

Old George Orwell Got It Backward: Some Thoughts on Behavioral Tax Economics

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It is entirely appropriate that the study of public finance take seriously “behavioral” inconsistencies with traditional models of individual and collective decision-making. This raises the question of whether the state should play a role in protecting individuals from themselves, and whether individuals are susceptible to manipulation, or even exploitation, by the people who comprise the state. In this essay I take two aspects of this issue – tax complexity and tax compliance. In addressing these issues I ask, and offer some tentative answers to, what is distinctive about behavioral tax economics as a sub-field of behavioral economics and as a sub-field of tax economics.

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“Old George Orwell got it backward. Big Brother isn’t watching. He’s singing and dancing. He’s pulling rabbits out of a hat. Big Brother’s busy holding your attention every moment you’re awake. He’s making sure you’re always distracted. He’s making sure you’re fully absorbed.”
Chuck Palahniuk (2002), in *Lullaby*

1. Introduction

It is entirely appropriate that the study of public finance take seriously “behavioral” inconsistencies with traditional models of individual and collective decision-making. A central tension in political economy – the extent to which people need to be protected from the state versus whether the state is needed to protect people from each other and the vicissitudes of life – takes on new dimensions once one recognizes that people often act irrationally and in ways that are contrary to their own long-term interests, and are cognitively bounded. This raises the question of whether the state should play a role in

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protecting individuals from themselves, and whether individuals are susceptible to manipulation, or even exploitation, by the people who comprise the state.

In this essay I address one aspect of this issue – how it affects an economic analysis of tax systems. In addressing this task I ask, and offer some tentative answers to, what is distinctive about behavioral tax economics as a sub-field of behavioral economics and as a sub-field of tax economics. In his review of behavioral economics, Camerer (2006, p. 196) refers to the “franchising” of behavioral economics into sub-fields, listing finance, labor economics, and public finance as notable examples, but he does not elaborate on the distinctive problems that the public finance franchise must confront. The papers collected in McCaffery and Slemrod (2006) address some of these questions, and Kirchler (2007) provides a nice overview of some as well. In this essay I offer some thoughts on two of these distinctive problems. The first is tax complexity and how it relates to the framing of the fiscal environment and the bounded rationality of taxpayers and citizen-voters. The second is tax compliance and the roles played by altruism and reciprocity.

2. Tax Complexity

Observers of tax systems have noted that many tax systems are extraordinarily complicated, although the standard for judging excess is generally not made explicit. Consider the U.S. income tax. The resource cost of collecting income taxes – including both the administrative cost and compliance cost – has been estimated to be about 10 percent of revenue collected.¹ In 2005 the number of words in the federal income tax code was 1,286,000, and 5,778,000 words in federal tax regulations.² In tax year 2006, 62 percent of individual income taxpayers in the United States paid someone to help them file; 72 percent did so in Australia.

Tax complexity can affect the private decisions made by taxpayers, as well as the voting and other social choice behavior of citizens. Each of these issues has been recognized, although the connection between the two has not been given much attention.

2.1. Taxpayers as Decision Makers

Accurately calculating one’s tax liability in self-assessment income tax systems is difficult for many taxpayers. To be sure, this is heterogeneous. People differ in their cognitive ability, and the cognitive (and energy) process re-

¹ See Slemrod (2004) for the source of this figure.

² <http://www.taxfoundation.org/research/show/1961.html>, accessed on April 7, 2009.

quirements of tax compliance vary greatly across taxpayers. For those with complicated financial affairs, especially with respect to capital income, it can be very difficult. For those whose income is mostly wages and salary, the process can be very straightforward.

Calculating one's tax liability is tantamount to calculating the distance between a pre-tax budget line and a post-tax budget line at a given set of choices about labor supply and consumption basket. Of more interest to economists, though, is how complexity affects individuals' perceptions of the whole budget set, and in particular the (relative) prices as reflected by its gradients.

There is a long strand of research about taxpayer perceptions of their average and marginal tax rate, a component of some central relative prices such as between labor and leisure. Sheffrin (1994) reviews studies of American, British, and Canadian taxpayers that find that taxpayers generally underestimate both their total tax liability and their marginal tax rates. What is not clear is the connection between knowledge of one's marginal tax rate and the complexity of the tax system. Bartolome (1995) showed in an experiment that at least as many individuals used the average tax rate as if it was the marginal tax rate as used the true marginal tax rate in making marginal decisions. Moreover, how the tax table was represented mattered a lot, as almost all subjects used the true marginal tax rate when the tax table was redesigned to stress it. Liebman and Zeckhauser (2004) argue that it is because of cognitive limitations that taxpayers presume that their marginal tax rate is the easier-to-calculate average tax rate; they call this rule-of-thumb behavior "ironing," one of two examples of what they dub "schmeduling," defined as an inaccurately perceived price schedule. They (as did Bartolome, 1995) show that ironing behavior eliminates some of the deadweight loss from high marginal taxes, so that when the optimal tax schedule with non-ironing taxpayers would be convex, superior outcomes are available. An empirical analysis of the introduction in 1998 of the child care credit uncovers evidence that is consistent with "schmeduling," but is not conclusive.

That taxpayers have cognitive limitations has many implications for tax analysis. One is that the distribution of tax burden may depend on cognitive ability in addition to the intended characteristics of taxpayers. Another is that taxpayers who are not so good at addressing tax matters may avoid certain types of employment status, such as self-employment, that require or reward this kind of savvy. Finally, some equivalences taken for granted by tax theory – for example, that between a labor income tax and a consumption tax – may not obtain because they are perceived differently.³ Blumkin, Ruffle,

3 The textbook equivalences may also fail because of differences in the administrative and compliance costs. See Slemrod (2008a).

and Ganun (2008) find, in an experimental setting, that subjects reduce their labor supply significantly more in response to an income tax than they do in response to an equivalent consumption tax, and speculate that this occurs because subjects underestimate the present value of the taxes levied on future consumption. Sausgruber and Tyran (2005) show, also in an experimental setting, that buyers systematically underestimate the tax burden of an indirect tax levied on sellers but do not do so with an equivalent direct tax. Moreover, Sausgruber and Tyran (2008) demonstrate that this perception bias can distort voting on taxes in a way that is reduced by experience but not by deliberation.

I believe that the public finance community needs to give more thought to the appropriate econometric methodology for measuring taxpayer responses to fiscal instruments in the presence of cognitive biases and rules of thumb that economize on cognitive resources. A first but necessary step is to understand how taxpayers map these instruments into relative prices. This step includes, but is not limited to, understanding which changes are ignored as not salient, possibly because rules of thumb conserve cognitive resources and focus only on changes above a certain level of materiality. The burgeoning literature on salience and taxation has provided many insights, but has not yet been placed in an adequate dynamic context; after all, a series of small tax changes, each ignored, can add up to a major displacement from an optimal choice.⁴

2.2. Taxpayers as Voters

Adult workers and consumers are also potential voters, and as such must decide which candidates' tax positions to favor, including how complex tax systems should be. In their role as voters they are confronted by the difficulty of figuring out what the consequences of alternative tax policies are, both for themselves and for aggregate economic outcomes.

Some context is appropriate. Political science research is fairly persuasive that voters know very little about the details of government generally. Delli Carpini and Keeter (1996), in a comprehensive survey of the political knowledge of voters covering several decades and hundreds of surveys, show that majorities of voters are ignorant of many key aspects of the U.S. political system, such as who has the power to declare war, the respective functions of the three branches of government, and who controls monetary policy. In contrast, the policy implications of this lack of political knowledge are highly controversial among political scientists. For example, Lupia (2001) argues that political knowledge, as commonly measured by scales that count the

⁴ See Chetty, Looney, and Kroft (2009).

number of correct responses to a small number of questions about public affairs, represent neither necessary nor sufficient conditions for voter *competence* in making choices, where a choice is defined to be competent if it is the same choice that would be made given the most accurate information about its consequences. There is little systematic evidence that voters are misled to support policies that are almost certainly not in their interest, although Slemrod (2006) argues that this is the case with respect to Americans' support for a flat income tax: because many (mistakenly) believe the current U.S. income tax system is regressive, they view, and support, the move to a flat tax as a move toward a more progressive distribution of the tax burden.

Why some jurisdictions' tax systems, or to be exact some taxes levied in some jurisdictions, become complex while others do not has not been widely studied, hampered by the absence of reliable, comparable measures of complexity across countries. Slemrod (2005) uses the variation in U.S. state income tax systems, and their differential change over time, to examine what engenders tax complexity, measured simply by the number of lines in the tax forms and the number of pages in the instruction booklets, and reveals some intriguing patterns. The analysis shows that, in 2000, states with more professional legislatures, as measured by the salaries paid, tended to have more complex tax systems, as did states with a less active voting population. The former relationship suggests that complexity is one of the things that professional legislatures *do*, although it may also be that states that want more activist policy want professional legislatures and choose more complex tax systems. The latter relationship suggests that a more politically involved citizenry acts as a deterrent to tax complexity.

Professional economists cannot be too smug about voter confusion, of course, because there is much we do not understand ourselves in all areas of economics, with the economics of taxation being no exception. Central questions such as the incidence of the corporate tax and deficit financing, and the long-term growth implications of alternative tax systems, are unresolved and controversial.

Politicians have an incentive and often the ability to take advantage of taxpayers' behavioral quirks and cognitive limitations.⁵ McCaffery (1993) and Krishna and Slemrod (2003) argue that the U.S. income tax has many features that take advantage of cognitive biases to reduce the perceived tax burden, and do so by applying well-known features of what in marketing

5 To be sure, there are other explanations for tax complexity. Hettich and Winer (1999) argue that complex tax structures emerge as a by-product of the struggle for political office, in the course of which political parties are forced to propose and implement policies that discriminate or distinguish as carefully as possible among heterogeneous voters. In their view it is administrative costs that limit the desire of governments to discriminate fully among taxpayers.

science is known as “price presentation,” such as the use of discounts (as in deductions from a broad measure of income) and of small frequent disbursements (as in employer withholding).⁶ The laboratory experiments of Baron and McCaffery (2003) provide some support that such a strategy can be successful, as they demonstrate that people tend to underestimate the total tax burden when it is spread among multiple taxes. The concern that some taxes, such as the value added tax or corporation income tax, are “hidden” from taxpayers is a major reason why some conservatives oppose these taxes: they feel that the hiddenness causes voters to underestimate the true cost of government.⁷ As an example, Finkelstein (2009) argues that the switch from manual, per-trip, remittance of traffic tolls to automatic electronic charging facilitated toll increases because the act of remittance became less salient to driver/voters.

The analogy of tax design to price presentation raises the issue of what is different between the public finance setting and a market environment. Although in democracies there is some degree of political competition, it seems likely that in social choices the intermediation of the market is less relevant, whereas in many cases involving behavioral economics, markets might plausibly arbitrage away, or exploit, irrationalities. But even this is not obvious. As Mullainathan and Thaler (2001) emphasize, many decisions, such as with regard to retirement savings, are made infrequently and so learning by doing is not likely to be very important; less-than-rational people “survive” and influence market outcomes.

Scitovsky (1950) observed sixty years ago that ignorance can be a source of oligopoly power because it limits price and quality competition among established firms and protects them from potential entry, thus facilitating collusion among established firms. Garrod (2007) remarks that obfuscation is widespread in several markets including, somewhat surprisingly, Internet retailing, and retail financial products such as index funds, money market funds, credit cards, conventional fixed-rate mortgages, life annuities, and term life insurance. Indeed, recent theoretical research has shown how even competitive markets might not drive out private firms’ obfuscation about prices. As a baseline, Milgrom (1981) had shown that, if consumers have the cognitive ability to infer that they should avoid firms with hidden information, then competing firms will fully inform consumers of product information if doing so is feasible and costless. But a more recent literature has established that

6 Kim and Kachersky (2006) critically review the marketing science literature on price salience.

7 Although see Galle (2009, pp. 94–98), who questions whether hidden taxes are necessarily lower, arguing that if sophisticates are aware that naives are unaware of the tax and hence do not lobby, sophisticates know that they can no longer free ride. Thus, total political opposition to hidden taxes may be higher.

obfuscation can be profitable in equilibrium with competitive constraints. For example, in the “shrouded attributes equilibrium” of Gabaix and Laibson (2006), firms can obfuscate their prices for a complementary, avoidable add-on to a good, and may optimally do so when there are a sufficient fraction of consumers that myopically do not consider the add-on. Of particular interest for the topic at hand is the result that in equilibrium the sophisticated consumers actually benefit by taking advantage of the lower price for the basic good and not purchasing the add-ons.⁸

One insight from this literature is that firms may benefit from complicating, or obfuscating, the available information and that this process may benefit sophisticated consumers at the expense of unsophisticated ones. I have argued that the people in an incumbent government may try to, and may be able to, take advantage of framing difficulties to benefit themselves by reducing the perceived burden of what they do. In the process the more sophisticated of taxpayers may actually benefit. But the people in the government are also “just” people, and so may themselves be subject to framing issues. One important and understudied issue is how to model the behavior of policy makers subject to cognitive limitations: are they subject to the same kind of heuristic biases as taxpayers/voters?

3. Tax Compliance

Once a tax system is in place, influenced by the voting decisions of citizens, then these same citizens must decide whether and to what extent to comply with the tax rules in place. Can the psychology of attitudes toward authority shed light on the question of whether taxpayers generally free ride, or under some circumstances look beyond their cost-benefit calculus of risk and reward to be influenced by, for example, the fairness of the distribution of tax burden and the process that determines the burden?⁹ Camerer (2006, p. 9) places this issue squarely within the realm of behavioral economics, remark-

- 8 Carlin (2009) generalizes the standard assumption in this literature that the fraction of uninformed consumers is constant, and allows that firms may influence how informed the consumer population is by affecting the quality of information they are given; in this model an increase in competitive pressure generates an increase in price complexity. Garrod (2007) discusses other models that address how firms strategically set prices in equilibrium in response to the cognitive shortcomings of their consumer population.
- 9 Of course, behavioral game theory may also apply to the strategic interaction between a taxpayer (and perhaps a professional tax preparer) and government auditors. For example, Slemrod, Blumenthal, and Christian (2001) found in a field experiment that sophisticated, high-income taxpayers report *less* taxable income when informed their tax return would be audited; one explanation is that the taxpayers understand that an audit is a negotiation in which the auditor has imperfect information, and that in such a negotiation a low initial bid (i.e., a low reported income) may be part of an optimal strategy.

ing that “the idea that people care only about their own monetary or goods payoff is not a central tenet of rational choice theory, but it is a common simplifying assumption.”

3.1. Beyond Deterrence

Although the deterrence framework introduced by Allingham and Sandmo (1972) has dominated the economics literature addressing tax evasion, some have argued that it misses important elements of the tax evasion decision because it predicts a compliance rate much lower than what we actually observe. For example, Feld and Frey (2002, p. 5) assert that it is “impossible to account for tax compliance in terms of expected punishment.” The dismissive argument goes as follows: given the low average probability of audit (in the United States recently less than 1 percent for individual returns with no business income), the low penalties generally assessed for noncompliance (typically 10 percent of the amount underpaid in the U.S.), and what we know about the degree of risk aversion from other contexts, noncompliance should be much higher than it apparently is.

But this dismissive argument is not persuasive, because the low average audit coverage rate vastly understates the chances that a typical dollar of unreported net income would be detected. A wage or salary earner whose employer submits the employee’s taxable income and Social Security number electronically to the Internal Revenue Service, but who does not report that income on his own personal return, will be flagged for further scrutiny with a probability much closer to 100 percent than to 1 percent. Thus, the low rates of noncompliance for labor income (about 1 percent) calculated as part of the IRS tax gap study (U.S. Department of Treasury, 2005) by no means patently contradict the deterrence theory. Whether the 57 percent noncompliance rate of non-farm sole proprietors the IRS calculates is less than the deterrence theory predicts is less clear, and Andreoni, Erard, and Feinstein (1998, pp. 821–822) argue that it is.

Nonetheless, there is considerable experimental (and anecdotal) evidence that there is more to the story of tax evasion than an amoral cost-benefit calculation. Frey (1997) argues that it is important to differentiate between the intrinsic motivation under which taxpayers comply with tax liabilities because of “civic virtue” and extrinsic motivation in which they pay because of threat of punishment. He suggests that increasing extrinsic motivation – say with more punitive enforcement policies – may “crowd out” intrinsic motivation by making people feel that they pay taxes because they have to, rather than because they want to. Gneezy and Rustichini (2000) argue that this explains why parent tardiness *increased* after an Israeli day care center instituted monetary fines for late pick-up of children. In an experimental

setting, Scholz and Lubell (2001) find that the level of cooperation in certain settings declines significantly when penalties are introduced, suggesting that the increased level of deterrence did not compensate for the change in how people frame their decision brought about by the higher penalties.

Some laboratory experiments have found that subjects respond not only to the probabilities and stakes of a tax evasion game, but also to the context provided to them, as in Spicer and Becker (1980) and Alm, Jackson, and McKee (1992).¹⁰ Alm, Jackson, and McKee (1993) found that (1) experimental subjects are willing to pay more in taxes when they first choose the use of their taxes by voting than when the identical use is imposed upon them, (2) compliance is somewhat greater when the vote is decisive compared to when the vote is close, and (3) tax compliance is significantly lowered by the imposition of an unpopular program.

It may be that tax evasion decisions depend on perceptions of the fairness of the tax system. If, the argument goes, perceived tax equity strengthens the social norm against evasion, then evasion becomes more costly in terms of bad conscience (if not caught) or bad reputation (if caught). Note also that an individual may find unfairness in what the government uses tax revenues for - a person with some of the spirit of Henry David Thoreau¹¹ may avoid taxes because that person thinks government (non-tax) policy wrong (Andreoni, Erard, and Feinstein, 1998). But such individual judgments can be complex; for example, expenditures on warfare might contribute to a sense of fairness tolerated in a patriotic period, but rejected during another period characterized by anti-militarism.¹²

These patterns suggest that a form of reciprocal altruism may be at work, in which the taxpayer's behavior depends on the behavior, motivations, and intentions not of any subset of particular individuals, but of the government itself. Levi (1997, p. 91) argues that when citizens believe that the government will act in their interests, that its procedures are fair, and that their trust of the state and others is reciprocated, then people are more likely to become "contingent consenters" who cooperate in paying taxes even when their short-term material interest would make free riding the individual's best option. Some survey evidence is consistent with this hypothesis. Torgler (2003) and Slemrod (2003) show there is a positive relationship across countries between survey-based attitudes toward tax evasion on the one hand and professed trust in government, and Slemrod (2003) finds that the same

¹⁰ Alm and Jacobson (2007) critically review the use of laboratory experiments in public economics.

¹¹ Thoreau, the author of the influential 1849 book *Civil Disobedience* advocating resistance to unjust forms of authority, in 1846 refused to pay delinquent poll taxes because of his opposition to the Mexican-American War and slavery.

¹² This argument is made by Daunton (1998).

relationship holds across individuals within the United States and Germany. Of course attitudes and actions are not the same.¹³ A 2002 poll in the Czech Republic indicated that a person would be more likely to evade taxes if that person believed government services were substandard (Hanousek and Palda, 2004). None of these studies, though, establishes a causal connection between the two attitudes, and some of the observed correlation might be due to an ex post rationalization of tax-noncompliant behavior.

If perceptions matter for tax compliance, a natural question is to what extent tax compliance behavior can be manipulated by the government to lower the cost of raising resources. Appeals to conscience go back at least to Hammurabi's reign in ancient Babylon, when the tax collector sent the following notice when payments were late: "Why have you not sent to Babylon the 30 lambs as your tax? Are you not ashamed of such behavior?"¹⁴ Wartime appeals to patriotism to induce citizens to pay their taxes (and, often, buy war bonds) are common; the U.S. Secretary of Treasury during World War I, William Gibbs McAdoo, referred to these campaigns as "capitalizing patriotism." Kang and Rockoff (2006) discuss the World War I experience, while Jones (1988/1989) discusses fiscal propaganda during World War II. Feldman and Slemrod (2009), using cross-country data on interstate conflicts from 1970 to the present and on attitudes toward tax evasion from the World Values Survey, find that positive attitudes towards tax compliance increase with the number and length of conflicts that a country faces, but decrease in the number of fatalities incurred in these conflicts. Konrad and Qari (2009) find a positive cross-country and within-country correlation between professed patriotism and tax compliance attitudes, although it is difficult to establish causality with their data.

That such campaigns are successful during ordinary (non-war) times has not been compellingly demonstrated. In a randomized field experiment with Minnesota taxpayers in a peacetime setting, Blumenthal, Christian, and Slemrod (2001) find no evidence that either of two written appeals to taxpayers' consciences had a significant effect on compliance. One letter stressed the beneficial effects of tax-funded projects, while the other conveyed the message that most taxpayers were compliant. Torgler (2004), using a controlled field experiment in Switzerland, also found that moral suasion had hardly any effect on taxpayers' compliance behavior. Fellner, Sausgruber, and Traxler (2009) find that similar written appeals had no discernible impact on compliance with Austrian television registration fees.

¹³ Kirchler (2007, p. 55) concludes from a review of the literature that most studies find a statistically significant, but weaker, relationship between attitudes toward taxation and self-reported compliance behavior, and goes on to suggest that this implies that the relationship between attitudes and actual behavior "is expected to be even weaker."

¹⁴ This quotation is cited in Webber and Wildavsky (1986, p. 58).

Survey evidence also suggests that attitudes about the acceptability of tax evasion vary considerably across countries. In the World Values Surveys done between 1999 and 2002, respondents were asked whether, given the chance, tax evasion is never, sometimes, or always justified, where a value of 1 corresponds to “never justifiable” and a value of 10 corresponds to “always justifiable.” These attitude measures of the World Values Survey across countries are associated, holding other factors constant, with already-discussed measures of the shadow economy and widely used survey measures of actual evasion (Torgler, 2004). But, again, attitudes are not behavior.

The difficulties of separating out whether people pay their taxes because they feel they “ought to” or whether they fear the penalties attendant to not doing so is well illustrated by some evidence from a recent survey sponsored by the Internal Revenue Service Oversight Board (U.S. Department of Treasury, 2006). While 96 percent of those surveyed in 2005 mostly or completely agreed that “It is every American’s civic duty to pay their fair share of taxes,” 62 percent also said that “fear of an audit” had a great deal or somewhat of an influence on whether they report and pay their taxes “honestly.”

Behavioral game theory and laboratory experiments may shed some light on the conditions under which taxpayers may be willing to deviate from their Allingham-Sandmo optimal level of evasion. For example, much research about the ultimatum game suggests that people are willing to take costly actions that express their concerns for fairness. Many people express “negative reciprocity,” meaning that they will take actions that lower the welfare of the *person* who treated them in a way that they perceive to be unfair, and will do so at a cost to themselves. The experimental results reported in Blount (1995) suggest that beliefs about what motivated another person and judging the appropriateness of the motives, their “intentionality,” is critical to explaining behavior toward that person.¹⁵ According to Cooper and Kagel (forthcoming, p. 49), the Blount result “makes it completely obvious why outcome-based preferences are not enough.”

Some observers have interpreted behavior reflecting intentionality as the vestigial expression of a behavior that had survival value in a setting where people repeatedly interacted with the same people in a small group. Also

¹⁵ The role of intentionality is nicely illustrated, although not resolved, by a famous interchange in Joseph Heller’s (1961) novel, *Catch-22*, between the protagonist John Yossarian, an Army Air Force bombardier, and another member of the bomb crew, the naïve Clevinger:

“They’re trying to kill me,” Yossarian told him calmly.

“No one’s trying to kill you,” Clevinger cried.

“Then why are they shooting at me?” Yossarian asked.

“They’re shooting at everyone,” Clevinger answered. “They’re trying to kill everyone.”

“And what difference does that make?”

of interest is the laboratory result that inducing a sense of entitlement, by allowing the ultimatum game proposer to be the winner of a contest, lowers offers; the sense of entitlement leads people to give away less of what is theirs. Ultimatum games with multiple players suggest that responders care about whether proposers are unfair to *them*, but do not care much about how the proposer treats others. This is an important distinction for understanding individuals' attitudes toward government, because government policies do not generally single out particular individuals other than through enforcement actions, but may single out groups of people defined by income, geography, demographics, tastes, or choices.

Note also that the concern for fairness that is evident in two-player games tends to disappear in large markets, where even those who care about fairness behave self-interestedly either because they are not sure whether others are being fair or they cannot easily punish those that are acting unfairly. As Camerer (2006) remarks, "a competitive market is simply a place in which it is hard to express your concern for fairness." It is indeed hard, but not impossible. Consumer boycotts date back as far as the fourteenth century, and have had both sociopolitical objectives (as with the U.S. civil rights bus boycotts) and objectives of changing corporate practices (as with the Nike boycott designed to stop their use of "sweatshop" labor).

There is an active controversy about what exactly fairness means. Is it an aversion to inequality, where people dislike both getting less than a fair share and getting more than a fair share? Or is a concern for reciprocity, where how people feel about others depends on how they expect to be treated? As mentioned, the research suggests that people care about the *intentions* of other players.

3.2. The Psychology of Authority

We know little about to what extent the psychological dynamics of individuals' relations with other individuals may be different than the psychological dynamics of individuals versus an agency of the government. For example, there is evidence from laboratory experiments that many people are willing to reciprocate what they perceive to be kindness in other individuals, and to not reciprocate – or even punish – perceived meanness in others. In addition, Falk and Kosfeld (2006) show that implementing a minimum performance requirement causes most agents to reduce their overall performance in response; when asked how they perceived the minimum performance requirement, most of those who reacted negatively said that they perceived it as a signal of distrust and as a limitation on their choice autonomy. But how do individuals ascribe human qualities like kindness, meanness, or distrust to a government? For example, do such feelings change with a change of

government? Certainly we should be sensitive to an “anthropomorphic fallacy” of attributing human thoughts and emotions to inanimate objects or animals, but that does not imply that related attributions, and reactions to those attributions, do not occur in interactions with governments.

Here again we may learn by looking at similar situations. Although government is not exactly like any other organization or institution – in particular, it has a monopoly on coercive power, including the power to tax – government is not the only organization or institution that individuals interact with. For example, people interact on a regular basis as employees and customers with firms, some of which are as large as some governments. As employees they have to decide whether to give maximal effort or slack off, whether to pilfer or even embezzle. Indeed, in his survey of behavioral economics, Camerer (2006, p. 177) asks whether angry workers consider “management to be a single monolithic player and get angry the same way that they get angry at a spouse who threatens to leave them or a driver who cuts them off on the LA Freeway.” As customers, people have to make decisions about shoplifting, insurance fraud, and the like. Firms invest resources in deterring employee crime (and encouraging effort), with accounting systems and hidden cameras. Many companies try to instill identification with the company, so as to achieve both goals. Konrad (2008) argues that, similarly, countries must make decisions about how many resources to invest in instilling identification with the country, what he refers to as patriotism, in order to increase tax compliance.

Because governments have much more power than any other organization, individual psychological attitudes toward them might be fundamentally different than toward other organizations. Because they purport to serve their interests, individuals might feel more dutiful, and even *obedient*, toward government. Invocation of the word obedience, though, invokes a darker side of the relationship between individuals and government as an authority figure. I am speaking of the controversial, indeed notorious, experiments conducted by the Yale University psychologist Stanley Milgram (1963), which showed that unwitting subjects were willing to deliver what they thought were substantial electric shocks when instructed to, and encouraged to, by authority figures. This research ignited several controversies, one of which centered on the nature and influence of authority figures – in Milgram’s experiments the men in white coats who were urging the subjects to continue the apparent shock treatments. Commentators such as Morelli (1983) differentiated between a person who is “in authority” and “an authority,” where the former refers to legitimate coercive power and the latter refers to a presumption of expert knowledge. Although reaction to the former may be characterized as “obedience,” response to the latter might be better denoted as “deference.”

Authority, obedience, and deference are central to many important questions in public economics. For example, the extensively demonstrated¹⁶ effect of defaults on individual choices may be due to the decider's presumption of expertise on the part of an authority, or to the decider's cost of obtaining information. Distinguishing between "in authority" and "an authority" is a worthwhile research objective. It will not likely be easy to address in an experimental setting, though, in part because both internal validity and external validity questions arise. Internal validity issues, also known as experimenter demand effects (EDE), arise when behavior by subjects depends on cues about what constitutes appropriate behavior. As Zizzo (forthcoming) states, "it is unavoidable that the experimenter is in a position of authority relative to subjects," having both legitimacy and expertise. Indeed, Zizzo (forthcoming, p. 6) says that the Milgram experiment is "an extreme case of EDE at work in an experiment where the effect of such social EDE was itself the objective of the experiment." External validity questions arise when the authority for the real-world tax enforcer (often referred to as the "tax authority") is crucial to behavioral response, and whose attributes are not (and maybe cannot) be replicated in a lab.

Before concluding, it is interesting to note that complexity and compliance are not completely independent concerns. It may be that a tax system is so complex that it is not worth the taxpayer's time and expense to accurately calculate tax liability. In that case, there will be more capriciousness in the assignment of tax burden, but the errors should be symmetric. It may also be that complexity engenders a particular strong negative assessment of the government and the tax process, which overcomes the free-rider calculus and leads to noncompliance. On the other hand, Scotchmer and Slemrod (1989) suggest that uncertainty about true tax liability may in some settings cause risk-averse taxpayers to be less aggressive than otherwise in their tax reporting behavior.

4. Final Thoughts

In this essay I have offered some observations about what insights behavioral economics can bring to bear on the issues of tax complexity and tax compliance. I ponder why the government, in the words of the epigraph, is often "singing and dancing" – presenting taxpayers with a tax system of cacophonous complexity. In part it may be, as the epigraph's author Chuck Palahniuk suggests, to distract taxpayers from the magnitude of the tax burden imposed or to reward those who can manage and even profit from the complexity. After all, firms operating in competitive markets have discovered that this can be

¹⁶ See, for example, Choi, Laibson, Madrian, and Metrick (2004).

a profitable strategy, and the constraints of political markets are likely to be smaller. It is, though, these same taxpayers in their role as voters that help set the tax system and its level of complexity, marking a difference between government and Procter & Gamble offering coupons it knows most buyers never cash in. In an environment of complicated tax systems and differing opinions among economists about the ultimate consequences of even simple tax systems, we must ask who is fooling whom.

Governments and firms differ in another important way. Most firms are selling private goods and therefore can, instances of theft notwithstanding, generally withhold their product absent payment. Governments are in part offering non-excludable services, and so must rely on remittances that are either made dutifully or “encouraged” by an enforcement system based on withholding, information reporting, and audits backed by penalties for noncompliance.¹⁷ Behavioral economics, largely observing the results of laboratory experiments, has shown that some people will deviate in some situations from the choices that would seem appropriate for rational, purely self-interested individuals. For example, their decisions depend on the perceived reciprocity or intentionality of those they interact with, as well as their perceived meanness or kindness. But by their nature laboratory experiments involve the decisions of individuals interacting with other individuals, or perhaps a random-number-generating computer, and not with a largely impersonal government or its tax agency, an authority figure imbued with a rich and complicated history. Field experiments offer more promise for capturing how real people react to real policy changes made by real governments, although they come with their own limitations.

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¹⁷ Another part of what government does is effect transfers from one group to another. This suggests that lobbyists, along with legislators, might work together to contribute to tax complexity, and that the objective is not only to reduce the perceived average burden of taxation but also to obfuscate the distribution of that burden. This raises the issue of the cognitive biases and limitations of the lobbyists and the interests they represent. Slemrod (2008b) argues that business associations’ positions on tax reform often make arbitrarily simple and internally inconsistent assumptions about incidence, especially by distinguishing between “business taxes” (presumed to negatively affect the return to business operations) and non-business taxes (not likely to do so) that are subject to the framing of the taxes and the remittance system (i.e., who “writes the check” to the tax authority).

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