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Contractual Tax Reform

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Abstract: One-size-fits-all taxation fails to accommodate diverse taxpayer circumstances. This Article proposes allowing taxpayers to contract into alternative tax regimes administered by private intermediaries. Participating taxpayers would make payments to the intermediaries pursuant to contract, and the intermediaries would be required to pay to the government at least as much as these taxpayers would have paid the government otherwise. That amount is determined based on the actual tax receipts of a control group, taxpayers who wish to contract with an intermediary but instead are chosen at random to continue under the status quo. These alternative tax regimes might better accommodate taxpayers’ preferences, leaving the taxpayers with greater utility, without reducing government revenue. An intermediary could offer different substantive law, different procedural rules, or both. Taxpayers, for example, might receive lower tax rates in exchange for forgoing deductions that cause the taxpayer to engage in socially wasteful behavior. Advances in artificial intelligence make contractual tax reform feasible.
Contents

I. APPLICATIONS ............................................................................................................11
   A. Changing the Tax Base .........................................................................................11
      1. Expanding the Base .........................................................................................12
      2. Contracting the Base .......................................................................................15
   B. Accommodating Other Sources of Heterogeneity .............................................18
      1. Earnings Potential ............................................................................................18
      2. Work vs. Leisure Preferences ..........................................................................24
   C. Reducing Waste ....................................................................................................29
      1. Saving on Compliance Costs ............................................................................29
      2. Closing the “Tax Gap” ....................................................................................30
   D. Opening the Overton Window ............................................................................32

II. IMPLEMENTATION ....................................................................................................34
   A. Basic Mechanics: Treatment Group and Control Group .................................34
   B. The Role of Intermediaries ................................................................................35
      1. Division of Responsibility ...............................................................................36
      2. Organizational Form .......................................................................................37
      3. Duration ............................................................................................................39
      4. Solvency Assurance .........................................................................................40
   C. Regulation of Contractual Tax Reform ...............................................................42
      1. Limitations ........................................................................................................43
      2. Filing Status ......................................................................................................43
      3. Innovation Incentives .......................................................................................45

III. POTENTIAL OBJECTIONS .........................................................................................46
   A. Taxpayer Exploitation ........................................................................................46
      1. Deceptive Practices ..........................................................................................48
      2. Privacy Violations .............................................................................................49
      3. Unconstitutional Conditions ............................................................................50
   B. Equality and Equity .............................................................................................51
      1. Worsening Inequality .......................................................................................51
      2. Violating Horizontal Equity .............................................................................52

IV. CONCLUSION ..........................................................................................................54
The same body of tax law applies to all taxpayers. This Article proposes upending this bedrock principle, allowing private intermediaries to offer alternative tax regimes. The government would insist that it receive at least as much tax revenue as it would have received under existing tax law, so the intermediaries would have powerful incentives to find packages of tax changes that would benefit individuals without lowering tax collections. For example, in exchange for lower rates, businesspersons might forgo the deduction for business travel or might link their cash register directly into the tax reporting system. Some taxpayers might agree to procedural rules that favor the government, in exchange for smoother tax-reform processing. Allowing some parents a deduction for childcare expenses might make them more likely to work outside the home and thus actually increase tax collections. Alternative tax-rate structures with higher inframarginal and lower marginal rates might encourage some taxpayers to work harder, pay more taxes, and yet be happier as a result.

Contractual tax reform requires data about taxpayers that would help predict how much they would pay in an alternative tax regime. Much of the tax literature presumes that taxpayers have private information about themselves. Sometimes, the tax system can harness that information by allowing private parties to choose among different regimes. But for the exchanges suggested above, one cannot allow all taxpayers to opt in, because those most willing to give up benefits would be

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1 E.g., I.R.C. § 1(a) (“There is hereby imposed on the taxable income of... every married individual...”) (emphasis added); id. § 11(a) (“A tax is hereby imposed for each taxable year on the taxable income of every corporation.”) (emphasis added); see also U.S. CONST. art. I, § 8, cl. 1 (“all Duties, Imposts and Excises shall be uniform throughout the United States”); United States v. Ptasynski, 462 U.S. 74, 79 (1983) (“Such taxes must be uniform throughout the United States, and uniformity is achieved only when the tax operates with the same force and effect in every place where the subject of it is found.”) (quotation marks and citations omitted). Taxpayers may make certain elections from a limited menu provided by tax law, see infra note 236 and accompanying text, but they cannot order off the menu.

2 See Section I.A.1.

3 See Section I.C.2.

4 See Section I.A.2.

5 See Section I.B.2.

6 See ROBIN BROADWAY, FROM OPTIMAL TAX THEORY TO TAX POLICY 50 (2012) (“[A]symmetric information has been a key feature of normative tax analysis, particularly the fact that the government is imperfectly informed about relevant characteristics of private agents.”). Alex Raskolnikov, for example, suggests allowing taxpayers to choose between a “deterrence regime” with high penalties and a “compliance regime” with features such as binding arbitration. Alex Raskolnikov, Revealing Choices: Using Taxpayer Choice to Target Tax Enforcement, 109 COLUM. L. REV. 689 (2009).

7 The goal of some proposals is to produce a separating equilibrium, where taxpayers have incentives to choose regimes in a way that is consistent with social welfare. See, e.g., Joseph E. Stiglitz, Self-Selection and Pareto Efficient Taxation, 17 J. PUBL. ECON. 213, 230 (1982) (discussing a possible separating equilibrium). Those committed to gaming the tax system will generally choose the former, while others choose the latter. Id. at 692–93 & 745–46.
those least likely to use them. A businessperson who does not travel for business would be happy to give up the deduction for business travel. Similarly, the goal might be to find a married taxpayer who would reenter the workforce after having children only in the absence of tax distortions. The challenge is to identify groups of taxpayers who can be expected, on average, to pay at least as much tax in the alternative tax regime.

Artificial intelligence ("AI") may now make it possible in many cases to identify such taxpayers. Three revolutions—in computing power, in the availability of data, and in the computer algorithms used to analyze the data—mean that computers can increasingly predict human behavior with remarkable accuracy. As early as 2011, the retailer Target Corp. famously sent coupons for baby clothes and cribs to a teenager, whom its data scientists had predicted was pregnant. The teenager’s father came to a Target store furious about the mailing, but later apologized when he found out that his daughter was in fact pregnant. Since 2011, artificial intelligence has grown ever more capable, and today, such anecdotes seem unsurprising. Legal scholars take as granted that algorithms can make reasonably accurate predictions, focusing instead on questions of when and how the legal system should be able to rely on them.

Even the best analysis will not provide foolproof predictions about how different taxpayers will respond to alternative tax regimes. But tax law already relies on predictive analytics. In the United States, the IRS has long used data-driven computer models to determine the most promising audit targets ex post.

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8 See Section I.A.1.
9 See Section I.A.2.
10 A notable advance has been the deep neural network. See Geoffrey E. Hinton, Learning Multiple Layers of Representation, 11 TRENDS COGNITIVE SCI. 428 (2007).
13 Id.
14 See, e.g., Judge Noel L. Hillman, The Use of Artificial Intelligence in Gauging the Risk of Recidivism, 58 JUDGES J. 36 (2019) (arguing that use of AI in sentencing may violate due process even if it is accurate); Sonia K. Katyal, Private Accountability in the Age of Artificial Intelligence, 66 UCLA L. REV. 54 (2019) (arguing a variety of legal tools to reduce the opacity of artificial intelligence); Danielle Keats Citron & Frank Pasquale, The Scored Society: Due Process for Automated Predictions, 89 WASH. L. REV. 1 (2014) (urging those affected adversely by predictions be given due process rights to challenge them).
15 The IRS has a highly confidential statistical methodology called the Discriminant Index Function (DIF) that scores the likelihood of an audit that increases tax revenue; the higher the DIF score, the greater the probability of being audited. IRS, INTERNAL REVENUE MANUAL § 4.1.3.2. The IRS also uses totally random audits to
But tax law has never used AI or other data-driven models to optimize or target tax rules ex ante, either to improve efficiency or to maximize tax revenues.\textsuperscript{16} Tax scholars have ignored the possibility of optimizing tax law using data science.\textsuperscript{17}

Perhaps the reason for this gap in the literature is justifiable fear that government empowered to use AI to change individual tax regimes might make serious errors or, more nefariously, favor some taxpayers and discriminate against others. But this Article proposes alternative regimes entered into through voluntary private contractual arrangements. Such an approach not only reduces the danger of governmental abuse but also ensures that private parties have robust incentives to identify areas in which available data allows sufficiently confident predictions.

Contractual tax reform would require careful implementation.\textsuperscript{18} Private intermediaries would design alternative tax regimes and decide which taxpayers to invite. These private intermediaries must have proper incentives to identify regimes that improve taxpayer utility while producing at least as much tax revenues to the government. Our proposal provides these incentives by randomly assigning some taxpayers who would like to be subject to an alternative regime to a control group subject to generally applicable tax law. This group’s tax receipts would determine how much the intermediary must pay to the government. The design ensures that the arrangement will not harm the government, and the requirement that taxpayers affirmatively opt in ensures that taxpayers expect it to benefit them. It might seem that the only losers are the taxpayers stuck in the status quo by random chance, yet this Article will demonstrate how these taxpayers can benefit too.\textsuperscript{19}

\begin{itemize}
\item \textsuperscript{16} Indeed, it is doubtful whether the IRS has the expertise or capacity to optimize tax law ex ante using artificial intelligence. 1 NAT’L TAXPAYER ADVOCATE, OBJECTIVE REPORTS TO CONGRESS FOR FISCAL YEAR 2017, at 123 (2016), https://taxpayeradvocate.irs.gov/reports/fy-2017-objectives-report-to-congress/full-report (noting that the IRS uses “data mining models,” amongst other techniques, to stop refunds on potentially false returns, but has an unacceptably high rate of false positives); see also TREASURY INSPECTOR GEN. FOR TAX ADMIN., REVIEW OF THE ELECTRONIC FRAUD DETECTION SYSTEM (Sept. 29, 2015), https://www.treasury.gov/tigta/auditreports/2015reports/201520093fr.html (discussing the poor state of the IRS’s technology).
\item \textsuperscript{17} The apparently sole exception is Christian Baker et al., A Big Data Approach to Optimal Sales Taxation (NBER Working Paper No. 20130, May 2014), and that paper deals only with sales tax, not income tax or corporate tax.
\item \textsuperscript{18} Contractual tax reform involves experimentation using real-world conditions, which is in stark contrast to the laboratory-based experimentation into individuals’ behavior that is common in areas including taxation. For a good review of laboratory-based experimentation, see James Alm & Sarah Jacobson, Using Laboratory Experiments in Public Economics, 60 NAT’L TAX J. 129 (2007).
\item \textsuperscript{19} See infra text accompanying note 243.
\end{itemize}
Suppose, for example, that a private intermediary called “Taxes, Inc.” hires tax experts and AI experts to collaborate. The firm identifies one million candidate taxpayers to invite to opt into an alternative tax regime. Taxes, Inc. would send these taxpayers an invitation to opt in, along with disclosures about the upsides and downsides of the alternative regime. Suppose that 100,000 of the invitees agree to participate and are deemed suitable candidates after further voluntary disclosures to Taxes, Inc. A randomly selected subset of these opting-in taxpayers (say, 10%, meaning 10,000 taxpayers) would be assigned at random to the control group. But the other 90,000 would be bound by the alternative tax regime; the alternative tax regime would be a contract between them and Taxes, Inc. If the 90,000 taxpayers—the “treatment group”—paid more than 9.0 times the taxes paid by the control group, then Taxes, Inc., would receive the excess (or some fraction thereof) as profits. But if the treatment group paid less than 9.0 times the taxes paid by the control group, Taxes, Inc., would have to reimburse the government the difference (or the same fraction thereof).

Private intermediaries could offer alternative tax regimes to individuals or to business entities like corporations. The alternative tax regimes could be purely substantive, purely procedural, or a combination of both. Some limitations on alternative tax regimes are desirable. Many tax benefits aim to achieve non-tax policy goals. For example, the research and development (R&D) tax credit encourages scientific and engineering expenditures. The underlying theory is that businesses do not capture all the benefits of their R&D expenses, and so society

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20 Regarding disclosures to avoid exploitation, see infra Section II.C.1.
21 Mathematical formulas other than fractions of the difference in collection are possible. The only constraint in designing the formulas for what Taxes, Inc. receives for increased collections (or what Taxes, Inc. pays for shortfalls) is that they must give Taxes, Inc. incentives to design alternative tax regimes that have an expected value greater than the expected value of the status quo.
22 C corporations and certain types of trusts are examples of business entities that pay taxes. I.R.C. § 11 (imposing tax on C corporations); Treas. Reg. § 301.7701-2(b) (deeming a number of types of business entities to be corporations); cf. I.R.C. § 641(a) (imposing tax on trusts). Other business entities, like partnerships and S corporations, are not taxing entities, but rather “pass through” their income and other tax attributes to their partners, shareholder, or other owners. I.R.C. § 701 (“A partnership as such shall not be subject to the income tax imposed by this chapter. Persons carrying on business as partners shall be liable for income tax only in their separate or individual capacities.”); id. § 1363(a) (“[A]n S corporation shall not be subject to the taxes imposed by this chapter”).
24 I.R.C. § 41; see also id. § 174 (allowing immediate deduction for R&D expenditures, in contravention of the general principle of capitalization for expenditures creating multi-year benefits).
benefits from favorable tax treatment of R&D. Similarly, many other tax expenditures aim to encourage taxpayers to create positive externalities or to reduce negative externalities. Examples include various tax benefits for higher education, clean energy, and homeownership. The simplest solution is for Congress simply to bar alternative regimes that remove specified tax benefits or, particularly in early implementations, to limit the scope of contractual tax reform to specific provisions. Blocking some tax benefits will, of course, be less of an issue in countries (or states) that make less use of tax benefits to further non-tax policy goals. Though most of our examples will focus on the U.S. federal tax system because of its familiarity, contractual tax reform might be as or more desirable in other jurisdictions.

There are strong theoretical reasons to believe that welfare-improving alternative tax regimes exist even in the U.S. federal tax system. This system is extraordinarily expensive to comply with and to administer, yet it leaves hundreds of billions of dollars owed to the government uncollected. And it creates massive economic distortions. These administrative costs and inefficiencies are potential gains that can be distributed among taxpayers, the government, and intermediaries, so long as an intermediary is able to target its offers sufficiently well.

Tax rate schedules will often be a source of beneficial exchanges, because the status quo balances two irreconcilable goals. The first goal, based on conceptions of equity, is progressivity. Progressivity demands that higher-earners should pay not merely higher tax than lower earners, but a higher percentage of

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26 Martin A. Sullivan, Economic Analysis: Can a Patent Box Promote Advanced Manufacturing?, 147 TAX NOTES 1347, 1347 (June 22, 2015) (”decades of research by leading economists indicates that externalities from R&D not only exist but are very large”).

27 I.R.C. § 25A.

28 Id. §§ 45, 136, 179D.

29 Id. § 163(h).

30 A drawback is that this may limit the most creative alternative regimes, such as those that do not even use the concept of deductions. See, e.g., infra note 140 and accompanying text.

31 Countries such as Germany, the Netherlands, and South Korea have much lower levels of tax expenditures than the United States. See Joe Minarik, Tax Expenditures in OECD Countries 28 (2009), http://www.oecd.org/governance/budgeting/42976288.pdf (last visited Feb. 5, 2019).

32 See Section I.C.1.

33 See Section I.C.2.

34 See Section I.B (giving examples of such exchanges based on tax rate schedules).

As a result, the marginal tax rate a taxpayer pays (that is, the tax on the last dollar of income) should be higher than the inframarginal rates (that is, tax on lower dollars of income). The second goal, based on efficiency concerns, is to minimize distortions from tax. Inframarginal tax rates are less likely to affect taxpayers’ behavior than marginal rates, because each additional dollar of income contributes less to utility than the prior dollar and because a unit of leisure time is more valuable when there is less of it. Efficiency thus counsels toward low marginal rates, even at the expense of higher inframarginal rates. Indeed, the least distortionary tax is a lump sum tax with a zero marginal rate. Thus, the dilemma: Progressivity requires that marginal rates increase with income; efficiency is best served by lump sum taxation or low marginal rates.

These two goals are irreconcilable only if the same tax rate schedule applies to all taxpayers. Contractual tax reform allows tailoring tax rate schedules to taxpayers’ characteristics and preferences, enabling both progressivity and efficiency. Tax schedules with relatively high inframarginal rates and low marginal rates are possible under contractual tax reforms targeted to taxpayers’ circumstances. If AI makes possible identification of those who would accept such alternative schedules and yet could expect to pay at least as much under them, then contractual tax reform can offer substantial benefits to both the government and taxpayers. Even if intermediaries can make confident predictions only that a small set of taxpayers, such as taxpayers subject to an especially inefficient deduction,
would benefit from an alternative tax regime while still paying higher taxes, the
benefits could be substantial for those taxpayers.

If contractual tax reform were sufficiently widespread, it might have broad
benefits beyond those who opt into alternative tax regimes. Congress, the IRS, and
scholars may learn from the success or failure of alternative tax regimes. Contractual
tax reform might support experimentation with tax reform goals
previously thought to require universally applicable tax changes, such as moves to
mark-to-market taxation of securities in exchange for lower rates or replacement
of corporate taxes by government holdings of nonvoting corporate stock.

The prior literature has considered the possibility that the government might
improve policy with randomized experiments in a variety of areas, including tax
law. Other scholars, meanwhile, have proposed allowing private parties to opt out
of default economic regulation in areas such as securities law and bankruptcy, and a recent article suggests that corporations be allowed to appoint private firms to serve the function of directors. But the literature on government experimentation has ignored the literature on opting out of regulation and vice

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43 Indeed, if contractual tax reform became common, the tax code in Title 26 of the U.S. Code might come to be seen as a “penalty default rule.” Ian Ayres & Robert Gertner, Filling Gaps in Incomplete Contracts: An Economic Theory of Default Rules, 99 YALE L.J. 87 (1989). Lawmakers might be more willing to enact cumbersome tax provisions if they know that affected taxpayers can contract around it with alternative tax regimes that lack those provisions.

44 “Mark-to-market” means that the securities (or other assets) are treated as if sold at the end of the year for their fair market value. See David A. Weisbach, A Partial Mark-to-Market Tax System, 53 TAX L. REV. 95 (1999) (proposing a generalized version of this alternative regime, with different rates for assets like securities marked-to-market than for assets not marked-to-market). But see Edward A. Zelinsky, For Realization: Income Taxation, Sectoral Accretionism, and the Virtue of Attainable Virtues, 19 CARDOZO L. REV. 861 (1997) (arguing against any mark-to-market system).

45 See infra Section I.D (discussing this option).


49 See Alan Schwartz, A Contract Theory Approach to Business Bankruptcy, 107 YALE L.J. 1807 (1998) (arguing that requiring firms to use a particular bankruptcy system increases the borrowing firm’s cost of capital).

versa. The possibility that private parties might facilitate contracting around default tax law has received no prior consideration.

Perhaps the closest suggestion is Saul Levmore’s proposal to “allow every wealthy individual, at age sixty for example, to choose among revenue-neutral combinations of income and estate tax rates.”  

Levmore does not explore the more general question of how the government or private parties might identify alternative tax regimes to apply to particular taxpayers. Meanwhile, Anthony Casey and Anthony Niblett argue that developments in AI anticipate the increasing ability of the government to fashion “micro-directives” responsive to circumstances, combining the predictability of rules with the flexibility of standards, and they offer a brief application to tax law. But their ambition is for the law to take into account diverse circumstances itself; they do not consider the possibility that private parties might identify citizens who then may opt into particular alternative legal rules.

We are not the first to consider allowing nongovernmental entities to create tax policy in some way, however. The economist Erzo Luttmer proposed a mechanism in which profit-maximizing firms redistribute income. The government would assign employees at random to employers, each receiving the same base salary. An employee may then enter into an agreement to work with the employer, or can work for a third party and give the assigned employer a government-set fraction of the amount earned. The lower this fraction, the greater the incentive to offer an attractive base salary, thus encouraging intrafirm income redistribution. Luttmer’s proposal is impractical. Assigning employees at random to employers is inconsistent with foundational commitments of liberal democracy. Nonetheless, Luttmer’s proposal underscores that properly incentivized private parties may be better situated than the government to assess individuals’ abilities and thus to better offer them tax schedules. Our project similarly seeks to take

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53 Casey and Niblett consider a tax authority using artificial intelligence “to provide advance tax rulings,” indicating how the law would apply to particular individuals. *Id.* at 22.
55 *Id.* at 5.
56 *Id.*
57 *Id.* at 8 (“To make privatized redistribution feasible, many practical issues would need to be addressed including opportunities for employment changes, bankruptcy, retirement rules and the age at which individuals are matched to firms.”).
58 *Id.* at 7 (noting that this system gives employers “incentives to improve their assessments of workers’
advantage of private information, but to allow taxpayers and private tax intermediaries to freely choose one another.

The Article proceeds as follows. Part I offers several examples of alternative tax regimes that private intermediaries might offer to taxpayers. These examples highlight inefficiencies from current one-size-fits-all tax law. Part II explores the mechanics of how private intermediaries could offer alternative regimes to taxpayers. It explains the responsibilities of intermediaries and how the government can ensure that they will be able to pay their bills, and it also describes how the government might prevent various manipulations, such as shifting income between periods or changing tax filing status, and deal with complications such as tax expenditures. Part III considers potential objections. Reliance on private intermediaries necessitates some regulation to prevent financial or privacy abuses, similar to existing financial and privacy regulation. Properly implemented, contractual tax reform need not worsen inequality or horizontal inequity and in fact could help reduce these problems. A brief conclusion follows.

I. APPLICATIONS

The goal of this Article’s proposal is for some taxpayers to receive the option of an alternative tax regime expected to leave the taxpayers better off and increase the tax revenue received by the government (or at least keep tax revenues constant). This Part will describe some hypothetical alternative regimes, while the next Part explains the mechanisms of contractual tax reform.

A. Changing the Tax Base

In the U.S. income tax system, the “tax base” is taxable income: the taxpayer’s gross income minus the taxpayer’s deductions.\(^59\) Any change to tax—whether it be traditional tax reform or contractual tax reform—can expand the tax base by expanding the definition of what is in gross income\(^60\) or by reducing the available deductions.\(^61\) Conversely, a change to tax law can contract the tax base, such as by offering a new deduction. Alternative tax regimes offered by private

\(^{59}\) I.R.C. §§ 1, 11, 63(a).

\(^{60}\) The most obvious way to expand gross income is to contract the “exclusions” from gross income, which are “a receipt or accrual that would, but for a specific exclusion provided by the Code or administrative action, be included in a taxpayer's gross income.” WARREN, GORHAM & LAMONT, TAX DICTIONARY (2019 ed.). I.R.C. sections 101 through 127 contain express exclusions.

intermediaries could offer expansions, contractions, or both, with the goal of increasing overall tax revenues while still leaving the taxpayer better off.

1. Expanding the Base

Consider businesspeople A and B, who both have gross income of $140,000 and spend $40,000 per year on business travel to visit clients. Assume for simplicity that both are subject to a flat 50% tax rate on all their taxable income. Although they appear identical, their business travel activities differ substantially: A loves sightseeing, whereas B only conducts business. A’s $40,000 spent on business travel generates merely $10,000 in gross income, but brings $20,000 worth of personal utility, because the travel allows A to sightsee between business meetings. It seems irrational for A to spend $40,000 on business travel that brings in only $10,000 in profits and $20,000 in personal utility. But current tax law makes such wasteful behavior entirely rational, since A can deduct the $40,000 in travel expenses, reducing A’s tax bill by $20,000. A’s distorted behavior has cost the

62 See I.R.C. § 162(a)(2) (“There shall be allowed as a deduction all the ordinary and necessary expenses . . . including . . . traveling expenses . . . while away from home in the pursuit of a trade or business”).
63 This rate is a simplification and is higher than the rates one would expect under current law, where top federal marginal tax rates are 39.6%, I.R.C. § 1(a)-(d). State tax rates, however, can add as much as 12.3%. CAL. REV. & TAX. CODE § 17041.
65 With respect to A, the costs of the business trip are $40,000 in actual expenses, plus the $5,000 in taxes paid on the $10,000 in gross income generated by the travel. The total costs to A are thus $45,000. Meanwhile, A’s benefits from the business trip are the $20,000 in personal enjoyment, plus $20,000 in taxes saved because the business expenses are deductible, plus $10,000 in gross income. Thus A’s benefits of $50,000 exceed A’s $45,000 in costs. A’s surplus from the travel is the difference, $5,000.
66 In theory, a deduction for business travel can be denied if the personal-consumption aspect is egregiously large compared to the bona fide business motivations. But courts give taxpayers a wide berth on such matters. See Palo Alto Town & Country Village, Inc. v. Commissioner, 565 F.2d 1388, 1390–91 (9th Cir. 1977) (allowing lavish travel expense deduction upon showing that it was helpful in one instance to the taxpayer); Henry v. Commissioner, 36 T.C. 879, 884 (1961) (“In determining that which is ‘necessary’ to a taxpayer’s trade or business, the taxpayer is ordinarily the best judge on the matter, and we would hesitate to substitute our own discretion for his”). A’s sightseeing expenses would not be deductible since they are clearly personal expenses. I.R.C. § 262. Whether the overall trip is treated as a deductible business trip or a personal trip is based on the facts and circumstances, with weight given to factors as time spent on business versus personal activities, not the amount of gross income earned from the trip. See Treas. Reg. § 1.162-2(b).
67 We assumed for simplicity a 50% tax rate. A deduction of $40,000 for someone with a 50% tax rate results in tax savings of 50% times $40,000, which equals $20,000.
government $15,000 in lost tax revenue\(^{68}\) and made society as a whole $10,000 poorer.\(^{69}\)

B’s business travel, by contrast, is all about business. By travelling, B earns $50,000 in additional income from clients, but zero personal utility. B’s after-tax benefit of the travel is $25,000, i.e., the additional $50,000 in income from clients, reduced by the 50% tax rate. B would not travel for business without the deductibility of travel expenses, because the $40,000 expense is greater than this $25,000. With deductibility, the $40,000 in travel expenses has an after-tax cost of only $20,000. B comes out $5,000 ahead by taking the travel, while the government collects an additional $5,000 in tax revenue. The deductibility of B’s travel expenses thus increases social efficiency by $10,000. Such behavior explains why the tax code currently allows deducting business travel.

Allowing B to deduct business expenses makes society better off, while allowing A the same deduction does the opposite. Under current law, the government makes no effort to distinguish between A and B.\(^{70}\) Indeed, the government currently has no way to observe that A enjoys $20,000 worth of personal utility from the travel (from sightseeing), or to observe that B’s business travel is all about business. The government also has no way to observe that A earns merely $10,000 in income from clients by travelling, whereas B earns $50,000.

Contractual tax reform can address this problem. Private intermediaries could offer both A and B an alternative tax regime, structured so that only those taxpayers who inefficiently take advantage of travel deductions would opt in. For example, both A and B could be offered an alternative tax regime where business travel expenses are not deductible, in exchange for lowering the tax rate from 50% to 45%. (Recall that to keep the math simple, we have assumed flat tax rates.) Simple cost-benefit analysis shows that A will accept this alternative regime and forgo all business travel,\(^{71}\) increasing A’s personal utility, increasing tax revenues, and increasing overall social well-being. Meanwhile, B will not opt-in, thus sticking with current law, also a socially efficient result.\(^{72}\)

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\(^{68}\) The travel resulted in gross income of $10,000 and a deduction of $40,000, for a decrease in taxable income of $30,000. At the 50% tax rate, the government has lost $15,000 in tax revenue.

\(^{69}\) As shown supra note 65, A’s net benefit from the travel expenses is $5,000, and as shown supra note 67, the government lost $15,000 in tax revenue. The $10,000 is the deadweight loss to society.

\(^{70}\) See authorities supra note 66.

\(^{71}\) Under current law, when A takes the deductible travel, A has gross income of $140,000, $40,000 in deductible travel expenses, leading to taxable income of $100,000 and after-tax income of $50,000. Adding in the $20,000 in personal utility from the travel, A has total utility of $70,000. But by opting for the alternative regime and not taking the business travel, A will have gross income of $130,000, no deductions (since A no longer travels), and thus taxable income of $130,000. The alternative regime provides a 45% rate, leaving 55% of A’s income available after taxes. 55% of $130,000 is $71,500, which is $1,500 greater than A’s utility under current law.

\(^{72}\) Meanwhile, under current law, when B takes the deductible travel, B has taxable income of $100,000 (i.e.,
Crucially, under the alternative regime, the taxes collected from A will increase by $8,500. Although the alternative regime lowers the tax rate from 50% to 45%, taking away the deduction for business travel – a form of broadening the tax base – more than makes up for the lowered tax rate. This $8,500 in additional tax revenue would likely more than cover any costs of administering the alternative tax regime. Some portion of the $8,500 would go to the private tax intermediary, with the remainder going into government coffers.

Of course, not every taxpayer should have the opportunity to opt into this alternative tax regime. Consider a taxpayer C, who never takes business travel. C will happily give up the right to deduct travel expenses, in exchange for tax rates reduced from 50% to 45%. But for C, this alternative tax regime would be a pure windfall, providing lower taxes but zero social benefit. The private intermediaries must not only design good alternative regimes, but also invite only taxpayers who, if they opt in, are likely to increase both tax collections and social welfare.

The most straightforward approach is likely for the private intermediary to consider past travel expenses, offering the alternative tax regime only to those taxpayers who have taken substantial travel-expense deductions in prior years. But private intermediaries could feed much more sophisticated, detailed, useful data to their AI. For example, taxpayers who use their credit card on business trips to pay for museum admission fees or sightseeing tours likely receive higher personal utility from business travel. Moreover, since someone who takes lots of for-pleasure travel presumably also gains more utility from business travel. Moreover, since someone who takes lots of for-pleasure travel presumably also gains more utility from business travel, data on

$140,000 gross income minus $40,000 deductible travel expenses), leading to after-tax income of $50,000. B has no additional personal utility from the travel. If B is subject to the alternative regime and nonetheless still takes the travel, then B will have taxable income of $140,000, which, with the 45% alternative tax rate, leaves $77,000 after taxes. Subtracting the $40,000 in travel expenses, which would not be deductible under the alternative regime, B is left with only $37,000, which is much worse than the $50,000 under current law. Meanwhile, if B takes the alternative regime and does not take the travel, then B will have gross income of just $90,000, since B will lose $50,000 in gross income from clients by not travelling. With the 45% alternative tax rate, that leaves $49,500, which is less than the $50,000 under the current law. Thus, B will not opt for the alternative regime.

Under current law, A took and deducted the business travel, resulting in taxable income of $100,000 and taxes collected of $50,000 at the 50% rate. But under the alternative regime, A will not take the business travel, and thus will lose $10,000 in gross income from clients, but will end up with taxable income of $130,000. At the 45% rate, that results in $58,500 in taxes collected, which is $8,500 greater than the $50,000 under current law.

More sophisticated methods of deciding whom to invite to opt in would likely have substantial benefits. Suppose that taxpayer D has the same observable characteristics as A and B, with business travel expenses of $40,000 and gross income of $140,000. But suppose that D has already made plans to switch from travelling to meet clients in person to using teleconferencing to conduct the same meetings. D would happily opt into the alternative tax regime, producing a windfall to D at the expense of tax revenues. Artificial intelligence can help predict which taxpayers likely would change their behavior without the alternative tax regime. Companies that market teleconferencing services make use of AI to predict who is most likely to buy their services in lieu of business travel, and a private tax intermediary should be able to identify the same taxpayers also using AI.
for-pleasure travel patterns also might give some indication of a taxpayer’s personal utility from business trips. The higher the personal utility a taxpayer receives from business travel, the more likely that the deductibility of business travel is creating distortions, as with the example of taxpayer A. It thus likely makes more sense—both in terms of additional tax revenue and social welfare—for a private intermediary to offer the alternative tax regime to such taxpayers.

Of course, existing data cannot provide a final answer to questions of which taxpayers should receive the option of the alternative tax regime. Actual experimentation in the real world by private intermediaries would generate experience and additional data.

2. Contracting the Base

Scholars have long recognized that tax law hinders gender equality by discouraging mothers from staying in (or reentering) the workforce. Consider a woman who earns $30,000 per year and has a husband who earns a great deal more than that. Suppose that the marginal tax rate applicable to all of the wife’s taxable income is 50%. The couple then has children. The woman faces a decision: stop working to care for the children or continue working but pay $20,000 per year for childcare. Childcare expenses are not deductible, so the after-tax benefit of continuing to work is $15,000, which is $5,000 less than the cost of childcare. Assuming that she acts solely based on present economic considerations and receives no utility (or disutility) from work, the woman will rationally stop working. This is inefficient. Society loses $10,000 because the wife is no longer contributing $30,000 worth of labor, which would cost only $20,000 in childcare.

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76 In most marriages, the two spouses file a joint return. BITTKER & LOKKEN, supra note 35, ¶ 111.5.2. With joint returns, the lower earner pays higher marginal tax rates than the low earner would pay if single. Id. Thus the application of the assumed top marginal rate to the wife’s taxable income in this example is not unrealistic, despite her low gross income. Of course, the problem exists even with lower marginal rates, with a concomitantly smaller tax distortion.
77 Care provided by a taxpayer to his or her own children in the home is not taxed. It is the paradigmatic example of untaxed “imputed income” under longstanding U.S. income tax principles. See BITTKER & LOKKEN, supra note 35, ¶ 5.3.2.
78 I.R.C. § 262(a) (“Except as otherwise expressly provided … no deduction shall be allowed for personal, living, or family expenses.”); Smith v. Commissioner, 40 B.T.A. 1038 (1939); cf. Shannon Weeks McCormack, Overtaxing the Working Family: Uncle Sam and the Childcare Squeeze, 114 Mich. L. Rev. 559 (2016) (arguing for allowing deductibility). Congress has provided a meager dependent-care tax credit worth only $600 per year in this situation. I.R.C. § 21; see BITTKER & LOKKEN, supra note 35, ¶ 37.2.2. Alternatively, taxpayers whose employers provide a dependent-care flexible spending account can exclude up to $5,000 in childcare expenses. See I.R.C. § 129 (excluding employer-provided dependent-care assistance); I.R.C. § 125 (authorizing flexible spending accounts).
Government, society, and the couple would all benefit from making their childcare deductible, which would change her after-tax benefit of continuing to work to $25,000, which exceeds the $20,000 cost of childcare.

Why then does the tax code not already allow a deduction for childcare expenses? Because many mothers work and pay for childcare without a deduction. Allowing such mothers to deduct childcare would give them a tax windfall. For example, suppose that the mother in the example above was earning $50,000 rather than $30,000. She might then rationally continue working even without childcare being deductible. Allowing her to deduct childcare would result in a tax windfall of $10,000, without furthering either economic efficiency or gender equity. As another example, suppose once again that the mother earned only $30,000, but that she received non-monetary personal satisfaction worth $6,000 from going to work and getting out of the house. That benefit would cause the mother to continue working, even without childcare being deductible. For this taxpayer, a deduction for childcare would also result in a tax windfall.

Contractual tax reform can solve this problem. Private intermediaries should offer the alternative tax regime, where childcare is deductible, only to married taxpayers for whom the deduction seems likely to make the difference between both spouses continuing to work or not. Even without extensive computing power and AI, a private intermediary might be able to identify such taxpayers by looking only at both spouses’ pre-child income, the couple’s marginal tax rate, and the cost of childcare near the taxpayers. But, using AI, private intermediaries might target the invitations to opt in even more precisely, projecting income potential. Moreover, AI could even be used to estimate the noneconomic utility (or disutility) the mother would receive from getting out of the house to go to work, just as marketers use AI to aim products and services at new mothers.

Antidiscrimination concerns might limit the variables that an artificial intelligence model could incorporate. The sex of each member of the couple (including whether the couple is same-sex) may be highly predictive, but there are

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79 The wife would earn $30,000 in additional gross income, but the couple could deduct the $20,000 in childcare costs, resulting in additional taxable income of just $10,000. The couple would pay $5,000 in taxes on the $30,000 in earnings, leaving $25,000 in after-tax benefit.
80 In this example, the after-tax benefit to the mother of continuing to work is $25,000, which is the earnings of $50,000 minus the 50% in taxes. The cost of continuing to work is $20,000, the cost of the childcare. Thus, the mother will have $5,000 to spend after paying for childcare.
81 In this example, the after-tax benefit of continuing to work is $21,000, i.e., the $15,000 income after taxes plus the $6,000 in noneconomic personal utility from working. The $20,000 cost of childcare is less than this.
82 See discussion infra note 113 and accompanying text (noting data-based predictions of income).
83 D’VERA COHN ET AL., PEW RESEARCH CENTER, AFTER DECADES OF DECLINE, A RISE IN STAY-AT-HOME MOTHERS 29 (2014), http://www.pewsocialtrends.org/files/2014/04/Moms-At-Home_04-08-2014.pdf (presenting survey data showing that mothers are much more likely than fathers to stop working, take
arguments against considering sex. A regime that results in more tax rate reductions for women, even if motivated by the good intention of increasing gender-equality in the workforce, would reinforce the stereotype that women prefer caring for children, and thus need inducements to work outside the home. The possibility that AI might perpetuate discrimination has received great attention recently, and this concern may be so weighty that some strategies offered by private intermediaries should be prohibited. Such concerns are a fertile area for future scholars.

Beyond childcare, private intermediaries offering alternative tax regimes could improve efficiency by granting other deductions or exclusions that entice taxpayers into the workforce or into accepting higher-paying jobs. Some possible examples among many include targeted deductions for home-office expenses, the cost of work clothing, and commuting expenses. Such expenses are often not currently deductible, under the theory that these expenses are usually mostly personal, but that may vary across taxpayers and expenses. The tax code seeks to accommodate this, sometimes allowing partial deductibility and at other times making fine distinctions about what is personal and what is not. But private intermediaries might account for individual circumstances, such as the importance of clothing to particular jobs or the availability of housing near a workplace. Alternative tax regimes, meanwhile, need not make a binary decision between allowing a deduction and disallowing it. Rather, an alternative tax regime might

significant time off, or reduce their work hours to care for children).

86 See I.R.C. § 280A(c)(1) (allowing deductions for limited home office expenses). For example, a lawyer who has children might be enticed to continue practicing by allowing deductions relating to adding and maintaining an alcove in an existing children’s playroom as a home office, which would not currently be deductible. Id. (requiring that use be “exclusive”).
87 See Pevsner v. Commissioner, 628 F.2d 467 (5th Cir. 1980) (disallowing deductions for employee purchases of job-required clothing in just about all situations).
88 See Commissioner v. Flowers, 326 U.S. 465 (1945) (based on predecessor to I.R.C. § 262 denying deduction for personal, family, and living expenses). Similarly, consider a taxpayer who has a more promising job in another state, but who is held back from moving due to negative home equity in her house. There could be an exclusion from such a taxpayer’s gross income when the new employer repays the taxpayer’s negative home equity, which currently is not excludable. See I.R.C. §§ 217(b) & 132(a)(6) & (g).
89 I.R.C. § 274(n) (allowing deduction for only 50% of most business meal expenses).
90 Compare Pevsner v. Commissioner, 628 F.2d 467 (5th Cir. 1980) (deductibility of cost of clothing worn to work determined based on objective standards), with Bernardo v. Commissioner, 88 T.C.M. (CCH) 191 (2004) (using subjective standards for same).
result in partial deductibility of certain expenses,\textsuperscript{91} in exchange for a small increase in tax rates.

\textbf{B. Accommodating Other Sources of Heterogeneity}

The previous section discussed how private intermediaries might offer alternative tax regimes that change the tax base to accommodate taxpayer’s diverse situations, such as preferences for business travel or for working outside the home. This section considers alternative tax regimes that accommodate diverse taxpayer preferences in more radical ways than just changing the tax base. Specifically, this section addresses two common sources of taxpayer diversity: differences in earnings potential and differences in preferences for work versus leisure. As in the previous Section, the alternative tax regimes should aim to increase the taxpayers’ utility (the overall satisfaction they derive from their work, leisure, and post-tax earnings), while resulting in at least as much tax revenue to the government.

\textit{1. Earnings Potential}

A central shortcoming of existing tax systems is that the government observes only taxpayers’ income. Income is the product of both effort and earnings potential, yet the government generally cannot measure either.\textsuperscript{92} How much of a taxpayer’s earnings were due to her earnings potential (which the economics literature generally calls “ability”), and how much were due to her efforts? The government generally cannot tell. If the government knew each taxpayer’s earnings potential, it could implement the “first-best” system wherein each taxpayer’s only tax burden would be a lump sum based on earnings potential.\textsuperscript{93} Such lump-sum taxes would be efficient, since the marginal tax rate would be zero, removing tax distortions on work decisions.\textsuperscript{94} This approach would be equitable too, imposing higher burdens on those most able to pay.\textsuperscript{95} For example, a surgeon might be charged a single lump-sum $100,000 tax bill, and then pay zero additional tax, preventing tax from distorting her work decisions.

\textsuperscript{91} See Klein, supra note 64 (arguing for such bifurcation with business travel expenses); I.R.C. § 274(n) (allowing part deductibility of most business meals).
\textsuperscript{92} E.g., James A. Mirrlees, An Exploration in the Theory of Optimum Income Taxation, 38 REV. ECON. STUD. 175 (1971); see also N. Gregory Mankiw et al., Optimal Taxation in Theory and Practice, 23 J. ECON. PERSP. 147, 161 (2009) (“Mirrlees . . . identified the heart of the problem of tax design to be the tax authority’s lack of information about individuals’ abilities.”).
\textsuperscript{93} Mankiw et al., supra note 92, at 149–50.
\textsuperscript{94} Id. at 149.
\textsuperscript{95} Id. at 149–50.
Because the government cannot measure earnings potential, such a first-best system is impossible. But the tax system can be improved by incorporating estimates of earnings potential. George Akerlof famously proposed using easily observable personal characteristics—which he called "tags"—that correlate with a taxpayer's earnings potential, to adjust the tax burden. Examples of "tags" that could be used include educational attainment, earnings history, age, and I.Q. Taxpayers possessing characteristics associated with higher earnings potential would have higher tax rates than those without the characteristic. The underlying theory is that those with higher earnings potential can earn more with less effort, and so total social utility is maximized by charging higher taxes on those with higher earnings potential.

N. Gregory Mankiw and Matthew Weinzierl applied tagging to height. Being taller correlates with earnings potential, with every additional inch of height as an adult being associated with a 1.8% increase in wages. Because tall people can earn income more easily than short people, the authors suggested, total economic utility would be maximized by charging higher income tax rates on taller people than on shorter people. Such tagging would redistribute income from the tall to the short, thus improving equity, while improving efficiency by equalizing the marginal benefits of consumption across people.

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96 Economists have developed mechanisms beyond those discussed in the main text, though often complex and impractical ones, to allow sorting. For example, Joseph Stiglitz has proposed using the threat of randomizing tax rates for those who appear to the government to be low-earnings-potential, while not randomizing rates for those who declare themselves to be high-earnings-potential. See Stiglitz, supra note 7. Under the reasonable assumption that those with higher earnings potential are more risk averse, this randomization encourages high-earnings-potential individuals to fulfill their full potential, contributing more to the economy and to tax revenues. Those additional tax revenues can compensate the lower-earnings-potential individuals so that they are better off despite the randomization.


98 Mirrlees, supra note 92, at 175 (identifying some possible types of tagging, thus laying the groundwork for Akerlof’s tagging analysis); Mankiw et al., supra note 92, at 161 (noting that Mirrlees thus laid the groundwork for tagging).

99 There are various different utility functions that a social planner might aim to maximize, although the most common is maximizing total social utility (which is the same as average social utility). See Mankiw et al., supra note 92, at 148.


Mankiw and Weinzierl leave open the possibility that the seeming absurdity of their proposal reveals a flaw in the dominant utilitarian optimal taxation framework. Their proposal may simply highlight that the tax system generally does not consider information other than income, because most such information would be far more difficult to collect than height. A limitation of tagging is that it provides taxpayers no incentives to reveal hidden information. Tagging depends on observable information. The tax authority would need to require taxpayers to reveal information that taxpayers may consider personal, and the tax authority would also need to enforce honest reporting.

By contrast, allowing private intermediaries to offer alternative tax regimes would encourage taxpayers to reveal information in two ways. First, taxpayers would implicitly reveal a great deal of information by deciding whether (or not) to opt into an alternative tax regime that a private intermediary has offered them. Second, the private intermediaries can require that taxpayers provide private information (e.g., their college major and GPA) as a prerequisite for being allowed to opt into an alternative tax regime. Contractual tax reform thus provides a systematic framework for revealing and using such information, while still leaving taxpayers with the option of not sharing information at all, if they so choose.

Another explanation for the existing tax system’s failure to embrace tagging is that it generally involves taking from one group (e.g., the tall) and giving to another group (e.g., the short). In other words, tagging is Kaldor-Hicks efficient, increasing total social utility, but tagging is generally not Pareto efficient, since some taxpayers (e.g., the tall) lose from the policy. Politically, tagging is difficult to implement, because high-earnings-potential groups like the tall and the educated will be motivated to organize politically to fight it. By contrast, contractual tax reform is Pareto efficient because taxpayers must opt in, and only those taxpayers who foresee that an alternative tax regime will leave them better off will opt-in. This opting-in thus can separate out high-earnings-potential taxpayers from those with low earnings potential.

Consider the following example. Suppose for simplicity that the default tax system has just two tax brackets: all taxable income between zero dollars and $50,000 is taxed at 10%, while all taxable income above $50,000 is taxed at 40%.

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102 The utilitarian framework does not seem to leave any role for considerations of horizontal equity. See, e.g., Mankiw & Weinzierl, supra note 100, at 174. But Mankiw and Weinzierl ask rhetorically, “Why would society sacrifice potentially large gains for its average member to preserve equal treatment of individuals within an arbitrarily-defined group?” Id. at 175.

103 Mankiw and Weinzierl show that height-sensitive taxation could be Pareto efficient relative to a regime that does not take height into account, but that the magnitude of the Pareto improvement would be small, with Pareto-improving height-based taxes involving only a few dollars. Id. at 172–73.

104 Perhaps largely for this reason, tagging’s use has largely been restricted to negative taxation, such as welfare benefits. See Mankiw et al., supra note 92, at 163.

105 Current U.S. federal income tax has seven tax brackets. See I.R.C. § 1(a)-(d) & (i).
Consider two individuals who both make $100,000 per year: $H$, who has high earnings potential, and $L$, who has low earnings potential. To earn this income despite having low earnings potential, $L$ toils long hours; meanwhile, $H$ earns this income working only modest hours. For $L$, we assume that a lower marginal rate would be unlikely to induce harder work, since $L$ is already working quite hard and the disutility from cutting into $L$’s scarce remaining free time would discourage further effort. But for $H$, a lower marginal rate could quite likely induce harder work, since $H$ is not currently working hard and, being high-earnings-potential, can earn additional money with relatively little additional effort.

Suppose that both $H$ and $L$ were offered an alternative tax regime that involved a lump-sum payment of $20,000, plus a mere 10% marginal tax rate on all income. This alternative rate schedule is a simple example of higher inframarginal rates and lower marginal rates. How would $H$ and $L$ react?

Two diagrams below explain their reactions. These diagrams build on the existing economic literature that models taxpayers’ preferences for after-tax income versus leisure. These models make the generally reasonable assumption that taxpayers derive more utility from both having more after-tax income and more leisure. For any taxpayer and any level of achievable utility, a convex function called an “indifference curve” represents all combinations of pre-tax income (which is earned by a combination of effort and earnings potential) and after-tax income (which is available for consumption) that achieve the same level of utility. The higher the indifference curve, the higher the level of utility achieved by the taxpayer.

Figure 1 illustrates high-earnings-potential $H$’s behavior under both existing law and the alternative regime. The horizontal axis is pre-tax income, while the vertical axis is the income left after taxes, available for consumption. The dashed line is the existing tax-rate schedule. This line is “kinked” because the existing tax-rate schedule in our hypothetical has two different brackets: 10% and then 40%. The slope of this tax schedule is 0.9 up to $50,000 in pre-tax income (because the government takes the remaining 0.1 or 10%), but then has the “kink,” taking the slope 0.6 beyond $50,000 (because the government takes the remaining 0.4 or 40%). By contrast, the straight gray line is the alternative regime’s tax-rate schedule, which starts at negative $20,000, because that is the lump-sum payment that must be made in the alternative regime. The line then has a slope of 0.9 at every amount of pre-tax income (because the government always takes the remaining 10%). The two solid black, curved lines are $H$’s two relevant indifference curves.

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106 Stiglitz, supra note 7, at 216–18.

107 Id. at 216 (assuming “$\frac{\partial U}{\partial C} > 0$,” which means utility $U$ goes up as consumption $C$ (i.e., after-tax income) goes up, and assuming that “$\frac{\partial U}{\partial L} < 0$,” which means utility $U$ goes down as hours worked $L$ (which “could equally well be interpreted as being effort”) goes up).
$H$ benefits from opting into the alternative regime, which causes $H$ to work harder and earn a pre-tax income of $120,000, with $88,000 left after taxes under the alternative regime. This combination of higher effort and additional after-tax income (increasing from $75,000 to $88,000) makes $H$ happier, shown by the higher indifference curve. Meanwhile, the government has increased the tax it collects from $H$ from $25,000 under existing law to $32,000 under the alternative tax regime. Allowing $H$ to opt in results in a win-win for both $H$ and the government.

By contrast, Figure 2 illustrates low-earnings-potential $L$’s reaction to the alternative tax regime. The crucial difference is $L$’s indifference curve. It is steep,
since additional after-tax income does little to compensate for cutting into $L$’s already scarce hours of leisure.\footnote{\textit{Id.} at 217–18 ("individuals of higher ability have flatter indifference curves . . . the increase in consumption that is required to compensate an individual for a given increase in before tax income is smaller for the more able, since to obtain the given increase in before tax income he needs to forgo less leisure."). Recall that the economics literature uses the term “ability” where we have been using the term “earnings potential."}

The indifference curve that $L$ achieves under current law is already higher than the alternative regime’s tax schedule, at all possible levels of pre-tax income. Being taxed under the alternative regime would thus lower $L$’s utility, so $L$ will not be interested in opting into the alternative tax regime. Intuitively, $L$ already works so hard to earn $100,000 in pre-tax income that the alternative rate schedule would leave $L$ worse off (hence, $L$ will not opt in).

By offering the same alternative rate schedule to both $H$ and $L$—both of whom currently earn $100,000—a private intermediary can determine which has high earnings potential and which has low earnings potential. Moreover, the alternative rate schedule simultaneously makes $H$ happier and raises more tax revenue from $H$. 

\begin{figure}[h]
\centering
\caption{Model of how low-earnings-potential $L$ responds to the alternative tax schedule}
\includegraphics[width=\textwidth]{image.png}
\end{figure}
The danger in offering such an alternative tax schedule is that opportunistic taxpayers might take advantage of it. Suppose that opportunistic taxpayer O earns $100,000 before taxes, but knows that his income is about to shoot upwards to $125,000 next year because of a coming promotion. Offering the alternative tax regime to O would result in a windfall for O at the expense of government revenues. This is where artificial intelligence plays a role. Artificial intelligence can help identify which taxpayers might increase their work effort for higher after-tax pay, and which taxpayers are likely to receive salary increases regardless of tax regime. The private intermediary has a strong financial incentive to find data and analyze it using AI to distinguish O from H and L – and to not invite O to opt into the alternative tax regime.

2. Work vs. Leisure Preferences

Even taxpayers with identical earnings potential may differ in their preferences for leisure versus after-tax income. Contractual tax reform can accommodate this diversity to offer alternative tax regimes that leave both taxpayers and the government better off. Suppose for simplicity—as in the previous section—that the existing tax system has just two tax brackets: all taxable income between zero dollars and $50,000 is taxed at 10%, while all taxable income above $50,000 is taxed at 40%. Assume that under the existing tax system, taxpayers A and B both maximize their utility by putting in 40 hours of effort, thus earning $100,000 in taxable income and paying $25,000 in taxes. A private intermediary offers both an alternative tax regime with a single, flat rate of 25% on all income. This alternative tax regime imposes the exact same tax liability—$25,000—on the taxpayers if they continue to earn $100,000. But they may not.

Assume that A opts in this alternative regime and maximizes her utility by working 10 more hours per week, thus earning $120,000 instead of $100,000. This outcome would result in $5,000 in additional tax revenues and $15,000 in additional after-tax money for A. It is a win-win for tax revenues and for A. This example demonstrates how offering alternative tax regimes can increase the work incentives of those taxpayers for whom lower marginal rates—and hence a higher return to additional work—would be worth the reduction of leisure. In effect, A has received lower marginal rates on additional income (decreased to 25% from 40%) in

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109 Under generally applicable tax law, O would have to pay taxes of 10% on the first $50,000 of income (i.e., $5,000) plus 40% on the remaining $150,000 (i.e., $60,000), for a total of $65,000. By contrast, under the alternative tax regime, O would have to pay the lump-sum of $20,000 plus 10% of the $200,000 income (i.e., $20,000), for a total of only $40,000, which is a $25,000 windfall to O.

110 10% times the first $50,000 in income results in $5,000 in taxes. 40% times the next $50,000 in income results in $20,000 in taxes. Adding the $5,000 and $20,000 in taxes gives total taxes of $25,000.
exchange for higher rates on her inframarginal income (increased to 25% from 10% on the first $50,000) dollars.

Suppose that B declines to opt into the alternative tax regime. Why might B not opt in? B may simply not have the opportunity to earn more than $100,000 under any circumstances. Maybe B has a salaried government job that does not allow for bonuses, meaning B would have to change jobs to earn more than $100,000. Maybe B is covered by a collective bargaining agreement fixing hours and compensation. Or, B may have time commitments outside of work (e.g. children, hobbies) that make working more than 40 hours unacceptable. Regardless of the reason, the alternative tax regime has caused A and B to reveal their divergent preferences for after-tax income versus leisure, with A, B, and tax revenues all left either just as well off or better off.

Two simple diagrams below demonstrate how A and B can have different preferences for after-tax income versus leisure—and thus why A chooses the alternative tax regime while B does not. Figure 3 illustrates A’s behavior under both existing law and the alternative regime. The diagram is similar to Figures 1 and 2, except that the alternative tax regime’s rate schedule is different, represented below by the straight gray line. This line has a slope of 0.75 at every amount of pre-tax income (because the government always takes the remaining 0.25 or 25%).
Under existing law, A maximizes her utility by working so that the existing rate schedule (i.e., the “kinked” dashed line) intersects her highest possible indifference curve (corresponding to highest possibility utility). A does this by working enough to earn $100,000 in pre-tax income, leaving her with $75,000 in after-tax income. But with the alternative rate schedule (the gray line), there is a higher indifference curve that intersects the gray line, where A earns $120,000 in pre-tax income, leaving her with $90,000 in after-tax income. A would opt into the alternative regime, choosing to work the extra 10 hours per week and getting more utility.

Why would B not opt-into the alternative regime? Figure 4 illustrates why. B’s indifference curves are quite different than A’s.

111 Most of the tax literature assumes, unrealistically, that all taxpayers have the same utility functions with respect to after-tax income and leisure. See BROADWAY, supra note 6, at 186. Contractual tax reform relaxes this unrealistic assumption.
The indifference curve including B’s current work choice has a “kink” at a pre-tax income of $100,000, so that earning any more than $100,000 would require much higher after-tax income to result in the same utility. The alternative rate schedule does not intersect any higher indifference curve, meaning that there is no way that the alternative regime can give B a higher utility than existing law. As a result, B will not opt into the alternative regime, thus revealing—and accommodating—B’s different preferences from A.

Opportunistic taxpayers might try to take advantage of the option of the alternative regime to minimize taxes. For example, suppose that taxpayer C currently earns $100,000, just like A and B, subject to $25,000 in tax under the existing two-bracket tax schedule. But suppose that C knew that her employer was already planning to raise her compensation from $100,000 to $120,000 next year, without C needing to work any harder. When viewed in terms of the model presented in Figures 3 and 4, C’s impending pay raise results in a shift of C’s “indifference curves” to the right, as the same amount of effort results in greater pre-tax income. C could opportunistically opt-into the alternative tax regime with a flat 25% rate,
and save $3,000 in taxes with no additional effort.\textsuperscript{112} If offered to C, the alternative tax regime is not Pareto-efficient, giving C a windfall at the expense of government tax revenues.

Private intermediaries would have an incentive to use all available data and AI to identify taxpayers like C and not to offer them the opportunity to opt into this alternative tax regime. For example, taxpayers such as A and B may be in professions with stable incomes, whereas C’s profession may offer frequent upicks in compensation. As another example, C may have just completed a new professional certification that would naturally foreshadow a pay increase. Or, C may have engaged in behavior consistent with someone expecting an increase in earnings, such as taking title to a new luxury car.

Using computer models to predict incomes has already been a reality for nearly a decade. Experian PLC, one of the credit-reporting agencies, introduced a service in 2011 called Income Insight that predicts an individual’s income, based \textit{solely} on credit-report data, without even seeing the individual’s tax returns.\textsuperscript{113} Artificial intelligence drawing from even more data, including complete tax histories, credit reports, vehicle registrations, and various other government records, could predict next year’s income still more accurately. AI could predict not only future income, but also the probability of a substantial jump in income, like the one C expected in the example above. Private intermediaries would have a strong incentive to obtain relevant data from taxpayers and train their AI models properly to identify such taxpayers—and not offer them the alternative regime.

This example demonstrates an important point: the AI used by private intermediaries need not be perfect for contractual tax reform to make society better-off. When taxpayers like A opt into an alternative regime, then the economic “pie” gets bigger: A ends up with higher utility, and the government ends up with more tax revenue than otherwise ($5,000 in the example above). If a taxpayer like C is accidentally allowed to opt into the alternative regime, the economic pie does not get smaller. Rather, a slice of the pie ($3,000 in the example above) is transferred to C, who pays less in taxes.\textsuperscript{114} The increased tax collections from A more than offset the lost tax from C, while both A and C are left better off.

\textsuperscript{112} Recall that we assumed that current law imposed a 10% rate on the first $50,000 of income and then 40% on all income above $50,000; under that schedule, $120,000 in income would result in $33,000 in taxes. But under the alternative regime all income would be taxed at 25%; $125,000 in income would result in just $30,000 in taxes.


\textsuperscript{114} Indeed, suppose that the alternative tax regime in the example were offered to A, B, and C. Of these, B would not opt in because of the “kinked” indifference curves discussed above. But A and C would both opt in, with the government gaining $5,000 in additional taxes from A and losing $3,000 by giving a tax windfall to C. The government comes out overall with $2,000 in additional tax revenues.
Private intermediaries might use a number of other creative strategies to prevent opportunistic taxpayer behavior like C’s above. For example, some jobs produce reliable metrics of effort, such as factory workers’ hours clocked or law-firm lawyers’ hours billed. For taxpayers with such jobs, the alternative tax regime might provide the lower marginal rates only if the taxpayer demonstrates an increase in hours worked. This example highlights a broader point: the current one-size-fits-all approach to tax law is constrained by the feasibility of obtaining information, whereas contractual tax reform allows alternative tax regimes to be available only to taxpayers for whom relevant information is available. For such taxpayers, an alternative tax regime can create a win-win for both the taxpayers and the government.

C. Reducing Waste

1. Saving on Compliance Costs

The current tax system has staggering large compliance costs: not only amounts paid directly to tax preparers and tax software providers, but also taxpayers’ time. Although estimates vary based on methodologies, complying with the tax code likely costs the U.S. economy between $150 billion and $250 billion per year. Although contractual tax reform will itself entail some transaction costs – as do all contracts – alternative tax regimes could simplify the tax code and reduce total compliance costs. Scholars and policymakers have proposed many ways to make tax compliance less costly. But uncertainty, inertia, gridlock, and special

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115 Optimal tax literature generally assumes that the government cannot directly observe taxpayers’ effort. See, e.g., Mankiw et al., supra note 92, at 150 (“The planner can observe income, which depends on both ability and effort, but the planner can observe neither ability nor effort directly.”). Recall that the economics literature uses the term “ability” where we have been using the term “earnings potential.” Although true for many professions, this assumption may not be quite accurate for those taxpayers whose hours are clocked.


interests have prevented implementation. Contractual tax reform could bypass this inertia and unlock savings from tax simplification by allowing taxpayers to opt into alternative tax regimes—many likely based on preexisting work by tax scholars—that simplify compliance.

For example, a bewildering array of tax provisions govern retirement savings, creating compliance burdens for taxpayers, their employers, and financial institutions handling retirement accounts. These provisions could be greatly simplified. Similarly, taxpayers currently must calculate their tax liability twice, once using the normal rules, and again using the different rules of the alternative minimum tax. An alternative tax regime could provide a single robust set of rules and a single set of rates, requiring calculating liability only once.

2. Closing the “Tax Gap”

The IRS currently collects only approximately 84% of taxes due. The uncollected 16%, about $400 billion per year, is the “tax gap.” The largest component of the tax gap is underreporting of gross income by individuals or self-employed business owners. Taxpayers who receive wages or salaries have an


119 Dodge, supra note 117, at 123–34.

120 Id. There is bipartisan support for simplifying the mishmash of tax rules governing retirement. See Zachary Abate, Legislative Outlook: Hearings on Tax Returns, Retirement Security Planned, 2019 TAX NOTES TODAY 23-9 (Feb. 4, 2019) (noting that the new Democratic chair of the House Ways and Means Committee plans to reintroduce the Retirement Plan Simplification and Enhancement Act of 2017 in the new Congress).


122 IRS, TAX GAP ESTIMATES FOR TAX YEARS 2008-2010, at 1 (Apr. 2016), reprinted in 2016 TAX NOTES TODAY 83-30. These are the latest years for which data are available given the length of time required to audit taxpayers and resolve disputes. See also William Hoffman, Tax Gap Widens, Compliance Rate Falls; Wyden Calls for Crackdown, 151 TAX NOTES 586 (May 2, 2016) (discussing this IRS tax-gap estimates release).

123 IRS, supra note 122, at 1 (estimating the net tax gap, which is the gap never ultimately collected even after IRS enforcement actions, as $406 billion).

124 Id. (discussing definition).

125 There are three basic components of the tax gap: (1) taxpayers who do not file tax returns as required; (2) underreporting of tax liability on filed returns; and (3) taxpayers who underpay the liabilities shown on their returns. IRS, supra note 122, at 1. Category (2) is far and away the largest, and it has two large subcomponents that correspond directly to underreporting by individuals who own businesses and/or are self-employed: $125 billion in individuals underreporting the income tax due on their business income, and $65 billion by self-
extraordinarily high level of compliance,\textsuperscript{126} because their employers are required to send a W-2 listing their gross income to the IRS,\textsuperscript{127} which cross-checks the W-2 against the tax return by matching the Social Security Number. By contrast, business owners and the self-employed are generally not subject to information reporting like the W-2, and their underreporting is the largest component of the tax gap.\textsuperscript{128} Increased information reporting requirements on business owners and the self-employed are widely recognized as central to reducing the tax gap.\textsuperscript{129}

Contractual tax reform could help close the tax gap in two ways. First, private intermediaries would have an incentive to offer low-compliance-group taxpayers alternative tax regimes that arrange for stringent information reporting, in exchange for lower tax rates. For example, an alternative tax regime offered to a shopkeeper could involve both the cash register and the credit-card reader reporting all transactions to the private intermediary via the internet—potentially reinforced by having a videocamera recording all activity in the store to ensure that no cash is paid “under the counter.” In exchange, the shopkeeper could receive lower rates or some other benefit such as a simplified tax system. Research shows that many taxpayers who underreport their taxes would like to be in full compliance but do not comply because they feel that their competitors do not comply.\textsuperscript{130} Such taxpayers might happily opt into an alternative tax regime with higher monitoring, but lower tax rates.

Second, contractual tax reform could allow the IRS to focus its limited enforcement resources on taxpayers least likely to be compliant: those to whom private intermediaries offered alternative regimes involving more monitoring, but

\textsuperscript{126}Id. at 2 ("income . . . subject to substantial information reporting and withholding" which includes wages and salaries results in only 1% of the total underreporting for Individual Income Taxes).

\textsuperscript{127}I.R.C. § 6041; id. § 6051; Treas. Reg. § 1.6041-2(a). The requirement to file W-2s is backed up by fines and up to one year in jail time. I.R.C. § 6674; id. § 7204.

\textsuperscript{128}IRS, supra note 122, att. 3 ("Income subject to little or no information reporting,” which “includes nonfarm proprietor income, other income, rents and royalties, farm income, Form 4797 income,” results in 63% of total underreporting for Individual Income Taxes); accord Gene L. Dodaro, GAO-16-92T, COMPTROLLER GENERAL OF THE UNITED STATES, BEFORE THE SENATE FINANCE COMMITTEE (Oct. 1, 2015) (“Where there is little or no information reporting, such as with business income, taxpayers tend to significantly misreport their income.”).

\textsuperscript{129}Dodaro, supra note 128, at 35; DEP’T OF THE TREASURY, GENERAL EXPLANATIONS OF THE ADMINISTRATION’S FISCAL YEAR 2017 REVENUE PROPOSALS 198–201 (Feb. 2016) (proposing two information-reporting requirement reforms to reduce the tax gap).

who declined to opt in.\textsuperscript{131} Merely offering the alternative regime causes taxpayers to reveal information about themselves, and this information could be used to better focus audit resources.\textsuperscript{132} This benefit stands in stark contrast to most of the benefits we have already discussed, which are Pareto-efficient, leaving the government, each taxpayer, and the private intermediary no worse off than before (and often better off). Allowing the IRS to focus enforcement resources on taxpayers who decline to opt into alternative regimes involving more substantiation will be worse off. But this detriment to low-compliance taxpayers will likely benefit society as a whole by increasing compliance rates.

\textbf{D. Opening the Overton Window}

As these examples suggest, private intermediaries might embrace ideas that are well beyond the range of political plausibility, that are outside the “Overton window” of acceptable political discourse.\textsuperscript{133} Private intermediaries could offer alternative tax regimes that are radically different from the current system. The progressive economist Dean Baker has argued that instead of taxing corporations based on their pre-tax profits,\textsuperscript{134} the government should become minority shareholders in corporate enterprises.\textsuperscript{135} Under this proposal, the government would receive nonvoting shares in an amount designed to provide the same revenues as the corporate tax, and the corporation would then be entirely free from paying corporate taxes. The corporation would no longer have an incentive to hire legions of well-paid tax advisors to take economically distortionary steps to minimize taxes.\textsuperscript{136}

This proposal is not a radical departure economically, as the government is effectively already a passive minority shareholder in every entity that pays taxes.\textsuperscript{137}

\begin{flushleft}
\textsuperscript{131} Economists have developed many sorting mechanisms to discover this taxpayer information, with the goal of optimizing tax law enforcement. \textit{E.g.}, Parkash Chander & Louis L. Wilde, \textit{A General Characterization of Optimal Income Tax Enforcement}, 65 \textit{Rev. Econ. Stud.} 165 (1998). Yet none of these mechanisms has the simplicity of the opt-in of contractual tax reform.

\textsuperscript{132} \textit{Cf.} Raskolnikov, \textit{supra} note 6 (proposing requiring taxpayers to choose between higher penalties or a more cooperative enforcement regime including binding arbitration).

\textsuperscript{133} \textit{See generally} Joseph Lehman, \textit{A Brief Explanation of the Overton Window}, \textit{Mackinac Ctr. for Public Pol’y} (n.d.) (last visited Jan. 31, 2019) (describing Joseph Overton’s theory that current legal change depends on what is considered plausible, but that this might change over time).

\textsuperscript{134} \textit{See, e.g.}, I.R.C. § 11(a) (imposing a 21\% tax).

\textsuperscript{135} Dean Baker, \textit{Get Rid of Corporate Taxes}, \textit{N.Y. Times}, Jan. 13, 2016, at A21 (noting that such a proposal has “been a popular ‘what if’ among academic economists for years” but had not been brought “into the light of policy discussions”). For discussion of how the government might itself experiment with such a reform without the help of private tax providers, see Abramowicz, \textit{supra} note 47, at 29-31.

\textsuperscript{136} \textit{Id.}

\textsuperscript{137} \textit{See} Mihir A. Desai et al., \textit{Theft and Taxes}, 84 \textit{J. Fin. Econ.} 591, 592 (2007) (“The state, thanks to its tax
But it would be a radical departure institutionally and legally. If this reform were implemented in generally applicable law, it would run into legal obstacles like the Fifth Amendment’s Takings Clause. Moreover, implementing this reform for all corporations at once would be risky, because it might not produce as much tax revenue in the short-term as the current corporate tax system. This reform, however, could be offered as an alternative tax regime. If it indeed offers substantial efficiency gains, then it would offer substantial benefits to taxpayers (here, corporations), the government (through higher revenue), and private intermediaries that offer it. At the same time, it might change the public conception of what is possible in the tax system, either opening the Overton window when private regimes prove attractive or closing it decisively should they fail.

Other reform proposals outside the current Overton window could be offered as alternative tax regimes. For example, corporations might be offered lower corporate rates, in exchange for losing the deduction for interest paid on debt. As another example, publicly traded securities held by individuals for investment could be marked-to-market, meaning that taxpayers would recognize gains and losses each year even if they do not sell the securities. In exchange for marking-to-market, taxpayers might get a lower rate for gains when their securities increase in value. Contractual tax reform allows experimentation with a nearly claim on cash flows, is de facto the largest minority shareholder in almost all corporations.”

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139 Corporations might react by avoiding paying dividends, with the corporation retaining cash, thus benefitting shareholders as the value of the stock went up. The non-government shareholders could thus reap the benefits of the corporation’s profits by selling their shares for the higher prices. But the share-price increase would not result in any cash flow to the government. If the corporation attempted to return cash to shareholders by redeeming shares (i.e., a buy-back), then a pro-rata portion of the government’s shares would have to be redeemed as well, resulting in cash flow.

140 As with the individual income tax, tax expenditures are a complication. See supra notes 22–31 and accompanying text. Congress would need to find some other means of ensuring that target taxpayers fulfill the goals embodied by corporate tax expenditures. See, e.g., I.R.C. § 199 (providing a deduction for qualified domestic production activities).


142 See the numerous authorities cited supra note 44, proposing varieties of mark-to-market combined with different rates applying. Currently mark-to-market is normally available solely for securities dealers like stock brokerages. I.R.C. § 475; cf. id. § 1256 (providing mark-to-market on sophisticated financial instruments like futures contracts and foreign currency contracts).
endless variety of possible alternative tax regimes, and it provides private intermediaries with incentives to develop alternatives not previously considered.

II. IMPLEMENTATION

The previous Part suggested some possible alternative tax regimes that private intermediaries might offer. These were hypothetical examples; the private intermediaries themselves would take the initiative in designing alternative tax regimes and deciding which taxpayers to invite to opt in. Contractual tax reform is voluntary; private intermediaries decide what alternative regime to offer and to whom, and invited taxpayers decide whether to opt in. It thus does not amount to privatization in any conventional sense. Privatization may enable government agencies to circumvent the legislative process to accomplish idiosyncratic policy goals, but contractual tax reform does not give government officials discretion. And while critics argue that privatization is based on a myth “that markets are more efficient than government,” our proposal is agnostic about in what areas and for which taxpayers, private intermediaries may be able to improve existing law. If private intermediaries cannot provide an alternative tax regime that leaves both taxpayers and the government’s coffers better off, tax law and institutions will simply continue to function as before.

A. Basic Mechanics: Treatment Group and Control Group

A private intermediary—say, “Taxes, Inc.”—would both design the alternative tax regime and solicit taxpayers to opt in to the alternative regime. Some invited taxpayers would simply decline to opt in. Others might be refused entry by the intermediary based on further data analysis. Of the taxpayers who remain, most (say, 90%) would in fact be subject to the alternative tax regime. These taxpayers are the “treatment group,” with their tax treatment specified in the alternative tax regime.

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145 Taxes, Inc. would receive taxpayer information only if taxpayers gave their consent. Taxpayers’ return data is kept confidential. I.R.C. § 6103; see BITTKE & LOKKEN, supra note 35, ¶ 111.4 (discussing § 6103 in depth). Taxpayers might grant permission either for specific intermediaries or for all intermediaries to consider their information. Even with permission, private tax intermediaries would need to be bound by the penalties against unauthorized disclosure or misuse of return information. See I.R.C. § 7213 (criminal penalty); id. § 7213A (same); id. § 7431 (civil actions).
146 Because the profits to the intermediaries depend on the control group, the percentage must be sufficiently high to ensure comparisons to the control group are sufficiently reliable for whatever level of statistical significance the government determines is necessary.
Some percentage (say, 10%) of taxpayers who are invited and who opt in would randomly be assigned to serve as the “control group,” subject to generally applicable tax law, filing their returns with the IRS. Taxes, Inc., would be required to ensure that the government received tax revenues from the treatment group based on the taxes collected from those in the control group. Given the percentages in our example, Taxes, Inc., could be required to pay the government 9.0 times the taxes paid by the control group, ensuring revenue neutrality for the government. Alternatively, Taxes, Inc. could be required to pay the government 9.0 times the taxes paid by the control group, plus some percentage, set by formula, of any excess collected from the treatment group. This arrangement would make contractual tax reform a potential revenue-raiser for the government, helping to reduce deficits or to fund new social spending.

**B. The Role of Intermediaries**

The role of the private tax intermediary is similar to an insurance company in two fundamental ways: designing a legal instrument and deciding to whom to offer it. Insurers design insurance policies for a risk pool and then decide who is eligible to buy into that risk pool. Similarly, private tax intermediaries would design alternative tax regimes and decide who is eligible to opt into the alternative tax regime. Insurers aim to collect more in premiums than they pay out on policies. Private tax intermediaries would aim to collect more in taxes from the treatment group than the control group’s taxes suggests the treatment group would have paid. Both insurers and private tax intermediaries must worry about adverse selection. In this context, adverse selection represents the possibility that those opting in are in fact those who would pay lower taxes to the private provider than to the government. Private intermediaries would use data and AI, plus careful design of the alternative tax regime, to combat such adverse selection.

This Section explores the private intermediaries in more detail. Part II.B.1 addresses which tasks the intermediary would take and which tasks would remain the responsibility of the tax authority. Part II.B.2 explores the organizational form of tax intermediaries, noting that they might be for-profit or nonprofit cooperatives, and Part II.B.3 examines the duration of the intermediary and of its contract with

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147 The private intermediary’s required payment might be adjusted by various administrative expenses that it either imposes on the IRS or relieves the IRS of. For example, if the intermediary handled auditing and dispute resolution, that would save the IRS the cost of auditing treatment-group taxpayers and resolving disputes that arose; thus, Taxes, Inc.’s required payment might be reduced below 9.0 to account for these savings to the U.S. Treasury.

the insured. Finally, Part II.B.4 explains different strategies that the government might use to ensure that the intermediaries will in fact be able to pay their tax bills, as calculated from the tax bills of the control group.

1. Division of Responsibility

Contractual tax reform can work with either the existing tax authority (i.e., the IRS) or the private intermediary handling administration. With IRS administration, the private intermediary might design the alternative tax regime, but all taxpayers in the treatment group would still file an annual tax return with the IRS. The return would include a tax form identifying the intermediary and the alternative tax regime. The IRS would continue to handle return processing, auditing, and collection activities. Alternatively, the private intermediary might handle administration, replacing the treatment-group taxpayers’ need to file tax returns with the IRS. The taxpayers might file a return designed by the private intermediary, with the private intermediary – or potentially even no return at all.

In other words, alternative tax regimes could offer different procedural law. With private administration, substantive tax law might even be unchanged. This highlights that contractual tax reform can be used to improve tax procedure as well as tax substance. IRS tax administration currently suffers from two interrelated failures. First, the IRS is large, cumbersome, and slow, failing to take full

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150 An issue arises as to whether the private intermediary’s liability should depend on the total collected from the control and treatment groups (i.e., tax bills actually collected) or the total assessed against the control and treatment groups (i.e., the tax bills reported). The distinction is that not all taxpayers pay their full assessed tax bill. IRS, supra note 122, at 3 (noting the underpayment tax gap of $39 billion). Basing the private intermediary’s liability solely on collections might give the IRS the perverse incentive not to try collecting from treatment taxpayers, since the intermediary serves as a backstop. On the other hand, it may be easier to collect from such taxpayers, since liability would not be in dispute. If the IRS cannot be trusted to be even handed, then liability should be based on assessments. But very little of the “tax gap” is the result of the IRS’s failure to collect. Id. at 3 (reporting the “Underpayment Tax Gap” as just $39 billion, which is far less than the total “gross tax gap” of $458 billion). Indeed, the IRS is already quite good at collecting assessed but un-paid taxes, plus penalties and interest. Id. (showing “Enforced & Other Late Payments” as $52 billion).


152 See IRS, INTERNAL REVENUE SERVICE DATA BOOK 2014 69 tbl.30 (listing 82,406 average full-time permanent employees during fiscal year 2014).
advantage of new technology.\textsuperscript{153} Second, Congress has underfunded the IRS,\textsuperscript{154} with each additional $1 spent on enforcement and administration resulting in at least $5 in additional revenue collected.\textsuperscript{155} Private tax intermediaries would be able to raise private capital to improve collections and to improve technology systems, outside the constraints of congressional budgeting that hamper the IRS.\textsuperscript{156} Given a more efficient collection process that induces greater compliance, intermediaries might be able to offer participating taxpayers a small discount on their total liability.

Even if an alternative tax regime used the private intermediary as administrator in lieu of the IRS, it would not free taxpayers from possible criminal liability. Fraud against private intermediaries would still be criminal tax fraud.\textsuperscript{157} Like insurers constantly seeking to ferret out insurance fraud,\textsuperscript{158} private tax intermediaries would have incentives to investigate such conduct and refer it to prosecutors.

2. Organizational Form

Some of the largest insurance companies in the U.S. are mutual insurance companies, acting as cooperatives, owned by their customers, and returning profits

\textsuperscript{153} See Written Testimony of Terence Milholland, Chief Technology Officer, IRS, before the House Oversight and Government Reform Committee (May 25, 2016), available at 2016 TAX NOTES TODAY 102-31 (discussing at length the IRS’s legacy technology systems, many of which were “initially developed over 50 years ago,” and which use were effectively designed to “automate[,] the processing of paper returns”).


\textsuperscript{155} U.S. DEP’T OF THE TREASURY, INTERNAL REVENUE SERVICE: FY 2017 PRESIDENT’S BUDGET, at IRS-17 (Feb. 9, 2016), https://www.treasury.gov/about/budget-performance/CJ17/02-06.%20IRS%20FY%202017%20CJ%201%20202%202016%20v2%20FINAL%20CLEAN.PDF ($5.60 per $1 spent is the average ROI; noting that some projects would be expected to achieve much higher ROIs, such as $12.30 per $1 spent).

\textsuperscript{156} Many variations of alternative tax regimes with procedural changes are possible. For example, the private intermediary might give taxpayers who agree to a more rigorous collection process a slight discount on their returns in exchange.

\textsuperscript{157} See I.R.C. § 7201 (making “willfully attempt[ing] in any manner to evade or defeat any tax imposed by this title or the payment thereof” a felony). See generally BITTGER & LOKKEN, supra note 35, § 114.9 (discussing tax fraud and other tax crimes, of which § 7201 is the “capstone” section) (quoting Spies v. United States, 317 U.S. 492, 497 (1943)). Assuming that the authority for contractual tax reform was provided in the Internal Revenue Code, which is “this title” referred to in § 7201, then there need not even be any statutory amendment for § 7201 to apply to fraud against private tax intermediaries.

\textsuperscript{158} See 13 COUCH ON INSURANCE § 197:8 (noting incentives for insurers, as well as trend for insurers to develop Special Investigative Units to attack insurance fraud); see also MODEL INSURANCE FRAUD ACT §§ 9 & 10 (allowing for cooperation and exchange of information about insurance fraud between insurers and law enforcement).
to them.\textsuperscript{159} Other insurers are for-profit, with profits going to shareholders. One might expect to see both models appear for private tax intermediaries.

For-profit tax intermediaries would attempt to attract taxpayers to opt into their alternative tax regimes by designing them to be utility-enhancing for the taxpayers who opt-in. To the extent that treatment-group taxpayers pay higher taxes than control-group taxpayers, the intermediary will earn gross profit. Subtracting out the costs of designing and administering the regime, plus any percentage that the government might demand to make the program a revenue-raiser, would result in profits for shareholders.

Cooperative tax intermediaries would, by contrast, be akin to mutual insurers. Mutual insurers offer insurance products generally comparable to those offered by for-profit insurers, sweetened by the possibility of a profit rebate. Cooperative tax intermediaries would offer alternative tax regimes, sweetened with the possibility of a tax rebate to treatment-group taxpayers.\textsuperscript{160} For example, if a cooperative tax intermediary offered an alternative tax regime where the treatment-group taxpayers generated 105\% of the taxpayers in the control group. Cooperative intermediary would refund treatment-group taxpayers 5\% of their taxes paid.\textsuperscript{161}

Currently no private tax intermediaries exist—either for-profit or cooperative. Where would these entities come from? Some for-profit intermediaries would likely be similar to the current crop of “Fintech” (financial technology) firms that are reshaping finance— including insurance—by taking advantage of artificial intelligence, the lower transaction costs allowed by technology, and alternative funding methods.\textsuperscript{162} Companies like H&R Block, Intuit (the maker of TurboTax), and Jackson Hewitt Tax Service, Inc., which already have a strong presence in tax preparation, might also consider becoming private tax intermediaries. Indeed, these existing players have long strived to offer tax-related financial services to their

\textsuperscript{159} Examples of mutual insurance companies include State Farm, New York Life, and USAA.

\textsuperscript{160} The formulas for the cooperative for dividing refunds amongst treatment-group taxpayers would be one aspect of the alternative tax regime that the regime would need to specify. One formula would be to rebate the cooperative’s surplus in proportion to the actual tax revenue paid by the taxpayer. Another formula would be to rebate the surplus in proportion to the amount by which the actual tax revenue paid by the taxpayer exceeded what that taxpayer would have paid under the generally applicable tax code. Any number of other formulas are possible to meet the goals of the cooperative. For example, the dairy cooperative Land O’Lakes has six different rebate rates for different fertilizer types it sells to its members. \textsc{Henry Hansmann}, \textit{The Ownership of Enterprise} 152 (2000); \textit{cf.} Andrew Blair-Stanek, \textit{Explaining the Enigmatic Expulsion in Northwest Wholesale Stationers v. Pacific Stationery & Printing}, 53 \textit{Williamette L. Rev.} 335, 378-80 (2018) (describing historical example of conflict within a cooperative caused by rebate formulas).

\textsuperscript{161} The precise number would, of course, adjusted for the intermediaries’ costs of administration, any share that the government demanded, and any rebates from the government for savings in terms of IRS audit, dispute, and administration costs.

\textsuperscript{162} See, e.g., \textit{Special Report: International Banking—From the People, for the People}, \textit{Economist}, May 9, 2015.
customers, so they might jump at the opportunity to become private tax intermediaries.

Industry groups might set up cooperative tax intermediaries to offer alternative tax regimes that address inefficiencies in the tax code. For example, plumbers might find a particular substantiation requirement of the tax code too costly in comparison to the additional tax revenues it raises for the government. The Plumbing Contractors of America might offer its members an alternative tax regime that removes this substantiation requirement, perhaps along with a handful of other changes, in exchange for a slightly higher tax rate. Politically active groups or non-profits might set up cooperative tax intermediaries to promote behavior seen as virtuous. For example, environmentalist groups might offer an alternative tax regime that taxed carbon, in exchange for lower income-tax rates. We would not, however, allow employers to serve as intermediaries for their own employees, because of the danger of conflicts of interest.

3. Duration

The tax year might serve as a natural duration for an agreement between a taxpayer and a private intermediary. Limiting duration is especially important with initial experiments with contractual reform, just as contractual tax reform should be limited in scope initially to ensure that it is capable of producing benefits. In principle, however, there could be benefits to longer duration. First, intermediaries might wish to enable trade-offs over time, for example by giving greater tax discounts for education or job training activities that the intermediaries judge to be likely to be successful in generating income, in exchange for higher tax rates once the training is complete. In this sense, contractual tax reform can serve as a modest version of “income share agreements,” an alternative to student loans in which students promise to repay a portion of their future income.

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163 For example, tax preparers offer various financial products giving customers access to their refunds. See William Hoffman, Practitioners Hope for the Best as CADE 2 Implementation Begins, 134 TAX NOTES 302 (Jan. 16, 2012) (discussing the decline of “refund anticipation loans” offered by many tax preparers and the corresponding shift of the tax-preparation industry to “prepaid refund debit cards and other financial products”).


165 One type of conflict is that an employer might seek to game the system by reducing the earnings of employees randomly assigned to the control group, thus reducing the employer’s own tax liability. This may be unlikely, but there is little benefit to tying tax contracts to the employment relationship.

166 See infra Part II.C.1.

Second, long durations may be useful as a way of countering a potential strategy in which taxpayers shift income into the contract period and out of other periods.\textsuperscript{168} Regardless of the duration of the contract, the government must ensure that the intermediaries’ profit or liability depends on all future tax payments by treatment and control group taxpayers. Suppose, for example, that an intermediary offers an unusually attractive capital gains rate, leading taxpayers to recognize capital gains during that period.\textsuperscript{169} That might lead to higher tax payments in that year but lower tax payments later. Thus, when the treatment group taxpayers pay less in tax years following the initial contract, the intermediary would be responsible for the difference. On the flip side, the intermediaries would be paid if their contract led to greater income recognized later. These dangers will cause intermediaries to be careful in designing their tax regimes in a way that prevents taxpayers from exploiting timing rules to their disadvantage; for example, they might agree to limit capital gains recognition (perhaps to zero) during the contract. Still, longer-term arrangements might reduce this danger and thus be more attractive to both taxpayers and private intermediaries.

4. \textit{Solvency Assurance}

The potential for long-term liabilities for private intermediaries strengthens the need to ensure that they will be sufficiently solvent to meet them. Suppose Taxes, Inc. offered a disastrous alternative tax regime that resulted in treatment-group taxpayers generating tax revenues at a rate of only 80% of control-group taxpayers. Taxes, Inc. would be required to reimburse some or all of the remaining 20% to the government. But Taxes, Inc. might have insufficient assets to reimburse the government, resulting in insolvency. Avoiding this situation is crucial for contractual tax reform to be viable, since, as the Supreme Court has repeatedly observed, “taxes are the life-blood of government, and their prompt and certain availability an imperious need.”\textsuperscript{170} If treatment-group taxpayers produce more revenue than control-group taxpayers, the intermediary’s shareholders or cooperative members keep some or all of the extra. But if treatment-group taxpayers produce less revenue, the intermediary might simply become insolvent,

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\textsuperscript{168} This danger also exists with governmental experimentation in taxation. \textit{See} Abramowicz, \textit{supra} note 47, at 44-46.

\textsuperscript{169} In general, “any item of gross income shall be included in the gross income for the taxable year in which received by the taxpayer.” I.R.C. § 451.

leaving the government with less tax revenue than generally applicable tax law. The result might be “heads the intermediary wins, tails the government loses.”

Insurance and banking both provide similar risks of insolvency. Insurance regulation and banking regulation both provide several possible solutions that could work for regulating private tax intermediaries. These solutions include capital requirements, bonding, and caveat emptor.

Capital requirements ensure the solvency of FDIC-insured banks and of insurers. Banks are required to have sufficient capital—consisting of equity and debt that subordinated to bank depositors—to ensure sufficient assets are available to repay depositors in full. This “capital cushion” generally needs to be larger when the bank is taking greater risks, and smaller when the bank is taking smaller risks. Similarly, private tax intermediaries could be required to have sufficient capital—consisting of equity and debt subordinated to tax revenue owed to the government—to ensure sufficient assets to pay the government. The greater the riskiness of the alternative tax regime, the more capital the intermediary would have to hold on its balance sheet.

Bonding is the second model for addressing the risk of intermediary insolvency. When governments enter into contracts with private companies to build public buildings or public works, statutes require that the private companies furnish bonds to ensure that the building is built and that all suppliers, workers, and subcontractors are paid. A third party acts as a surety on such bonds, ensuring performance and full payment if the contractor becomes insolvent. Because the

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171 Similar situations appear throughout the law. For example, equityholders in a corporation with little equity will be tempted to take large risks, since they reap the upsides but the corporation’s creditors bear the downsides. See Credit Lyonnais Bank Nederland, N.V. v. Pathe Comm’n Corp., 1991 WL 277613 at n.55 (Del. Ch. 1981). Similarly, before their insolvency, Fannie Mae and Freddie Mac were private for-profit corporations operating with a de facto government guarantee, leading them to take large risks. See Carol J. Perry, Note, Rethinking Fannie and Freddie’s New Insolvency Regime, 109 COLUM. L. REV. 1752 (2009).


173 I COUCH ON INSURANCE § 2:27 (discussing capital-reserve regulation of insurers); 3 id. § 39:4 (2017 rev.) (“Typically, the commissioner of insurance may require that a certain portion of the capital remain unimpaired in order to safely satisfy potential claims”).

174 Malloy, supra note 172, § 7.03[C][4][b].

175 Id.


178 See 74 AM. JUR. 2d Suretyship § 1 (2017 rev.) (“A suretyship is a three-party relationship where the surety [e.g., the insurance company] undertakes to perform to an obligee [e.g., the government] if the principal [e.g.,
surety will be on the hook if the contractor defaults, the surety has a strong incentive to scrutinize the risk that the contractor will fail to complete the project, and thus to charge an appropriate premium. Similarly, insurance regulators often allow insurance companies to post a bond to guard against the insurer becoming insolvent and unable to satisfy policyholders’ claims.\footnote{\textit{179}} Private tax intermediaries could be required to furnish bonds to ensure that the government is paid.

Caveat emptor is the third model for addressing the risk of intermediary insolvency. Banking regulation uses this approach for wealthy depositors; FDIC insurance covers only the first $250,000 in deposits.\footnote{\textit{180}} Any deposits above $250,000 can be fully or partially lost if the bank becomes insolvent. Insurance regulation sometimes also uses this approach, as policyholders may receive less than the full amount owed them by an insurer that becomes insolvent.\footnote{\textit{181}} Applying this caveat emptor model to private tax intermediaries, if an intermediary becomes insolvent, then all taxpayers in the treatment group would be required to pay their ordinary tax obligation to the government under the generally applicable tax laws. This approach creates incentives for taxpayers to evaluate and monitor the financial condition of their tax intermediary. Meanwhile, a tax intermediary could reduce the risk of insolvency by providing in the alternative tax regime’s definition that if tax receipts fall short, all treatment group taxpayers must pay an additional amount sufficient to cover the amount the intermediary owes to the government. Regardless of how implemented, caveat emptor would give participating taxpayers incentives to assess the feasibility of an alternative tax regime before opting into it.

\textit{C. Regulation of Contractual Tax Reform}

Once assured that the private intermediary is solvent, the government need not micromanage the contract between intermediary and insured. Nonetheless, some regulation of contracts may be warranted, especially with early experiments into contractual tax reform. Part II.C.1 describes limitations that may be appropriate. Part II.C.2 addresses how regulations should address changes in filing status, such as marriage. Finally, Part II.C.3 explores how the government might encourage innovation among private intermediaries.

\textit{\textsuperscript{179}} 1 \textit{Couch on Insurance} § 2:28.
\textit{\textsuperscript{180}} FDIC, Your Insured Deposits, \url{https://www.fdic.gov/deposit/deposits/brochures/your-insured-deposits-english.pdf}.
\textit{\textsuperscript{181}} 1 \textit{Couch on Insurance} § 6:8 (discussing priority of claims upon insurer insolvency, with policyholders often towards the end of the line, depending on state law).
1. Limitations

In principle, an alternative tax regime offered by a private tax intermediary might involve any changes whatsoever to tax law – procedural, substantive, or a combination of both. But the government would likely prohibit some changes. For example, to the extent that an alternative tax regime changed procedural law, the government would require adhering to standards of due process, like those already present in the tax code. As another example, some existing substantive tax benefits, like the tax credit for research and development, aim to encourage positive externalities or discourage negative externalities. The government might simply bar alternative tax regimes that remove such tax benefits, so that contractual tax reform does not reduce social welfare.

The government would likely require intermediaries to file the alternative tax regime and the eligibility criteria with the government before offering it to taxpayers. A key design question is whether the government must approve this alternative regime and eligibility criteria before invitations can go out, or whether filing alone suffices to allow invitations. There is precedent for both approaches. In securities law, filing is normally all that is required for many actions. But in insurance law, regulators must approve insurers’ proposed policies, and at least in initial implementation, that approach is likely preferable.

2. Filing Status

Calculating the amount that a private intermediary owes becomes more challenging when taxpayers may change their filing status. In particular, an individual taxpayer might change his or her tax filing status by marrying or divorcing, and a business association might merge with another business.

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182 See, e.g., I.R.C. §§ 6320 & 6330.
183 See discussion supra notes 24-29 and accompanying text
184 See 15 U.S.C.A. § 77f(c) (“The filing with the Commission of a registration statement, or of an amendment to a registration statement, shall be deemed to have taken place upon the receipt thereof”); 1 THOMAS LEE HAZEN, LAW OF SECURITIES REGULATION § 1:17 (Nov. 2016 rev). (noting that the Securities Act of 1933 aims primarily for filing and disclosure, rather than review of merit).
185 1 COUCH ON INSURANCE § 2:8 (Dec. 2016 rev.) (noting that state insurance “commissioners are called upon to approve policy forms to assure that they are in conformity with all applicable statutes”).
186 This problem can be seen as analogous to the problem of “crossover” in the administration of randomized experiments. See, e.g., Michael Abramowicz et al., Randomizing Law, 159 U. Pa. L. Rev. 929, 959-60 (2012). For example, if a taxpayer originally in the control group marries a taxpayer in the treatment group, then subjecting the taxpayer to the treatment regime would amount to changing the taxpayer’s group membership.
association or spin-off a subsidiary. Taxpayers might do so opportunistically, or for reasons having nothing to do with the experiment.

These problems are easily addressed. Any individual or entity outside the treatment group for the relevant time period (whether in the control group or outside the experiment altogether) will continue to be subject to independent tax liability if it combines through marriage or merger with a taxpayer in the treatment group. For example, if a treatment group individual taxpayer has agreed to pay a lump sum of $100,000 in taxes, someone who marries that person cannot suddenly claim that the couple must pay a total of just $100,000. Similarly, if a treatment group company merged with a non-treatment group company, the latter would have to file separate corporate tax returns. Existing tax law already requires separate corporate tax returns to avoid abuse, so this requirement would be easily implemented.

Changes in control group taxpayers’ status will matter only insofar as they modestly complicate the government’s calculation of the private intermediary’s liability. Such taxpayers have no incentive to game the system, since they pay tax according to the usual rules. So long as the government can develop a reasonable model allocating tax payment among these taxpayers, this should not be an issue. For example, such a model would allocate income paid by a newly married couple between the members of the couple, so if one had been a control group member and the other were not, the total control group tax payments can be approximated. A divorcing couple poses less of a challenge; just add together their subsequent tax payments.

Treatment group taxpayers, in contrast, do have an incentive to game the system, but this is not the government’s problem. The private intermediary would need to address this in the alternative tax regime. Such solutions could be straightforward. For example, for a married couple, the alternative tax regime might simply treat each spouse as a separate taxpayer. This illustrates how contractual tax reform can accomplish a tax reform goal (eliminating the U.S.’s unusual joint-married filing status) without specific legislation on point.

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187 See I.R.C. § 368(a) (defining how mergers can be tax-free).
188 See id. §355 (governing tax treatment of corporate separations, such as spin-offs, split-offs, and split-ups).
189 Cf. Section I.B.1 (giving example of alternative regime with lump-sum payment in exchange for low or zero marginal rates).
190 In many reorganizations, companies maintain their filing statuses in any event. See, e.g., I.R.C. § 368(a)(1)(B) (providing rules for “B” reorganizations).
191 See BITTNER & LOKKEN, supra note 35, ¶ 97.2.
192 For example, the W-2 wages and salary for each spouse are reported separately with each spouse’s Social Security Number, and the Schedule C “Profit or Loss from Business” also reports the separate proprietors.
193 See, e.g., Edward Fox, Do Taxes Affect Marriage? Lessons from History 9-10 (Law & Econ. Res. Paper
This example also illustrates another advantage of contractual tax reform over government-run experimentation.\textsuperscript{194} If the government ran experimentation, it would need to worry about exploitation of loopholes by treatment group taxpayers. The possibility for loopholes certainly does vanish with contractual tax reform, but intermediaries may be able to respond much more quickly than the government to problems. If treatment group taxpayers exploit the alternative regime in some unanticipated way, then the private intermediary can update its alternative tax regime in the future. That process would be easier and quicker than changing statutes or regulations. And, unlike Congress and the IRS, private tax intermediaries would have strong financial incentives to seek out and close loopholes.

3. Innovation Incentives

A potential private tax intermediary faces two risks: that too few taxpayer-customers will opt in; and that taxpayers who opt in and receive the alternative tax regime will pay less per capita than the control group (thus requiring reimbursing the government for some or all of the shortfall). The government should encourage potential private intermediaries to brave such risks, to foster innovation and experimentation in tax law.

A private intermediary might capture the benefits from its innovations in several ways. The first intermediary to offer an alternative regime attractive to many customers would have a first-mover advantage. An intermediary might earn a good reputation for making taxpayer-customers happy, such as by increasing their utility, or with good customer service. Moreover, an intermediary’s eligibility criteria for each alternative tax regime should remain confidential,\textsuperscript{195} and thus would be trade secrets, protected from misappropriation.\textsuperscript{196}

But intermediaries may be discouraged from developing innovative alternative tax regimes and eligibility criteria by the threat of copy-cat intermediaries adopting the same regimes. Even though eligibility criteria for an alternative tax regime might be confidential and protected as trade secrets, competitors would likely at least observe which alternative tax regimes proved successful, based on the first-mover’s continuing to offer them. From an ex post

\textsuperscript{194} For a discussion of status changes with government-run tax experiments, see Abramowicz, supra note 47, at 46-49.

\textsuperscript{195} The eligibility criteria would be filed with the government but not publicly disclosed. Keeping the eligibility criteria confidential also has the benefit of preventing opportunistic taxpayers from planning their affairs to qualify for an alternative tax regime that would give them a windfall.

\textsuperscript{196} See \textsc{Uniform Trade Secrets Act} (Nat'l Conference of Comm'rs of Unif. State Laws 1985).
perspective, copying alternative tax regimes is desirable, because more competition will drive down profit and increase the benefits from alternative tax regimes to taxpayers (and potentially also to the government in the form of greater tax collections). But from an ex ante perspective, intermediaries may not be willing to undertake a risky new alternative tax regime without the opportunity to capture a significant portion of the social gains if successful.

The intellectual property literature already provides guidance on mitigating the risk that copying business methods will lead to too little innovation. The government might address this problem by providing a time-limited exclusive right to an intermediary that is willing to commercialize an alternative tax regime strategy that no one else is willing to commercialize, absent the exclusive right. Such a mechanism, however, would be unnecessary if intermediaries produced extensive innovation without it.

III. POTENTIAL OBJECTIONS

We have already considered objections to contractual tax reform internal to the mechanism, such as whether the system might be gamed by short-term contracts, insolvent intermediaries, or filing status changes. We now turn to broader objections: that contractual tax reform might exploit participating taxpayers or that it might have systemic negative effects on equity.

A. Taxpayer Exploitation

Historical evidence shows that reward structures for tax collectors can create corruption and abuses. “Tax farming” helped precipitate the French

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199 See supra Part II.B.3.

200 See supra Part II.B.4.

201 See supra Part II.C.2.

202 See Charles Adams, For Good and Evil: The Impact of Taxes on the Course of Civilization (1993) (collecting evidence from ancient Egypt, ancient Israel, ancient Greece, ancient Rome, the rise of Islam, the Middle Ages in Europe, Cortes’s conquest of the Aztecs, pre-Revolution France, Tudor and Stuart England, the revolutionary United States, as well as the modern world). Looking beyond just tax law, there is a voluminous literature on the benefits and downsides of allowing private intermediaries to take on any function previously performed by the government. See, e.g., Jody Freeman, Extending Public Law Norms Through Privatization, 116 Harv. L. Rev. 1285, 1291-1314 (2003) (providing a thorough summary of pro- and anti-
Revolution and Roman tax collection practices made tax collectors the quintessential sinners in the Christian gospels. In the Roman Empire and pre-Revolution France, the government sold the right to collect taxes to tax collectors, who then had a profit incentive to squeeze as much money as possible from those under their jurisdiction. Such arrangements do bear passing resemblance to contractual tax reform, but only in that an intermediary stands between the taxpayer and government.

Contractual tax reform differs from tax farming in crucial ways. First, tax farming aimed to maximize revenues for the government and for tax farmers, but contractual tax reform seeks primarily to increase taxpayer utility. Second, participation is optional. By contrast, pre-Revolutionary French taxpayers could not opt out of tax farming, although they sometimes tried to opt out by killing tax farmers.

Third, contractual tax reform would be governed by written alternative tax regimes, regulated by the government to protect taxpayers, and subject to judicial process. Tax farming did work relatively well in democratic ancient Athens, where courts fairly adjudicated any disputes involving abuses by tax farmers.

The unpopularity of the IRS suggests that private tax collection could be an improvement, but regulation must ensure that contractual tax reform does not exploit taxpayers. We consider three different concerns: first, that private...
intermediaries might, like tax farmers of old, take advantage of unsophisticated taxpayers; second, that contractual tax reform might adversely affect taxpayer privacy; and third, that taxpayers might be coerced into making concessions to private taxpayers, perhaps even unconstitutionally.

1. Deceptive Practices

Taxpayers may have relatively little information about private tax intermediaries, and the alternative tax regimes might be complicated. (However, the alternative tax regimes would often be far simpler than the existing voluminous tax code.) Some intermediaries may seek to exploit any lack of information or behavioral biases exhibited by taxpayers. For example, intermediaries may exploit hyperbolic discounting by inducing taxpayers to enter into alternative tax regimes that provide them lower taxes in one year but much higher taxes in later years. This has the effect of a usurious loan, but it could be more pernicious if the complexity of an alternative tax regime made it hard to recognize it as such. There is a substantial debate in the literature about the extent to which the government needs to protect consumers from themselves.

Assuming taxpayers do need protection, a familiar approach is for the government to police disclosure rigorously. In the wake of the financial crisis and related mortgage abuses, Congress and the Consumer Financial Protection Bureau (CFPB) set out to simplify disclosures to mortgage applicants. The invitation to opt into an alternative tax regime could similarly require easy-to-read disclosures, including key comparisons such as how much tax would be due under the generally


applicable law versus the alternative regime, for several scenarios likely for the taxpayer. The government could also publish extensive data on the past performance on each intermediary (and indeed on every alternative tax regime) showing how taxpayers who opted in fared compared to control group taxpayers, plus surveys of treatment-group taxpayers’ satisfaction. Whether or not government enables contractual reform, the government will need to regulate similar arrangements, such as the use of artificial intelligence in offering alternative regimes for student loans.215

The government also might protect consumers with regulatory strategies specific to contractual tax reform. The government might prohibit particular provisions in agreements, or it might limit how far alternative tax regimes deviate from generally applicable tax law (e.g., requiring tax rates to remain within 3% of existing rates).216 Similarly, the government might protect taxpayers by giving them an option to cap the amount they must pay under the alternative tax regime. For example, the government might specify that, in any year, a treatment-group taxpayer may opt out of the alternative tax regime and pay only 10% of what the taxpayer would have owed under the generally applicable tax laws. Such a cap would limit intermediaries’ opportunistic behavior.217 In early stages of contractual tax reform, the government could begin with a relatively low cap, but increase that percentage over time if taxpayer exploitation does not become a problem.

2. Privacy Violations

Much of the population believes that the private sector already maintains too much data about individuals.218 Contractual tax reform can incentivize taxpayers to reveal private information, such as their earnings potential.219 This private information, in turn, can be used to improve taxpayers’ utility while either

215 See supra note 167 and accompanying text.

216 An alternative, heavier-handed approach would be for the government to specify those terms that the alternative tax regime might offer (e.g., permissible tax rates and a list of tax benefits that might be removed). Of course, such as heavy-handed approach might stifle valuable innovation.

217 Private tax intermediaries could protect themselves by providing that liability to them shall be no less than some percentage (say, 95%) of what the federal tax bill would have been, so that the requirement is not asymmetric.


219 See supra Section I.B.1 (encouraging taxpayers to reveal information about their earnings potential through their decision to opt in or not); Section I.B.2 (encouraging taxpayers to reveal information about their work versus leisure preferences through opting in or not).
maintaining or increasing government revenues. But putting additional personal information into private hands creates the potential for abuse.\textsuperscript{220}

The debates around the privacy of personal data are well beyond the scope of this article.\textsuperscript{221} But much concern about privacy could be addressed by simply binding private tax intermediaries to the same tax information confidentiality provisions that already severely restrict the IRS's ability to disclose taxpayer information.\textsuperscript{222}

3. Unconstitutional Conditions

Arguably, the government should not coerce people to giving up their rights, even by paying them to do so. The Supreme Court has developed a "doctrine of unconstitutional conditions," asking when a condition on receipt of a government benefit is unconstitutionally coercive.\textsuperscript{223} Consider the example alternative tax regime where shopkeepers receive a tax-rate discount, in exchange for consenting to intensive electronic reporting.\textsuperscript{224} The taxpayers' cash register and credit-card machines would report all activity electronically to the intermediary, potentially backstopped by a camera to prevent cash payments "under the table."\textsuperscript{225} The tax-

\textsuperscript{220} A related concern is that, once a taxpayer reveals private information about ability to an intermediary, the government might act opportunistically, using that information to maximize revenues to the taxpayer's detriment. See BOADWAY, supra note 6, at 195–96 (discussing the problem of government commitment not to misuse information about taxpayers). For example, if moderate earners with high earnings potential but high preferences for leisure reveal these characteristics by opting into an alternative regime, the government in the future could opportunistically raise the inframarginal rates on such taxpayers—thus pushing them to work harder to maintain the same utility. Id.; see also Dagobert L. Brito et al., Dynamic Optimal Income Taxation with Government Commitment, 44 J. PUB. ECON. 15 (1991).


\textsuperscript{222} I.R.C. § 6103.

\textsuperscript{223} See Kathleen M. Sullivan, Unconstitutional Conditions, 102 HARV. L. REV. 1413 (1989) (attempting to clarify the doctrine, which is "riven with inconsistencies"); Cass R. Sunstein, Why the Unconstitutional Conditions Doctrine Is an Anachronism, 70 B.U. L. REV. 593, 620 (1990) (calling doctrine "too crude and too general to provide help in contested cases"); accord Dolan v. City of Tigard, 512 U.S. 374, 407 n.12 (1994) (Stevens, J., dissenting) ("Although it has a long history,... the 'unconstitutional conditions' doctrine has for just as long suffered from notoriously inconsistent application").

\textsuperscript{224} See supra Section I.C.2.

\textsuperscript{225} See id.
rate discount is a government benefit, albeit one administered through a private intermediary, and the intensive monitoring is a condition on receipt of that benefit.

If mandating intensive electronic reporting would be unconstitutional,226 perhaps conditioning receipt of a tax benefit on such reporting might be unconstitutional too, though the use of private intermediaries makes this less likely. A two-part test governs.227 First, there must be an “essential nexus” between a “legitimate state interest” and the condition.228 Preventing tax avoidance is a quintessential legitimate state interest,229 and monitoring businesses for unreported income has a clear nexus with preventing tax avoidance.230 Second, there must be a “rough proportionality” between the condition and the benefit.231 If all eligible taxpayers opted in, that might indicate a lack of proportionality, suggesting that shopkeepers believe they need to participate to remain competitive. But so long as a substantial proportion of taxpayers decline to opt in, rough proportionality should be presumed. A similar analysis would likely uphold any alternative tax regime offered as opt-in.

B. Equality and Equity

1. Worsening Inequality

Unless carefully designed, contractual tax reform might worsen inequality. Higher-income taxpayers tend to have better tax advisors, are less risk-averse, and provide proportionally higher potential tax increases to cover the costs of designing and administering an alternative tax regime. Intermediaries might focus their efforts on providing Pareto-efficient alternative tax regimes only for the well-off. At its worst, contractual tax reform would be like the bank system, which often leaves

226 The Fourth Amendment, U.S. CONST. amend. IV, generally requires either warrants or an opportunity for precompliance review before searching commercial records. See, e.g., City of Los Angeles v. Patel, 135 S. Ct. 2443 (2015). There is an exception only for closely regulated industries such as liquor sales, firearms dealing, mining, and automobile junkyards. 135 S. Ct. at 2454.


228 Dolan, 512 U.S. at 386; Smolla & Nimmer, supra note 227, § 7:5.

229 Colangelo v. United States, 575 F.2d 994, 998 (1st Cir. 1978) (finding “orderly assessment and collection of taxes” to be a legitimate government interest); see also New York ex rel. Cohn v. Graves, 300 U.S. 308, 313 (1937) (“Taxes are what we pay for civilized society”) (citation omitted).

230 See supra notes 122-129 and accompanying text (discussing the “tax gap,” hundreds of billions of dollars primarily resulting from unreported business income).

231 Dolan, 512 U.S. at 391; Smolla & Nimmer, supra note 227, § 7:5.
lower-income individuals without banking services ("unbanked") or with only limited access to banking services ("underbanked").

Yet contractual tax reform can be designed to maximize the utility of the less-fortunate through progressive formulas regarding the allocation of profit (i.e. the excess of taxes paid by treatment-group taxpayers over control-group taxpayers). For example, when intermediaries offer alternative regimes to taxpayers making over $200,000 per year, the government might allow the intermediary to keep just 30% of all additional tax revenue generated by the treatment group, in comparison to the control group. By contrast, when intermediaries offer alternative regimes to taxpayers making under $40,000 per year, the government might allow the intermediary to keep 100% of the additional tax revenue generated. Such progressive formulas would incentivize creating alternative tax regimes that increase lower-income taxpayers’ utility.

2. Violating Horizontal Equity

Horizontal equity is the principle that taxpayers earning the same income should pay the same amount of tax. Contractual tax reform presents two potential violations of horizontal equity. First, the intermediary would not offer the alternative tax regime to all taxpayers. Second, of those taxpayers invited to opt in and who do opt in, the government will randomly assign some percentage to the control group, who would be subject instead to the normal tax code.

The first objection—that not all taxpayers are invited to opt into every alternative regime—is largely overcome by the fact that it is the private intermediary, not the government, deciding who is invited. Suppose that two individuals A and B both interview for a coveted private-sector job that pays $10,000 more after taxes than their current job. It is unobjectionable that only one of the two will get the job. This situation differs little from a private tax intermediary offering an alternative tax regime, which will increase after-tax


233 This aspect of contractual tax reform is even more powerful if one considers “taxes” more broadly to include not only monies raised from individuals, but also transfer payments (like anti-poverty programs) made to individuals as negative taxes. This broader view of “taxes” is common in the economic literature. See, e.g., Akerlof, supra note 97; BOADWAY, supra note 6, at 152–80. Contractual tax reform for lower-income individuals could thus be seen as a way to encourage privately run alternative regimes that help individuals escape poverty, such as by eliminating the “welfare trap” of extremely high marginal rates that lower-income individuals face as higher incomes cause large drops in their eligibility for various transfer payments under anti-poverty programs.

234 See BITTKE & LOKKEN, supra note 35, ¶ 3.1.4; cf. Alan J. Auerbach & Kevin A. Hassett, A NEW MEASURE OF HORIZONTAL EQUALITY, 92 AM. ECON. REV. 1116, 1116 (2002) (“[T]here is virtual unanimity that horizontal equality—the extent to which equals are treated equally—is a worthy goal of any tax system.”).
income by $10,000, to only one of A or B. Indeed, the government itself already uses invitations in tax administration. For example, the IRS has offered an invitation-only “compliance assurance process” (CAP) that allowed for ex ante (i.e., before return filing) resolution of large corporations’ tax matters. Current tax law offers numerous elections into different substantive rules, often with arbitrary conditions for eligibility.

The second objection—that the government randomizes some taxpayers who opt in into the control group—weakens when one considers that the IRS already uses randomization to audit taxpayers. Just as auditing provides valuable information to the IRS, randomizing some taxpayers into the control group provides valuable information on whether an alternative tax regime has increased tax collections. A Kantian might object that randomization on individual taxpayers for informational purposes violates the principle that each person should be treated as an end rather than merely as a means. Even assuming the validity of this principle, however, the randomization into the control group is not treating taxpayers solely as a means. The goal of contractual tax reform is to better accommodate diverse individual preferences, which increases autonomy. A Kantian would argue that law has the imperative to respect each individual as an end in him- or herself, including his or her freedom to pursue his or her own ends and conception of the good life. Alternative tax regimes respect this imperative and are justifiable on Kantian grounds.

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236 See, e.g., Treas. Reg. §1.1502-75(h) (setting forth mechanics for a group of corporations to opt into filing a consolidated return); Treas. Reg. §§ 1.1502-1 to -100 (governing the consolidated return tax regime); KEVIN M. HENNESSEY ET AL., THE CONSOLIDATED TAX RETURN (2017 ed.) (treatise dedicated to the consolidated tax return regime); id. ch. 2 (discussing the extensive requirements to be eligible to opt into the consolidated return regime); see also, e.g., I.R.C. § 1362(a) (opting into being an “S corporation”); id. § 856(c)(1) (opting into being a “real estate investment trust”).

237 For details on how the IRS select taxpayers to audit in part based on random considerations, see IRS, INTERNAL REVENUE MANUAL § 4.1.3.2, which explains how a Discriminant Index Function affects the likelihood that a taxpayer will be audited, and § 4.22.1.5(5), which allows the National Research Program to choose taxpayers at random. For a broader discussion of randomization in tax administration, see Sarah B. Lawsky, Fairly Random: On Compensating AuditedTaxpayers, 41 CONN. L. REV. 161, 164–68 (2008).

238 See IMMANUEL KANT, GROUNDWORK OF THE METAPHYSIC OF MORALS 96 (H.J. Paton trans., Harper Torchbooks 1964) (1785) (“Act in such a way that you always treat humanity, whether in your own person or in the person of any other, never simply as a means, but always at the same time as an end.”) (emphasis omitted)); see also Abramowicz et al., supra note 186, at 964 & n.128 (2012).

239 See supra Section I.B.

240 See, e.g., Section I.B.2 (discussing alternative regimes better accommodating different taxpayers’
Control group taxpayers may not get the same benefits as treatment group taxpayers, but they are no worse off. It is common for governmental programs to choose only a subset of applicants to participate, and contractual tax reform simply won’t work if everyone participates. A control group taxpayer might still benefit from randomization anyway, and not just because the experiment might produce information that leads to better tax policy. The control group taxpayer one time might be a treatment group taxpayer in another period. Meanwhile, an intermediary in theory could offer insurance, with payoffs equal to the premium divided by the probability of being randomized to control. Under expected utility theory, “it is well established that a risk-averse individual will purchase full insurance when the insurance contract is fairly priced.” That is, a rational purchaser should buy just enough insurance to be indifferent to those outcomes. Usually, insurance is expensive to provide because underwriting requires risk assessment, but here the risk is transparent, so insurance should be cheap. If such insurance is provided, to enable the insurance function to work, premiums should not be deductible, and payouts should not be taxed.

IV. CONCLUSION

This Article has outlined how contractual tax reform could increase taxpayer utility without adversely affecting government revenues. Private intermediaries would design alternative tax regimes. Using artificial intelligence and other data-based models, the intermediaries would invite certain taxpayers to opt in. Of those who do so, the government would randomize some percentage to a control group to measure the revenue that those subject to the alternative regime would have raised if subjected to the generally applicable tax code. The intermediaries either could be for-profit or could be cooperatives, operated for the benefit of those who opt in. Regulation of insurers provides a model for regulating the private tax intermediaries, who are similar in many ways. Particularly in early implementations, the deviations from existing tax law would likely be relatively

different work versus leisure preferences).

241 See, e.g., DAVID GREENBERG ET AL., SOCIAL EXPERIMENTATION AND PUBLIC POLICYMAKING 225 (2003) (noting that the impossibility of serving all comers is a justification for randomization).

242 We would not allow the control group taxpayer to contract with another intermediary in the same year. In theory, the first intermediary’s tax bill might depend on whatever the control group taxpayer pays to the second intermediary. But there is a danger of side payments, in which the first intermediary rewards the second for giving a good deal to the taxpayer, lowering the intermediary’s bill. This is much less worrisome across time periods.

243 Michael Braun & Alexander Muermann, The Impact of Regret on the Demand for Insurance, 4 J. RISK & INS. 737, 737 (2004). Prospective insureds, however, do not always follow the recommendations of expected utility theory. Id. at 738.
small, but substantial benefits could still be achieved, including increased taxpayer utility and increased government tax revenues.