, for that matter, that simply bars them outright-really the kind of small government, having only minimal effects on liberty, efficiency, or wealth distribution, that opponents of Leviathan should want? Plainly not.").

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 Amy Finkelstein explains, “compliance 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.”

As with the indirect taxes hypothesis, the empirical literature on how tax-system complexity affects voting behavior remains indeterminate. The most important line of empirical research on this question began with Richard Wagner in 1976. Wagner devised a measure of aggregate tax system complexity and found a strong correlation between this measure and government expenditure levels. 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. Subsequent studies have pointed out limitations in Wagner’s approach. Correcting for these limitations, some empirical studies have found results similar to Wagner’s, while others have failed to find any significant correlations between measures of tax system complexity and government expenditure levels.

As the most important recent empirical study of the tax-system complexity hypothesis, Amy 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

81 Finkelstein, supra note __, at 969.
84 Id. at 59.
85 Oates, supra note __, at 69-70.
88 We earlier discussed the implications of Finkelstein’s study for the spotlighting market-salience hypothesis, supra notes __ and accompanying text.
89 Finkelstein, supra note __, at 969.
collection more efficient such as by reducing compliance costs.\(^9\) 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.\(^1\)

3. Withholding

Another tax-design element which 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.\(^2\) 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 has sometimes 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.\(^3\) If this is the dominant way in which withholding affects political-salience, then withholding should probably be thought of as a sub-factor of the tax-system complexity hypothesis.\(^4\) Yet other accounts appear to suggest that voters may not fully pay attention to amounts taken out of their salaries prior to the receipt of their paychecks.\(^5\) It could also 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.\(^6\) If these are the

\(^9\) Id. at 1002-08. She primarily does so by showing that electronic-toll collection leads toll setting to become less sensitive to the local election calendar.

\(^1\) Id. at 1009. To foreshadow our discussion in Part III, infra, Finkelstein also emphasizes that the normative implications of her findings “are ambiguous.” Id.

\(^2\) See President's Advisory Panel on Federal Tax Reform, Transcript of Sixth Meeting 113-14 (Mar. 31, 2005) (testimony of Milton Friedman), available at http://govinfo.library.unt.edu/taxreformpanel/meetings/docs/transcript_03312005.doc (“you could not today have a government of the size it is . . . . if you did not have the withholding tax as a way of raising the money.”). See also Dick Armey, Why America Needs the Flat Tax in ROBERT E. HALL, ALVIN RABUSIKA, DICK ARMey, ROBERT EISNER, AND HERBERT STEIN, FAIRNESS AND EFFICIENCY IN THE FLAT TAX 99 (1996) (“If America had not accepted withholding ... the government could never have grown as large as it has.”).

\(^3\) MILTON FRIEDMAN AND ROSE FRIEDMAN, TWO LUCKY PEOPLE at 123 (1998).

\(^4\) E.g., Aradhna Krishna and Joel Slemrod, Behavioral Public Finance: Tax Design As Price Presentation, 10 INTERNATIONAL TAX AND PUBLIC FINANCE 189. 193-94 (2003).

\(^5\) See notes ___ supra (discussing the argument that numerous smaller tax liabilities may have less political-salience than fewer larger tax liabilities).

\(^6\) See Dick Armey, supra note __, 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 notes ___ supra for discussion of an analogous intuition with respect to indirect taxes.

\(^7\) 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. Kyle Logue and Joel Slemrod, Of Coase,
operative mechanisms, then the withholding hypothesis may bear more relation to the indirect-taxes hypothesis than to the tax-system complexity hypothesis. Because it is unclear whether withholding is best thought of as a sub-factor 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\(^98\) -- in effect giving “interest free loans to the government”\(^99\) -- the intuition that withholding reduces the perceived costs of the withheld tax liabilities remains unconfirmed.\(^100\) Regardless, there appears to be widespread agreement with the intuition that withholding reduces political-salience. 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.”\(^101\) Several conservative legislators have even proposed legislation to end income tax-withholding, arguing for this position on political-salience grounds.\(^102\)

4. Deficit Financing

Another hypothesis for how tax design may reduce political-salience concerns the use of deficit financing.\(^103\) Paying for government expenditures with deficit financing can delay the need to levy taxes to fund those expenditures.\(^104\) If voters discount their future tax liabilities in


\(^{100}\) Krishna and Slemrod, supra note \(^2\), at 193-94.

\(^{101}\) For some suggestive evidence that withholding may lead to larger governments – 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 (2006), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1585119.

\(^{102}\) Id.

\(^{103}\) As we will discuss further in Parts I.C. and II.D (notes \(^2\) infra and accompanying text), deficit financing may reduce market-salience as well as political-salience. For an excellent review of the literature analyzing the connection between deficit financing and both dimensions of tax salience, see DANIEL SHAVIRO, DEFICITS MATTER? at 87-103 & 221-304 (1997). For another good review of the literature on deficit financing and political-salience, see Brian E. Dollery and Andrew C. Worthington, The Empirical Analysis of Fiscal Illusion, 10 J. OF ECONOMIC SURVEYS 261, 290-293 (1996).

\(^{104}\) 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.
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 will eventually 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.

The political-salience hypothesis of deficit financing may thus 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.

However, even if the use of deficit financing does lead voters to support higher levels for government spending, 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. For this reason 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

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105 See Part I.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 ___ (discussing the endowment effect as a potential explanation for the indirect-taxes hypothesis).

106 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. E.g., Jonathan Baron and Edward McCaffery, Isolation Effects and the Neglect of Indirect Effects of Fiscal Policies, 19 JOURNAL OF BEHAVIORAL DECISION MAKING 289, 290 (2006).

107 To the extent that deficit financing merely delays the imposition of a tax burden without shifting the taxpayers who will eventually 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. Note ___ supra. The distributional impact of shifting tax burdens amongst generational cohorts can undoubtedly affect voting behavior – and is undoubtedly important – but is beyond the scope of this paper.

108 Dollery and Worthington, supra note __, at 290-93; Oates, supra note __, at 71.
financing reduces the political-salience of taxation,\textsuperscript{109} and there is some suggestive empirical support for this hypothesis,\textsuperscript{110} as well as a great deal of anecdotal support.\textsuperscript{111}

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 foregone tax cuts are less politically-salient than are actual tax hikes (with the difference between “foregone 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: a. The Flypaper Effect; b. Bracket Creep; c. Income Elasticity; and d. the Fiscal-Volatility Effect.

\textit{a. The Flypaper Effect:} Arthur Okun coined the “flypaper effect” as the notion that the money that governments send out “sticks where it hits.”\textsuperscript{112} Numerous studies have investigated the flypaper effect with regard to intergovernmental grants, generally finding that sub-national governments “use the grants they receive from the federal government to increase local spending.”\textsuperscript{113} This finding is potentially inconsistent with standard economic models based on full political-salience; because – 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 . . . , [t]he residents of the local jurisdiction should spend this increase in income just like any other increase.”\textsuperscript{114}

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{115} Local government taxpayers might be more likely to notice if the federal

\textsuperscript{109} E.g., DANIEL SHAVIRO, DO DEFICITS MATTER at 303 (1997) (“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.” \textit{Id.}


\textsuperscript{111} E.g., Shaviro, DEFICITS, \textit{supra} note __, at 71-78.


\textsuperscript{113} \textit{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.”).

\textsuperscript{114} \textit{Id.}

\textsuperscript{115} See David Gamage, \textit{Preventing State Budget Crises: Reframing the Fiscal Volatility Problem}, \textit{CAL. L. REV.} (2010) [Hereinafter: \textit{State Budget Crises}] (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 foregone tax cuts less politically-salient.).
government distributed money directly to the taxpayers, with the local government subsequently raising taxes in order to appropriate this money for increased spending, as compared to if the federal government distributed the money directly to the local government so that spending could be increased without the money ever passing through the hands of the taxpayers. In other words, a plausible explanation for the observed flypaper effect is that the foregone tax cuts used to finance local government spending when grants are given directly to local governments may be less politically-salient than would the actual tax hikes needed to fund increased local government spending were the grants instead given to the local government’s taxpayers.

**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 U.S. during the 1970’s before the federal income-tax brackets were indexed for inflation as part of the 1981 tax reform.\footnote{E.g., Edward J. McCaffery, *Cognitive Theory and Tax*, 41 UCLA L. REV. 1861, 1896–97 (1994).} According 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.”\footnote{Michael J. Graetz, *Tax Policy at the Beginning of the Clinton Administration*, 10 YALE J. ON REG. 561, 563 (1993).}

Bracket creep relates to the sticky-baselines hypothesis to the extent the “automatic tax increases”\footnote{Id.} generated by inflation have less political-salience than would equivalent tax increases enacted through actual tax-rate hikes. Concern over the bracket-creep phenomenon is thus consistent with the intuition that foregone tax cuts may be less politically-salient than actual tax hikes.\footnote{See David Gamage, *State Budget Crises, supra* note __, at ___ (“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.”)}

**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.\footnote{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. E.g., Mark Nichols and Mehmet Tosun, *The Income Elasticity of Gross Casino Revenues: Short-Run and Long-Run Estimates*, 61 NAT. TAX. J. 635, 636-37 (2008); Jon Vasche and Brad Williams, *Revenue Volatility in California*, 36 STATE TAX NOTES 35, 37 (2005). See also Part I.B.5.d infra.} For instance, income taxes generally have higher income elasticity than do sales taxes, such that economic growth will generally 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 has often 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. The higher income elasticity of income taxation has been
cited as a potential 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. 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 foregone
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 highly plausible the other sub-hypotheses of income elasticity, bracket
creep, and the fiscal-volatility effect. Nevertheless, these effects may not result from political-

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121 E.g., David Gamage, Managing California’s Fiscal Roller Coaster, 49 STATE TAX NOTES 659 (2008).
122 E.g, Steven Sheffrin, Tax Reforms and the Growth of Government, 24 EMPIRICAL ECONOMICS 655, 664 (1999)
(concluding that “[the increased use of the income tax enacted in California in the 1930s] 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.”)
123 Id.
124 David Gamage, Coping Through California’s Budget Crises in Light of Proposition 13 and California’s Fiscal
125 David Gamage, State Budget Crises, supra note __,
126 Hines and Thaler, supra note __, at 218.
127 With respect to government spending, it has long been understood that budgetary baselines matter. There are
occasional proposals for zero-base budgeting – for continually re-evaluating 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 at 10-14 (4th ed., 2002) (“Incremental calculations, then, proceed from an
existing base. By ‘base’ I refer to the commonly held expectations among participants in budgeting that programs
will be carried out at close to the going level of expenditures.”).
salience. As a competing explanation, 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.\textsuperscript{128} Even if baselines have no influence on how voters perceive the costs of taxation (i.e., 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.\textsuperscript{129} Yet anecdotal review of how tax politics are discussed suggests that political-salience is at least part of the explanation.\textsuperscript{130} As Mathew Rabin has written, a “core feature of humans is that we are highly attuned to changes in our circumstances, not merely to the absolute levels.”\textsuperscript{131} 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.’”\textsuperscript{132}

6. Tax-Label Aversion

For the final political-salience hypothesis that we will 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, government 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{133}

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{134} Tax-averse preferences describe when taxpayers dislike paying taxes more than

\textsuperscript{128} For a more in-depth discussion of this alternative explanation, see David Gamage, Preventing State Budget Crises: Managing the Fiscal Volatility Problem, 98 CALIFORNIA L. REV. __ (forthcoming, 2010).
\textsuperscript{130} One of us (Gamage) makes this point elsewhere by reviewing the wording of the No New Taxes Pledge, the debates over extending the Bush tax cuts, and the debates over indexing Social Security payments, among others. Gamage, State Budget Crises, supra note __, at __. See also DANIEL SHAVIDO, TAXES, SPENDING, AND THE U.S. GOVERNMENT’S MARCH TOWARDS BANKRUPTCY at 159 (2007) (discussing the indexing of Social Security payments).
\textsuperscript{131} Matthew Rabin, A Perspective on Psychology and Economics, 46 EUR. ECON. REV. 657, 662 (2002).
\textsuperscript{132} Gamage, State Budget Crises, supra note __, at __.
\textsuperscript{133} DANIEL SHAVIDO, TAXES, SPENDING, AND THE U.S. GOVERNMENT’S MARCH TOWARD BANKRUPTCY at 12 & 23-27 (2007) (discussing both the endowment effect and particularities of American anti-tax sentiments as potential explanations for American voters’ aversion to policies that are labeled as “taxes” as compared to similar policies that avoid the “tax” label).
\textsuperscript{134} For a more in-depth discussion of tax-averse preferences, and of tax aversion more generally, see Christopher C. Fennell and Lee Anne Fennell, Fear and Greed in Tax Policy: A Qualitative Research Agenda, 13 WASH. U. J. OF LAW AND POLICY 75 (2003).
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{135} Whereas tax salience relates to taxpayers’ perceptions, tax-averse preferences relates to how taxpayers’ respond to their perceptions. Both tax-averse preferences and tax-label aversion can be grouped under the general heading of tax aversion.\textsuperscript{136} However, only tax-label aversion 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{137}

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 policy).\textsuperscript{138} 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: a. Taxes versus Other Extractions; b. Tax-Financed Spending versus Tax Expenditures; and c. Tax-Financed Spending versus Regulation.

\textit{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 Hardistry, Eric Johnson, and Elke Weber, conducted three experiments comparing their experimental subjects reactions to “carbon taxes” as opposed to “carbon offsets.”\textsuperscript{139} They found that subjects identifying as Republicans were significantly more opposed to the “carbon taxes” than to the equivalent “carbon offsets.”\textsuperscript{140} 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 “fees,” “offsets,” “penalties,” or “service charges.”\textsuperscript{141}

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\textsuperscript{135} \textit{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{137} However, 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{138} See David J. Hardisty, Eric J. Johnson, and Elke U. Weber, \textit{A Dirty Word or a Dirty World?: Attribute Framing, Political Affiliation, and Query Theory}, 20 PSYCHOLOGICAL SCIENCE 1 (2009) (“The literature on attribute framing suggests that labels make a big difference . . .”).

\textsuperscript{139} \textit{Id.} at 2-6.

\textsuperscript{140} Interestingly, subjects identifying as Democrats responded similarly to the tax and offset frames. \textit{Id.} at 6.

\textsuperscript{141} E.g., Mathew Saltmarsh, \textit{Struggling Goverments Get Creative to Raise Income}, N.Y. TIMES, Mar. 17, 2010 (reporting that “analysts note” that government charges levied on “services once provided free or at low cost” for the purpose of raising revenues “are generally easier to enact” than are tax increases).

For another empirical study on this question, Edward McCaffery and Jonathan Baron conducted a laboratory-type experiment comparing government extractions labeled as “taxes” to equivalent-sized direct payments (or “service charges”). They found that their experimental subjects were more accepting of “taxes” for
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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.\textsuperscript{142} Although the definition of “tax expenditures” is somewhat controversial, the term is generally 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.\textsuperscript{143} According to Ed 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.”\textsuperscript{144}

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 the Congressional Research Service’s calculations, the sum of U.S. tax expenditures equaled $1.2 trillion in 2008\textsuperscript{145} – an amount larger than both the revenue raised by the income tax and the sum total of all federal discretionary spending.\textsuperscript{146} 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.\textsuperscript{147} 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.\textsuperscript{148} Although there has been surprisingly little empirical study of the political-salience of tax expenditures, there is still solid grounds for inferring that tax expenditures 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.\textsuperscript{149} 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.\textsuperscript{150} Similarly, some environmentalists have called for climate regulations as a more politically feasible alternative to carbon taxes.\textsuperscript{151} Regulations can impose real burdens on taxpayers, just as can taxation. Like 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.\textsuperscript{152}

\textbf{e. 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 enacting their policy goals. Of course, there are limits to the extent to which these alternatives can substitute for tax-financed direct spending.\textsuperscript{153} 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.\textsuperscript{154} 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.\textsuperscript{155}

\textsuperscript{152} See DANIEL SHAHVIRO, TAXES, SPENDING, AND THE U.S. GOVERNMENT’S MARCH TOWARDS BANKRUPTCY at 27-28 (2007) (discussing minimum wage laws as an alternative to taxation).
\textsuperscript{153} Id. at 11 (arguing that our “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.”).
\textsuperscript{154} E.g., Finkelstein, supra note __, 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).
\textsuperscript{155} E.g., Nussim, supra note __, at ___ (citing the literature on political-salience – i.e. fiscal illusion – as support for the market-salience-related behavior of consumer under-valuation of tax-exclusive prices); Galle, \textit{Hidden Taxes}, supra note __, at 109-11 (analyzing an alleged conflict between “democracy” and “welfare”).
Indeed, by treating tax-salience as a unitary concept, some commentators have 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 II we agree with the conclusion that reducing market-salience should generally be considered desirable. However, in Part III we dispute the notion that reducing political-salience should be considered harmful. Regardless, we emphasize in this Section that policymakers 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. Although there are certainly tax design techniques that may reduce salience along both dimensions, many techniques for reducing tax salience along one dimension may increase salience along the other dimension.

Consider CLK’s famous study of the market-salience of U.S. retail sales taxes. CLK 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 CLK’s 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 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 they do not remit these taxes

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156 E.g., Galle, supra note __, at 109-11.
157 CLK, Salience and Taxation, supra note __.
158 Id. at 26-28.
159 Bird, supra note __, at 6.
161 Chetty, The Simple Economics of Salience and Taxation at 10 (“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”). Canada’s GST is an exception to this rule. Note __ supra.
themselves does not imply that consumers do not respond to the costs of indirect taxes when 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 non-tax 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 non-tax components of a price should thus not affect market-salience. The indirect-taxes hypothesis predicts that the use of indirect taxes reduces political-salience, but – at least as compared to retail sales taxes – CLK’s results suggest that the use of indirect taxes should increase market-salience.

Within the market-salience literature, the spotlighting hypothesis has received the most empirical support. 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. Yet voting decisions are not usually made at the same point in time as are market decisions. 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. Consequently, significantly delaying tax assessment – such as through deficit financing – may reduce both market-salience and political-salience. 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. An exception would be if consumers have strong tax-accepting or tax-averse preferences. See note supra.

162 An exception would be if consumers have strong tax-accepting or tax-averse preferences. See note supra.

163 Part I.A.1.

164 Id.

165 Id.

166 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 also Sherman, supra note __, 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.”).

167 The spotlighting hypothesis thus runs directly counter to Barro’s Ricardian Equivalence hypothesis. 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, DEFICITS, supra note __, at 66-78 & 145 (discussing the Ricardian equivalence hypothesis and concluding that it is implausible in its strong form). For further discussion of the relationship between deficit financing and market-salience, see Part II.D infra.
More formally, we might imagine that taxpayers code taxes that are not assessed until after a market decision as losses or as non-voluntary extractions – thus triggering the endowment effect (i.e., loss aversion) – but that taxes assessed at the time of market decision making are understood to be part of the costs of making the market decision. 168 This logic may explain why the estate tax appears to have high political-salience, but low market-salience. 169

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 rates, phase-outs can reduce both the market-salience and the political-salience of taxation. 170 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 of tax credits and deductions. 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 should reduce both the market- and political-salience of taxation.

The existing literatures on market-salience and political-salience are both tentative and underdeveloped. Considerably more empirical work will be needed to confidently assess how market-salience and political-salience may 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 – such as phase-outs of credits and deductions and the AMT – may reduce both market-salience and political-salience, we see no reason to expect that market-salience and political-salience work together more often then 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

168 SHAVIRO, FISCAL LANGUAGE, supra note __, at 23-25.
169 See Lee Ann Fennell, Death, Taxes, and Cognition, 81 North Carolina L. Rev. 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. . .”).
170 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.
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 whether increased use of techniques for reducing market-salience would have the intended effect.\textsuperscript{171}

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. Although we would be reluctant to base tax policy decisions on most of these hypotheses, the fact remains that the hypotheses for political-salience are widely held and are currently having great influence on fiscal policy debates – whether we like it or not.\textsuperscript{172}

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.

Although we have aimed our reviews of the empirical literature toward comprehensiveness – to facilitate their use as a reference by other scholars – we have not 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.\textsuperscript{173} Moreover, in addition to the hypotheses that we discuss regarding how tax design may influence tax salience, situational factors such as government regulation may also influence tax salience, such as by requiring or prohibiting price presentation techniques that might serve to shroud the tax-costs of making

\textsuperscript{171} See notes supra and accompanying text.

CLK do analyze limiting factors, but only within a bounded rationality model. Notably, increasing the tax rates of an initially low market-salience tax instrument -- within CLK’s model -- increases the market-salience of the tax instrument. Hence, even with respect to retail sales taxes, it is difficult to predict the market-salience implications of adjusting sales-tax rates. CLK, \textit{Salience and Taxation}, supra note __, at __.

\textsuperscript{172} See notes supra and accompanying text.

\textsuperscript{173} For instance, as we will discuss further in Part III, infra, 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. However, unlike the political-salience hypotheses discussed in this Section, governments cannot readily control whether voters think of tax costs in terms of dollar amounts or as percentages. The political-salience hypotheses discussed in this Section all relate to choices that real-world governments make about which tax instruments to employ (for the indirect taxes, tax-system complexity, and sticky baselines hypotheses), about how tax instruments are to be administered (for the tax-system complexity, withholding, and sticky baselines hypotheses), or about whether to use alternatives to current taxation for funding expenditures (for the deficit financing and tax-label aversion hypotheses).
either market or political decisions. 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 simply 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. Not only would ignoring these intuitions be akin to the proverbial searching for one's keys by a lamppost – “where the light is good” – despite the keys having potentially been dropped elsewhere. But as 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.

**II) Analyzing the Normative Implications of Market-Salience**

Readers versed in public finance economics can probably anticipate the argument for reducing the market-salience of taxation. Taxes harm the economy 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 – i.e., reducing the market-salience of taxation – may alleviate some of the economic harm caused by taxation.

Perhaps because the advantages of reducing market-salience are so readily understood, most of the normative literature on market-salience has focused on questioning this simple case for reducing market-salience. The literature has posited three potential limitations to the simple case for reducing market-salience – distortionary income effects, externalities, and distribution. In this Part, we argue that the previous normative literature has overstated all three of these concerns. We conclude that the simple normative case for reducing market-salience is generally robust to all three of these potential limitations.

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175 Campbell, book manuscript, p. 28 (reporting that voter attitudes about the U.S. federal income tax have changed over time).
176 See notes __ supra.
177 SHAIVIRO, *FISCAL LANGUAGE*, *supra* note __, at 23 (“There is an old story about a man who drops his house keys on the street while staggering around drunk one night, and is spotted looking for them by a lamppost. ‘Is that where you dropped them?’ he is asked. ‘No, but the light is good here,’ he replies.’).
178 Establishing a scholarly reputation, after all, requires making non-obvious contributions.
Nevertheless, we should emphasize that not all mechanism for reducing market-salience are normatively desirable; as in most things, the ends do not always justify the means. In particular, 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.\footnote{179}

The same is true of other mechanisms for reducing market-salience that may produce negative side effects – for example, deficit financing.\footnote{180} The use of deficit financing may reduce the overall excess burden caused by taxation even if tax rates must eventually be raised to pay off accumulated debts.\footnote{181} Although these future tax increases are likely to be fully market-salient to future workers and to other future taxpayers making market decisions, they may be discounted by taxpayers making investment decisions at the earlier time periods during which deficit financing is substituted for current taxes.\footnote{182} The efficiency gains from reducing the distortionary effects of taxation on these earlier investment decisions could potentially overpower the efficiency losses from the higher tax rates later assessed to pay off the debts.\footnote{183} Nevertheless, even under these (perhaps unlikely) conditions, deficit financing may still be on net harmful if it results in side effects like higher interest rates or inflation.\footnote{184} Perhaps most importantly in current political contexts, excessive use of deficit financing may result in policy instability that could produce high transition costs once accumulated debt levels become unsustainably high.\footnote{185}

The argument we present in this Part for why it is generally normatively desirable to reduce the market-salience of taxation thus does not account for negative side effects like complexity or like the political instability that might result from overuse of deficit financing. Instead, this Part takes as its question whether – all else being equal – reducing the market-salience of taxation should be considered normatively desirable.

\footnote{179} 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 hand, if some taxpayers continue to calculate post-tax prices, additional complexity raises the compliance costs faced by those taxpayers. On the other hand, if the additional complexity causes other taxpayers to forgo calculating post-tax prices, the additional complexity thereby eliminates the compliance costs that these taxpayers would have incurred in calculating their post-tax prices under the less complex tax systems. How these factors balance out will differ depending on the details of the tax instruments in question. \footnote{180} Of course, deficit financing may also affect political-salience. See Part I.B.4. \footnote{181} As discussed in note __, supra, most scholars reject the strong version of the Ricardian equivalence hypothesis and thus appear to believe that market decision makers spotlight on current tax rates (discounting any future tax increases needed to pay for deficit financing). \footnote{182} The earlier investment decisions may include human capital investment decisions such as educational choices. \footnote{183} This could be true despite the tax smoothing advantages that are thought to result from holding tax rates more steady over time, but only if reducing distortion to the earlier investment decisions produces very strong gains. [cite to literature on tax smoothing]. \footnote{184} For a discussion of the potential harmful side-effects from deficit financing, see Shaviro, DEFICITS, supra note __ at 188-202. \footnote{185} E.g, Gamage, State Budget Crises, supra note __, at 122-23; Shaviro, DEFICITS, supra note __ at 147-50.
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” salience. For market-salience, we use as our baseline taxpayers’ perceptions of the non-tax costs of making market decisions. When taxpayers evaluate tax costs the same as they do non-tax costs (e.g., the prices charged by private-sector vendors), we say that the tax costs are fully market-salience. Hence, a tax instrument has “low” market-salience when taxpayers discount its tax costs as compared to non-tax costs, and a tax instrument has “high” market-salience when taxpayers weigh its tax costs more heavily than they do non-tax costs.

The remainder of this Part first elaborates the simple normative case for reducing market-salience, and then argues that this case is robust to the concerns of distortionary income effects, externalities, and distribution. The Part concludes by discussing some additional caveats and limitations to the analysis presented.

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 loss.” As a starting point, it is typical to envision the economic decisions taxpayers would have made in a hypothetical pre-tax 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 (e.g., hamburgers), but not on another substitute good (e.g., 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 may then 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

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186 Not all non-tax 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 non-tax 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 non-tax costs.

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


189 The following discussion roughly follows HARVEY ROSEN AND TED GAYER, PUBLIC FINANCE 331-52 (8th ed. 2008). Similar accounts can be found in most other introductory texts on public economics, for example: JONATHAN GRUBER, PUBLIC FINANCE AND PUBLIC POLICY 35-37 (2d ed., 2007); BERNARD SALANIE, THE ECONOMICS OF TAXATION 35-44 (2003).
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 called “excess burden” or “deadweight loss.”

Generalizing from the simple example of a tax on hamburgers – while hot dogs are tax-free – a similar logic applies to taxes on income, under the assumption that leisure can generally not be taxed, and to any other taxes that can be avoided by engaging in less of the taxed activities. Hence, for instance, 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.\(^{190}\) 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 has so far considered only “substitution effects” – shifts in taxpayer behavior that occur due to taxes altering the relative prices of goods or activities.\(^{191}\) 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.\(^{192}\) For example, if the imposition of a new income tax reduces the amount of money a taxpayer has to spend on consumer goods, she may reduce her consumption of luxury items (e.g., designer clothes and entertainment) more than of necessary items (e.g., 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 a hundred dollars from a taxpayer in aggregate taxes, and then immediately returns the hundred dollars to the taxpayer as a cash payment, 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.\(^{193}\) In order to factor out considerations related to governments’ use of tax revenues, economists frequently measure the

\(^{190}\) Of course, the listed tax instruments can also generate excess burden by affecting taxpayer behavior on margins other than those mentioned.

\(^{191}\) ROSEN AND GAYER, supra note __, at 337-38.

\(^{192}\) Id.

\(^{193}\) 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 instance, if the government spending provides valuable public goods), net taxing and spending may increase taxpayers’ budgets. However, even in this latter case, there may be income effects if the government spending is not a perfect substitute for the foregone 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 amongst taxpayers. Regardless, for our purposes, the key lesson remains that – when tax instruments are fully market-salient – income effects depend on how governments use collected tax revenues.
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\textsuperscript{194} 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.\textsuperscript{195} 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.\textsuperscript{196}

The above discussion summarizes the standard economics approach for measuring excess burden when tax instruments are assumed to be fully market-salient.\textsuperscript{197} As we will elaborate momentarily, income effects may have additional implications for excess burden when tax instruments are not fully market-salient.\textsuperscript{198} 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.\textsuperscript{199} Replacing a high-market-salience tax instrument with an otherwise identical lower-market-salience alternative thus alleviates the excess burden caused by substitution effects.\textsuperscript{200} 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

\textsuperscript{194} A “lump-sum tax” is defined as a tax instrument “whose value is independent of individual’s behavior.” \emph{Id.} at 334.


\textsuperscript{196} \textit{ROSEN AND TED GAYER, supra} note __, 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 sometimes called using “compensated responses,” “compensated demand curves,” or “compensated elasticities.” \textit{Id.} All of these terms refer to the approach of factoring out income effects to focus solely on substitution effects.

\textsuperscript{197} Chetty, \textit{Simple Economics, supra} note __, at 14.

\textsuperscript{198} See [discussion of budget distortions following] \textit{See Part I.A, supra.}

\textsuperscript{199} \textit{CHETTY, supra} note __, at 14-15 (“As the degree of attention to taxes rises, excess burden rises at a quadratic rate . . . ”); Galle, \textit{Hidden Taxes, supra} note _, at 62 (“if the size of the behavioral distortion is related to the size of the tax bill, then a diminished awareness of the bill’s economic burdens should also diminish the distortion. It follows that an unnoticed tax is, like a tax on highly inelastic behaviors, potentially more efficient than more obvious excises.”).
respond to tax prices as compared to non-tax prices. When tax instruments are fully market-salient, taxpayers generally respond identically to tax prices as to non-tax 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.

Consequently, the standard economic notion that substitution effects result in normatively undesirable excess burden supports the 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, the simple case for reducing market-salience would be unassailable. The remainder of this Part thus 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 normative case for reducing market-salience, the problem of “distortionary income effects” has received the greatest attention in the recent economics literature. We thus begin our analysis of the potential limitations to the simple normative case for reducing market-salience by focusing on distortionary income effects. In the following discussion, we argue that concerns over distortionary income effects have been overstated; we argue that distortionary income effects are only likely to defeat the simple normative 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.

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 are typically factored out because decreases to individuals’ budget capacities are counteracted by increases to the government’s budget capacity. When taxes reduce individuals’ budgets, the standard models assume that the individuals optimally

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201 Chetty, Simple Economics, supra note __.
202 Id. at 10-11. An exception to this rule is when taxpayers have tax-averse or tax-accepting preferences. See notes supra and accompanying text. Following the approach of most optimal tax models, Chetty’s formulas assume away the possibility of tax-averse or tax-accepting preferences. Another exception is when non-tax prices are not fully salient, such as when private-sector vendors engage in price shrouding. Chetty, Simple Economics, supra note at 10.
203 CLK, Salience and Taxation, supra note __, at 38.
204 To elaborate, distortionary income effects are the major limitation analyzed in Chetty, Simple Economics, supra note __ and in CLK, Salience and Taxation, supra note __. Since we view these as the most important texts on market-salience, we follow their approach in focusing first on distortionary income effects in our analysis of the potential limitations to the simple normative case for reducing market-salience.
205 Our assessment of the importance of distortionary income effects thus contrasts with CLK’s. CLK, Salience and Taxation, supra note __, at 46-47.
206 See supra notes [in previous section]__, and accompanying text.
allocate their (now smaller) after-tax budgets across goods and time periods. However, individuals may not allocate their after-tax budgets optimally when taxes have low-market-salience. As Brian Galle explains, “if the consumer doesn’t realize her bank account is low, she may find at the end of the month she doesn’t have enough cash for the things she planned to buy.”

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 pre-tax price, the taxpayer may select a more expensive automobile than she would have desired if she understood the full cost. 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.

Hence, the very feature that supports the simple normative case for reducing market-salience may also produce what CLK term a “distortionary income effect.” To the extent that a car-registration tax induces taxpayers to purchase less expensive automobiles, this generates deadweight loss through substitution effects. 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 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.

CLK model different ways in which individuals may allocate their budgets when faced with low market-salience taxes. They conclude that the welfare implications of reducing market-salience “depends critically” on how taxpayers adjust their budgets. 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

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207 Chetty, Simple Economics, supra note __, at 14.
208 Id. at 15-16.
209 Galle, Hidden Taxes, supra note __, at 79.
210 This example is adapted from Chetty, Simple Economics, supra note __, at 16. A similar example can be found in CLK, Salience and Taxation, supra note __, at 43. 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, supra note __.
211 CLK, Salience and Taxation, supra note __, at 43.
212 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).
213 Chetty, Simple Economics, supra note __, at 14.
214 CLK, Salience and Taxation, supra note __, at 43-44.
215 Id. at 43.
necessities once they run out of funds. 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. 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. Likewise, if taxpayers reduce their consumption of all goods equally, distortionary income effects create only small excess burden.

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. In the following paragraphs, 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 our intuitions for how taxpayers learn from experience. For taxes imposed on regular expenditures or activities – in the absence of long time delays – we expect that taxpayers should generally 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.

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216 We use the term "necessities" here to indicate goods for which the taxpayers have highly curved utility functions and "luxuries" to refer to goods for which taxpayers have less curved utility functions. 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. Id.

217 Id. The net social welfare implications of low market-salience in this case – whether or not the negative implications of distortionary income effects in fact overpower the positive implications of lessened substitution effects – is an empirical question.

218 Id.

219 Id. at 44.

220 There may be other circumstances that would cause individuals to disproportionately cut consumption of necessities in response to low market-salience taxes, but scenarios where luxury items are purchased first strike us as by far the most plausible.

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 pre-tax budget based on pre-tax prices will produce budget shortfalls then 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. Therefore, when low market-salience taxes are assessed on regular expenditures and activities, we expect that taxpayers should generally learn to approximate the size of their budgets well before they learn to estimate post-tax prices.

Assuming our intuitions about taxpayer learning are mostly accurate, reducing the market-salience of taxation should generally 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 do not account for the effects of taxation on relative prices, the simple normative case for reducing market-salience is robust to concerns about distortionary income effects.

a. Irregular Purchases by Credit-Constrained Taxpayers: The first set of conditions under which we expect distortionary income effects to remain an important limitation are 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. 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.

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).”

222 For a discussion of how bundled consequences from decisions can interfere with learning from experience, see Liebman and Zeckhauser, supra note __, at 4-5. See also Colin Camerer, Comments on “Some Implications of Cognitive Psychology for Risk Regulation,” by Roger Noll and James Krier, 19 J. LEGAL STUD. 791, 794 (1990).

223 If the size of a low market-salience tax liability is made large enough, taxpayers should eventually 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.

224 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.
We thus expect the simple case for reducing market-salience to hold for regular purchases and activities – as distortionary income effects are mitigated by taxpayer learning.\textsuperscript{225} We do not expect taxpayer learning to play an equivalent role with respect to irregular purchases and activities. However, taxpayers 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{226} Distortionary income effects occur when taxpayers overspend on luxury goods and are thus forced to disproportionately cut consumption of more necessary goods. 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{227}

\textit{b. Long-Time Delays Between Market Choices and Tax Assessments:} The second set of conditions wherein we expect distortionary income effects to pose a serious concern (long-time delays) 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.

If tax assessments with long time delays lead taxpayers to save less than they would otherwise wish for retirement, then distortionary income effects may well overpower lessened substitution effects. We thus expect that the simple case for reducing market-salience is unlikely to hold with time delays of a decade or more. Individuals seem ill-equipped for long-term decision-making like retirement planning even in the absence of low-market-salience taxes.\textsuperscript{228}

3. Distortionary Income Effects – Conclusion

Overall then, we expect the simple case for reducing market-salience to be generally robust to concerns about distortionary income effects. The two exceptions are when low market-salience taxes affect the irregular expenditures and activities of credit-constrained taxpayers, and when there are long time delays between market choices and tax collections. Our assessment

\textsuperscript{225} Of course, this is only a prediction based on our assessment of how factors are likely to balance out. Future empirical research may prove us mistaken.
\textsuperscript{226} Chetty, \textit{Simple Economics, supra} note __, at 16.
\textsuperscript{227} \textit{Id.}
\textsuperscript{228} B. Douglas Bernheim, \textit{Taxation and Saving, in HANDBOOK OF PUBLIC ECONOMICS} 1201 (Alan Auerbach & Martin Feldstein eds., 2002).
stands in contrast to CLK, who write that “deadweight loss from distortionary income effects could potentially be large in practice.”

CLK cite two reasons for their contention:

First, many individuals are likely to be uncertain about the benefits of optimizing relative to various tax policies. When faced with uncertainty, boundedly rational agents may not pay attention to aspects of the tax code that have large financial consequences (e.g. tax credits, Roth vs. Traditional IRAs) because the cost of optimizing relative to all policies outweighs the expected benefit from doing so. As a result, a tax that is not salient could produce large budget allocation errors and lead to a substantial efficiency loss. Second, individuals often make repeated small purchases that aggregate to a large fraction of total expenditure over time. A boundedly rational agent may ignore the tax because the value of computing [the price-effects of the tax] for each transaction is small; however, the total welfare loss over time from the resulting budget allocation errors could be large.

Yet both of CLK’s scenarios ignore the likelihood that taxpayers will learn to approximate the size of their budgets for regular expenditures and activities. Indeed, we believe that both scenarios support our argument that the bundled impact of market decisions makes it easier for taxpayers to learn to approximate the size of their budgets than to learn the price effects of low market-salience taxes. Taxpayers may find it difficult to predict the impact of tax credits and other provisions on their income tax liabilities. But taxpayers with regular incomes should still learn to approximate their aggregate after-tax budgets through experience. Tax uncertainty may pose greater problems for taxpayers with fluctuating annual incomes, but even these taxpayers can mitigate distortionary income effects if they save or borrow so as to smooth their consumption over time.

Likewise, taxpayers may have difficulty predicting the price-effects of taxation with respect to each of numerous “repeated small purchases”, but this should not prevent the taxpayers from estimating the aggregate effects of the taxes on their overall budgets. If

\[229\] CLK, Salience and Taxation, supra note __, at 46-47.

Brian Galle appears to share our assessment, although he reaches this conclusion by introducing the additional factor of producer surplus. Galle, Hidden Taxes, supra __, at 79-81. As Galle neither considers producer surplus in the context of a market equilibrium, nor attempts to directly compare the magnitude of producer surplus effects to consumer surplus effects, his take is probably best viewed as an intuition about the relevant empirics. For a discussion of market-salience and producer surplus in an equilibrium context, see Chetty, Simple Economics, supra note __, at 17-18.

\[230\] Id.

\[231\] See notes __ supra, and accompanying text.

\[232\] Our discussion here assumes that it is undesirable for taxpayers to respond to the price differences created by income tax provisions – that any such responses are classic substitution effects. To the extent income tax provisions are intended to encourage socially desirable behavior, the analysis must expand to incorporate externalities and pigouvian tax rationales. See Part II.C.


\[234\] CLK, Salience and Taxation, supra note __, at 46-47.
individuals could only discern their overall budgets by adding up the cost of each of their small everyday purchases, the very need to make repeated small purchases would create distortionary income effects even without any taxes, as budgeting would be prohibitively complex. In practice, individuals learn about the impact of small repeated purchases on their budgets by noting the aggregate impact of these purchases on their bank accounts and credit card statements. The tax-prices of small purchases are reflected in bank account and credit card statements just as are the non-tax-prices. With the exceptions of long-time delays and irregular purchases by credit-constrained taxpayers, we thus continue to expect the simple normative case for reducing market-salience to be robust to distortionary income effects.

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, “in 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.”

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235 E.g., Chetty, Simple Economics, supra note __, at 4 & 6-8; CLK, Salience and Taxation, supra note __, at 47-50; Galle, Hidden Taxes, supra note __, at 61, 78, & 100-03; Nussim, supra note __, at 244-47 & 249-53.
237 Kaplow, supra note __, at xviii.
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 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.

To be clear, we do not claim that offsetting tax-rate adjustments can always resolve concerns related to externalities or distribution. But we do argue that meaningful evaluating of the relationship between market-salience and externalities or distribution requires the consideration of offsetting tax-rate adjustments. 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 can generally 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 (i.e., 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.

However, with offsetting tax-rate adjustments, it should often 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 half of the cost of the tax. In

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240 Nussim, supra note __, at 249.
241 The example here assumes that the taxpayers (i.e., the polluters) perceive only half of the cost of the tax with respect to all of their market decisions. If a tax could be made more market-salience 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.
this example, making the appropriate tax-rate adjustments would require doubling the rates of the pollution 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 the reduction in the market-salience of the tax instrument.242

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.243 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.244 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 efficient revenue-raising through exploiting low market-salience.245 To the extent offsetting

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242 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.
244 There are many possible interactions between market-salience and externalities beyond those we address here. For instance, under CLK’s bounded-rationality model for market-salience, increasing the rate of a tax is assumed to make the tax more market-salient. If externalities were added to this model, the optimal tax rate might sometimes 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. CLK, Salience and Taxation, supra note __, at __.
245 However, the simple normative case for reducing market-salience can still be preserved, even within a CLK-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. To reiterate our primary argument in this Section: although we do not analyze all of the possible interactions between market-salience and externalities or distribution, the first step to any such analysis should be to consider offsetting tax-rate adjustments.
246 For further qualifications to Kaplow’s framework that may also apply to our discussion of market-salience and externalities, see, e.g., LOUIS KAPLOW, THE THEORY OF TAXATION AND PUBLIC ECONOMICS at 135-48 (2008). 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
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.246

2. Distribution

As with externalities, meaningful evaluation of the interactions between market-salience and distribution must consider the potential for offsetting tax-rate adjustments. However, evaluating the impact of distributional concerns involves additional complexities. Notably, distributional analysis requires understanding how market-salience affects tax incidence. We will not address the tax incidence question in this Article.247 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.

If reducing the market-salience of a tax instrument would have negative distributional implications,248 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 will typically be better at measuring characteristics relevant for distribution.249

As a starting point, imagine that taxpayers’ ability to earn income is the only characteristic of taxpayers that is relevant for distributional analysis.250 Further imagine that the income tax near perfectly measures taxpayer’s 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.251 Finally, assume that – controlling for taxpayers’

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246 Conclusively, when market decisions produce positive externalities, such that subsidization may be in order, the subsidies should generally be made as market-salient as possible (with the amount of the subsidy adjusted as appropriate).
247 For existing discussions of market-salience and tax incidence, see Chetty, Simple Economics, supra note __, at 6-8; CLK, Salience and Taxation, supra note __, at 47-50; Galle, Hidden Taxes, supra note __, at 100-03; Nussim, supra note __, at 244-47.
248 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.
249 LOUIS KAPLOW, THE THEORY OF TAXATION AND PUBLIC ECONOMICS at 21 (2008). (“It is usually best to use instruments that are most directly related to the matter in question. In the case of redistribution, the income tax system (including cash transfers) is that instrument.”).
250 The description of the starting point in this paragraph is intended as a simplified articulation of Kaplow’s framework.
251 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
income – any heterogeneity in taxpayers’ susceptibility to means for reducing market-salience is uncorrelated with the taxpayers’ preferences for leisure as opposed to work.  

252 This relates to the famous “separability” assumption of Kaplow’s framework (and of the A-S 1976 model and related literature); however, our formulation is purposefully colloquial rather than formal.  For discussions of the consequences of relaxing this assumption see Louis Kaplow, Optimal Policy with Heterogeneous Preferences, NBER WORKING PAPER 14170 (2008); Louis Kaplow, Taxing Leisure Complements, HARVARD JOHN M. OLIN DISCUSSION PAPER NO. 621 (2008); Jeff Strnad, The Progressivity Puzzle: The Key Role of Personal Attributes, STANFORD LAW SCHOOL JOHN M. OLIN PROGRAM IN LAW AND ECONOMICS WORKING PAPER NO. 293 (2004); Emmanuel Saez, The Desirability of Commodity Taxation under Non-Linear Income Taxation and Heterogeneous Tastes, 83 J. OF ECONOMICS 217 (2002).

Chris Sanchirico has ardently critiqued the use of the separability assumption in Kaplow’s framework and in other optimal taxation literature.  E.g., Chris Sanchirico, Tax Eclecticism, TAX L. REV. (forthcoming).  Yet Sanchirico’s argument only implies that relaxing the separability assumption requires adjustments to the results obtained in models based on separability assumptions.  Although this conclusion is undoubtedly correct, Sanchirico’s critique does not suggest the direction in which these adjustments should be made.  For instance, in relation to the question of the desirability of capital income taxation, Sanchirico’s argument does not suggest whether capital income should be taxed or subsidized.  Id. at 80 (“By combining either the positive taxation or the subsidy of a given attribute with a calibrated uniform lump sum transfer, a taxable attribute may be used to effect a multilateral zero-sum transfer among taxpayers.  One of the two compensated transfers so constructed—either from a positive tax or from a subsidy—will effect socially positive redistribution.”).  Notably, although the two author’s tones are quite different, the implications of Sanchirico’s argument mirrors Kaplow’s conclusions.  LOUIS KAPLOW, THE THEORY OF TAXATION AND PUBLIC ECONOMICS at 136 (2008).  Both authors recognize that the results obtained from models based on separability assumptions may need to be adjusted in some fashion once those assumptions are relaxed, but both authors conclude that the directions in which these adjustments should be made are ambiguous without further analysis.  Like Kaplow, Id., we view these conclusions as supporting the consideration of offsetting tax-rate adjustments as an essential first-step.  Numerous qualifications to the basic framework may limit the potential for offsetting tax-rate adjustments, thus making distributional concerns a (possible) partial limiting-factor to the simple normative case for reducing market-salience.  But analyses of the relationship between market-salience and distribution that do not consider the potential of offsetting tax-rate adjustments are likely to produce erroneous results.
Under these assumptions, any concerns related to distribution can be completely alleviated through offsetting income-tax-rate adjustments, such that the simple normative case for reducing market-salience is robust to distributional concerns. Reducing the market-salience of any tax instrument for which such is possible alleviates labor-to-leisure distortions, which are the only costs to redistribution under these assumptions. Hence, reducing tax-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.

There are numerous qualifications to this strong result, which depends on the narrow assumptions listed above.253 Perhaps most 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 (and which cannot be perfectly controlled for by the income tax). For instance, heterogeneity in taxpayer’s general cognitive ability could be associated with both taxpayers’ ability to earn income – controlling for the actual income earned – and with taxpayers’ susceptibility to means for reducing market-salience. If so, reducing market-salience would increase the revenues raised from lower-ability taxpayers more than from higher-ability taxpayers.254 The income-tax-rate adjustments required to offset these negative distributional consequences of reducing market-salience will then counteract at least some of the efficient revenue-raising advantages of reducing market-salience.255 If distributional concerns of this sort are strong enough, they might completely defeat the simple normative case for reducing market-salience.


Jolls’s discussion, id., is particularly noteworthy in the context of this Article. Jolls argues that behavioral factors may lead taxpayers to respond differently to redistribution enacted through the tax system than to redistribution enacted through other legal rules. In essence, her argument suggests that the price effects of redistribution enacted through legal rules may be less market-salient on at least some margins than the price effects of redistribution enacted through the income tax. This argument can be extended to apply to redistribution enacted by manipulating the market-salience of tax instruments as compared to redistribution enacted by adjusting the rates of other fully market-salient tax instruments. However, although this qualification is intellectually intriguing within the context of this paper’s discussion, we agree with Jolls that the practical importance of this qualification can only be determined through further empirical work. Id. at 1677. Ultimately, although the many qualifications to Kaplow’s framework imply that the distributional implications of manipulating market-salience cannot always be offset by tax-rate adjustments, it remains the case that analyses which do not consider the potential for offsetting tax-rate adjustments will frequently reach erroneous conclusions. See Kaplow, id., at 148 (arguing that results based on models that do not consider the possibility of offsetting tax rate adjustments – such as the Ramsey framework for optimal commodity taxation – “are often highly misleading.”).

254 Both Brian Galle and Jacob 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 taxpayer’s time and the distributional impact of market-salience. Galle, Hidden Taxes, supra note __, at 100-04; Nussim, Taxes and Consumer Protection, supra note __, at 244-47.

255 This is equivalent to “tagging” in the wrong direction. See
Moreover, 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 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.\(^\text{256}\)

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. We doubt whether an analysis that fails to consider offsetting tax-rate adjustments can shed much light on the relationship between market-salience and distribution.

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,\(^\text{257}\) 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 should be robust to both externalities and distributional concerns.


\(^{257}\) See Galle, *Hidden Taxes*, supra note __, at 100 (“there are gaping holes in our current information about the incidence of [the market-salience of taxation]”).
D) Analyzing The Normative Implications of Market-Salience – Conclusion

We thus conclude that – all else being equal – it is generally normatively desirable to reduce the market-salience of taxation. We should emphasize again that our argument does not justify all possible mechanisms for reducing market-salience, as some such mechanisms may produce more harm through negative side effects than they alleviate by reducing the market-salience of taxation. For instance, we have not considered whether techniques for reducing market-salience might impose “psychic costs” on taxpayers, to the extent taxpayers experience negative utility from the techniques. Richard Bird reports that Canadians express displeasure at having to pay taxes at store registers that are not posted on the prices displayed on store aisles. If we consider this expressed displeasure to be real utility loss, then these psychic costs must be weighed against the benefits that result from reducing market-salience by not requiring that tax information be displayed on the prices listed on store aisles.

We should also note that our argument in favor of reducing market-salience assumes that market-salience would be reduced 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, then this might induce taxpayers to increase their grocery store consumption at the expense of consumption for which tax prices remain more market-salient.

[...]

III) ANALYZING THE NORMATIVE IMPLICATIONS OF POLITICAL-SALIENCE

[...]

A. The Lack of a Useful Normative Baseline for Measuring Political-Salience

It turns out that how researchers ask questions of voters can dramatically affect the answers received. For example, in experiments conducted by Edward McCaffery and Jonathan Baron, the experimental subjects expressed significantly different preferences regarding fiscal policies depending on whether tax prices were expressed in dollar values or as percentages. 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. Under the

259 Bird, supra note __, at 10.
260 We thank Eric Zolt for raising this concern.
261 Ed McCaffery and Jon Baron, Thinking About Tax, 12 PSYCHOLOGY, PUBLIC POLICY, AND LAW 106, 113-14 (2006) (“Most strikingly, subjects gave systematically different answers on the basis of whether the question was asked using dollars or percentages. . . .”).
262 Id.
standard definitions, a “flat tax” is defined as when all taxpayers pay 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 should perhaps 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 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. Thus, for example, one is hard pressed to find a major politician or political party campaigning against hidden taxes such as the corporate income tax.

264 McCaffery and Baron, supra note __, at __.
265 Lawrence Zelenak, The Conscientious Legislator and Public Opinion on Taxes, 40 Loyola 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.”); Richard Epstein, Behavioral Economics and Public Finance: Some Closing Reflections at 52 (2003). (“All in all therefore it is far from clear what conclusions should be drawn from [the surveys in McCaffery and Baron’s experiments].”).
266 See Edward McCaffery and Jonathan Baron, The Political Psychology of Redistribution, 52 UCLA 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.”).
267 See, e.g., BRYAN CAPLAN, THE MYTH OF THE RATIONAL VOTER at 2 (2007) (“The central idea is that voters are worse than ignorant; they are, in a word, irrational – and vote accordingly.”).
269 Id at 1788-1789.
Our initial problem in assessing the political-salience of taxation is thus that voter preferences appear to be unstable and easily manipulated.\textsuperscript{270} Survey after survey confirms the common-sense 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.\textsuperscript{271} What does it mean to be respectful of voter preferences when voters’ fiscal beliefs appear to lack any strong foundations?

Moreover, 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.\textsuperscript{272} According to a powerful critique most associated with Liam Murphy and Thomas Nagel, voters directly assessing their tax burdens has the consequence of elevating artificial measurements for pre-tax resources.\textsuperscript{273}

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 gross income. The calculated amount for gross income is merely an artificial accounting concept. Yet the manner in which income taxes are structured makes it seem as though 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 pre-tax income measurements (e.g., gross income) and that the tax liabilities calculated from these measurements indicate how much the voter is personally sacrificing in order to fund state

\textsuperscript{270} However, it does not follow that politicians can easily manipulate voter preferences when such is the politicians’ intent. We suspect that voters are very sensitive (and resistant) to proposals that appear to be designed for the purpose of manipulating voters. It may be that the successful manipulation of voter preferences requires the use of policies that are primarily designed for other purposes and that affect voter preferences only as a side-effect of those other goals.

\textsuperscript{271} E.g., Larry M. Bartels, \textit{Homer Gets a Tax Cut: Inequality and Public Policy in the American Mind}, 3 PERSPECTIVES ON POLITICS 15, 36 (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, \textit{What Does the Public Believe About Tax Fairness?}, 46 NAT’L TAX J. 301, 306 (1993).

\textsuperscript{272} 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.

\textsuperscript{273} Murphy and Nagel have made this argument most forcefully in recent years, but the argument has a long pedigree. LIAM MURPHY & THOMAS NAGEL, \textit{THE MYTH OF OWNERSHIP} 31-37 (2002). For instance, Michael Graetz made essentially the same argument in 1995. \textit{See} Michael Graetz, \textit{Paint-By-Numbers Tax Lawmaking}, 95 COLUM. L. REV. 609,619-20 (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 absent any government, is unknowable, indeed unimaginable.”). Graetz attributed this argument to an earlier public finance treatise by Carl Shoup—\textit{CARL S. SHOUP, PUBLIC FINANCE} 577-78 (1969)).
spending programs.\textsuperscript{274} Yet as the economist Carl Shoup concluded decades ago, “[t]o 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.”\textsuperscript{275} Carl Shoup viewed this objection as “conclusive,”\textsuperscript{276} and we agree.

Crucially, any amounts calculated as gross income – or as other pre-tax resource measurements – are dependent on the existence of the state in its current form. In order for a pre-tax income measurement to have moral weight, 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 pre-tax income the amount by which a taxpayer’s income is higher due to the effects of government expenditures, then this net measurement might have moral relevance. But for existing measurements of pre-tax resources, we cannot easily divorce the extent to which pre-tax resources are higher due to the operation of state spending programs from the amount of pre-tax resources that would still be enjoyed in the absence of state funded spending programs.

We should note that we do not mean to endorse all of the conclusions that Murphy and Nagel reach based on their critique of pre-tax income measurements. Murphy and Nagel suggest that the government’s contribution to pre-tax resource measurements should be considered in relation to a Hobbesian version of the state of nature.\textsuperscript{277} 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 pre-tax income measurements should be viewed as dependent on the operation of state spending programs.\textsuperscript{278}

Some voters might alternatively conclude that the appropriate baseline for fiscal policy is more Lockean than Hobbesian, such that governments should largely defer to the distributive (and allocative) outcomes of voluntary market exchanges.\textsuperscript{279} Libertarian-minded voters might even think that the appropriate baseline should be measured based on a minimalist night-

\textsuperscript{274} Murphy & Nagel, supra note __, at 31-37.
\textsuperscript{275} Shoup, supra note __.
\textsuperscript{276} Id.
\textsuperscript{277} Murphy and Nagel, supra note __, at 16-17.
\textsuperscript{278} Id.
\textsuperscript{279} See Kevin A. Kordana and David H. Tabachnick, Tax and the Philosopher’s Stone, 89 VA. L. REV. 647, 651 (2003) (“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.”).
Under this libertarian view, the morally relevant pre-tax income measurement might be the amount of pre-tax income one would have had if we lived in an actual night-watchman state. Any taxes taken from the night-watchman pre-tax income measurement could then be considered sacrifices the taxpayer is making (or is forced to make) in order to fund additional state spending programs.

More generally, 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.

Yet without a 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 real-world fiscal policies. We doubt that anyone seriously believes that most voters 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.”

We should emphasize that we are assuming that democratic institutions should be structured so as to effectuate the voters’ collective will, and that political information should thus be evaluated based on how well it enables voters to make political judgments based on their “true” preferences. Acting strategically, a political theorist might want the political-salience

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280 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.”).

281 However, we would argue that even a libertarian should not assign undue moral weight to pre-tax resource measurements. 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 pre-tax 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 pre-tax incomes within the current system of taxes and government spending depend partially on the existence of government spending. Were taxes and spending lower, pre-tax income measurements would be different. See Duff, supra note ___ at 32-34 (noting that libertarian theories of taxation do not even indicate an appropriate tax base); 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); Epstein, supra note ___, at 66-68 (conceding that following Locke does not help us choose between an income or consumption base and that the current Internal Revenue Code is full of unjustifiable tax expenditures).

282 BRENNAN AND LOMANSKY, supra note ___, at 202.

We will not fully address the question of how democracy should be evaluated if voters are best thought of as not having “true” preferences. It is hard to know how to assess political-information under such a conception of
of taxation to be higher or lower if she thought such would lead voters to support the fiscal policies the theorist considers desirable. The use of a specified baseline for political-salience can certainly be argued for on consequentialist grounds if one approves of the direction in which the baseline is thought to shift voter decision making. But it is important to understand that these arguments are consequentialist in nature. Under most plausible conceptions of distributive justice, there is nothing inherently valid about existing pre-tax income measurements. Any argument that subtractions from existing pre-tax resource measurements are an appropriate metric for understanding the costs imposed by taxation must depend on a specific conception of distributive justice that is unlikely to be widely shared.

Of course, pre-tax income measurements do provide some information about the amounts taxpayers contribute to fund government spending. But under most conceptions of distributive justice, the information provided by pre-tax income measurements must be considered incomplete. Tautologically, any policy proposal that increases or decreases political-salience must alter either pre-tax income measurements or how taxpayers understand pre-tax 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 pre-tax income measurements, and this determination cannot be made without referencing a specific theory of distributive justice.

We do not mean to advocate fiscal nihilism. Democracy requires that voters assess tax policies. Again, we would oppose secret forms of taxation. A government should not be permitted to brainwash its citizens so that they forget about the existence of taxes. Slightly more realistically, we would also oppose reducing the political-salience of taxation to the point where most of the commonly advocated conceptions of distributive justice would agree that voters underestimate tax costs.

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 value-added-tax 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? 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?

democracy. Perhaps if the purpose of democracy is thought to be stability or the avoidance of dictatorship, then political-information should be structured so as to maintain the illusion that democracy effectuates voters’ collective will so as to encourage voters to remain at least somewhat engaged with the democratic process. Yet this notion would not appear to provide any more guidance for the appropriate level of tax political-salience than do ‘conceptions of democracy based on the direct desirability of effectuating voters’ judgments.

283 See notes ___ supra and accompanying text.
Lacking a philosophically agreed-upon answer for what information voters should use to assess the costs of taxation, we cannot determine a useful normative baseline for evaluating political-salience. The empirical evidence on voter psychology suggests that voters’ preferences with regard to taxation are shallow and unstable. Neither philosophy nor social science has developed a commonly accepted theory for how voters ought to understand tax information. 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 alone would not resolve our dilemma. 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.\(^{284}\)

The difficulties in politically assessing the costs of taxation mostly arise due to distribution. If we could somehow abstract from distribution, we might attempt to evaluate at least the allocative dimension of political-salience.\(^{285}\) 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 simplified model of politics appears to be what many of the scholars who criticize the use of tax instruments with low political-salience have in mind.\(^{286}\) Yet even within this simplified model, the argument that taxes should be made as politically-salient as possible falls apart once we begin questioning how salient are the benefits produced by public spending. Even within the simplified model, the use of tax instruments with low political-salience only distorts voters’ cost-benefit analyses if the benefits of public spending have higher political-salience. To facilitate voters’ cost-benefit analyses, we would thus need to make the costs of taxation and the benefits of public spending equally politically-salient.

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\(^{285}\) Cite to Musgrave

\(^{286}\) See, e.g., Downs, *supra* note __, at 559 (“Thus, insofar as taxation can be concealed from the electorate, the government budget will tend to be larger than the “correct” one.”).
However, 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. 287 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. 288 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. 289 Like the costs of taxation, the benefits of government spending are often indirect. 290 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 background – for instance, deterring crime, regulating the food and water supply, and providing national defense. For many government services, a taxpayer will often only focus on the services when the government has failed. 291

Consider next our second political-salience hypothesis of tax-system complexity. 292 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. 293 Yet government spending programs are also frequently disaggregated. If disaggregation obscures costs of taxation, then it is hard to see why it should not similarly obfuscate the benefits produced by government spending. 294

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287 Cullis and Jones, supra note __, at 220 (discussing arguments made by Downs and Galbraith).
288 The comparison made here is intended to be completely hypothetical. Although we do find many of the political-salience hypothesis 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.
290 And, by design, because governments often specifically provide those services that cannot be provided through a standard market mechanism. See Downs supra note __, at 547-559 (“I believe that the actual budget will still be smaller than the ‘correct’ budget because even indirect taxation is much more apparent than many remote government benefits.”).
291 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.
293 Notes __ supra and accompanying text.
294 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.” 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. Indeed, we suspect that those theorists who argue that governments generally strive to reduce the political-salience of taxation 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 which 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.

Moreover, 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 may also be relevant for constructing a baseline for political-salience. Tax instruments with low political-salience should only lead voters to prefer government-provided

295 Cullis and Jones, supra note __, 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., Gruber, supra note __, at 3; cf. Shaviro, supra note __, at 30. 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 was recognized by Olson, 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, supra note __, at 95-96.
296 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.” BERNARD SALINIE, THE ECONOMICS OF TAXATION at 168 n.105 (MIT Press, 2003). A sizeable branch of the political economy literature has taken this notion as one of its basic postulates. E.g., WALTER HETTICH AND STANLEY WINER, DEMOCRATIC CHOICE AND TAXATION: A THEORETICAL AND EMPIRICAL ANALYSIS (Cambridge University Press, 1999).
297 Cullis and Jones, supra note __, at 226.
services to market-provided services when the tax prices are more shrouded then the prices of the private-sector consumption.

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 primary problem in assessing the political-salience of taxation is that voter preferences appear to be unstable, easily manipulated, and analytically ambiguous.\(^{300}\) Again, survey after survey confirms the common-sense 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.\(^{301}\) 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.\(^{302}\) It is with this notion that we take issue.

C. Analyzing Political-Salience Without a Normative Baseline

[...]

1. Might Providing More Information About Tax Costs Be Inherently Good?

[...]

2. Is There Anything Wrong With Purposefully Reducing the Political-Salience of Taxation?

[...]

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\(^{300}\) Cullis and Jones, *supra* note \_, at 226 (“However, what matters for the Leviathan literature are tax illusions relative to spending illusions, and here these data put a curse on both their houses, suggesting a thick but fairly evenly spread layer of ignorance over the public sector. 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 . . .”).

\(^{301}\) Note *supra*.

\(^{302}\)
C) Analyzing The Normative Implications of Political-Salience – Conclusion

[...]

CONCLUSION

[...]

PRELIMINARY AND INCOMPLETE DRAFT – September 12th, 2010