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# LINE DRAWING, DOCTRINE, AND EFFICIENCY IN THE TAX LAW

David A. Weisbach†

## INTRODUCTION

Doctrinal tax disputes are notoriously messy. Nontax scholars leave the room when the tax geeks start talking doctrine. And, tax academics generally do not write serious articles on doctrinal issues. For example, since William Plumb summarized the case law on the difference between debt and equity in 1971,<sup>1</sup> no one has touched the subject. A few articles focus on the definition of capital gains,<sup>2</sup> and none focus on the difference between independent contractors and employees. Scholars view literally dozens of subjects within the tax law as being outside the scope of serious academic discourse. Yet on a daily basis, policymakers in the Treasury, Congress, and the courts make decisions on these matters.

Doctrinal disputes in disparate areas of the tax law have the same underlying structure: doctrine is used to draw lines between what are otherwise similar activities. For example, doctrinal rules determine which of similar financing devices are treated as debt or as equity, or which of similar service contracts create employment or independent-contractor relationships. Viewed from this perspective, one can analyze doctrinal rules in disparate areas of the tax law as a single class of problems—line-drawing problems—which are susceptible to solutions with a common structure.

This Article argues that line drawing in the tax law can and should be based on the efficiency<sup>3</sup> of competing rules rather than on

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† Associate Professor, The University of Chicago Law School. I thank Douglas Baird, Omri Ben-Shahar, David Bradford, Patrick Crawford, Richard Epstein, Avery Katz, Heidi Feldman, Randy Picker, Eric Posner, Dan Shaviro, Lynn Stout, Steve Salop, and participants in the Georgetown University Law Center faculty retreat and the NYU Colloquium on Tax Policy and Public Finance for comments.

<sup>1</sup> See William T. Plumb, Jr., *The Federal Income Tax Significance of Corporate Debt: A Critical Analysis and a Proposal*, 26 TAX L. REV. 369 (1971).

<sup>2</sup> See Calvin H. Johnson, *Seventeen Culls from Capital Gains*, 48 TAX NOTES 1285 (1990) (proposing many reforms amending what is and is not a capital asset); Stanley S. Surrey, *Definitional Problems in Capital Gains Taxation*, 69 HARV. L. REV. 985 (1956). For arguments on whether a capital gains preference should exist, see Noël B. Cunningham & Deborah H. Schenk, *The Case for a Capital Gains Preference*, 48 TAX L. REV. 319 (1993), and George A. Zodrow, *Economic Analyses of Capital Gains Taxation: Realizations, Revenues, Efficiency and Equity*, 48 TAX L. REV. 419 (1993).

<sup>3</sup> See *infra* Part II.A.1. for a definition of efficiency as used in this Article.

doctrinal concerns or traditional tax policy. Doctrinal concerns, such as whether various reified constructs can be fit together, or traditional tax policy concerns, such as whether something is "income" within the Haig-Simons definition,<sup>4</sup> are neither helpful nor relevant to most disputes.<sup>5</sup>

One example, the so-called check-the-box regulations,<sup>6</sup> best illustrates the approach to line drawing recommended here. Prior to the check-the-box regulations, the determination of whether an entity was treated as a corporation subject to the double tax, or a partnership subject to only a single tax, was based on four factors that described platonic notions of partnerships and corporations. For example, corporations were thought to have centralized management, but partnerships were not. Corporations were thought to have unlimited life, but partnerships were not. Business entities with a sufficient number of corporate factors were subject to the corporate tax because they were closer to the platonic notion of a corporation than to the notion of a partnership. In addition, the regulations automatically characterized entities with traded equity interests (e.g., stock listed on an exchange, for example<sup>7</sup>) and entities incorporated under a state-law incorpora-

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<sup>4</sup> Under the Haig-Simons definition of income, a taxpayer has income in each period equal to his consumption plus his change in savings. See HENRY C. SIMONS, *PERSONAL INCOME TAXATION* (1938); Robert Murray Haig, *The Concept of Income—Economic and Legal Aspects*, in *READINGS IN THE ECONOMICS OF TAXATION* 54, 59 (Richard A. Musgrave & Carl S. Shoup eds., 1959).

<sup>5</sup> Scholars have previously criticized Haig-Simons income or similar definitions as inappropriate criteria for resolving tax issues. Professor Boris Bittker made this argument over 30 years ago in a seminal article. See Boris I. Bittker, *A "Comprehensive Tax Base" as a Goal of Income Tax Reform*, 80 HARV. L. REV. 925, 933-35, 984-85 (1967). More recently, other scholars have criticized definitional approaches to tax law. See Thomas D. Griffith, *Should "Tax Norms" Be Abandoned? Rethinking Tax Policy Analysis and the Taxation of Personal Injury Recoveries*, 1993 WIS. L. REV. 1115, 1142-51; Thomas D. Griffith, *Theories of Personal Deductions in the Income Tax*, 40 HASTINGS L.J. 343, 345 (1989); Louis Kaplow, *A Fundamental Objection to Tax Equity Norms: A Call for Utilitarianism*, 48 NAT'L TAX J. 497, 502 (1995) (advocating utilitarianism in setting tax policy); Louis Kaplow, *The Income Tax as Insurance: The Casualty Loss and Medical Expense Deductions and the Exclusion of Medical Insurance Premiums*, 79 CAL. L. REV. 1485, 1486-87 (1991); Joseph E. Stiglitz & Michael J. Boskin, *Some Lessons from the New Public Finance*, 67 AM. ECON. REV. 295, 295-97 (1977). These scholars argue that we should instead rely on explicitly stated notions of distributive justice.

This Article is consistent with and is based on these works. It contributes to this area by focusing on a particular policy-making context—line drawing—and suggesting that line-drawing problems have a common structure susceptible to a common solution. For a work with a similar approach, see Daniel N. Shaviro, *An Efficiency Analysis of Realization and Recognition Rules Under the Federal Income Tax*, 48 TAX L. REV. 1 (1992). Shaviro argues that the realization doctrine can be analyzed from an efficiency perspective. See *id.* at 24-26.

<sup>6</sup> See Treas. Reg. § 301.7701-2 to -3 (1996).

<sup>7</sup> The "publicly traded" restriction is found in I.R.C. § 7704 (1994). Congress enacted the publicly traded rule in 1986 in response to the growth of publicly traded partnerships, which, despite the four-factor test, were viewed as effective substitutes for corporations. Prior to enactment of the publicly traded test, the distinction between corporations and partnerships was based solely on the four-factor test.

tion statute<sup>8</sup> as corporations.

Taxpayers could manipulate the four factors at will, and readily available structures allowed taxpayers to choose their tax classification without significantly changing their economics.<sup>9</sup> Taxpayers would set up their organizations to be classified as partnerships rather than corporations because of the lower tax on partnerships. Although taxpayers could achieve the desired tax results, the costs—the changes in organizational structures needed to meet the rules and the fees to accountants and lawyers—were significant in the aggregate.

The check-the-box regulations eliminated the four-factor test and moved the line between partnerships and corporations to public trading. On a rough basis, an entity is treated as a corporation if its stock is traded; otherwise, it is treated as a partnership, unless it makes an affirmative election to be treated as a corporation (hence the name “check-the-box”).<sup>10</sup>

The argument for abandoning the four-factor test is that it was enormously inefficient. It merely caused people to shift their organi-

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<sup>8</sup> The statute includes associations in the definition of a “corporation.” See I.R.C. § 7701(a)(3) (1994). This suggests that associations are business entities that are not traditional state-law corporations or partnerships. A state-law corporation, defined by an actual incorporation, is automatically a corporation for tax purposes. The Treasury Department designed the four-factor test to distinguish business associations from partnerships.

<sup>9</sup> If business reasons required the company to incorporate or have traded equity, then it usually could not avoid corporate status. In other words, the real lines under the four-factor test were public trading and actual incorporation. See Staff of Joint Comm. on Taxation, 105th Cong., REVIEW OF SELECTED ENTITY CLASSIFICATION AND PARTNERSHIP TAX ISSUES 15 (Comm. Print 1997) (“[I]t could be asserted that, in actual practice, the [four-factor test] had come to be so readily manipulated by tax practitioners as to be effectively elective, so that the adoption of an affirmatively elective regime is a change in form rather than in substance from the former regulations.”).

The most important structure used to manipulate the four-factor test was the limited liability company (LLC), which was invented in the 1980s. See Larry E. Ribstein, *The Emergence of the Limited Liability Company*, 51 BUS. LAW. 1, 3-6 (1995). LLCs shared most of the economic advantages of corporations, including limited liability for all members, but the IRS treated them as partnerships for tax purposes. See, e.g., Rev. Rul. 88-76, 1988-2 C.B. 360 (holding that a Wyoming LLC is a partnership for tax purposes). As stated above, taxpayers could easily achieve these results by manipulating the four factors. For example, continuity of life was present unless the death, bankruptcy, removal, or withdrawal of any member of the organization caused the organization’s dissolution. However, the members could agree to refrain from causing a dissolution; this meant that the business entity could effectively continue indefinitely, but the tax code would not treat it as having continuity of life. See Treas. Reg. § 301.7701-2(b)(2) (1996).

<sup>10</sup> The only major deviation from this scheme is that the check-the-box regulations retain the rule that state-law corporations are automatically treated as corporations. Commentators view this rule as an anomaly in the check-the-box world. The Treasury Department probably retained this rule solely because of concerns about its authority to change the rule by regulation. The other departure from this rule is in the international context, where the Treasury listed a number of per se corporations. See Treas. Reg. § 301.7701-2(b)(8) (1996). Generally these are entities that the regulations could not readily treat as partnerships under the four-factor test because of foreign law restrictions on their capital structure.

zational structures without collecting any tax. The check-the-box regulations try to draw a line—public trading—that is more difficult to avoid.<sup>11</sup> Because fewer taxpayers will change their behavior to avoid the new line, it is potentially more efficient. Even if the check-the-box regulations cause loss of revenue (and they inevitably will cause some loss), the prior system was such a bad source of revenue that replacing the lost revenue with a better tax should be easy.

Regardless of the merits of this argument (a subject that will be explored in greater depth below<sup>12</sup>), what is important about the check-the-box regulations is that they drop traditional doctrinal concerns and instead focus on efficiency.<sup>13</sup>

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<sup>11</sup> The analysis here ignores the elective element of the check-the-box regulations on the assumption that virtually everyone will choose the partnership structure.

<sup>12</sup> See *infra* Part II.A.4. There is some indication that the check-the-box regulations lose more money for the government than originally thought. For example, the check-the-box regulations are a major factor behind recent moves by the Treasury to prevent taxpayers from using so-called hybrid entities. See Treas. Reg. § 1.904-5T; I.R.S. Notice 98-35, 1998-27 IRB 35; I.R.S. Notice 98-11, 1998-6 IRB 18. The regulations treat a hybrid entity as a corporation for foreign-law purposes, but the entity uses the check-the-box rules to elect partnership treatment for U.S. purposes. There are many advantages to using hybrid entities. The Treasury designed Notice 98-11 and the accompanying regulations to prevent the use of hybrid entities to avoid the rules for inclusion of foreign-source income. See I.R.C. §§ 951-64 (Subpart F) (requiring current inclusion of income for so-called controlled foreign corporations).

<sup>13</sup> The check-the-box regulations have produced an outpouring of commentary, although little if any focuses on the efficiency considerations underlying the decision to promulgate the regulations. Substantial commentary exists on the check-the-box regulations. See Reuven S. Avi-Yonah, *To End Deferral As We Know It: Simplification Potential of Check-the-Box*, 74 TAX NOTES 219 (1997); Richard A. Booth, *The Limited Liability Company and the Search for a Bright Line Between Corporations and Partnerships*, 32 WAKE FOREST L. REV. 79 (1997); Hugh M. Dougan et al., *'Check-the-Box'—Looking Under the Lid*, 75 TAX NOTES 1141 (1997); Jerold A. Friedland, *Tax Considerations in Selecting a Business Entity: the New Entity Classification Rules*, 9 DEPAUL BUS. L.J. 109 (1996); Craig W. Friedrich, *One Step Forward—Final Check-the-Box Entity Classification Regulations Issued*, 24 J. CORP. TAX'N 107 (1997); Craig W. Friedrich, *The Impact of the Final Check-the-Box Entity Classification Regulations on Real Estate*, 24 J. REAL EST. TAX'N 331 (1997); Susan Pace Hamill, *The Taxation of Domestic Limited Liability Companies and Limited Partnerships: A Case for Eliminating the Partnership Classification Regulations*, 73 WASH. U. L.Q. 565 (1995); Christopher H. Hanna, *Initial Thoughts on Classifying the Major Japanese Business Entities Under the Check-the-Box Regulations*, 51 SMU L. REV. 75 (1997); Michael Hirschfeld & Jo-Renee Hunter, *'Check the Box' Regs. Require Planning To Avoid Default Status*, 7 J. INT'L TAX'N 292 (1996); Marc M. Levey & Richard D. Teigen, *International Implications of 'Check-the-Box'*, 85 J. TAX'N 261 (1996); Richard M. Lipton & John T. Thomas, *Impact of Final Check-the-Box Regulations Awaits Further IRS Guidance and States' Input*, 14 J. PARTNERSHIP TAX'N 91 (1997); Henry J. Lischer, Jr., *Elective Tax Classification for Qualifying Foreign and Domestic Business Entities Under the Final Check-the-Box Regulations*, 51 SMU L. REV. 99 (1997); John M. Magee et al., *Reexamining Branch Rules in the Context of Check the Box*, 77 TAX NOTES 1511 (1997); Payson R. Peabody, *States Generally Endorse Check-the-Box but Key Issues Remain*, 87 J. TAX'N 228 (1997); Roger F. Pillow et al., *Check-the-Box Proposed Regs. Simplify the Entity Classification Process*, 85 J. TAX'N 72 (1996); Roger F. Pillow et al., *Simplified Entity Classification Under the Final Check-the-Box Regulations*, 86 J. TAX'N 197 (1997); Daniel Shefter, *Check the Box Partnership Classification: A Legitimate Exercise in Tax Simplification*, 67 TAX NOTES 279 (1995); Scott D. Smith, *What Are States Doing on the Check-the-Box Regs?*, 76 TAX NOTES 973 (1997); Ann F. Thomas, *Square Wheels: U.S.*

The example can be easily generalized. Tax policy decisions typically require drawing a line between two relatively fixed points, such as the line in the check-the-box regulations between partnerships and corporations. Between the fixed points is a continuous range of transactions. Wherever the line is drawn, transactions on either side will be substantially similar (in the sense that they are substitutes for one another), and taxpayers will change their behavior to take advantage of the line. The tax-induced change in behavior will have efficiency effects, regardless of how arbitrary the line is or how doctrinally complex the subject matter might be. This Article argues that lines in the tax law should be drawn to be as efficient as possible.

The most important caveat to this argument is that we must take into account the distributional consequences of line drawing. Changing a line in the tax law will change the distribution of the tax burden. There are, however, arguments that drawing lines efficiently often will increase wealth sufficiently that the marginal tax rates can be adjusted to leave everyone better off. In these cases, efficiency is the sole appropriate criterion for line drawing.

Part I of this Article shows that the line-drawing problem is pervasive in the tax law and gives several examples that are used throughout the Article. It then argues that traditional theory fails to address the problem. Part II shows how line-drawing decisions affect the efficiency of the tax system, develops some intuitions for drawing lines more efficiently, and provides some examples of efficient line drawing. Part III argues that efficiency is an appropriate criterion for line drawing and considers distributional effects.

## I

### LINE DRAWING, DOCTRINE, AND TRADITIONAL TAX THEORY

#### A. Line Drawing in the Tax Law

The tax law often treats similar activities differently. For example, selling an asset is treated differently than holding an asset.<sup>14</sup> Likewise, the tax law treats financing with debt differently than financing

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*Pass-Through Taxation of Privately Held Enterprises in a Comparative Law Context*, 17 N.Y.L. SCH. J. INT'L & COMP. L. 429, 432-50 (1997); Joni L. Walser & Robert E. Culbertson, *Encore Une Fois: Check-the-Box on the International Stage*, 76 TAX NOTES 403 (1997); Francis J. Wirtz, *Check-the-Box: The Proposed Regulations on Entity Classification*, 74 TAXES 255 (1996); George K. Yin, *The Taxation of Private Business Enterprises: Some Policy Questions Stimulated by the "Check-the-Box" Regulations*, 51 SMU L. REV. 125 (1997); Victor E. Fleischer, Note, "If It Looks Like a Duck": *Corporate Resemblance and Check-the-Box Elective Tax Classification*, 96 COLUM. L. REV. 518 (1996); Thomas M. Hayes, Note, *Checkmate, the Treasury Finally Surrenders: The Check-the-Box Treasury Regulations and Their Effect on Entity Classification*, 54 WASH. & LEE L. REV. 1147 (1997).

<sup>14</sup> See I.R.C. § 1001 (1994); *Eisner v. Macomber*, 252 U.S. 189, 206-07 (1920).

with equity.<sup>15</sup> Paying an independent contractor is treated differently than paying an employee.<sup>16</sup> The basic approach of the tax law is to classify activities through doctrinal rules and distinctions and to tax them accordingly.<sup>17</sup> The daily gruel of the tax lawyer is to explain and manipulate these classifications. Although current classifications are frighteningly more complex than earlier ones, the role of tax lawyers and tax doctrine has not changed since the creation of the income tax.

Within the basic structure of these classifications, there are several known or fixed points, and a continuous range of transactions which falls between them. For example, certain instruments are debt and others are equity with a vast range of instruments lying between these two poles. Similarly, certain service contracts create employee relationships and others create independent-contractor relationships with a large number of intermediate cases. The difficulty lies in classifying the transactions that fall between the fixed points.

To be sure, many of the fixed points can and potentially should be changed to eliminate distinctions. For example, we could eliminate the distinction between debt and equity, between independent contractors and employees, or between corporations and partnerships. For decades, tax reformers have attempted to identify and eliminate unsupported distinctions. Taxing similar activities differently causes behavioral distortions and unfairness. Moreover, the complex doctrines needed to draw these distinctions make compliance costly. Reformers, therefore, argue that a broad tax base, one that taxes all forms of income equally, is the fairest, most efficient, and most easily administered tax base.<sup>18</sup>

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<sup>15</sup> See Plumb, *supra* note 1, at 371-404 (describing the differences). The most important difference is that the return on a debt instrument is treated as interest, deductible to the borrower and taxable to the lender, while the return on equity is treated as dividends or capital gain, taxable to the investor but not deductible to the business. See *id.* at 372-74.

<sup>16</sup> For example, employees are subject to wage withholding, but independent contractors are not. See I.R.C. §§ 3401-04 (1994 & Supp. II 1996). The distinction between independent contractors and employees has been extremely controversial. See Rev. Rul. 87-41, 1987-1 C.B. 296, 298-99 (identifying 20 factors relevant to the distinction between employees and independent contractors); J. David Mason, *Independent Contractor or Employee: The Continuing Controversy*, 75 TAXES 99 (1997).

<sup>17</sup> One author has referred to the line-drawing approach of tax law as the cubbyhole approach. The tax law classifies activities by putting them into various cubbyholes and taxing them according to the rules for the cubbyhole. See Edward D. Kleinbard, *Equity Derivative Products: Financial Innovation's Newest Challenge to the Tax System*, 69 TEX. L. REV. 1319, 1320 (1991).

<sup>18</sup> Entire volumes of tax policy research have been devoted to this. See, e.g., A COMPREHENSIVE INCOME TAX BASE? (Boris I. Bittker et al. eds., 1968); COMPREHENSIVE INCOME TAXATION (Joseph A. Pechman ed., 1977).

Even fundamental tax reform is likely to leave some line-drawing problems. For example, the Hall-Rabushka flat tax proposal treats employees differently than independent contractors. See ROBERT E. HALL & ALVIN RABUSHKA, *LOW TAX, SIMPLE TAX, FLAT TAX* 119-

I fully support the goal of a broader, more rational tax base and the scholarship pursuing it. This Article, however, focuses on a more pragmatic issue: how a policymaker should respond to the typical, real-life situation of drawing a line between relatively fixed points. Doctrinal distinctions are often deeply embedded in the tax law and are difficult to eliminate. Many doctrines, such as the realization requirement,<sup>19</sup> are fundamental building blocks of our tax system. Policymakers need guidance in this second-best context which they encounter on a daily basis, in which change short of fundamental reform is being considered.<sup>20</sup>

This Article uses several doctrinal distinctions central to the U.S. tax system as examples, including the realization requirement and the corporate tax.<sup>21</sup>

### 1. *The Realization Requirement*

Under the realization requirement, income is not taxed and losses are not deducted until the income or loss is "realized."<sup>22</sup> Although the Code does not define realization, it generally means the asset producing the income or loss is sold or exchanged. The realization requirement is a bedrock of the existing tax system. The Supreme Court once considered it a constitutional requirement.<sup>23</sup> Although no longer a constitutional requirement, there are few exceptions to the rule requiring a realization event before a taxpayer

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22 (1983). Under this flat tax proposal, employees may not deduct the cost of business inputs, such as unreimbursed employee expenses, while independent contractors may do so. This is because the independent contractor can file a "Business Tax" return while the employee must file an "Individual Tax" return. *See id.* at 35-47. Thus, it remains problematic to distinguish between the two classes of workers.

<sup>19</sup> *See* MICHAEL J. GRAETZ & DEBORAH H. SCHENK, *FEDERAL INCOME TAXATION* 159-61 (3d ed. 1995); *see also infra* notes 22-41 and accompanying text (discussing the realization requirement in detail).

<sup>20</sup> Central to any analysis of policy reform is the range of alternatives that policymakers are permitted to consider. For example, if integration of the corporate and individual taxes is an alternative, concerns about the debt-equity distinction or the definition of a corporation may vanish (depending on how integration is achieved). Determining the allowable range of alternatives is a standard problem in a second-best analysis. For example, the seminal results of the Ramsey analysis change significantly in the presence of an income tax. *See* Joseph E. Stiglitz, *Pareto Efficient and Optimal Taxation and the New Welfare Economics*, in 2 *HANDBOOK OF PUBLIC ECONOMICS* 991, 1027-29 (Alan J. Auerbach & Martin Feldstein eds., 1985). The allowable range of alternatives will vary with the problem and over time, and it is worth studying problems with varying ranges of alternatives.

<sup>21</sup> Other examples abound—the Appendix includes a list of some of the more important doctrinal distinctions in the tax law.

<sup>22</sup> I.R.C. § 1001 (1994).

<sup>23</sup> *See Eisner v. Macomber*, 252 U.S. 189, 205 (1920).



must report income.<sup>24</sup> Despite suggestions to eliminate the realization requirement, the likelihood of elimination remains remote.<sup>25</sup>

The scope of the realization requirement is elusive. No underlying legal or economic concept serves as a touchstone. Although complete disposal of an asset's economic ownership (through a legal sale to an unrelated party) is a sale, and possession of an asset without change is not, there is a vast continuum between the two. The tax law must classify transactions in this indeterminate area as either sold or held.

Drawing that line has not been easy. The Supreme Court originally attempted to define realization in terms of a "severance" or "derivation" of gain from capital.<sup>26</sup> Severance, however, proved inadequate.<sup>27</sup> For example, the Court held that a lessor realizes income when, upon a lease default, she reclaims land that includes a building added by the tenant, even though the building is not severable from the land.<sup>28</sup> On the other hand, lower courts have ruled that "severing" the cash from an asset by borrowing against appreciation does not create a realization event.<sup>29</sup>

An alternative formulation of the realization requirement hinges on whether there has been a legal sale, regardless of the economic consequences. A variety of Code provisions recognize that some formal sales are insufficient to create a realization event. These provisions prohibit claiming losses from, for example, sales to related parties, wash sales (selling and immediately repurchasing an identical

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<sup>24</sup> The most important exception is embodied in § 475 of the Internal Revenue Code, which requires securities dealers to measure portions of their income under the Haig-Simons definition. See I.R.C. § 475 (1994). Because there is no precise definition of the term "realization," there can be no precise count of the number of deviations the tax code allows from "realization." For example, one could view the requirement to include interest income before it is paid either as a deviation from the realization requirement or as simply determining the time of realization. See I.R.C. §§ 1272-75 (1994). Similarly, one could either consider depreciation allowances exceptions to the realization requirement or not. See Douglas A. Kahn, *Accelerated Depreciation—Tax Expenditure or Proper Allowance for Measuring Net Income?*, 78 MICH. L. REV. 1, 13-15 (1979). Whether something is an exception to the realization requirement or not makes little difference. It is the substantive law itself that has effects, not views of whether the substantive law is an exception to, or a part of, a general rule.

<sup>25</sup> See Fred B. Brown, "Complete" Accrual Taxation, 33 SAN DIEGO L. REV. 1559, 1560-61 (1996); David J. Shakow, *Taxation Without Realization: A Proposal for Accrual Taxation*, 134 U. PA. L. REV. 1111, 1113 (1986); David A. Weisbach, *A Partial Mark-to-Market Tax System*, 53 TAX L. REV. (forthcoming 1999) (manuscript at 53 n.3, on file with author).

<sup>26</sup> See *Eisner*, 252 U.S. at 207.

<sup>27</sup> The realization requirement appears to be the result of confused thinking by the Supreme Court and a desire for conformity with accounting rules, which also have historical roots. See Marjorie E. Kornhauser, *The Origins of Capital Gains Taxation: What's Law Got To Do with It?*, 39 SW. U. L. REV. 869 *passim* (1985).

<sup>28</sup> See *Helvering v. Bruun*, 309 U.S. 461, 467-69 (1940).

<sup>29</sup> See *Woodsam Assocs. v. Commissioner*, 198 F.2d 357, 359 (2d Cir. 1952).

asset), or other similar transactions.<sup>30</sup> To the surprise of many, however, the Supreme Court decided that exchanging economically identical but legally different portfolios of securities is a realization event.<sup>31</sup> The implications of this decision remain uncertain. For example, outside of specific statutory rules, it is not clear whether purely legal formalities control or whether economic substance continues to matter.<sup>32</sup> Regulations addressing the impact of this decision for a single type of transaction are close to fifty pages long.<sup>33</sup>

If legal formalities are not the appropriate guideline, one might instead focus on the economics of a sale. For example, the tax code might treat a taxpayer as holding an asset only if she has the risk of loss and opportunity for gain from the asset. This is consistent with a platonic notion of holding and selling. In the past, courts used risk as a factor to decide whether there had been a sale.<sup>34</sup> But implementing this rule on a general basis proved a formidable proposition. For example, hedging transactions, in which taxpayers reduce the risk of loss

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<sup>30</sup> See, e.g., I.R.C. § 267 (1994) (prohibiting taxpayers from claiming losses on sales to related parties); I.R.C. § 1091 (1994) (prohibiting taxpayers from claiming losses on certain "wash sales"); I.R.C. § 1092 (1994) (prohibiting taxpayers from claiming losses in certain cases when there is identifiable, related gain).

<sup>31</sup> See *Cottage Sav. Ass'n v. Commissioner*, 499 U.S. 554, 556 (1991).

<sup>32</sup> The uncertainty has spawned a large body of commentaries. See, e.g., Richard L. Bacon, *SEC Loan Swaps at the Supreme Court: Ripple Effects*, 49 TAX NOTES 1121 (1990) (discussing and criticizing the use of the "material difference" test to determine whether there has been a realization event); Richard L. Bacon & Harold L. Adrion, *Taxable Events: The Aftermath of Cottage Savings*, 59 TAX NOTES 1227 (pt. 1), 1385 (pt. 2) (1993) (reviewing the scope and aftermath of *Cottage Savings* and discussing the Treasury's regulation § 1.1001-3, which deals with realization in debt modification transactions); Richard M. Lipton, *The Section 1001 Debt Modification Regulations: Problems and Opportunities*, 85 J. TAX'N 216, 216 (1996) (criticizing regulations that concern debt modification under Section 1001 and hypothesizing that the "service may yet rue the decision to issue the final Regulations"); Loren D. Prescott, Jr., *Cottage Savings Association v. Commissioner: Refining the Concept of Realization*, 60 FORDHAM L. REV. 437 (1991) (discussing how *Cottage Savings* may limit the scope of the realization concept); Robert Willens & Andrea J. Phillips, *A Road Map Through the 'Cottage Savings' Regulations*, 72 TAX NOTES 765 (1996) (employing a flowchart to explain § 1.1001-3 regulations); John E. Capps, Note, *In the Wake of Cottage Savings: The Tax Consequences of Debt Modifications*, 72 TEX. L. REV. 2015, 2015 (1994) (arguing that *Cottage Savings*, "together with newly proposed treasury regulations, expands the realization doctrine's applicability to debt modifications"); Scott Lenz, Note, *The Symmetry of the Realization Requirement and Its Application to the "Mortgage Swap" Cases*, 9 VA. TAX REV. 359, 360 (1989) (offering "two statutory proposals to resolve the judicial debate over allowing the losses as deductions encountered in the 'mortgage swap' cases").

<sup>33</sup> See Treas. Reg. § 1.1001-3 (1995).

<sup>34</sup> See *Frank Lyon Co. v. United States*, 435 U.S. 561, 581-84 (1978) (deciding that the nominal lessor was the owner of property under the facts of the case). Although *Frank Lyon* does not directly address realization, its underlying issue—tax ownership of property—stems from the realization concept.

on an asset or a business operation, have never been classified as realization events.<sup>35</sup>

Concern about economic risk is likely to have motivated the recent change to the treatment of so-called "short-against-the-box" transactions. In a short-against-the-box transaction, a taxpayer owning stock enters into a short sale of the stock, while legally still holding the original position.<sup>36</sup> Future gain or loss on the short sale exactly offsets future gain or loss on the original stock position, which means the taxpayer no longer has any economic stake in the stock. If the value of the stock goes up, the short sale goes down by an exactly equal amount. If the value of the stock goes down, the short sale goes up again by an exactly equal amount. In addition, the taxpayer receives cash from the short sale approximately equal in value to the stock. The two transactions, however, were treated separately: the taxpayer was not required to treat the stock as if it were sold.

From an economic perspective, short-against-the-box transactions look too much like sales for them to be not treated as realization events. Because they eliminate the risk of gain and loss, Congress changed the law to treat them as sales.<sup>37</sup> It is not clear, however, if this change was appropriate. The new law only moves the line between holding and selling incrementally. The basic underlying problem, that similar transactions are treated differently, is still there—there is just a new line. The new law is substantially more complex than prior law, and taxpayers can probably avoid unfavorable tax treatment just as easily. It is doubtful that the legislation moves us any closer to a clear definition of the realization requirement.<sup>38</sup>

A final approach looks to the underlying reasons for the realization requirement. When a court or the Treasury Department interprets the tax law, this approach may be particularly appropriate.<sup>39</sup> The reasons given for the realization requirement are that, under a

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<sup>35</sup> For the treatment of hedging transactions, see *Corn Products Refining Co. v. Commissioner*, 350 U.S. 46, 52-53 (1955), *Arkansas Best Corp. v. Commissioner*, 485 U.S. 212, 222 (1988), and Treas. Reg. § 1.1221-2 (1995).

<sup>36</sup> In a short sale, a taxpayer borrows stock from a broker and sells the stock. To close the transaction, the taxpayer buys a share of the same stock on the market and delivers it to the broker. If the taxpayer purchases the stock at less than the amount received from the original sale, she makes money. In other words, the taxpayer wins if the stock price goes down. If the taxpayer purchases the stock at more than the amount received from the sale, she loses money. See Edward Kleinbard, *Risky and Riskless Positions in Securities*, 71 TAXES 783, 788 (1993). Because the taxpayer makes money if the stock price goes down and loses money if the stock price goes up, a short sale is a perfect hedge for owning stock.

<sup>37</sup> See I.R.C. § 1259 (1994); H.R. CONF. REP. NO. 105-220, at 512 (1997).

<sup>38</sup> See David A. Weisbach, *Should a Short Sale Against the Box Be a Realization Event?*, 50 NAT'L TAX J. 495 (1997) (summarizing the arguments for and against the new law); see also *infra* Part III (discussing further whether the new law is appropriate).

<sup>39</sup> See Michael Livingston, *Practical Reason, "Purposivism," and the Interpretation of Tax Statutes*, 51 TAX L. REV. 677, 679 (1996) (discussing statutory interpretation in the tax con-

pure Haig-Simons approach, taxpayers may not be able to determine the value of an asset or may not have the funds available to pay the tax.<sup>40</sup> These reasons are all but worthless for making policy because they bear no relationship to current law. For example, the realization requirement applies to traded stock, even though traded stock is liquid and valuation is easy. If the realization requirement must apply to stock, the reasons for the realization requirement cannot determine which stock transactions are realization events. One cannot, for example, decide whether hedging traded stock or borrowing against appreciation in traded stock should be realization events by reference to liquidity and valuation; as just discussed above, these norms dictate that we would not have a realization requirement for stock at all. Thus, one cannot use the purpose behind the realization doctrine to decide many of the most basic questions concerning the scope of the doctrine, or to resolve difficult borderline issues.<sup>41</sup>

## 2. *The Corporate Tax*

The two-tier corporate tax has been a part of our income tax system since its founding. It taxes income from investments in corporate stock at a higher rate than income from other investments (in either corporations, through a different financial instrument, or in noncorporate businesses). Although academics, and more recently the Treasury Department, have long called for elimination of the two-tier tax system,<sup>42</sup> there has never been a strong political push in the United States to reform it. The two-tier corporate tax will likely be with us for the indefinite future.

Aside from the definition of a corporation addressed in the discussion regarding check-the-box regulations,<sup>43</sup> the other major boundary defining the corporate tax base is the distinction between debt and equity. Because interest is deductible, but dividends are not,

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text and concluding that "most tax cases are—and should be—decided by a practical reason method" as opposed to a "purposive" approach).

<sup>40</sup> See DAVID F. BRADFORD, *BLUEPRINTS FOR BASIC TAX REFORM 73* (2d ed. 1984) (describing these two reasons, and adding, as a third, the administrative burden of annual reporting).

<sup>41</sup> For example, the Supreme Court in *Cottage Savings*, the most significant decision on the scope of the realization doctrine in recent history, noted that "[n]either the language nor the history of the Code indicates whether and to what extent property exchanged must differ to count as a 'disposition of property' under §1001(a)." *Cottage Sav. Ass'n v. Commissioner*, 499 U.S. 554, 560 (1991).

<sup>42</sup> See U.S. DEP'T OF THE TREASURY, *INTEGRATION OF THE INDIVIDUAL AND CORPORATE TAX SYSTEMS* at vii (1992) (describing "three distortions inherent in the classical system" that integration would reduce); ALVIN C. WARREN, JR., *FEDERAL INCOME TAX PROJECT: INTEGRATION OF THE INDIVIDUAL AND CORPORATE INCOME TAXES: REPORTER'S STUDY OF CORPORATE TAX INTEGRATION* 22-46 (1993).

<sup>43</sup> See *supra* notes 12-13 and accompanying text.

the distinction between debt and equity creates the two-level corporate tax.

The distinction between debt and equity possibly could be an even worse morass than the definition of a realization event. The structure of the problem is the same as that facing the realization problem. The two extremes are clear: voting common stock is equity, but senior securities with current payments and a reasonably short maturity are debt. However, there are vast numbers of financing devices that fall between these two simple cases, and attempts to distinguish between them have failed. The case law is replete with these attempts, and the court decisions have been aptly vilified as a "jungle"<sup>44</sup> and a "vipers tangle."<sup>45</sup>

As with the realization requirement, one cannot use the underlying purpose behind the debt-equity distinction to draw the line. Most scholars believe that there is no justification for the existence of the two-level corporate tax.<sup>46</sup> As Professor Saul Levmore noted, the distinctions drawn in the corporate tax are "especially arbitrary" and "almost necessarily devoid of a normative foundation."<sup>47</sup> Similarly, Dean Robert Clark argued that the corporate tax should be understood as the cultural extension of seven essentially arbitrary assumptions.<sup>48</sup> Given this lack of normative content for the corporate tax, it is difficult to determine the appropriate debt-equity boundary by reference to the underlying goals.

Likewise, we cannot look to congressional intent to make the debt-equity distinction. Section 385 of the Code delegates the authority to make the distinction to the Treasury Department.<sup>49</sup> Because the

<sup>44</sup> *Commissioner v. Union Mut. Ins. Co.*, 386 F.2d 974, 978 (1st Cir. 1967).

<sup>45</sup> BORIS I. BITTKER & JAMES S. EUSTICE, *FEDERAL INCOME TAXATION OF CORPORATIONS AND SHAREHOLDERS* ¶4.04 (6th ed. 1994).

<sup>46</sup> In particular, most scholars believe that there is no justification for imposing a higher tax rate on stock investments than on other investments. See WARREN, *supra* note 42, at 42 ("The current relationship between the corporate and individual income taxes may also undesirably distort individual investment decisions.")

<sup>47</sup> Saul Levmore, *Recharacterizations and the Nature of Theory in Corporate Tax Law*, 136 U. PA. L. REV. 1019, 1061 (1988). Levmore includes realization rules in this argument. For example, he notes, "There is, in short, no normative theory or rule that suggests the optimal number or coverage of recognition rules." *Id.* at 1063.

<sup>48</sup> See Robert Charles Clark, *The Morphogenesis of Subchapter C: An Essay in Statutory Evolution and Reform*, 87 YALE L.J. 90, 96-137 (1977). The seven principles are as follows: (1) the separate tax principle, (2) the distribution principle, (3) the capital gains principle, (4) the dividend principle, (5) the corporate veil principle, (6) the nonrecognition principle, and (7) the *General Utilities* principle.

<sup>49</sup> The Treasury Department's experience with its delegated authority to draw the line has not been pleasant. Section 385 was enacted in 1969. Proposed regulations were issued eleven years later, in 1980. The saga which followed is lamentable. The regulations were quickly finalized, but their effective date was extended twice because of criticism. Extensive amendments were proposed in December 1981, followed by further extensions of the effective date. Despite this amendment process, investment bankers were quickly able to

Treasury has not promulgated regulations dealing with the problem, one can find very little identifiable congressional intent. Thus, courts have been making the distinction since the founding of the income tax by looking to the meaning of the terms "debt" and "equity" in the absence of any guidance from Congress on the intended distinction.<sup>50</sup>

Given the lack of definitive rules and the economic similarity between debt and equity, designing instruments to skirt the border has become one of the most active practices in tax planning.<sup>51</sup> For example, taxpayers and their advisors have recently developed a security known as MIPS,<sup>52</sup> which is treated as debt for tax purposes, but treated as preferred stock for essentially all other purposes. Because of their tax advantages, MIPS have effectively replaced preferred stock in the marketplace.<sup>53</sup> The question for the Treasury Department is whether to treat such securities as equity potentially by using its regulatory authority.<sup>54</sup>

The corporate tax contains numerous other distinctions. For example, the tax law treats some corporate acquisitions as taxable while treating others as a tax-free recovery of basis.<sup>55</sup> Some distributions to shareholders are taxable while others are tax-free.<sup>56</sup> The distinctions between the taxable and the tax-free forms of these transactions are ethereal. An exchange of single dollar of cash can, in some circumstances, make an otherwise tax-free acquisition into a taxable

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develop an instrument treated as debt under the regulations that no court would have treated as debt under prior law. Even the Treasury Department agreed that this new instrument was not debt. See the description of the so-called "ARCNs" in Rev. Rul. 83-98, 1983-2 C.B. 40. With the development of this instrument, all versions of the regulation were withdrawn (before they ever took effect) and the project abandoned.

<sup>50</sup> See Plumb, *supra* note 1, at 369-70 and cases cited ("The Supreme Court once said that such terms are 'well understood' and 'need no further definition'; but a 'jungle' of several hundred court decisions which 'defy symmetry' have . . . proved the error of that assumption." (citations omitted)).

<sup>51</sup> See David P. Hariton, *Distinguishing Between Equity and Debt in the New Financial Environment*, 49 TAX L. REV. 499, 499 (1993) ("[T]he distinction between debt and equity still is foremost in the practitioner's mind.").

<sup>52</sup> MIPS stands for Monthly Income Preferred Stock. Other acronyms for the same security are QUIPS (Quarterly Income Preferred Stock) and TRUPS (Trust Preferred Securities). The differently named instruments differ only in tiny details. The details of MIPS are not relevant for purposes of this Article. For more information on MIPS, see Hariton, *supra* note 51, at 517-21.

<sup>53</sup> See Letter from Robert T. Flaherty, Investment Counsel, Flaherty & Crumrine Inc., to David Weisbach (July 30, 1996) [hereinafter Flaherty Letter] (on file with author).

<sup>54</sup> Part II considers this question.

<sup>55</sup> See Bernard Wolfman, *Whither "C"?*, 38 TAX NOTES 1269 (1988) (describing some of the disparities).

<sup>56</sup> See George K. Yin, *A Different Approach to the Taxation of Corporate Distributions: Theory and Implementation of a Uniform Corporate-Level Distributions Tax*, 78 GEO. L.J. 1837, 1842-53 (1990).

purchase.<sup>57</sup> In other circumstances, over half of the consideration can be cash, and the transaction can be considered tax-free.<sup>58</sup> The order of otherwise interchangeable steps frequently determines the result.<sup>59</sup> It is difficult to detect any pattern in the law.

The function of corporate tax doctrine is to distinguish among the various similar forms of transactions. Because of the complexity of the distinctions, the doctrine is complex. The Bittker & Eustice<sup>60</sup> and the Ginsburg & Levin<sup>61</sup> treatises attempt to explain the lines drawn within the corporate tax. Neither treatise resolves all issues, even though each is over two thousand pages long. With arguably no sound reason for having a two-level corporate tax, however, it is not easy to justify the distinctions; explaining them through doctrine becomes simply a list of arbitrary details.

The realization requirement, the debt-equity distinction, and other distinctions in the corporate tax have the same basic structure. Between relatively fixed points, there is a continuous range of transactions, and within the range there is considerable doctrinal uncertainty. This structure is the source of most practical problems in the tax law. Assuming that the end points are fixed, the difficult question for taxpayers and tax policymakers is how to deal with the transactions in the middle.

The realization requirement, the debt-equity distinction, and the corporate tax all have little or no underlying normative content. They are, in this sense, meaningless distinctions. Of course, not all distinctions in the tax law have this wonderful feature, and one might argue that the doctrinal uncertainty in the areas discussed is a result of this lack of normative content.

Many, if not most, distinctions in the tax law, however, similarly lack content.<sup>62</sup> The realization requirement and the corporate tax are

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<sup>57</sup> See I.R.C. § 368(a)(1)(B) (1994) (imposing a "solely" for stock requirement for so-called "B" reorganizations).

<sup>58</sup> See *John A. Nelson Co. v. Helvering*, 296 U.S. 374 (1935) (allowing a reorganization to be tax free with only 38% stock).

<sup>59</sup> See, e.g., *United States v. Cumberland Pub. Serv. Co.*, 338 U.S. 451 (1950) (refusing to tax a corporation on sales of property by shareholders following a liquidation distribution); *Commissioner v. Court Holding Co.*, 324 U.S. 331 (1945) (taxing a corporation on the sale of an apartment house which had been transferred to shareholders as a liquidating dividend); *Esmark, Inc. v. Commissioner*, 90 T.C. 171 (1988).

<sup>60</sup> See BITTKER & EUSTICE, *supra* note 45.

<sup>61</sup> See MARTIN D. GINSBURG & JACK S. LEVIN, *MERGERS, ACQUISITIONS, AND BUYOUTS* (1997).

<sup>62</sup> One might wonder why certain distinctions arise if they lack normative content. One possibility is that they arise out of historical anomalies that no longer (or never did) have a good normative base. For example, Professor Marjorie Kornhauser has traced the origins of the corporate tax to theories on the nature of the corporation as a person—theories that most would now find wanting. See Marjorie E. Kornhauser, *Corporate Regulation and the Origins of the Corporate Income Tax*, 66 IND. L.J. 53, 58 (1990). Aside from theo-

sufficiently fundamental that vast numbers of tax rules stem from them.<sup>63</sup> And one need only to look at a typical tax reform proposal to get a sense of the number of other distinctions that can be eliminated.<sup>64</sup>

Even the relatively small number of distinctions that have normative content have the same basic structure: fixed points, a continuous range of transactions between the fixed points, and uncertainty in the middle. For example, even though basic notions of the appropriate tax base support the boundary between personal expenses and business expenses, the boundary still follows the same structure. Expenses for personal consumption are not deductible in an income tax. Business expenses, however, are a cost of producing income; therefore, taxpayers must net them against total receipts (either through a deduction or over time through recovery of "basis") to measure income. Some things are clearly business expenses, like the cost of inventory, and some things are clearly personal expenses, such as the cost of a meal with friends. However, there is a vast area of uncertainty between these two, and drawing the line is difficult. We must decide, for example, whether corner offices, business trips to Aspen, or three martini lunches are business expenses or personal consumption. We

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ries of corporate personality, it is worth noting that the corporate tax was enacted prior to the passage of the Sixteenth Amendment to the Constitution. Corporate income taxes were constitutional at that time, although individual income taxes were not. See *Flint v. Stone Tracy Co.*, 220 U.S. 107 (1911) (holding that the corporate tax, enacted in 1909—four years before the ratification of the Sixteenth Amendment—was constitutional). Given the strong desire to tax income at the time, a corporate tax was the only choice. Congress could have eliminated the corporate tax when the Sixteenth Amendment was ratified and the individual income tax was imposed, but it was not, thus creating the two-tier tax system.

<sup>63</sup> Professor Andrews has referred to the realization requirement as the "Achilles' Heel" of the income tax. William D. Andrews, *The Achilles' Heel of the Comprehensive Income Tax*, in *NEW DIRECTIONS IN FEDERAL TAX POLICY FOR THE 1980s* 278 (Charles E. Walker & Mark A. Bloomfield eds., 1984). Once the realization requirement is imposed, a wide variety of other doctrines are needed to implement it. For example, the loss-restriction rules (partially contained in I.R.C. §§ 465 (at-risk rules), 469 (passive activity losses), 1091 (wash sales), 1092 (straddles), and 1211 (capital losses)), the depreciation rules (contained in I.R.C. §§ 167 and 168), the capital gains rules (partially contained in I.R.C. §§ 1221, 1222, and 1223) and the various timing rules (including I.R.C. §§ 163(d) (interest deduction limitations), 461(h) (economic performance rules), 1272 to 1275 (the original issue discount rules) and 7872 (low-interest loans)) all stem from the realization requirement. This list is only a tiny fragment of the rules that ultimately rely on the realization requirement for justification. See Brown, *supra* note 25, at 1588-92, for a more complete list of doctrinal distinctions that Congress could eliminate if the realization requirement were eliminated. The corporate tax is not responsible for as many tax rules, although it is responsible for a reasonable mass of rules—rules that can be explained only by several thousand pages of treatises. See GINSBURG & LEVIN, *supra* note 61. It should be remembered, however, that any policy decision on the taxation of capital income must consider the effect of the corporate tax.

<sup>64</sup> See, e.g., HALL & RABUSHKA, *supra* note 18, at 32-33 (describing how a simple, flat tax would eliminate many distinctions).



must decide whether commuting expenses, child care, work clothes, and meals eaten in the office should be deductible. But merely knowing that a distinction should be made is insufficient; the difficult task is knowing where to draw the line.

The doctrines governing these various activities are byzantine. We must decide, for example, whether meals are for the convenience of the employer, whether sufficient business is conducted at mealtime, whether employee discounts are excessive, whether home offices are used exclusively for business, or whether work clothes can be worn outside of the office.<sup>65</sup> This is only the tip of the iceberg. Much of the law school introductory tax class is devoted to exploring the intricate doctrines used in making these distinctions. Thus, even in cases in which the distinction has some normative content, there remains a doctrinally and normatively uncertain area between the fixed points.<sup>66</sup>

The extent to which there are compelling reasons for drawing a line in a given place will vary. Most of the hard distinctions in the tax law lack a sufficient normative foundation for line drawing, either because there is no normative content to the distinction or because the existing normative content is indeterminate at the boundaries. In cases, if any, in which the underlying reasons are sufficient to determine the boundaries of the distinction, the policymakers have it easy. The focus here is on the more difficult and far more common cases—the meaningless distinctions.

Methods of statutory interpretation may allow some actors to draw lines in some cases. To this extent, the focus of this Article is on Congress or a benevolent policymaker making a legislative proposal—cases in which the rules of statutory interpretation do not apply. This removes any institutional concerns about the appropriate role of various actors in our government. To the extent one believes that courts and particularly agencies have discretion beyond merely applying the plain language of a statute, implementing clear congressional will, or merely applying some other rule of statutory interpretation, this Article addresses these actors. In at least some cases, the Treasury Depart-

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<sup>65</sup> Generally, I.R.C. § 162 governs the treatment of these deductions and allows them only to the extent that they are ordinary and necessary business expenses. The tax law provides more specific rules in I.R.C. §§ 119 (meals provided by employers), 132 (fringe benefits generally, including employee discounts), 274 (meals paid for by employers), and 280A (home offices). See also WILLIAM A. KLEIN & JOSEPH BANKMAN, *FEDERAL INCOME TAXATION* ch. 5 (11th ed. 1997) (providing numerous other examples and problems).

<sup>66</sup> Policymakers may be constrained in this context as well. Consequently, policymakers cannot base line-drawing decisions on the existing underlying norm. For example, the value of certain meals provided by an employer might be excludable, and the question facing the policymaker is whether similar meals should also be excludable, even if on first principles none should be.

ment has the discretion necessary to address the line-drawing problem in a fundamental manner.<sup>67</sup>

## B. Traditional Theory Fails

Traditional methods of evaluating tax policy—most importantly, platonic reasoning, the Haig-Simons notion of income, horizontal equity, and the notion of ability to pay—fail when applied to the line-drawing problem.<sup>68</sup> This part examines the application of traditional tax policy to line drawing.<sup>69</sup>

The typical approach to line drawing is platonic. It searches for the essential meaning of words, such as corporation, partnership, debt, equity, selling, or holding, and draws lines accordingly. For example, the old regulations that distinguished corporations from partnerships focused on the meaning of the words “corporation” and “partnership” to create a list of distinguishing factors.<sup>70</sup> Similarly, the current doctrine distinguishing debt and equity looks to the typical features of “debt” and “equity.”<sup>71</sup>

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<sup>67</sup> For example, as noted in *supra* text accompanying note 49, I.R.C. § 385 empowers the Treasury to distinguish between debt and equity. The appropriate overlap between direct pursuit of good law and institutional considerations (such as deference to Congress) is beyond the scope of this Article. There is at least an argument, however, that courts and agencies should directly pursue appropriate legal results in some cases, notwithstanding institutional concerns.

<sup>68</sup> Courts and agencies also look to congressional intent for line-drawing problems. As noted above, congressional intent is indeterminate for many lines of tax laws, and particularly so for hard problems. See *supra* text accompanying note 49. In addition, Congress cannot draw lines by reference to congressional intent. As noted above, to the extent one believes the usual methods of statutory interpretation are binding on courts and agencies, this Article may be viewed as addressing Congress or a benevolent policymaker. See *supra* text accompanying note 67. To the extent that the courts and the Treasury Department have discretion, this Article addresses these actors as well.

<sup>69</sup> It has become commonplace to criticize the traditional tax theories. See *supra* note 5. The argument here focuses only on whether these theories can help solve line-drawing problems. One can both believe in the traditional tax theories and agree with the argument made here.

<sup>70</sup> See Treas. Reg. § 301.7701-3 (1995).

<sup>71</sup> For a summary of this doctrine, see Hariton, *supra* note 51, at 521-23; Plumb, *supra* note 1, at 404-12. There are numerous other illustrations of this approach. For example, one of the major reasons for the most significant change in corporate tax law in decades, the repeal of the so-called *General Utilities* doctrine, was the integrity of the corporate tax. See H.R. REP. NO. 99-426, at 281 (1985). To believe this, one must believe that there is some platonic notion of the corporate tax whose integrity can be compromised. Similarly, the 20 factors that are used to distinguish between independent contractors and employees rely on platonic notions of these categories. See Rev. Rul. 87-41, 1987-1 C.B. 296. The predominant example of platonic thinking in tax scholarship is the debate over whether particular items are “income.” Much of this debate discusses income as if it were an independent concept whose meaning can be derived through reflection. For broad approaches to tax reform based on a definition of income, see STANLEY S. SURREY, *PATHWAYS TO TAX REFORM: THE CONCEPT OF TAX EXPENDITURES 17-20* (1973) (describing the different definitions of “income” between economists and the Treasury); R.A. MUSGRAVE, *In Defense of an Income Concept*, 81 HARV. L. REV. 44, 45 (1967) (“While Professor Bittker’s

The platonic approach fails as a general method of drawing lines. The platonic or essentialist notions contained in doctrinal rules are not tied to values that a tax system should promote.<sup>72</sup> Tax doctrines do not, for example, draw lines that necessarily make the system more equitable, more efficient, or more administratively feasible. Moreover, platonic approaches cannot be defended on pragmatic grounds because the words themselves do not have readily accessible meanings. The effect is that the platonic approach does not make the system more certain.

For example, the definition of the term "realization" gives no insights into whether a particular event is a realization event. When applied outside of the most obvious context—a sale—"realization" lacks meaning. Line drawing that relies on these definitions will often fail to make the tax system more fair, more equitable, or more administrable. Similarly, the pre-check-the-box regulations distinguishing partnerships from corporations took the platonic approach. The terms "corporation" and "partnership," however, do not clearly refer to common ideas, particularly at the boundaries of these categories. Instead of clarity, platonic reasoning only creates complexity and avoidance opportunities. The platonic approach fails on theoretical grounds (because it is not tied to values we care about) and on practical grounds (because the words themselves are inherently unclear).<sup>73</sup>

Policymakers and scholars who look beyond platonic thinking usually focus on what the traditional tax theory refers to as the Haig-Simons notion of income, horizontal equity, and ability to pay. I shall consider each theory in order.

The Haig-Simons definition of income is often cited as the most important income tax principle. Under the Haig-Simons definition, income is the sum of consumption plus the change in wealth during a taxable period.<sup>74</sup> Implementing the definition would require taxpayers to value their assets at the end of each taxable period, and to include in income any increase in value and deduct any decrease.

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argument is largely in terms of specific points of income definition, the basic theme is that there is no need for a general income concept on which to build a rational income tax system. This, I believe, is an untenable position."). The same approach is used to address more narrow issues, such as whether personal injury damages should be taxable. *See, e.g.,* Joseph M. Dodge, *Taxes and Torts*, 77 CORNELL L. REV. 143, 152-62 (1992).

<sup>72</sup> This observation, as applied more generally to legal issues, goes back at least to Holmes. *See, e.g.,* O.W. Holmes, *The Path of the Law*, 10 HARV. L. REV. 457, 460 (1897). It has been a recurring theme in the literature ever since.

<sup>73</sup> To be fair to courts and regulators that adopt the platonic approach, there are separation of power arguments that dictate that words should be interpreted according to their plain meaning (whatever that is in this context). In this sense, statutes themselves may require a platonic approach. *See, e.g.,* Livingston, *supra* note 39, at 680-89, 706-12 (summarizing arguments on statutory interpretation in the field). This paper does not address institutional concerns, such as separation of powers and statutory interpretation.

<sup>74</sup> *See supra* note 4.

The Haig-Simons definition is inconsistent with most lines in the tax law. Consider the taxation of three items that would be taxed equally under the Haig-Simons definition: *A*, *B*, and *C*. Assume that *A* and *C* are taxed differently, and their taxation cannot be changed. *B* must be taxed either like *A* or like *C*. This is akin to deciding where to draw the line between *A* and *C*. For example, consider *A* as the sale of an asset and *C* as the holding of an asset. *B* is a transaction in the middle, such as hedging, and the tax code must treat this like either *A* or *C*.

The Haig-Simons definition offers no guidance for this line-drawing problem. The assumption that *A* and *C* are taxed differently inherently violates the Haig-Simons definition. Consequently, under the definition, it is not clear whether it is best for the tax law to treat *B* like *A* or like *C*.

As discussed above, a number of transactions such as selling and replacing, borrowing against appreciation, and hedging are difficult to classify under the realization requirement.<sup>75</sup> These transactions fall between the selling and the holding of an asset under a tax code that treats selling differently from holding. Under the assumed Haig-Simons ideal, however, taxpayers should pay the same tax regardless of whether they sell or hold.

One possibility is to tax intermediate cases under the Haig-Simons definition.<sup>76</sup> However, Haig-Simons taxation should not be imposed on the intermediate transactions merely because their treatment under the realization requirement is uncertain. This would simply create a presumption in favor of creating a realization event—a presumption which may not improve things. For example, taxpayers may change their behavior because of the presumption and thereby increase distortions caused by the realization requirement (primarily the so-called “lock-in” effect)<sup>77</sup> which, in turn, reduce the fairness or efficiency of the tax system. Haig-Simons taxation permits only perfect taxation (under its terms) and, therefore, cannot help draw lines in the tax law.<sup>78</sup>

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<sup>75</sup> See *supra* Part I.A.1.

<sup>76</sup> For example, Professor Shakow would rewrite substantial portions of the corporate tax law solely to adhere to this rule of thumb. See David J. Shakow, *Wither, “C”*, 45 *Tax L. Rev.* 177, 191 (1990) (stating that “[r]educing the number of nonrecognition provisions generally simplifies the application of the Code” and that “transactions should be taxable unless such a change will substantially restrict normal economic activity”).

<sup>77</sup> The lock-in effect is the incentive for taxpayers to hold assets to avoid taxation. Taxpayers are “locked-in” to assets with substantial appreciation even if they would rather sell. See *Zodrow, supra* note 2, at 440.

<sup>78</sup> The best argument for using the Haig-Simons approach is that countless lines must be drawn in the tax law, and, over time, an optimal solution almost certainly moves all lines toward either of the two competing norms—income or consumption. Because of this, adherence to the Haig-Simons definition for a given line may be preferable even if ineffi-

The Haig-Simons definition is even less helpful with respect to the debt-equity distinction. Under a pure Haig-Simons tax, there would be no two-tier corporate tax, and therefore no need for a distinction between debt and equity. The difficulties in applying the Haig-Simons definition to the debt-equity distinction are so severe that, not surprisingly, no article has attempted to do so.

Although the realization requirement and the corporate tax violate the Haig-Simons definition of income, other lines are consistent with it. Presumably, the Haig-Simons definition should offer guidance in these cases. Consider the distinction between personal and business expenses.<sup>79</sup> The issue for mixed personal and business expenses is whether they should be treated as personal or as business expenses. But the Haig-Simons definition of income is simply that—a definition. The definition itself cannot make that determination. Thus, the Haig-Simons definition is unhelpful even for line drawing consistent with its strictures.<sup>80</sup>

Horizontal equity, another traditional tax criterion, is even less helpful for line drawing than the Haig-Simons definition.<sup>81</sup> Horizontal equity requires taxing equals equally. What is "equal" is undefined, so in some sense horizontal equity is a tautology.<sup>82</sup> Usually, however, the Haig-Simons definition is used to define equality. Consequently, the problems with the Haig-Simons definition infect horizontal equity as well.<sup>83</sup> If *A*, *B*, and *C* are all "equals," but *A* is taxed differently from *C*, horizontal equity cannot determine how to tax *B*. According to the horizontal equity norm, *B* must be taxed like both *A* and *C*. If *B* is

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cient in the short run. Additionally, the Haig-Simons line may be easier to determine than the efficient line in a given context. Even if this argument is correct, we cannot take it too far—blind adherence to the Haig-Simons definition can cause significant inefficiencies in the short run. See, e.g., Shlakow, *supra* note 76, at 191 (proposing a significant change to the corporate tax regime merely to move it closer to the Haig-Simons definition, without regard to the effects of the proposal).

<sup>79</sup> See *supra* note 65 and accompanying text for a discussion of this distinction.

<sup>80</sup> To be fair to Haig and Simons, their project was designed to argue for a broader tax base, not to solve the problems posed here. See SIMONS, *supra* note 4; Haig, *supra* note 4.

<sup>81</sup> Horizontal equity has been criticized as meaningless. See Louis Kaplow, *Horizontal Equity: Measures in Search of a Principle*, 42 NAT'L TAX J. 139, 148 (1989) (criticizing horizontal equity as derivative of more fundamental notions of distributive justice); see also Peter Westen, *The Empty Idea of Equality*, 95 HARV. L. REV. 537, 542 (1982) (stating that the idea of equality, in general, "should be banished from moral and legal discourse as an explanatory norm"). But see Richard A. Musgrave, *Horizontal Equity, Once More*, 43 NAT'L TAX J. 113, 116-17 (1990) (defending horizontal equity as an independent norm). For purposes of this Article, the exchange between Kaplow and Musgrave is secondary because even if horizontal equity has meaning, it still is not helpful for purposes of meaningless distinctions.

<sup>82</sup> See Kaplow, *supra* note 81, at 140.

<sup>83</sup> If a distinction is consistent with the Haig-Simons definition, horizontal equity offers no additional guidance. If a distinction is inconsistent with the Haig-Simons definition, wherever the line is drawn, horizontal equity will be violated.

taxed like *A*, horizontal equity is violated because *B* also must be taxed like *C* and vice versa. No matter where the line is drawn, it will violate horizontal equity.<sup>84</sup>

A third traditional tax norm is the principle that each individual should pay taxes in accordance with her ability to pay. Many criticize the ability-to-pay principle as too vague to provide meaningful guidance for tax policy,<sup>85</sup> but it continues to be cited as fundamental.<sup>86</sup> Regardless of whether it is generally useful, it does not provide help for most line-drawing problems for the same reasons the Haig-Simons definition and horizontal equity do not. Ability to pay provides no method for choosing the lesser divergence when, by assumption, it is violated.

There are two other more promising strands of traditional theory. The first is vertical equity, which is commonly cited as a goal of the tax system.<sup>87</sup> The precise definition of vertical equity is unclear, but it generally means taxing differently situated taxpayers differently, with the term "differently situated" defined by reference to the Haig-Simons notion of income. However, because it relies on the Haig-Simons definition, it has the same problems described above. Also, vertical equity cannot help determine which *similarly* situated taxpayers should be treated differently, if we assume that some must, which is the nature of the line-drawing problem. Vertical equity is about *differently* situated taxpayers.

An alternative formulation of vertical equity is simply a concern with the distributional impact of taxes. Under this formulation, vertical equity has significant force, but it is not sufficient to determine where the line should be drawn on its own. For example, if the relevant distinction does not have significant distributional consequences, vertical equity will not matter. And few would argue that all distinctions should be drawn solely by reference to the distributional consequences. Distributional consequences of a decision are relevant, but, as will be discussed below, they should not be the primary consideration for line-drawing problems.

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<sup>84</sup> The realization example given above illustrates this problem. Transactions that fall between selling and holding cannot be treated like both. Horizontal equity will always be violated, and even worse, it provides no principle for deciding between lesser and greater degrees of violation. Similarly, it cannot help distinguish between debt and equity. By assumption, it is violated if there is a distinction between the treatments of similar instruments.

<sup>85</sup> See STEPHEN G. UTZ, *TAX POLICY: AN INTRODUCTION AND SURVEY OF THE PRINCIPAL DEBATE* 41-45 (1993).

<sup>86</sup> See *id.* at 41 & n.11 ("[T]he approach that claims the largest following among prominent tax policy experts is one that . . . requires that taxes be levied in accordance with taxable capacity or 'ability to pay.'").

<sup>87</sup> See, e.g., HARVEY S. ROSEN, *PUBLIC FINANCE* 333-34 (4th ed. 1995) ("In particular, it is widely agreed that a tax system should have vertical equity . . ." (emphasis omitted)).

The second promising strand of traditional theory is efficiency. Efficiency is usually defined as simply taxing all income as equally as possible.<sup>88</sup> This definition of efficiency is unhelpful for the same reasons that horizontal equity is unhelpful. Assuming that similar income is taxed differently, this conceptualization of efficiency is not sufficiently nuanced to determine how to draw lines; it provides no principle for deciding between lesser and greater degrees of violation. Much of this Article is devoted to refining the notion of efficiency to deal with line drawing in the tax law.

Because of the problems with traditional tax theories, scholarly writing on the realization requirement and the distinction between debt and equity is essentially nonexistent. As mentioned above, there is only one substantial article on the distinction between debt and equity, a 1971 article by William Plumb.<sup>89</sup> The other major source of learning in this area is a chapter from the Bittker & Eustice treatise on the corporate tax.<sup>90</sup> The dearth of articles on the subject is most likely because scholars view the distinction as entirely unprincipled. This is amazing given how important the distinction is. It is difficult to imagine a similar lack of scholarship on the distinction between, say, an enforceable contract and an unenforceable contract, or between a negligent action and a careful action.<sup>91</sup>

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<sup>88</sup> See, e.g., GRAETZ & SCHENK, *supra* note 19, at 31-32.

<sup>89</sup> See Plumb, *supra* note 1. For a recent, thoughtful article on the subject, see Jeremy I. Bulow et al., *Distinguishing Debt from Equity in the Junk Bond Era*, in DEBT, TAXES, AND CORPORATE RESTRUCTURING 135 (John B. Shoven & Joel Waldfoegel eds., 1990). The authors argue in part that the scope of the interest deduction should be based on its effect on corporate behavior. See *id.* at 162-63. They are particularly concerned about optimizing corporate finance decisions. See *id.* Their approach is consistent with the approach recommended here. See also Adam O. Emmerich, Comment, *Hybrid Instruments and the Debt-Equity Distinction in Corporate Taxation*, 52 U. CHI. L. REV. 118, 133 (1985) (noting that "the courts and the Treasury have failed to give meaning to the debt-equity distinction"); Margaret A. Gibson, Comment, *The Intractable Debt/Equity Problem: A New Structure for Analyzing Shareholder Advances*, 81 NW. U. L. REV. 452, 457 (1987) ("Although the corporate community understands this basic distinction, the practical and conceptual differences between debt and equity do not support the widely disparate tax treatment . . ."); Matthew P. Haskins, Recent Development, *Can the IRS Maintain the Debt-Equity Distinction in the Face of Structured Notes?*, 32 HARV. J. ON LEGIS. 525, 543 (1995) (noting that, in reference to the debt-equity distinction, "[t]his confusing welter of existing rules and imperfect approaches for extending rules leaves one longing for Ockham's razor").

<sup>90</sup> See BITTKER & EUSTICE, *supra* note 45, ¶ 4.02.

<sup>91</sup> The reason for the lack of scholarship is not because the Plumb and the Bittker and Eustice materials are sufficient. In fact, these materials shed little light on the appropriate distinction between debt and equity. Both simply survey the case law and attempt to find patterns, similar to Langdellian scholars from ages past. They use the underlying principles from case law to determine whether the features of traditional debt and traditional equity are present in the financial instrument in question. Although this may be appropriate for a practitioner attempting to determine the likely treatment by the courts of a particular instrument, it is not sufficient for scholarship or for policymaking. Other scholarship in the field, although less case-law oriented, takes the same approach as Plumb, and Bittker and Eustice. For example, a recent article by David Hariton proposes that the

Similarly, no one has offered a traditional analysis of the realization requirement.<sup>92</sup> This is so despite a recent Supreme Court opinion that, in the eyes of many, significantly changed the scope of the requirement,<sup>93</sup> a recent statute that modified the scope of the requirement,<sup>94</sup> and regulations that interpreted the Supreme Court decision in one of its more important applications.<sup>95</sup> The realization requirement is simply not susceptible to traditional analysis.<sup>96</sup>

In sum, traditional scholarship offers no insights into the line-drawing problem, except perhaps to argue that most distinctions should be eliminated. Two bedrock elements of our tax system, the realization requirement and the corporate tax (particularly the debt-equity distinction), have not been and cannot be adequately addressed through traditional approaches such as ability to pay, the Haig-Simons criteria, horizontal equity, or platonic notions. Scholarship addressing these areas is almost nonexistent, which is stunning given their importance to our tax system. Moreover, line-drawing problems are pervasive and enduring. Virtually all tax policymaking involves line drawing at some level. Therefore, a method for drawing lines is vital.

## II

### AN EFFICIENCY ANALYSIS OF LINE DRAWING

If traditional analysis of line drawing cannot guide us, what can? I will argue that lines should be drawn to maximize efficiency. The

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only relevant question is "to what extent does the instrument insulate the investor from the risks and rewards of the issuer's business." Hariton, *supra* note 51, at 522. Hariton offers no support for this test other than the fact that participation in the business is a traditional feature of equity. Thus, his proposal relies on platonic reasoning as well.

<sup>92</sup> Two recent articles do attempt to analyze the realization requirement from an efficiency perspective, which is the approach recommended here. See Shaviro, *supra* note 5; Weisbach, *supra* note 38.

<sup>93</sup> See *Cottage Sav. Ass'n, v. Commissioner*, 499 U.S. 554 (1991).

<sup>94</sup> See I.R.C. § 1259 (1998). This is the short-against-the-box rule discussed *supra* notes 36-38 and accompanying text.

<sup>95</sup> See Treas. Reg. § 1.1001-3 (1995).

<sup>96</sup> The distinction between personal and business expenses, however, is more susceptible to traditional analysis including efficiency issues. See Thomas D. Griffith, *Efficient Taxation of Mixed Personal and Business Expenses*, 41 UCLA L. REV. 1769, 1772-73 (1994); Avery Katz & Gregory Mankiw, *How Should Fringe Benefits Be Taxed?*, 38 NAT'L TAX J. 37, 39-41 (1985); see also Daniel I. Halperin, *Business Deduction for Personal Living Expenses: A Uniform Approach to an Unsolved Problem*, 122 U. PA. L. REV. 859, 903-05, 911-12 (1974) (arguing that deduction law should be liberalized in the areas of education and job-seeking expenses); William A. Klein, *The Deductibility of Transportation Expenses of a Combination Business and Pleasure Trip—A Conceptual Analysis*, 18 STAN. L. REV. 1099 (1966) (analyzing the deductibility of these expenses). Analysis focusing on this distinction often refers directly to the underlying goals of distributive justice such as efficiency and distributional concerns. I suspect the reason why the writing on the personal-business boundary takes this approach, but the writing on other distinctions (such as the debt-equity distinction) does not, is because it is easier to locate the personal-business decision in these underlying goals.



most difficult element of this argument is showing how line drawing affects efficiency and developing usable criteria for efficient line drawing. This Part, therefore, begins by defining efficiency and then applies the definition to the line-drawing problem. This Part then looks closely at two prominent line-drawing problems in recent debates, the check-the-box regulations and the appropriate treatment of MIPS as debt or equity, to show that efficiency can be applied to difficult line-drawing problems.<sup>97</sup> This first step shows that the line-drawing problem can be analyzed in a principled fashion, which is a step well beyond current thinking.

Where a line is drawn also affects the distribution of the tax burden. Nevertheless, I will argue that line-drawing problems are generally best solved by maximizing efficiency and adjusting the rate schedule to achieve an appropriate distribution of the tax burden. Focusing the line-drawing problem on efficiency is not at all an indication that distributional concerns are less important. Instead, welfare is maximized by using the rate structure to meet distributional concerns and efficiency to solve line-drawing problems. Part III below takes up this argument.

#### A. Applying Efficiency to Line-Drawing Problems

This Part begins with a definition of an efficient tax and an example of how the definition can be used to determine a tax structure. The discussion is essentially a brief summary of concepts found in public finance texts.<sup>98</sup> With that background, this Part applies the usual concepts of efficient taxes to line drawing.

##### 1. *Definition of an Efficient Tax*

The efficiency of a tax is measured by the so-called "deadweight loss," or "excess burden" of the tax.<sup>99</sup> Deadweight loss results from the loss of consumer (and producer) surplus when comparing the after-tax world to the before-tax world. Deadweight loss is best understood through an example. Assume that there are only two commodities in the world, wheat and barley, that each sells for \$1 per bushel, and that at that price consumers purchase 100 bushels of each

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<sup>97</sup> For a discussion of MIPS, see *supra* notes 52-53 and accompanying text.

<sup>98</sup> For good undergraduate texts on public finance, see ROSEN, *supra* note 87, and JOSEPH E. STIGLITZ, *ECONOMICS OF THE PUBLIC SECTOR* (2d ed. 1988). For more advanced work, see ANTHONY B. ATKINSON & JOSEPH E. STIGLITZ, *LECTURES ON PUBLIC ECONOMICS* (1980), and RICHARD W. TRESCH, *PUBLIC FINANCE: A NORMATIVE THEORY* (1981). For a good but technical survey of the public finance literature, see *HANDBOOK OF PUBLIC ECONOMICS*, *supra* note 20. Survey articles on optimal tax theory also provide a good introduction to the subject. See Nicholas Stern, *The Theory of Optimal Commodity and Income Taxation: An Introduction*, in *THE THEORY OF TAXATION FOR DEVELOPING COUNTRIES* 22 (David Newberry & Nicholas Stern eds., 1987).

<sup>99</sup> See, e.g., STIGLITZ, *supra* note 98, at 113.

during the year. Suppose that the government imposes a 30% tax on wheat and no tax on barley. If there were no change in behavior, the government would raise \$30 per year. But the price of wheat will go up relative to the price of barley because of the tax, so consumers will change their behavior. In the extreme, consumers will switch entirely to barley. The government would raise no tax revenue, and the loss to consumers would be large because they changed their behavior.<sup>100</sup> If consumers purchased only fifty bushels of wheat and spent their remaining money on barley, the tax collected would be only \$15. The loss to consumers, however, would be greater than \$15 because they would not only pay \$15 in tax, but also switch some of their consumption from wheat to barley, contrary to their preferences. Of course, the tax revenue raised does not count as deadweight loss because that revenue is simply transferred to the government. The deadweight loss of the tax is the loss in value to consumers in excess of the revenue raised by the government. An efficient tax is simply a tax with low deadweight loss.

The notion of deadweight loss is often demonstrated graphically. Suppose wheat, the taxed commodity in the above example, has the supply and demand curves depicted in Figure 1. The price and quantity of wheat without tax are  $P_1$  and  $Q_1$ . The consumer surplus is the triangle ACE.

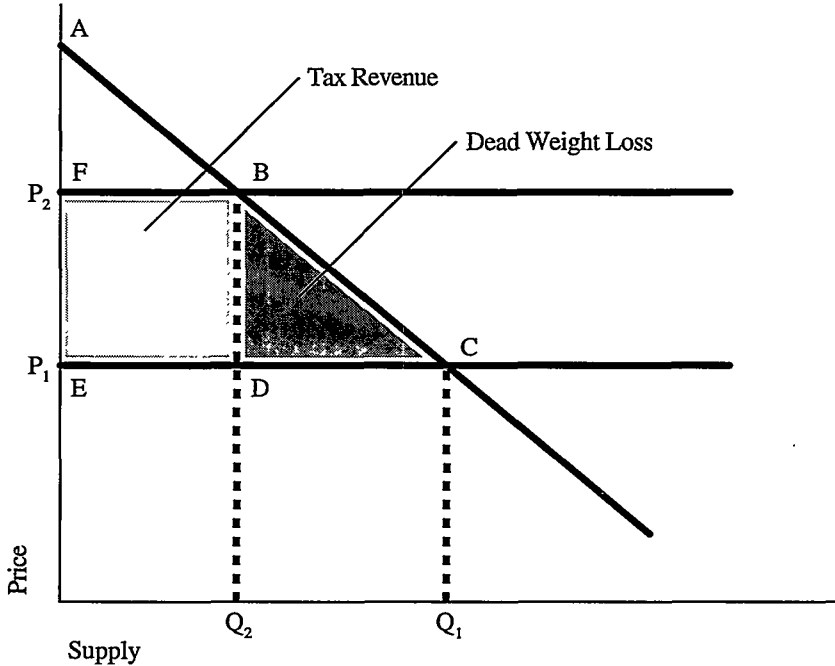
Suppose a tax of  $t$  is imposed on each unit. The price then increases to  $P_2$ , equal  $P_1+t$ , and the quantity decreases to  $Q_2$ . The loss to the consumer is the trapezoid BCEF. The tax raised is the shaded rectangle BDEF. The difference between the tax raised and the loss to the consumer, the shaded triangle BCD, is the deadweight loss from the tax. Deadweight loss is related to the change in the demand for the commodity in response to the change in the price caused by the tax. The size of the triangle is  $\frac{1}{2}t(Q_1-Q_2)$ , where  $t$  is an absolute, per-item tax. One can easily show that the size of the triangle equals  $\frac{1}{2}\epsilon P_1 Q_1 t^2$ , where  $\epsilon$  is the price elasticity of demand and  $t$  is stated as a percentage tax.<sup>101</sup>

The example above is too simplistic because the government could just tax all commodities—barley and wheat—without changing relative prices. Taxes in the real world, however, always change relative prices because at least one commodity, leisure, cannot be

<sup>100</sup> If wheat and barley were perfect substitutes, even a penny tax on wheat would motivate consumers to switch completely to barley, and there would be no loss to consumers and no revenue raised. A tax that raises revenue will always create deadweight loss, however, unless the tax is unavoidable, such as a poll tax.

<sup>101</sup>  $\frac{1}{2}\epsilon P Q t^2 = \frac{1}{2} (\Delta Q / \Delta P) (P/Q) P Q t^2 = \frac{1}{2} (\Delta Q / t P) (P/Q) P Q t^2 = \frac{1}{2} \Delta Q P t = \frac{1}{2} (Q_1 - Q_2) t^*$ , where  $t$  is a percentage tax and  $t^*$  the equivalent per item tax.

FIGURE 1



taxed.<sup>102</sup> If the government were to tax everything but leisure at a uniform rate, the relative price of leisure would become cheaper, creating deadweight loss. Individuals might prefer to work more (or less) or consume more (or less), but they do not because of taxes. Thus, deadweight loss from taxation is unavoidable.

From this discussion it might appear that an efficient tax would leave pretax behavior entirely undisturbed. This intuition is close but not entirely accurate. Individuals have less revenue after paying taxes. If they have less revenue, they *should* change their behavior. For example, if a person would eat caviar every night absent taxes, and the government takes half of her money through taxes, she should not continue eating caviar every night. Instead, she should behave like someone with half the money she originally had. Consuming rice and beans every few nights would be a more appropriate behavior. The tax system should not distort the choice among rice, beans, and caviar for that person given her after-tax income.

Thus, tax efficiency is concerned with the difference between consumers' actual after-tax behavior and the behavior they would engage in merely because they have less revenue. If the tax changes the

<sup>102</sup> Leisure cannot be taxed easily. A tax on leisure is either a uniform head tax on all individuals, which would be unfair, or an attempt to measure the benefits of leisure individually, which would be impractical. See ROSEN, *supra* note 87, at 329 ("In practice, putting a tax on leisure time is impossible.").

relative prices among rice, beans, and caviar, then our sample consumer's behavior will be different from the behavior that results merely because of the loss of income.<sup>103</sup> This difference creates the inefficiency.

Efficiency can be defined more rigorously. Consider a hypothetical government that takes money from a consumer through taxes, thus changing relative prices, and then gives the money raised back to the consumer through a lump sum distribution, which does not change relative prices.<sup>104</sup> The consumer has no net change in revenue.<sup>105</sup> The tax will change the relative prices of goods, which will ultimately change behavior and reduce utility relative to the untaxed world, even if all the tax revenue is returned to the consumer. To keep utility constant, the government would have to give the consumer more money than it raised with the tax. The deadweight loss from a tax is the difference between the amount raised by the tax and the amount needed to give back to the consumer so that the consumer would be indifferent to the tax. Note that because the tax revenue is returned to the consumer, there are no changes in behavior caused by the reduction in income. Only the changes in behavior induced by price changes remain. An efficient tax is a tax with low deadweight loss.<sup>106</sup>

Four comments are necessary. First, some terms of art from the economics literature will be useful in discussing the application of efficiency to line drawing. Economists break down the response to a change in prices into the "income effect" and the "substitution effect." The income effect is the effect on behavior caused by the change in net income to the consumer from the tax when relative prices remain the same.<sup>107</sup> The substitution effect is the change in behavior from the change in relative prices, when income remains the same. As

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<sup>103</sup> The loss in income will often cause a change in relative prices because, as noted above, people with less income may change their consumption patterns, which, in turn, will change the demand for various goods. Taxation will change relative prices from *this* set of prices, creating inefficiency.

<sup>104</sup> The government might change prices merely by increasing income, which will cause a shift in the supply and demand for various commodities. *See supra* note 103.

<sup>105</sup> Assume for the moment that the government's administrative costs are zero. Any administrative costs will just add to the inefficiency.

<sup>106</sup> Note that this definition of deadweight loss uses the "Hicks compensating variation" measure, in which the consumer's utility is held constant through compensating payments. *See* Alan J. Auerbach, *The Theory of Excess Burden and Optimal Taxation*, in 1 HANDBOOK OF PUBLIC ECONOMICS, *supra* note 20, at 61, 65. An alternative formulation, known as the "Hicks equivalent variation," measures the difference between taxes raised and the amount the consumer would pay to maintain the pretax prices. *See id.* at 65. For purposes of this discussion, the two measures are effectively equivalent. The wheat-barley example relied on the Hicks equivalent variation rather than the Hicks compensating variation.

<sup>107</sup> *See* WILLIAM A. McEACHERN, *ECONOMICS: A CONTEMPORARY INTRODUCTION* 49 (1988).

noted above in the discussion of the caviar lover,<sup>108</sup> efficiency is not concerned with income effects. Efficiency depends solely on substitution effects. The above discussion of the definition of efficiency illustrates how it isolates the substitution effect.

Because it focuses only on substitution effects, efficiency relies on the so-called "Hicksian" or "compensated demand curve."<sup>109</sup> The compensated demand curve is the schedule of quantities demanded by the consumer as prices change, assuming additional income is given to, or taken from, consumers to keep them indifferent to the change in prices (i.e., holding utility constant). The "price elasticity of demand" is the percentage change in quantity demanded for a percentage change in price.<sup>110</sup> A commodity's "own elasticity of demand" refers to a percentage change in its own price.<sup>111</sup> A "cross-elasticity of demand" refers to a percentage change in quantity of one commodity with respect to a percentage change in the price of another commodity.<sup>112</sup> A "compensated elasticity" is an elasticity computed by reference to the compensated demand curve.<sup>113</sup> Because compensated demand curves are the relevant functions and compensated elasticity is the relevant elasticity, throughout the remaining text, I will use "demand curve" and "elasticity" to mean compensated demand and compensated elasticity respectively.

Second, the definition of an efficient tax assumes perfect markets. For example, changing the consumers' purchases from the pretax 100 bushels each of wheat and barley is assumed to reduce their welfare. This assumption requires a perfect market. To the extent that there is a market failure, the definition of an efficient tax changes. In particular, so-called Pigouvian taxes are taxes, or subsidies, that attempt to cure market failures. For example, a tax on polluters might help them internalize the cost of the pollution that they would otherwise impose on society.<sup>114</sup> Similarly, if the structure of an industry allows economic profits, the profits can be taxed. The notion of efficiency relied upon here assumes that Pigouvian taxes should be used when appropriate.<sup>115</sup>

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<sup>108</sup> See *supra* note 103 and accompanying text.

<sup>109</sup> See Auerbach, *supra* note 106, at 65-67.

<sup>110</sup> See STIGLITZ, *supra* note 98, at 418-19.

<sup>111</sup> See JAMES M. HENDERSON & RICHARD E. QUANDT, *MICROECONOMIC THEORY: A MATHEMATICAL APPROACH* 22 (3d ed. 1980).

<sup>112</sup> See *id.*

<sup>113</sup> See *id.* at 23.

<sup>114</sup> For a more detailed account of this example, see ROSEN, *supra* note 87, at 99-101.

<sup>115</sup> Some market imperfections cannot readily be eliminated with a Pigouvian tax. Of particular relevance, information may be costly, and offsetting this information cost with a Pigouvian tax is not possible. See Louis Kaplow, *Accuracy, Complexity, and the Income Tax*, 14 J.L. ECON. & ORG. 61 (1998) (discussing information costs and taxation).

Third, the efficiency model eliminates the distributional effects of taxes. The deadweight loss experiment relies on the assumption that there is only a single representative consumer, which means distributional concerns are ignored. Not all consumers are alike, however, and the loss experiment, which requires returning the tax revenue to consumers, is indeterminate once we allow for differences among consumers because there is no unique method of returning the money. The redistributive effects of a tax will determine, in part, its welfare effects and generally must be considered. Despite this shortcoming, it will be argued below that the single-consumer model is usually appropriate for decisions regarding line-drawing problems.<sup>116</sup>

Fourth, the notion of efficiency used here is somewhat different from notions of efficiency commonly used in the law-and-economics literature. Law and economics generally uses the notions of Pareto efficiency and Kaldor-Hicks efficiency.<sup>117</sup> A state of affairs is Pareto efficient if nobody can be made better off without making someone else worse off.<sup>118</sup> Kaldor-Hicks efficiency requires that those who benefit from a change make transfer payments to those hurt by the change so that the change would then be Pareto efficient.<sup>119</sup>

The definition of efficiency given above assumes a single representative consumer; consequently, notions of potential transfer payments or distributional effects are absent. Any efficiency-improving change by definition helps all members of society and is, therefore, both Pareto and Kaldor-Hicks efficient. Although Part III argues that efficiency should be the predominant criterion, there is no claim that this efficiency measure alone is appropriate for solving problems more generally. This is in contrast to others who often use the Kaldor-Hicks and Pareto criteria as the sole appropriate measure for problem solving.<sup>120</sup>

## 2. *Using the Measure of Efficiency To Determine Taxes*

The efficiency goal for tax policy is to find the tax that causes the lowest deadweight loss. A seminal application of this concept was by Frank Ramsey, whose results (along with others' extensions) usually

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<sup>116</sup> See *infra* Part III.

<sup>117</sup> See JEFFRIE G. MURPHY & JULES L. COLEMAN, *PHILOSOPHY OF LAW: AN INTRODUCTION TO JURISPRUDENCE* 182-87 (1990) (discussing these notions of efficiency).

<sup>118</sup> See *id.* at 182.

<sup>119</sup> See *id.* at 186.

<sup>120</sup> The Kaldor-Hicks criterion is often used by those who claim that wealth maximization is the appropriate criterion for distributive justice. See RICHARD A. POSNER, *THE ECONOMICS OF JUSTICE* 91-99 (1983). For a more complete description of Posner's arguments, see *id.* at 48-115. This paper does not rely upon wealth maximization as a criterion for distributive justice. The Pareto criterion is often used by those who claim that making interpersonal judgments is illegitimate. No such claim is made here.

are called "optimal commodity taxation."<sup>121</sup> This section describes the Ramsey result. The next section applies the Ramsey result to line drawing in the tax law.

The most efficient tax system raises the necessary revenue with the lowest deadweight loss. A tax system will have the lowest deadweight loss if and only if the change in deadweight loss from a change in the tax on a commodity (the marginal deadweight loss) is equal for all commodities. Suppose this were not true. Then the tax system with the lowest total deadweight loss would create different marginal deadweight loss for different commodities. For example, suppose the marginal deadweight loss because of the tax on *A* is higher than the marginal deadweight loss on *B*. If we increase the tax on *B* and reduce the tax on *A*, while keeping revenue constant, the increase in tax on *B* will not increase deadweight loss as much as the decrease in tax on *A* will reduce deadweight loss. This is because the marginal deadweight loss on *B* is lower than that on *A*. This means that the change reduces deadweight loss while keeping revenue constant, contrary to the initial assumption. Therefore, the most efficient tax will set the marginal deadweight loss equal for all commodities.

In addition, the size of the deadweight loss from a tax on an item is related to the elasticity of demand of the item. The greater the elasticity, the more the demand changes for a change in price, and consequently the greater the economic distortion. In the wheat-barley example given above, if wheat has a high elasticity, consumers will substitute barley in place of wheat, and the deadweight loss will be high. Therefore, taxing commodities with low elasticity is generally more efficient than taxing commodities with high elasticity.

Nevertheless, the ability to raise taxes on low-elasticity items is limited because as the tax on a commodity increases, the marginal deadweight loss increases. In particular, one can show that because deadweight loss increases with the square of the tax rate, marginal deadweight loss increases linearly with the tax rate.<sup>122</sup> Thus, the elasticity conclusion is tempered. One cannot raise the rate on a high-taxed, low-elasticity item indefinitely. Eventually, its marginal deadweight loss will be the same as the one for a low-taxed, high-elasticity item. Taxing any one commodity at too high a rate, even one with a low, but nonzero, elasticity, will create undue losses.

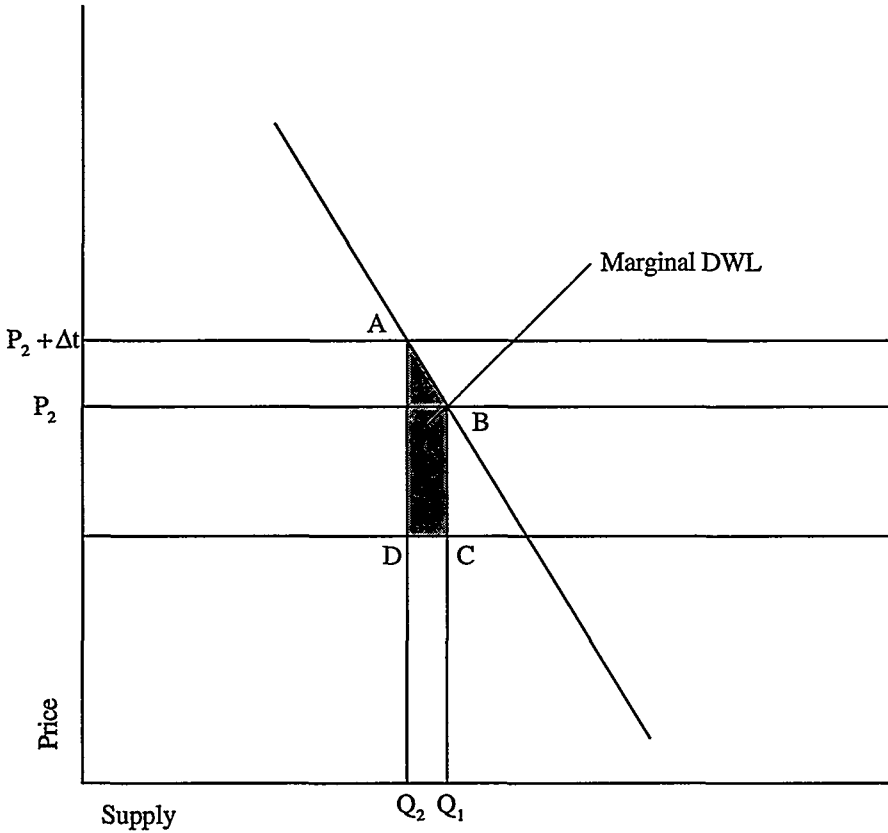
Using a diagram similar to that used above, one can provide an intuitive picture of marginal deadweight loss. Figure 2 shows a com-

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<sup>121</sup> For basic background information on optimal commodity taxation, the Ramsey rule, and the Corlett-Hague rule, see ROSEN, *supra* note 87, at 328-35.

<sup>122</sup> See *supra* note 101 (demonstrating that deadweight loss increases with the square of the tax rate). Because marginal deadweight loss is the first derivative of the deadweight loss, it increases linearly with the tax rate.

FIGURE 2



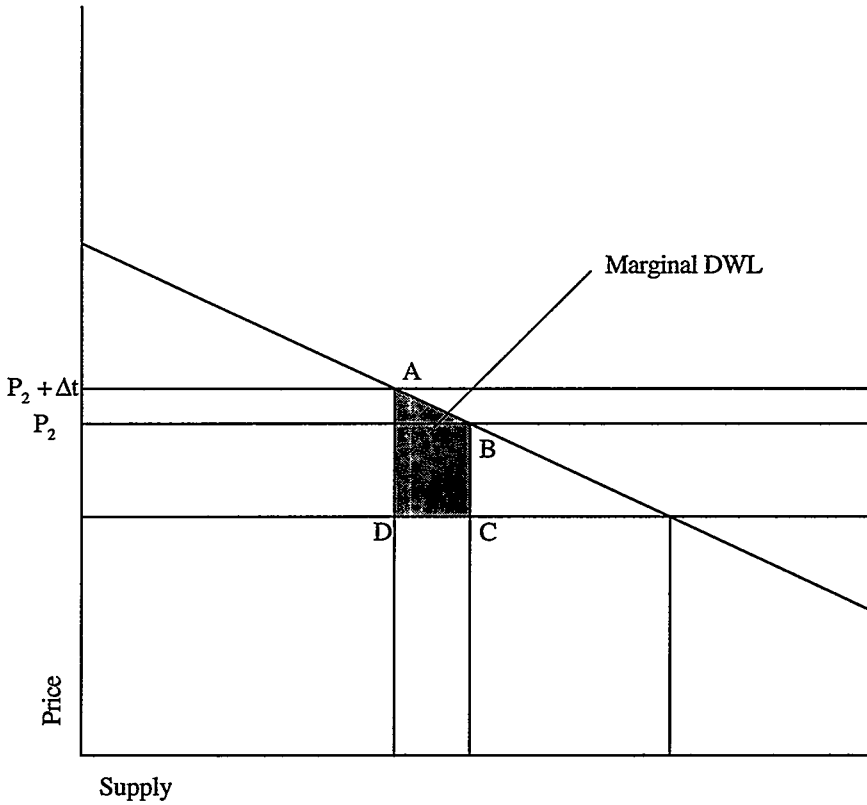
modity with a low elasticity—the percentage quantity change is relatively small for a percentage change in price. Our goal is to measure marginal deadweight loss—the loss from a change in price,  $P_2$ , due to a small increase in the tax,  $\Delta t$ . The increase in deadweight loss from the increase in tax is represented by the shaded trapezoid ABCD in Figure 2. The size of the marginal deadweight loss depends not only on the elasticity of the demand for the commodity, but also on the existing level of tax. The higher the existing tax, the greater the marginal deadweight loss from a tax increase.

If the elasticity were high, then the marginal deadweight loss would be represented by the shaded trapezoid ABCD in Figure 3. To equalize marginal deadweight losses, one needs to know the existing level of taxes and the elasticities. The trapezoid in Figure 2 is slimmer, but taller, than the one in Figure 3. To set the areas of the trapezoids equal, one needs to know both the width and the height of each trapezoid.

According to the Ramsey result, taxes should vary inversely with the elasticity of demand for a commodity. The combination of fac-



FIGURE 3



tors—the width and height of the trapezoids representing marginal deadweight loss—produces the mathematical result that the tax rate should be inversely proportional to the elasticities of commodity demands (the “inverse elasticity rule”). If the elasticity is high, the tax should be low, and if the elasticity is low, the tax should be high. The tax rate on a low-elasticity commodity, however, should not be so high that its marginal deadweight loss exceeds those of other commodities.

The inverse elasticity rule requires strict conditions. Most importantly, the price of one commodity cannot depend on the prices of other commodities. Under the more generalized version of the Ramsey result, taxes should be set so that the percentage changes in demand for all commodities caused by the taxes are equal (the “equal percentage change rule”). The equal percentage change rule is intuitively similar to the inverse elasticity rule; the only major difference is that, under the equal percentage change rule, one must pay close attention to the effect of the tax on one commodity on the demand for another. Like the inverse elasticity rule, the equal percentage change

rule generally requires different tax rates on different commodities, and high-elasticity commodities attract low tax rates.<sup>123</sup>

### 3. *Applying Optimal Tax Results to Line Drawing*

In this section, we apply the insights we have gathered so far to the line-drawing problem. We cannot directly apply the Ramsey model to line drawing because the model allows the policymaker to set individualized rates on each commodity without considering costs of classifying the commodities. In other words, line drawing is not a relevant issue in the Ramsey model. This section considers variations on the Ramsey model that we can use to develop intuitions about the line-drawing problem.

In their model, Corlett and Hague assumed that there are three goods in the economy, two of which are taxed at the same rate. The third good—leisure—is, and must remain, untaxed.<sup>124</sup> They asked whether a change in the tax could improve welfare. They found that a decrease in the tax on the good that is the better substitute for leisure and a corresponding revenue-neutral increase in the tax on the other good improve welfare.<sup>125</sup> The intuition behind their conclusion was that the reduction of the tax on the substitute for leisure would reduce economic distortions caused by failure to tax leisure. This is true because when there is no tax on leisure, but there are taxes on its substitutes, individuals shift their behavior from the substitutes to leisure. Reducing the tax on substitutes, therefore, reduces the shift to leisure. Similarly, increasing the tax on complements to leisure makes engaging in leisure more expensive, thereby reducing the economic distortions caused by failure to tax leisure.

Alan Auerbach also came to a similar conclusion.<sup>126</sup> He considered the case in which certain taxes could not be changed (for political or other reasons) and determined the optimal choice for the

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<sup>123</sup> The derivation can also be found in standard public finance texts. See *supra* note 98 (listing public finance texts treating the Ramsey result). Economists have specified the general condition under which this approach yields a uniform optimal tax rate on commodities: all goods must be equal complements of leisure. See ATKINSON & STIGLITZ, *supra* note 98, at 379 (“[T]he optimal tax conditions are identical for all goods if there is implicit separability between leisure and goods . . .”).

<sup>124</sup> See W. J. Corlett & D. C. Hague, *Complementarity and the Excess Burden of Taxation*, 21 REV. ECON. STUD. 21, 24-26 (1953); see also Avinash Dixit, *Welfare Effects of Tax and Price Changes*, 4 J. PUB. ECON. 103 (1975) (generalizing the model of equilibrium for any number of goods).

<sup>125</sup> One good is a substitute for another if individuals increase their consumption of the good when the price of another good increases. A good is a complement for another if individuals decrease their consumption of the good when the price of another good increases. See MCEACHERN, *supra* note 107, at 53-54.

<sup>126</sup> See Auerbach, *supra* note 106, at 113-15. Auerbach followed a model first proposed by Green. See H.A. John Green, *The Social Optimum in the Presence of Monopoly and Taxation*, 29 REV. ECON. STUD. 66 (1961).

remaining taxes.<sup>127</sup> Consider the simple case of taxing only two commodities. Fix the tax on the first commodity, and allow the tax on the other to vary.<sup>128</sup> According to Auerbach, we should tax the second commodity on the basis of the ratio of its cross-elasticity with the first commodity to its own elasticity.<sup>129</sup> Consider each element in the formula.

Recall that the cross-elasticity measures the percentage change in the demand of a commodity for a percentage change in the price of another. If the absolute value of the cross-elasticity of a commodity is high, the commodity is either a good substitute or a good complement for the second commodity. In other words, the two commodities are closely related. If the two commodities have a negligible cross-elasticity, they are largely unrelated.

Because the cross-elasticity of the two commodities is in the numerator of the ratio, the higher (in absolute value) the cross-elasticity, the higher the tax (or subsidy) should be. This is not surprising considering that if the second commodity is a good substitute for the first (so that the cross-elasticity is high), a tax on the second will reduce the distortions caused by the tax on the first. For example, if butter is taxed, a tax on margarine (a good substitute for butter) would reduce the number of consumers shifting from butter to margarine. If the second commodity is a complement to the first, the tax on the second should be negative—a subsidy. Again, this makes sense because the subsidy for the second commodity will reduce distortions caused by the tax on the first. For example, if right shoes are taxed, a subsidy for left shoes will reduce the distortion caused by the tax. If the cross-elasticity between two commodities is near zero, a tax or subsidy on the second commodity will have little effect on the distortions caused by the tax on the first.

The own-elasticity of a commodity measures the sensitivity of its demand to a change in its price.<sup>130</sup> Any variation of the own-elasticity in the denominator of the ratio would affect the size of the tax or subsidy suggested by the cross-elasticity in the numerator. The higher the own-elasticity, the lower the tax. This is consistent with the Ram-

<sup>127</sup> See Auerbach, *supra* note 106, at 113-15.

<sup>128</sup> This model does not require the tax on the second commodity to raise a specific amount of revenue. Revenue-neutrality is maintained in the model by adjusting a "lump sum" tax (a tax that cannot be avoided through behavior, such as a poll tax. The goal of the model is to show that even in the presence of lump sum taxation), a "distorting" tax on the second commodity may improve welfare. This is directly within the tradition of the "second best" results: a change can actually improve welfare even though it may not seem capable of doing so when considered in isolation.

<sup>129</sup> Auerbach expressed the tax on the second commodity as  $\theta_2 = \theta_1(\epsilon_{12}/\epsilon_{11})$ , where  $\theta_1$  is the tax on commodity 1,  $\epsilon_{12}$  is the cross-elasticity between commodity 1 and commodity 2, and  $\epsilon_{22}$  is commodity 2's self-elasticity. See Auerbach, *supra* note 106, at 114.

<sup>130</sup> See *supra* note 111.

sey intuition—we should not tax a high-elasticity commodity at too high a rate or we will cause a large deadweight loss. If its own-elasticity is small, then we can impose a tax or provide a subsidy on the commodity with low cost.<sup>131</sup>

The Corlett and Hague model, and the Auerbach model, provide valuable intuitions about line drawing because both models involve setting tax rates, and we can view line drawing as simply setting the rates on various transactions. Treating a security as equity rather than debt changes the effective tax rate on the security. Treating a transaction as a realization event changes the tax rate on the transaction. Thus, we can treat line drawing as a subset of rate setting.

For example, consider an activity that falls between traditional notions of realization and nonrealization (selling and holding), say, borrowing against appreciation, or hedging the risk of gain and loss. If an activity is a close substitute for selling, then, all other things being equal, we should tax it as a sale. That is, activities that are just “like” selling should be taxed like sales because they are likely to be close substitutes for selling. But if the activity has a high own-elasticity, taxing it as a sale would produce a large deadweight loss. Therefore, own-elasticity acts as a countervailing factor. That is, if taxpayers can avoid a given realization rule by shifting to another transaction, taxing the activity like a sale may not be efficient. If we can keep the substitutes together, and if the sale-like activities collectively have a low own-elasticity, then we can achieve efficient taxation.

Similarly, consider a security that falls somewhere between equity and debt. If the security is a closer substitute for equity than for debt, we should tax it as equity. The benefit of taxing it like its close substitute, however, is limited. Taxing the security as equity will raise its tax and, depending on its own-elasticity, create an incentive to shift to other securities.<sup>132</sup> On the other hand, if the security is a close substi-

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<sup>131</sup> In the more general case in which there are several pre-existing fixed taxes and a single variable tax, one should set the variable tax at the weighted average of the ratios. A model by John Wilson provides a similar insight. See John Douglas Wilson, *On the Optimal Tax Base for Commodity Taxation*, 79 AM. ECON. REV. 1196 (1989). Wilson considers the optimal number of commodities that one should tax under the assumption that adding additional commodities to the base increases administrative costs. As one adds commodities to the base, the marginal distortion from taxation decreases (i.e., as the tax base approaches ideal), but the marginal administrative cost increases. Wilson finds that “a general rise in the substitution elasticities between taxed and untaxed commodities increases the optimal number of taxed commodities.” *Id.* at 1196. This is consistent with the conclusions from the Auerbach and Corlett-Hague models: the substitutability of commodities that are taxed differently should concern us. For prior work along similar lines, see Shlomo Yitzhaki, *A Note on Optimal Taxation and Administrative Costs*, 69 AM. ECON. REV. 475, 475 (1979) (presenting “the solution to a simple model of optimal taxation which includes the administrative cost of taxation”).

<sup>132</sup> To complete this picture, we need to examine both the corporations’ rationale for issuing various types of securities and the social costs of incentives to switch between securi-

tute for debt, then we should tax it like debt. In general, we should tax a security like its closest substitute, but we should be more expansive in applying this rule for debt than for equity because the debt rules generally cause fewer distortions than the equity rules.

The Corlett and Hague model, and the Auerbach model, only consider whether the commodity is a good or bad substitute (or complement) for one other commodity. The line-drawing problem is far more complex. It involves taxing a transaction (or commodity) either like one transaction (or group of commodities) or another. Shifting toward one means moving away from the other, and we should take both effects into account. In addition, while the Corlett and Hague model, and the Auerbach model, allow continuous changes to the tax rules through rate adjustments, line drawing involves a discontinuous change. We treat a security as either debt or equity. If its features change just a little so that it crosses the "line," the tax treatment jumps dramatically.

A third model adds these elements. The model considers the case in which there are three commodities (plus leisure), but we allow only two tax rates.<sup>133</sup> Thus, we must tax one of the commodities like one of the others, effectively drawing a line. For example, we must tax *B* either like *A* or like *C*. Effectively, we must draw a line to one side of *B* or the other. Modeling this case allows us to determine whether we can reduce deadweight loss by taxing *B* like *A* or like *C*.

The solutions for the optimal rate structure within this model are similar to the familiar Ramsey rule,<sup>134</sup> except that the optimal rates are based on the weighted average of the similarly taxed commodities. Thus, in the simple case of the Ramsey model with the conditions that produce the inverse elasticity rule, if we tax commodities *A* and *B* at the same rate, the optimal rate is inversely proportional to the weighted average (by size of the market) of the elasticities of *A* and *B*. In the more general case, the optimal rates produce the same weighted-average percentage reduction in the demand for the commodities. If we tax *A* and *B* at the same rate, the combined percentage reduction in demand for *A* and *B* must be the same as the percentage reduction in demand for *C*.

To determine whether it is better to tax *B* like *A* or like *C*, we must determine the tax rule that gives the lower deadweight loss at the optimal rate. Intuition might lead us to believe that we can minimize deadweight loss if we tax commodities with the most similar elasticities

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ties. Thus, the analysis of tax on securities is not as straightforward as the analysis of consumer preferences in the commodities cases. See *infra* Part II.B (providing a more complete discussion of this issue in the context of MIPS).

<sup>133</sup> See David Weisbach, 29 J. LEGAL STUD. (forthcoming 2000) (on file with author).

<sup>134</sup> See *supra* notes 98, 123.

at the same rate. In general, however, this is not correct. The cost of deviating from the optimal tax will be different for different commodities. Thus, we should be less willing to be "wrong" for some commodities than for others. In particular, the cost of being wrong by a given amount for a high-elasticity commodity will be higher than the cost of being wrong for a low-elasticity commodity. We should be less willing to group commodity *B* with high-elasticity commodities because the associated cost often will be higher than if we group commodity *B* with low-elasticity commodities. In other words, we should group commodity *B* with the high-elasticity commodity only when its elasticity is somewhat closer than halfway between the two.<sup>135</sup>

The conclusions from the three-commodity-and-two-tax model extend and reinforce the conclusions from the Auerbach model. The difference is that now we must consider whether commodity *B* is a closer substitute for *A* or for *C*. Nevertheless, we must still consider the substitution effects (in a slightly more complex manner) and the direct effects. For example, if we consider a transaction that falls between selling and holding, we should tax the transaction like its closest substitute (to take into account the substitution costs), but should not tax the high-elasticity transaction too much (to take into account the direct costs). A similar conclusion for the distinction between debt and equity follows: we should tax a security like its closest substitute, but should be a little more generous for debt than for equity.

To summarize, the three models examined—the Corlett and Hague model, the Auerbach model, and the three-commodity-and-two-tax model—all introduce some imperfection to the tax system and examine the optimization of the tax structure given the imperfection. In this sense, the models are similar to the line-drawing problem, in which we assume that one must draw a line between essentially similar items. The models all point to the same basic factors—substitution costs and direct costs. We should tax similar things similarly to minimize substitution costs, but not too much at the expense of direct costs.

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<sup>135</sup> In the general equilibrium case, optimal rates are set so that they produce the same percentage reduction in (i) the weighted average of demands for two commodities taxed at the same rate and (ii) the demand for the commodity taxed alone. To determine where to draw the line, one should first calculate the optimal rates and the corresponding deadweight loss in each possible situation. One should then select the rule with the lowest deadweight loss. The minimization of the deadweight loss is based on the own elasticity of the commodity and the substitutability with other commodities (i.e., the cross-elasticities). We should not tax high-elasticity commodities at high rates, and should tax similar items similarly.

#### 4. *Further Comments on Applying Optimal Tax Insights to Line Drawing*

The intuitions developed from the models are useful, but the models are highly stylized and need further development before they can be practically applied. This section applies efficiency to line-drawing problems in more realistic settings, in particular the check-the-box regulations.

Recall that the old four-factor test treated a business as a corporation if (i) it was incorporated under state law, (ii) the equity of the entity was publicly traded, or (iii) the entity had the requisite number (three) of the four corporate factors.<sup>136</sup> The third element, the four factors themselves, was easily avoidable, and the check-the-box regulations repealed this element of the test, while leaving the public trading and actual incorporation lines.<sup>137</sup> I will ignore the actual incorporation test here based on the assumption that in future years, fewer companies will actually incorporate given the option of using limited liability companies instead.

The basic reasoning behind the regulations is consistent with the models. Assume that publicly traded entities will be treated as corporations, and that entities that are not publicly traded and that fail all four factors will be treated as partnerships (e.g., a two-person, general partnership). These are the "fixed" points, *A* and *C*. The question is how to treat entities in the middle (*B*). Consider the four-factor test as a possible line.

The four factors had close substitutes that did not count toward becoming a corporation and therefore did not result in a corporate tax. The market was slow in developing these substitutes, but by the time the Treasury issued the check-the-box regulations, the use of substitutes was prevalent because of their lower tax cost.<sup>138</sup> For the same reasons, the four factors themselves were highly elastic. Both elements from the models point to the same conclusion: the four factors should not be taxed differently from their substitutes; they should not create corporate status because their substitutes do not. Also, they should not be taxed at a high rate, so they should not create corporate status. Using the four factors to define corporate tax is, under this logic, inefficient. Thus, the basic logic behind the check-the-box regulations seems plausible.

The first problem with this analysis is that the four-factor test and the check-the-box test are incommensurate because they raise differ-

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<sup>136</sup> See *supra* notes 6-8 and accompanying text.

<sup>137</sup> The limitation on flow-through taxation for entities incorporated under state or federal statute is embedded in Treas. Reg. § 301.7701-2(b)(1) (1996), while the limitation for entities that are publicly traded is found in I.R.C. § 7704 (1994).

<sup>138</sup> See *supra* note 9 and accompanying text.

ent amounts of revenue. The four-factor test may be less efficient, but it raises more revenue. Generally, taxes that raise more revenue will have a higher deadweight loss,<sup>139</sup> so it is not immediately apparent that the above analysis condemns the four-factor test.

The general problem with applying the models to real decisions is that moving a line will often change tax revenues, and we do not know what offsetting changes in tax law will be made to keep total revenues constant. For example, changing the border between debt and equity would change the size of the corporate tax base. If that change reduces tax revenues, we will have to increase some other tax. Congress could increase the gasoline tax, change the foreign tax credit rules, lower the child care credit, or make any number of other changes. It is difficult to determine whether a given change is efficient without knowing where the offsetting changes will be made or the corresponding change in deadweight loss.

The models did not have this problem because they automatically adjusted tax rates to raise a constant amount of tax revenue. In the Corlett and Hague model, if the tax on one commodity was decreased, it required a corresponding increase in the tax on the other commodity.<sup>140</sup> In the three-commodity-and-two-tax model, if *B* was taxed like *C*, the rates were set optimally given that and the revenue constraint. If taxing *B* like *C* meant that rates had to be raised (above the rate at which *C* would be optimally taxed if *B* were independent), the model adjusted the rates and added in the additional deadweight loss. The optimal conditions minimized deadweight loss subject to this feedback mechanism.<sup>141</sup>

Without knowing where Congress will make the offsetting revenue change, it is difficult to determine whether a tax law change is efficient. One solution is to consider only revenue-neutral changes to the tax base.<sup>142</sup> To allow more general considerations, we can consider a stand-alone measure of the marginal efficiency of a tax (the efficiency cost of another dollar of revenue from the system) known to economists as the marginal efficiency cost of funds (MECF).<sup>143</sup> We

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<sup>139</sup> See *supra* note 122 and accompanying text.

<sup>140</sup> See Corlett & Hague, *supra* note 124, at 26-27.

<sup>141</sup> In the Auerbach model, the government was allowed to impose nondistorting lump sum taxation, which was adjusted to offset the effect of the distorting tax imposed on the commodity. See Auerbach, *supra* note 106, at 119-23.

<sup>142</sup> This is, in a loose sense, required under the current law. See Elizabeth Garrett, *Harnessing Politics: The Dynamics of Offset Requirements in the Tax Legislative Process*, 65 U. CHI. L. REV. 501, 509-10 (1998) (describing the codification of revenue neutrality in tax legislation).

<sup>143</sup> The concept of the MECF is based on a more generic problem of public finance. If taxes are to finance pure public goods, then one must adjust the marginal cost of the goods for the marginal distortion engendered because the funds for the project must be raised via distortionary taxes. Economists developed the MECF to measure this cost. See,



can roughly assume that a new line is appropriate if it is more efficient than the average or median efficiency of the system. Eliminating a tax with a high-efficiency cost is likely to be an improvement even if we do not know where the offsetting revenue will be found. If the tax that raises the offsetting revenue is no worse than the average tax, then the combined change is an improvement. Thus, if the four-factor test is less efficient than most other sources of revenue, it should be abandoned.

Fortunately, a simple measure of the MECF is readily computable from data gathered for revenue-estimating purposes (albeit only for legislative changes, not regulatory changes). The measure is simply the ratio of the revenue that would be raised from a tax absent any behavioral distortions to the actual revenue raised.<sup>144</sup> The revenue actually raised and the revenue raised without behavioral changes are

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*e.g.*, Charles L. Ballard & Don Fullerton, *Distortionary Taxes and the Provision of Public Goods*, 6 J. ECON. PERSP. 117 (1992) (using the MECF to determine that a hypothetical wage tax was distortionary). The use of the MECF to determine the optimal provision of public goods has recently been challenged. See Louis Kaplow, *The Optimal Supply of Public Goods and the Distortionary Cost of Taxation*, 49 NAT'L TAX J. 513 (1996).

This Article uses the MECF to compare different taxes for the same supply of public goods (i.e., the same level of taxes). Therefore, for purposes of this Article, the MECF is relevant notwithstanding whether it should be used to determine the level of taxes.

<sup>144</sup> See JOEL SLEMROD & SHLOMO YITZHAKI, THE COST OF TAXATION AND THE MARGINAL COST OF FUNDS, International Monetary Fund Working Paper (vol. 43, No. 1 1995). The measure was developed by Joel Slemrod and Shlomo Yitzhaki primarily to allow administrative costs to be included in efficiency analysis. We want to calculate the marginal burden of a tax change for a given change in tax revenue. This is easiest to calculate using the indirect utility function,  $V(p, y)$ , which is utility expressed as a function of price,  $p$ , and income,  $y$ . By a theorem known as Roy's identity (the intuition for which will be given below),

$$\frac{\partial V}{\partial P_i} = \lambda X_i$$

where  $\lambda$  is the marginal utility of income,  $p_i$  is the price of commodity  $i$ , and  $X_i$  is the quantity of commodity  $i$  demanded. See TRESCH, *supra* note 98, at 62. If we assume fixed producer prices, the imposition of a tax will increase prices by the same amount, so that  $dp_i = dt_i$ , and thus

$$\frac{\partial V}{\partial P_i} = \frac{\partial V}{\partial t_i} = \lambda X_i$$

The marginal burden of a tax reform will be the change in utility expressed in dollars—the change in utility divided by the marginal utility of money,  $\lambda$ . The change in utility is the total differential of the indirect utility function, so using Roy's identity,

$$MB = \frac{\partial V}{\lambda} = \sum x_i dt_i$$

Let  $\delta_i$  be the change in revenue from a small change in tax,  $MR_i dt_i$ . Substituting  $\delta_i$  into the formula for marginal burden, we obtain

$$MB = \sum \left( \frac{X_i}{MR_i} \right) \delta_i$$

the "dynamic" and "static" revenue estimates routinely computed for tax law changes. Thus, policymakers can learn, in real time, the efficiency costs or benefits of a tax law change.

For example, we can calculate the MECF for the four-factor test based on some simple assumptions.<sup>145</sup> Suppose there are ten similar businesses, each of which produces income that, if subject to the corporate tax, would create \$100 of tax liability. In addition, suppose that under the check-the-box regime, six would be corporations with no change in behavior and that under the four-factor test, all ten would be corporations.<sup>146</sup> Taxpayers, however, will change their behavior to avoid corporate status. Suppose that under the check-the-box regime, one taxpayer arranges its business to avoid corporate status, so that the actual revenue collected is \$500. Furthermore, suppose that under the four-factor test, four taxpayers alter their businesses to avoid corporate status, so that the total revenue is \$600.

Assume that public trading is the line drawn, and we want to compute the MECF of the additional tax revenue from adding the four-factor test. The MECF is the static revenue change, which is the increase in tax revenues expected from the rule change (assuming nobody changes her behavior to respond to the rule) divided by the actual revenue. The increase in revenue absent any behavioral change is \$500 (assuming the business that avoids the public trading line of the check-the-box rules would be a corporation under the four-factor test without any further behavior change). The actual revenue from the rule is \$100, so the MECF is \$500 divided by \$100 or five.

If the cost of funds for other taxes is lower than five, then the other taxes should be used instead of the four-factor test.<sup>147</sup> It is this thinking, that the efficiency cost of the additional revenue from the

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The change in marginal burden for a given change in tax is the amount in the parenthesis, which is the marginal efficiency cost of funds.

The key to the statement of the MECF is Roy's identity. The intuition behind Roy's identity is as follows. Consider a small increase in the price of a commodity, say a price increase of \$1. How much money would a consumer need for her not to care about the increase? She would need at most \$1 multiplied by the amount of the commodity consumed,  $X$ , because this amount will allow her to consume the identical bundle of goods as before the price increase. She might need less because good substitutes might be available, but the upper bound on the change in (money metric) utility from a small change in price is  $\$X$ . Consider a small decrease in price. How much better off is the consumer? At least \$1 multiplied by the amount of the commodity consumed because she can consume the same bundle and keep that amount. Thus, the lower bound on the change in utility for a small change in price is  $\$X$ . The upper bound and lower bound are both  $\$X$ , so the change in utility from a change in price of \$1 is  $\$X$ .

<sup>145</sup> I thank Dan Shaviro for suggesting the basics of this example to me.

<sup>146</sup> These numbers are summarized *infra* in Table 1.

<sup>147</sup> This analysis ignores other distortions caused by imposing the corporate tax. For example, the five businesses that are taxed as corporations under the check-the-box regime may issue more debt than they otherwise would. A more complete analysis would consider all the behavioral changes resulting from a change in the tax law.

TABLE 1

	Check-the-box	Four factors
Number of corporations with no changes in behavior	6	10
Actual number of corporations	5	6
Tax collected	\$500	\$600
MECF		5

four-factor test is higher than from other sources, that underlay the decision to enact the check-the-box regulations.<sup>148</sup>

This calculation uses the simplified formula, which relies only on static and dynamic revenue, for determining the MECF. For large tax law changes, this formula may not reflect the true costs.<sup>149</sup> The choice between the check-the-box regulations and the four-factor test may be large enough to warrant a direct calculation of burden. Suppose that the cost of avoiding the four-factor test is \$30, \$60, \$80, and \$90 for the four taxpayers who avoid it, and over \$100 for the rest (so that they would rather pay the corporate tax than avoid it).<sup>150</sup> Suppose also that the one taxpayer who avoids corporate status under the check-the-box rules was one of these four, that its cost of avoiding check-the-box was \$80, and that it must spend an additional \$10 to avoid the four factors for a total cost of \$90. The increased burden on taxpayers from the four-factor test is \$180, which is the sum of the tax paid by the business that is newly treated as a corporation and the cost of avoiding corporate status for the rest. The additional revenue is \$100, so each additional \$1 of revenue increases the burden on taxpayers by \$1.80. The decision to eliminate the four-factor test is based on whether other sources of the \$100 have a lower burden. This approach is obviously less practical than the simple MECF calculation and is better suited for tax changes that have long gestation periods. In fact, many tax law changes are supported by significant studies, usually conducted by affected industries with relatively cheap access to the data, so more accurate measurements may often be feasible.

<sup>148</sup> Another major factor was simplification. The check-the-box rules are viewed as a significant simplification over current law. Administrative costs can readily be incorporated into the MECF. See SLEMROD & YITZHAKI, *supra* note 144, at 16-17.

<sup>149</sup> This is because the formula depended on Roy's identity, which involved the derivative of the indirect utility function. See TRESCH, *supra* note 98, at 62. For a large change in prices, Roy's identity might not be valid.

<sup>150</sup> The MECF calculation using the static revenue estimate as a measure of deadweight loss assumed that the deadweight loss of a \$100 tax increase (i.e., becoming subject to the corporate tax created an additional tax liability of \$100).

A second problem is that in the formal models, we know all of the relevant information, particularly the starting point from which to consider reform. For example, the Corlett and Hague model starts from uniform taxation and asks whether we can make an improvement.<sup>151</sup> The Auerbach model starts with an existing distortion around which we determine the remaining taxes.<sup>152</sup> The starting points in these cases are critical. If, in the Corlett and Hague model, the commodity that is a substitute for leisure had a very low tax rate, raising the rate might improve welfare. That is, we cannot conclude that taxing substitutes more similarly than under current law makes lines more efficient, unless we make assumptions about the existing distortions and tax rules. We cannot state a simple a priori rule. The appropriate direction of change depends on the starting point for reform.

One must be extremely careful in determining the starting point for reform. Existing tax law imposes numerous distortions that might alter the starting point. Some transactions have been developed solely because of taxes. For example, some have argued that short-against-the-box transactions would not exist absent taxes.<sup>153</sup> We should not, however, be concerned with this "tax elasticity" because the very existence of the transaction was due to a preexisting distortion—the particular definition of the realization requirement that treated short-against-the-box transactions as nonrealization events. In the financial world, in particular, it is difficult to separate "real" transactions that might occur absent tax distortions from transactions structured solely or substantially around the existing tax law. In these cases, we should not be concerned with the presence or absence of particular transactional forms. Instead, we should determine whether taxes distort or change the ability of taxpayers to achieve their desired risk and return. Thus, we should analyze the effects of taxing the short-against-the-box transaction, namely the lock-in effect and the ability of taxpayers to diversify, not the number of short-against-the-box transactions.

Third, we cannot simply interpret the models as suggesting that lines in the tax law should be made harder to avoid. A line can be *too* hard to avoid, at least from an efficiency perspective. This can happen because there are two components in the deadweight loss triangles (or marginal deadweight loss trapezoids): the width (reflecting elasticity) and the height (reflecting the size of the tax).<sup>154</sup> Taxing a low-elasticity item too high is not optimal. We can think of these

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<sup>151</sup> See *supra* notes 124-25 and accompanying text. For a complete description of their study, see Corlett & Hague, *supra* note 124, at 21.

<sup>152</sup> See *supra* notes 127-29 and accompanying text.

<sup>153</sup> See Kleinbard, *supra* note 36, at 790 (noting that "[a] short-against-the-box is a pure creature of tax law").

<sup>154</sup> See *supra* Figures 1, 2, 3.

dimensions as the number of taxpayers that shift their behavior (the width) and the social cost (loss of consumer surplus) for each shift (the height). If a line is too hard to avoid, there may be few shifts, but each shift will have a large cost. Making the line easier to avoid effectively reduces the tax on an activity because it is cheaper to avoid the tax. This may reduce deadweight loss even though additional taxpayers will alter their behavior.

To make this more concrete, suppose the cost of avoiding the check-the-box rules for the single taxpayer is \$99, but the cost of avoiding the four-factor test is \$20 for each of the four taxpayers who do so. Then, as illustrated in Table 2, the total deadweight loss from the four-factor test is less than the deadweight loss from the check-the-box test, despite allowing more taxpayers to avoid the rule and raising more revenue. Here, the four-factor test is more efficient than the check-the-box rule. We cannot simply look at how many taxpayers avoid a line. We must also look at the costs of doing so.

TABLE 2

	Check-the-box	Four factors
Cost per avoider	\$99	\$20
Number of avoiders	1	4
Deadweight loss	\$99	\$80
Revenue	\$500	\$600

The four-factor test is efficient in this example because it both raises revenue and allows people or businesses to avoid the tax at a low cost. The business that is treated as a corporation has an avoidance cost of over \$100, while the four who avoid corporate tax treatment have an avoidance cost of \$20 each—a dramatic shift. The extreme differences among taxpayers cause this result. The tax raises revenue because one business cannot avoid it, but it produces low deadweight loss because the four who can avoid it do so easily.<sup>155</sup>

Knowing the starting point and dealing with lines that are easy or hard to avoid may be viewed as second-best problems, and may be causes of despair.<sup>156</sup> One is forced between the Scylla of simple gen-

<sup>155</sup> There are a number of other reasons for us to be cautious about applying simplified models to real-world problems. For example, the conclusions of the optimal commodity tax model change in the presence of an income tax. See Stiglitz, *supra* note 20, at 1029. Similarly, the assumption of fixed producer prices may be unrealistic. The models should be taken merely as ways to clarify thinking and develop intuitions about the efficiency effects of line drawing. Ultimately, any decision regarding a particular line must involve a careful consideration of the consequences in light of the relevant facts.

<sup>156</sup> See Angus Deaton, *Econometric Issues for Tax Design in Developing Countries*, in *THE THEORY OF TAXATION FOR DEVELOPING COUNTRIES*, *supra* note 98, at 92, 92-113; Robert H.

eralizations that are sometimes wrong and the Charybdis of an approach that is too complex to apply. Nevertheless, if these are the relevant variables, a good tax system must take them into account, at least implicitly. This is a challenging, yet feasible task. Academics have the time to study these problems and can recommend solutions based on relevant empirical data.

Additionally, we can develop some rules of thumb for real-time analysis by policymakers, rules that, while not always correct, are likely to point in the right direction. First, as the models tell us, we should be concerned about substitution costs and direct costs. Second, the MECF is a useful policy guide and is relatively easy to compute. Lines with high MECFs are unlikely to be optimal, as intuition may suggest. Third, when thinking about preexisting distortions, such as the existence of tax-motivated transactions, we should focus on the underlying consumption or savings decisions rather than on the transactions themselves. Even these decisions will have preexisting distortions, but focusing on them avoids the traps of focusing on transactional form.

This is the type of thinking that occurs daily at an intuitive level in tax policymaking. It is, for example, consistent with the stated rationale for many tax law changes.<sup>157</sup> Moreover, policymakers usually do not pay serious attention to a complex or large tax change that raises little revenue because it can be avoided (and, therefore, has a high MECF), even if it conforms to Haig-Simons or platonic notions of good policy. Formalizing the intuitions and making them legitimate concerns for tax policy can only help decisionmakers.

The feasibility of the efficiency approach probably remains the most common objection. The next section attempts to quell these

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Haveman, *Optimal Taxation and Public Policy*, in MODERN PUBLIC FINANCE 247, 247 (John M. Quigley & Eugene Smolensky eds., 1994) (“[B]ecause of the limitations of optimal income tax theory, policymakers should treat all policy inferences derived from it with circumspection.”); Charles E. McLure, Jr. & George R. Zodrow, *The Study and Practice of Income Tax Policy*, in MODERN PUBLIC FINANCE, *supra*, at 165, 205; Joel Slemrod, *Optimal Taxation and Optimal Tax Systems*, J. ECON. PERSP., Winter 1990, at 157.

<sup>157</sup> To take an example from recent legislation, consider the change in the realization rule that requires certain hedging transactions, such as shorts-against-the-box, to be treated as realization events. See I.R.C. § 1259 (1998). The rationale for this change is that the economics of this class of hedges were substantially identical to that of a sale. Before the enactment of § 1259, taxpayers could easily avoid sale treatment by using these transactions. See H.R. CONF. REP. NO. 105-220, at 512 (1997). In other words, selling and hedging of this sort are close substitutes. Inevitably, the legislation merely moves the line. But one hopes it moves the line to a place where it is not as easy to substitute transactions. Another example is the repeal of the so-called *General Utilities* doctrine. See *supra* note 71. In this case, Congress expanded the corporate tax base while knowing that the corporate tax causes economic distortions. The stated logic was in part the worst sort of platonic thinking, involving the “integrity” of the corporate tax base. Nevertheless, the underlying intuition is that the transactions covered by the *General Utilities* doctrine were close substitutes for other, higher taxed transactions and that efficiency was improved by taxing these transactions alike, notwithstanding the expansion of the corporate tax base.

concerns by reviewing several recent studies of line-drawing problems that take an efficiency approach.

### B. Further Examples of Efficient Line Drawing

This section considers some additional examples of efficient line drawing to show that the approach is workable. The goal is to illustrate the recommended approach rather than to provide definitive answers to these problems. In particular, empirical research is necessary to determine the appropriate answers, and this section includes only what I hope are plausible assumptions.

The check-the-box regulations provide a ready example of the feasibility of an efficiency-based approach. As illustrated above, under plausible assumptions, the check-the-box regulations are efficient.<sup>158</sup> That is, the four-factor test had a high MECF, and replacements for the revenue raised by the four factors could easily be found. Thus, it was appropriate to move the line between corporations and partnerships to public trading, as was done in the check-the-box regulations.

The academic literature provides at least three examples of the type of analysis recommended here. Professor Shaviro recently examined the realization doctrine from an efficiency perspective by considering potentially offsetting effects of the realization rule.<sup>159</sup> A broad rule means that investments will be more evenly subject to realization, reducing the disparity in tax rates between assets and, therefore, reducing disparities with respect to the taxpayer's initial decision to invest.<sup>160</sup> But a realization rule will increase the lock-in effect, and a broad rule will increase it more than a narrow one. Shaviro then applied this analysis to a number of different transactions that are, or should be, controversial under the realization rule.<sup>161</sup>

Furthermore, I have explored whether a short-against-the-box should be a realization event.<sup>162</sup> This depends on the efficiency benefits, not on whether the transaction looks like a sale.<sup>163</sup> The major efficiency cost of the realization rule is the harm from the lock-in effect.<sup>164</sup> Taxing shorts-against-the-box increases the cost of holding stock because it makes tax-free hedging more difficult.<sup>165</sup> This will

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<sup>158</sup> See *supra* Part II.A.4.

<sup>159</sup> See Shaviro, *supra* note 5.

<sup>160</sup> See *id.* at 27-29.

<sup>161</sup> Shaviro's analysis is consistent with the spirit of the suggestions made here, but many of the details are different. I do not endorse or criticize any of his suggestions, but instead use his analysis as an example of the type of inquiry that should be done.

<sup>162</sup> See Weisbach, *supra* note 38. See *supra* note 36 and accompanying text for a discussion of short-against-the-box transactions.

<sup>163</sup> See Weisbach, *supra* note 38, at 499.

<sup>164</sup> See *id.* at 499-500.

<sup>165</sup> See *id.* at 500.

cause some people, who otherwise might have held, to sell, but it will increase the cost for those who continue to hold.<sup>166</sup> From the analysis above, it is clear that fewer taxpayers will avoid the rule, but those who do so will bear a higher cost. The net effect will depend on the total costs of avoidance and the revenues gained. The Article concludes that administrative costs will probably outweigh any efficiency benefits of the rule.

Most recently, Mark Gergen and Paula Schmitz examined the distinction between debt and equity in the context of MIPS.<sup>167</sup> MIPS is an almost perfect substitute for preferred stock. But most tax advisors consider MIPS to be debt for tax purposes, and issuers of MIPS are entitled to a tax deduction for interest payments to holders. Because it is a close economic substitute with a lower tax cost, MIPS has essentially replaced preferred stock.<sup>168</sup> The Treasury Department wanted to treat MIPS as stock rather than as debt and proposed legislation to this effect.<sup>169</sup> Congress, however, rejected the proposal.

Initially, treating MIPS as debt appears to be efficient because it reduces the corporate tax, which is generally perceived to be inefficient. Additionally, this approach allows corporations to reduce their tax without changing the type of financing they use, at least to the extent that MIPS is a perfect substitute for preferred stock. Thus, it would seem to replace a tax causing a high deadweight loss with few additional costs (as opposed to, say, allowing corporations to reduce the tax through over-leveraging with more traditional debt, which increases expected financial distress).

The question, however, is somewhat more complicated. The law continues to treat common stock as equity, and dividends on common stock are not deductible. Thus, MIPS just moves the dividing line between debt and equity—it does not fundamentally change it. The question is whether moving the line is efficient. This depends on the behavioral changes that moving the line causes—the relative substitutions among various securities, and the welfare and revenue effects of this behavior. Although Gergen and Schmitz do not use this language, they analyze the problem in exactly this fashion.

Gergen and Schmitz use a simple model of the decision to issue debt or equity involving the expected cost of financial distress caused by excessive debt issuances—the cost of bankruptcy reorganization—and the benefit of the tax shield from issuing debt rather than eq-

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<sup>166</sup> See *id.*

<sup>167</sup> See Mark P. Gergen & Paula Schmitz, *The Influence of Tax Law on Securities Innovation in the United States: 1981-1997*, 52 TAX L. REV. 119, 189 (1997).

<sup>168</sup> See Flaherty Letter, *supra* note 53.

<sup>169</sup> See U.S. DEP'T OF THE TREASURY, GENERAL EXPLANATIONS OF THE ADMINISTRATION'S REVENUE PROPOSALS 73-74 (1996).



uity—the value of the interest deductions. Managers will issue debt until the expected cost of financial distress, given the amount of debt outstanding, exceeds the benefit of the tax shield.

There are two offsetting effects of treating MIPS as debt: the shift from traditional debt to MIPS and the shift from equity to MIPS. Thus, if we treat MIPS as debt, some instruments that would have been structured as debt with strong holder rights can now be restructured as MIPS with lesser holder rights. The tax shield will remain constant, but the costs of financial distress are less because the holders' rights are reduced. This is a positive effect. At the same time, some instruments that were previously considered equity will shift to MIPS. Holder rights will be increased, both increasing the cost of financial distress and reducing tax revenues—two negative effects. Policymakers need empirical studies to determine the net effect, which will depend on whether MIPS substitutes more for debt than for equity. Gergen and Schmitz argue that preliminary data show that MIPS is primarily a substitute for equity and, therefore, treating MIPS like debt is likely to be inefficient.<sup>170</sup>

This is a simple model of corporate financial decisions and their costs. More complex models would consider the benefits of optimal capital structures on manager behavior (such as the constraining influence of debt on the cash flows available to managers). In addition, more complex models would account for the fact that the costs of financial distress will vary for different types of holder rights. The Gergen and Schmitz analysis neither carefully delineates the expected behavioral responses nor shows how the changes will affect the costs of distress. Moreover, proposals to tax MIPS as equity have resulted in a high MECF, indicating that taxing MIPS does not significantly affect the ability of issuers to substitute debt for equity. Thus, taxing MIPS as equity may be inefficient.<sup>171</sup>

Although one may quibble with their argument, the result is striking and counterintuitive to those who view reductions in a bad thing—the corporate tax—as necessarily good. The approach is exactly that recommended here: we should examine how the shift in the line affects the substitution costs and direct costs of a tax.

Policymakers as well as academics can engage in an efficiency analysis of line-drawing problems. Although the analysis is not simple

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<sup>170</sup> See Gergen & Schmitz, *supra* note 167, at 189-92.

<sup>171</sup> For example, the MECF on the Treasury proposal to tax MIPS was high. The proposal was projected to raise at most \$189 million over five years. The estimate includes the MIPS proposal and several other debt-equity proposals, and is not broken down separately. The estimate would have been much higher if determined without behavior changes. For example, in 1995 alone, \$10.7 billion of MIPS were issued. See Flaherty Letter, *supra* note 53. The assumption behind the estimate must have been that the line proposed by the Treasury Department was not significantly less elastic than current law.

and requires information, it should be well within the reach of tax policymakers.

### III

#### EFFICIENCY IS THE APPROPRIATE CRITERION

The previous Part showed that we can evaluate line-drawing problems by determining the efficiency of potential solutions. This Part argues that this is appropriate and should often be the primary method of analysis.

##### A. Efficiency Is an Appropriate Criterion

The argument that efficiency is appropriate for resolving line-drawing problems in the tax law is the same as the argument that efficiency is an appropriate norm in other areas of law. If we are concerned with the effect of the law on individuals' welfare, efficiency provides an important measure of the effect. This ground is well-trodden and is not worth going over again.<sup>172</sup> However, two comments on this argument should be made.

First, the arguments in favor of efficiency apply directly to line drawing. Where a line is drawn affects welfare and thus should be evaluated by the consequences. This is true even if we are constrained to leave many arbitrary rules in place, because we can maximize welfare within the constraints. For example, Professor Levmore is not correct in saying that the existence of immutable arbitrary lines in the corporate tax means one cannot make normative arguments about that area.<sup>173</sup> Although the constraints often affect outcomes significantly, and efforts to change the constraints, such as those represented by the comprehensive tax base literature, may be a good use of time and energy, within any set of constraints, there are welfare consequences that law should maximize.

Second, many of the objections to efficiency made elsewhere have less force when applied to line drawing in the tax law. In particular, nonconsequentialist concerns for rights or personal liberty are generally less germane here than in other areas of the law.<sup>174</sup> For example, it is difficult to say that whether a particular instrument is classified as debt or equity affects liberty. Similarly, efficiency has

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<sup>172</sup> The literature discussing this principle is vast. See, e.g., JULES L. COLEMAN, *MARKETS, MORALS AND THE LAW* 95-132 (1988); ROBERT COOTER & THOMAS ULEN, *LAW AND ECONOMICS* (2d ed. 1997); A. MITCHELL POLINSKY, *AN INTRODUCTION TO LAW AND ECONOMICS* (2d ed. 1989); RICHARD A. POSNER, *ECONOMIC ANALYSIS OF LAW* 453-54 (3d ed. 1986).

<sup>173</sup> See Levmore, *supra* note 47, at 1061-62.

<sup>174</sup> See Martha C. Nussbaum, *Flawed Foundations: The Philosophical Critique of (a Particular Type of) Economics*, 64 U. CHI. L. REV. 1197, 1206-07 (1997); see also COLEMAN, *supra* note 172, at 111-32 (describing the ethical basis of wealth maximization and criticizing efficiency as a goal of social policy, but not as an evaluative tool).

been criticized because it assumes that preferences are exogenous and reasonably well-defined (and well behaved in the sense that they are transitive and continuous).<sup>175</sup> Tax laws most often do not have a major effect on preferences. For example, it is difficult to see how the distinction between debt and equity affects preferences significantly.<sup>176</sup> Thus, an assumption that preferences are exogenous in the tax law is more reasonable than, say, in the criminal law.

To be sure, the tax law sometimes does attempt to change preferences or pursue goals other than efficiency.<sup>177</sup> For example, the tax law may prohibit deductions for bribes, treat married couples differently from unmarried couples, or make lobbying more expensive. Some of these rules may be attempts to change preferences. Nevertheless, many of these provisions are merely attempts to change behavior by changing prices rather than by changing preferences, and most provisions attempt to change neither behavior nor preferences.

## B. Distributional Considerations

The argument for efficiency, as noted above, is that the consequences of rules matter. A welfarist, however, evaluates rules based on whether they improve the aggregate welfare in society, not on whether they improve efficiency. For the welfarist, maximization does not involve separate maximization of efficiency and of other considerations, such as the distribution of wealth. In principle, we must evaluate each line-drawing problem by reference to both efficiency and the distribution of the tax burden. This makes an already complicated analysis even more difficult. There are, however, many cases in which efficiency should be the primary criterion for evaluating line-drawing problems.

This argument is based on Professors Kaplow and Shavell's argument that the tax system is more efficient than the legal system in

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<sup>175</sup> See Nussbaum, *supra* note 174, at 1209-11.

<sup>176</sup> This does not mean that tax law does not change behavior—it clearly does. Attention to these behavioral changes is one of the goals of this Article. But changing behavior by changing relative prices is not the same as changing preferences. When the tax law intentionally changes behavior by, for example, a subsidy or tax preference, it usually is not intended to change preferences. This is not to say that tax laws never affect preferences; some social policy may be purposefully designed to change preferences, but this is usually an exception.

<sup>177</sup> Even when the tax system implements goals other than efficiency, in most cases these goals are insufficient to determine where lines should be drawn. The base cases are easy. For example, it is easy to identify the core set of bribes to be described by the rule denying deductions for bribes. The problem is deciding where the line should be drawn *outside* of the base cases, where the underlying goal is weaker. In these cases, the appropriate line should incorporate both the other underlying goal and the efficiency costs of meeting that goal. The analysis above, that line drawing will cause shifts in behavior and efficiency losses, is still relevant. But the costs of these shifts must be balanced against the other goals being pursued.

redistributing income.<sup>178</sup> Compare two policies that create equal distributions of income. The first achieves redistribution by imposing an inefficient tort rule (for example, one in which the damages vary by the relative wealth of the plaintiff and defendant). The second imposes the efficient tort rule, but changes marginal tax rates to achieve the same redistribution as the inefficient tort rule. The regime with the inefficient tort rule imposes two costs: the increased cost of accidents because the tort rule is inefficient and the deadweight loss caused by redistributive taxation. The regime with the change to the marginal rate structure imposes the same deadweight loss from redistribution, but does so without increasing the cost of accidents. By focusing on redistributive policies in the tax system, everyone can be made better off. It is a Pareto improvement.<sup>179</sup>

This argument also applies to the tax base. If the scope of the tax base is used for redistributive purposes, then the double inefficiency identified by Kaplow and Shavell occurs. For example, rather than defining the distinction between debt and equity to redistribute (if that is possible), we should define the distinction based upon efficiency and adjust rates to achieve an appropriate distribution of the tax burden. Thus, the tax base should be defined as efficiently as possible, and the rate structure should be used for redistribution.<sup>180</sup>

There are two caveats to this argument. First, it may not be possible to adjust rates so that the effect of moving a line is distributionally neutral. For example, many lines in the tax law affect the distribution of income between men and women, such as the decision not to tax the imputed income of homemakers<sup>181</sup> or to disallow deductions for the expense of child care.<sup>182</sup> Furthermore, the tax law distributes wealth between married couples and similarly situated unmarried couples.<sup>183</sup> These lines redistribute wealth within an income class be-

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<sup>178</sup> See Louis Kaplow & Steven Shavell, *Why the Legal System Is Less Efficient Than the Income Tax in Redistributing Income*, 23 J. LEGAL STUD. 667, 677 (1994).

<sup>179</sup> See *supra* note 118 and accompanying text.

<sup>180</sup> This argument requires every change in the tax base to be accompanied by a rate change. This might be impracticable. Instead, we could establish a procedure in which overall tax rates are adjusted for distributional considerations on a regular basis. This type of regular adjustment would allow policymakers to focus on efficiency considerations in other areas. Unfortunately, it is Congress's perceived lack of ability to adjust tax rates that has put so much pressure on the distributional considerations of every change in the tax law. For a discussion of these pressures, see Michael J. Graetz, *Distributional Tables, Tax Legislation, and the Illusion of Precision*, in DISTRIBUTIONAL ANALYSIS OF TAX POLICY 15, 15-17 (David F. Bradford ed., 1995) and Michael J. Graetz, *Paint-by-Numbers Tax Lawmaking*, 95 COLUM. L. REV. 609, 610-14 (1995).

<sup>181</sup> See Edward J. McCaffery, *Taxation and the Family: A Fresh Look at Behavioral Gender Biases in the Code*, 40 UCLA L. REV. 983, 1001-05 (1993).

<sup>182</sup> See *id.* at 1005-11.

<sup>183</sup> This disparate tax treatment is now referred to as the "marriage penalty." Before 1969, however, the Code used to impose a "singles penalty." See KLEIN & BANKMAN, *supra* note 65, at 750-51.

tween groups we might otherwise care about. That is, these rules are distributionally neutral in reference to income class, but they are not distributionally neutral in regard to other groups. If distribution within income classes is appropriate (e.g., between men and women who have the same income), it will not be possible to adjust the rates to achieve the desired distribution. In these cases, the analysis must incorporate both distributional (between the relevant groups rather than between income classes) and efficiency effects.

More generally, there is no clear distinction between the tax base and the rate structure, unlike the distinction between tort law and tax law. Policymakers often must use both the rate and the base to achieve redistribution because the base helps define who is taxed. For example, a special exemption for the blind redistributes by changing the base of the tax. Similarly, denying a deduction for bribes redistributes away from the corrupt by changing the base. We cannot look primarily to efficiency for defining the base when there is no clear distinction between the base (which is where line-drawing problems occur) and redistributive goals. Nevertheless, it is usually possible to achieve the redistributive goals through mere adjustments to the rate because most line-drawing problems, unlike the exemption for the blind, are not closely tied to distributive goals. Thus, this criticism, while valid, is often unimportant.

Second, the Kaplow and Shavell argument is not really an argument based on a Pareto improvement, contrary to their claim. This is so because the winners of redistribution through tort law will not necessarily be made equally well-off by redistribution through the tax law. Even though their income class as a whole might be equally as well-off, we cannot identify the individuals who would have benefitted from the tort law, and thus we cannot be sure that they are equally well-off. The Kaplow and Shavell argument ultimately rests on Kaldor-Hicks efficiency, which is not an attractive normative base.<sup>184</sup> Similarly, in the tax case, those who may benefit from redistribution through line drawing may not benefit as much from general rate changes.

Rate adjustments, however, come fairly close to a Pareto improvement in the sense that only a few individuals are likely to be worse off. The reason is that any tort law or line drawing in the tax law that redistributes must have a correlation with income if it is to achieve the desired effect. Thus, changing the rate structure will have much the same result. If only a few individuals are worse off, the approach will likely lead to welfare improvements (for example, measured by the sum of individuals' utilities). That is, the efficiency gains are likely to

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<sup>184</sup> Kaplow and Shavell recognized this problem, but relegated it to a footnote. See Kaplow & Shavell, *supra* note 178, at 677 n.17. Their counterargument is similar to that given in the text above. See *id.*

produce welfare gains sufficient to outweigh the losses suffered by some individuals. Additionally, to the extent that redistribution through the tort law or line drawing in the tax law cannot be achieved through the rate structure, one must question its desirability. Some less well-off individuals will benefit if we redistribute through the tort law or through lines in the tax law, but at the cost of being treated better than others in their income class.

While this is not a complete evaluation of the argument, and ultimately distributive concerns matter, the Kaplow and Shavell argument is still generally correct. Policymakers should draw lines efficiently and use rates to redistribute income.

#### CONCLUSION

This Article analyzed line drawing in the tax law. Basic motivating examples included the line between partnerships and corporations, between debt and equity, and between selling and holding. Line drawing is ubiquitous in the tax law—the tax law treats similar activities differently, and distinguishing between them is problematic.

Traditional analysis of the tax law, including relying on the platonic meaning of the terms or looking to the Haig-Simons definition of income, ability to pay, or some other traditional tax norm, is not helpful for line drawing. As a result, substantial and difficult problems in the tax law have not been adequately analyzed. For example, although the line between debt and equity in part determines the corporate tax base, few articles analyze the line. The corporate tax raises over \$100 billion in tax revenue each year and is thought to impose significant distortions on the economy. The appropriate line between debt and equity can significantly affect these costs.

Where lines are drawn has welfare consequences, and policymakers should draw lines where the consequences are most desirable. In particular, line drawing has efficiency effects, and this Article identifies some of the factors that will determine how lines can be drawn most efficiently. The most important factors are whether the line keeps close substitutes together and whether transactions are taxed appropriately when considered by themselves (i.e., without regard to line drawing). For example, close substitutes for equity should be taxed like equity, and close substitutes for debt should be taxed like debt. We should, however, be somewhat more expansive on the debt side because debt taxation will generally lead to fewer distortions. The models used to develop this intuition need refinement, and further work should be done to identify general efficiency conditions. Additionally, we must keep in mind that each line involves features that make the analysis complex because of second-best considerations.

## APPENDIX

## LIST OF SOME IMPORTANT LINES IN THE TAX LAW

1. Debt/equity  
Debt is treated differently from equity because payments on debt (interest) are deductible, while similar payments on equity (dividends) are not.
2. Holding/selling  
Income is not taxed until it is realized, which generally means when the asset producing the income is sold. Thus, the tax law treats holding and selling an asset differently.
3. Independent contractor/employee  
Payments for services from independent contractors are not subject to withholding taxes, while similar payments to employees are. Independent contractors are also subject to fewer restrictions on the deduction of work-related expenses. See, for example, I.R.C. §67, which imposes a 2% floor on unreimbursed business expenses of employees.
4. Consumption/business or investment  
Expenses for consumption are not deductible (and do not create basis), but expenses for business or investment are recovered for tax purposes through either an immediate deduction or a basis adjustment.
5. Market/imputed income  
Wealth created through market transactions is generally taxable, while self-produced wealth or wealth produced from the holding of durable consumption assets is not. For example, the wealth created through ownership of a home (known as imputed rent) is untaxed, while the wealth created through the rental of a home is taxed.
6. Corporation/partnership  
Corporations are subject to a two-tier tax, while partnerships are subject to only a single tax (at the owner level).
7. Capital gain/ordinary income  
Capital gains are taxed at a lower rate than ordinary income.
8. Foreign-source income/U.S.-source income  
Income from foreign sources is taxed differently in a variety of ways than income from U.S. sources. For example, foreigners may be taxed by the U.S. government only on U.S.-source income. Allowances for foreign tax credits for U.S. taxpayers are determined in part by the amount of foreign-source income.
9. Deduction/capitalization  
Business expenses may be deducted or capitalized. Capitalization creates a higher tax liability than deduction.
10. Recognition/nonrecognition

Certain transactions that are realization events do not produce gain or loss for tax purposes because they are treated as “nonrecognition” events. Other similar transactions are not nonrecognition events. For example, the exchange of real estate in Kansas for real estate in New York City can qualify as a nonrecognition event (see I.R.C. §1031), but the exchange of IBM stock for Microsoft stock generally will not.