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# Perceptions of Taxing and Spending: A Survey Experiment

**ABSTRACT.** This Note presents the results of an original survey experiment on whether the public prefers "tax expenditures" to "direct outlays" – that is, whether members of the public are more likely to support government spending that takes the form of a tax credit rather than a check or cash. Using a survey that spans a wide variety of policy areas – and with important variations in wording and information – we show that the public strongly prefers tax expenditures even when the economic substance of the proposed policies is identical. We also show that the public views tax expenditures as less costly than equivalent direct outlays. These results support a longstanding but largely unstudied hypothesis that tax expenditures hide the costs of government spending, and have implications for why tax expenditures have continued to grow in size and complexity.

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## INTRODUCTION

A stubborn question in tax law and policy is why some spending programs are organized through the tax code rather than as direct outlays. Both methods are common. For example, Social Security payments are issued directly into the recipients' accounts.[1] In contrast, the Earned Income Tax Credit (EITC), as its name suggests, takes the form of a credit against the recipient's income tax: eligible beneficiaries simply owe less or are entitled to a refund when they file their taxes.[2] Social Security payments are made by the Social Security Administration.[3] The EITC, like all federal tax expenditures, is handled centrally at the IRS.[4]

For some tax experts, the widespread use of "tax expenditures"—policy spending through the tax code that departs from taxing "accepted concepts of net income"[5]—is concerning. The great tax scholar Stanley Surrey argued famously that one of several problems with tax expenditures is that they are a *disguised* form of spending, spending that is poorly managed by Congress and almost completely overlooked by the American people. Most tax expenditures, wrote Surrey, "seem almost to live a life of their own, undisturbed and unexamined," and with "[n]o agency [that] really studies or controls them."[6] Surrey concluded unhappily that this "is no way to run a tax system."[7]

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1. *See Social Security Direct Deposit*, SOC. SECURITY ADMIN., http://www.ssa.gov/deposit [http://perma.cc/BT48-8UXR].

2. *See EITC, Earned Income Tax Credit, Questions and Answers*, IRS, http://www.irs.gov/Individuals/EITC,-Earned-Income-Tax-Credit,-Questions-and-Answers [http://perma.cc/442P-UGXT].

3. *See Social Security Direct Deposit*, *supra* note 1.

4. For the EITC, see *EITC Home Page*, IRS, http://www.irs.gov/Individuals/EITC-Home-Page--It%E2%80%99s-easier-than-ever-to-find-out-if-you-qualify-for-EITC [http://perma.cc/W5R4-NT4R]; for a list of others, see *Credits & Deductions*, IRS, http://www.irs.gov/Credits-&-Deductions [http://perma.cc/4P7P-TQV6].

5. Stanley S. Surrey & William F. Hellmuth, *The Tax Expenditure Budget–Response to Professor Bittker*, 22 NAT'L TAX J. 528, 528 (1969).

6. STANLEY S. SURREY, PATHWAYS TO TAX REFORM: THE CONCEPT OF TAX EXPENDITURES 7 (1973).

7. *Id.* At the margins, defining what should and should not count as a tax expenditure is a difficult task. Boris Bittker argued that such labeling is not possible in a comprehensive way, since there is no neutral baseline of "income" that can be used to identify tax expenditures. For example, should reducing the tax bills of the disabled or unemployed count as a subsidy for the affected classes, or simply as recognition of a reduced capacity to earn income? *See* Boris I. Bittker, *A "Comprehensive Tax Base" as a Goal of Income Tax Reform*, 80 HARV. L. REV. 925 (1967). Nevertheless, we consider the concept useful and believe that our questions target policies that deviate from the usual treatment under the Code. Even taking Bittker's position, our results are still highly relevant. Bittker argued that tax policies should be con-

In the decades since Surrey's writing on the subject, questions about the role and value of tax expenditures have become only more relevant. While the Tax Reform Act of 1986 eliminated many tax expenditures in the Internal Revenue Code, total tax expenditures have since grown and are now more than eight percent of GDP—$1.4 trillion in 2014.[8] In the aggregate, individual income tax expenditures are now larger than either defense spending or Medicare spending.[9] Yet despite the fact that academic studies of tax salience and behavioral taxation have become increasingly popular, basic questions about the public perception of tax expenditures remain largely unanswered. In particular, many of Surrey's original concerns have avoided rigorous testing: is the true cost of a tax expenditure really hidden or diminished by virtue of being part of the tax code? Is it true that the public sees spending through the tax code as different?

These questions are urgent for an additional reason. In some ways, Surrey got his wish. Tax expenditures are subject to more oversight than ever. "Tax expenditure budgeting," an annual process by which the federal and state governments account for their spending through the tax code, has become the American norm. Federal law requires the United States Treasury to produce an annual tax expenditure budget,[10] and most states have adopted similar processes.[11] These procedures would no doubt please Surrey, but the continued growth of tax expenditures would not. Indeed, that growth presents a paradox: spending through the tax code has continued to rise faster than government spending has as a whole, despite repeated efforts to publicize and rein in the costs of tax expenditures.

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sidered "provision by provision" to see if they are desirable, without reference to whether the policy departs from taxing Haig-Simons income (that is, consumption plus savings). *Id.* at 925. We show that the framing of the policy matters for this "provision by provision" review since that framing affects how people view the policy.

8. *The Budget and Economic Outlook: 2014-2024*, CONG. BUDGET OFF. 90 (Feb. 2014), http://www.cbo.gov/sites/default/files/cbofiles/attachments/45010-Outlook2014_Feb.pdf [http://perma.cc/LZQ6-EEQD].

9. *Id.*

10. 2 U.S.C. § 622(3) (2012) (defining tax expenditures and the tax expenditure budget); 2 U.S.C. § 632(e)(2)(E) (2012) (requiring that this budget be produced); 31 U.S.C. § 1105(a)(16) (2012) (same).

11. These points and others are discussed in helpful detail in Edward A. Zelinsky, *The Counterproductive Nature of Tax Expenditure Budgets*, 137 TAX NOTES 1, 2 & n.2 (2012). As of 2010, only Alabama, Nevada, South Dakota, Wyoming, and the District of Columbia did not have some form of tax expenditure budget. Michael Leachman, Dylan Grundman & Nicholas Johnson, *Promoting State Budget Accountability Through Tax Expenditure Reporting*, CENTER ON BUDGET & POL'Y PRIORITIES 38-43 (May 2011), http://www.cbpp.org/files/5-11-11sfp.pdf [http://perma.cc/K9J7-RVGM].

Our Note helps to explain this apparent paradox. We offer evidence on how the American public thinks about tax expenditures as opposed to spending programs organized outside the tax code. We obtain this evidence through a survey experiment that tests how support for (and perceptions of) public spending policies vary not based on the substance or expense of a policy, but simply on whether a policy is described as a tax expenditure or direct outlay. We use Google Consumer Surveys (GCS) to ask panels (which aim to be demographically representative of the United States Internet-using population) for their views on a variety of policy options, including hypothetical subsidies for the housing market and the disabled.[12] We keep the substance and total cost of the policies functionally identical. We then ask one group for its views on a policy that is described as a direct expenditure, and the other for its views on a policy that is described as a tax break.

By asking similar panels for their views on such questions, we are able to study the way in which a policy's framing affects public support and public perceptions, and we are able to isolate this framing effect in an empirically rigorous manner. In particular, this method allows us to test the hypothesis that citizens are more likely to support "hidden" spending that occurs through the tax code, rather than "direct" spending that occurs through another policy mechanism, such as payment via cash or check. And this method allows us to test whether tax expenditures simply appear less expensive than direct outlays.

Our results are strongly consistent with both hypotheses. Americans are more likely to support policies when they are described as tax expenditures, and they are more likely to view tax expenditures as cheaper than direct outlays. In our baseline comparisons, respondents were ten percentage points more likely to support our hypothetical, economically equivalent policies when we framed them as tax breaks rather than as direct outlays. These results held true across a variety of policy areas, and they held true when we varied the amount of information that we offered about how tax expenditures work. Respondents were also more likely to say that a program added "a lot" to the deficit if it was described as a direct outlay instead of a tax expenditure, even though the programs were listed with the same explicit cost.

These results make several contributions to the existing literature. First, we apply a better methodology to a wider range of contexts than did past studies to help answer significant outstanding questions in the political science, economics, and tax-law literatures. Second, we test the robustness of the idea that

12. Google's methodology has some drawbacks, including the fact that it permits only short questions and induces quick responses from recipients. Nonetheless, it has performed in ways comparable to more traditional telephone surveys. These methodological issues are taken up in detail in Part II.

"spending through the tax code" produces a framing effect by varying the amount of information we provide to our survey respondents; this question speaks to the issue of *why* citizens are so inclined to favor tax expenditures. Finally, we connect our results to key debates in the economics and political science literatures, and we discuss the implications for economic welfare, modern tax law, and democratic decision making about public spending.

The rest of this Note is divided into five Parts.[13] Part I positions our contribution in the relevant literature on tax expenditures and the behavioral-economics approach to taxation. Part II describes our methodology in more detail. Part III offers a fuller description of our results. Part IV discusses limitations and implications. Part V concludes.

## I. TAX EXPENDITURES AND PUBLIC PERCEPTIONS IN CONTEXT

### *A. The Existing Tax Literature*

In the tax-law literature, the general distinction between spending inside and outside the tax code is typically associated with the work of Stanley Surrey, who reportedly coined the term "tax expenditure."[14] Surrey is well-known for emphasizing that "[t]he federal income tax system consists really of two parts," one which "comprises the structural provisions necessary to implement the income tax," and another that "comprises a system of tax expenditures under which Governmental financial assistance programs are carried out through special tax provisions rather than through direct Government expenditures."[15]

Surrey had many criticisms of the tax-expenditure system: he thought it confused Congress,[16] muddled the administration of social programs,[17] and made the tax code more complicated.[18] But a particularly notable theme of Surrey's work is that tax expenditures are "hidden."[19] Despite the fact that tax expenditures are now identified and budgeted like other expenditures—a long-

13. We also include a short methodological appendix. *See infra* Appendix.

14. *See* Stanley S. Surrey, Assistant Sec'y, U.S. Treasury, The U.S. Income Tax System—The Need for a Full Accounting, Address Before the Money Marketers (Nov. 15, 1967).

15. SURREY, *supra* note 6, at 6.

16. Stanley S. Surrey, *Tax Incentives as a Device for Implementing Government Policy: A Comparison with Direct Government Expenditures*, 83 HARV. L. REV. 705, 728 (1970).

17. *Id.* at 729.

18. *Id.* at 731-32.

19. *Id.* at 731 ("[C]omparisons of tax expenditures and direct expenditures must be comparisons of hidden programs with open ones.").

time goal of Surrey's[20]—the hidden nature of tax expenditures is a theme that still runs through contemporary literature on taxation and public policy. In his book *The Hidden Welfare State*, for example, the political scientist Christopher Howard writes that "tax expenditures with social welfare objectives are largely invisible to citizens, policy makers, and academics who study U.S. social policy."[21]

The premise that tax expenditures are or would be treated differently from direct outlays is, in some sense, counterintuitive from the perspective of public finance. Most scholars of public finance would consider tax expenditures to be "conceptually equivalent" to direct outlays.[22] Indeed, tax expenditures can always be described in a manner that makes them seem identical to direct spending—one in which (as Howard puts it) "taxpayers write a check to the government for their full tax liability, and the government issues them a check to cover those activities exempted from taxation."[23] As consumers of government benefits, taxpayers *should* value a dollar of cash just as much as a dollar of tax relief. As taxpayers who fund government programs and vote for elected officials, they should view a dollar of government spending as equivalent to a dollar of forgone tax revenue.[24] Considered at this level of abstraction, public support for a spending program should not depend on whether that spending goes through the tax code.

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20. *See* Stanley S. Surrey & Paul R. McDaniel, *The Tax Expenditure Concept and the Budget Reform Act of 1974*, 5 B.C. L. REV. 679, 725 (1976) (describing initial budgeting efforts as "a major advance both for those concerned with budget efficiency and for those concerned with tax equity").

21. CHRISTOPHER HOWARD, THE HIDDEN WELFARE STATE: TAX EXPENDITURES AND SOCIAL POLICY IN THE UNITED STATES 3 (1997).

22. *Id.* Nearly all traditional economic models are "outcome equivalent" in that when there is no uncertainty, actors consider only the final results, not how the results are achieved. This view is incompatible with different preferences for tax expenditures and direct outlays that provide identical results. *See, e.g.*, Claudia R. Sahm, Matthew D. Shapiro & Joel Slemrod, *Check in the Mail or More in the Paycheck: Does the Effectiveness of Fiscal Stimulus Depend on How it is Delivered?*, 4 AM. ECON. J.: ECON. POL'Y 216, 216 (2012) (noting that whether a subsidy is delivered by check or through the tax code is "immaterial in a standard economic model with rational and unconstrained consumers," but finding that consumers likely do spend differently when money is received through a different mechanism).

23. HOWARD, *supra* note 21, at 3-4.

24. There might be some circumstances under which this is not true. As discussed in more detail below, there may be organizational efficiencies in administering a policy either through the tax code (for example, if the IRS must already collect all the information necessary to determine program eligibility) or by direct spending (for example, if non-IRS agency expertise is needed to administer it). *See* David A. Weisbach & Jacob Nussim, *The Integration of Tax and Spending Programs*, 113 YALE L.J. 955 (2004). But, for reasons we discuss below, we think these efficiencies are very unlikely to explain our results. *See infra* Part IV.A.2.

But do real-life taxpayers actually treat a dollar of direct spending as equivalent to a dollar of tax expenditure? In our opinion, the tax-expenditure literature generally answers this question in the negative—but it has received surprisingly little empirical attention. One of the few tax-law papers to study this subject directly is a 2005 article by Edward Zelinsky, which used a student survey to assess how different types of financial support for firefighters affected how respondents perceived their "volunteer" status.[25] Zelinsky's subject matter was drawn from a real policy dilemma: increasingly stringent requirements for training firefighters make it difficult for communities to recruit volunteers, but many communities are nonetheless reluctant to *pay* firefighters directly. As a result, some communities apparently offer tax breaks to their volunteer firefighters, such as property tax reductions.[26] The idea is that the tax breaks offer a financial inducement to become a volunteer firefighter—but not an inducement that is so explicit as to threaten the volunteer status of the position.

To see how the different forms of compensation affected public perceptions of these "volunteers," Zelinsky distributed questionnaires to several groups of law students at the Benjamin N. Cardozo School of Law.[27] Half were asked whether a direct payment affected the volunteer standing of firefighters, while the other half were asked whether a tax exemption did the same thing.[28] Zelinsky finds strong evidence that respondents are more likely to view recipients of a tax break (rather than a direct payment) as volunteers in good standing.[29]

An older attempt to study such questions empirically is a book chapter by Steven Sheffrin.[30] Sheffrin looks primarily at how the public conceives of a fair sharing of the tax burden, but he also briefly considers the question of how public views diverge from views commonly held by professional economists.[31] To see if the public shares economists' view that tax expenditures and direct outlays are equivalent, Sheffrin asked 150 students in an economics class about their opinions of an investment subsidy plan for firms.[32] He described the plan in one instance as a $1 million tax break and in the second as a $1 million pay-

25. *See* Edward A. Zelinsky, *Do Tax Expenditures Create Framing Effects? Volunteer Firefighters, Property Tax Exemptions, and the Paradox of Tax Expenditure Analysis*, 24 VA. TAX REV. 797 (2005).

26. *Id.* at 811.

27. *Id.* at 816.

28. *Id.*

29. *Id.* at 800.

30. Steven M. Sheffrin, *Perceptions of Fairness in the Crucible of Tax Policy*, *in* TAX PROGRESSIVITY AND INCOME INEQUALITY 309, 324-31 (Joel Slemrod ed., 1994).

31. *Id.* at 325.

32. *Id.*

ment.[33] In the baseline scenario, the students had a similar view of the favorability of the tax break and direct subsidy programs.[34]

However, when asked a follow-up question in which tax credits reduced the companies' tax liability to zero, the students had a substantially more favorable view of the direct subsidy program.[35] In other words, they preferred the program under which the firms "paid" some taxes, even if this payment was exactly offset by a check from the government. Sheffrin attributes this result to respondents' belief that "[e]ntities should pay taxes" and the fact that they were not looking solely at the company's net position.[36]

While the tax literature has recognized the importance of tax expenditures, therefore, relatively little empirical work has been done on whether the public actually thinks of them as different from direct outlays.

### *B. Recent Political Science Literature*

Outside of legal scholarship on taxation, two recent political science papers have used survey evidence to study the public's perception of spending programs. Christopher Faricy and Christopher Ellis asked university students about their opinions of three social spending programs: the mortgage interest deduction, the deduction for retirement savings, and food stamps.[37] They presented the programs to some students as tax expenditures and to others as the equivalent direct outlays,[38] and they found weak evidence that respondents preferred identical programs couched as tax expenditures.[39] For each program, the tax expenditure equivalent was more popular than the direct outlay, but this difference was small and only statistically significant for one of the three programs.[40] The authors also found that the effect is bigger for Republican students than for Democratic students.[41]

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33. *Id.*

34. *Id.* at 326.

35. *Id.* at 326-27.

36. *Id.* at 327.

37. *See* Christopher Faricy & Christopher Ellis, *Public Attitudes Toward Social Spending in the United States: The Differences Between Direct Spending and Tax Expenditures*, 36 POL. BEHAV. 53, 60-61 (2014).

38. *Id.* at 62.

39. *Id.* at 68.

40. *Id.* at 67-68.

41. *Id.* at 71.

Jake Haselswerdt and Brandon Bartels take a similar approach in an unpublished working paper.[42] Unlike the other papers mentioned above and below, Haselswerdt and Bartels do not use a student sample. Instead, like us, they use a survey that attempts to reach a representative sample of the U.S. population.[43] They asked about three programs: the mortgage interest deduction, job training, and paid parental leave.[44] Among other things, they describe the programs as either a tax expenditure or an equivalent direct outlay.[45] They find that each program is significantly more popular when described as a tax expenditure.[46]

### *C. Research in Behavioral Economics and Political Framing*

The studies above follow a method that is widely employed in behavioral research: asking two demographically similar groups of respondents a question in which the substance is identical but the *framing* is different.[47] This research agenda seeks to isolate what is now called *the framing effect.*[48] Amos Tversky and Daniel Kahneman popularized this approach in a classic series of behavioral experiments,[49] finding, for example, that identical life-saving policies are more popular when the outcomes are framed in terms of lives saved rather than lives lost.[50] As applied to tax expenditures, Zelinsky derives a similar result, finding that "policies unacceptable when framed as direct expenditures become

42. Jake Haselswerdt & Brandon L. Bartels, Public Opinion, Policy Tools, and Policy Feedbacks: Evidence from a Survey Experiment (Sept. 16, 2014) (unpublished manuscript) (on file with authors). We thank the authors for their permission to cite this work.

43. *See id.* (manuscript at 10).

44. *Id.* (manuscript at 10-11).

45. *Id.* (manuscript at 11-12).

46. *Id.* (manuscript at 14).

47. *See, e.g.*, Irwin P. Levin, *Associative Effects of Information Framing*, 25 BULL. PSYCHONOMIC SOC'Y 85, 85-86 (1987) (describing and utilizing information framing).

48. For one recent overview (with an emphasis on the underlying biology) see Benedetto De Martino et al., *Frames, Biases, and Rational Decision-Making in the Human Brain*, 313 SCIENCE 684 (2006).

49. *See* Zelinsky, *supra* note 25, at 807 ("A seminal demonstration of framing effects was a now-classic and much emulated experiment in which Professors Tversky and Kahneman asked two comparable but separate groups to decide between two alternative policies in the face of an impending epidemic.").

50. Amos Tversky & Daniel Kahneman, *Rational Choice and the Framing of Decisions*, 59 J. BUS. 251, 254-55 (1986).

supportable when labeled as tax subsidies, even though the economic substance of the policies is the same."[51]

Political scientists have also considered the relationship between public spending and framing. They have studied, among other things, how different political parties frame their approaches to spending;[52] how political framing differs from political persuasion;[53] and how framing interacts with political competition and the formation of citizen preferences.[54]

In continuing to study how tax expenditures are viewed in comparison to direct outlays, we also join a growing literature on behavioral-economic approaches to tax policy.[55] This field is increasingly interested in how general principles of behavioral economics can be applied to tax policy, and in developing original experiments that might inform tax-law design.[56] Many of these studies find that individuals react to taxes in ways not predicted by standard economic theory.[57]

### *D. Our Contribution to the Existing Literature*

Our approach complements and builds on existing work in several ways.

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51. Zelinsky, *supra* note 25, at 799.

52. *See* William G. Jacoby, *Issue Framing and Public Opinion on Government Spending*, 44 AM. J. POL. SCI. 750 (2000).

53. Thomas E. Nelson et al., *Toward a Psychology of Framing Effects*, 19 POL. BEHAV. 221 (1997).

54. Dennis Chong & James N. Druckman, *Framing Theory*, 10 ANN. REV. POL. SCI. 103 (2007); James N. Druckman, *The Implications of Framing Effects for Citizen Competence*, 23 POL. BEHAV. 225 (2001).

55. There is growing empirical literature on "tax salience." *See, e.g.*, Raj Chetty et al., *Salience and Taxation: Theory and Evidence*, 99 AM. ECON. REV. 1145 (2009) (performing an experiment at stores and finding consumers do not fully account for taxes that are charged at the counter rather than posted in their purchase decisions (for example, most sales taxes)); Amy Finkelstein, *E-ZTax: Tax Salience and Tax Rates*, 124 Q.J. ECON. 969 (2009) (finding that electronic billing makes consumers less aware of tolls and leads to increased use of tolls where such systems are in place); Jacob Goldin & Tatiana Homonoff, *Smoke Gets in Your Eyes: Cigarette Tax Salience and Regressivity*, 5 AM. ECON. J. 302 (2013) (finding that only low-income consumers are responsive to cigarette taxes applied at the counter). For more general studies, see Edward J. McCaffery & Jonathan Baron, *Thinking About Tax*, 12 PSYCHOL. PUB. POL'Y & L. 106, 106 (2006) (reporting "the findings of several experiments about perceptions of various aspects of tax-law design"); and William Congdon, Jeffrey R. Kling & Sendhil Mullainathan, *Behavioral Economics and Tax Policy* (Nat'l Bureau of Econ. Research, Working Paper No. 15328, 2009), http://www.nber.org/papers/w15328.pdf [http://perma.cc/8H9A-RA7T] (reviewing the implications of recent developments in behavioral economics for tax policy).

56. *See, e.g.*, Chetty et al., *supra* note 55 (performing one such experiment).

57. For an overview of these studies, see generally McCaffery & Baron, *supra* note 55.

### 1. *The Representativeness of Our Sample*

We believe our sample is a substantial improvement over existing work. First, we reach a diverse, non-expert sample that is close to representative of the electorate. All of the other papers that compare tax expenditures and direct outlays, except Haselswerdt and Bartels's working paper,[58] use student samples. Such samples can be problematic. For example, Sheffrin's study is designed to illustrate that the public's views diverge from the views of conventional economics, but the students he surveys were in an economics class.[59]

That is a specific example of a general phenomenon. Student samples often differ from the general population in systematic ways that matter. One survey paper found that student responses "differed substantially" from those of the population at large in 48% of social science studies where they could be compared.[60] For our purposes, students are likely to differ substantially from the average population on at least two important dimensions: their level of education and their experience paying taxes.

Highly educated people, particularly those trained in quantitative fields, may be less susceptible to framing.[61] Zelinsky hypothesizes that this explains differences in the framing effect among his students,[62] and this may be one explanation for why Sheffrin does not initially find a framing effect.

Moreover, students are less experienced with tax expenditures than the population as a whole, and this might make them poor proxies. For example, like Faricy and Ellis, and Haselswerdt and Bartels, we ask about the mortgage

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58. The Haselswerdt and Bartels survey is tacked onto a larger survey on political opinions. *See* Haselswerdt & Bartels, *supra* note 42 (manuscript at 10). Seeing the other questions in that survey may "prime" people, changing their answers from what they would have said if they were asked about tax expenditures only. Similarly, each person answered three tax expenditure questions. *Id.* Earlier questions may also prime respondents with regards to later questions, although the authors try to minimize this effect by randomizing the order of the questions. *Id.*

59. *See* Sheffrin, *supra* note 30, at 325.

60. Robert A. Peterson, *On the Use of College Students in Social Science Research: Insights from a Second-Order Meta-Analysis*, 28 J. CONSUMER RES. 450, 458 (2001) (analyzing studies drawn from a "social science database").

61. *See* Ellen Peters et al., *Numeracy and Decision Making*, 17 PSYCHOL. SCI. 407 (2006). Peters's study found that individuals with higher education, and in particular higher numeracy were less susceptible to the frame. However, the general applicability of this study is unclear because the frame in that case was entirely mathematical (two ways of presenting the same number).

62. *See* Zelinsky, *supra* note 25, at 818. Zelinsky found that men's opinions differed less depending on the frame than women's, and speculated that this was because men were more likely to be trained in economics, math, or business. *See id.*

interest deduction. There are some differences in wording, but all three studies asked about support for the deduction in light of its $100 billion annual cost. Our study and that of Haselswerdt and Bartels – studies aimed at the population at large – found that support was roughly 55%.[63] However, when shown the costs, only 21% of Faricy and Ellis's students supported the deduction.[64] Faricy and Ellis's students were likewise not affected by the frame, whereas both our paper and that of Haselswerdt and Bartels found a difference in support of 25 to 35 percentage points.[65] As a result, we believe that our results are a more reliable measure of the framing effect than those derived from student samples.

### 2. *Distinguishing Our Questions and Implications*

In addition to studying a more representative sample, our approach differs from previous work in several ways. First, we explore the framing effect in a range of contexts, including support for housing programs, aid to the disabled, and the question of whether people prefer to receive cash or equivalent tax credits and whether they perceive tax expenditures to be less expensive. Taken together, this variation across policy areas helps show that the framing effect is wide-ranging and sheds light on the source of that effect.[66]

Second, we show that the public's preference for tax expenditures persists even when we describe the mechanics of a tax expenditure in some detail. This helps ensure that the source of the framing effect is not confusion over how the tax programs work or who gets the benefit. In their surveys, Haselswerdt and Bartels, as well as Faricy and Ellis, do not clarify the mechanics of their programs in the same way. For example, while Faricy and Ellis express concern that citizens do not understand tax expenditures, they do not illustrate the insight empirically.[67] Instead, the questions in their study and in that of Ha-

63. Haselswerdt & Bartels, *supra* note 42 (manuscript at 22).

64. Faricy & Ellis, *supra* note 37, at 66.

65. *See* Haselswerdt & Bartels, *supra* note 42 (manuscript at 29).

66. Zelinsky's work on the perception of volunteer status is somewhat limited by the narrow focus of the study. People have unique ideas about what, if any, personal benefits can be obtained while still being considered a volunteer, which likely interact with their perceptions of tax expenditures relative to direct outlays. *See* Ram A. Cnaan et al., *Defining Who Is a Volunteer: Conceptual and Empirical Considerations*, 25 NONPROFIT & VOLUNTARY SECTOR Q. 364 (1996) (describing the wide dispersion in definitions and empirically held beliefs about what constitutes a "volunteer").

67. *See* Faricy and Ellis, *supra* note 37, at 58. While we find that increasing the amount of information about the mechanics of the tax expenditure does not have a big impact, we think it is

selswerdt and Bartels are somewhat unclear. For example, Haselswerdt and Bartels ask respondents whether they support making those who take a job retraining class "eligible for a tax break, that is, a reduction in the income tax they owe to help cover the cost of the class," and similarly describe the direct expenditure as simply "a cash payment to help cover the cost of the class."[68] Respondents may simply assume that the payments will be larger or smaller depending on which vehicle is used for payments. Even in other questions in which the researchers specify the total cost, the programs are not necessarily equivalent in terms of how much each person receives, particularly since often the tax expenditures are phrased as deductions, but the direct outlays appear more similar to credits.[69]

Third, we avoid using existing programs—except the mortgage interest deduction—to measure the framing effect. All of the programs in the Faricy and Ellis study are currently implemented in the United States,[70] as are two-thirds of those in the Haselswerdt and Bartels study.[71]

Asking about these "status quo" programs is potentially problematic for a number of reasons. Rational respondents might prefer not to change only the mechanism by which an existing program is delivered, since switching the mechanism is presumably costly and the substance of the program will remain the same. In addition, respondents might simply be confused as to why an existing program is being framed as a hypothetical choice. They may pick the status quo when a choice is too complex; they may pick it in protest.[72] Or respondents may simply be affected by the well-known status quo bias, which

important to know that the framing effect does not stem from uncertainty or misunderstanding about how the program works. *See infra* Part III.

68. *See* Haselswerdt & Bartels, *supra* note 42 (manuscript app. at 34-35). Their mortgage interest question has a similar structure. *See id.* at 34.

69. *See* Faricy & Ellis, *supra* note 37, at 62, 74-75; Haselswerdt & Bartels, *supra* note 42 (manuscript at 35-36). The value of deductions is greater for higher income tax payers, who pay higher marginal taxes, while (refundable) credits are equally valuable to all taxpayers. Our direct spending equivalent to the mortgage interest deduction also suffers a bit from this issue because, for simplicity, the value of the subsidy does not depend on income. *See infra* note 106. Note also that this criticism does not apply to Haselswerdt and Bartels's final question on paid parental leave where the payments are specified to be 100% of lost income. Haselswerdt & Bartels, *supra* note 42, app. at 36.

70. *See* Faricy & Ellis, *supra* note 37, at 61 ("[A]ll three programs mirror existing federal programs in cost, intent, and actual redistributive effects.").

71. *See* Haselswerdt & Bartels, *supra* note 42 (manuscript app. at 35-36).

72. *See* Wiktor Adamowicz et al., *Stated Preference Approaches for Measuring Passive Use Values: Choice Experiments and Contingent Valuation*, 80 AM. J. AGRIC. ECON. 64, 73 (1998) ("It could be that individuals chose the status quo response when the task of selecting options was too complex or when they were uncertain about the trade-offs they would be willing to make. Choosing the status quo could also be a form of protest response.").

has been extensively studied in behavioral economics.[73] The notable point is that, in each of these scenarios, something other than a question's framing – as either a tax expenditure or direct outlay – may partially influence the response.

Such status quo issues are well understood to be a problem in survey design.[74] Indeed, the difference between new and status quo options can be enormous, even when the real payoff is the same. One well-known study of individual biases toward risk, for example, found that only 27% of survey respondents were willing to pay $700 for a safety measure that guaranteed a 0.5% reduction in the risk of an injury in a given year; that number jumped to 60% when the safety feature in question was described as an industry standard.[75] In at least one influential study of stated-preference survey design, these problems were considered worrying enough that respondents who always selected a status quo were categorized along with respondents who selected "I don't know."[76] Haselswerdt and Bartels are aware of this issue, and in fact one of their goals is to measure whether the status quo "communicat[es] to the public how different problems should be viewed and solved."[77] But we are not sure that they can separate this effect from the other status quo issues discussed above.

Fourth, and perhaps most important, we consider the implications of these findings in ways that differ greatly from previous work. We explore the likely underlying causes of the framing effect, as well as the relationship between framing effects and welfare economics. We then highlight the implications of citizens' preference for tax expenditures for the way in which the Internal Revenue Code is written. We use our results to suggest a new and counterintuitive

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73. *See* Daniel Kahneman et al., *Anomalies: The Endowment Effect, Loss Aversion, and Status Quo Bias*, 5 J. ECON. PERSPS. 193 (1991); *see also* William Samuelson & Richard Zeckhauser, *Status Quo Bias in Decision Making*, 1 J. RISK & UNCERTAINTY 7 (1988) (identifying the modern status quo bias for the first time).

74. *See* David Dreyer Lassen, *The Effect of Information on Voter Turnout: Evidence from a Natural Experiment*, 49 AM. J. POL. SCI. 103, 105 (2005) ("Uncertainty about [an] issue could take the form of a status quo bias, documented in a variety of settings, leading uncertain voters to vote for the status quo where abstaining, according to the reasoning in the models, would be optimal.").

75. *See* W. Kip Viscusi et al., *Asymmetric Assessments in Valuing Pharmaceutical Risks*, 34 MED. CARE DS34, DS41-42 (Supp. 1996) (citing Jack L. Knetsch, *The Endowment Effect and Evidence of Nonreversible Indifference Curves*, 79 AM. ECON. REV. 1277 (1989)) (describing the implications of the Knetsch study in terms of the status quo bias).

76. *See* Adamowicz et al., *supra* note 72, at 68 n.3 ("We are assuming that individuals who always chose the status quo regardless of the attribute levels were essentially not responding to the CE task. Thus these responses were treated the same as an 'I don't know' response in a CVM question.").

77. *See* Haselswerdt & Bartels *supra* note 42 (manuscript at 7).

explanation for why tax expenditures have grown: because the public is actually paying more attention to government budgets. We also suggest that the public's fondness for tax expenditures should be added to the traditional list of factors that drive the increasing complexity of the tax code and is perhaps one of the best explanations for why ordinary taxpayers find the tax system so maddeningly complex. Finally, we make a new connection between tax expenditures and other areas of the law in which increasing transparency has potentially serious drawbacks.

## II. EMPIRICAL STRATEGY

### *A. Using Google Consumer Surveys*

We developed a survey instrument using Google Consumer Surveys (GCS), a popular and relatively inexpensive online survey tool designed for use by both companies and researchers.[78] GCS is a relatively new service—the product was launched in March 2012[79]—but it has already been used to produce peer-reviewed papers in a variety of fields, including political science,[80] psychology,[81] and business.[82]

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78. Paul McDonald et al., *Comparing Google Consumer Surveys to Existing Probability and Non-Probability Based Internet Surveys*, GOOGLE CONSUMER SURVS. 3 (2012), http://www.google.com/insights/consumersurveys/static/consumer_surveys_whitepaper.pdf [http://perma.cc/5MCM-TK6S].

79. Paul McDonald, *A New Way to Access Quality Content Online*, GOOGLE NEWS: BLOG (Mar. 29, 2012, 10:21 AM), http://googlenewsblog.blogspot.co.uk/2012/03/new-way-to-access-quality-content.html [http://perma.cc/YS45-CGUW].

80. *See, e.g.*, Jessica Lavariega Monforti et al., *¿Por Quién Votará? Experimental Evidence About Language, Ethnicity and Vote Choice (Among Republicans)*, 1 POL., GROUPS, & IDENTITIES 475, 481 (2013) ("By asking different single questions of multiple samples [using GCS], researchers can conduct a survey experiment . . . . The tool is ideal for survey experiments . . . because randomized assignment to different questions holds unobserved variables constant." (citation omitted)). This paper uses GCS to consider how voters respond to identical candidates who are or are not bilingual.

81. *See, e.g.*, Andrew K. Przybylski, *Who Believes Electronic Games Cause Real World Aggression?*, 17 CYBERPSYCHOLOGY, BEHAV. & SOC. NETWORKING 228, 229 (2014) ("GCS produces highly accurate results in line with other probability-based panel survey approaches. Importantly, GCS demonstrates substantially higher response rates (15–20%) compared to sampling rates observed industry wide (0.1–2%) across a range of polling topics."). This paper uses GCS to study national beliefs about the relationship between violent video games and real-life violence.

82. *See, e.g.*, Shane Frederick et al., *The Limits of Attraction*, 51 J. MARKETING RES. 487, 491 (2014) ("Although our prior results—and, more to the point, our repeated non results—led us to predict no attraction effect when quality was represented visually, we were curious whether

We discuss in detail below the extent to which our panel is likely to be representative of the U.S. population. We conclude that there are some reasons to believe that our panel is not fully representative—but, in the end, it is likely to be close, and it offers substantial advantages over the classroom surveys utilized in existing publications.

Unlike several other online survey tools—which hire a representative panel of respondents[83] or otherwise manage a marketplace for survey questions[84]—GCS presents survey questions to general Internet users in the form of a "wall" preventing access to premium Internet content. Just as a visitor to a website might be required to watch an advertisement or pay a fee before accessing premium content (typically known as a "paywall"), GCS lets Internet users answer a survey question.[85] This "surveywall" is intended to be relatively brief and painless. Google's theory is that, "[b]y reducing the burden [of responding to a survey] to just one or two clicks, we increase the response rate of the survey."[86] According to Google, this produces an average response rate of 16.75%.[87] Google argues that this response rate compares favorably to other commonly used Internet or traditional phone survey tools.[88]

Unlike many other survey tools, Google does not ask respondents to report their age, gender, location, income, or other demographic information. Instead, Google reports that "Consumer Surveys infers approximate demographic and location information using the respondent's IP address and DoubleClick cookie," which Google uses to "ensure each survey receives a representative

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the marginally significant repulsion effect we obtained would replicate, so we reran the study using Google Surveys, which enabled us to obtain very large samples quickly."). This paper uses a variety of survey tools—including GCS and Mechanical Turk—to study the prevalence of the "attraction effect," wherein the addition of an irrelevant third consumption option changes consumer perceptions of the two preexisting options.

83. *See, e.g.*, *Panel Methodology*, YOUGOV, http://research.yougov.co.uk/services/panel-methodology [http://perma.cc/3BVB-2K9R]; *see also* Siona Robin Listokin et al., *Americans' Preferences for Tax Increases and Spending Cuts*, 139 TAX NOTES 188 (2013) (using YouGov to examine how Americans would alter spending and taxes to close the budget deficit).

84. *See* MECHANICAL TURK, https://www.mturk.com/mturk [http://perma.cc/445U-QXMT]; *see also* Ilyana Kuziemko et al., *How Elastic Are Preference for Redistribution? Evidence from Randomized Survey Experiments* (Nat'l Bureau of Econ. Research, Working Paper No. 18865, 2013), http://www.nber.org/papers/w18865.pdf [http://perma.cc/LF6D-NHKB] (using Mechanical Turk to gather data on attitudes toward tax policy).

85. *See How It Works*, GOOGLE CONSUMER SURVS., http://www.google.com/insights/consumersurveys/how [http://perma.cc/TRK-7Q42].

86. McDonald et al., *supra* note 78, at 3.

87. *Id.*

88. *Id.*

sample and to enable survey researchers to see how sub-populations answered questions."[89] Not asking for this information improves response rates and allows questions to be asked free of any survey "priming."[90] We discuss the accuracy of Google's methods below and include further details in a short Appendix.

The representativeness and reliability of the GCS survey population have been tested and discussed favorably in two studies – one from the Pew Foundation[91] and one from Google itself.[92] Google's study compared GCS surveys to "gold standard" national telephone surveys – one private and one conducted by the Centers for Disease Control – by using questions identical to those in the "gold standard" surveys.[93] Google also hired two well-respected Internet survey firms to ask the same questions.[94] The search giant concluded that its own survey tool outperforms other Internet survey providers on several benchmarks.[95]

The Pew Research Center, meanwhile, performed "a series of tests covering a wide range of topics and question types to compare results from Pew Research telephone surveys to those obtained using the Google Consumer Surveys method."[96] GCS performed relatively well overall. Across forty-eight questions, the median difference between GCS and the Pew surveys was 3%.[97] Of particular interest for our survey, Pew concluded that "the Google Consumer Surveys sample appears to conform closely to the demographic composition of the overall internet population."[98] In terms of political views, GCS respond-

89. *Id.* (citations omitted).

90. *Id.* ("Inferring this demographic data enables Consumer Surveys researchers to ask fewer questions in a survey which in turn increases response rates.").

91. Scott Keeter & Leah Christian, *A Comparison of Results from Surveys by the Pew Research Center and Google Consumer Surveys*, PEW RES. CENTER (Nov. 7, 2012), http://www.people-press.org/files/legacy-pdf/11-7-12%20Google%20Methodology%20paper.pdf [http://perma.cc/BY5Z-4CJP].

92. McDonald et al., *supra* note 78.

93. *Id.* at 6.

94. *See id.* at 5.

95. *Id.* at 6-9. For example, Google reports that the "average absolute error for the non-Google samples was 5.29% across all benchmarks, while the Google samples averaged 3.76%." *Id.* at 7. GCS attempts to target the Internet-using population, while the benchmark surveys were aimed at the whole population, and therefore we should not be surprised to see some differences.

96. Keeter & Christian, *supra* note 91, at 1.

97. *Id.* at 2. The mean was 6%, driven by a few questions in which the differences were relatively large. *Id.* There may be innocent explanations for these differences, as in some cases the Pew questions and potential answers did not entirely match what GCS put out. *Id.*

98. *Id.*

ents were "broadly similar [to the U.S. population], though some larger differences were observed."[99] Nor was there a consistently conservative or liberal bent to these differences.[100] In fact, Nate Silver concluded that GCS was the second most accurate 2012 presidential poll, beating out CNN, Quinnipiac, Gallup, and YouGov, among others.[101]

Nonetheless, there are good reasons to believe that GCS panels are not perfectly representative of the entire U.S. population. First, Google surveys only the U.S. Internet-using population, and 15% of the U.S. population does not use the Internet.[102] These individuals are disproportionately older and less educated, and this likely biases any survey of Internet users.[103] Similarly GCS's model does not guarantee that each panel is a random sample of all Internet users. Nevertheless, the research discussed above suggests it is quite likely that GCS is close to representative—and certainly a large improvement over the classroom panels used in prior research. It is also likely to be much more representative than Mechanical Turk, where survey respondents are paid for each survey that they complete, raising a number of problems—including self-selection and potential misrepresentation.[104] In spite of these problems, Mechanical Turk studies have found generally receptive audiences.[105]

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99. *Id.* at 9.

100. *Id.* at 10.

101. Nate Silver, *Which Polls Fared Best (and Worst) in the 2012 Presidential Race*, N.Y. TIMES: FIVETHIRTYEIGHT (Nov. 10, 2012, 8:38 PM), http://fivethirtyeight.blogs.nytimes.com/2012/11/10/which-polls-fared-best-and-worst-in-the-2012-presidential-race [http://perma.cc/SL29-KKGL].

102. *See* Kathryn Zickuhr, *Who's Not Online and Why*, PEW RES. CENTER. 2 (2013), http://www.pewinternet.org/files/old-media//Files/Reports/2013/PIP_Offline%20adults_092513_PDF.pdf [http://perma.cc/9389-HET4].

103. *Id.* at 5. We think it very likely that our sample skews toward more educated respondents, which means that we actually *underestimate* the framing effect.

104. *See, e.g.*, Dan Kahan, *Fooled Twice, Shame on Who? Problems with Mechanical Turk Study Samples, Part 2*, CULTURAL COGNITION PROJECT (July 10, 2013, 9:30 AM), http://www.culturalcognition.net/blog/2013/7/10/fooled-twice-shame-on-who-problems-with-mechanical-turk-stud.html [http://perma.cc/3KGU-MFUM] (noting a variety of problems with Mechanical Turk panels, including selection issues with voluntary Mechanical Turk workers, problems of repeated exposure to research studies, and misrepresentation among survey participants); Kuziemko et al., *supra* note 84, at 7 (discussing how the authors confronted issues with Mechanical Turk, including foreign professional survey takers and how survey release times had to be altered to minimize the impact of these professionals).

105. See, for example, articles published in prominent economics and political science journals, including Justin Grimmer et al., *How Words and Money Cultivate a Personal Vote: The Effect of Legislator Credit Claiming on Constituent Credit Allocation*, 106 AM. POL. SCI. REV. 703 (2012) (using Mechanical Turk to gather information about how people react to political officials

GCS does have some important drawbacks. First, we can ask only short questions. Google imposes a 175-character limit on questions, which forced us to think hard about how we worded our questions, and made it a challenge to ask several questions about technical tax policy.[106] Second, because GCS questions pop up instantaneously, respondents see the question before committing to answer—an issue that affects most Internet surveys but is arguably more problematic in our case. Third, the fact that individual respondents will see only one question makes it impossible to study an individual respondent's answers *across* questions.

On the other hand, GCS also offers some practical benefits. Consumer Surveys are inexpensive—which allowed us to gather many thousands of fairly representative observations at low cost—and have a relatively high response rate. In our surveys, an average of 18% to 24% of Internet users who saw each question responded. In addition, the fact that Google infers demographic data means that we did not need to rely on respondents' self-reporting to obtain a representative panel. We also did not have to rely on respondents' self-reporting about sensitive matters like age and income. And, unlike Mechanical Turk, GCS respondents do not answer questions for money.

### *B. Our Survey Questions*

The central goal of our survey was to ask two demographically equivalent groups of respondents whether they supported economically equivalent policy proposals—one described in the form of a tax expenditure, the other in the form of a direct outlay. Our central hypothesis, consistent with the notion that spending through the tax code disguises the true cost, was that respondents would be more likely to support policies that take the form of tax expenditures.

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who claim credit for government spending); Douglas L. Kriner & Francis X. Shen, *How Citizens Respond to Combat Casualties: The Differential Impact of Local Casualties on Support for the War in Afghanistan*, 76 PUB. OPINION Q. 761 (2012) (detailing a Mechanical Turk experiment designed to explore whether support for wars varied when respondents read a mock-account of a casualty from their state or from elsewhere); and Emily Oster et al., *Optimal Expectations and Limited Medical Testing: Evidence from Huntington Disease*, 103 AM. ECON. REV. 804 (2013) (relying in part on Mechanical Turk data for information on how and why Americans save for retirement).

106. In particular, our direct spending equivalent to the mortgage interest deduction had to be modified. We did not have space to create an exactly equivalent program in which the percentage reimbursement increases with the taxpayer's income (as with the actual mortgage interest deduction). For the other questions, without GCS's character limits, we might have added more detail about why the policy might be a good idea and who would be eligible. Generally, however, we felt that we were able to communicate all the information we wanted to communicate despite the limits.

We also tested several secondary questions by varying the details of our questions. One secondary question was whether the hypothesis above works because respondents view tax expenditures as "cheaper." We tested this by asking respondents how they perceived the costs of equivalent tax expenditures and direct outlays, and whether they would prefer to receive a tax credit or a check. Another secondary question was whether taxpayers' preference for tax expenditures would hold true across a range of policy types; we tested this question by asking about hypothetical policies that support the housing market and hypothetical subsidies for the disabled. A third secondary question was whether respondents' views vary depending on whether the policy in question is a new, hypothetical policy, or an existing and salient policy; we probed this distinction by asking about the home mortgage interest deduction.

A fourth secondary question was whether respondents' views change depending on how much information we provide about the policy proposals in question. Because tax policy is relatively technical, in our view it is important to try to distinguish between the framing effect and simple ambiguities in (or misunderstandings of) how the policies in question operate. For example, it might be apparent to those steeped in tax law or public finance that a dollar of "refundable tax credit" is the conceptual equivalent of a dollar in cash – but perhaps not to the average citizen. To get a sense of how this affects our results, we varied our descriptions of the tax expenditure. In some questions, we spelled out in detail how refundable tax credits operate; in others we did not. We also tested to see whether using the term "tax expenditure" itself affects the results.

Finally, we asked several questions designed to rule out common alternative explanations that might indicate a bias toward spending through the tax code, and to see whether policy preferences diverged from individual consumption preferences.

In our first wave, we asked the following nine questions[107]:

Q1. Would you support the government offering annual $1000 cash payments to each family, to help cover rent?

Q2. Would you support reducing each family's taxes by $1000 to help cover rent? If a family owes less than $1000, they get the rest in cash.

107. Each question also included information required for informed consent telling respondents that "this is an academic study" and that their participation was "voluntary and anonymous," which we have removed for convenience here.

Q3. Would you support the government offering a $1000 refundable tax credit for each family, to help cover rent?

Q4. Do you support the government letting homeowners deduct their mortgage interest payments?

Q5. Would you support the government replacing existing tax aid for homeowners by matching 25% of their mortgage interest with cash?

Q6. Tax aid for homeowners costs $100 billion a year. At the same cost, would you instead support matching 25% of their mortgage interest with cash?

Q7. Tax aid for homeowners costs $100 billion a year. Do you support the government continuing to let them deduct their mortgage interest payments?

Q8. Would you support an annual $1000 government cash payment to each disabled person?

Q9. Would you support a tax credit reducing each disabled person's taxes by $1000? If a person owes less than $1000, he or she gets the rest in cash.

We released these questions in November 2013, spread over a weekend and three weekdays.

The demographics of respondents and responses we received did not vary by day of the week, indicating that the pool of potential respondents was similar during weekdays and weekends.[108] We received a little over 1,000 responses to each question. However, as can be seen in Table 1 below, not all of these responses were usable since some respondents chose to opt out and others lacked full demographic data.[109] There is some evidence that more respondents opted

108. The response rate did vary to some degree. For example, it was higher during weekends, but given the similarity of responses, we are not concerned that this variation will bias the results, particularly since the relative proportion of weekday and weekend responders is the same across questions.

109. If people opted out at random, then our survey would still be representative of the U.S. Internet-using population—as a rough intuition: if you remove random individuals from a random sample, you'll still have a random sample. Some of the opting-out, however, appears to be non-random since it is slightly correlated with people's demographic characteristics. In particular, younger respondents opted out more often than older ones. Generally, the differences are not very substantial: roughly 20% of our sample should have been 18-24, but only 15% were (differences in the other age groups were smaller). Likewise, slightly more

out of the more complex questions.[110] But we remain confident that this skew is relatively minor. Even if, for the sake of argument, each additional person who opted out of the more complex questions reduces the significance of our results, our results still show that tax expenditures are substantially preferred and the results are still statistically significant.[111]

In February 2014 we conducted a relatively small second survey designed to ascertain whether applying the label "tax expenditure" to spending through the tax code made any difference. In April 2014 we asked a larger sample about their preferences for *personally* receiving direct-payment subsidies or tax credits. Finally, in September 2014, we asked a large sample about how they perceived the costs of direct outlays and tax expenditures.

Our results are summarized in the following tables.

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women opted out than did men. There was no evidence that people with different incomes opted out at different rates.

If this opt-out behavior was random *within* demographic groups, it still will not present a problem because we can fix the issue using probability weighting. For example, imagine that there should be twenty people in each of five age groups. If a random set of ten people opt out of answering a question in the first age group, but everyone else answers in the rest of the groups, we can get the "right" result by doubling the weight accorded to responses from the first age group.

In the end, while we think it is unlikely that opt-out behavior within groups is entirely random, we have no reason to believe that some non-random behavior should substantially bias the results. In particular, we do not see any opting out based on income, which we think is the variable most likely to be correlated with unobserved characteristics (for example, education) that affect people's reactions to the frame. Likewise, we do not see any evidence of opt-out behavior varying *across* different questions by age, sex, or income group, which might otherwise threaten to bias our comparisons across questions.

110. We believe the questions describing the mechanics of tax expenditures and cost of the programs are more complex as they required respondents to grapple with more information than did questions laying out a simple government payment.

111. An example may be illustrative: twenty-nine fewer respondents with full demographic information answered Question 9 (aid to disabled persons as a tax expenditure) compared to Question 8 (the direct subsidy version). Respondents favored the credit over the direct subsidy by roughly ten percentage points. This remains true even if we treat the additional twenty-nine opt-outs for Question 9 as not supporting the policy. Doing so reduces the gap to eight percentage points, which remains economically and statistically significant. This is true for all paired questions.

However, we believe this treatment may overstate the true differences in beliefs among selective opt-outs. It is likely that people who avoid more complex questions are more susceptible to the frame, since they seem to be less willing to use slow, logical thinking. (In the Kahneman sense, this is System-Two thinking. *See* DANIEL KAHNEMAN, THINKING FAST AND SLOW (2011).) Thus, any selective opting out on this basis probably causes an under- rather than over-statement of the true framing effect presented below.

## III. RESULTS

**Table 1.**

**SURVEY OF PREFERENCES FOR USING DIRECT SUBSIDIES OR TAX CREDITS**

| | *Question* | *Respondents with Full Demographic Information* | *Weighted Using Demographic Info* | |
|---|---|---|---|---|
| | | | *Yes* | *No* |
| Q1 | Would you support the government offering annual $1000 cash payments to each family, to help cover rent? | 632 | 24.09% | 75.91% |
| Q2 | Would you support reducing each family's taxes by $1000 to help cover rent? If a family owes less than $1000, they get the rest in cash. | 567 | 33.92% | 66.08% |
| Q3 | Would you support the government offering a $1000 refundable tax credit for each family, to help cover rent? | 611 | 35.09% | 64.91% |
| Q4 | Do you support the government letting homeowners deduct their mortgage interest payments? | 596 | 67.50% | 32.50% |
| Q5 | Would you support the government replacing existing tax aid for homeowners by matching 25% of their mortgage interest with cash? | 514 | 25.50% | 74.50% |
| Q6 | Tax aid for homeowners costs $100 billion a year. At the same cost, would you instead support matching 25% of their mortgage interest with cash? | 467 | 20.02% | 79.98% |
| Q7 | Tax aid for homeowners costs $100 billion a year. Do you support the government continuing to let them deduct their mortgage interest payments? | 607 | 56.15% | 43.85% |
| Q8 | Would you support an annual $1000 government cash payment to each disabled person? | 592 | 29.73% | 70.27% |
| Q9 | Would you support a tax credit reducing each disabled person's taxes by $1000? If a person owes less than $1000, he or she gets the rest in cash. | 563 | 40.23% | 59.77% |
| Q10 | Would you support a tax expenditure reducing each family's taxes by $1K to help cover rent? If a family owes less than $1K, they get the rest in cash. | 318 | 37.10% | 62.90% |
| Q11 | Would you support reducing each family's taxes by $1000 to help cover rent? If a family owes less than $1000, they get the rest in cash.§ | 198 | 36.82% | 63.18% |

† Grey bars are only for readability.

‡ Only individuals with full demographic information are used in the weighted calculation. Roughly 15% of respondents are missing such demographic information (age, gender, geography). "Weighting" the data means adjusting for the fact that the samples were slightly more likely pick up members of some demographic groups than others. In practice, the reweighting does not make much difference because the characteristics of samples and the U.S. internet-using population are similar.

§ Note Q11 is identical to Q2, but since it was asked in a different wave of the survey, we obtained responses again to ensure that the survey was still reaching the same audience and that Attitudes had not shifted. The response is very similar.

**Table 2.**

**SURVEY OF PREFERENCES FOR RECEIVING DIRECT SUBSIDIES RELATIVE TO TAX CREDITS**

| | *Question* | *Respondents with Full Demographic Information* | *Weighted Using Demographic Info* | | |
|---|---|---|---|---|---|
| | | | *Indiff't* | *Check* | *Credit* |
| Q12 | Would you prefer a credit reducing your tax bill by $1000 (given as cash if you owe less than $1000) or a $1000 check?<br>• Check<br>• Credit<br>• I am indifferent | 560 | 36.68% | 43.00% | 20.31% |
| Q13 | Would you prefer a credit reducing your tax bill by $1000 (given as cash if you owe less than $1000) or a $1000 check?<br>• Check<br>• Credit<br>• I am indifferent; they are the same | 496 | 37.91% | 42.37% | 19.72% |
| Q14 | Would you prefer a refundable tax credit reducing your tax bill by $1000 or a $1000 check?<br>• Same options as Q12 | 535 | 32.05% | 50.39% | 17.56% |
| Q15 | Same as Q12 except options are:<br>• Check (when you file your taxes)<br>• Credit (when you file your taxes)<br>• I am indifferent | 531 | 43.37% | 33.75% | 22.88% |
| Q16 | Would you prefer a one-time credit reducing your tax bill by $1000 (given as cash if you owe less than $1000) or a one-time $1000 check?<br>• Same options as Q12 | 508 | 42.68% | 40.69% | 16.63% |

† For all questions respondents preferred the check to the credit. This preference is statistically significant at the 1% level for each question.

**Table 3.**

**SURVEY OF RESPONDENTS' PERCEPTION OF POLICY COSTS**

| | *Question* | *Respondents with Full Demographic Information* | *Weighted Using Demographic Info* | | |
|---|---|---|---|---|---|
| | | | *Not at all* | *Not that much* | *A Lot* |
| Q17 | Some propose spending $6 billion to reduce each blind person's taxes by $1,000 (paid in cash if they owe less than $1,000). How much will this increase the deficit? | 881 | 24.65% | 43.82% | 31.54% |
| Q18 | Some propose spending $6 billion to provide each blind person with a $1,000 cash payment. How much will this increase the deficit? | 899 | 22.81% | 40.33% | 36.87% |

† Respondents' perception that the tax expenditure would add less to the deficit than the direct outlay is statistically significant at the 5% level ($p = 0.015$) when data is tested using an ordered logit regression. Using a multinomial logit produces a similar result ($p = 0.003$).

**Table 4.**
**COMPARISONS OF SURVEY ANSWERS**

| *Question A* | *Question B* | *Support A* | *Support B* | *Difference (A)-(B)* |
|---|---|---|---|---|
| *Direct Spending v. Spending Through the Tax Code* | | | | |
| Q1: Direct Rent Subsidy | Q2: Rent Subsidy through tax credit (Default info given about credit) | 24.09% | 33.92% | -9.82%*** |
| Q1: Direct Rent Subsidy | Q3: Rent Subsidy through tax credit (Less info given about credit) | 24.09% | 35.09% | -11.00%*** |
| Q5: Direct Mortgage Interest Matching | Q4: Continue Mortgage Interest Deduction | 25.50% | 67.50% | -42.00%*** |
| Q6: Direct Mortgage Interest Matching (Info on Cost Given) | Q7: Continue Mortgage Interest Deduction (Cost info given) | 20.02% | 56.15% | -36.12%*** |
| Q8: Direct Subsidy for Disabled | Q9: Subsidy For Disabled Through Tax Credit | 29.73% | 40.23% | -10.50%*** |
| *Other Comparisons* | | | | |
| Q2: Rent Subsidy through tax credit (Default info given about credit) | Q3: Rent Subsidy through tax credit (Less info given about credit) | 33.92% | 35.09% | -1.18% |
| Q4: Continue Mortgage Interest Deduction | Q7: Continue Mortgage Interest Deduction (Cost info given) | 67.50% | 56.15% | 11.35%*** |
| Difference between Q1: Direct Rent Subsidy & Q2: Rent Subsidy through tax credit (Default info given about credit) | Difference between Q8: Direct Subsidy for Disabled & Q9: Subsidy For Disabled Through Tax Credit (Default info given) | -9.82% | -10.50% | 0.68% |
| Q10: Rent Subsidy through tax credit (Using "Tax Expenditure" in the question)[1] | Q11: Rent Subsidy through tax credit (not using "Tax Expenditure" in the question)[1] | 37.10% | 36.82% | 0.27% |

*** represents that the means are statistically different from each other at the 1% level; ** represents significance at the 5% level. Calculations of statistical significance done using demographically weighted data. We calculate standard errors using the "Huber-White Sandwich estimator" and population weights derived from "simple cell weighting" comparing the composition of the sample to the Current Population Survey's (CPS) Internet Use data. This weighting scheme follows Google's methodology.

Our results strongly confirm the central hypothesis that individuals prefer spending through the tax code to direct expenditures. In our baseline compari-

sons, respondents were about 10 percentage points more likely to support policy proposals when they were described as tax expenditures rather than as direct outlays. This held true across policy types: respondents were 10.5 percentage points more likely to support a subsidy for the disabled when it was phrased as a tax expenditure and 9.8 percentage points more likely to support a subsidy for the rental market when described in similar terms. Respondents also very strongly preferred the existing mortgage-interest deduction to an alternative policy in which the government directly matched a portion of homeowner mortgage payments. All of these results are statistically significant at the 1% level.

We had hypothesized that more information about how tax expenditures work would push some respondents to think about the underlying similarities between spending through the tax code and direct spending. For example, noting that "[i]f a family owes less than $1000, they get the rest in cash" probably underscores these similarities more than explaining that each family gets "a $1000 refundable tax credit." But surprisingly and notably, respondents were only slightly more likely to support a tax expenditure when we offered less information about it, and the difference was not statistically significant. The additional information on the mechanics of the tax expenditure did not appear to alert respondents to the functional equivalence of tax expenditures and direct outlays, at least not to a statistically significant extent.

Similarly, in our later survey, when we asked people whether they preferred a $1000 check or an equivalent tax credit, more information did not reduce the impact of the frame: when given more information, people were a bit more likely to conclude that the two options were equally good, but that difference was not statistically significant. On balance, we found these results surprising and believe that they have important implications for tax policy (discussed below). We do not find that using the term "tax expenditure" has any effect relative to simply describing the tax reduction.

We also found that respondents have a strong personal preference for receiving a check (rather than a tax reduction) from the government: that is, while individuals would prefer to see tax expenditures enacted as policy, they would prefer to receive direct outlays. This would be consistent with the hypothesis that tax expenditures seem cheaper: the other side of the coin is that they might seem less valuable.

Finally, and also consistent with the hypothesis that tax expenditures seem cheaper, we found that respondents were less likely to think that tax expenditures contributed substantially to the deficit. Specifically, 37% of respondents said that a $6 billion dollar direct spending program added "a lot" to the deficit, while only 32% of respondents said equivalent spending through the tax code would add as much.

## IV. DISCUSSION

The results presented in the previous Part support the idea that individuals prefer spending through the tax code to direct expenditures, and these results are consistent with the framing effect. The results also suggest that the framing effect holds true in a sample of survey respondents that are representative of the national Internet-using population, across a range of policy types, and when more information on tax expenditures is provided. Our evidence also suggests that the framing effect is at least partly driven by a perception that tax expenditures are cheaper from the point of view of the fisc. Likewise, individual respondents are less likely to view a tax break as equally valuable as a direct subsidy of the same size.

In this Part, we discuss our results more fully. In Part IV.A, we discuss some limitations and hypotheses that we hope will provide a basis for future research on why taxpayers prefer spending through the tax code. In Part IV.B, we discuss the implications of our results for tax law and policy.

### *A. Open Questions and Directions for Future Research*

Our results are limited in a few respects. Some of these are general problems of single-question Internet surveys: for example, our respondents did not spend hours thinking about these questions. The average response time was about twenty seconds.[112] While this response time in some ways limits inferences about respondents' "true preferences," as discussed below, it also perhaps captures how some voters actually perceive and evaluate these questions in the political marketplace. In the context of political advertisements and platforms, voters do not necessarily spend long periods of time puzzling over the details.[113]

Nonetheless, a few remaining issues strike us as especially interesting and relevant for further discussion and research. In this section, we focus on two possible explanations for why respondents seem to have a stubborn preference for tax expenditures. First, we discuss the well-known framing effect and why

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112. See *infra* Appendix for more details.

113. For a pessimistic discussion of how voters think, see Christopher H. Achen & Larry M. Bartels, It Feels Like We're Thinking: The Rationalizing Voter and Electoral Democracy, Presentation at the Annual Meeting of the American Political Science Association (Aug. 28, 2006), http://www.princeton.edu/csdp/events/AchenBartels011107/AchenBartels011107.pdf [http://perma.cc/3QLE-SCWU]. One might worry that the immediate reward that survey-takers get from finishing the survey (access to desired Internet content) may skew responses even compared to actual voters who make decisions under the hectic constraints of real life. However, this skew is probably not too severe given that GCS performed comparably to traditional surveys that lack this instant gratification feature.

it might exist here. Second, we discuss possible reasons for why a "rational citizen" or "rational voter" might prefer to channel spending programs through the tax code. While we are ultimately skeptical about these latter explanations, we think they are important to discuss alongside our results.

### 1. *Why Would a Framing Effect Exist?*

As described above,[114] there is a large literature in psychology, economics, and political science attempting to clarify how the framing of a decision affects responses. If one takes the view that a dollar spent inside the tax code is functionally equivalent to a dollar spent outside of it, then our results support the existence of a framing effect in this context.

Our results suggest that taxpayers prefer tax expenditures in part because they perceive them to be less expensive for the public fisc. Our respondents felt that direct spending programs increased the deficit more substantially than equivalent tax expenditures, *even though the explicit cost was the same.* The other side of this coin is that our respondents were more likely to prefer receiving a dollar of cash over a dollar of tax relief because they *perceive a dollar of cash to be more valuable*, even when we subtly emphasized that they are the same (for example, in Question 13).

This fits our intuitions—and the scholarly literature—about how citizens view the tax code. Providing a dollar of tax relief might be viewed as letting a person keep something she already possesses; some citizens might not even realize that they are in fact receiving a benefit from a government policy.[115] This taps into an intuitive and common—though, in many ways problematic—assumption about the nature of taxation and government, in which one's "pre-tax income" represents a natural state of justice that precedes government intervention. We think this view is somewhat misguided: after all, one's pre-tax income depends crucially on a system of public order that could not exist without government intervention (and, hence, taxation). But the view of pre-tax income as naturally just is commonly held.[116]

This theory has a subtle connection to the first studies of the framing effect, in which respondents preferred a triage policy that emphasized the lives saved

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114. *See supra* notes 47-54.

115. *See* Suzanne Mettler, *Reconstituting the Submerged State: The Challenges of Social Policy Reform in the Obama Era*, 8 PERSP. ON POL. 803, 809 (2010) (finding that many recipients of tax expenditures do not even realize that they are benefiting from a government program).

116. *See generally* LIAM MURPHY & THOMAS NAGEL, THE MYTH OF OWNERSHIP: TAXES AND JUSTICE 15 (2002) (describing and disputing this "everyday libertarianism" view); Lawrence Zelenak, *The Myth of Pretax Income*, 101 MICH. L. REV. 2261 (2003) (reviewing MURPHY & NAGEL, *supra*).

rather than lives lost, even if the totals were the same.[117] Likewise, we find it plausible that respondents prefer policies that let citizens keep their own hard-earned money to those that give citizens benefits from an amorphous government larder.

We think that this view likely explains much of the framing effect we witness here. We also think that teasing apart these explanations more directly would be a valuable direction for future research.

### 2. *Can Rational Voters Prefer Tax Expenditures?*

An assumption of our paper is that tax expenditures and direct outlays of equivalent size are, in fact, equivalent. But we do not (and cannot) eliminate every possible reason why a "rational" voter might prefer tax expenditures to direct outlays.

That said, we do attempt to rule out some of these alternative explanations. For example, it could be that voters view tax expenditures as more politically stable or permanent. Zelinsky, for example, raises this prospect when he notes that a tax expenditure, "if embedded in a permanent tax code, may be more secure politically than a cash payment, which must be appropriated annually."[118] While we think this is plausible, we are unconvinced that political stability explains a large proportion of the apparent framing effect. The results from our later waves of survey questions—which included a question emphasizing that both the tax expenditure and the direct outlay are "one-time" only—still display a robust framing effect.

Alternatively, it could be the case that voters and policymakers view spending through the tax system as less amenable to "regulatory capture" than a program administered by a specialist agency that interacts repeatedly with a specific part of the economy.[119] While we have not tested this hypothesis, we think it unlikely that aversion to regulatory capture explains a large proportion of the apparent framing effect. Details of tax and spending administration are not particularly salient to the public,[120] and we think it improbable that most taxpayers respond on the basis of a difference in program administration—much

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117. *See* Tversky & Kahneman, *supra* note 50.

118. Zelinsky, *supra* note 25, at 814.

119. *See generally* Edward A. Zelinsky, *James Madison and Public Choice at Gucci Gulch: A Procedural Defense of Tax Expenditures and Tax Institutions*, 102 YALE L.J. 1165 (1993) (arguing that there are valid procedural reasons related to interest group capture for promoting public spending through the tax code).

120. *See* HOWARD, *supra* note 21, at 3 ("[T]ax expenditures . . . are largely invisible to citizens, policy makers, and academics . . . .").

less a difference in the likelihood of capture based on the administrative scheme.

Finally, spending through the tax code might be preferred based on how voters evaluate a tradeoff between specialization and coordination. If voters think that certain spending activities are most efficiently clustered together in the tax system, then they will prefer tax expenditures over direct outlays.[121] However, given the simplicity of the programs that we proposed in our experiment, we find it unlikely that this last explanation plays a role in explaining our responses.[122]

We should note one element of our results that we think can be explained by rational behavior: the questions about mortgage interest showed the widest gap between the proposed direct spending program and existing spending routed through the Code, and there are many plausible explanations for these results. We felt it important to ask these questions because they deal with one of the best-known tax expenditures. Because the mortgage deduction is an existing program, the public's preference for keeping this policy might simply reflect a quite rational preference for the status quo—as opposed to switching to a new and very similar system and incurring related costs.[123] That said, the status quo bias cannot explain the entire preference for spending through the Code, since the framing effect is seen in responses to questions that propose hypothetical programs unrelated to the status quo.

### *B. Implications*

Our findings have several implications for tax law and the debate over tax expenditures, and we discuss these implications here.

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121. For more on these questions, see Weisbach & Nussim, *supra* note 24, at 961. Weisbach and Nussim argue that routing spending programs through the tax code makes sense when there is significant overlap between the information the IRS will need anyway and the information needed to administer the program in question—like, for example, the earned income tax credit. *Id.* at 1001. On the other hand, for other programs, like food stamps, there is little overlap in required information, and there might be other problems with IRS administration (for example, if payments need to be made more than once a year). *Id.* at 1006-07. Therefore, the program should be directly administered by an agency.

122. Indeed, Weisbach and Nussim argue that their theory of tax expenditures is novel and that Americans have likely not begun to consider broadly the specialization-versus-coordination tradeoff when considering spending through the Code. *See id.* at 957.

123. See the discussion of potential status quo bias *supra* Part I.D.2.

### 1. *Economic and Welfare Implications*

One set of implications concerns public welfare. Indeed, the framing effect raises a question that appears frequently in behavioral economics: how can we evaluate the welfare consequences of seemingly irrational public preferences?

If the arguments in Part IV.A.2 are correct, then taxpayers are not rational in the manner predicted by classical economics: they should not prefer a dollar of tax spending to a dollar of direct spending. Public support and public welfare should be the same in both cases – but we show that this does not hold true.

Might public welfare remain the same, even if public preferences are susceptible to the framing effect? Some argue that this might be the case. Weisbach and Nussim, for example, suggest that outcome equivalence implies welfare equivalence.[124] In other words, the welfare effect – that is, the effect on utility – of a $1000 check *should be the same* as the welfare effect of a $1000 tax credit, even if the public says it prefers one over the other.[125] But our results suggest that welfare equivalence does not necessarily hold true: people may react differently if they receive the same $1000 in a different manner (having their taxes reduced as opposed to paying the higher tax and receiving a $1000 check).

These results showing the framing effect are nonetheless hard to interpret. Indeed, some scholars have concluded that this kind of "equivalency framing," in which two identical options receive different levels of support depending on how they are described, renders preferences "uninterpretable."[126] Nonetheless, in studying the potential divergence between public welfare and public preferences, we contribute to the growing interest in interpreting the welfare implications of behavioral economics.[127]

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124. Weisbach & Nussim, *supra* note 24, at 958 ("Welfare is the same regardless of whether the program is formally part of the tax system or is located somewhere else in the government.").

125. *See id.*

126. For a rich discussion of this point, see Druckman, *supra* note 54, at 234 ("The implication is that equivalency framing effects render peoples' preferences uninterpretable. For example, when people prefer an economic program described as resulting in 95% employment but then oppose the same program when told that it will result in 5% unemployment, it is impossible to determine if they support or oppose the program (i.e., the preferences are irreconcilable).").

127. *See* B. Douglas Bernheim & Antonio Rangel, *Beyond Revealed Preference: Choice-Theoretic Foundations for Behavioral Welfare Economics*, 124 Q.J. ECON. 51 (2009); *see also* Jacob Goldin & Daniel Reck, Preference Identification Under Inconsistent Choice: A Reduced-Form Approach (Working Paper), http://ssrn.com/abstract=2417709 [http://perma.cc/RA9F-F2YW].

### 2. *Implications for Trends in Tax Law*

Perhaps more centrally, our results also have implications for a longstanding debate in tax law and policy: why have tax expenditures continued to increase, despite repeated efforts to expose and restrain their cost? Since Surrey's original writings on the subject, there has been a concerted effort at both the federal and state levels to make tax expenditures a more public part of the budgeting process – in other words, to make sure that policymakers are forced to publicly account for their spending through the tax code.[128] According to some recent critics, however, these efforts have failed to slow the growth of tax expenditures.[129]

There have been several prominent efforts to address this apparent paradox.[130] One line of analysis emphasizes that, but for the budgeting requirements, the growth rate of tax expenditures would have been "even more robust."[131] Another argues that efforts to publicize tax expenditures have so far been meek and ineffective. Edward Kleinbard, for example, has argued that the current federal tax expenditure budgeting scheme "is expressly designed to avoid leaving any visible imprint on the budget, and the programs so favored have not been forced to compete with other spending programs for scarce Government resources in other committees or among the members as a whole."[132] A third line of analysis, favored by Edward Zelinsky, argues that tax expenditure budgeting "legitimates tax expenditures and encourages a scramble [among interest groups] for parity in the form of comparable tax benefits."[133]

Our results have implications for the debate over why tax expenditures have continued to grow. In particular, we show that there is likely to be more demand for spending through the tax code even if more transparent "budgeting" or "disclosure" takes place. A major constraint on a legislator's willingness to enact new spending measures is the way in which new policies will be viewed by constituents – and, naturally, politicians running for elected office have incentives to propose policies and frame policies in a manner that appeals

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128. *See* Zelinsky, *supra* note 11, at 3-4.

129. *See generally* Zelinsky, *supra* note 11. Of course, it might be the case that the growth in tax expenditures would, but for tax expenditure budgets, be much worse. But it is difficult to imagine a kind of randomized experiment that could test this proposition.

130. The contours of this debate are outlined in Zelinsky, *supra* note 11.

131. J. Clifton Fleming Jr. & Robert J. Peroni, *Reinvigorating Tax Expenditure Analysis and Its International Dimension*, 27 VA. TAX REV. 437, 524 (2008).

132. *See* Edward D. Kleinbard, *The Congress Within the Congress: How Tax Expenditures Distort Our Budget and Our Political Processes*, 36 OHIO N.U. L. REV. 1, 29 (2010).

133. Zelinsky, *supra* note 11, at 5.

to the median voter. Our results suggest that constituents may view tax expenditures more positively than general outlays, and this in turn suggests that the scales might always be tilted in favor of spending measures that flow through the tax code.[134]

Spending through the tax code is what Chong and Druckman refer to as a "strong frame": a frame that "emerge[s] from public discussion as the best rationale[] for contending positions on the issue."[135] Since the "typical political strategy is to connect a proposal to a positive idea or value that is widely available in the population,"[136] we believe that the basic and stable public bias in favor of spending through the tax code helps to explain the enormous rise of tax expenditures.

### 3. *The Perverse Effects of Existing Tax Expenditure Budgets*

A powerful tradition of legal thought suggests that transparency is normally good (or, in Justice Brandeis's memorable phrase, that sunlight is the best disinfectant[137]). Likewise, the emphasis of the conversation on tax expenditures has been about making them more transparent through a process of tax expenditure budgeting.[138] The thought is simple: "[I]f policymakers, the media, and the general public lack information about tax expenditures, they cannot fully participate in decisions about how to allocate state resources."[139]

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134. This does not mean that we should expect that all direct spending will be routed through the tax code. For the reasons that Weisbach and Nussim outline, it may be impractical or very costly to route some programs, such as food stamps, through the tax code. Therefore, these programs are not administered as tax expenditures, even if they would be more popular if they were. *See* Weisbach & Nussim, *supra* note 24, at 997-1027 (explaining why the Earned Income Tax Credit, unlike food stamps, is best administered as a tax expenditure).

135. Chong & Druckman, *supra* note 54, at 116.

136. *Id.*

137. LOUIS D. BRANDEIS, *What Publicity Can Do*, *in* OTHER PEOPLE'S MONEY AND HOW THE BANKERS USE IT 92 (1914) ("Publicity is justly commended as a remedy for social and industrial diseases. Sunlight is said to be the best of disinfectants; electric light the most efficient policeman.").

138. *See, e.g.*, Jon Craig & William Allan, *Fiscal Transparency, Tax Expenditures, and Budget Processes: An International Perspective*, 94 PROC. ANN. CONF. ON TAX'N & MINUTES ANN. MEETING NAT'L TAX ASS'N 258 (2001); *see also* TAX EXPENDITURES—SHEDDING LIGHT ON GOVERNMENT SPENDING THROUGH THE TAX SYSTEM (Hana Polackova Brixi et al. eds., 2004) (describing lessons from developed and transition countries for the transparent use of tax expenditures).

139. JASON LEVITIS ET AL., CTR. ON BUDGET & POLICY PRIORITIES, PROMOTING STATE BUDGET ACCOUNTABILITY THROUGH TAX EXPENDITURE REPORTING 1 (2009).

The question of when and how to give the public information about tax expenditures is very much alive. Tax transparency is a perennial subject of the policy debate,[140] and the tax expenditure budgets are becoming increasingly common. The federal government is required to produce an annual tax expenditure report, as are most states.[141] While tax expenditures still typically receive less scrutiny than direct spending,[142] the trend continues to favor more disclosure about tax expenditures. In some states, like Connecticut[143] and Minnesota,[144] the reporting requirements and publications are extensive. Furthermore, as of 2011, only four states did not require some form of tax expenditure report, falling from nine in 2009.[145]

This trend toward tax expenditure budgeting and related transparency is usually viewed as beneficial. As the Joint Committee on Taxation recently put it, "[t]ax expenditure analysis can help both policymakers and the public to understand the actual size of government, the uses to which government resources are put, and the tax and economic policy consequences that follow from the implicit or explicit choices made in fashioning legislation."[146] Yet despite the enthusiasm for tax expenditure disclosure, the growth of tax spending has eclipsed the growth of government spending as a whole.[147]

Our results suggest that recent efforts to expose the true costs of tax expenditures can be ineffective and perhaps even counterproductive. In broad

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140. *See, e.g.*, Kenneth W. Gideon, *Assessing the Income Tax: Transparency, Simplicity, Fairness*, 25 OHIO N.U. L. REV. 101, 104 (1999) ("The efforts to date are not encouraging from the standpoint of transparency.").

141. *See supra* notes 10–11 and accompanying text.

142. *See* LEVITIS ET AL., *supra* note 139, at 1 ("States typically require extensive documentation of how much direct spending they do each year, and their budget processes entail evaluation of each item. Tax expenditures usually receive far less scrutiny.").

143. *See* CONN. GEN. STAT. ANN. § 12-7b(e) (West 2014); *see also* Office of Fiscal Analysis,, *Connecticut Tax Expenditure Report*, CONN. GEN. ASSEMBLY (2012), http://www.cga.ct.gov/ofa/Documents/year/TER/2012TER-20120410_Tax%20Expenditure%20Report%20FY%2012%20Revised.pdf [http://perma.cc/C5VL-CJDH].

144. *See* MINN. STAT. ANN. § 270C.11 (West 2014); *see also* Tax Research Div.,, *State of Minnesota Tax Expenditure Budget: Fiscal Years 2012-2015*, MINN. DEP'T REVENUE (2012), http://www.revenue.state.mn.us/research_stats/research_reports/2012/2012_tax_expenditure_links.pdf [http://perma.cc/45VX-EMAZ].

145. *See* Leachman, Grundman & Johnson, *supra* note 11, at 38-44. For the 2009 data, see Michael Leachman, Nicholas Johnson & Jeremy Koulish, *Promoting State Budget Accountability Through Tax Expenditure Reporting*, CTR. ON BUDGET & POLICY PRIORITIES 3 (Apr. 2009), http://www.cbpp.org/files/4-9-09sfp.pdf [http://perma.cc/5NU9-GPN8].

146. STAFF OF THE J. COMM. ON TAXATION, 113TH CONG., ESTIMATES OF FED. TAX EXPENDITURES FOR FISCAL YEARS 2012-2017, at 1 (Comm. Print 2013).

147. *See generally The Budget and Economic Outlook: 2014-2024*, *supra* note 8 (discussing the growth rate of both tax expenditures and total government expenditures).

strokes, existing efforts to disclose tax expenditures might have two effects. First, they might make the public more aware of the general equivalence between taxing and spending programs, and perhaps as intended, educate the public on the true costs of tax expenditures. Second, however, efforts to disclose tax expenditures might make the public think more about how the budget is organized and thereby normalize the broad range of policies that are organized through the tax code. This normalization in turn may make it seem perfectly appropriate to use tax expenditures to implement a new social benefit scheme in the future, whereas, without the additional information, tax expenditures seemed unusual and only appropriate in specific areas.[148]

If such normalization occurs, we should expect it to increase both the relative spending on tax expenditures and total spending. Relative spending increases because legislatures, responding to public preferences, substitute spending through the tax code for direct spending. Absolute spending increases because the public thinks spending through the tax code is spending on the cheap.[149] Therefore, if the public consistently prefers spending through the tax code—even if the public has more information about the equivalence between that spending and direct outlays—providing more information about the size and prevalence of tax expenditures might actually make tax expenditures more popular.

Our results do suggest that the framing effect is relatively robust to additional information—that is, in our survey the framing effect persisted even when we provided additional information. People's opinions did not change when they were given clear information about the mechanics of the tax expenditure. Even when respondents were given *explicit* information about the cost of the program—exactly the type of information that they would see in a tax expenditure budget—they continued to think that tax expenditures should be classified as less expensive.[150]

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148. This idea is similar to Zelinsky's point that tax expenditure budgeting might counterproductively "encourage[] a scramble [among interest groups] for parity in the form of comparable tax benefits." Zelinsky, *supra* note 11, at 5. But instead of emphasizing the desires of special interests, we suggest that budgeting might also affect the public directly by making citizens aware of the many forms that tax expenditures can take. Likewise, while Haselswerdt and Bartels do not talk about tax expenditure budgeting, this idea also reflects their belief that when people are more familiar with government support coming through tax expenditures in a given policy area, they are more likely to support future use of tax expenditures in that area. Haselswerdt & Bartels, *supra* note 42 (manuscript at 6-7).

149. This idea follows the well-known income and substitution effects in microeconomic theory. For a discussion of these effects, see ROBERT E. HALL & MARC LIEBERMAN, MICROECONOMICS: PRINCIPLES AND APPLICATIONS 161-65 (6th ed. 2013).

150. In addition, we also find evidence that, despite widespread tax-expenditure budgeting, the term has little meaning to the public.

More information might help. People who spend a lot of time thinking about the equivalence of tax expenditures and direct outlays – like tax professors and other well-informed tax mavens – are probably less likely to care about the frame. But what our results do show is that the type of information typically disclosed in tax expenditure budgets does not have much effect on the public's preference for tax expenditures. This isn't necessarily a bad thing; it might simply mean that the public is getting more of what it wants and that people are happier as a result. But the public's stubborn preference for tax breaks does suggest that if the modern-day Surreys want to press their campaign against tax expenditures, they might want to consider a different approach.

In some ways, the notion that tax expenditure budgets might normalize tax expenditures should not be surprising: it connects to a growing literature that is skeptical of whether mandatory disclosure will always help.[151] Disclosing CEO salaries, for example – a step intended to shame companies away from excessive compensation packages and curb agency problems – might actually increase the overall level of CEO pay, since it makes price competition for CEOs all the more explicit, and CEOs likely want to be paid more than average.[152] Likewise, informing employees of their coworkers' salaries might reduce job satisfaction, since no one wants to get paid less than the median employee.[153] The transparency of medical prices could, in some instances, increase medical costs, since no one wants to pay for a cheaper than average surgeon.[154] Likewise, publicly documenting the popularity of tax expenditures might have the effect of making tax expenditures more popular.

### 4. *Implications for Tax Complexity*

The public's stubborn preference for tax expenditures may also help explain another much-derided feature of tax policy that has frustrated many scholars: tax complexity. A public bias in favor of spending through the tax

151. *See, e.g.*, Justin Fox, *Government Transparency and Policymaking*, 131 PUB. CHOICE 23 (2007).

152. Charles M. Elson & Craig K. Ferrere, *Executive Superstars, Peer Groups, and Overcompensation: Cause, Effect, and Solution*, 38 J. CORP. L. 487 (2013); *see also* James Surowiecki, *Open Season*, NEW YORKER, Oct. 21, 2013, http://www.newyorker.com/talk/financial/2013/10/21/131021ta_talk_surowiecki [http://perma.cc/8WK2-GMFQ] ("[T]he drive for transparency has actually helped fuel the spiraling salaries [of executives].").

153. *See* David Card et al., *Inequality at Work: The Effect of Peer Salaries on Job Satisfaction*, 102 AM. ECON. REV. 2981 (2012).

154. Peter Ubel, *How Price Transparency Could End Up Increasing Health-Care Costs*, ATLANTIC (Apr. 9, 2013, 7:55 AM), http://www.theatlantic.com/health/archive/2013/04/how-price-transparency-could-end-up-increasing-health-care-costs/274534 [http://perma.cc/Y979-BXKE].

code is an overlooked explanation for why the tax code has become so complex. Typical explanations for tax complexity focus on interest group pressure, tax fairness, and tax fraud reduction.[155] But a robust public predisposition for spending through the tax code—combined with an electoral system in which politicians are motivated to pursue policies and framing that appeal to the median voter—also adds to the confusion of the tax system.

When ordinary taxpayers confront their taxes, the most complex items they deal with are generally tax expenditures. For salaried or wage employees, calculating gross income is relatively easy: enter your W-2 and, if you have any investments, take the income figures from the 1099 provided by your broker or financial institution. On the other hand, calculating deductions and credits is much trickier. A few relevant deductions are expenses related to earning taxable income.[156] But the rest are tax expenditures: the mortgage interest deduction, deduction for state and local taxes, mortgage insurance deduction, the EITC, the adoption credit, the child tax credit, the "astonishingly complex credits designed to offset the cost of college tuition,"[157] the charitable donation deduction, retirement accounts—the list goes on. The IRS estimates that the average individual spends eight hours on their taxes each year, between record keeping and actually filing.[158] We think it is likely that the vast majority of this time is spent dealing with eligibility for tax expenditures.[159] Taxpayers' preference for spending through the tax code is thus part of what drives 84% of Americans to call the federal tax system complex.[160]

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155. *See, e.g.*, Deborah L. Paul, *The Sources of Tax Complexity: How Much Simplicity Can Fundamental Tax Reform Achieve?*, 76 N.C. L. REV. 151 (1997).

156. For example, expenses incurred while moving to a new job.

157. MICHAEL J. GRAETZ & DEBORAH H. SCHENK, FEDERAL INCOME TAXATION: PRINCIPLES AND POLICIES 429 (6th ed. 2008).

158. *See Notices*, IRS, http://www.irs.gov/instructions/i1040/ar03.html [http://perma.cc/3KKG-REF5].

159. The standard deduction is designed to insulate many taxpayers from the hassles of dealing with these issues, but even non-itemizers must deal with credits of various kinds and the rules surrounding retirement accounts if they have one.

160. *See Topline Results for Tax Foundation's 2009 Survey of U.S. Attitudes on Taxes, Government Spending and Wealth Distribution*, TAX FOUND. (Apr. 8, 2009), http://taxfoundation.org/article/topline-results-tax-foundations-2009-survey-us-attitudes-taxes-government-spending-and-wealth [http://perma.cc/BZ5U-CTQ7]. Of course, even if the tax expenditures were instead direct outlays, a different government agency would need to determine eligibility and administer them, perhaps leading to equal aggravation for citizens.

## CONCLUSION

Tax expenditures are an important part of government spending. As noted above, the CBO estimates that federal tax expenditures will be $1.4 trillion in the 2014 fiscal year.[161] If total spending is higher because (all else being equal) citizens have a persistent and systematic bias in favor of spending through the tax code, then billions of dollars are at stake. For example, if tax expenditures are a mere 2% higher because of greater public support for spending through the Code, then this $28 billion would be as much money as the President's proposed energy budget (including clean energy initiatives – $28.4 billion)[162] or the entire budget of the DOJ (including federal prisons and the FBI – $27 billion).[163]

Are citizens competent to make these important decisions of tax policy and public spending? A relatively uncontroversial feature of democratic theory is that the government should be responsive to citizen preferences. But this suggests an analogous conclusion, discussed at some length in the political science literature: in order for government to be responsive to citizen preferences, citizens must be capable of *forming* preferences.[164]

What does it mean for citizens to be capable of forming competent preferences? Some political scientists argue that competent preferences "should not be based on arbitrary aspects of how an issue or problem is described"[165] – a criterion that resembles the well-known "independence of irrelevant alternatives" condition in the social choice literature.[166] But when framing effects cause the public to respond differently to equivalent proposals, the democratic competence of the citizenry may be thrown into doubt.[167]

This problem is different from one that is often raised in analyses of the public's relationship to the tax system. Often, the emphasis is on public *ignorance* of the mechanics of tax administration.[168] But the framing effect creates a

161. *The Budget and Economic Outlook: 2014-2024*, *supra* note 8, at 90.

162. Exec. Office of the President, *Budget of the U.S. Government, Fiscal Year 2014*, OFF. MGMT. & BUDGET 85 (2013), http://www.whitehouse.gov/sites/default/files/omb/budget/fy2014/assets/budget.pdf [http://perma.cc/62SC-VX68].

163. *Id.* at 119.

164. *See* Druckman *supra* note 54, at 232-33.

165. *Id.* at 232.

166. *See* KENNETH J. ARROW, SOCIAL CHOICE AND INDIVIDUAL VALUES 26 (2d ed. 1970).

167. *See* Chong & Druckman, *supra* note 54, at 121-22.

168. Sheffrin, for instance, writes that the "tax system is one of our most complex social contrivances and, realistically, one can only expect there to be limited knowledge about it." Sheffrin, *supra* note 30, at 311.

different worry. It suggests that even if the public were much more fully aware of how the tax system works, public preferences would still be susceptible to "arbitrary" changes in wording and frames.

Frames are, of course, an inevitable feature of life. But they are an underappreciated part of the ways in which tax law and policy have been shaped over the last several decades. Much of academic and policy focus has been on publicizing the details and cost of our tax policy choices. But our analysis here suggests this emphasis is incomplete. However worthy those efforts may be, they run up against the stable and enduring public bias in favor of pursuing policies through the tax code.

## APPENDIX

As discussed in the body of the Note, Google Consumer Survey (GCS) is a "survey wall" that pops up when users want to access premium content, much like a paywall. GCS is used by "130 publishers in the U.S." including "[t]hree of the top 10 newspapers, seven of the top 15 . . . sites like the New York Daily News, Christian Science Monitor, and . . . the LA Times."[169] The network also includes small news sites like Lima, Ohio News and the Texas Tribune as well as Pandora and YouTube, and various other arts and entertainment sites.[170]

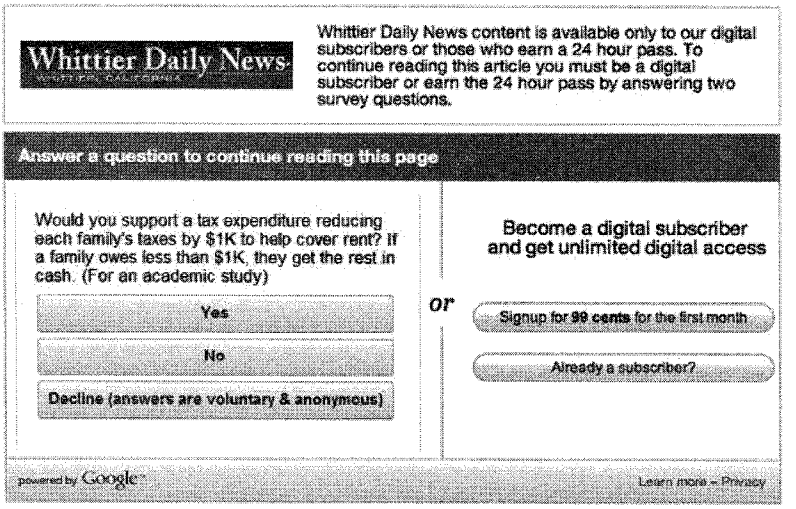
Visitors to these sites cannot opt into the surveys. Instead, they are solicited using a model that is designed to ensure a representative sample. The algorithm over-samples groups that are currently underrepresented in the sample. That is, if, say, women aged 18-24 from the South were underrepresented in the sample relative to the portion of the underlying Internet-using population they make up (as measured by the Census' Current Population Survey), then that group would receive proportionally more survey requests.[171] This is known as stratified sampling, but GCS's ability to receive responses in real time makes it different from traditional stratified methods where the stratification (that is, the issue of which groups are over sampled) is set before the survey begins.

The screenshot on the following page, displaying Question 10, shows how one of our questions would show up. The order in which the answers are displayed is randomized (that is, the "Yes" option will show up after "No" as often as before "No").

169. Steve Cooper, *Q&A with Paul McDonald: Co-Creator of Google Consumer Surveys*, FORBES, Mar. 29, 2013, http://www.forbes.com/sites/stevecooper/2013/03/29/qa-with-paul-mcdonald-co-creator-of-google-consumer-surveys [http://perma.cc/485U-BNWD].

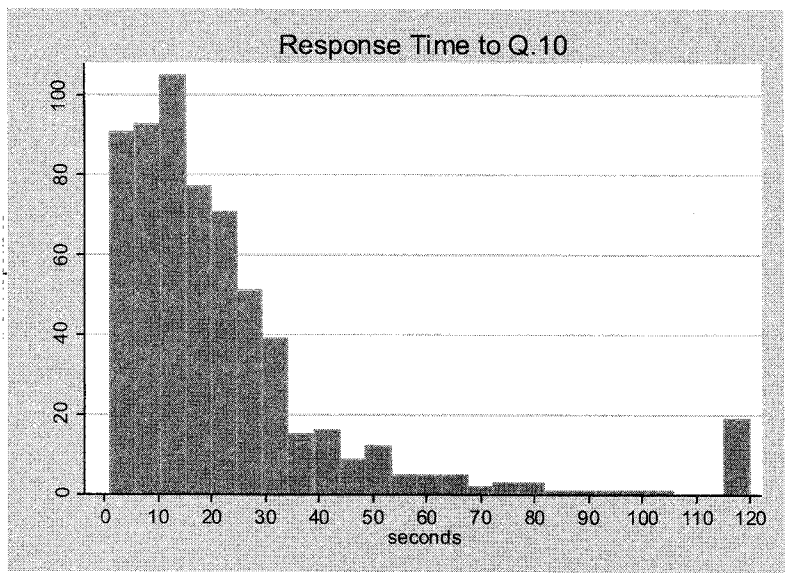
170. Keeter & Christian, *supra* note 91, at 3.

171. *See id.*; McDonald et al., *supra* note 78, at 3-4.




Taking Question 10 as an example, the image below shows the distribution of how long participants took to respond to the question.

On average, participants took thirty-six seconds. Excluding participants who took more than two minutes to respond, the average response time was twenty seconds. There does not appear to be any binding upper time limit.




One respondent took fifty-four minutes to respond (though we doubt that he was lost in thought about tax expenditures the whole time).

