

Fear and Greed in Tax Policy: A Qualitative Research Agenda

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An intriguing and underexplored set of issues surrounds the concept of “tax aversion,” the notion that people find taxes more

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painful than other categories of expenses and losses.¹ To the extent a phenomenon of tax aversion exists, it imposes several kinds of costs on society. If people are averse to taxes for reasons above and beyond the financial losses the taxes represent, they will likely spend more time and money on tax avoidance than a purely economic analysis predicts, generating additional deadweight losses for society.² Even when people do not pursue avoidance at elevated levels, tax aversion increases the disutility associated with the payment of the tax. Not only is this costly in itself,³ but it would also be expected to impact compliance rates and enforcement costs by raising the perceived benefits of tax evasion relative to the severity and probability of punishment.⁴

1. See Edward J. McCaffery, *Cognitive Theory and Tax*, 41 UCLA L. REV. 1861, 1878 (1994) (“[T]here may be a phenomenon of ‘tax aversion,’ akin to but distinct from loss aversion, whereby individuals attach disproportionate disutility to government extractions perceived or labeled as ‘taxes.’”). Despite the intuitive resonance of this concept, we have uncovered only a handful of studies that use the term “tax aversion.” In those limited instances, authors typically employed the phrase “tax aversion” or “tax avoision” to indicate that their analysis focused on the overall, added costs and impacts of both illegal “tax evasion” and legal “tax avoidance,” without focusing on the concept of disproportionate disutility that we examine here. See, e.g., Amy Freedman, *Benefiting from Tax Aversion*, FIN. SERV. WK. Oct. 15, 1990, at 27; Roger N. Waud, *Tax Aversion, Optimal Tax Rates, and Indexation*, 43 PUB. FIN. 310 (1988); Hans Geeroms & Hendrik Wilmots, *An Empirical Model of Tax Evasion and Tax Avoidance*, 40 PUB. FIN. 190, 203 (1985) (using “avoision” term); Rodney Cross & G.K. Shaw, *On the Economics of Tax Aversion*, 37 PUB. FIN. 36 (1982). The fuller sense in which we mean to use the term “tax aversion” is perhaps best captured by the idea of “emotional hazard” presented as a possible “new source of efficiency cost of taxation” in Ronald Bosman & Frans van Winden, *Emotional Hazard in a Power-to-Take Experiment*, 112 ECON. J. 147, 149 (2002). See *infra* notes 41-47 and accompanying text (discussing the experimental results presented by Bosman & van Winden).

2. HARVEY S. ROSEN, PUBLIC FINANCE 282 (6th ed. 2002) (defining “excess burden” as “a loss of welfare above and beyond the tax revenues collected,” and noting that the phrases “welfare cost” and “deadweight loss” are also used to denote this cost); David Weisbach, *Line-Drawing, Doctrine, and Efficiency in the Tax Law*, 84 CORNELL L. REV. 1627, 1650-51 (1999) (analyzing examples of deadweight loss or excess burden in tax transactions).

3. We will later pursue the possibility that disutility associated with taxes might actually play a functional role in spurring political action. See Part V.A, *infra*. Absent such a countervailing instrumental role, disutility represents a social loss.

4. See Gary S. Becker, *Crime and Punishment: An Economic Approach*, 76 J. POL. ECON. 169, 183-84 (1968) (presenting an economic model in which the “price” of crime is a function of the probability and severity of punishment); Dan M. Kahan, *Trust, Collective Action, and Law*, 81 B.U. L. REV. 333, 340 & n.28 (2001) (applying Becker’s analysis that “individuals will evade when the expected gain from doing so exceeds the expected penalty” to tax evasion); John S. Carroll, *Taxation: Compliance with Federal Personal Income Tax Laws*, in HANDBOOK OF PSYCHOLOGY AND LAW 507, 510 (D.K. Kagehiro & W.S. Laufer eds., 1992)

While there is a general consensus that most people dislike paying taxes,⁵ more empirical data is needed to determine how, and to what extent, tax aversion plays a role in taxpayer behavior. If tax aversion occurs at significant levels, it becomes important to isolate and explore the constitutive elements of that aversion. A better understanding of the causes and components of tax aversion could spur useful innovation in tax design. In this paper, we survey and mine existing bodies of empirical work for the insights they might bring to bear on these questions, while constructing a qualitative research agenda that begins to fill the remaining gaps. To focus our inquiry, we concentrate primarily on the federal income tax.

This analysis proceeds in five parts. In Part I, we discuss the phenomenon of tax aversion and consider the need for further study to pinpoint its dimensions, constituent elements, and effects. In Part II, we introduce and discuss some of the experimental literature involving public goods games while working through some stylized examples. Cooperation can break down in experimental group contribution settings due to factors like fear and greed—the fear that others will not contribute, and the greedy desire to free ride on the contributions of others.⁶ Other factors, like repeat play and social proximity of the players, can apparently buffer or counteract these negative emotions and help to sustain cooperation.⁷ Legal scholars

(explaining this “standard economic model” as applied to tax compliance); Michael G. Allingham & Agnar Sandmo, *Income Tax Evasion: A Theoretical Analysis*, 1 J. Pub. Econ. 323 (1972) (formulating static and dynamic economic models for analyzing individual taxpayer decisions on whether and how much to evade taxation).

5. See, e.g., Frank Newport, *Americans Suffer from Negative Mental Attitude While Doing Taxes*, GALLUP POLL MONTHLY, April 2001, at 43, 44 (reporting that 66% of those interviewed in a recent survey indicated that they either “dislike” or “hate” paying taxes, and that 65% believed the federal income tax they had to pay was “too high”).

6. We posit that perhaps more important than either fear or greed in isolation is the fear of greed—the concern that the greed of others will go unpunished and that one’s own contributions will turn one into a “sucker.” See *infra* notes 77-83 and accompanying text.

7. Claudia Keser & Frans van Winden, *Conditional Cooperation and Voluntary Contributions to Public Goods*, 102 SCANDINAVIAN J. ECON. 23, 31 (2000), http://papers.ssrn.com/sol3/delivery.cfm/SSRN_ID245568_code001011130.pdf?abstractid=245568 (concluding, based on public goods experiments, that the “tendency to cooperate is greater when subjects anticipate prolonged interaction with others as members of a group”); GARY CHARNESS ET AL., SOCIAL DISTANCE AND RECIPROCITY: THE INTERNET VS. THE LABORATORY 1-4, 23 (Sept. 13, 2001) (Working Paper Series, available on Social Science Research Network), at http://papers.ssrn.com/sol3/delivery.cfm/SSRN_ID312141_code020515560.pdf?

are beginning to recognize that these studies could have important implications for tax policy,⁸ but the hard work remains of translating the insights of these analyses into the context of a coercive tax system.

In Part III, we introduce some additional difficulties present in real-world taxpaying situations. Some of these difficulties relate to the contested ends of taxation, including intentional redistribution, while others relate to the structure of the tax system. In Part IV, we turn to the anthropological and sociological literature for a richer and deeper understanding of the notion of reciprocity. Such an understanding helps us see whether and how to address the sources of tax aversion within a real-world taxation system. Some of the interactive features that mediate concerns about free riding and that sustain cooperation in cohesive small-group settings are necessarily absent in the federal taxation context. Yet, it still may be possible to make use of certain features conducive to cooperation, or approximations thereof, in the federal taxation context.

In Part V, we discuss some possible ways of testing, refining, and applying empirical insights relating to tax aversion in the federal taxation context. Two features present in many real-world reciprocal contexts are the transparency of reciprocal moves and the ability of parties to communicate their preferences through the granting or withholding of contributions. We sketch a change in the interface encountered by the taxpayer that attempts to incorporate these features without otherwise effecting a substantive change in tax law. We propose this idea as a possible experimental design model to advance innovation in tax design and lay the groundwork for further experimentation in, and dialogue about, tax design.

abstracted =312141; ARMIN FALK ET AL., INFORMAL SANCTIONS 31-32 (U. of Zurich, Inst. for Empirical Research in Econ., Working Paper No. 59, 2000), http://papers.ssrn.com/sol3/delivery.cfm/SSRN_ID245568_code001011130.pdf?abstractid=245568 (testing for reciprocal behavior in Internet and classroom laboratory experiments and concluding that reciprocity decreases with increased social distance but is not eliminated).

8. See, e.g., Kahan, *supra* note 4, at 340-44 (noting relevance of public goods experiments for tax-enforcement policy).

I. MAPPING TAX AVERSION

It borders on the insipid to observe that most people dislike paying taxes. Perhaps for this reason, virtually no systematic work has been undertaken to gauge whether taxes are more aversive than other sorts of costs or losses. To be sure, a great deal of study has focused on questions of tax compliance.⁹ Additional studies have examined how taxpaying might be made to feel fairer or less burdensome to taxpayers.¹⁰ Notably, scholars have observed that reactions to survey questions about taxation are mutable and depend on the framing of the question¹¹—a fact that problematizes the study of taxpayer attitudes, even as it provides clues to the nature and tractability of tax aversion. While this body of existing research concerning compliance burdens and perceptions of equity touches on and implicates instances of tax aversion, we think the phenomenon of aversion warrants a more direct exploration.

A functional definition of the kind of tax aversion we wish to investigate is the amount by which one's aversion to a tax exceeds the economic cost of the tax. A symptom of this kind of tax aversion would be a willingness to expend more on tax avoidance (or risk more through tax evasion)¹² than is warranted by the economic cost

9. E.g., ALAN LEWIS, *THE PSYCHOLOGY OF TAXATION* 123-87 (1982); *TAX EVASION: AN EXPERIMENTAL APPROACH* (Paul Webley et al. eds., 1991) [hereinafter *TAX EVASION*]; *WHY PEOPLE PAY TAXES: TAX COMPLIANCE AND ENFORCEMENT* (Joel Slemrod ed., 1992); Carroll, *supra* note 4; John T. Scholz & Neil Pinney, *Duty, Fear, and Tax Compliance: The Heuristic Basis of Citizenship Behavior*, 39 *AM. J. POL. SCI.* 490 (1995).

10. E.g., Gregory A. Carnes & Andrew D. Cuccia, *An Analysis of the Effect of Tax Complexity and Its Perceived Justification on Equity Judgments*, 18 *J. AM. TAX'N ASS'N* 40 (1996); RONALD G. CUMMINGS ET AL., *CROSS-CULTURAL COMPARISONS OF TAX COMPLIANCE BEHAVIOR* (Ga. State Univ., Int'l Studies Program Series, Working Paper No. 01-3, 2001), available at <http://isp-aysps.gsu.edu/papers/ispwp0103.pdf>; Thomas M. Porcano & Charles E. Price, *Some Evidence on the Association Between Judgment Criteria and Fairness Perceptions*, 4 *ADVANCES IN TAX'N* 183 (1992); Martha L. Wartick, *Legislative Justification and the Perceived Fairness of Tax Law Changes: A Referent Cognitions Theory Approach*, 16 *J. AM. TAX'N ASS'N* 106 (1994).

11. E.g., LEWIS, *supra* note 9, at 47-49 & tbl.4.2 (discussing notorious malleability of survey responses and presenting table entitled "How to Record the Fiscal Preferences You Want from Attitude Surveys and Public Opinion Polls").

12. *TAX EVASION*, *supra* note 9, at 2 (distinguishing tax avoidance, which involves legal efforts to reduce tax liability, from tax evasion, which involves illegal efforts to reduce taxes). For additional studies of issues in tax avoidance and evasion, see, for example, BRUNO S. FREY & LARS P. FELD, *DETERRENCE AND MORALE IN TAXATION: AN EMPIRICAL ANALYSIS* (Ctr. for

of the tax. A substantial body of experimental literature indicates that people are willing to incur positive costs to keep others from getting away with conduct they perceive as unfair,¹³ and we believe that a similar dynamic might operate to heighten avoidance and evasion in the tax context.

An example will illustrate the point. Imagine that Borg can reduce his tax bill either legally (by consuming tax deductible items) or illegally (by fabricating deductions).¹⁴ He can also simply pay the tax. In making the decision about avoidance, he should compare the tax-discounted price of the deductible item in question with the utility it generates for him. For example, if he is in a 36% marginal tax bracket and contemplates attending a conference that costs \$1000 in real dollars (and if we further assume that his tax situation allows the full deduction of this amount), he should rationally attend the conference only if attending is worth more than \$640 to him.¹⁵ If he subjectively values attending the conference at just \$600, but attends because he wants to take the tax deduction, this suggests either irrationality, innumeracy, or an additional factor that makes taxes more painful than the dollar figure suggests (or, alternatively, that makes a tax savings of \$360 more attractive to him than that dollar figure indicates). We call that additional factor “tax aversion.”

Do people actually take tax deductions beyond the economically justified point or otherwise engage in nonoptimizing behavior with regard to tax avoidance? Some have intuited that this indeed occurs, and anecdotal evidence supports the proposition.¹⁶ For example,

Econ. Studies & Ifo Inst. for Econ. Research, Working Paper No. 706, 2002), http://papers.ssrn.com/sol3/delivery.cfm/SSRN_ID341380_code021021590.pdf?abstractid=341380; J. Slemrod & S. Yitzhaki, *Tax Avoidance, Evasion and Administration*, in 3 HANDBOOK OF PUBLIC ECONOMICS 1423-70 (A.J. Auerbach & M. Feldstein eds., 2002); J. Andreoni et al., *Tax Compliance*, 36 J. ECON. LITERATURE 818 (1998).

13. *See infra* notes 37-47 and accompanying text (discussing studies involving dictator, ultimatum, and power-to-take games).

14. *See supra* notes 9, 12 (citing studies of compliance, evasion and avoidance).

15. We use the thirty-six percent marginal tax rate here for illustrative purposes only; actual marginal tax rates have been changing as a result of recent legislation. *See* I.R.C. § 1(i). Other provisions of the Internal Revenue Code address the availability of deductions. *See, e.g.*, I.R.C. § 67(a) (establishing a floor for certain itemized deductions); I.R.C. § 68 (setting limits on allowable itemized deductions for taxpayers above a certain income). For purposes of this simple illustration, we ignore the complications associated with those limits.

16. *E.g.*, McCaffery, *supra* note 1, at 1914-15 (suggesting people may consume

Texas has an annual “sales tax holiday”—a few days each August during which shoppers may purchase selected items free of sales tax. News articles covering the event note the huge crowds that descend upon stores to take advantage of this opportunity and the fact that some individuals make rather extraordinary expenditures in connection with it.¹⁷ The savings are not large, with a sales tax of 8.25% in cities such as Austin, and some commentators quite reasonably speculate that merchants do not offer prices as low as they might in the absence of the tax break. However, monetary savings may not be the only factor motivating the behavior. As one shopper articulated, “there’s something to be said for finally beating the government at something.”¹⁸

However, we know of no empirical study of such manifestations of tax aversion.¹⁹ Designing such a study would not be easy. For example, consider the difficulties that would be involved in attempting to measure whether an effective price change resulting from a change in tax treatment had a larger or smaller impact on consumer demand than a similar price change resulting from market

deductible items beyond the point of optimality); *id.* at 1915 (making a similar point regarding the use of unprofitable tax shelters).

17. Rod Kurtz, *A Buyers’ Bonanza*, AUSTIN AMERICAN-STATESMAN at A1, A10 (Aug. 3, 2002) (describing expenditures such as staying in hotels in order to be closer to the stores when they open).

18. *Id.* at A10 (quoting Pamela Krisan, a shopper taking advantage of the Texas “tax holiday”). Of course, one might argue that attitudes towards taxation in Texas, a state that has long resisted enacting an income tax, do not necessarily typify those that prevail nationwide. However, organized events such as sales tax holidays and time-limited amnesty offers for taxpayers incorporate the characteristics of “inversion” or “reversal” rituals that anthropologists have found to be a frequent component of secular rituals within stratified societies. Such inversion rituals serve to relax normal societal and legal rules within a bounded context and time period. By relaxing, or reversing, the existing legal rules within such limited frameworks, sales tax holidays and amnesties can serve to reinforce and emphasize the applicability and enforceability of those rules at all other times. VICTOR TURNER, *THE RITUAL PROCESS* 172-78 (1995); Evon Z. Vogt, *Rituals of Reversal as a Means of Rewiring Social Structure*, in *THE REALM OF THE EXTRA-HUMAN: IDEAS AND ACTION* 201-11 (Agehananda Bharati ed., 1976); see also Joshua D. Rosenberg, *The Psychology of Taxes: Why They Drive Us Crazy and How We Can Make Them Sane*, 16 VA. TAX REV. 155, 219 (1996) (finding tax amnesty effective when “taxpayers perceive that the amnesty will be followed immediately by substantially increased enforcement of the law”).

19. In a 1994 article, Edward McCaffery noted this lack of empirical work on the question of excessive avoidance behaviors: “I am aware of no study that pins this particular phenomenon down. Thus, this discussion remains anecdotal for now.” McCaffery, *supra* note 1, at 1915.

forces.²⁰ The unavailability of existing data suitable for these purposes and the difficulty in formulating a method for successfully collecting such data outside of a controlled laboratory experiment present daunting challenges. Nevertheless, beginning to imagine what such a study might look like can help set the stage for innovative research in this area.

Another possible manifestation of tax aversion might be increased evasion. Recall that Borg has the ability to fabricate deductions rather than actually consume deductible items. In deciding whether or not to fabricate deductions, many factors could play a role, but on a strict economic analysis we imagine that Borg will compare the expected cost of fabricating the deduction (a product of the probability of detection multiplied by the costs of defending himself and paying penalties for this sort of tax evasion) with the expected tax benefit to be derived from the fabrication.²¹ If Borg fabricates a deduction for \$1,000, it yields him \$360 in tax benefits. To be “worth it” for Borg to break the law, the expected value of punishment for violating the law must be less than \$360. If Borg runs a one percent chance of being caught and expects to suffer defense and punishment costs of \$40,000 if caught, the expected value of such costs equals \$400.²²

20. For an overview of some of the methodological considerations and complications associated with the design of empirical studies, see E. Allan Lind, John E. Shapard, & Joe Shelby Cecil, *Appendix B: Methods for Empirical Evaluation of Innovations in the Justice System*, in EXPERIMENTATION IN THE LAW: REPORT OF THE FEDERAL JUDICIAL CENTER ADVISORY COMMITTEE ON EXPERIMENTATION IN THE LAW 81, 88-112 (1981).

21. See ROSEN, *supra* note 2, at 326-27 (presenting a more detailed account of an individual's tax evasion calculation).

22. This hypothetical probability of detection exceeds actual audit rates in recent years. For taxpayers with less than \$100,000 in annual income, the probability of being subjected to a federal income tax audit was 1.60% in fiscal year 1995, 1.58% in 1996, 1.19% in 1997, 0.92% in 1998, 0.86% in 1999, 0.45% in 2000, and 0.55% in 2001. INTERNAL REVENUE SERVICE, PROGRESS REPORT FROM THE COMMISSIONER OF INTERNAL REVENUE 43 (Dec. 2001), available at http://www.irs.gov/pub/irs-utl/pub3970_2-2002.pdf. The audit rates in these years for taxpayers with annual incomes of \$100,000 or more were 2.97% in 1995, 3.21% in 1996, 2.74% in 1997, 2.01% in 1998, 1.40% in 1999, 0.96% in 2000, and 0.79% in 2001. *Id.* Moreover, the penalty amount we have posited far exceeds the monetary penalties actually imposed. The actual penalty levels under current law call for payment of the tax due, accrued interest on that amount, plus a penalty of twenty percent of that tax amount if underpayment resulted from negligence or substantial understatement of taxes due. I.R.C. § 6662. The penalty level increases to seventy-five percent of the tax amount due if the taxpayer underpaid as a result of fraudulent conduct. *Id.* § 6663(a). Our hypothetical assumes that Borg would incur substantial additional costs in defending himself against an audit and subsequent legal

Because this cost exceeds the monetary savings associated with the fabricated deduction, we do not expect a rational Borg to fabricate. However, if we posit that another factor makes the fabricated deduction worth more than what the dollar value suggests, the calculation might change.

How might we measure whether people are actually adding in an additional “kicker” associated with tax aversion in making evasion decisions? It might seem that they are doing exactly the opposite. Relatively few people evade taxes, even though we might expect the combination of low audit rates and low penalties to make evasion attractive from the standpoint of rational calculation.²³ Yet people likely overestimate the probability and severity of punishment, and also give unknown amounts of weight to intangible factors such as guilt and shame in their decisionmaking.²⁴ Because tax evasion is notoriously difficult to detect and to distinguish from unintentional taxpayer errors,²⁵ it is hard to gain much insight into subjective taxpayer calculations based on detected instances of evasion. A number of controlled laboratory experiments have attempted to measure and evaluate tax evasion.²⁶ However, evasion in these contrived settings arguably does not compare with real-world evasion.²⁷ It is impossible to accurately estimate the perceived

proceedings, and would also suffer significant intangible disutility associated with detection and punishment.

23. Overall compliance rates in recent years have exceeded eighty-three percent. CUMMINGS ET AL., *supra* note 10, at 3 n.3.

24. *Id.* at 3-4; see ROSEN, *supra* note 2, at 328 (noting the “psychic costs of cheating”).

25. LEWIS, *supra* note 9, at 124-26; Paul Webley et al., *The Problem of Measurement*, in TAX EVASION, *supra* note 9, at 29, 30-35; Carroll, *supra* note 4, at 509.

26. See *supra* notes 9, 12 (citing studies on evasion and compliance enforcement efforts).

27. For example, participants may view the experimental interface as a game and may not view decisions about evasion with the same moral seriousness (or with the same fear of humiliation and punishment) as they might in the real world. Paul Webley et al., *The Subjects' View*, in TAX EVASION, *supra* note 9, at 114; Paul Webley & S. Halstead, *Tax Evasion on the Micro: Significant Simulations or Expedient Experiments?*, 1 J. INTERDISC. ECON. 87 (1986); see also Susan Long & Judyth Swingen, *The Conduct of Tax-Evasion Experiments: Validation, Analytical Methods, and Experimental Realism*, in TAX EVASION, *supra* note 9, at 128, 136-37 (observing that tax evasion experiments do not involve the threat of non-financial punishments such as imprisonment). On the other hand, some participants may shun evasion behaviors in the experimental setting out of a desire to appear “honest” to the experimenter or otherwise provide responses they believe the researchers desire. See, e.g., Webley et al., *The Subjects' View*, *supra*, at 114, 117.

severity of punishment that confronts taxpayers (which includes individual subjective valuations of being imprisoned or fined, as well as any dollar amounts paid in penalties or defense costs) or taxpayers' perceptions of the probability that a given fabrication will be detected.²⁸ A qualitative study that attempts to tap into the calculations made by tax evaders would provide invaluable help in this regard.

Heightened avoidance and evasion do not adequately capture all of the costs associated with tax aversion. Some taxpayers have little ability to avoid or evade taxes or may reach limits in their ability to take advantage of these tactics. For others, even inflated measures of benefits derived from avoiding or evading taxes provide insufficient triggers for avoidance or evasion because the costs still loom higher. Hence, Borg might neither evade nor avoid, but instead simply suffer the disutility associated with tax aversion. We might also wish, then, to measure the increased disutility that accompanies tax aversion, even when not manifested in changed avoidance or evasion behavior.²⁹

The theoretical question is easy enough to state: whether taxes are more painful than other economically equivalent events. An economically equivalent event would be a gain or a loss through some means other than taxation that has an equal dollar value to the gain or loss associated with the tax payment and the corresponding benefits received. However, a difficulty arises when we attempt to pin down whether a given taxpayer has enjoyed a gain or suffered a loss as a result of a tax payment. If we show a rational individual a world in which no tax-financed goods exist (including no government, no courts, no police, no national defense, no schools, no roads, and so on) and ask her how much she would pay to move from

28. Taxpayers may also make different calculations regarding evasion depending on whether they view themselves as facing a loss (taxes due at year's end) or a gain (refund already forthcoming). For a recent review of the literature on this point, see Chris Guthrie, *Prospect Theory, Risk Preference, and the Law*, 97 Nw. U.L. REV. 1115, 1142-45 (2003).

29. It is also possible that tax aversion not immediately manifested behaviorally due to lack of opportunity might translate into behavioral manifestations at a later time when opportunities become available to the individual taxpayer. Another theoretical possibility, unexplored to our knowledge, is whether frustrated tax aversion might be redirected into noncompliant behavior in other interactions with the government, such as benefit claims.

this chaotic world to one in which our current slate of tax-financed goods exists, the answer would surely exceed the amount that the individual pays in taxes.³⁰ However, it does not follow that individual taxpayers would not choose, at the margin, to pay lower taxes and receive fewer services, provided they could pick and choose which services to continue receiving and which ones to jettison.

A potentially more useful approach brackets the theoretical question by identifying the economic events that occupy the extreme ends of a spectrum of financial transactions: market exchanges and uncompensated losses. On the one hand, we expect that a tax would generate more aversion than would a market transaction. Unlike a market transaction, a taxpayer does not choose her owed payment (except in the limited sense suggested by opportunities for evasion or avoidance), and a tax payment does not yield an immediate, tangible object of exchange. On the other hand, a tax is not quite the same as a theft or other uncompensated loss; it does go somewhere and yields at least some benefits (ambient or otherwise)³¹ for the taxpayer. It seems that a tax occupies a middle ground between loss and exchange—an intermediate status further complicated both by the possibility of free riding and the lack of any rhetorical connection (at least with respect to the federal income tax) between payments made and benefits received.

Do people perceive taxes more like losses, exchanges, or some third mental category of expenses, such as bad gambles or mandated purchases? Or do they attempt to mentally disaggregate the portion of their taxes that corresponds to identifiable benefits from the extra amount they must pay to “carry” or cross-subsidize full or partial free

30. See LIAM MURPHY & THOMAS NAGEL, *THE MYTH OF OWNERSHIP* 16 (2002) (arguing that “the baseline for determining the benefits of government is the welfare a person would enjoy if government were entirely absent; the benefit of government services must be understood as the difference between someone’s level of welfare in a no-government world and their welfare with government in place”); cf. RICHARD A. EPSTEIN, *TAKINGS* 210 (1985) (observing that “a court could place all legislative initiatives past and future in a single hopper and proclaim that the benefits and burdens are always proportionate, thereby gutting the takings clause for general regulation”).

31. Cf. Lee Anne Fennell, *Beyond Exit and Voice: User Participation in the Production of Local Public Goods*, 80 *TEX. L. REV.* 1, 9 (2001) (differentiating between the consumption good of public education or safety and the composite good that results from the community-wide pattern of consumption of these goods).

riders, so that they perceive the tax as a bundle containing some exchange value and some loss?³² If so, does the fact that free riding occurs make the loss greater than the number of dollars involved indicates? Does the fact that one is interacting with the government change the situation? Does the compulsory nature of the collection add to the disutility? Surprisingly, few studies address this set of questions in the tax context.

One possible line of qualitative research into these questions could use survey questions and interviews to probe the relative degree of disutility associated with a variety of ambiguous expenditures of a particular sum of money, all of which straddle the middle ground between loss and exchange. Such data could help identify the features that contribute to tax aversion and provide a richer understanding of how people perceive taxes. While a full experimental design protocol is beyond the scope of this paper, we suggest starting with something like the survey questions listed in Figure 1.

32. As discussed below, identifying when and whether one is actually subsidizing or carrying free riders (as opposed to simply purchasing a redistributive public good with ambient benefits or purchasing social insurance against potential risks) proves to be a difficult and controversial task.

Figure 1

Indicate on a scale of 1 to 4 how much you would be bothered by each of the following scenarios, assuming (where relevant) that there would be no way to rectify the problem: (1 = not bothered at all; 2 = slightly bothered; 3 = significantly bothered; 4 = extremely upset).

On the back of the sheet, please add any explanations or qualifications.

1. suffering a \$100 gambling loss at a local casino
2. missing by one day a sale that discounts a major appliance by \$100
3. accidentally dropping a \$100 bill into a storm drain
4. buying a \$100 used computer “as is” and finding that it does not work
5. receiving a \$100 speeding ticket for going 26 mph in a 20 mph zone
6. contributing \$100, as agreed, to a workplace fund for a terminally ill colleague and later learning that most people contributed less than \$20 and several people contributed nothing at all
7. learning that, as a result of a new law, you owe an extra \$100 in tax to the federal government
8. learning that you paid \$100 more than necessary for an original work by a local artist
9. paying \$100 in dues for a club membership to help pay for club activities and facilities, where club members who cannot afford the dues are relieved of the dues requirement or are given subsidized rates
10. being required by law to purchase a motorcycle helmet (the cheapest one costs \$100) in order to cycle on public streets

There are some obvious limitations to this approach. One significant problem is that the brief scenarios in the survey items listed in Figure 1 provide only the thinnest of contextual cues. Research indicates that the surrounding context or “frame” can be extremely important in processing or “coding” an event.³³ For example, a respondent’s reaction to item number one might depend on how she mentally constructs the context of the imagined gambling loss—whether she imagines it as a loss occurring in isolation or as

33. See, e.g., Amos Tversky & Daniel Kahneman, *The Framing of Decisions and the Psychology of Choice*, in FOUNDATIONS OF THE ECONOMIC APPROACH TO THE LAW 304 (Avery Wiener Katz ed., 1998); Daniel Kahneman & Amos Tversky, *Prospect Theory: An Analysis of Decision Under Risk*, 47 *ECONOMETRICA* 263, 274 (1979); Anton Kühberger, *The Influence of Framing on Risky Decisions: A Meta-Analysis*, 75 *ORGANIZATIONAL BEHAV. & HUMAN DECISION PROCESSES* 23, 24-25 (1998).

one following earlier wins or losses.³⁴ We could make similar points about many of the other items. Therefore it becomes difficult to determine whether differential responses to the various scenarios were merely reactions to different contextual assumptions or mental frames, rather than to perceived differences in substantive features of the posited situation.

Another problem arises when different respondents have different preferences about the specific substantive matters raised in the scenarios. Attitudes and past experiences related to gambling, to motorcycles, to the arts, to terminal illnesses, or to speeding tickets can lead to differential responses that do not necessarily represent true reactions to the features intentionally planted by the researcher.

For both of these reasons, making sense out of responses requires the collection of more substantial data in the form of written comments and follow-up interviews.³⁵ Some studies of taxpaying have attempted to qualitatively evaluate respondents' reactions to different tax environments.³⁶ It would be very useful to extend that body of qualitative work to encompass other kinds of interactions that might implicate some of the more troubling aspects of taxpaying.

An alternative way of exploring the phenomenon of tax aversion consists of examining empirical work in related contexts to isolate some of the structural and contextual features that might drive or mitigate tax aversion. Empirical studies indicating that people will incur positive costs to punish those whom they perceive as acting unfairly might provide a template for understanding tax aversion, particularly as manifested in expenditures on tax avoidance that

34. See, e.g., Richard Thaler & Eric Johnson, *Gambling with the House Money and Trying to Break Even: The Effects of Prior Outcomes on Risky Choice*, 36 MGMT. SCI. 643, 657 (1990) (discussing the "house money" effect, in which gamblers exhibit a greater tendency to take risks with prior gambling winnings, presumably because gamblers can mentally "code" the later losses in a manner that integrates them with the prior gains); Tversky & Kahneman, *supra* note 33, at 310-11.

35. H. RUSSELL BERNARD, RESEARCH METHODS IN ANTHROPOLOGY: QUALITATIVE AND QUANTITATIVE APPROACHES 256-88 (1995); FLOYD J. FOWLER, JR., SURVEY RESEARCH METHODS 99-123 (1984).

36. E.g., Donna Bobek & Richard C. Hatfield, *The Effect of Policy Objectives, Complexity, and Self-Interest on Individuals' Comparative Fairness Judgments of a Flat Tax*, 13 ADVANCES IN TAX'N 1 (2001); Carnes & Cuccia, *supra* note 10; Valerie C. Milliron et al., *Policy Judgments of Taxpayers: An Analysis of Criteria Employed*, 2 ADVANCES IN TAX'N 201 (1989).

exceed the financial cost of the tax.³⁷ In the experimental “ultimatum game,” for example, one player proposes a division of a sum of money to a second player, who may either accept or reject the division.³⁸ If the second player rejects the proposal, both players receive nothing; if the second player accepts the proposal, the parties both receive the proposed division amounts.³⁹ Numerous studies show that the responding players “typically reject offers of less than 20 percent of the total amount available,” establishing that players are “willing to punish unfair behavior, even at a financial cost to themselves.”⁴⁰

We can find even closer parallels to taxpayer behavior in studies involving the “power-to-take” game.⁴¹ Before the game begins, each participant earns income by performing a task on a computer.⁴² Experimenters then randomly assign participants to one of two roles, a “take authority” or a “responder,” and randomly pair them up with

37. See, e.g., Ernst Fehr & Simon Gächter, *Fairness and Retaliation: The Economics of Reciprocity*, J. ECON. PERSP., Summer 2000, at 159, 161-62 (describing and collecting cites to studies of the ultimatum game in a number of countries); see also Joseph Henrich et al., *In Search of Homo Economicus: Behavioral Experiments in Fifteen Small-Scale Societies*, 91 AM. ECON. REV. 73 (2001) (describing the same); Alvin E. Roth et al., *Bargaining and Market Behavior in Jerusalem, Ljubljana, Pittsburgh, and Tokyo: An Experimental Study*, 81 AM. ECON. REV. 1068 (1991) (describing the same).

38. Christine Jolls et al., *A Behavioral Approach to Law and Economics*, in BEHAVIORAL LAW AND ECONOMICS 13, 21-23 (Cass R. Sunstein ed., 2000). Similarly, the proposers in ultimatum games frequently make initial allocations that reflect concerns for fair-dealing, rather than self-interested maximization of their own shares. Elizabeth Hoffman et al., *Behavioral Foundations of Reciprocity: Experimental Economics and Evolutionary Psychology*, 36 ECON. INQUIRY 335, 340-44 (1998) (discussing various ultimatum game experiments that show initial allocation offers frequently range between twenty percent and fifty percent). Unlike ultimatum games, a subject in a “dictator game” is assigned the role of proposer and is not confronted with a recipient who can decide whether to accept or reject the proposed allocation. The frequency of initial allocation offers reflecting self-interested maximization on the part of the proposer increases in such games over that seen in ultimatum games. However, offered allocations showing concerns for fair-dealing and reciprocity are not entirely eliminated, even when the proposer knows nothing about the putative recipient of the dictated allocation. E.g., Elizabeth Hoffman et al., *Social Distance and Other-Regarding Behavior in Dictator Games*, 86 AM. ECON. REV. 653 (1996).

39. Jolls et al., *supra* note 38, at 21-22.

40. *Id.* at 22.

41. See Bosman & van Winden, *supra* note 1, at 147-49 (describing the power-to-take game, and the potential of the game to model taxation issues).

42. *Id.* at 148; see *id.* at 151 & n.8 (describing the computer task, which took thirty minutes, and subjects’ perceptions of the task as “work”).

each other.⁴³ The player designated as the take authority chooses a “take rate,” which is the proportion of the responder’s income she wishes to appropriate.⁴⁴ The responder can choose to destroy all or any part of her own income before having the take rate applied to it.⁴⁵ Destroying income involves real costs for the responder, but it also reduces the amount that the take authority receives.⁴⁶ Therefore, the game offers an ideal vehicle for investigating “how subjects trade off emotional satisfaction of punishment against monetary gain,”⁴⁷ an investigation that could shed much light on the dynamics of tax aversion.

Also of potential relevance is the growing body of empirical work using experimental games to model the provision of public goods.⁴⁸ These experiments attempt to identify the conditions that lead people to voluntarily contribute to public goods, and, conversely, the conditions that make it more likely that people will fail to contribute. A study of the success or failure of collective action in uncoerced settings might lead to an understanding about the degree to which the legal mechanism of compulsory collection coordinates and facilitates the kinds of cooperative endeavors in which people would voluntarily engage absent coercion, and the degree to which compulsory

43. *Id.* at 151.

44. *Id.* at 148.

45. *Id.* Unlike the binary choice presented by the ultimatum game, the power-to-take game permits the responder to choose exactly how much (if any) of her own income to destroy. *Id.* at 148 n.2. Interestingly, however, most responders in the Bosman and van Winden study chose one of two extreme reactions, either destroying all of their income or none of it. *See id.* at 153-54 & tbl.1 (discussing this finding). For example, half of the eight responders presented with take rates of seventy-five percent or higher opted for total destruction, and one additional respondent chose ninety-nine percent destruction; the other three responders engaged in no destruction at all. *Id.* at 153 tbl.1. No destruction of income occurred in this experiment at take rates of less than seventy percent. *Id.*

46. *Id.* at 148.

47. *Id.* Responders’ self-reports suggest the presence of negative emotions, including “irritation, contempt, anger, and envy,” both among those who destroyed income and those who did not. *Id.* at 153. However, the strength of these negative emotions varied positively with the take rate, and the intensity of negative emotions and the take rate were both positively correlated with the destruction of income. *Id.* at 154-56 & tbs. 2, 3, 4.

48. For a concise and useful introduction to the literature on public goods experiments, see Robyn M. Dawes & Richard H. Thaler, *Anomalies: Cooperation*, J. ECON. PERSP., Summer 1998, at 187; *see also* Christina M. Fong et al., *Behavioral Foundations of Egalitarianism, Reciprocity and Altruism* 9-11 (Aug. 8, 2002), available at <http://www.umass.edu/preferen/gintis/bfghand.pdf> (discussing experimental literature on *n*-player public goods games).

collection instead forces contributions that would not otherwise be made.⁴⁹ The larger the latter component, the larger the degree of tax aversion we would expect to see.⁵⁰

II. LEARNING FROM PUBLIC GOODS GAMES

A large body of experimental work conducted in controlled laboratory settings analyzes how people react to small-group games involving contributions to a public good.⁵¹ Contrary to predictions that might flow from a simple rational actor model of human behavior, significant levels of voluntary contributions have been found in numerous public goods games and other experimental interactions conducted in various times and places.⁵² We believe that

49. An analogous contrast might be drawn between two traffic laws—one that dictates the side of the road on which people should drive, and another that limits speed on a wide, straight, uncongested thoroughfare to 40 miles per hour. The first law coordinates the sort of cooperative action in which people would engage anyway, while the second law most likely coerces behavior in which people would not otherwise engage.

50. It is not quite as simple as that, however, because compulsion fundamentally changes the picture. On the one hand, some people who are willing to contribute voluntarily under a given set of circumstances may resent a compulsory collection under the same set of circumstances if part of what made the contribution attractive in the first case was its voluntary nature. Cf. Richard D. Schwartz & Sonya Orleans, *On Legal Sanctions*, 34 U. CHI. L. REV. 274, 298-99 (1966) (presenting experimental results indicating that appeals to subjects' consciences are more successful in increasing tax compliance than increased threats of sanctions). On the other hand, adding elements of compulsion directed at thwarting free riders can elicit higher levels of voluntary contributions. In the latter case, the compulsion might be seen as a proxy for a social contract or other voluntary arrangement in which the group's members derive benefits from binding themselves to undertake certain obligations. See John T. Scholz, *Carrots or Just Deserts: Adding Assurance to Deterrence Models 7-10* (2002) (on file with author) (discussing a contractual model of tax collection). There are also many differences between the experimental setting and the real-world tax context that complicate matters; for an exploration of these complications, see Part III, *infra*.

51. A pure public good, in the economic sense, exhibits two features: non-rival consumption and non-excludable consumption. See, e.g., ROSEN, *supra* note 2, at 56 (setting forth these criteria). Few or no real-world goods fit this definition in the strict sense, but many goods do exhibit these features to some degree, or over some range. See, e.g., RUSSELL HARDIN, *COLLECTIVE ACTION* 19 (1982) (observing that "one can easily list goods that seem similar to public goods over some range of the number of consumers"). The goods that are at issue in the experiments we describe might instead be termed collective goods or group goods. See *id.* (expressing a preference for this terminology when a good does not fit the criteria of a pure public good). However, because the term "public goods" is typically used in the experiments themselves, we will retain that terminology here.

52. For example, Fehr and Gächter, *supra* note 37, summarize a variety of laboratory and survey studies showing that individual participants from contemporary, Western societies

the conditions eliciting voluntary contributions might be the same as the conditions in which compulsory tax collection becomes more acceptable. Similarly, the circumstances in which people resist making voluntary contributions to public goods are the same circumstances in which compulsory collections would be resented.

One common experimental game is set up so that contributions to the group are multiplied by some factor and then redistributed to the group's members in equal shares.⁵³ For example, a group of seven people might each begin with \$5.00, which the members may either keep or contribute to the group; contributions are then multiplied by a factor of three and redistributed to the group on a per capita basis. If group members cannot make binding agreements with other members, a single player will always do best by not contributing, regardless of what everyone else does. If a representative player, Aja, does not contribute but everyone else in the group does, then Aja's payoff equals her \$5.00 "non-contribution" plus her share of the pot (\$12.86),⁵⁴ for a total of \$17.86. If Aja contributes along with the rest of the group, she receives only \$15, one-seventh of a somewhat large pot (\$105).⁵⁵ On the other hand, if nobody contributes, including Aja, she keeps her \$5.00, and if only Aja contributes, she receives only 1/7 of the \$15.00 pot, or \$2.14. At all points in between these extreme cases, the same logic holds true; Aja always does best by not contributing, no matter what the other players do.

This "multiplier" public goods game represents a garden-variety multi-party prisoner's dilemma.⁵⁶ Figure 2 illustrates the basic payoff

(ranging from forty to sixty-six percent of the subjects) often employed principles of reciprocity in posited exchanges, while a smaller percentage (twenty to thirty percent of the subjects) employed measures of self-interest. *Id.* at 162; see Hoffman et al., *Behavioral Foundations of Reciprocity*, *supra* note 38, at 340-41 (discussing typical outcomes in ultimatum and dictator games); Roth et al., *supra* note 37, at 1091-94 (discussing similar outcomes in bargaining games in cross-cultural settings).

53. See, e.g., Dawes & Thaler, *supra* note 48, at 188 (describing the typical public good game with multiplier).

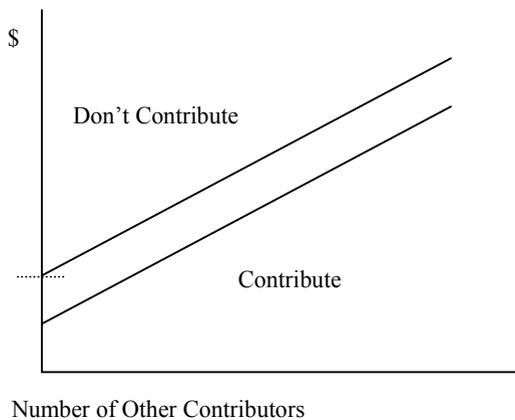
54. This figure results from first multiplying the \$5 contributions of the other 6 players by the multiplier factor of 3, which yields a pot of \$90. We then equally divide that pot among the 7 players ($\$90/7 = \12.86).

55. $7 \times \$5.00 \times 3 = \105

56. See Amnon Rapoport, *Provision of Public Goods and the MCS Experimental Paradigm*, 79 AM. POL. SCI. REV. 148, 148-49 (1985) (observing that "[i]f the benefit to the group increases as the number of contributors grows, with no minimal contributing set (MCS),

structure; the payoff line for “contribute” always lies below the payoff line for “don’t contribute.”⁵⁷ The dotted horizontal line represents the starting sum each player receives (\$5.00 in the example above).

Figure 2
Payoffs for One Player in a “Multiplier”
Public Good Contribution Game



Not all public goods games involve a multiplying pot of money where each contribution yields the same marginal benefit to the group. Other public goods experiments provide a single lump-sum bonus to the group if enough group members contribute.⁵⁸ This represents a “step-level” good⁵⁹ that is best conceptualized by

the provision of public goods may be modeled as an n -person Prisoner’s Dilemma game in which the (pure) strategy not to contribute is unconditionally best”); HARDIN, *supra* note 51, at 25-28 (demonstrating that provision of a collective good presents a strategic dilemma that is logically identical to the Prisoner’s Dilemma); see also Russell Hardin, *Collective Action as an Agreeable N-Prisoners’ Dilemma*, 16 BEHAV. SCI. 472 (1971) (providing a more extensive analysis of the same point).

57. See JON ELSTER, *THE CEMENT OF SOCIETY* 27-28 & fig.1.3 (1989) (analyzing and depicting a structurally identical dilemma, using a graph type introduced by Thomas Schelling).

58. See *infra* note 71 and accompanying text (discussing components and design of a step-level public good game).

59. Step-level goods are public goods for which some minimum threshold of contributions must be obtained in order for the good to be provided at all, and additional

considering a real-world analogy: a bridge.⁶⁰ A partial bridge is useless, and a bridge that spans more than the necessary space provides no additional benefits. Thus, contributions short of the threshold necessary to provide an entire bridge are of no use, and contributions in excess of that threshold are superfluous. Imagine that a bridge will cost \$10,000 to construct, and that we have ten players who will all benefit equally from the bridge. Each player will receive a benefit of \$2,000 if the bridge is built, making the project clearly worthwhile. Further imagine that a machine costlessly transforms players' contributions into bridge construction. The players have no opportunity for communication or side-deals, and each player contributes confidentially, so no player can impose even informal sanctions on noncontributors.⁶¹

Will the bridge be build? It might seem there is little reason for optimism. First, each player knows that if she contributes while enough others fail to do so, she will lose her money (the bridge-building machine transforms the contribution into a useless partial bridge). In addition, each player knows that it would be "worth it" for the others to provide the bridge even without her participation, and this creates a powerful incentive to free ride. These two hindrances to cooperation can be labeled "fear" and "greed," respectively.⁶² Each

contributions made above that threshold do not increase or improve the good. *See, e.g.,* Ido Erev & Amon Rapoport, *Provision of Step-Level Public Goods: The Sequential Contribution Mechanism*, 34 J. CONFLICT RESOLUTION 401, 403 (1990) (discussing "public or collective goods that only exist after a substantial amount has been contributed to their production, and then do not increase in quality or quantity if more contributions are made").

60. Note that a bridge is not a pure public good in the economic sense. *See supra* note 51 (defining public goods). While a bridge is nonrival within a certain range (until crowding inhibits the use of the bridge), the use of tolls can easily provide exclusivity.

61. *See* Robyn M. Dawes et al., *Organizing Groups for Collective Action*, 80 AM. POL. SCI. REV. 1171, 1175 (1986) (describing a "standard step-level public goods game" as "one that involves no communication, no opportunity for persuasion or coercion, no possibility of side payments or reciprocity, and no social disclosure of individual choices (except to the experimenters)").

62. *Id.* at 1173-74 (citing Clyde Coombs, *A Reparameterization of the Prisoner's Dilemma Game*, 18 BEHAV. SCI. 424, 424-28 (1973), which discusses the competing motives of fear and greed in the context of a prisoner's dilemma). The use of the term "fear" by Dawes and his coauthors to refer to a futile contribution constitutes only one of several possible uses of that term in the context of experimental games. It might also be used to refer to a fear of retaliation in a repeat-play game, as in Coombs, *supra*, at 426, or to the fear of being "suckered" by others. *See infra* notes 77-83 and accompanying text (discussing varying uses of these terms).

individual faces three possible outcomes: her contribution will be futile (despite the contribution, there are insufficient funds to provide the bridge), critical (the contribution makes the difference in the completion of the bridge), or redundant (the bridge would have been built even without the contribution).⁶³ Only in the case where the individual's contribution is critical would a rational actor find contributing worthwhile.⁶⁴

If we simplify the choice situation to one in which our representative player, Aja, decides whether or not to contribute her "share" (\$1,000) to the bridge project, the payoffs depicted in Table 1 frame the choice:

Table 1
Net Payoffs in a Step-Level Public Goods Game

	Futile	Critical	Redundant
Contribute	- \$1,000	\$1,000	\$1,000
Don't Contribute	0	0	\$2,000

If Aja contributes futilely, she loses \$1,000 with no countervailing benefits. If Aja contributes nothing where her contribution would have been futile, she receives a net payout of zero (she loses nothing, and gains nothing). If Aja makes a critical contribution, she receives a benefit of \$2,000 at a cost of \$1,000, yielding a net gain of \$1,000. If she contributes nothing when her contribution would have been critical, she again pays nothing and receives nothing. Finally, if her contribution will be redundant, making it yields her a net payoff of \$1000 (\$2,000-\$1,000); choosing not to contribute in this event produces benefits of \$2,000 at zero cost.

63. See Dawes et al., *supra* note 61, at 1178 (applying this analysis to a step-level good); see also Rapoport, *supra* note 56, at 149-50 (presenting formal analysis corresponding to this framework, and discussing similar models applied to voting behavior).

64. See Dawes et al., *supra* note 61, at 1178.

Thus, we would expect Aja to contribute when she anticipates that her contribution will be critical, but not when she expects it to be either futile or redundant. A rational Aja would base her course of action on estimates of the respective probabilities of each of these three states of the world.⁶⁵ Only when the probability that she will make a critical contribution exceeds fifty percent will Aja find it worthwhile to contribute her fair share, based on these monetary payoffs.⁶⁶ Thus, voluntary contributions to step-level public goods are only rational when players determine that the chance of making a critical contribution is sufficiently high, and irrational otherwise.⁶⁷

Because the odds are vanishingly small that one's own contribution will be "critical" in public finance settings, the step-good

65. For example, if Aja judges the three possibilities (futile, critical, and redundant) as equally likely, she will make a decision based on the expected values generated by those probabilities as follows:

$$\text{Contribute} = (-\$1,000 \times .33) + (\$1,000 \times .33) + (\$1,000 \times .33) = \$333$$

$$\text{Don't Contribute} = (0 \times .33) + (0 \times .33) + (\$2,000 \times .33) = \$666$$

Under these assumptions, the choice not to contribute dominates.

66. The following equations, which assume a 52% probability of a critical contribution and probabilities of 24% for each of the other two possibilities, illustrate:

$$\text{Contribute} = (-\$1,000 \times .24) + (\$1,000 \times .52) + (\$1,000 \times .24) = \$520$$

$$\text{Don't Contribute} = (0 \times .24) + (0 \times .52) + (\$2,000 \times .24) = \$480$$

Here, the "contribute" option dominates. *See* Dawes et al., *supra* note 61, at 1178 (noting that if the chance of a critical contribution exceeds 0.50, a participant will expect a net gain from contributing).

67. Robyn Dawes and his colleagues tested this hypothesis by asking subjects participating in a step-level public good experiment to estimate the respective chances that their contribution would be futile, critical, and redundant. *Id.* at 1178-79 (describing theoretical framework and methodology). The results were interesting, in part because the contribution level in the standard game accompanied by the probability estimates—a mere 23%—was significantly lower than in two experiments run a few years earlier by the authors. *Compare id.* at 1180 tbl.3 (showing contribution rates of 23% in the standard dilemma involving probability estimates) *with id.* at 1176-77 tbls.1-2 (presenting results of two previous standard public goods experiments with contribution levels of 51% and 64%, respectively). While the authors cautioned against "too easy" speculation about the causes of these differences, *id.* at 1180, we cannot resist one vein of speculation: Could making people estimate these probabilities cause them to approach the choice in a more calculating frame of mind, such that they become more "rationally uncooperative"? While the cooperators contributed despite an average subjective chance of making a critical contribution of 0.29 (far below the 0.50 mark above which contributions become rational), the many defectors, on average, judged the chance of a critical contribution to be even less likely (0.18). *Id.* at 1180-81 & tbl. 4.

analysis might seem to have little traction for tax policy.⁶⁸ Yet more than the rationality calculation suggested here underlies contribution decisions. Contributions occur at significant levels even where the public good involved is not of the “step” variety (that is, where the “don’t contribute” option should always dominate), and also occur with step-level goods even where subjective estimates of the chance of making a critical contribution are too low to rationally justify making the contribution.⁶⁹ Experiments involving step-level goods help in pinpointing motivations, and thus help us discover the additional factors potentially involved in contribution decisions for public goods of all sorts.

Dawes and his co-authors used a step-level game to determine the relative importance of fear (of losing one’s contribution to a public good without receiving the public good) and greed (the opportunity to free ride) in jeopardizing the provision of public goods.⁷⁰ After conducting a standard public goods game to establish a baseline for cooperation,⁷¹ the Dawes study controls for fear of a futile contribution by offering a money-back guarantee.⁷² To put this in terms of our bridge-building machine, rather than construct a partial bridge with the contributions, the machine detects the insufficiency of funds and returns all contributions to the contributors. Next, Dawes and his co-authors attempted to control for greed by adding an “enforced contribution” requirement, providing that if players raise

68. In contrast, in small-group settings each group member can verbally pre-commit to providing no more than her fair share, dramatically increasing the odds that each individual will perceive her own contribution to be critical to the enterprise.

69. See *supra* notes 52, 66-67 and accompanying text.

70. The authors presented the results of three different experiments, each with three parts: a standard public goods game, a game involving a “money-back” guarantee, and a game involving an “enforced contribution” condition. See Dawes et al., *supra* note 61, at 1176-79. The third experiment also involved subjects’ subjective estimates of the probability that their contribution would be futile, critical, or redundant. *Id.* at 1178-79; see *supra* note 67 and accompanying text (discussing this experiment).

71. The game involved the provision of a step-level public good by a seven-member group. The experimenter gave every player a \$5 promissory note, which she could either keep or contribute. The group would receive a bonus of \$70 to divide among its members if enough players contributed. The first experiment required three contributors, while the second and third experiments required five contributors. *Id.* at 1176-77, 1179.

72. *Id.* at 1175; see also *id.* at 1172 (providing a real-world example in which a group of state system faculty members used such a technique to raise money for a lobbyist); ELSTER, *supra* note 57, at 42 (discussing this “money-back” technique).

sufficient funds to produce the public good, the game forces everyone in the group to contribute their share.⁷³ This eliminates the possibility of free riding.

Interestingly, the Dawes study found that the enforced contribution condition produced significantly higher voluntary contribution levels, while the money-back guarantee failed to produce statistically significant changes in contribution levels.⁷⁴ The authors conclude that “greed,” not “fear,” causes cooperation to fail.⁷⁵ In other words, the authors’ analysis suggests that people who switch from being noncontributors in the basic game to being contributors in the enforced contribution game are would-be free riders who no longer have an incentive to free ride under the enforced contribution requirement.⁷⁶

This analysis, like the expected value calculations discussed above, assumes that participants are indifferent to the payoffs of other people and wish only to maximize their own payoffs. Yet, people often seem to care about others’ payoffs. Expanding the model to take account of a more complex vision of human rationality yields a plausible alternative explanation for the results observed in the Dawes study. Importantly, this alternative explanation shows how we can reconcile those results with the relatively high baseline

73. Dawes et al., *supra* note 61, at 1175. In fact, the “enforced contribution” game was framed slightly differently, which might have impacted the results. The players all began with \$5 and had the choice of whether to contribute. If there were enough contributions, each of the seven players would receive their \$10 share of the bonus, but no player was allowed to receive more than \$10. This cap effectively forced a contribution from each player. *See id.*

74. In one experiment, the enforced-contribution variation yielded contribution rates of 86%, as compared with 51% in the standard dilemma setting. In a second experiment, the contribution rate in the enforced-contribution setting reached 93%, as compared with 64% in the standard dilemma context. *Id.* at 1176-78 & tbls.1-2. In the third experiment, which required subjects to make probability estimates, the contribution rate in the enforced-contribution setting was 77%, compared with a 23% contribution rate in the standard dilemma. *Id.* at 1180 tbl.3. The contribution levels for the money-back guarantee condition were 61%, 65%, and 43%, respectively. *See id.* at 1176-80 & tbls. 1-3 (presenting and discussing these results).

75. *See id.* at 1183 (positing, based on experimental results, that “[f]ear of loss through contributing is not the critical motivation underlying defection”; rather, “the relative success of the enforced contribution is consistent with the hypothesis that desire for gain through defecting is the motivation underlying defection”).

76. *See id.* (hypothesizing that “enforcing a contribution if a public good is provided works to promote contribution by convincing people that the good will be provided and by removing the opportunity for free riding if it is provided”).

contribution levels seen in many public goods games.

Imagine that Aja is a fair-minded individual who wants to contribute to the public good. However, she suffers severe disutility if other people can free ride on her contributions. In other words, Aja is perfectly happy to accept the \$1,000 net “contributor’s benefit” in the bridge example; indeed, this squares perfectly with her sense of equity. However, the thought that someone else could receive the \$2,000 “free rider’s benefit” irks her to no end; she does not want someone to make her a “sucker.”⁷⁷ Thus, Aja will most likely contribute in the “enforced contribution” situation. She contributes not because the “free rider’s benefit” is now unavailable to her, but because the free rider’s benefit is unavailable to *others*. The rules of enforced contribution require anyone who ends up benefiting from the contributions to pay their fair share.

Under this interpretation, the potential pressures against contribution to a public good include not only fear and greed, but also “fear of greed”—the fear that greedy individuals will receive benefits without paying for them. This interpretation fits well with the experimental results in many public goods games. Some individuals begin cooperating, but cooperation decays over time.⁷⁸ One interpretation that scholars have discredited through experimentation is that people learn to defect—that they learn how the game really works and come to appreciate the benefits of free riding.⁷⁹ Another

77. See, e.g., Peter H. Huang & Ho-Mou Wu, *More Order Without More Law: A Theory of Social Norms and Organizational Cultures*, 10 J. L. ECON. & ORG. 390, 403 (1994) (“Human beings possess a very strong emotional desire not to be suckered”). Somewhat confusingly, the Dawes study also uses the word “suckered,” but to describe the very different situation in which a player makes a futile contribution. See Dawes et al., *supra* note 61, at 1175 (observing that “subjects could still lose their contributions and be ‘suckered’” if enough other people did not contribute and the good was not provided). We think a critical component to the feeling of being “suckered” is the knowledge or belief that someone else benefits unfairly from one’s own contributions. This is consistent with the use of the term “sucker” in Prisoner’s Dilemma games. E.g., ANTHONY DE JASAY, *SOCIAL CONTRACT, FREE RIDE: A STUDY OF THE PUBLIC GOODS PROBLEM* 63-64 (1989) (applying “free rider” and “sucker” designations to the Prisoner’s Dilemma); Jane J. Mansbridge, *On the Relation of Altruism and Self-Interest*, in *BEYOND SELF-INTEREST* 133, 141-42 & fig.8.1 (Jane Mansbridge ed., 1990) (discussing “sucker’s payoff” in conjunction with a prisoner’s dilemma matrix).

78. See, e.g., Fong et al., *supra* note 48, at 9-10.

79. See, e.g., *id.* at 10 (discussing research that suggests this explanation is invalid); see also Fehr & Gächter, *supra* note 37, at 164-65; URS FISCHBACHER ET AL., *ARE PEOPLE CONDITIONALLY COOPERATIVE? EVIDENCE FROM A PUBLIC GOODS EXPERIMENT* 9 (Univ. of

explanation has gained support: That people who start out cooperating stop in reaction to the non-cooperation of other group members.⁸⁰ Often, the game structure permits no communication of one's displeasure toward a defecting player other than defecting oneself.⁸¹ When devices to communicate through sanctions exist, group members use those devices instead of defecting.⁸²

Knowing whether greed or fear of greed acts as the dominant factor in unraveling cooperative action in these settings could provide useful insight in formulating a policy response to the collective action problem. If greed dominates, the individual player will act based on her perceptions of her own payoffs, including the sanctions that the other players can bring to bear against her in the event she attempts to free ride. If fear of greed dominates, the individual's perception of the sanctions that she and others can bring to bear against other free riders determines her willingness to cooperate.⁸³

III. REAL-WORLD COMPLICATIONS IN TAX-FUNDED BENEFITS

The public goods examples presented above, like much of the experimental literature within the public goods genre, seem to offer useful lessons for tax policy. These examples suggest that enforcement can play a facilitating role in eliciting cooperation to the extent it removes the temptation to free ride and the fear that others will succumb to that temptation.⁸⁴ Applied to the taxation arena, it appears that people's contributions are more a product of cooperation

Zurich, Inst. for Empirical Research in Econ., Working Paper No. 16, 2000), <http://papers.ssrn.com/sol3/delivery.cfm/000106400.pdf?abstractid=203288>.

80. Fehr & Gächter, *supra* note 37, at 162-63, 165 (observing that participants in repeat-play experiments often employed principles of reciprocity to discipline self-interested participants to adopt more reciprocal responses in successive exchanges).

81. *See, e.g., id.* at 161-62; *see also* James Andreoni, *Cooperation in Public Goods Experiments: Kindness or Confusion*, 85 *AM. ECON. REV.* 891, 900 (1995) (concluding that thwarted attempts at kindness and cooperative behavior likely lead to the decay of cooperation in repeat-play games).

82. *See, e.g.,* FALK et al., *supra* note 7, at 31-32.

83. This might seem to be a distinction without a difference, insofar as tougher enforcement would answer both concerns. Yet it may lead to subtly different rhetorical and policy strategies when employed in a real-world context involving heterogeneous actors.

84. *See* Dawes et al., *supra* note 61, at 1183-84 (observing that "[e]nforcing contribution should a public good be provided is, by this hypothesis, an institutional modification that is appropriately attuned to widespread, perhaps characteristic, human motivations").

and less a product of compulsion in settings where people see that others who enjoy the public goods must make similar contributions. On this view, the compulsory nature of taxes should go far towards overcoming the resistance to contributing to public goods by addressing fears of free riding that can otherwise unravel public goods games. Indeed, free-rider concerns are often used to justify government provision of public goods.⁸⁵

However, we must proceed with caution in applying insights from stylized games involving small numbers of participants in experimental settings to any culturally-situated arena. The prevalence of the free riding concerns discussed above might increase or decrease in a given real-world tableau. In this Part, we discuss certain features of the federal income tax system that one might expect to heighten or complicate concerns about free riding, notwithstanding the existence of a compulsory collection system that in some measure replicates the “enforced contribution” condition. Additional studies that incorporate these features might refine our understanding of tax aversion.

A. Disagreement About Ends

The public goods typically at issue in experimental settings transparently benefit the players. Indeed, the public good in question is usually a cash bonus distributed among the players on a per capita basis.⁸⁶ Where benefits are uncontroversially valuable, tangible, and easy to measure, players confront a stark conflict between collective and personal benefit maximization. When an individual fails to contribute in that context, she cannot claim that she thinks the public good in question is not worth providing—her noncontribution can only be interpreted as free riding.

In contrast, people often have differing opinions about the value

85. See, e.g., ROSEN, *supra* note 2, at 64 (“Some suggest that the free rider problem necessarily leads to inefficient levels of public goods; therefore, efficiency requires government provision of such goods”).

86. Cf. Yoram Barzel & Tim R. Sass, *The Allocation of Resources by Voting*, 105 Q. J. ECON. 745, 752 (1990) (observing that “harmony” in individual voters’ interests “is relatively easy to achieve in projects that provide only pecuniary benefits, but harder to achieve when projects also provide their owners direct consumption”).

of real-world public goods. Hence, noncontributors may not be expressing a greedy desire to free ride, nor even a fear that others will do so, but rather a genuine disinterest in the provided good. Of course, it is often difficult to determine noncontributors' true motivations. Free riders often employ a stratagem of falsely announcing that they do not value a public good, in the hopes that others will pay for it.⁸⁷

Some contexts make testing the truthfulness of participants' representations about their preferences easier than others. To return to the bridge example, we could announce that only contributors of a set amount (for example, the \$1,000 fair share) will receive passes that will allow them to use the bridge if completed.⁸⁸ Unlike the enforced contribution condition, this system ensures that no person will have to contribute if she actually attaches a lower value to the good than the enforced contribution amount. However, this solution is unworkable where exclusion from a good is difficult.

The enforced contribution version of the public goods game does not permit as fine-grained a customization of a good's provision and funding as would the system just described, but it does provide an interesting proxy mechanism for assessing the popularity of the public good. In the first phase of the enforced contribution public goods game, the *voluntary* contributions amount to a monetary "vote" for the provision of the public good. If the vote carries, then everyone who benefits must contribute. Our political system does not offer a direct monetary vote through which a government body can aggregate preferences in a manner that accounts for their intensity.⁸⁹

87. See, e.g., ROSEN, *supra* note 2, at 63 (explaining that "people may have incentives to hide their true preferences for a public good"). While economic analysis often assumes that people will hide their true preferences in order to free ride, the extent to which people actually engage in such self-serving behavior is empirically questionable. See Earl R. Brubaker, *Free Ride, Free Revelation, or Golden Rule?*, 18 J. L. & ECON. 147 (1975) (questioning this assumption and discussing research findings in which expressed demand for a collective good did not appear to suffer from severe free ridership distortions).

88. This could be coupled with a money-back guarantee in the event the bridge is not built.

89. See Saul Levmore, *Voting with Intensity*, 53 STAN. L. REV. 111, 113-16 (2000) (discussing conventional explanations for prohibition of vote buying and selling). Of course, those with intense, money-backed preferences can attempt to exert indirect influence on political outcomes. See, e.g., *id.* at 129 (discussing "indirect vote buying," which includes individual contributions to campaigns and to organizations backing particular candidates and

Moreover, people typically vote for representatives rather than on issues in isolation.⁹⁰ This blunts people's ability to signal preferences about specific public goods.

In contexts where the public good in question is unambiguously more valuable than the contributions participants are called upon to make, a compulsory collective mechanism adds value by solving a collective action problem. But when we recognize the possibility that people might genuinely disagree about whether and to what extent particular goods generate benefits, the compulsory nature of the collection mechanism takes on a different cast.⁹¹ Compulsory collections from those who genuinely attach a lower value to the provided good than to the amount of their enforced contributions are not coordinating unambiguously valuable action; rather they are coercing people to make contributions that are of negative value to them.⁹² Taxpayers might view compulsion as presumptively undesirable and justifiable only when accompanied by a countervailing benefit—when the compulsion delivers to each

causes); Thomas Stratmann, *The Market for Congressional Votes: Is the Timing of Contributions Everything?*, 41 J. L. & ECON. 85 (1998) (presenting empirical work addressing the extent to which Political Action Committees make contributions that are designed to influence congressional votes on particular issues).

90. See, e.g., ROBERT AXELROD & MICHAEL D. COHEN, *HARNESING COMPLEXITY* 128 (2000) (observing that “voters are not able to pick and choose among the features they like in the incumbent and a challenger”).

91. See Brubaker, *supra* note 87, at 156 (explaining that a compulsory collection system overcomes the problem of “free riding” only by introducing the possibility of “forced-riding”—enforced collections from those who do not, in fact, value the good to the extent of the collection).

92. In local taxation contexts, people with similar tastes in public goods might efficiently cluster together, eliminating some of these concerns. See, e.g., RICHARD A. MUSGRAVE, *FISCAL SYSTEMS* 299 (1969) (positing that “it is efficient for people with similar tastes in social goods to reside together”). The Tiebout hypothesis is premised on precisely such clustering. See Charles M. Tiebout, *A Pure Theory of Local Expenditures*, 64 J. POL. ECON. 416, 422 (1956) (explaining that consumers make choices among communities just as they make choices among goods in private markets, so that “[s]patial mobility provides the local public-goods counterpart to the private market’s shopping trip”). However, this clustering can lead to a larger-scale free rider problem among local municipalities where people are heterogeneous not only with regard to tastes but also with regard to resources. See, e.g., *Southern Burlington County NAACP v. Township of Mount Laurel*, 336 A.2d 713, 730-33 (N.J. 1975) (recognizing temptation for a growing municipality to seek only that form of growth that will enhance its tax base by excluding the poor, to the detriment of the surrounding region); Lee Anne Fennell, *Homes Rule*, 112 YALE L.J. 617, 652-54 (2002) (book review) (discussing municipal incentives to shift the costs of poverty to other jurisdictions).

individual a state of the world that she values more highly than the state of the world without such contributions or provided goods. If many public goods are provided, some of which generate a surplus for the taxpayer and some of which generate a deficit, this criterion would be satisfied as long as the net result is positive for a given taxpayer. Nevertheless, we should keep this concern in mind to the extent that it becomes empirically plausible to suppose that certain categories of taxpayers have their interests consistently overridden.

B. Factoring in Intentional Redistribution

Public goods games are interesting because they involve the risk of cross-subsidization of some players by other players. In this sense, the prospect of unintentional redistribution always looms in the background. However, public goods games typically do not involve an intentional or structured effort to benefit certain players at the expense of others. Nor do these experiments involve players who command different resources within the context of the game. In contrast, a real society includes people who are heterogeneous with regard to resources. Moreover, a good deal of taxation effects redistribution by design.⁹³

We can analytically recast redistribution as a public good.⁹⁴ The new distribution pattern itself might be seen as a public good,⁹⁵ or it can generate collateral public goods by providing a minimal level of subsistence to the citizenry, thereby creating a society in which children receive adequate nutrition and in which people do not languish in impoverishment.⁹⁶ However, problems remain.

First, deep political and philosophical differences exist about

93. See, e.g., MURPHY & NAGEL, *supra* note 30, at 76 (describing the role that taxation plays “in determining how the social product is shared out among different individuals” as one of its “two primary functions”); Eric Rakowski, *Transferring Wealth Liberally*, 51 TAX L. REV. 419, 438 (1996) (listing redistribution as a principal goal of taxation).

94. Wil Arts & Peter van Wijck, *Share and Share Alike? Social Constraints on Income Equalization*, 3 SOC. JUST. RES. 233, 235 (1989) (characterizing income distribution as a public good).

95. *Id.*

96. See, e.g., Lee Anne Fennell, *Interdependence and Choice in Distributive Justice: The Welfare Conundrum*, 1994 WIS. L. REV. 235, 267-74 (1994) (discussing costs to non-poor associated with poverty).

whether redistribution is, or could be said to generate, a public good. Second, those who benefit directly and monetarily from redistribution receive, by definition, a higher level of benefits than those who receive just the ambient public good associated with the redistribution (the monetary beneficiaries receive both the ambient good and a check). Also, the recipients of the redistribution will not make positive net contributions to that redistribution.⁹⁷ Finally, free riding can operate because at least some potential “net recipients” control some of the factors that could place them in a position to be a “net recipient” in a particular round of play.

An example illustrates some dimensions of the problem. Imagine ten individuals are about to embark on a group expedition through a wilderness area in winter, a joint enterprise in which the well-being of all the group members will matter. Before beginning, it becomes apparent that two of the ten participants lack a warm winter hat, an essential piece of survival equipment. A hat store nearby offers new expedition-warmth hats for \$20.00 each, but the hatless participants have no money. Equipping both of the hatless group members requires \$40.00 in contributions from the group, or \$5.00 from each of the eight moneyed members of the group.

Supplying hats to the hatless accomplishes two things. First, it effects a tangible redistribution from the hatted to the hatless; each hatless person gains a \$20.00 value, while each hatted person must contribute \$5.00. Second, it generates a suitably-dressed expedition cohort (a valuable public good) for the group. Even if this is not deemed valuable in itself, a number of valuable collateral goods may flow from the redistribution: that the group does not have to see any of its members perish from hypothermia en route, that pity does not move a member of the group to give up essential clothing in the middle of the expedition, that a desperately cold, hatless person does not assault another group member to obtain a hat, or that the expedition is not interrupted by the need to call for (and potentially finance) emergency medical assistance.

Of course, the hatless individuals who receive the direct benefits

97. Of course, the possibility exists that they might literally make contributions. However, in order for redistribution to occur, they will always receive all these contributions back, plus a surplus, making their net contribution to the good negative.

from the hats also benefit from the public good of a well-dressed expedition cohort; the other group members receive only the ambient public good. Where redistribution is the point of a collective contribution arrangement, participants on the receiving end of the redistribution will always receive larger net benefits than the participants who subsidize them. This means that some of the participants necessarily occupy the position of full or partial free riders, at least within a given round of the game. Because the term “free rider” usually carries the connotation of strategic exploitation, we dub those recipients who free ride out of necessity “needy riders.”

An enforced contribution scheme like that outlined by Dawes and his co-authors cannot address needy riding; it defeats the purpose of redistribution to force the recipients to pay their fair share for the benefits received. Yet if each individual at least partially controls the factors that determine whether she meets the criteria for receiving redistribution, making structural provision for needy riding encounters problems. Not only might the prospect of a free ride tempt some group members to put themselves into a position that makes them eligible for redistributive benefits, but it might also cause other members of the group to fear potential free riding (masquerading as needy riding) on the part of others, a prospect to which they may react by refusing to contribute.

Thus, the redistributive element adds a new concern about free riding recipients (faux needy riding) without ameliorating the original concern about free riding among contributors that is endemic to the provision of even non-redistributive public goods. To put this in terms of our expedition example, a given would-be contributor must concern herself not only with strategic hatlessness, but also with the possibility that other hatted people will choose not to contribute so as to gain the ambient benefits of a well-dressed expedition cohort at the expense of the other hatted people. There are now two independent ways in which cooperation might unravel, because there are two avenues for potential free riding and two ways to become a “sucker.”

A certain destructive synergy may result. For example, imagine two would-be contributors, Cody and Chako. Cody believes that the hatless people are really strategic free riders in disguise and refuses to contribute. Chako interprets this refusal as a greedy desire on the part of Cody to free ride on the poverty relief efforts of the other group

members, and Chako therefore retaliates by refusing to contribute. An enforced contribution requirement could solve this problem, but it requires adding a means-test to determine whether one is among the “contribution eligible” or, instead, eligible to receive the benefits of redistribution. In the hat example, this requires equipment and funds checks to see who should contribute and who may receive contributions. Such a test might superficially solve the problem of free riding among those identified as contributors, but it would in turn heighten concerns about strategic behavior designed to keep one from being identified as a contributor.

Finding ways to minimize strategic self-qualification for assistance increases the likelihood of cooperation from all able contributors.⁹⁸ Society can, for example, choose conditions for redistribution that fall clearly outside the control of the recipients. The concern that would-be contributors will attempt to strategically present themselves as needy riders disappears when we base redistribution on a characteristic difficult to bring about voluntarily and very hard to fake, such as old age or permanent disability. Likewise, need that is the product of events clearly out of the victims’ control, such as a natural disaster or a terrorist attack, avoids such self-qualification concerns.

Furthermore, certain conditions requiring assistance are not only outside of individual control, but result from risks spread broadly across the population. Redistribution in such settings carries the flavor of insurance; individuals want to provide for people harmed by forces outside of their control, at least in part because these individuals could have been (or still might be) in the harmed person’s shoes. However, if a person knows with virtual certainty that she does not face particular risks, the “self-insurance” function of

98. See Amy Wax, *Reciprocity Norms, Reactive Attitudes, and the Political Economy of Welfare Reform*, 63 LAW & CONTEMP. PROBS. 257, 268 (2000) (arguing that “tolerating voluntary self-qualification for aid is inconsistent with sustaining a voluntary cooperative agreement”). In the hat example, self-qualification might be limited by waiting to announce the redistributive scheme until after the individuals have reported for the expedition. If the individuals did not have any idea that redistribution would be provided, the possibility of redistribution could not have an impact on their decisions to show up hatless or without funds. For obvious reasons, this tactic is not workable for ongoing, society-wide public assistance schemes.

redistribution would disappear for her with regard to those risks.

The breadth of an individual's definition of the category of persons receiving redistributive assistance affects contributors' perceptions of whether this self-insurance function exists in a given scenario. If we frame redistribution broadly to help people in a variety of situations outside of individual control, contributors may desire the redistribution in a repeat-play setting where they can contemplate becoming a recipient in a later round or stage of the interaction. Conversely, if a particular program deals only with a problem that most members of the population believe they will not likely face (such as chronic poverty that exists independent of the usual "good excuses" of old age, disability, or disaster), the self-insurance justification loses its persuasiveness.

There are several additional features of our 10-person expedition example that do not exist in a nationwide tax and transfer scheme. First, the people who benefit from redistribution in the expedition example are readily identifiable and will continue to be engaged in an ongoing enterprise with the contributors. This enables the contributors to see, first-hand, how their donations are being used. In addition, the benefits themselves are provided in a form (here, hats) that comports with majoritarian assessments of the recipients' needs. The scenario does not allow recipients to sell their new warm hats to purchase, for example, lottery tickets, alcohol, or cigarettes, even if they might prefer these other consumption alternatives.

Second, the trope of the expedition provides a built-in structure for potential reciprocity. Those who receive hats from the group might feel a stronger obligation to the group; they might be more willing to undertake extraordinary efforts for the group if some eventuality, such as an accident, made this effort necessary.

Finally, it is clear in this example how the hatlessness of some members could harm the enterprise as a whole. In the expedition setting, the fates of all group members are intertwined, making their utility functions transparently interdependent. In a larger societal context, many would bridle at the notion that we are all on anything like an "expedition" together or that a common interest binds us all to the fates of each other so as to provide a basis for a societal redistributive scheme. Some would-be contributors would deny receiving any ambient benefits at all from the redistributive scheme,

and would profess profound disinterest in the fates of any individuals other than family members and chosen associates. Such potential contributors would therefore resent the enforced contribution condition, despite its capacity to address the problem of free riding among contributors.

Other would-be contributors might perceive that some ambient benefits potentially flow from redistribution, but would view other measures available to them as cheaper means for securing those same benefits. For example, a potential contributor who believes that desperate, impoverished people are more likely to commit crime and less likely to succeed in school might welcome an ambient benefit arising from redistribution to the poor to lower the crime rate and make inner city schools better. However, the would-be contributor might perceive that another option can secure many of the same safety and educational benefits: insulating herself and her children from the poor in an exclusive suburb or private community and sending her children to an exclusive suburban or private school. If this alternative costs less (including not just the monetary cost, but also the emotional cost associated with the worry about being “suckered”), the would-be contributor might resent any requirement that she contribute to redistribution. Thus, legal features outside the federal tax and transfer realm are likely to affect the alternatives available to potential contributors, and these alternatives will in turn influence the potential contributors’ acceptance of redistributive arrangements.

C. Progressivity

Other structural features of the tax system, such as the degree of progressivity, may further complicate the array of alternatives and choices facing participants. Progressivity in contributions is tightly connected to redistributive concerns, but deserves separate consideration. First, we should distinguish (i) a progressive tax, in which those with higher income (or wealth, or other measure of well-being) contribute a *larger percentage*,⁹⁹ from (ii) a flat tax, in which

99. See JOEL SLEMROD & JON BAKIJA, TAXING OURSELVES: A CITIZEN’S GUIDE TO THE GREAT DEBATE OVER TAX REFORM 50 & n.4 (1996) (defining an income tax as progressive “if

all contributors pay the *same percentage*, but those with more income pay more in absolute terms. We can then readily distinguish both of these schemes from a per capita “head tax,” in which all individuals pay the same amount, regardless of income.

To justify the move from a head tax to a flat income tax, one might argue that those with higher income receive a higher level of benefits from the public goods in question so that their higher contribution actually represents their “fair share,” given the benefits received.¹⁰⁰ Looking at the bridge example, if we imagine that the existence of the bridge saves each player thirty minutes in commuting time each day, the value of that time will differ among individuals. A high-income attorney with a billing rate of \$400 per hour benefits by \$200 each day, while a fast-food worker who earns \$10 an hour benefits by a mere \$5 each day.¹⁰¹ Similar arguments can be made with greater or lesser degrees of success for other public goods. In general, wealthier people have more to lose from the breakdown of social order, and hence gain more from governmental institutions that preserve order.¹⁰²

Progressivity involves collecting a higher percentage of tax from those with higher incomes. Even if we accept the argument that a reasonably tight correspondence exists between the benefits received through taxation and the tax base (income), then it remains the case

an individual’s or family’s total tax liability, as a fraction of income, rises with income,” and explaining that the same definition would apply to a tax based on “any alternative measure of well-being”).

100. A related, but distinct, argument would posit that those with higher income or wealth have, self-evidently, already received disproportionately large amounts of benefits from “the system” as a whole; otherwise these individuals would not have enjoyed such economic success. See MURPHY & NAGEL, *supra* note 30, at 17 (observing that we might view “people’s actual levels of welfare, with government in place, as a rough measure of the benefit conveyed to them by government”). On this account, a progressive tax system amounts, in part, to a payback for high levels of benefits received elsewhere. This argument is vulnerable to the usual counter that individual success reflects many factors (e.g., hard work, luck, personal endowments) for which the state cannot claim credit.

101. Even where high-income individuals receive most of their income through investments, rather than earnings, these individuals will likely value their time highly. One might measure this value by the amounts these individuals expend to save time in various ways.

102. See SLEMROD & BAKIJA, *supra* note 99, at 53 (explaining that the “benefit principle” of taxation “suggests that the tax burden should be higher for households with higher income and wealth, because these people have more to lose from the anarchy that would prevail if the government withdrew from providing defense, a justice system, police and so on”).

that a fully progressive scheme involves some measure of cross-subsidization from the better-off to the less well-off. We can defend this subsidization on the ground that the better-off have a greater ability to pay.¹⁰³ We can augment this assertion by citing the diminishing marginal utility of money, which makes removal of a larger percentage off the top of a much larger stack of dollars hurt no more than taking a smaller percentage off the top of a smaller stack of dollars.¹⁰⁴ To the extent progressivity contributes to distributive goals, we could couch this as a public good.

Building redistribution into the tax structure itself may have advantages over a simpler (head or flat) taxation scheme followed by additional transfers to achieve the same result. One advantage is purely administrative in nature. Taxing people who subsequently receive net positive transfer payments to achieve distributive goals moves money around needlessly. Progressive taxes also seem to enjoy popular support, although people seem to view them less favorably when confronted with examples that reveal how these taxes actually work.¹⁰⁵

103. *See id.* at 54 (discussing the “ability to pay” principle of fair taxation).

104. *See id.* (presenting this argument, but noting that it is also “unprovable” because of the impossibility of making interpersonal utility comparisons).

105. Despite broad popular support for progressivity as a concept, the results of one study that asked respondents to answer concrete questions about fair taxation “do not indicate that a majority of the sample prefer taxes that increase progressively, that is, more than proportionately to increases in income.” Michael L. Roberts et al., *Understanding Attitudes Toward Progressive Taxation*, 58 PUB. OP. Q. 165, 185 (1994). The authors suggest that the public perception that well-off people do not pay a proportionate share of their income in taxes, given the differential availability of tax avoidance opportunities, might explain this apparent discrepancy. *See id.* at 185-86. Another explanation suggests that people do not fully appreciate, or cannot readily process, the difference between flat taxes that take more money (but the same percentage) from the better-off, with truly progressive taxes that take a larger percentage from the better-off. For example, it appears that people are susceptible to a “progressivity illusion” when taxes are expressed in dollar rather than percentage terms. *See* EDWARD J. MCCAFFERY & JONATHAN BARON, FRAMING THE FAMILY: EVALUATION OF TAX POLICIES INVOLVING HOUSEHOLD COMPOSITION 14, 30, 33, 36 (USC Law School, Olin Research Paper No. 00-18, Revised, 2003), available at http://papers.ssrn.com/sol3/delivery.cfm/SSRN_ID246408_code001023520.pdf?abstractid=246408 (discussing this effect).

D. Opportunities for Avoidance and Evasion

Where public goods games involve a forced contribution feature, as did one of the experimental games in the Dawes study, the forced contribution can be implemented perfectly.¹⁰⁶ In contrast, any real-world tax system includes opportunities for legal tax avoidance and illegal tax evasion. Tax avoidance is generated by intentional or unintentional gaps in the tax base that enable people to reduce tax liability by selectively engaging in particular activities. Tax evasion is a function of necessarily imperfect enforcement regimes. Scholars have extensively analyzed the costs associated with tax avoidance and evasion.¹⁰⁷ While we will not revisit those topics in detail here, opportunities for avoidance and evasion might impact tax aversion by presenting opportunities for free riding.¹⁰⁸

As noted at the outset, instances of tax avoidance and evasion are likely manifestations of tax aversion. It remains possible, however, that they also exacerbate and perpetuate tax aversion. The dynamic is similar to a simple public goods game in which baseline levels of cooperation decay over time. Some people begin as noncooperators, while others become noncooperators in reaction to the noncooperation of other people. As in the public goods game, taxpayers may believe that to avoid victimization from free riding, a taxpayer must become a free rider herself. In other words, if taxpayers perceive the game as offering a binary choice between being a free rider or being a sucker, some number of would-be cooperators will choose free riding, or at least the partial free riding that accompanies tax avoidance or evasion.

Prohibiting all free riding would make these “reactive” free riders happiest, but given a world in which some people do free ride, these reactive people wish to be among the free riders.¹⁰⁹ Thus, closing up

106. Dawes et al., *supra* note 61, at 1175-78.

107. See *supra* notes 9, 12 (citing studies on tax evasion, avoidance and compliance issues).

108. Some gaps in the tax base are intentional. If the behavioral shifts induced by these gaps generate societal benefits that outweigh the lost revenue, then those who “avoid” taxes by engaging in tax-preferred behaviors do not free ride. However, just as the uses of tax revenue may be controversial, so too may be these tax preferences. See generally CITIZENS FOR TAX JUSTICE, THE HIDDEN ENTITLEMENTS (1996) (criticizing certain tax expenditures).

109. Such reactive free riding parallels the phenomenon of conditional cooperation found

gaps in the tax base or toughening enforcement might decrease free riding in two ways: by actually keeping people from free riding, and by making people believe that nobody else can get away with such free riding. If most avoiders and evaders are of the “reactive” variety, setting up a system that minimizes free riding should decrease tax aversion.

Standard economic analysis posits that an optimum level of enforcement exists. It is inefficient to catch every tax cheat; the efficient solution minimizes the sum of evasion costs and administrative and enforcement costs.¹¹⁰ Similar analysis has been applied to tax avoidance devices, such as tax shelters. If these avoidance devices generate costly deadweight losses, perhaps making avoidance easier for those who wish to avoid taxes will actually be more efficient.¹¹¹ Yet if some proportion of avoidance and evasion is of the “reactive” variety, then the optimum level of enforcement must take into account the impact that instances of avoidance and evasion could have on norms of compliance. Tightening up enforcement might have a multiplier effect in inducing and sustaining cooperation; in addition to increasing deterrence, enforcement might also reduce the fear of free-riding by fostering a public perception that free riding is not going to be tolerated.

Tax aversion also generates costs other than those captured by avoidance and evasion behaviors. Wage-earning taxpayers who cannot cobble together enough deductions to itemize have little opportunity to evade or avoid taxation.¹¹² Yet to the extent that taxes cause them more pain than other expenditures of similar magnitude, there is a social utility loss. Thus, even enforcement that appears inefficient when compared with the amount of evasion detected or deterred might actually yield latent benefits in the reduction of tax

in experimental economics studies. *See, e.g.*, FISCHBACHER ET AL., *supra* note 79; Keser & van Winden, *supra* note 7; *see also* Jon S. Davis et al., *Social Behaviors, Enforcement, and Tax Compliance Dynamics*, 78 ACCT. REV. 39 (2003) (modeling dynamics of compliance norms and behaviors among taxpayers).

110. *See* Becker, *supra* note 4, at 183-84.

111. *See* Weisbach, *supra* note 2, at 1669-71.

112. *See* Henry S.J. Robben et al., *Decision Frame and Opportunity as Determinants of Tax Cheating*, 11 J. ECON. PSYCH. 341, 347 (1990) (observing that “[t]axpayers vary in terms of the opportunities available to them to conceal income or declare unwarranted deductions without risking detection”).

aversion. If we care about addressing tax aversion itself, and not just its most obvious manifestations, then the role of enforcement in shaping attitudes towards contributing to taxes deserves independent attention.

Nevertheless, enforcement is a double-edged sword that can produce unintentional results. For those presently in compliance, the existence of extensive enforcement efforts may signal that free riding is in fact rampant—a signal that might lead to more noncompliance.¹¹³ In addition, an IRS that is perceived as overzealous in prosecuting offenses may be viewed as treating taxpayers unfairly or with undue levels of suspicion, thus generating additional resentment about the tax system.¹¹⁴ If the fact of compulsion itself adds distaste to the tax payment context, heightened enforcement efforts may operate to highlight the compulsory aspects of the system, rather than the more “service-oriented” side of the IRS’s operations.

IV. THE ROLE OF RECIPROCITY

Part III suggests that a real-world tax system, notwithstanding its compulsory nature (and perhaps in part because of it), will continue to contain features that generate aversion. A significant part of that

113. The Minnesota Department of Revenue conducted a study in 1995 that showed the converse of this trend. The Department sent informational letters to a sample of state taxpayers, informing them that tax compliance rates were in fact higher than the levels suggested in recent public opinion polls. Those taxpayers thereafter reported more income and claimed fewer deductions in their state tax returns. STEPHEN COLEMAN, MINN. DEP’T OF REVENUE, *THE MINNESOTA INCOME TAX COMPLIANCE EXPERIMENT: STATE TAX RESULTS 5-6, 18-19* (1996), available at <http://www.taxes.state.mn.us/reports/complnce.pdf>. A later study examined changes in tax reporting conduct on both state and federal income tax returns, using a different selection of data sets than those employed in the Minnesota Department of Revenue’s study. This later study found no statistically significant impact of the informational letters when assessed with those different data sets. Marsha Blumenthal et al., *Do Normative Appeals Affect Tax Compliance? Evidence from a Controlled Experiment in Minnesota*, 54 NAT’L TAX J. 125 (2001). For a detailed discussion of these and other studies on norms of tax compliance, see Leandra Lederman, *The Interplay Between Norms and Enforcement in Tax Compliance*, 64 OHIO ST. L.J. (forthcoming 2003), George Mason Univ. School of Law, Law and Economics Working Paper No. 3-12, 2003, at 18-21 & nn.87-112, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=391133.

114. See, e.g., FREY & FELD, *supra* note 12, at 23 (observing that “when the tax officials consider taxpayers purely as ‘subjects’ who have to be forced to pay their dues, the taxpayers tend to respond by actively trying to avoid taxation”).

aversion relates to concerns about free riding. We can obtain a deeper and richer understanding of what those concerns entail and how we might ameliorate them from anthropological and sociological studies of the phenomenon of reciprocity. Such analyses have identified cross-cultural trends in belief systems and norms of conduct that are consistent with findings in controlled experiments indicating that reciprocity plays a central role in the success of repeat-play interactions.

A. Structures and Scales of Reciprocity

Anthropological and sociological studies of exchange systems across cultures indicate that exchange participants tend to prefer balanced, reciprocal exchanges over systems of centralized collection and redistribution.¹¹⁵ Within systems of balanced reciprocity, participants provide resources (human capital, goods, and services) to each other on the understanding that they will receive clearly comparable resource contributions in return. Such systems permit delays, but the reciprocation must occur within reasonably contemporaneous time spans. If participants in these exchange systems obtain contributions without reciprocating in kind, other contributors typically subject these non-reciprocating participants to social condemnation, invoking social norms of expected degrees of fairness in the exchanges. In addition, such failures of reciprocity frequently result in participants' avoidance of future exchanges with noncontributing members of the exchange system.¹¹⁶

Public good experiments have examined the reciprocal interactions of limited numbers of participants in face-to-face interactions. These experiments have provided useful findings of the

115. See, e.g., MAURICE GODELIER, *THE ENIGMA OF THE GIFT* (Nora Scott trans., 1999); ANNETTE B. WIENER, *INALIENABLE POSSESSIONS: THE PARADOX OF KEEPING-WHILE-GIVING* (1992); Marshall Sahlins, *On the Sociology of Primitive Exchange*, in *THE GIFT* 26 (Aafke E. Komter ed., 1996).

116. PIERRE BOURDIEU, *OUTLINE OF A THEORY OF PRACTICE* 4-6 (Richard Nice trans., 1977); CHRISTOPHER A. GREGORY, *SAVAGE MONEY: THE ANTHROPOLOGY AND POLITICS OF COMMODITY EXCHANGE* 64-65 (1997); WEINER, *supra* note 115, at 28-33; Arjun Appadurai, *Commodities and the Politics of Value*, in *THE SOCIAL LIFE OF THINGS* 18-20 (Arjun Appadurai ed., 1986); Henry Orenstein, *Asymmetrical Reciprocity: A Contribution to the Theory of Political Legitimacy*, 21 *CURRENT ANTHROPOLOGY* 69, 69-70 (1980).

degree to which members of Western societies have been socialized with norms of reciprocity that often dominate over desires for self-interested maximization. However, one cannot directly extrapolate findings involving limited networks of face-to-face interactions to settings involving social actors engaged in more abstract interactions with centralized institutions. Nonetheless, the findings from experiments concerning face-to-face interactions provide useful insights, because small-scale networks form the building blocks of the larger, centralized institutions which are of concern for a study of tax aversion dynamics in American taxation.

In cultural systems with centralized institutions for collecting and redistributing resources, the mechanisms of social interaction and organization operate on both small and large scales. At the smaller scale, social integration is maintained through reciprocal, largely face-to-face interactions of individual actors within particular groups. At the larger scale, there are less face-to-face interactions of participants, and instead a greater role for institutional forms of communication and action between groups representing those individuals. The larger-scale systemic integration is built upon, and depends upon, the closer-scale modes of social integration.¹¹⁷

Taxpayers in systems of centralized redistribution often perceive those exchange systems as involving degrees of expropriation because the levels of taxation and other required contributions do not appear justifiable on the basis of clearly identifiable public goods received in return. As a result, groups controlling the collection and redistribution systems develop and utilize other elements of social structure to counter the participants' aversion to making such contributions, and to deter noncompliance.¹¹⁸ These elements include institutions for imposing the controlling groups' power over the participants, and elaborate ideologies that legitimate their authority

117. See, e.g., ANTHONY GIDDENS, *CENTRAL PROBLEMS IN SOCIAL THEORY: ACTION, STRUCTURE AND CONTRADICTION IN SOCIAL ANALYSIS* 76-81 (1979); WEINER, *supra* note 115, at 29-30; ERIC R. WOLF, *PATHWAYS OF POWER: BUILDING AN ANTHROPOLOGY OF THE MODERN WORLD* 167-68 (2001).

118. See, e.g., ABNER COHEN, *TWO-DIMENSIONAL MAN: AN ESSAY ON THE ANTHROPOLOGY OF POWER AND SYMBOLISM IN COMPLEX SOCIETY* 119-38 (1976); Jonathan Friedman, *Culture, Identity and World Process*, in *DOMINATION AND RESISTANCE* 246-60 (Daniel Miller et al. eds., 1989); Orenstein, *supra* note 116, at 70-73.

within the society.¹¹⁹

In smaller-scale interactions of identifiable participants, each participant tends to judge the fairness of the interaction by her perceptions of each other *participant's* behavior and motivations. This is consistent with results of experimental studies showing that the perceived motives of other players matter greatly in assessments of fairness by a given player.¹²⁰ Thus, participants express norms of reciprocity to reward or punish others in these smaller-scale interactions.¹²¹ When the forum of interaction moves to a broader scale, however, the focus of individual participants falls more on the perceived character of the *things exchanged* (whether in amounts of money capital, human capital, or commodities) and the fairness of the exchange of values conveyed through those items.¹²² One interpretation of this shift in focus is that individual participants' motives become more difficult to accurately assess as group size increases. Therefore, a participant must rely on the perceived values of the goods received and given to assess whether her partners in the interaction treated her fairly.

Alvin Gouldner's broad survey of anthropological and sociological studies of the norm of reciprocity across cultures found that this norm is practically a universal component of cultural systems.¹²³ However, the particular characteristics and dynamics of a norm of reciprocity can vary significantly among cultural settings. Reciprocity exists not only in smaller social groups engaged in ritualized gift exchange, but also in larger social settings where reciprocity entails an interdependence of participants in an increasing

119. See, e.g., Orenstein, *supra* note 116, at 70-73.

120. See, e.g., Fong et al., *supra* note 48, at 8-9 (explaining that in ultimatum and dictator games, "[p]unishment is triggered by responders' beliefs about the *intentions* of the proposer").

121. See, e.g., Igor Kopytoff, *The Cultural Biography of Things: Commodification as Process*, in *THE SOCIAL LIFE OF THINGS* 68-70 (Arjun Appadurai ed., 1986).

122. See, e.g., LOUIS DUMONT, *FROM MANDEVILLE TO MARX: THE GENESIS AND TRIUMPH OF ECONOMIC IDEOLOGY* 5-6 (1977); GREGORY, *supra* note 116; WEINER, *supra* note 115, at 28-30; Duran Bell, *Modes of Exchange: Gift and Commodity*, 20 *J. OF SOCIO-ECONOMICS* 155, 165 (1991); Edward L. Schieffelin, *Reciprocity and the Construction of Reality*, 15 *MAN* (n. s.) 502 (Sept. 1980); see also Appadurai, *supra* note 116, at 11-12.

123. Alvin W. Gouldner, *The Norm of Reciprocity: A Preliminary Statement*, 25 *AM. SOC. REV.* 161, 171 (1960). While some aspects of Gouldner's analysis received criticism due to contrary evidence in later ethnographic studies, several key features of reciprocity described by Gouldner remain supported by a broad array of anthropological research efforts.

division and specialization of labor, as well as the exchange of capital, goods, and services.¹²⁴

In its most basic characteristics across cultures, a norm of reciprocity “makes two interrelated, minimal demands: (1) people should help those who have helped them, and (2) people should not injure those who have helped them.”¹²⁵ In some cultures, reciprocity acts as a fundamental organizing principle in the operations of political and economic institutions of centralized governments.¹²⁶ In other large-scale and complex cultural systems, such as the United States, the political and economic institutions of centralized government have become rationalized and legitimized in the belief systems of that culture.¹²⁷ In such contexts, the operations of reciprocity may remain “endemic” among members of the culture, but are not carried out overtly in the operations of these centralized economic institutions.¹²⁸

A primary aspect of reciprocity that varies from one cultural setting to another is the way in which participants affix values to particular things exchanged, and thereby determine what things have equivalent values within the context of their exchanges. In many cultural systems, “equivalence may mean that the things exchanged may be completely different, but should be equal in value as defined by the actors in the situation.”¹²⁹ In other cultures and group interactions, “equivalence may mean that exchanges should be concretely alike, or identical in form, either with respect to the things exchanged or to the circumstances under which they are exchanged.”¹³⁰

A number of anthropological studies of reciprocal exchange systems have found that loss avoidance is a key concern. For example, Schieffelin examined the role of a norm of reciprocity in the creation and maintenance of social ties among the Kaluli people of

124. *Id.* at 169-70.

125. *Id.* at 171.

126. *Id.*

127. *Id.*

128. *Id.*

129. *Id.* at 172.

130. *Id.*

Papua New Guinea.¹³¹ Even in exchanges among smaller groups of identifiable participants, the actors perceived the things they exchanged as imbued with cultural meaning that provided a basis for placing particular valuations on each exchanged thing. When one participant conveyed an item of value to another, it created an imbalance between them until the recipient responded by conveying something to the donor of equivalent value under the circumstances of the relationship. The Kaluhi people thus perceive reciprocity as being driven by the social necessity of redressing the loss sustained by the first donor in order to restore and maintain the ongoing social relationships between that donor and the recipient. Therefore, exchanges were motivated not just by the positive value of enhancing social relationships through donations, but also by the converse fear of sustaining unredressed losses and a breakdown in the social order of the exchange network.¹³²

What relevance does such a reciprocity norm have in a setting in which an institutionalized governmental body compels payments from individuals, and where different classes of people are stratified economically and politically into a hierarchy of different status levels? In such a setting, one would expect social actors of higher status to extract benefits from participants of lower status without a concern for reciprocity. Cultural beliefs and social norms that legitimate the higher status of certain members of that society would sustain such asymmetric exchanges. Similarly, the political and economic institutions of a centralized government operating in such a stratified society might extract payments from its citizens without providing direct reciprocation to each paying participant.¹³³

However, surveying the findings of numerous studies of reciprocity in different cultural settings, Gouldner observed:

Not only does the norm of reciprocity play a stabilizing role in human relations in the *absence* of a well developed system of special status duties, but it contributes to social stability even when these are *present* and well established. Status duties

131. Schieffelin, *supra* note 122.

132. *Id.* at 513-15.

133. *See, e.g.,* Orenstein, *supra* note 116, at 70-73.

shape behavior because the status occupant believes them binding in their own right; they possess a kind of *prima facie* legitimacy for properly socialized group members. The general norm of reciprocity, however, is a second-order defense of stability; it provides a further source of motivation and an additional moral sanction for conforming with specific status obligations.¹³⁴

Different elements of enculturated norms and collective ideologies can thus play out at multiple scales of interaction—from the policy rhetoric deployed by administrators of centralized redistribution to the decisions of conformity or deviation by individual participants in small-group interactions.¹³⁵

How might these insights from anthropological and sociological studies inform an analysis of taxpaying behavior in the United States? Experimental studies have already attempted to identify strategies corresponding to those used at the large and small scales of reciprocal interactions to legitimate centralized tax collection.¹³⁶ The results suggest that trust in government and in other citizens buttresses tax compliance.¹³⁷ However, additional work is necessary to augment and translate these insights into meaningful tax policy directives.

In addition to the challenges of centralized collection presented by the American tax system, the system also, controversially, effects redistribution. The type of redistribution that receives the most attention—that from the better-off to the less well-off—presents sharp concerns about free riding.¹³⁸ Here, too, we can see reactions that correspond to small and large scale strategies. On the one hand, we have seen the devolution of certain social welfare programs to the state and local level, a move premised, in part, on the supposed

134. Gouldner, *supra* note 123, at 175-76.

135. *See, e.g., id.*; GIDDENS, *supra* note 117, at 76-81.

136. *See, e.g.,* John T. Scholz & Mark Lubell, *Trust and Taxpaying: Testing the Heuristic Approach to Collective Action*, 42 AM. J. POL. SCI. 398 (1998).

137. *Id.* at 411-13.

138. In fact, transfers to the poor constitute only a small subset of all societal redistribution. *See, e.g.,* GORDON TULLOCK, *ECONOMICS OF REDISTRIBUTION* 1 (2d ed. 1997) (explaining that “if we use redistribution to mean all cases in which the government transfers funds or wealth from one group of people to another, it is a much larger phenomenon than the rather modest transfers to the poor”).

greater ability of local institutions to assess the needs and motives of would-be recipients.¹³⁹ On the other hand, we see the use of rhetoric and social control mechanisms to legitimate these expenditures.¹⁴⁰ However, these strategies may be insufficient to overcome the perceived lapses of reciprocity that redistribution introduces into the tax system.

To pinpoint these shortcomings, we must evaluate the American tax system in terms of its satisfaction of enculturated norms of reciprocity. In subpart B, we work through two models of exchange: the market exchange model, and a model of non-market reciprocity through repeat-play and gift-giving. The federal tax system does not fit comfortably within either of these templates. In subpart C, we consider how and whether certain components of reciprocity, or proxies for those components, might be introduced into the federal tax system.

B. Markets and Other Reciprocal Exchanges

1. Market Exchange

The most familiar and ubiquitous form of bilateral exchange in modern, developed countries is the market exchange. One can also

139. See Matthew Diller, *The Revolution in Welfare Administration: Rules, Discretion, and Entrepreneurial Government*, 75 N.Y.U. L. REV. 1121, 1145-73 (2000) (discussing degree of discretion given to front-line administrative personnel in administering Temporary Assistance for Needy Families (TANF) and in making individual determinations about matters such as the needs and abilities to work of would-be recipients); see also Wax, *supra* note 98, at 270 (explaining that “[t]he need to judge what persons seeking benefits can do or have done for themselves or others will drive a keen interest in the behavior and conduct of would-be beneficiaries”); *supra* Part III.B (discussing difficulty in distinguishing “needy riders” from “free riders”).

140. The Personal Responsibility and Work Opportunity Reconciliation Act of 1996, Pub. L. No. 104-193, 110 Stat. 2105 (codified as amended in scattered sections of 42 U.S.C.), which replaced Aid to Families with Dependent Children (AFDC) with TANF, contained a number of rhetorical and structural features designed to address perceived problems with free riding, including the express disavowal of any person’s entitlement to benefits and the addition of work requirements, sanctions, and time limits. See HOUSE WAYS AND MEANS COMMITTEE, 106TH CONG., 2000 GREEN BOOK, SECTION 7: TEMPORARY ASSISTANCE TO NEEDY FAMILIES 352-54 (Comm. Print 2000) (discussing these and other changes effected by the legislation); see generally FRANCES FOX PIVEN & RICHARD A. CLOWARD, *REGULATING THE POOR: THE FUNCTIONS OF PUBLIC WELFARE* (2d ed. 1993) (discussing historical control of welfare recipients).

conceive of taxes in these terms; indeed, the “benefit approach” to taxation does exactly that.¹⁴¹ However, there are two impediments to the use of this model in the federal taxation context. The first impediment arises from the rhetorical, temporal, and spatial separation of the collection function of government from the benefit-providing functions of government.¹⁴² Only rarely do the collection and benefit sides of government unite in time and space, in a single interaction informed by coherent policy rhetoric. We do not know of any in-depth study of the psychological impact of putting money through a window and receiving a tangible representation of a benefit through that same window in return, but the sense of reciprocity engendered in the transaction must be much greater than in the typical taxpaying setting.¹⁴³

Other settings in which either rhetorical or actual connections have been drawn between payments and benefits include school bond issues, the earmarked use of lottery revenues,¹⁴⁴ and the earmarking of payroll taxes for Social Security, Medicare, and Unemployment Insurance.¹⁴⁵ Local governments have also employed the imagery of a

141. RICHARD A. MUSGRAVE, *THE THEORY OF PUBLIC FINANCE* 62 (1959) (“In the benefit approach, the relation of taxpayer and government is seen, as John Stuart Mill puts it, in quid pro quo terms. Since the relation is one of exchange, the rules of the public household are taken to be more or less the same as those of the market.”).

142. *E.g.*, Rosenberg, *supra* note 18, at 179-83.

143. Examples of such “single-window” transactions include many forms of government-issued licenses (e.g., licenses to hunt, fish, marry, operate a vehicle, keep a pet, or enter a public park). The individual’s control over the choice whether to engage in the underlying activity, and the evident value that the individual places on the privilege she is obtaining, likely make the interaction more palatable. *See* CUMMINGS ET AL., *supra* note 10, at 2 (reporting experimental results of laboratory investigations conducted with subjects in the United States, South Africa, and Botswana that “provide support for the hypothesis that tax compliance increases with individual perceptions that the tax system is fair and that the government is providing valued goods and services with the revenues”); *id.* at 6 n.7 (IRS survey results show “individuals react negatively to the perception that they have no control over the use of their taxes”); James Alm et al., *Fiscal Exchange, Collective Decision Institutions and Tax Compliance*, 22 *J. ECON. BEHAV. & ORG.* 285, 288 (1993) (reporting results of laboratory experiments showing tax compliance “is significantly higher when individuals vote on the use of their taxes than when the identical [spending plan] is imposed upon them”); *cf.* Rosenberg, *supra* note 18, at 229-30 (suggesting media campaigns to emphasize public goods and services the federal government provides using tax revenues).

144. *See, e.g.*, CHARLES T. CLOTFELDER & PHILIP J. COOK, *SELLING HOPE: STATE LOTTERIES IN AMERICA* 227-28 (1989) (discussing the earmarking of state lottery revenues and the likelihood that it has little or no impact on spending patterns).

145. *See* ROSEN, *supra* note 2, at 184-85, 196 (explaining that payroll taxes fund Social

unified exchange in campaigns to support the payment of taxes. For example, a 1934 Memphis advertising poster depicted a customer receiving a basket of identifiable public goods in exchange for his monetary payment.¹⁴⁶ However, the federal income tax system lacks such connections. The efficiency justifications for agency specialization are obvious, but severance of all connections between the collection of taxes and the provision of benefits eliminates any semblance of a quid pro quo exchange.¹⁴⁷

The second difficulty is the aforementioned fear of free riding. The failure of some members of society to contribute their shares to the provision of the public good prevents the individual taxpayer from receiving full value for her money in the interaction. Indeed, the existence of free riders may independently generate disutility that makes the deal even worse in experiential terms than would be suggested by the gap between payments and benefits. Thus, even if it were possible to arrange matters so that people directly associated the benefits received with the taxes going into the system, taxpayers would still need reassurance that others had not contributed less while receiving more.¹⁴⁸ A system that incorporates a measure of intentional redistribution, whether through transfer programs or through cross-subsidization built directly into the tax system in the form of progressivity and gaps in the tax base, cannot provide such assurance.¹⁴⁹

Security, Medicare, and Unemployment Insurance).

146. Poster from the 1934 the Memphis Pay Your Taxes Campaign, *Good Merchandise Fairly Priced*, U.S. MUN. NEWS, Oct. 1, 1935, reprinted in DAVID T. BEITO, *TAXPAYERS IN REVOLT* 122 (1989).

147. This is not to suggest that it would always be easy to draw rhetorical connections between government collections and expenditures. Some benefits generated by government expenditures take an indirect or intangible form that makes such connections more difficult to draw. For example, the direct benefits of welfare payments only go to the poor, but the payments yield an important set of ambient benefits for society as a whole (such as the chance to live in a society in which young children do not starve). Because these ambient benefits arise only indirectly from the government expenditures, non-poor individuals may have difficulty recognizing that they receive any benefit at all from the tax dollars spent on poverty relief.

148. See Alm et al., *supra* note 143, at 290, 301 (showing tax compliance rates in laboratory experiments were highest when subjects could vote for how taxes were spent and were informed of widespread support for the public goods provided; the researchers inferred that subjects perceived that strong support for a good would translate into high rates of payment for that good by the other participants).

149. More explicitly drawing the connection between taxes and benefits could even

2. Wider Frames of Exchange

We can best introduce another brand of exchange potentially implicated in public goods interactions by contrasting it with the market exchange model just discussed. Market exchanges often involve the immediate, anonymous exchange of a good or service for currency. The availability of a generalized medium of exchange that stores value (money) makes it unnecessary for the parties to an exchange to await the moment when each has something intrinsically valued by the other to complete the deal.¹⁵⁰ Contracts offer a device for temporally offsetting the moves in the exchange,¹⁵¹ while products such as credit can further widen the time-span for performance. Notably, contract transactions accomplish all of these functions within the framework of a market-based interaction in which the individual identities of the participants are unimportant.

Outside of the marketplace (and even within it, where repeat play is involved), exercises in reciprocity often diverge from this market-based model of exchange. The time span between giving and receiving can widen without the aid of market products such as credit, or formal devices such as contracts. Factors like trust and reputation begin to play a role in sustaining the parties' cooperation. Much anthropological and sociological literature analyzes gift exchange, which some view as a kind of slow-motion market transaction.¹⁵²

In other words, widening the frame of reference can often address the above-mentioned concerns with free riding.¹⁵³ A degree of

sharpen the sense of unfairness for some if these individuals learned how much they paid for particular benefits as compared to others. As a collateral matter, these individuals might fundamentally disagree with some of the ends of taxation, thereby widening the perceived margin between taxes paid and benefits received.

150. See *supra* note 122 (citing studies of market and commodity exchange structures).

151. See, e.g., CHARLES FRIED, *CONTRACT AS PROMISE: A THEORY OF CONTRACTUAL OBLIGATION* 13-14 (1981) (discussing use of contracts to transform future exchange into present exchange); see also YORAM BARZEL, *A THEORY OF THE STATE: ECONOMIC RIGHTS, LEGAL RIGHTS, AND THE SCOPE OF THE STATE* 90-91 (2002) (discussing use of contracts to address exchange over time as opposed to immediate exchange); DENNIS C. MUELLER, *CONSTITUTIONAL DEMOCRACY* 227 (1996) (discussing the same).

152. E.g., BOURDIEU, *supra* note 116, at 5-7; Kopytoff, *supra* note 121, at 68-69.

153. Cf. Daryl J. Levinson, *Framing Transactions in Constitutional Law*, 111 *YALE L.J.* 1311 (2002) (discussing the significance of how widely or narrowly one "frames" a given

patience or a broader view of the interaction can turn what might initially seem to be a case of free riding into a reciprocal move in an ongoing interaction. For example, one who invests time, effort, and money in helping a family member appears to make a bad deal if we look narrowly at the balance sheet at a given moment. However, examining the situation over time might reveal a more balanced picture in which the assisted family member becomes an assisting family member.

Another way in which people in the real world “widen their frames” involves the recognition of benefits that they receive by helping those they care about. We speak here not of payback for earlier favors or the banking of future favors, but rather of a recognition that one’s own well-being is to some extent bound up with that of people to whom one has certain ties. Relatedly, members of small groups may feel their own successes belong, at least in part, to those who have participated in their lives, so that sharing does not as clearly involve a transformation of something that is strictly personal property into a transfer to another.

Experimental literature and anthropological studies agree that small groups whose members readily identify with each other have an easier time sustaining cooperation. There are several reasons for this. First, informal pressures and social sanctions may be ineffective in large group settings.¹⁵⁴ Relatedly, where the provision of public goods involves large disparate groups, as it does in the federal taxation context, individuals do not likely perceive themselves as cooperating with others in a meaningful sense. Equally unlikely is the perception that noncooperation in large-scale settings constitutes the sort of “free riding” that actually harms others.¹⁵⁵ When a person does

transaction in determining its constitutionality).

154. See MANCUR OLSON, *THE LOGIC OF COLLECTIVE ACTION* 62 (1965) (positing that “[i]n general, social pressure and social incentives operate only in groups of smaller size, in the groups so small that the members can have face-to-face contact with one another”).

155. See JAMES M. BUCHANAN, *THE DEMAND AND SUPPLY OF PUBLIC GOODS* 87 (1968) (contending that the term “free rider” is something of a misnomer in large-number settings involving the provision of public goods because an individual “has no sensation of securing benefits at the expense of others in any personal manner”); see also EDNA ULLMANN-MARGALIT, *THE EMERGENCE OF NORMS* 28-29 (1977) (describing the “condition of individual insignificance,” where each individual contribution is so small and difficult to trace that it appears to have no impact on the overall result, and where defection is “not at the personal

not perceive that her actions have a personal impact on other individuals, she will be less reluctant to free ride.¹⁵⁶ Finally, members of a small, cohesive group will likely have a greater degree of interdependence in their utility functions than members of a larger group.

Small-group settings also allow enormous transparency in the reciprocal interaction. Members of small groups can personally assess the motives and situations of the other players in a manner not possible in large group settings. For example, in our winter expedition example,¹⁵⁷ the hatted players could easily perceive the equipment requirements of the hatless players, and the hatted players could assess whether the hatless players were strategically hatless or hatless through no fault of their own. Both the donors and the recipients could view the redistribution, and the donors could also monitor the recipients' use of the donated hats. Moreover, the donors could assess the recipients' action or inaction in the face of later opportunities to reciprocate.

One might question whether the impersonal nature of the large scale setting makes free riding a less acute concern. Free riding is likely to be more commonplace in large group settings for the reasons noted, but might those settings involve a lesser degree of the psychic pain associated with being "suckered"? Little or no systematic study and analysis of this possibility exists. However, popular outcry over welfare—a program that involves a special category of perceived free riders—was an important catalyst of reform. Political animosity towards welfare has far outweighed the relatively small monetary expenditure associated with it, leading some to believe that the animosity stems not from the cost of the program but from the expectations regarding reciprocity.¹⁵⁸ This suggests that the large group setting sheds the benefits that might make reciprocity more

expense of any of the other participants and is moreover likely to go entirely unnoticed by them").

156. ULLMANN-MARGALIT, *supra* note 155, at 29 (explaining that possible inhibitions about "the infliction of direct and personal damage on one's partners" would not be operative in settings "where the condition of individual insignificance is satisfied").

157. *See supra* Part II.B.

158. *See, e.g.,* Wax, *supra* note 98, at 272-74; Fong et al., *supra* note 48, at 21.

viable without introducing any countervailing benefits in the form of lessened psychic pain and increased tolerance for free riding.

C. Components and Proxies

Even a superficial look at the federal tax system raises serious doubts about its ability to embody a robust notion of reciprocity. Taxation at the federal level does not remotely resemble strict “for value” market exchanges, given the fact that benefits are temporally, spatially, and rhetorically removed from payments. Moreover, the large numbers of people involved and the high social distance between them retards any move towards a wider-framed understanding of the reciprocal interaction. No ability exists to directly observe the motives or circumstances of other taxpayers or recipients, potentially sharpening concerns about free riding.¹⁵⁹ At the same time, free riding becomes more attractive because taxpayers do not perceive it as personally harming other individuals. Finally, people will likely feel a strong sense of entitlement to their gross income.¹⁶⁰

Even if interjecting a stronger sense of reciprocity into the federal tax system would reduce tax aversion, the possibilities for doing so are significantly constrained. If we want to make progress, we must identify particular components found in reciprocal interactions and transplant them into the federal taxation arena, or, alternatively, find proxies for the features that exist in robust reciprocal interactions. For example, some recent and ongoing work investigates whether the Internal Revenue Service’s treatment of taxpayers affects compliance levels.¹⁶¹ This work incorporates notions of reciprocity by querying whether, for example, a courteous, fair, and helpful IRS triggers a reciprocal reaction from taxpayers in the form of heightened

159. See, e.g., ARMIN FALK & URS FISCHBACHER, A THEORY OF RECIPROCITY 20 (Ctr. for Econ. Studies & Ifo Inst. for Econ. Research, Working Paper No. 457, 2001), <http://papers.ssrn.com/sol3/delivery.cfm/000105406.pdf?abstractid=203115>; Fehr & Gächter, *supra* note 37, at 162-63.

160. MURPHY & NAGEL, *supra* note 30, at 25-26, 30-36 (discussing claims of moral property rights in pretax income).

161. See, e.g., FREY & FELD, *supra* note 12, at 22-23; Leandra Lederman, Tax Compliance and the Reformed IRS, 51 KAN. L. REV. (forthcoming 2003), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=391134.

compliance levels.

Could the IRS potentially serve as a proxy for all of the other members of society who engage in the taxpaying game? If taxpayers viewed the agency as a composite “good citizen”—a fiscally aware “Smokey the Bear” type of character¹⁶²—this might reduce the present, large-scale taxpaying game to a small-group (two-player) game between the taxpayer and the anthropomorphized agency. However, this approach has limits. While people might behave marginally better when treated well by an agency that has an attractive public image, some forms of free riding that may be of concern to taxpayers occur outside of the jurisdiction of the agency. In addition, a single-purpose agency devoted to collection of taxes might have difficulty fostering the sort of wide-frame view of the societal interaction that can make the interaction appear more reciprocal.

Another feature alluded to above is that of transparency—the ability to see and evaluate the reciprocal moves. In small-group interactions, where voluntary contributions dominate, transparency is tightly linked to the notion of control. If a participant believes that the group interaction has become too imbalanced, she can simply stop contributing, secure in the knowledge that this punishes those individuals who failed to exhibit sufficient reciprocity in their dealings. In contrast, the uses made of tax money are less transparent. At a minimum, there are significant costs in learning where one’s dollars go. Political action affords only the bluntest form of control; each voter can only “purchase” a bundle of issue positions advocated by a given representative. In addition, the motives, circumstances, and contributions of the other members of society are not transparent.

Certain kinds of transparencies, such as knowledge of where taxes go, and the amounts other contributors pay, could be enhanced in the federal tax system at relatively low cost. A remaining question, though, is whether heightened transparency does any good—or whether, indeed, it does harm—when presented in isolation from meaningful control. One might argue that knowing more about the

162. For background on Smokey the Bear and similar public service advertising campaigns, see PAUL RUTHERFORD, *ENDLESS PROPAGANDA: THE ADVERTISING OF PUBLIC GOODS* 26-29 (2000).

tax system actually makes people like it less. While the answer remains unclear, a possibility worth investigating is whether a proxy for control—the exercise of voice—might mitigate this concern. In other words, introducing a transparency-voice bundle into the federal taxation system might carry many of the advantages of the transparency-control bundle we see in successful small-group interactions.

V. BUILDING A QUALITATIVE RESEARCH AGENDA

In this final section of the paper, we present some possible ways of operationalizing the insights gleaned from existing empirical literature as it relates to the phenomenon of tax aversion. However, as we have noted throughout the paper, the existing empirical literature contains many gaps. There is little or no direct work on the phenomena that most interests us—the contours, dynamics, causes, and cures of tax aversion. As the anthropological and behavioral literature emphasizes, context is critically important, and one cannot simply lift lessons from one experimental context and apply them to the very different context of federal taxation. In keeping with this understanding of the limits of the existing work, we do not present the ideas in this section as policy proposals for immediate universal adoption. Rather, we mean to provide tentative sketches for experimental designs that might be attempted, perhaps as pilot programs, in the federal taxation context.

A. Transparent Taxpaying

One could design programs to test the effects of making taxpaying more transparent to taxpayers. We have in mind two distinct sorts of transparency. The first involves making the use of specific tax monies transparent to taxpayers. Even an extraordinarily motivated taxpayer would encounter great difficulty in attempting to learn where her income tax dollars go. Federal income tax instruction booklets do contain an “outlay” pie chart that shows the breakdown of the federal budget.¹⁶³ Yet this budget shows *overall* federal

163. Internal Revenue Service, 2002 1040 Instructions 2 (2002), *available at*

expenditures; it does not show only the expenditures funded by the income tax. Payroll taxes, which fund a specific slate of social benefits, account for thirty-five percent of federal receipts.¹⁶⁴ Because the “outlay” pie chart includes expenditures funded by payroll taxes as well as expenditures funded by income taxes, an individual glancing at the chart might misapprehend the proportion of her income tax dollars flowing to various programs.¹⁶⁵

A taxpayer who undertakes to construct her own pie chart showing only the uses made of income tax receipts will find this a daunting task. Like the instruction booklet pie chart, the official budget documents break down expenditures in various ways but do not provide a functional breakdown of the expenditures funded only by the income tax.¹⁶⁶ Therefore, a taxpayer would have to know which programs income tax does not fund, identify and subtract the amounts of the related budget lines, and calculate overall percentages for each category and subcategory based on the remaining totals. This would require many tedious hours poring over government documents and making calculations. Only after painstakingly calculating percentages for each function funded by the income tax could a taxpayer apply these percentages to her own income tax bill to determine how the government spends her income tax dollars. This level of non-transparency is stunning, given the relative ease with which the government could provide this information to taxpayers.¹⁶⁷

<http://www.irs.gov/pub/irs-pdf/i1040gi.pdf>.

164. *See id.* (providing “income” chart).

165. The misconceptions potentially generated by this pie chart are highly significant if we think that redistribution of the sort that accompanies social programs raises heightened fears about free riding.

166. *See* Office of Management and Budget, Historical Tables, Budget of the United States Government, Fiscal Year 2004, *available at* <http://www.whitehouse.gov/omb/budget/fy2004/pdf/hist.pdf> (providing detailed tables showing government outlays broken down by function, category, and agency; and showing breakdowns of government receipts by source; but showing no functional breakdown of just the subset of expenditures funded by the income tax). Some organizations provide online charts and other information regarding the uses made of federal income tax revenue, but a taxpayer encountering these breakdowns would have to independently investigate and assess the validity of the data and the methodology used to achieve these results, and consider the extent to which the results might be influenced by each group’s political objectives. These concerns are not entirely avoided when a governmental body provides the breakdown, but they are minimized by the use of official data, standard category terms, and generally accepted methods of aggregating and presenting data.

167. Oregon, for example, provides the breakdown of its use of income tax revenues in a

While a simple printed pie chart showing the uses of income tax monies would provide a major advance, the ubiquity of computerized tax preparation software makes an even more transparent interface feasible. For example, after a taxpayer completes an income tax return on a computer¹⁶⁸ a software program could easily provide a pie chart showing the percentages of income tax revenue dedicated to various functions and applying those percentages to the taxpayer's annual income tax bill. This would inform a taxpayer exactly how many of her dollars flow to each governmental function. The software could initially present taxpayers with a pie chart showing broad categories of federal income tax expenditures. By clicking on a slice of the pie, a taxpayer would reach subsidiary charts showing expenditure details. At an appropriate level of detail, the taxpayer would encounter links to government webpages describing the individual tax-funded program.

Another type of transparency that might be built into such a software program involves other taxpayers' actions. The government could easily provide taxpayers with information (perhaps based on a previous year's taxes) indicating the median and mean dollar amount of taxes people in various income strata and household configurations pay. A computer interface could personalize this information by telling an individual taxpayer whether her tax contribution falls above or below the median or mean amount of taxes for someone in her income range and filing status.¹⁶⁹ This interface could even indicate the percentile into which the taxpayer falls. Again, while a taxpayer could theoretically construct this information from publicly-available data, building it directly into the tax preparation context would dramatically lower the costs of obtaining this information.

user-friendly format online. Oregon Department of Revenue, Services Paid for with Oregon Income Tax Dollars (Fiscal Year 2001-02), at <http://www.dor.state.or.us/taxInfo/Poster.html>.

168. The IRS has recently launched a new internet-based electronic filing program designed to reach a majority of American taxpayers. Internal Revenue Service, Free File, at <http://www.irs.gov/app/freeFile/welcome.jsp>; see Alex Frangos, *Use the Web to File Taxes*, WALL ST. J., SUNDAY (available in THE ADVOCATE & GREENWICH TIME) Jan. 19, 2003, at F3.

169. Tax preparation software has already begun to provide this information. The 2002 edition of TurboTax® Deluxe contains a feature called "U.S. Averages Comparison" that compares the individual taxpayer's earned income, other income, itemized deductions, and tax liability with those of others in her adjusted gross income range, using year 2000 IRS data adjusted by a consumer price index factor.

We could then study the effects of this pilot project on the amount and quality of tax aversion. On the one hand, the program could more concretely connect benefits with tax payments, perhaps making the interaction feel more reciprocal. It might also correct common misperceptions. For example, a person who has long resented taxation because she imagines that most of her tax money flows to “lazy” welfare recipients might view taxation differently when she learns how few of her tax dollars actually go to the welfare program. It might also allow an individual to see she is not a “sucker” contributing to the tax system while everyone else free rides. Thus, transparency might enhance the legitimacy of the governmental agencies responsible for collecting and spending funds, while simultaneously increasing compliance levels.¹⁷⁰

On the other hand, the possibility exists that greater transparency might actually lead to greater hostility regarding taxpaying as taxpayers learn exactly how much of their money flows to programs they do not support and as they learn with greater precision the degree to which their own contributions subsidize others (whether recipients of redistributive programs, or fellow contributors who pay smaller amounts in tax).¹⁷¹ Yet, absolute levels of tax aversion may matter less than the practical consequences of that aversion. While the analysis in this paper suggests that tax aversion typically takes the socially destructive forms of avoidance, evasion, and unfocused disutility, the possibility remains that tax aversion could be “functional” in the sense that it motivates people to take political action aimed at rectifying perceived problems in public finance. In other words, disutility can function in a democracy much like pain in a physiological system, alerting the actor to take ameliorative steps to avoid permanent damage.¹⁷²

170. See, e.g., JOHN RAWLS, *POLITICAL LIBERALISM* 66-71 (1993) (discussing the importance of publicity in legitimating governmental institutions); Tom R. Tyler, *Justice, Self-Interest, and the Legitimacy of Legal and Political Authority*, in *BEYOND SELF-INTEREST* 171 (Jane J. Mansbridge ed., 1990) (discussing the impact of government legitimacy on citizen compliance).

171. See McCaffery, *supra* note 1, at 1874-86 (suggesting that hidden taxes may be more palatable to taxpayers).

172. See ROBERT E. LANE, *THE LOSS OF HAPPINESS IN MARKET DEMOCRACIES* 230 (2000) (arguing that expressions of pain in a democratic system can serve “to make that system more responsive to popular needs and demands”).

But aversion, like pain, is only useful to the extent that it prompts useful corrective action. Because corrective action requires information, one benefit of transparency is the improved political efficacy of the citizenry.¹⁷³ Hence, we would not expect or want a transparent tax system to merely generate hedonic gains for taxpayers, but rather to transform aversion that is now blindly directed towards taxation in general into political sentiments that are more finely focused, and hence potentially more functional. Rather than simply feeling vaguely cheated by the system, taxpayers could address the specific programs (or particular features of the tax system) that engender a sense of waste or unfairness.

Two issues threaten to puncture this optimistic vision. First, it is questionable how much difference any taxpayer's angst can make (no matter how finely tuned) in a system in which majoritarian preferences are arguably subordinated to interest group politics. Second, given the fact that an individual taxpayer can do virtually nothing about a particular source of angst, one might question the extent to which taxpayers will even bother to examine the uses of their tax money. The next section offers a potential mechanism for addressing these concerns.

B. Adding Voice: "The Taxpayer's Budget"

We hypothesize that a meaningful taxpayer "voice" might alleviate the concerns about powerlessness by serving as a proxy for taxpayer control. To test this hypothesis, we propose adding an additional interactive feature to the interface in the pilot project described above. We contemplate a simple software program that enables taxpayers to move seamlessly from a "budget-viewing" mode into a "budget-making" mode. In "budget-making" mode, taxpayers could express their budgetary preferences by revising the pie chart

173. See, e.g., Julie Roin, *Truth in Government: Beyond the Tax Expenditure Budget*, 54 HASTINGS L.J. 603, 605-08 (2003) (discussing the importance of information in a democracy); Kenneth W. Gideon, *Assessing the Income Tax: Transparency, Simplicity, Fairness*, 25 OHIO N.U. L. REV. 101, 102 (1999) (discussing advantages of transparency in tax rules); see also Julie Roin, *Competition and Evasion: Another Perspective on International Tax Competition*, 89 GEO. L.J. 543, 600-03 (2001) (discussing impact of increased transparency on tax avoidance schemes in various jurisdictions).

(and the subsidiary pie charts subsumed within each slice) to reflect their preferred allocations of their tax dollars.¹⁷⁴ We contemplate an intuitive interface that permits a taxpayer to use a computer mouse to grab the edge of a given pie slice and widen or narrow it. For each such move, the taxpayer could have the option of automatically readjusting every other slice proportionally or of making additional adjustments manually.

Of course, we do not contemplate allowing taxpayers to directly control the budget in this fashion; the interface would make very clear to the taxpayer that the “budget-making” mode merely conveys information about the taxpayer’s preferred allocation. However, the government could aggregate all of the individual allocations (or a representative sample) to construct a publicly-available “taxpayer’s budget” that shows how taxpayers would spend tax dollars, if given the power. If the news media compared this aggregate against the real budget, it could serve as a focal point for public discourse and political debate, potentially influencing government spending patterns. This dynamic could conceivably operate as a counterweight to any real or perceived dominance of the political process by special interest groups. We might also expect this program to encourage some improvements in public relations work among governmental agencies, in an effort to win a vote of confidence from the citizenry.¹⁷⁵

Operationalizing this idea, even within the context of a limited experimental program, would require us to address several fundamental questions. First, we would need to decide on the basis of

174. At least one experimental study found that subjects allowed to choose between two options for expenditures of the group funds to which they had contributed, experienced increased satisfaction with the taxation and expenditure system in which they participated. Alm et al., *supra* note 143. The budget allocation we propose here would offer participants a greater array of choices. Perhaps suggesting the appeal of such an approach, our hometown newspaper, the Austin American-Statesman, has recently created an interactive online “budget game” to accompany its coverage of the 78th Texas Legislature. See *The Budget Game*, http://www.statesman.com/insight/content/norails/budget_game. The game enables people to choose the budget cuts and new revenue sources that they would use to bridge the state’s budgetary shortfall, and provides commentary on the likely political fallout associated with each choice. See Gary Susswein & Juan B. Elizondo, Jr., *Play the Budget Game!*, AUSTIN AMERICAN-STATESMAN, Apr. 13, 2003, p. E1 (explaining the game and providing a hard copy version).

175. Alm et al., *supra* note 143, at 301-02.

our “taxpayer’s budget.” We could base the budget on the “dollar votes” of taxpayers so that the chosen allocations of someone with more tax dollars to allocate would have more weight in the aggregate pie chart. Another approach would give equal weight to the preferences of each taxpayer, regardless of the amount of tax she pays.¹⁷⁶

There are political and philosophical arguments for both the “dollar vote” and the “equal vote” approaches. Giving those who pay larger amounts a “louder” voice in any political arena may seem morally repugnant at first blush, but the case for doing so grows stronger if we think that part of what fuels tax aversion is a concern with cross-subsidization. Moreover, if one believes that those with more money *already* have a louder voice, a tax-dollar-based aggregation would not necessarily yield results more “pro-rich” than those already produced by the current political process. A compromise approach would make the data publicly available in both forms, first aggregated by tax dollars, and separately aggregated on a one-person one-vote principle.¹⁷⁷ The political process could then decide which, if either, of these compilations should inform policy.¹⁷⁸ It is even possible that a backlash could develop against “the rich people’s budget” if it transparently appears to embody “pocketbook voting.”¹⁷⁹

A related concern is that taxpayers, as a group, are not necessarily representative of the nation as a whole, because not everyone pays federal income taxes. Linking the interface to tax return filings will thus automatically miss a segment of the population that is especially vulnerable and politically underrepresented.¹⁸⁰ However, the fact that

176. We thank David Schizer for prompting us to focus on the implications of this design choice.

177. To alleviate the concerns about non-taxpayers, we might allow any person eligible to vote to submit an allocation, even when they do not file a tax return. This would be counted in the latter aggregation, but not in the former one.

178. There are a number of other details that we would have to address. For example, we might permit married couples filing joint returns to create separate allocations for one-half of the tax payment amount, or choose to allocate the entire amount together (counting as two separate allocations for purposes of the one-person, one-vote budget).

179. See, e.g., David O. Sears & Carolyn L. Funk, *Self-Interest in Americans’ Political Opinions*, in *BEYOND SELF-INTEREST* 147, 156-57 (Jane J. Mansbridge ed., 1990) (discussing and questioning the “pocketbook voting” hypothesis).

180. The specific “voice” mechanism contemplated here—a computer interface—might

many people of limited means file tax returns to claim refunds and to receive the Earned Income Tax Credit significantly alleviates this concern. Of course, many of these people do not pay any positive amount in federal income taxes,¹⁸¹ which raises the issue of the appropriateness of a “dollar votes” approach even more sharply.

Another interesting question is whether government should permit all allocational moves, or whether it should disallow certain moves. For example, the interface might prevent a taxpayer from reducing the amount of money allocated to debt service, or the interface might allow the taxpayer to do this if she chooses, but only after responding to a pop-up warning about the risk and significance of government default. We tend to favor the latter approach, because we fear that moves in the direction of carving out “untouchable” categories of expenditures could dilute taxpayer voice and its corresponding ability to serve as a proxy for taxpayer control.

Our proposed interface would provide taxpayers with a form of voice presently unavailable to them. While taxpayers are already free to engage in political action, the realities of bundled choices and interest group politics make any real involvement illusory. Likewise, the current system severely limits taxpayers’ ability to seek judicial relief regarding the use of their tax monies.¹⁸² In some tax-related contexts, the ability to exercise voice appears quite important to taxpayer perceptions, and there is reason to suspect it might be significant in this context as well.¹⁸³ At any rate, there is nothing lost, and potentially much gained, by investigating these questions.¹⁸⁴

also seem to leave out those on the wrong side of the “digital divide.” However, it would be possible to address this concern by setting up public tax centers at libraries and other community centers that would provide free use of computers and software for this purpose, and by providing paper forms in which respondents could list desired allocations.

181. The Earned Income Tax Credit is a “refundable” tax credit, which means that eligible recipients receive the credit even when it exceeds any positive amount of taxes. ROSEN, *supra* note 2, at 166.

182. *See, e.g.*, United States v. Richardson, 418 U.S. 166, 169-70 (1974) (discussing taxpayer standing requirements).

183. Richard Lempert, *Commentary, in* WHY PEOPLE PAY TAXES: TAX COMPLIANCE AND ENFORCEMENT 251, 254 (Joel Slemrod ed., 1992) (“Probably the strongest and most powerful factor that leads to judgments of fair procedure is ‘voice,’ the ability to state one’s case or tell a story to a decision maker”).

184. *Cf. id.* (suggesting that modifying tax returns “so that they provided an opportunity to speak to the government” would be “an experiment well worth doing”).

CONCLUSION

The phenomenon of tax aversion is elusive, yet of great practical and theoretical significance. We have attempted to convince readers of the value that might be gained from employing empirical tools to pin down the phenomenon, to understand its constituent parts, and to evaluate how it might be alleviated. Because the paper seeks to open up new lines of inquiry that can inform tax design, this “conclusion” concludes nothing; we offer merely a starting point.

We close with a brief note about interdisciplinarity. This paper, like many interdisciplinary papers involving law, seems at first blush to reflect a unidirectional notion of interdisciplinarity. On this view, the law (which has plenty of unsolved problems but few answers of its own) eagerly pries open the treasure chests of other disciplines and attempts to pilfer transferable lessons from them. The anthropological and sociological literature, however, comes with built-in warnings attached, reminding us that findings in one context do not readily transfer to other contexts; anthropology is, in a sense, all about understanding the ways in which context shapes human choice. Anthropology’s contributions to federal taxation cannot be realized in a manner consistent with the discipline’s own operating principles until anthropologists begin to apply the tools of the discipline to those specific cultural contexts.

Thus, this paper identifies a gap not only in legal scholarship but also in the anthropological literature. One might think that anthropological studies would have thoroughly covered aspects of human and societal life as integral as taxpaying and public finance, but this is not the case. Where we expected to find a rich stock of accumulated theory and empirical data, we encountered mostly bare cupboards.¹⁸⁵ Our ambitious hope, then, is that this paper advances not only public policy dialogue about taxation and legal scholarship,

185. Recent anthropological studies have examined cultural and social dynamics among welfare recipients and social workers. See, e.g., Jo Anne Schneider, *Introduction: Social Welfare and Welfare Reform*, 103 AM. ANTHROPOLOGIST 705 (2001). Still, broader issues of taxation and spending remain new terrain to be addressed.

but also helps to advance anthropological studies by opening up a relatively untapped field of inquiry that seems to have significant implications for the discipline.