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Bradley T. Borden

Brooklyn Law School, bradley.borden@brooklaw.edu

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Quantitative Model for Measuring Line-Drawing Inequity

Bradley T. Borden*

ABSTRACT: The law draws lines. It draws lines between manslaughter and murder, negligence and gross negligence, speeding and driving legally, and capital gains and ordinary income. Those lines invariably cause undesirable results. In particular, lines in the law cause inequity because they impose different treatment on similarly situated persons. Despite this inequity, analysts generally embrace the quantitative comforts of inefficiency analysis. This Article introduces a quantitative model for measuring inequity. Consequently, the preference for quantitative measures no longer justifies the disdain for inequity analysis. Instead, democratic and philosophical efforts to assess laws should embrace now-quantifiable inequity analyses as the analytical tools of choice.

The quantitative model introduces a method for measuring line-drawing inequity. The quantitative information it yields illustrates that a line's location affects the amount of inequity that results from enforcing that line. The model provides an opportunity to test and rethink the relationship between equity and efficiency. It demonstrates that the governed may reduce line-drawing inequity by altering their behavior to avoid negative line-drawing effects. The model also provides quantitative evidence that the perceived tension between equity and efficiency analyses is misinformed. In fact, the model demonstrates that efficiency and equity may correlate in the

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line-drawing context. Finally, this Article illustrates that the criteria used to draw a line may result in that line having an inappropriate orientation, and concludes that excessive inequity may signal a need to change a line's orientation within a law or otherwise alter that law to reduce line-drawing inequity.

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I. INTRODUCTION

Line-drawing is a prevalent and problematic part of the law. Line-drawing occurs when the law must distinguish between two legal phenomena. For example, the law must draw a line between murder and manslaughter; between negligence and reasonable care; between capital gains and ordinary income; between speeding and driving below the speed limit; and any number of other phenomena in various areas of the law. Drawing lines makes the law administrable and can help deter socially unacceptable behavior. For instance, the penalty imposed on people who speed undoubtedly deters some reckless driving.

Unfortunately, line-drawing also creates inequity. A sixty-mile-per-hour speed limit, for example, may subject someone who drives sixty-one miles per hour to a \$200 penalty but not penalize someone who drives sixty miles per hour. The two drivers are very similarly situated, but the law treats them very differently. Despite the obvious inequity, line-drawing analysis has not traditionally employed inequity as an analytical tool for three reasons. First, some commentators believe that inequity will result regardless of where the law draws the line,¹ whether, for example, the law makes the speed limit fifty miles per hour or seventy miles per hour. Second, critics claim that inequity analysis is tautological and therefore unhelpful.² They assert that equity comparisons are unimportant because the law prescribes the treatment and defines the class of people to whom the treatment applies.³ They would argue, for instance, that if the speed limit is sixty miles per hour, the law can identify speeders by examining the speed of each individual driver regardless of other drivers' conduct. Third, until now, inequity has not been quantifiable in the line-drawing context. Consequently, quantitative types have favored inefficiency analysis.

This Article reveals the weaknesses of these rationales by demonstrating that inequity can and should be an important part of quantitative line-drawing analyses, and introduces a model derived from tax law that measures line-drawing inequity. The model relies upon a tax scenario for three reasons. First, the Author is a tax scholar and is familiar with the intricacies of the tax scenario used to construct the model. Second, a tax scenario provides information that is readily quantifiable. Third, given the current political climate surrounding tax policy,⁴ most people are familiar

1. See *infra* notes 68–69 and accompanying text.

2. See *infra* notes 71–75 and accompanying text.

3. See *infra* notes 68–77 and accompanying text. For example, critics might argue that the speed limit determines whether a person is driving legally. Measuring a driver's speed is sufficient to determine compliance with the law, and comparing driving does nothing to further the analysis of compliance.

4. See, e.g., Victor Fleischer, *A Tax Shelter Mitt Romney Could Love*, N.Y. TIMES (Sept. 25, 2012, 3:43 PM), http://dealbook.nytimes.com/2012/09/25/a-tax-shelter-mitt-romney-could-love/?nl=business&emc=edit_dlbkpm_20120925; Suzanne Mettler & John Sides, *We Are the 96*

with the distinction between ordinary income, which the law taxes up to a rate of 35%, and capital gains, which the law taxes at a rate of only 15%.⁵ The resulting inequity from such disparate treatment between these two sources of income has become a salient part of public discourse.⁶ The quantitative model helps to further illustrate the imbalance and suggests that lawmakers can take steps to reduce it.

The tax-law scenario therefore provides a lens through which to view the quantitative aspects of line-drawing inequity, and will help develop a model that applies to every area of the law that draws lines. For instance, the model should assist lawmakers and commentators when they seek to determine whether lines in areas such as criminal and tort law are drawn appropriately. For example, the model illustrates that the ability to change behavior may reduce inequity if the benefits of changing that behavior outweigh the costs. Because it is easily avoidable, lawmakers and commentators will be less likely to fret over the inequity resulting from lines such as speed limits. Even though a slight difference in speed may result in significantly different treatment, the model illustrates that the inequity caused by speed limits is inconsequential because the costs associated with driving within the speed limit are so small. For those who cannot change their behavior, however, the location of the line alone determines the extent of the resulting inequity. In those situations, the model helps determine the location of a line that will generate the least inequity.

The model also demonstrates how both lawmakers and the public find ways to reduce the inequity that results from all-or-nothing legislation typical in many line-drawing scenarios. For example, police officers may use their discretion and not issue tickets to drivers who drive at only a few miles per hour above a speed limit.⁷ In the same token, lawmakers have moved from a

Percent, N.Y. TIMES (Sept. 24, 2012, 8:51 PM), <http://campaignstops.blogs.nytimes.com/2012/09/24/we-are-the-96-percent/>; Andrew Rosenthal, *Mitt Romney on 60 Minutes*, N.Y. TIMES (Sept. 24, 2012, 2:41 PM), <http://takingnote.blogs.nytimes.com/2012/09/24/mitt-romney-on-60-minutes/>.

5. See I.R.C. § 1(h)(1)(A), (i)(2) (2006) (applying ordinary rates of as much as 35% to income that does not come within the definition of net capital gain); *id.* § 1(h)(1)(C) (providing the favorable rate net capital gain); *id.* § 1221(a) (defining capital asset); *id.* § 1222(1) (defining net capital gain).

6. See, e.g., Bradley T. Borden, *Romneys' Tax Returns Underscore Gross Inequity and Extent of Class Warfare*, HUFFINGTON POST (Jan. 25, 2012, 1:58 PM), http://www.huffingtonpost.com/bradley-t-borden/romneys-tax-returns-under_b_1228549.html; Walter Hamilton & Nathaniel Popper, *Mitt Romney Inspires a Look at How Tax Rules Help High Earners*, L.A. TIMES (Jan. 24, 2012), <http://articles.latimes.com/2012/jan/24/business/la-fi-0124-romney-capital-gains-20120124>; Kathleen Kingsbury, *Who Pays the Highest Taxes?*, REUTERS (Feb. 9, 2012, 11:15 AM), <http://www.reuters.com/article/2012/02/09/us-who-pays-the-highest-taxes-idUSTRE8171HS20120209>.

7. See Margaret Raymond, *Penumbral Crimes*, 39 AM. CRIM. L. REV. 1395, 1404-05 (2002) ("[T]he decision not to enforce speeding laws strictly is often publicly expressed."). Enforcement officers may also exercise discretion in issuing tickets by, for example, taking into account the driver's demeanor and other characteristics. See Kim Forde-Mazrui, *Ruling Out the Rule of Law*, 60 VAND. L. REV. 1497, 1516-30 (2007). After stopping a driver who is driving

regime that recognizes only negligence and contributory negligence to ones that embrace comparative negligence.⁸ Such decisions help eliminate line-drawing inequity. In the case of differential-rate treatment, property owners developed, and courts sanctioned, structures that help eliminate inequity of all-or-nothing rules.⁹ These shifts suggest that all-or-nothing line-drawing may be inappropriate, and lawmakers should consider changes, such as line reorientation, to help eliminate the law's ill effects.

Perhaps most significantly, the ability to quantify inequity gives inequity analysis the mathematical heft it formerly lacked, making it as quantitatively appealing as inefficiency analysis. The model also reveals that the long-held notions about the tension between equity and efficiency may be misplaced.¹⁰ In some circumstances, an inequity analysis and an inefficiency analysis may reach a similar conclusion about the proper location of a line. To the extent the two analyses reach different results, the quantification of inequity analysis, and the democratic ideal of equal opportunity and the philosophical notion of treating equals equally that support equitable laws, make it at least as valuable as inefficiency analysis.

This Article proceeds in seven parts. Part II places line-drawing analysis in context by introducing a hypothetical that illustrates line-drawing inequity. Subsequent Parts draw upon this hypothetical to build the quantitative model and explore facets of line-drawing inequity. Part III introduces the concept of inequity analysis, reviews the general criticisms of inequity analysis, and, by introducing the intuitive notion of inequity, illustrates why the criticisms do not apply in the line-drawing context. Part IV introduces the quantitative model and demonstrates that both the location of a line and one's ability to change behavior affect the impact of line-drawing inequity. Part V uses the quantitative model to challenge long-held beliefs about the tension between equity and efficiency. It first shows that linear behavior (i.e., left or right movement along a continuum) reduces inequity, and then illustrates that inequity and inefficiency may correlate positively with respect to the placement of a line.

Part VI considers the relevance of the orientation of the line. It first illustrates how the public may create mechanisms to compensate for an improperly drawn line, which results in waste. This Part suggests that lawmakers can take steps to eliminate such waste by reorienting problematic

above the speed limit, an officer can learn about the driver's age, driving history, sobriety, and other factors to assess whether the driver's excess speed likely affects the driver's control of the vehicle. *Id.* Other factors such as road conditions, weather conditions, and the amount of traffic may also affect the officer's decision to give a ticket. *Id.* (discussing discretion generally and using police discretion in issuing tickets to illustrate).

8. See 65A C.J.S. *Negligence* § 316 (2012) ("Most jurisdictions have adopted or applied in some form the doctrines of comparative negligence or comparative fault.").

9. See *infra* Part VI.A.

10. See *infra* Part V.

lines. Part VII draws upon the general conclusion derived from the quantitative model to suggest guidelines for lawmakers. It recommends that when remedying the considerable inequity caused by a line, lawmakers should consider the appropriateness of that line's location, whether the public can change its behavior at low cost to cross to the favorable side of that line, and whether that line is oriented correctly. Part VIII concludes.

II. LINE-DRAWING IN CONTEXT

A single scenario helps identify the problems resulting from line-drawing and introduces the issues this Article addresses.¹¹ Consider two hundred individuals, each of whom owns a separate piece of real property. They acquired their respective properties several years ago with the hope that the properties would increase in value.¹² The properties are suitable for subdivision into several residential lots, and each person now has the opportunity to sell the property. The property owners can sell their respective properties "wholesale" by transferring the entire property in one transaction (or blocks of individual lots), or they can sell them "retail" by subdividing the property and selling individual lots to multiple purchasers. Each person can use any number of sales up to two hundred to dispose of the property retail. For instance, an owner could sell the property to four different buyers using four sales or to seventy-five different buyers using seventy-five sales. To use more than one sale to dispose of the property, an owner must do some subdivision and expend some effort to market and sell the property. Thus, each additional sale represents additional effort expended to subdivide, market, and sell the property.

The number of sales an owner uses to dispose of the property could affect the profitability of the property. There should generally be more buyers seeking smaller pieces of property,¹³ so the demand for smaller

11. This Article relies upon a scenario from real estate taxation. The facts and assumptions lend themselves to line-drawing analysis and quantifying inequity. Also, the Author is a tax scholar and familiar with the nuances of the scenario. The level of detail required to create the model for quantifying inequity demands familiarity with the law in question. After witnessing the application of the model to one scenario, other analysts should recognize how the model could apply to other scenarios.

12. The model only considers the consequences of selling the property at a gain. Similar issues would present themselves if property owners sold the property at a loss and if different rates applied depending upon similar factors used to classify the property.

13. This follows because the majority of the population is limited in the amount of property they can purchase. Generally, an individual's or family's only, or largest, purchase of real property is a home. See Jesse Bricker et al., *Changes in U.S. Family Finances from 2007 to 2010: Evidence from the Survey of Consumer Finances*, 98 FED. RES. BULL., no. 2, June 2012, at 1, 42-47, available at <http://www.federalreserve.gov/pubs/bulletin/2012/pdf/scf12.pdf> (showing that primary residences account for about 50% of the nonfinancial assets of families, that nonfinancial assets are roughly 60% of families' total net worth, and that only a small percentage of families (around 20% of all families) held real property other than a primary residence). That being the case, only a relatively small portion of the population owns more

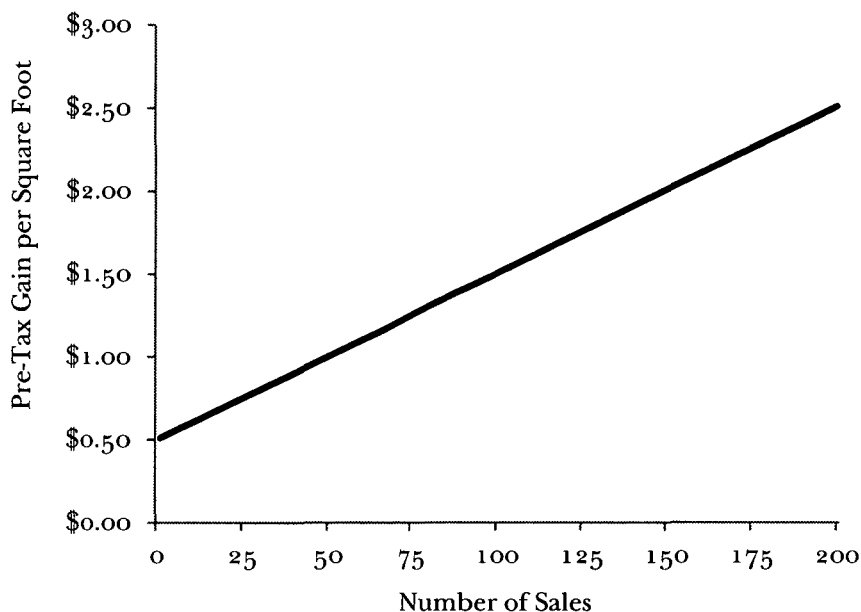
pieces of property is greater than the demand for larger pieces of property. Because subdividing and selling more lots will increase risks and costs, a rational property owner will do so only if the price is higher for the additional sales. Consequently, if an owner uses more sales to dispose of the property, the owner will likely charge more per square foot for the property. Although the cost per square foot of subdividing, marketing, and selling the property will increase with each additional sale, due to economies of scale, the increase in sales price should increase more per additional sale than will the cost (otherwise subdividing property would not be economical). As a result, selling property at a retail price is more profitable than selling it wholesale. Figure 1 depicts the pre-tax economic gain that property owners would obtain in relation to the number of sales they make.¹⁴ As expected, the curve representing the pre-tax economic gain slopes upward as the number of sales increases, forming a not-unexpected supply curve—as the price increases, the number of lots available for purchase will increase.

than a single piece of property, and an even smaller portion can afford to purchase large plots of property.

14. The graph assumes a property owner could dispose of the property in one sale for \$2.01 per square foot, and could charge an extra \$0.01 for each additional sale used to dispose of the property. For the sake of analysis, also assume that the cost of the property remains a constant \$1.50 per square foot. Based on those assumptions, a property owner who uses one sale to dispose of the property would have a \$0.51 economic benefit (i.e., the sales price minus the cost) per square foot on the disposition, and the property owner who uses two hundred sales would have a \$2.50 benefit per square foot. The cost per square foot would increase with each additional sale. The analysis assumes the cost would be in proportion to the increased sale price, so holding the cost constant allows for an accurate comparison of the pre-tax economic gain.

The graphs in this Article present the results of discreet, noncontinuous phenomena (number of sales) in linear format. Because the phenomena are discreet, the results do not create actual "lines," but are instead a series of dots that are very close together. Nonetheless, the graphs present them as lines for visual effect to illustrate the model's results.

FIGURE 1
PRE-TAX ECONOMIC GAIN



Assume that each owner's preference differs from all other owners' preferences.¹⁵ If so, each situation on the horizontal continuum represents a different property owner (i.e., one property owner would use one sale, another would use two sales, and so on). Despite the smooth curve depicted in Figure 1, tax law places all situations into one of two categories: capital and non-capital (in this case, inventory) income. Tax law imposes a 15% tax on gains from the sale of capital assets held for more than one year.¹⁶ If the property is not a capital asset, however, tax law classifies the property as inventory and imposes ordinary income rates on the gain realized on the disposition of the property.¹⁷ The maximum rate that tax law imposes on ordinary income is 35%,¹⁸ and this Article assumes that all gain from the sale of inventory will be subject to the 35% rate. Consequently, the classification of property as capital or non-capital has serious tax implications.

15. Several factors could affect preferences. Although each additional sale adds to pre-tax economic gain, each additional sale also requires more effort and more risk. Those factors affect the number of sales a property owner will make.

16. See I.R.C. § 1(h)(1)(C) (2006) (imposing the 15% rate on net capital gain); *id.* § 1222(11) (defining net capital gain to include net long-term capital gain).

17. See *id.* § 1(h)(1)(A).

18. See *id.* § 1(i)(2).

Property at each “situation” will be either a capital asset or inventory.¹⁹ The law must draw the line somewhere along the continuum to divide the two types of assets. Courts have adopted a complicated and somewhat ambiguous multi-factor definition to separate capital assets from inventory.²⁰ In considering these multiple factors, courts aim to separate property into two categories: property that derives its income from services and property that derives its income from its appreciation in value.²¹ If the gain on the disposition of the property is largely from the property’s appreciation in value, the property is a capital asset.²² If, on the other hand, the gain derives largely from services, the property is inventory.²³ Thus, the line appears to classify property based upon the source of income recognized on disposition.

The number of factors courts use to distinguish capital assets from inventory varies from four to nine.²⁴ One factor—and perhaps the most important factor—that is common of the tests courts apply is the number of sales a property owner uses to dispose of the property.²⁵ Other factors, such as subdivision and efforts to market and sell the property, help facilitate the

19. In this Article, “situation” refers to a theoretical point at which a disposition of property occurs using a number of sales.

20. See, e.g., *Thompson v. Comm’r*, 322 F.2d 122, 123 (5th Cir. 1963) (“The first [question] is the old, familiar, recurring, vexing and oftentimes elusive problem of the treatment of proceeds of sales of subdivided lots as capital gains or ordinary income.” (footnote omitted)). The common law definition of capital asset derives from the statutory definition, which includes all property other than that specifically excluded by statute. See I.R.C. § 1221(a)(1) (providing that the concept of capital asset does not include “stock in trade of the taxpayer or other property of a kind which would properly be included in the inventory of the taxpayer if on hand at the close of the taxable year, or property held by the taxpayer primarily for sale to customers in the ordinary course of his trade or business”). Courts interpret that language to determine whether the type of situations discussed in this Article would make the property a capital asset or inventory.

21. See *Malat v. Riddell*, 383 U.S. 569, 572 (1966) (“The purpose . . . is to differentiate between the profits and losses arising from the everyday operation of a business on the one hand and the realization of appreciation in value accrued over a substantial period of time on the other.” (citations omitted) (internal quotation marks omitted)).

22. See, e.g., *Comm’r v. Gillette Motor Transp., Inc.*, 364 U.S. 130, 134 (1960) (“[T]he term ‘capital asset’ is to be construed narrowly in accordance with the purpose of Congress to afford capital-gains treatment only in situations typically involving the realization of appreciation in value accrued over a substantial period of time . . .”).

23. See *Corn Prods. Ref. Co. v. Comm’r*, 350 U.S. 46, 52 (1955) (“Congress intended that profits and losses arising from the everyday operation of a business be considered as ordinary income or loss rather than capital gain or loss.”).

24. See, e.g., *Hous. Endowment, Inc. v. United States*, 606 F.2d 77, 81 (5th Cir. 1979) (using four factors); *Estate of Segel v. Comm’r*, 370 F.2d 107, 108 (2d Cir. 1966) (using nine factors).

25. See *Suburban Realty Co. v. United States*, 615 F.2d 171, 178 (5th Cir. 1980) (“It will remain true that the frequency and substantiality of sales will be the most important factor.”); *infra* note 44 and accompanying text (listing several cases that have considered the definition of capital assets and used one of the multiple-factor definitions that included number of sales).

number of sales, so this Article uses the number of sales as a proxy for all other factors. The increased activities needed to increase the number of sales contribute to the gain recognized on the disposition of the property—as the number of sales increases, more income derives from services. Thus, the number of sales can be used as a proxy for the source of income.

In so utilizing the number of sales, the law must determine the point at which the number of sales is too many for the property to appropriately be categorized a capital asset.²⁶ On one side of the line, the gain will be subject to the favorable 15% rate; on the other side, the gain will be subject to the ordinary 35% rate.²⁷ For example, if the law draws the line after the 100-sale situation (represented by a vertical line in Figure 2), a property owner who disposes of his property with 100 sales and the property owner who does so with 101 sales would be subject to significantly different tax treatment. The respective tax rate that applies to each property owner would affect their after-tax economic gain differently.²⁸ In fact, the curve in Figure 2 reveals that after-tax economic gain increases with each additional sale until it reaches the 100-sale situation. After that point, there is a significant cliff, and after-tax economic gain begins to increase from the 101-sale situation from a rate below that of the 100-sale situation. After the 146-sale situation, after-tax economic gain again exceeds the after-tax economic gain at the 100-sale situation.²⁹

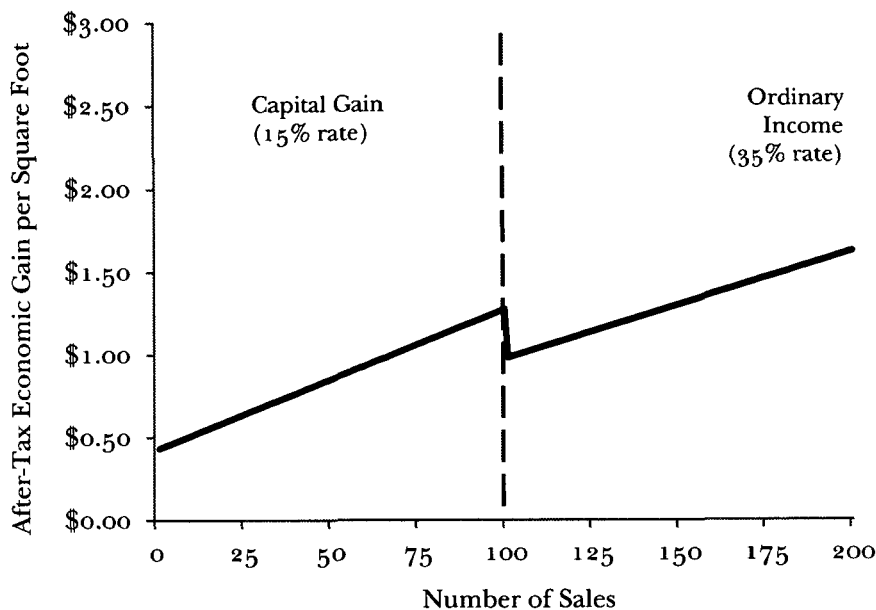
26. This model simplifies a very complicated analysis. Although the number of sales likely correlates to the other factors courts use, the correlation is not perfect. Consequently, the law does not merely rely upon the number of sales. Instead it adopts a facts-and-circumstances test, which prohibits the ability to draw a line in the abstract. *See infra* note 44 and accompanying text. Case law takes into account the period of time over which sales occur. Two hundred sales over a ten-year period may not be sufficient to establish that the property is inventory. *See, e.g., Estate of Barrios v. Comm'r*, 265 F.2d 517, 520 (5th Cir. 1959) (granting capital gain treatment), *rev'g* 29 T.C. 378 (1957) (holding that property was inventory because the owners used 130 sales to dispose of the property over five years). To avoid the complexities that temporal considerations would raise, this Article assumes that the sales would occur over the same period of time for each property owner. Based upon that assumption, the law could end up drawing the line at any point along the x-axis without exceeding the scope of the definitions of capital asset and inventory. The temporal component becomes unimportant in the analysis of the inequity caused by line-drawing.

27. Some property owners who recognize ordinary income on the disposition of property are not in the 35% tax bracket, so they may pay tax at a lower rate. This Article assumes that the gain recognized on the disposition of the property will ensure that the property owner is in the highest tax bracket and will be subject to the 35% tax rate.

28. The after-tax economic gain is the gain recognized minus the tax liability. Tax liability is the amount of gain recognized multiplied by the applicable tax rate. The property owner should focus on the after-tax economic gain because the benefit derived from the sale depends upon the amount of tax the property owner has to pay with respect to the sale.

29. The after-tax economic gain at the 100-sale situation is \$1.275 and at the 146-sale situation it is \$1.274; however, it is \$1.281 at the 147-sale situation.

FIGURE 2
AFTER-TAX ECONOMIC GAIN



The pre-tax economic gain at any two adjacent points is very similar (see Figure 1), but the difference in after-tax economic gain at the points on either side of the vertical line that separates capital assets from inventory is substantial (see Figure 2). Despite this substantial difference in after-tax economic gain, there is hardly any practical difference between these two situations, save for their location with respect to the line. Consequently, the disparate tax treatment intuitively appears to cause inequity.³⁰

30. Line-drawing alone does not create inequity in this scenario. Thus, a note about the scenario is in order. The idea of taxing gain from property and income from services at different rates is inequitable under the abilities theory. See Bradley T. Borden, *The Like-Kind Exchange Equity Conundrum*, 60 FLA. L. REV. 643, 677-78 (2008) (discussing the abilities theories and other theories that could produce a different analytical result). Both types of income bestow the same ability to pay tax. The Author recognizes that different tax rates for capital gain and gain from the sale of inventory are inequitable from an abilities perspective. For the sake of analysis, this Article assumes that the different tax treatment is an immutable part of the law, and analyzes the law in its current second-best setting, providing an opportunity to construct an analytical model. Despite this undesirable setting, the resulting model provides insight and has broad application. Even if the law eliminated the distinction between two types of income, the need to draw lines would arise in other areas, and the findings using this property-owner scenario should apply to those areas as well. In this second-best setting the analysis turns to measuring inequity.

This Article also rejects the notion that illiquidity affects ability to pay. Instead, it recognizes that illiquidity affects the value of property and values determine the ability to pay.

To examine several questions relating to line-drawing, this Article introduces and uses quantitative inequity, or the measurement of the extent to which the actual treatment of two situations differs from the most appropriate treatment of those two situations. First, can changing the location of a line help reduce or eliminate inequity? The general notion is that the location of a line generally does not affect inequity.³¹ For example, the inequity that exists when the line is drawn at the 100-sale situation will generally remain whether the line is drawn at the 50- or 150-sale situation. Thus, moving the line would not appear to make the line any more or less inequitable. Quantitative inequity provides an opportunity to test that general understanding of the relevance of a line's location, and shows that the placement of the line may in fact affect the severity of the resulting inequity.

Second, does one's ability to change behavior affect how inequitable a line is? Although commentators recognize that drawing lines does create inequity and affect behavior, they do not appear to consider whether one's ability to change his situation will alter line-drawing inequity.³² At first blush, the line between capital asset and inventory may appear to be inequitable because it treats two very similar situations differently. Nonetheless, a property owner can, at little cost, avoid inventory classification by choosing to dispose of his property with fewer sales.³³ The law appears to be less inequitable for penalizing a person for doing something that person could have avoided at little or no cost. The cost of using one fewer sale to dispose of property is low, and generally, penalizing someone who does not incur that small cost does not offend our intuitive notion of equity. This conclusion suggests that in measuring line-drawing inequity, one should consider the cost a person must incur to fall on the favorable side of the line.

Third, can quantitative inequity further our understanding of the relationship between equity and efficiency? The ability to change behavior at

This Article also does not empathize with property owners who have to sell property to pay tax, and it ignores sentimental value that owners may claim to have in certain property. Stated differently, this Article assumes a person's sentimental value of money would be the same as the sentimental value of a piece of property, and a law that does not treat income from the property's appreciation in value the same as it treats income from services would be inequitable.

31. See David A. Weisbach, *Line Drawing, Doctrine, and Efficiency in the Tax Law*, 84 CORNELL L. REV. 1627, 1643-49 (1999) (describing the failure of the traditional line-drawing theory in affecting inequity).

32. See generally Borden, *supra* note 30, at 692-96 (suggesting that line-drawing is more equitable if the law draws the line to contemplate the similarities of various situations, the purpose of the law, and whether the location of the line will promote or deter behavior); Weisbach, *supra* note 31, at 1659-75 (arguing that the line should be drawn in such a manner to minimize the effect it has on behavior, and the line's location should be uninfluenced by any inequity it may cause).

33. See *supra* text accompanying note 28 (discussing the effect the number of sales have on the classification of property as inventory or capital gain).

a low cost may reduce inequity, but the traditional understanding is that a law is inefficient if it causes behavioral changes.³⁴ Changing one's behavior requires him to incur some cost, so doing so would be inefficient if it did not result in some benefit to society.³⁵ This problem illustrates the generally accepted tension between equity and efficiency—as one decreases, the other appears to increase.³⁶ Quantitative inequity illustrates that existing notions of the relationship between equity and efficiency may be incorrect—that inequity and inefficiency may in fact be positively correlated.

Fourth, does the orientation of the line affect the amount of resulting line-drawing inequity? People are not always in a position to alter their situation, so a law that draws a line based upon an unchangeable attribute or position may be inequitable on its face. For example, a law that discriminates based upon race or sex would generally be inequitable because people cannot change their race or sex. Suggesting that someone should consider such a change to obtain more favorable legal treatment offends our most fundamental sense of fairness and decency. Furthermore, race and sex do not usually relate to the stated purpose of discriminatory laws. For example, a law could provide that only women should be allowed to attend college. The stated purpose of that law might be that only people who are intellectually qualified should attend college. The problem with using sex as the criteria for this law is that a person's sex does not determine her intellectual qualifications. As a consequence, laws that discriminate based on such criteria will always be inequitable. The criteria used to draw lines are critical, and they often relate to the orientation of a line. By changing the criterion from sex to intelligence, the hypothetical law governing college admission reorients the line and would appear to reduce inequity.

The quantitative model for measuring inequity addresses each of these questions. The frame of reference for each question relies upon inequity as a valid tool for analysis. Although inequity analysis has been the subject of criticism by some commentators, a critical examination of those criticisms

34. See HARVEY S. ROSEN & TED GAYER, *PUBLIC FINANCE* 329–47 (9th ed. 2010) (demonstrating that a tax is inefficient if it changes behavior, causing consumer surplus to fall more than the revenues the tax generates); see also *infra* Part V (computing the inefficiency resulting from line-drawing based on specific assumptions).

35. See ROSEN & GAYER, *supra* note 34, at 329–47.

36. See, e.g., Nan D. Hunter, *Risk Governance and Deliberative Democracy in Health Care*, 97 GEO. L.J. 1, 59 (2008) (recognizing “the inherent tensions and trade-offs between equity and efficiency in health care”); Rachel F. Moran, *Brown’s Legacy: The Evolution of Educational Equity*, 66 U. PITT. L. REV. 155, 168 (2004) (“Because of inherent tensions between equity and efficiency, bureaucratic managerialism, as typified by high-stakes testing, can degenerate into a failed, incomplete, or even cynical initiative.”). But see A. MITCHELL POLINSKY, *AN INTRODUCTION TO LAW AND ECONOMICS* 9 (4th ed. 2011) (“Whether there is in fact a conflict [between equity and efficiency] depends on the specific distributional consequences of pursuing efficiency and on what constitutes an equitable distribution of income.”).

and the introduction of the quantitative model help establish inequity analysis as a valuable part of line-drawing analysis.

III. OVERVIEW OF INEQUITY ANALYSIS

The goal of inequity analysis is to ensure that laws are equitable. A law's desirableness should be inversely related to the amount of inequity it creates. Thus, inequity analysis (as opposed to equity analysis) becomes important in measuring the desirableness of a law.³⁷ Inequity analysis most likely derives from moral and philosophical writings on equality.³⁸ The origin of inequity analysis is attributed to Aristotle: "[Equity] in morals means this: things that are alike should be treated alike, while things that are unlike should be treated unlike in proportion to their unalikehood."³⁹ The model for quantitative inequity analysis introduced in this Article aims to measure whether things that are unlike are treated unlike in proportion to their unalikehood. A law will be inequitable to the extent it fails to treat things differently in proportion to their differences. Quantitative inequity

37. "Inequity analysis" also helps alleviate confusion that arrives from the use of "equity analysis," which may refer to the analysis of security instruments, such as corporate stock.

38. Some commentators use "equality" in recent moral and philosophical discussions to present the concept this Article refers to as "equity." See, e.g., Peter Westen, *The Empty Idea of Equality*, 95 HARV. L. REV. 537 (1982). This Article uses the term "equity" because it follows the tradition in tax law and policy discussions. Furthermore, this Article distinguishes substantive equity (treating likes alike and ensuring just laws) from procedural equity. See MARK W. JANIS, AN INTRODUCTION TO INTERNATIONAL LAW 67, 75 (4th ed. 2003) (distinguishing substantive equity from procedural equity in international law). Procedural equity refers to a judiciary's ruling in the absence of law or against law based upon principles that appear to produce a just result. See *id.* at 69-70 (recognizing that procedural equity may allow a judge to act *intra legem*, i.e., within the law to achieve the law's intent; *praeter legem*, i.e., beyond the law to fill in gaps or supplement the law with equitable rules; or *contra legem*, i.e., against the law to achieve an equitable result despite the law's explicit injunction). Equity, as used in this manner, refers to procedural equity recognized by English law. See GEO. TUCKER BISPAM, THE PRINCIPLES OF EQUITY 1-2 (Joseph D. McCoy ed., 11th ed. 1931) ("Equity, in its technical and scientific legal sense, means neither natural justice nor even all that portion of natural justice which is susceptible of being judicially enforced. It has, when employed in the language of English law, a precise, definite and limited signification, and is used to denote a system of justice which was administered in a particular court . . ."); BLACK'S LAW DICTIONARY 619 (9th ed. 2009) ("3. The recourse to principles of justice to correct or supplement the law as applied to particular circumstances <the judge decided the case by equity because the statute did not fully address the issue>."). This Article focuses on the extent to which the law treats similarly situated people similarly, so its concern is substantive, not procedural, equity.

39. Westen, *supra* note 38, at 542-43 (quoting ARISTOTLE, ETHICA NICOMACHEA V.3 1131a-31b (W.D. Ross trans., 1925)) (attributing the origin of the study of equality and the articulated statement of equality to Plato and Aristotle). Other translations attribute less directness to Aristotle: "For if the persons be not equal, their shares will not be equal; and this is the source of disputes and accusations, when persons who are equal do not receive equal shares, or when persons who are not equal receive equal shares." 1 ARISTOTLE, THE NICHOMACHEAN ETHICS OF ARISTOTLE § 3 (F.H. Peters trans., 5th ed. 1893), available at http://oll.libertyfund.org/?option=com_staticxt&staticfile=show.php%3Fid=903&chapter=70712&layout=html.

analysis, so described, is derivative of, but different from, the general concepts of equity. Those general concepts have been the subject of sharp criticism.⁴⁰ Because quantitative inequity analysis derives from the general concepts, those concepts and their shortcomings warrant attention.

A. GENERAL CONCEPTS OF EQUITY

The general concepts of equity inform the specific aspects of inequity analysis and deserve consideration. An earlier article referred to the comparison of likeness (i.e., treating likes alike) as the Aristotelian concept of equity.⁴¹ From that simplistic understanding, equity can have two conceptual interpretations: it can be understood as a concept that is “derivative, lexical, and descriptive”—or “lexical equity”—or “essential, substantive (or comparative), and prescriptive”—or “comparative equity.”⁴² Lexical equity has no normative significance, but comparative equity does. The property-owner example helps highlight the difference between lexical equity and comparative equity. Assume the law draws the distinction between capital asset and inventory at the 100-sale situation. Any property owner who uses 100 or fewer sales to dispose of the property will be subject to a 15% tax rate on gains from the sales. Any property owner who uses more than 100 sales to dispose of the property will be subject to a 35% tax rate on gains from the property. Property owners could determine their tax liability by simply asking whether the number of sales they use to dispose of property exceeds 100.⁴³

Property owners would gain nothing by comparing themselves to each other to determine the appropriate tax rate. For instance, assume Adam used 105 sales to dispose of property and the gain he recognized was subject to the 35% rate. Eve also used 105 sales to dispose of her property. Eve can determine the tax rate that applies to her by simply looking at the 100-sale cutoff the law uses and realizing that she is subject to the 35% rate because the number of sales she used exceeds the cutoff. She does not need to compare her situation to Adam's to determine her tax liability. If Eve were to determine her tax liability by comparing herself to Adam (i.e., recognizing that because she too had 105 sales, her gain should be subject to the 35% rate), the result would be derivative, lexical, and descriptive. The comparison would be an example of lexical equity.

40. See *infra* Part III.B.

41. Borden, *supra* note 30, at 655–56. That same article also reviewed the general concepts of equity and their critiques. *Id.* at 654–60.

42. Kenneth W. Simons, *Equality as a Comparative Right*, 65 B.U. L. REV. 387, 394 (1985).

43. Professor Simons used an example involving a family outing to explain lexical equity. In that example, a mother says that she will take all of her children to a movie on Friday. The children do not have to compare themselves to each other to determine the applicability of the mother's rule—by knowing that they are her children, they can know that they are going to the movie on Friday. *Id.* at 390, 394.

The definition of capital asset, however, derives from common law and requires comparisons. Numerous courts have considered the definition of capital asset and inventory in the real estate context,⁴⁴ but they have not provided a bright-line test. Instead, taxpayers and their advisors must consider the numerous rulings to determine whether a piece of property is a capital asset or inventory. The only way to predict the character of a piece of property is to compare it to those properties discussed in the myriad of court decisions. Where courts have yet to address the tax treatment of a particular type of situation, the analysis should compare the new situation to similar situations that courts have considered to determine the proper tax treatment of the new situation.

At first blush, lexical equity may appear to apply to line-drawing analysis. All situations on one side of the line are subject to the rules that apply to that side of the line (i.e., all situations with more than a certain number of sales will be inventory). No comparison of situations on that side of the line is needed to determine culpability. But line-drawing analysis is more nuanced; it must ask whether a line causes alike to be treated differently. That question turns on whether the situations on either side of the line are alike. The inquiry invokes more than mere lexical equity—or simply asking how the law applies—but something different from comparative equity, which does not look for a reference point to determine how the law should apply. Inequity analysis in the line-drawing context thus varies from traditional equity analyses—it must consider whether situations on either side of the line are alike. If they are, treating them differently as a result of line-drawing would be inequitable. Because all situations are alike in some respects and unlike in others, the analysis must adopt appropriate criteria to determine likeness,⁴⁵ as inappropriate criteria may result in unintended inequity. To prevent this, the analysis should consider the purpose for which a law was enacted to determine how it was meant to apply

44. See, e.g., *Major Realty Corp. v. Comm'r*, 749 F.2d 1483 (11th Cir. 1985); *Sanders v. United States*, 740 F.2d 886 (11th Cir. 1984); *Redwood Empire Sav. & Loan Ass'n v. Comm'r*, 628 F.2d 516 (9th Cir. 1980); *Suburban Realty Co. v. United States*, 615 F.2d 171 (5th Cir. 1980); *Devine v. Comm'r*, 558 F.2d 807 (5th Cir. 1977); *Philhall Corp. v. United States*, 546 F.2d 210 (6th Cir. 1976); *Jersey Land & Dev. Corp. v. United States*, 539 F.2d 311 (3d Cir. 1976), *abrogated by* *Pleasant Summit Land Corp. v. Comm'r*, 863 F.2d 263 (3d Cir. 1988); *Biedenharn Realty Co. v. United States*, 526 F.2d 409 (5th Cir. 1976); *Huxford v. United States*, 441 F.2d 1371 (5th Cir. 1971); *United States v. Winthrop*, 417 F.2d 905 (5th Cir. 1969); *Thompson v. Comm'r*, 322 F.2d 122 (5th Cir. 1963); *Tidwell v. Comm'r*, 298 F.2d 864 (4th Cir. 1962); *Sovereign v. Comm'r*, 281 F.2d 830 (7th Cir. 1960); *Gudgel v. Comm'r*, 273 F.2d 206 (6th Cir. 1959); *Frankenstein v. Comm'r*, 272 F.2d 135 (7th Cir. 1959); *Estate of Barrios v. Comm'r*, 265 F.2d 517 (5th Cir. 1959); *Guardian Indus. Corp. v. Comm'r*, 97 T.C. 308 (1991); *Daugherty v. Comm'r*, 78 T.C. 623 (1982); *Buono v. Comm'r*, 74 T.C. 187 (1980).

45. See J.R. Lucas, *Vive la Différence*, 53 PHIL. 363, 363-64 (1978) ("Men are all alike, and . . . Men are all different.").

to individuals.⁴⁶ Thus, the focus turns to determining the likeness of persons affected by line-drawing.

John Rawls' work reinforces the need for purposeful criteria in general inequity analysis; his theories inform the development of inequity analysis used in the line-drawing context. Rawls provides that equity "is defined by the first principle of justice and by such natural duties as that of mutual respect; it is owed to human beings as moral persons."⁴⁷ Stated differently, "The essence of [equity] that matters in America is the idea that 'one person is as good as another,' that each of us is a respected participant in the society, a member who counts for something."⁴⁸ Under the Rawlsian concept of equity, stigmatizing a group would cause inequity because such actions treat some people as not quite human, which is a breakdown of justice.⁴⁹ The Rawlsian approach exposes weaknesses in the Aristotelian concept of equity. A caste system may group likes in similar classes based on some criteria such as sex or race. Rules of the system could apply to one class but not another without violating the express language of the Aristotelian concept of equity.⁵⁰ Such rules would, however, violate the Rawlsian concept of equity because "some are considered inferior, treated as though they

46. See Kent Greenawalt, *How Empty Is the Idea of Equality?*, 83 COLUM. L. REV. 1167, 1178 (1983) ("In order to decide what persons are relevantly equal or unequal, substantive judgments have to be made about what characteristics count."). Norms of equality should inform lawmakers' decisions regarding rules related to presently unidentified individuals. *Id.* at 1178–79. Lawmakers should, however, disregard irrelevant factors. *Id.* at 1179.

47. JOHN RAWLS, *A THEORY OF JUSTICE* 447 (rev. ed. 1999).

48. Kenneth L. Karst, *Why Equality Matters*, 17 GA. L. REV. 245, 272 (1983). A great modern-day philanthropist and business icon also appeals to equity in his recent call to arms:

But humanity's greatest advances are not in its discoveries—but in how those discoveries are applied to reduce inequity. Whether through democracy, strong public education, quality health care, or broad economic opportunity—reducing inequity is the highest human achievement.

. . . .

I hope you will judge yourselves not on your professional accomplishments alone, but also on how well you have addressed the world's deepest inequities . . . on how well you treated people a world away who have nothing in common with you but their humanity.

Remarks of Bill Gates, Harvard Commencement 2007, HARV. GAZETTE (June 7, 2007), news.harvard.edu/gazette/story/2007/06/remarks-of-bill-gates-harvard-commencement-2007/ (second alteration in original).

49. See RAWLS, *supra* note 47, at 444 ("Equality of consideration puts no restrictions upon what grounds may be offered to justify inequalities. There is no guarantee of substantive equal treatment, since slave and caste systems (to mention extreme cases) may satisfy this conception. The real assurance of equality lies in the content of the principles of justice and not in these procedural presumptions."); Karst, *supra* note 48, at 249 ("[I]t is the imposition of this status inequality itself that is harmful.").

50. See Westen, *supra* note 38, at 572–75 & n.126.

deserve less.”⁵¹ Rawlsian equity therefore requires more than a mere comparison of arbitrary criteria; it requires that the criteria represent a meaningful, appropriate distinction that does not create hierarchies of superiority.

Rules relating to social inequality help illustrate the Rawlsian approach. For example, the Supreme Court has recognized that line-drawing criteria must be related to the purpose of a law, or the law may be inequitable. In fact, if the effect of a law is unequal treatment, the law may be unconstitutional regardless of the stated purpose.⁵² An example illustrates how the stated criteria may belie the purpose of a law and create an unequal effect. In *Palmer v. Thompson*, the Supreme Court held that the city of Jackson, Mississippi denied African-Americans equal protection of the laws by denying only them access to public swimming pools.⁵³ The city attempted to skirt the appellate court’s ruling by closing the pool to all people.⁵⁴ That rule might satisfy the Aristotelian concept of equity in its simplest form because it denies all humans access to the pool, thus appearing on its face to treat them equitably, but the purpose of the rule is obvious, as is its effect. The closing violates our sense of right and wrong because its purpose was to deny African-Americans access to the pool, thus treating them as inferior.⁵⁵ Later, the Court appeared to recognize that closing a public pool for the purpose of prohibiting a particular group of people from swimming stigmatizes that group, effecting unequal treatment.⁵⁶ Here, the Rawlsian approach required more than merely asking whether the law facially treated all races equally—it required asking whether the law resulted in harmful race-motivated treatment to a particular racial group. If a law does result in harmful race-motivated treatment, it draws a line based upon race, regardless of its stated purpose and the criteria it identifies to draw the line. To move beyond perfunctory acceptance of criteria, the analysis must examine the purpose and effect of a law and honestly assess the suitability of the stated criteria used to determine the application of a law.

Line-drawing analysis must similarly ask whether the criteria used to draw distinctions serve the appropriate purpose of law. The Supreme Court realized that closing public schools was a proxy for racial discrimination and

51. MARTIN LUTHER KING, JR., *I HAVE A DREAM: WRITINGS AND SPEECHES THAT CHANGED THE WORLD* 45 (James Melvin Washington ed., 1992).

52. See, e.g., *Washington v. Davis*, 426 U.S. 229, 238–48 (1976) (describing the relationship between purpose and effect that may determine the constitutionality of a law); *Griffin v. Cnty. Sch. Bd.*, 377 U.S. 218 (1964) (holding that closing public schools and funding a private school open only to white students was done to avoid the effect of the law of the land and was unconstitutional).

53. See *Palmer v. Thompson*, 403 U.S. 217 (1971).

54. See *id.* at 219.

55. See Westen, *supra* note 38, at 590–91.

56. See *id.* at 590–92 (citing *Washington*, 426 U.S. at 244 n.11).

struck down laws permitting or requiring such closings.⁵⁷ The Supreme Court did not merely ask whether the law was race-neutral on its face, but considered the purpose and effect of the law. As discussed above, the number of sales may correlate to the purpose of taxing gains from property at lower rates, but it does not perfectly account for the source of income. In the absence of a perfect proxy for source of income, a criterion such as sales may have to suffice in a second-best setting. Nonetheless, Rawlsian equity requires the analysis to recognize criteria's inadequacies and make changes, if feasible, to eliminate inequity.

Tax law has advanced inequity analysis in ways that incorporate both the Aristotelian and Rawlsian concepts of equity.⁵⁸ Tax law also provides quantitative measures that help develop quantitative inequity. In tax law, equity provides that "people with equal capacity [should] pay the same [amount of tax]."⁵⁹ Stated differently, "Units with the same level of well-being should be liable for identical taxes or transfers,"⁶⁰ or "equals [should] be treated equally."⁶¹ This approach, which gauges one's tax rate based on his capacity to afford disposing of more income, or his "ability" to pay, is

57. See *Griffin*, 377 U.S. 218.

58. John Stuart Mill used the term "equality" in discussing tax policy, recognizing that equality is as applicable to tax as it is to other laws. See JOHN STUART MILL, *PRINCIPLES OF POLITICAL ECONOMY* 735 (Prometheus Books 2004) ("For what reason ought equality to be the rule in matters of taxation? For the reason, that it ought to be so in all affairs of government. As a government ought to make no distinction of persons or classes in the strength of their claims on it, whatever sacrifices it requires from them should be made to bear as nearly as possible with the same pressure upon all; which, it must be observed, is the mode by which least sacrifice is occasioned on the whole."). Equity has become the term of preference in and is thoroughly integrated into tax analysis. See, e.g., *Oshkosh Truck Corp. v. United States*, 123 F.3d 1477, 1481 (Fed. Cir. 1997) ("[U]nless there is a rational reason for different treatment, similarly-situated taxpayers should be treated similarly."); HENRY C. SIMONS, *PERSONAL INCOME TAXATION: THE DEFINITION OF INCOME AS A PROBLEM OF FISCAL POLICY* 30 (6th ed. 1970) ("[W]e may say that tax burdens should bear similarly upon persons whom we regard as in substantially similar circumstances, and differently where circumstances differ."); Richard A. Musgrave, *ET, OT and SBT*, 6 J. PUB. ECON. 3, 4 n.2 (1976) (recognizing that Simons draws the distinction between horizontal equity and vertical equity without using such terms explicitly). Inequity analysis finds use in the line-drawing context in tax law. See generally Borden, *supra* note 30.

59. RICHARD A. MUSGRAVE & PEGGY B. MUSGRAVE, *PUBLIC FINANCE IN THEORY AND PRACTICE* 223 (5th ed. 1989). This definition relies upon an abilities theory, but it could rely upon a benefits theory, under which "each taxpayer would be taxed in line with his or her demand for public services." *Id.* at 220. Incidentally, after-tax economic gain probably would not be the appropriate criterion for measuring inequity under a benefits theory, but the scope of this Article does not allow for consideration of the public services parties receive in exchange for taxes paid. Consequently, it embraces the abilities theory.

60. Robert Plotnick, *The Concept and Measurement of Horizontal Inequity*, 17 J. PUB. ECON. 373, 374 (1982).

61. Louis Kaplow, *Horizontal Equity: Measures in Search of a Principle*, 42 NAT'L TAX J. 139, 139 (1989).

known as the "abilities theory."⁶² The language used in tax law embraces Aristotelian equity, but it uses well-being as a criterion, which incorporates the concerns addressed from a Rawlsian perspective. If Rawlsian equity only prohibits stigmatizing a particular group, a definition of similarity based on well-being should help measure inequity. In fact, commentators suggest that "Americans accept wide disparities in wealth and income, so long as the system remains open and people at the bottom of the economic scale are relieved from the kinds of deprivation that stigmatize or exclude them from participation in society."⁶³ Thus, tax law would violate Rawlsian equity only if it eliminated the opportunity for economic advancement for people of a lower socio-economic status, but it does not necessarily require tax law to equalize income, and would still allow higher tax rates for the wealthy.

Tax law creates two subcategories of equity: vertical equity and horizontal equity. Horizontal equity requires that "similar persons should be treated similarly,"⁶⁴ which is reminiscent of Aristotelian equity. The traditional concept of vertical equity "call[s] for an appropriate differentiation among unequals."⁶⁵ Assuming the abilities theory applies, differentiation would depend upon a person's ability to pay tax—thus, one who has more ability to pay should pay more tax.⁶⁶ Vertical equity generally informs the debate of the proper distribution of income,⁶⁷ suggesting that a progressive tax is appropriate because those with more wealth have a greater ability to pay tax. This Article does not, however, focus on the proper distribution of income. Instead, it adopts aspects of horizontal equity (treating similar persons similarly) and vertical equity (requiring proportional differentiation) to create a hybrid form of equity, or "hybrid equity."

To the extent that horizontal equity merely asks whether two situations are alike and treated similarly, its utility is limited. Hybrid equity considers the degree of likeness between two situations and asks whether the law appropriately comprehends that degree of likeness in determining the

62. See ROSEN & GAYER, *supra* note 34, at 356–57 ("A tax system . . . should distribute burdens fairly across people with different abilities to pay.")

63. Karst, *supra* note 48, at 262–63.

64. A.C. PIGOU, *A STUDY IN PUBLIC FINANCE* 8 (1928) (emphasis omitted); see also ROSEN & GAYER, *supra* note 34, at 366 ("People in equal positions should be treated equally."); Richard A. Musgrave, *Horizontal Equity, Once More*, 43 NAT'L TAX J. 113, 113 (1990) ("[H]orizontal equity . . . requir[es] equal treatment of equals.")

65. Musgrave, *supra* note 64, at 113.

66. See ADAM SMITH, *AN INQUIRY INTO THE NATURE AND CAUSES OF THE WEALTH OF NATIONS* 777 (Edwin Cannan ed., Modern Library 1937) (1776) ("The subjects of every state ought to contribute towards the support of the government, as nearly as possible, in proportion to their respective abilities . . ."). One commentator stated that "[vertical equity] is a matter of social taste and political debate." Musgrave, *supra* note 64, at 113.

67. See ROSEN & GAYER, *supra* note 34, at 356–57 ("A tax system should have vertical equity: It should distribute burdens fairly across people with different abilities to pay.")

extent to which the two situations should be treated alike. If two situations are slightly different, the law should treat them only slightly differently. If two situations, however, are substantially dissimilar, the law should treat them significantly differently. Hybrid equity exists if the law treats two situations similarly in proportion to their likeness and treats them differently in proportion to their unalikehood.

B. CRITICISM OF INEQUITY ANALYSIS

Several commentators have criticized inequity analysis. Critics of horizontal equity claim that it has no independent normative significance,⁶⁸ and that using irrelevant criteria to compare persons or situations further limits its utility.⁶⁹ This Article argues that hybrid inequity analysis has independent normative significance in a second-best setting because it assists with line-drawing analysis by comparing the treatment of different situations that lie along a continuum.⁷⁰ Hybrid inequity analysis requires knowledge of a law's purpose and also the ability to assess the degree to which situations on a continuum differ from one another. By asking whether the law treats situations differently in correct proportion to their differences, hybrid inequity has independent normative significance in the line-drawing context. In other words, because a comparison is the only way to determine if two situations are different and treated differently in the correct proportion to their differences, hybrid inequity is not merely tautological, derivative, lexical, or descriptive.

Properly used in line-drawing analysis, hybrid inequity analysis also overcomes the criticism that inequity analysis is a mere tautology.⁷¹ As Professor Westen articulated, "To say that people are morally alike is

68. See, e.g., Kaplow, *supra* note 61, at 141, 148 (arguing that horizontal equity has no independent significance); see also David Elkins, *Horizontal Equity as a Principle of Tax Theory*, 24 YALE L. & POL'Y REV. 43, 46 (2006) ("[H]orizontal equity can only be justified within the framework of a theory of social justice that accepts the morality of the market distribution."). Critics make this claim despite the staying power of horizontal inequity analysis. See, e.g., ROSEN & GAYER, *supra* note 34, at 368 ("We are forced to conclude that horizontal equity, however defined, is a rather amorphous concept. Yet it has enormous appeal as a principle of tax design. Notions of fairness among equals, regardless of their vagueness, will continue to play an important role in the development of tax policy."); SIMONS, *supra* note 58, at 30; Joseph T. Sneed, *The Criteria of Federal Income Tax Policy*, 17 STAN. L. REV. 567, 574-80 (1965) (identifying and describing horizontal equity's utility as a criterion of federal tax policy). This argument is particularly relevant in the context of lexical equity. See *supra* notes 42-43 and accompanying text.

69. See Borden, *supra* note 30, at 672-82 (discussing the inadequacy of horizontal equity if applied with irrelevant criteria and providing examples of such misuse).

70. Other commentators have argued that equity has independent normative significance in other analytical endeavors. See, e.g., MUSGRAVE & MUSGRAVE, *supra* note 59, at 117-20 (demonstrating how horizontal equity works in second-best settings to determine the more appropriate tax based on change in welfare cost).

71. See Westen, *supra* note 38, at 547-48 ("Equality is an undeniable and unchangeable moral truth because it is a simple tautology.").

therefore to articulate a moral standard of treatment—a standard or rule specifying certain treatment for certain people—by reference to which they are, and thus are to be treated, alike.”⁷² He therefore concluded that once the standard of treatment is prescribed, that standard should apply to everyone without regard to others.⁷³ The tautology criticism recognizes the weakness of lexical equity.⁷⁴ For example, if the law defines inventory by reference to the number of sales, a person may determine the character of property by referring to the number of sales in the definition and the number of sales used to dispose of the property.⁷⁵ Therefore, Professor Westen argues that equity adds nothing to the analysis of the rule’s applicability.

This criticism, however, ignores the effect of line-drawing. Take, for example, two drivers driving in a 70-mile-per-hour zone—one, say, driving 50 miles per hour, and the other driving 120 miles per hour. Both are substantially different with respect to safety and fuel efficiency, so treating them differently under the law appears to be appropriate. Nonetheless, the law also treats very similar drivers—one driving 70 miles per hour and another 71—differently as well. Hybrid inequity analysis helps reveal this potential inequity, and is thus more than a mere tautology.

Another criticism of inequity analysis is that it can never remove inequity from a system that requires line-drawing.⁷⁶ A definition of inventory based on the 100-sale situation creates inequity because it treats someone who uses 100 sales to dispose of property differently from someone who uses 101 sales. The law cannot eliminate inequity by moving the line to the 50-sale situation because doing so would merely move the equity split from the 100-sale situation to 50-sale situation. For that reason, some commentators claim that equity adds little when analyzing lines.⁷⁷ Quantitative inequity suggests that the location of the line may in fact affect the level of inequity. Thus, even though changing the line’s location may not eliminate inequity, it may reduce it.

The utility of quantitative inequity depends upon the criteria used to measure the degree of likeness between different situations. This Article relies on the premise that inequity can be properly measured if a law’s

72. *Id.* at 545 (footnote omitted).

73. *See id.* at 553.

74. *See supra* text accompanying notes 41–43.

75. *See supra* text accompanying notes 41–43.

76. *See* Weisbach, *supra* note 31, at 1643–49. An earlier article illustrated this in the non-recognition context. *See* Borden, *supra* note 30, at 675–82.

77. *See, e.g.,* Fred B. Brown, *Proposal To Reform the Like Kind and Involuntary Conversion Rules in Light of Fundamental Tax Policies: A Simpler, More Rational and More Unified Approach*, 67 MO. L. REV. 705, 735–39 (2002) (arguing that equity does not inform the analysis of the like-kind exchange rules). *But see* Borden, *supra* note 30, at 692–96 (arguing that because the law incorporates the realization requirement, equity must be considered in a second-best situation, and it appears to provide guidance regarding line-drawing).

purpose is clear. There are, however, limitations and even dangers to such presumptions. If line-drawing inequity arises when the law draws a line based on one set of criteria, simply changing the criteria could result in illusory equity. For example, some states famously enacted laws requiring people to pass literacy tests before being allowed to vote.⁷⁸ They framed and administered the tests in a discriminatory manner, with the aim to disenfranchise African-Americans.⁷⁹ Literacy may appear on its face to be a valuable skill for voters to possess, but literacy tests became a mere front for race-based discrimination. If inequity analysis were purely technical, it would accept the stated purpose of such tests without additional inquiry, and would fail to identify the embedded discrimination. Such blind acceptance is problematic. Nonetheless, line-drawing analysis often occurs in a second-best setting, so quantitative inequity analysis must accept the reasonably stated purposes of a law.

C. INTUITIVE NOTION OF INEQUITY

Thus far, this Article has assumed that some aspects of inequity are intuitive. This Subpart fleshes out the intuitive notion of inequity in the line-drawing context. Line-drawing often treats very similar persons differently, so the resulting inequity will be greatest with respect to persons whose situations are closest to the line.⁸⁰ For instance, the resulting inequity between treating the 100- and 101-sale situations differently is high, while the same between the 200- and 100-sale situations appears to be low.⁸¹ Thus, line-drawing inequity appears to be low at the extremes but higher at situations closer to the line. The reason for this disparity is fairly intuitive—generally, it makes sense to treat two very different things quite differently.

A simple Cartesian graph (Figure 3) assists in understanding this intuitive notion of inequity. The x-axis (i.e., horizontal line) represents the number of sales used to dispose of property. The continuum begins at the far left with a single sale. The number of sales increases in equal increments moving to the 200-sale situation on the far right of the continuum. The situations at either extreme of the line are quite different, but any two situations next to each other on the line are quite similar. Assume a law, which must necessarily draw a line, does so at the 100-sale situation (the y-axis). That law would treat the 100-sale situation and the 101-sale situation differently. The inequity of treating those two situations differently appears to be quite high because those two situations are quite similar. By comparison, the inequity of treating the two situations at each extreme

78. See *South Carolina v. Katzenbach*, 383 U.S. 301, 310–14 (1966).

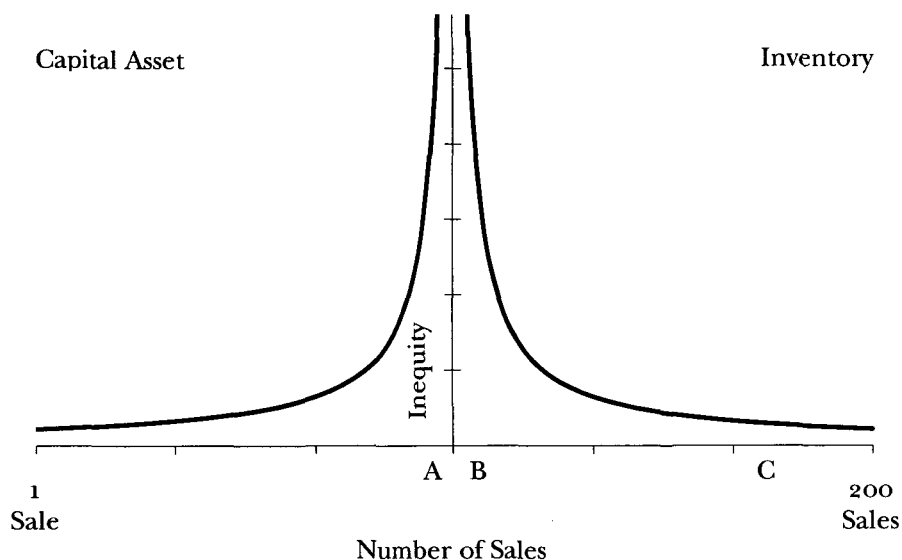
79. See *id.* at 333–34. To disenfranchise African-American voters, officials adopted several cruel practices, including giving white voters easier tests or excusing them from testing and giving subjective moral-standing assessments. *Id.* at 310–14.

80. See *supra* text accompanying notes 26–29.

81. See *supra* text accompanying notes 19–23.

differently from situations on opposite sides of the line appears to be quite low because those two situations are very unlike.

FIGURE 3
INTUITIVE NOTION OF INEQUITY



The closer situations are to the y-axis, however, the greater the inequity of treating them differently from a situation on the opposite side. In fact, treating the two situations immediately on either side of the y-axis differently would appear to create significant inequity.⁸² That follows intuitively—as differences between two situations become smaller, treating the two situations differently becomes more inequitable.⁸³ This intuitive inequity illustrated in Figure 3 is inherent in line-drawing.

Figure 3 helps identify other dimensions of inequity that result from line-drawing. First, as described above, the line generates inequity because it

82. The intuitive notion of inequity may be stated formulaically as simply $I = 1/|x|$, where I is the amount of inequity and x is a person's situation measured in units (number of sales in this hypothetical) from the vertical line. As x gets smaller and smaller, the amount of inequity moves toward infinity. The formula for the intuitive notion of inequity ($I = 1/|x|$) is the "inequity function."

83. The intuitive notion of inequity raises an issue that deserves further consideration. As the differences between two situations become smaller, the inequity of treating them differently becomes greater. Infinitesimals often do not receive consideration in some fields of study, and were in fact deemed irrelevant in mathematics for years. See SILVANUS P. THOMPSON & MARTIN GARDNER, *CALCULUS MADE EASY* 21–24 (1998). In law, commentators often focus on big-picture issues and neglect the smaller issues or smaller distinctions. The intuitive notion of inequity suggests that if the focus is on big issues, instead of small issues, laws can be grossly inequitable.

treats two similar persons—points *A* and *B*, one on either side of the *y*-axis—differently. Second, points *B* and *C* are somewhat far apart on the *x*-axis, suggesting they are significantly different. Nonetheless, the law treats them the same because they are on the same side of the *y*-axis. Because the law treats two significantly different situations the same, it may be inequitable in another respect. The intuitive notion of inequity does not appear to account for this second dimension of inequity. The discussion in the next Part illustrates how quantitative inequity accounts for both dimensions.

Having illustrated the intuitive notion of inequity, this Article now sets out to test whether the quantitative model for measuring line-drawing inequity recognizes intuitive inequity. The validity of the model will be enhanced if it yields a result that reflects the intuitive notion of inequity. To test the intuitive notion of inequity, a model must quantify and measure inequity. The next Part introduces the quantitative model for measuring inequity, reveals that line-drawing evinces the intuitive notion of inequity, and demonstrates that the location of a line may in fact affect the overall inequity of a law.

IV. THE QUANTITATIVE MODEL

Quantitative inequity accounts for the fundamental aspects of inequity analysis established above. Quantitative inequity therefore takes into account the difference between two persons and asks whether the law treats them differently in proportion to their differences.⁸⁴ The first step in measuring quantitative inequity is to identify the normative treatment, or ideal treatment, of each situation, recognizing that at least one situation will be taxed at 35% and one will be taxed at 15%. A law is inequitable to the extent it does not follow the normative treatment. Thus, the second step is to compare the actual treatment to the normative treatment. The following Subparts introduce a model that measures inequity and then illustrate how the model provides an opportunity to test common notions of equity and efficiency in the line-drawing context.

A. MEASURING INEQUITY

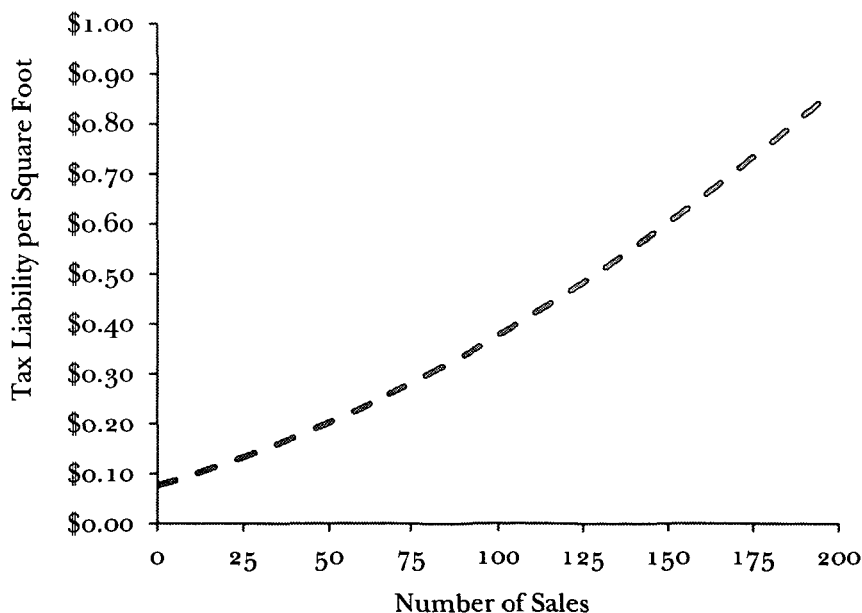
To measure inequity, the model must compute the difference between situations and establish the actual and normative treatment of each situation. The model uses the assumptions from the property-owner scenario set forth in Part II. Each situation on the *x*-axis is identified by the number of sales used to dispose of the property. The difference between any two situations is the difference between the number of sales the property owners at those respective situations use to dispose of their properties. The model

84. This is similar to a notion expressed by Professor Simons. See Simons, *supra* note 42, at 443 (“[I]mplicit proportionality rights require a more complete and complex analysis of the relation between a person’s treatment and the asserted reasons for the treatment.”).

uses the actual tax liability of each situation as the actual treatment for each situation, so it must determine the normative tax treatment for each situation.

To determine the normative tax treatment, the model assumes that the number of sales correctly identifies the source of income. Each additional sale increases the amount of income that derives from services (i.e., the efforts of the property owner to subdivide, market, and sell the property). The model also assumes that the 1-sale situation is properly subject to a 15.1% tax rate and that the 200-sale situation is properly subject to the 35% rate.⁸⁵ The tax rate difference between the two extremes is 19.9 percentage points and the two extremes are separated by 199 sales, so they are separated by one-tenth of a percentage point for each sale that is between them. In an ideal world, the tax rates of two adjacent situations should differ by one-tenth of one percentage point to account for the difference in source of income. Consequently, the 2-sale situation should be subject to a 15.2% tax rate, the 3-sale situation should be subject to a 15.3% tax rate, and so forth. With that information, the model can generate a normative tax liability for each situation and graph them as a normative-tax-liability curve, as depicted in Figure 4.

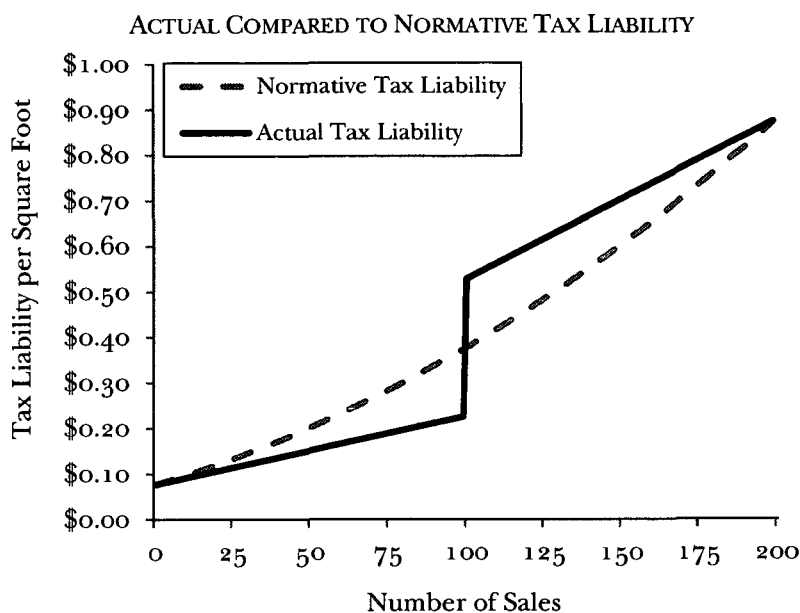
FIGURE 4
NORMATIVE TAX LIABILITY



85. The model assumes the 1-sale situation is subject to a 15.1% tax rate, recognizing that a portion of the gain at that point derives in very small part from services. That assumption also simplifies the computation of the normative tax rate for each situation.

The normative-tax-liability curve represents the ideal tax liability for each of the situations on the continuum.⁸⁶ The inequity of drawing a line to separate capital assets from inventory becomes apparent by comparing the actual-tax-liability curve to the normative-tax-liability curve. If the law draws the line separating the two classifications of property at the 100-sale situation, the actual-tax-liability curve would have a significant kink immediately following the 100-sale situation (see Figure 5).⁸⁷ This kink represents the significant tax-liability increase that occurs between the 100-sale situation and the 101-sale situation. The kink also results in an actual-tax-liability curve that substantially differs from the normative-tax-liability curve.

FIGURE 5

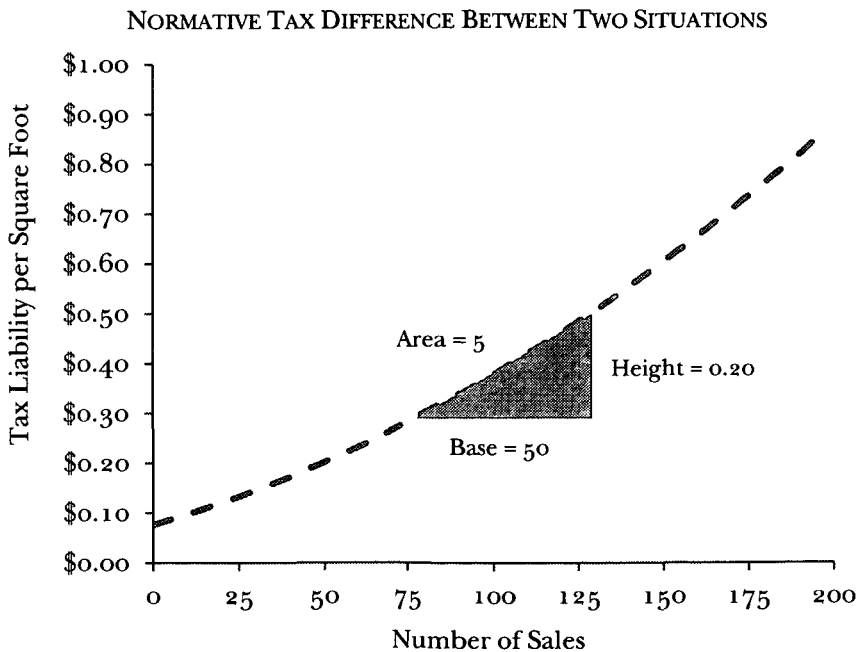


86. The curve derives from multiplying the normative tax rate by the gain realized at each sale-point. Recall from Figure 1 that gain increases as the number of sales increase, as does the normative tax liability. Consequently, the normative-tax-liability curve is slightly upward and concave. The analysis relies upon measures per square foot, as is typical for measuring costs of, and income from, property ownership in the real-estate industry. Tax liability per square foot is merely the tax liability owed at any particular situation divided by the square feet of the property. In this scenario, the number of square feet (the denominator) remains the same, but the before-tax gain and the tax liability (the numerator) increase as the number of sales increase. Consequently, the tax liability per square foot is lowest at the point where the fewest sales occur and highest at the point where the most sales occur.

87. The results presented by the graphs do not create actual lines. Instead, the representation of the information in the graphs as lines is for visual effect. The curve actually consists of numerous dots that are in very close proximity, but the curve is not continuous, and thus the "line" does not technically "kink." See *supra* note 14. Again, the graphs present the material in linear format for visual effect, and the text uses the term "kink" to describe the visual effect that results from the different treatment of two similar situations.

The next step is to quantify the amount of inequity that results from drawing the line at the 100-sale situation. Quantitative inequity requires a metric that contemplates both the difference between two situations (i.e., the number of sales separating them) and the difference between the actual and normative tax treatment of those two situations. The area of a triangle accounts for such differences. The model first computes the area of a triangle based upon the normative curve, using the 75- and 125-sale situations as comparison points. The difference between the 75- and 125-sale situations is 50 sales, so 50 is the base of the triangle. The normative tax liability of the 75-sale situation is \$0.28 per square foot, and the normative tax liability for the 125-sale situation is \$0.48 per square foot. The difference between those two amounts is \$0.20, so 0.20 is the height of the triangle.⁸⁸ The area of that triangle is therefore 5.⁸⁹ Figure 6 illustrates the manner in which the model determines the normative relationship between two situations using the area of a triangle.

FIGURE 6



Inequity exists to the extent the difference between the actual tax liability of two situations varies from the difference between the normative

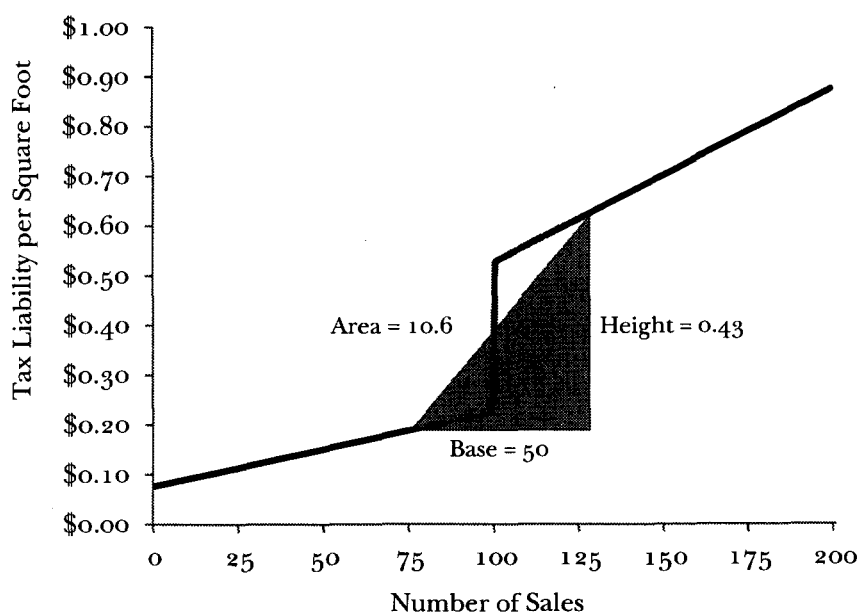
88. The unit labels are not important because all differences in tax liability are measured in dollars, so the model disregards the labels in computing the difference.

89. The area is one-half of the 50-unit base multiplied by the 0.20-unit height ($1/2 \times 50 \times 0.20$).

tax liability of those two situations. Therefore, quantitative inequity requires a similar computation (using the area of a triangle) based upon the actual-tax-liability curve. The base of this triangle is also 50, because the analysis is still considering the difference between the 75- and 125-sale situations. The height, however, is substantially higher than that of the triangle based upon the normative-tax-liability curve. The actual tax liability per square foot at the 75-sale situation is \$0.188, and the actual tax liability at the 125-sale situation is \$0.613. The difference between those two amounts is \$0.425. Therefore, the height of the triangle is 0.425, and the area of the triangle is 10.625, as illustrated in Figure 7.

FIGURE 7

ACTUAL TAX DIFFERENCE BETWEEN TWO SITUATIONS



Using the two triangles, the model is able to determine the extent to which the law is inequitable with respect to the two points in question. To determine that inequity, the model first computes the difference between the areas of the two triangles. It then divides that difference by the area of the normative triangle.⁹⁰ The result is a measure of inequity based upon a single reference point. The difference between the areas of the two triangles

90. The inequity between two points is the difference of the areas of the two triangles as a percentage of the area of the normative triangle. The model uses the percentage difference instead of the nominal value to allow for comparisons of various scenarios with differing dollar amounts on units of differentiation.

in this case is 5.625.⁹¹ That amount divided by the area of the normative triangle (5) returns a disparity of 1.12.⁹² This amount reflects the inequity caused by treating the two situations differently from the normative standard; the 1.12 measure is the single-reference-point inequity,⁹³ which measures the extent to which the law treats two situations differently, disproportionately to their differences. Figure 8 provides a visual representation of the two triangles, accentuating their differences.⁹⁴

91. The difference is the 10.625-unit area of the actual triangle minus the 5-unit area of the normative triangle.

92. The computation of inequity between the two situations can be stated formulaically as follows:

$$\text{Single-Reference-Point Inequity} = \left| \frac{\text{normative area} - \text{actual area}}{\text{normative area}} \right|$$

The formula uses the absolute value of the result because the difference between the normative area and the actual area is relevant. Whether the normative area or the actual area is larger is irrelevant because the concern is the difference. The same equation can be stated more specifically as follows:

$$\text{Single-Reference-Point Inequity} = \left| \frac{\frac{1}{2} (s_x - s_n) (nt_x - nt_n) - \frac{1}{2} (s_x - s_n) (at_x - at_n)}{\frac{1}{2} (s_x - s_n) (nt_x - nt_n)} \right|$$

Where:

s = the situation (i.e., the number of sales)

nt = normative tax liability at a given situation

at = actual tax liability at a given situation

x = situation under analysis

n = situation to which x is being compared

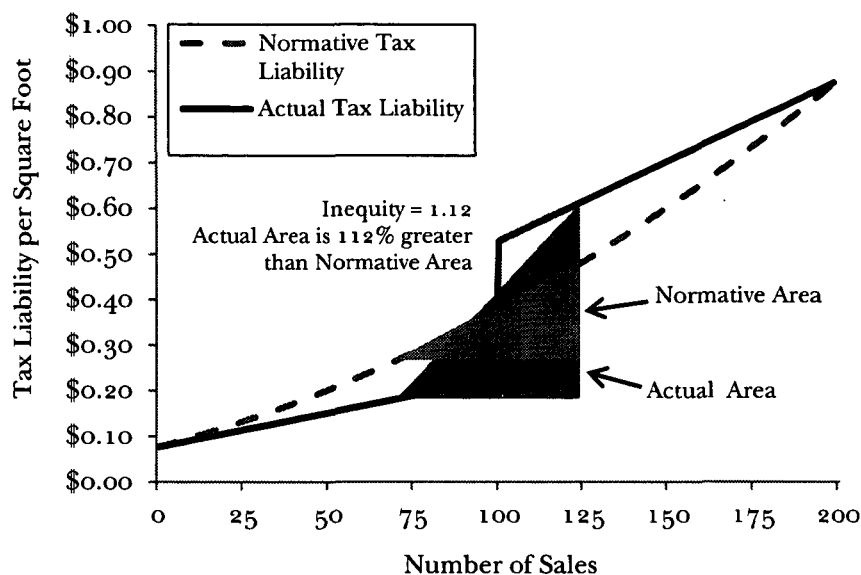
Simplified, the formula appears as follows (for $x \neq n$):

$$\text{Single-Reference-Point Inequity} = \left| 1 - \frac{(at_x - at_n)}{(nt_x - nt_n)} \right|$$

93. The inequity of the 75-sale situation with respect to the 125-sale situation will equal the inequity of the 125-sale situation with respect to the inequity of the 75-sale situation.

94. In Figure 8, the triangles overlap. They would not, however, overlap if they connected two points on the same side of the line. Similarly, if the actual-tax-liability curve were parallel to the normative-tax-liability curve, the model would suggest that there was no inequity. The model only measures inequity that results from line-drawing or from treating two situations proportionately differently from the normative treatment. Thus, if every situation were taxed more or less in the same proportion and the curve of the actual-tax-liability was the same as the curve of the normative-tax-liability, using this model, an upward or downward shift of the actual-tax-liability curve would not cause inequity.

FIGURE 8
MEASURE OF INEQUITY BETWEEN TWO SITUATIONS



The single-reference-point inequity fails to capture the total inequity that results from taxing the 75-sale situation at 15% instead of the 22.5% normative rate.⁹⁵ In fact, the 75-sale situation is subject to the same 15% rate that applies to all situations from the 1-sale situation to the 100-sale situation, even though the normative tax rate for each of these situations differs proportionally to the number of sales. Similarly, all situations to the right of the 100-sale situation are subject to the 35% rate, even though the normative rate for each situation (other than the 200-sale situation) similarly differs across the number of sales. As a consequence, tax law does not treat the 75-sale situation differently from all other situations in proportion to their differences.

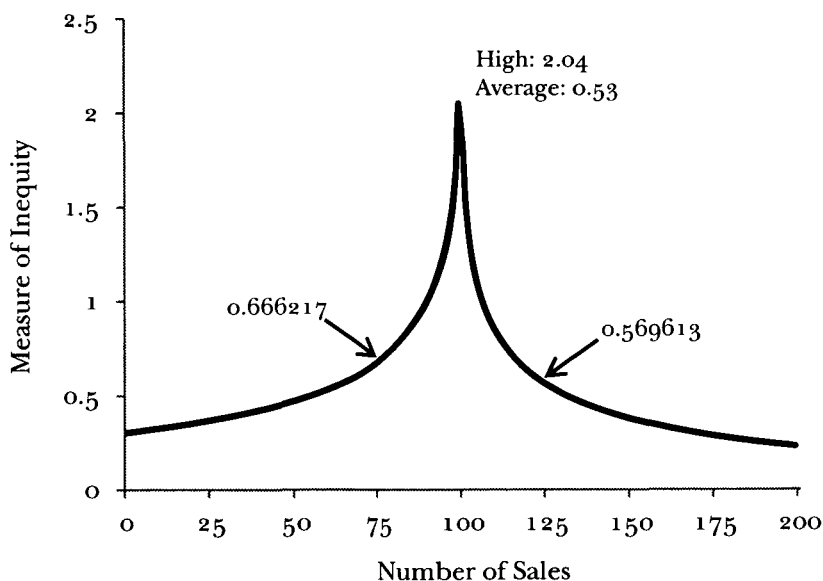
To determine the inequity of taxing the 75-sale situation at 15% instead of the normative rate, the model must use the triangle method to compare the 75-sale situation to every other situation on the continuum. The model could then determine the total inequity for the 75-sale situation (the single-point inequity).⁹⁶ To compute that single-point inequity, the model must

95. The normative tax rate for the 75-sale situation is the sum of the 15% that applies to the 1-sale situation plus 75 times 1/10, which represents the 75 sales representing the two situations.

96. The model averages the inequity measures of the 75-sale situation and every other situation to derive the inequity for the 75-sale situation. The value of the inequity at the 75-sale situation is unimportant and would make comparison across systems difficult, but the average of

therefore make 199 comparisons of triangles derived for the 75-sale situation from the normative curve and triangles derived from the actual-tax-liability curve. That procedure returns a single-point inequity for the 75-sale situation of 0.666217. The same procedure would return a single-point inequity of 0.569613 for the 125-sale situation.⁹⁷ Having established the method for computing single-point inequity, the model can compute the single-point inequity for every situation on the continuum. The single-point inequity for each situation is shown in Figure 9. The resulting curve reveals the quantitative inequity caused by drawing the line at the 100-sale situation. Figure 9 also notes the highest single-point inequity value (2.04) and the average of single-point inequity (0.53) of the curve.

FIGURE 9
INEQUITY WITH LINE AT 100



The inequity curve in Figure 9 looks very similar to the graph of the intuitive notion of inequity in Figure 3. This similarity suggests that the

the total inequity of the 75-sale situation and every other situation provides a number that allows for comparisons among different scenarios.

97. The following formula determines the inequity of a single point based upon a comparison of the single point to all other points on the continuum (for $x \neq n$):

$$\text{Single-Point Inequity} = \frac{1}{J} \sum_{n=1}^J \left| 1 - \frac{(at_x - at_n)}{(nt_x - nt_n)} \right|$$

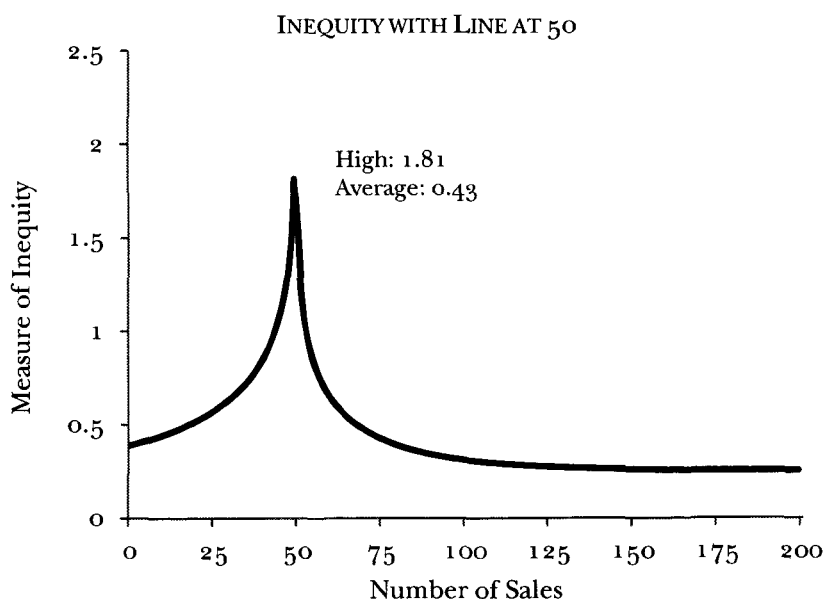
Where J = the number of situations on the continuum.

model provides a reasonable measure of inequity. Figure 9 reveals, however, that the inequity does not go to infinity, even for situations close to the line. This is because the different tax treatment in this scenario will never exceed twenty percentage points. If the treatment were more disparate, the inequity may spike even higher. For instance, in criminal law, a person on one side of the line could be sentenced to death while a person on the other side could be sentenced to a maximum of life in prison. That difference in treatment is substantial, so if the practical difference between the offenses those two people committed is small, the inequity of treating them differently would be great—and would perhaps even approach infinity. The model of quantitative inequity next considers other factors that may affect a law's level of inequity.

B. HOW THE LOCATION OF A LINE AFFECTS INEQUITY

By measuring the inequity that results when a line is drawn at each of the various points on the continuum, the model demonstrates that the location of a line directly affects inequity.⁹⁸ Figure 10 depicts the inequity curve that results from drawing the line at the 50-sale situation. Notice that the highest point on this new curve (1.81) is lower than the highest point on the curve that results from drawing the line at the 100-sale point (2.05). Furthermore, the average inequity when the line is at the 50-sale situation (0.43) is lower than when it is at the 100-sale situation (0.53).

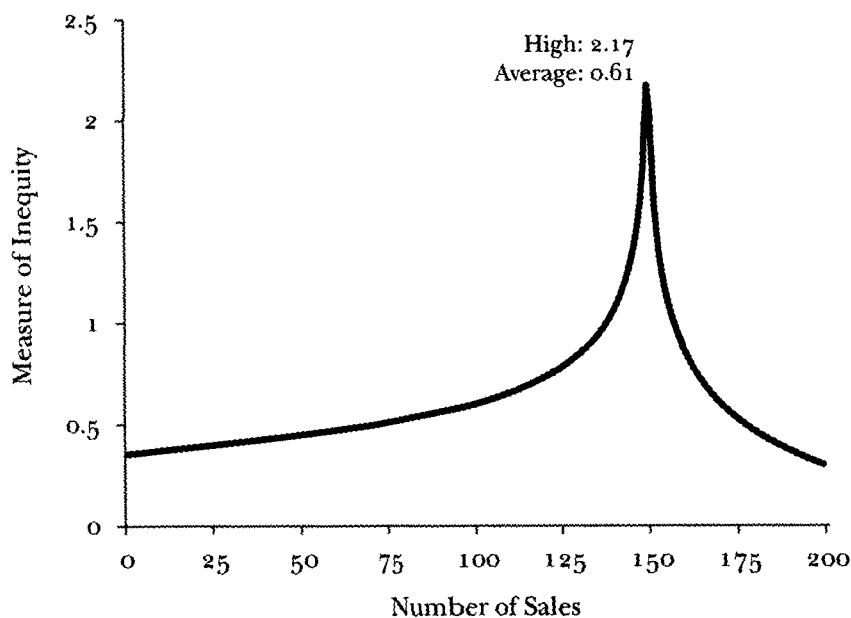
FIGURE 10



98. Because the law requires two tax rates, at the left extreme the line will be drawn at the 1-sale situation, and at the right extreme it will be drawn at the 199-sale situation.

Next, consider the result with the line at the 150-sale situation, as depicted in Figure 11. Notice that the highest point on the curve (2.17) and the average of all of the points on the curve (0.61) are higher than the respective points on the curves derived from the lines at the 50-sale and 100-sale situations. Because the level of highest point and the average of all points changes when the line is drawn at different situations, the model of quantitative inequity suggests that the location of the line affects the level of inequity.

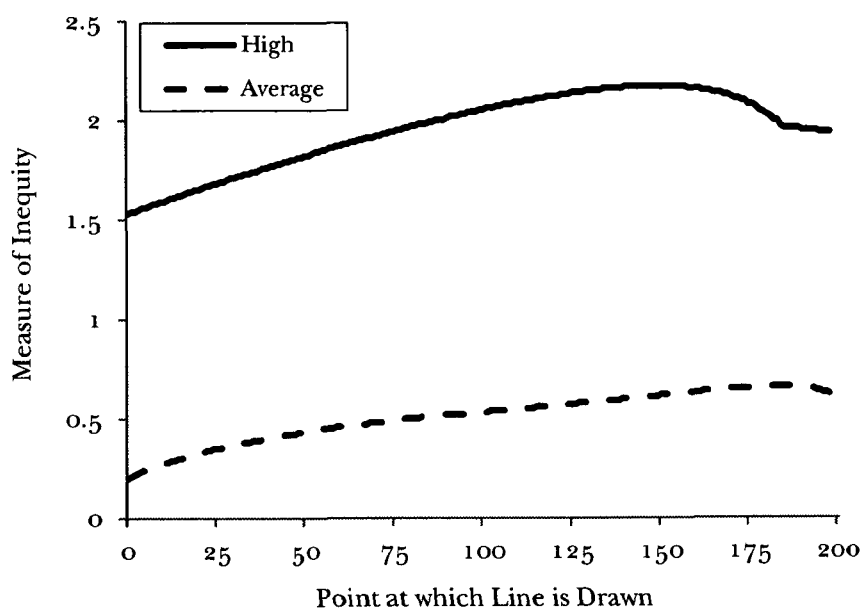
FIGURE 11
INEQUITY WITH LINE AT 150



As a general rule, the closer the line is to the 1-sale situation, the less inequity results from line-drawing. Figure 12 plots the highest single-point inequity and the average single-point inequity derived from drawing the line at each of the respective points on the continuum. Notice that each measure of inequity increases as the location of the line moves away from the 1-sale situation, until some point after the 150-sale situation. Both the highest single-point inequity and average decline slowly after the point.⁹⁹ The curve suggests that inequity is lowest when the line is closest to the 1-sale situation.

FIGURE 12

INEQUITY BASED ON PLACEMENT OF LINE

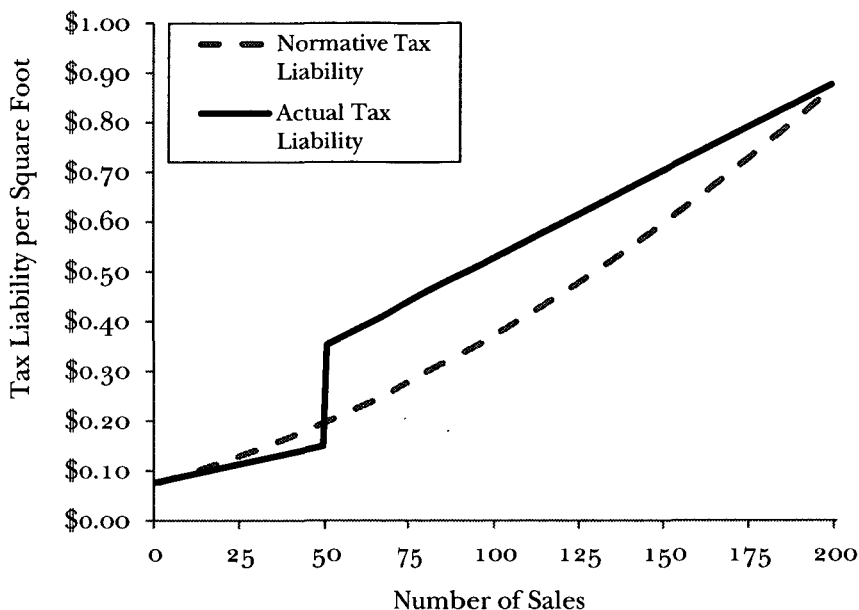


99. The reason for that leveling and decline may be attributable to the difference above the normative curve and below the actual curve narrowing after a certain point.

A comparison of the actual-tax-liability curve and the normative-tax-liability curve suggests why the overall inequity is lowest when the line is drawn closer to the 1-sale situation.¹⁰⁰ The closer the line is to zero, the more closely the actual-tax-liability curve tracks the normative-tax-liability curve, as illustrated in Figure 13.

FIGURE 13

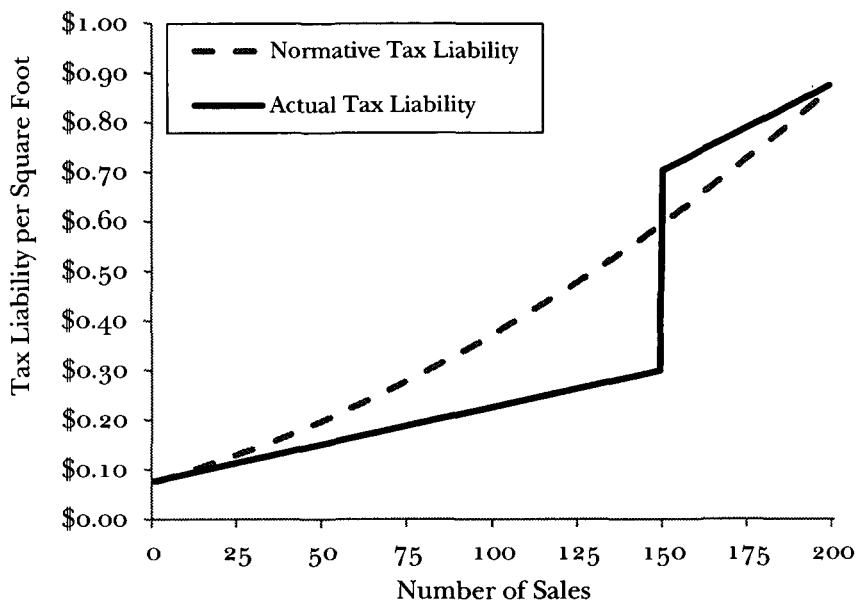
ACTUAL COMPARED TO NORMATIVE WITH LINE AT 50



100. The analysis assumes that at least one situation will be subject to the 15% rate and one will be subject to the 35% rate. Consequently, the extremes of the line-drawing are at the 1-sale situation and the 199-sale situation.

The closer the line is drawn to the 200-sale situation, the more the actual-tax-liability curve deviates from the normative-tax-liability curve, as illustrated in Figure 14. The difference between the curves at these extremes helps illustrate why the overall inequity varies depending upon where the law draws the line.

FIGURE 14
ACTUAL COMPARED TO NORMATIVE WITH LINE AT 150



Notice that inequity will always exist under the current assumptions, regardless of where the line is drawn. If the law draws the line at the 1-sale situation, all but one situation would be subject to the 35% tax rate.¹⁰¹ That flat rate for all but the 1-sale situation differs from the normative tax rate, which varies slightly for each situation. The normative tax rate attempts to account for the source of income, so as more income derives from services, the tax rate increases. A flat rate does not account for the different sources of income. Consequently, a flat rate will not eliminate inequity—it would treat all situations the same irrespective of their tax-relevant differences. Thus, a flat rate cannot purge inequity from this system.¹⁰²

101. If the law draws the line at the 1-sale situation, the tax rate will be almost a flat 35%. Nonetheless, the curve representing that flat rate will slope upwards because the gain increases as the number of sales increase. See *supra* Figure 1.

102. A flat rate would eliminate inequity only if it disposed of the distinction between capital gain and ordinary income. If that were the case, the normative-tax-liability curve would derive from a single rate.

Noting that inequity is lowest when the line is closest to zero is critical. The definition of capital asset is the narrowest when the line is closest to the 1-sale situation because fewer properties will qualify for capital asset classification and gain the advantage of the favorable capital gains rates. The narrower definition is not taxpayer-friendly. As a consequence, the law that is least taxpayer-friendly appears to be the most equitable.

This result seems to be different from that which would result from an inefficiency analysis, which is not unexpected based upon a traditional understanding of the tension between equity and efficiency. Professor Weisbach promotes efficiency as the superior tool for line-drawing analysis.¹⁰³ He suggests the law should draw the line where the compensated elasticity is low so that the line will be less likely to compel changes in taxpayer behavior.¹⁰⁴ Compensated elasticity, or price elasticity of demand, is the "ratio of price to quantity multiplied by the slope of the demand function."¹⁰⁵ The compensated elasticity in the property-owner scenario would be lowest when the line is closest to the 200-sale situation, so Professor Weisbach's efficiency analysis would suggest that the law should draw the line closer to the 200-sale situation.¹⁰⁶ This is the anticipated outcome based upon the common understanding of the tension between equity and efficiency, but it contradicts the result of inequity analysis. The discussion below further considers the measurement of inefficiency, reaching a different conclusion.¹⁰⁷

Line-drawing in the property-owner scenario is an effort to distinguish between different sources of income, but it creates inequity by drawing a

103. See Weisbach, *supra* note 31, at 1627–28. Professor Weisbach appears to ignore the concept of the continuum, suggesting, for example, that if a transaction is a close substitute for sale, it should be taxed as a sale, and something falling between a security and equity should be taxed like its closest substitute. See *id.* at 1661–62. Failure to recognize the continuum is a serious defect in the analysis because some situations will not be "close" to either extreme, but instead must be classified.

104. See *id.* at 1631.

105. See HAL R. VARIAN, *INTERMEDIATE MICROECONOMICS: A MODERN APPROACH* 267 (5th ed. 1999). The same formula applies to the price elasticity of supply. See RALPH T. BYRNS & GERALD W. STONE, *ECONOMICS* 458 (6th ed. 1995) ("The price elasticity of supply measures the responsiveness of quantity supplied to changes in price." (emphasis omitted)). Professor Weisbach applies his analysis to the question of classifying debt and equity without identifying the relative non-tax demand of either type of instrument. See Weisbach, *supra* note 31, at 1661–63, 1673–74. If the continuum were created with a negative-sloping demand curve, it would be unclear which end of the continuum would be appropriate for both debt and equity, making the computation of compensated elasticity difficult for instruments that fall within either extreme. See *id.* at 1661–62.

106. The slope of the supply curve in the property-owner hypothetical remains constant and less than one, see *supra* Figure 1, but the ratio of price to quantity decreases as the number of sales increase.

107. See discussion *infra* Part V.B. In fact, the inefficiency is negative, suggesting that line-drawing in this scenario may affect behavior, but it does not cause inefficiency. That conclusion goes against the common understanding of the effect of line-drawing.

single line. The law could help eliminate inequity by drawing more lines and using more tax rates, depending upon the number of sales. Indeed, the normative-tax-liability curve is derived from drawing 200 lines and using 200 different tax rates. Although numerous lines may be ideal, in the second-best setting, multiple lines may be impractical.¹⁰⁸ This model relies upon a set of assumptions that allow for the convenient computation of a normative-tax-liability curve. Courts, however, make decisions in complex settings, so too many lines could make that process burdensome. Thus, one line (or a few at most) will most likely remain the norm, and inequity will always be a concern. Having revealed that the location of the line may affect inequity, this Article next considers how behavior may affect inequity.

V. RECONSIDERING THE RELATIONSHIP BETWEEN EQUITY AND EFFICIENCY

Up to this point, the computation of inequity assumes property owners will not alter their behavior to obtain better tax treatment. This Part considers how linear behavior (i.e., left-right movement along the x-axis from one situation to another) may affect line-drawing inequity. The discussion will show that if a person has the ability to change situations, changing situations may reduce the inequity caused by line-drawing. The effect of changing one's behavior may also help identify the optimal location of a line. The model also provides an opportunity to quantify inefficiency and refute the traditional understanding of the tension between inequity and inefficiency.

A. HOW LINEAR BEHAVIOR AFFECTS INEQUITY

Recall that Figure 2 revealed a cliff immediately following the 100-sale situation, the point at which the analysis assumed the law draws the line between capital assets and inventory. The kinked curve in that figure represents the after-tax economic gain that a property owner would recognize if the line were drawn at the 100-sale situation. Because the curve drops off after the 100-sale situation, the after-tax economic gain for the 101-sale situation is considerably less than the after-tax economic gain for the 100-sale situation.¹⁰⁹ Given a choice, rational property owners would prefer to sell their property using 100 sales instead of 101 sales; in fact, they would move from any given situation to any other situation if the move would increase their after-tax economic gain.

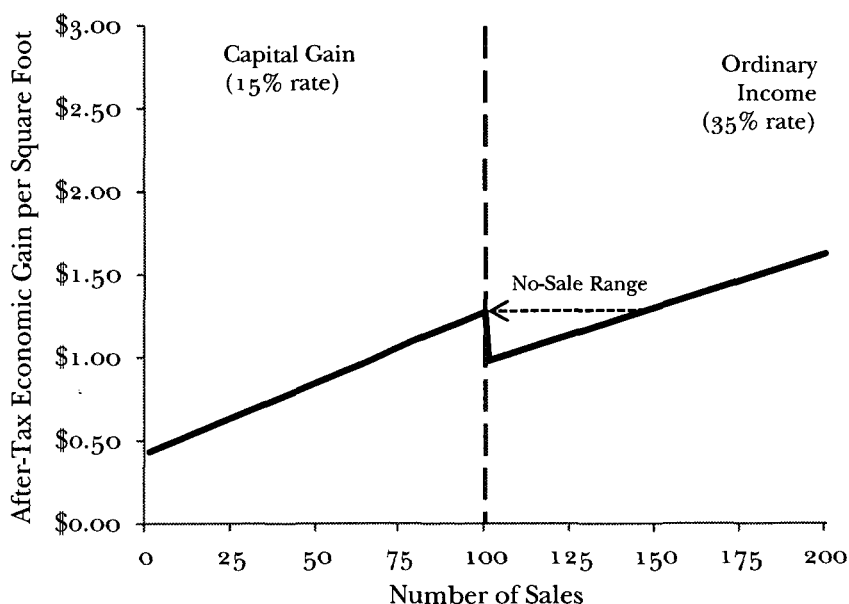
The after-tax economic gain per square foot for the 100-sale situation is \$1.275; it does not reach that level again until the 147-sale situation, at

108. For one thing, many developers use fewer than 200 sales to dispose of property because their property is not large enough to accommodate 200 lots. The law would have to devise some system for determining the appropriate rate of tax for each disposition. That would be an extremely difficult task.

109. The cliff occurs because the pretax economic gain of the two situations is similar, but the tax rates of the two situations is quite different. See *supra* Figure 2.

which point the after-tax economic gain is \$1.281 per square foot. Therefore, rational property owners who would otherwise use between 101 and 146 sales to dispose of their property will use either 100 or 147 sales. Assuming that those who would otherwise use between 101 and 146 sales would only decrease the number of sales they use to dispose of property,¹¹⁰ everyone in the range between the 100-sale situation and the 147-sale situation would use 100 sales to dispose of their property, as depicted in Figure 15. The changed behavior would create a no-sale range between the 100- and 147-sale situations.

FIGURE 15
PROPERTY OWNER REACTION TO LINE-DRAWING

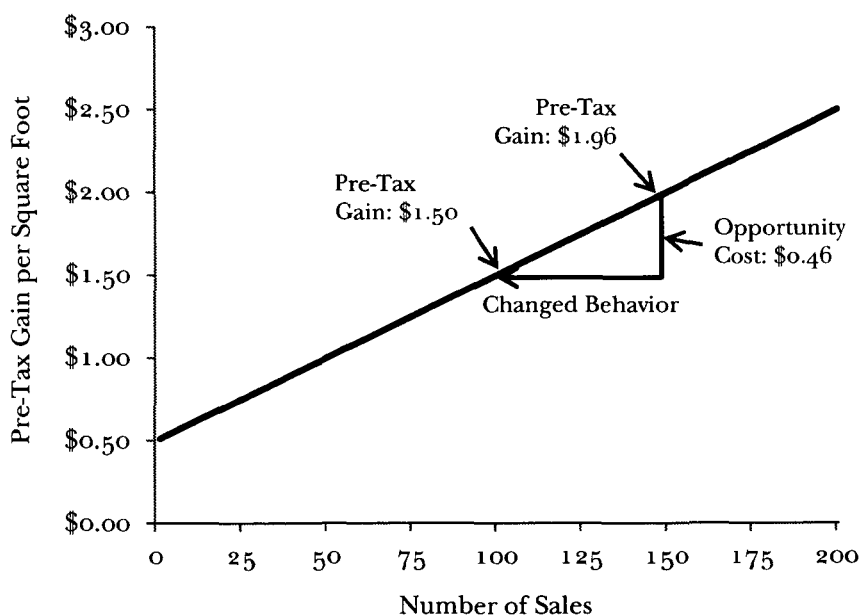


Because rational property owners will change their behavior to improve their after-tax economic gain, the model must account for such change in determining the system's inequity. In particular, the model must determine the economic equivalent of the after-tax economic gain for each situation that would otherwise be in the no-sale range. The model adopts a modified tax liability to determine the economic equivalent for those property owners who change situations. The modified tax liability accounts for both the cost incurred to change situations and the actual tax liability. Those property

110. They could of course increase the number of sales to obtain an equivalent after-tax economic gain, but doing so would require greater effort and some risk. The increased effort and risk for a similar after-tax result suggests that property owners would use fewer sales rather than more to overcome the negative effects of the change in tax rate.

owners who change their behavior will incur a cost—they will give up the pre-tax economic benefit they would otherwise obtain by disposing of the property with the number of sales they originally planned to use. The opportunity cost of moving is thus the difference between the pre-tax gain they would have recognized if they had not changed behavior, and the pre-tax gain they recognize after changing their behavior (see Figure 16). The opportunity cost of moving from the 146-sale situation (pre-tax gain is \$1.96 per square foot) to the 100-sale situation (pre-tax gain is \$1.50 per square foot) is therefore \$0.46 per square foot.

FIGURE 16
OPPORTUNITY COST OF CHANGED BEHAVIOR

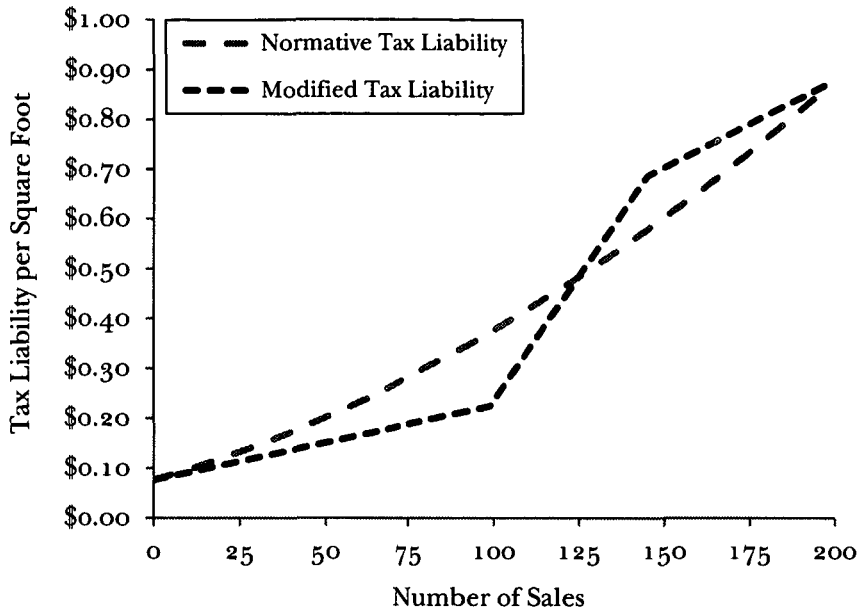


To compare the property owners in the no-sale range to other property owners, the model adds the opportunity cost of moving to the 100-sale situation to the tax those persons will pay as a result of using 100 sales to dispose of their property. The sum of the opportunity cost and the tax liability is the modified tax liability. The modified-tax-liability curve has two definite kinks (see Figure 17) instead of just the one kink found in the actual-tax-liability curve (see Figure 5). The first kink represents the point at which the law draws the line (the left boundary of the no-sale range), and the second kink represents the point at which property owners do not change situations (the right boundary of the no-sale range). The span between the two kinks helps smooth the line. As a consequence, the

modified-tax-liability curve in Figure 17 is more similar to the normative-tax-liability curve.

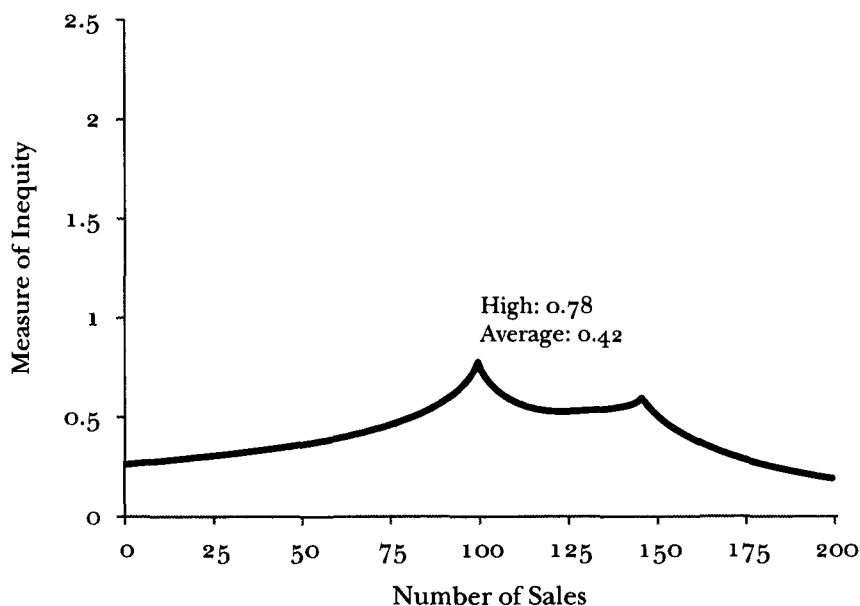
FIGURE 17

MODIFIED TAX LIABILITY COMPARED TO NORMATIVE TAX LIABILITY



The closer similarity of the curves suggests that the changed behavior reduces the inequity that results from line-drawing. Indeed, Figure 18 illustrates that inequity is lower when people change their behavior as a result of line-drawing—the high point (0.78) and average (0.42) in Figure 18 is lower than the high point (2.04) and average (0.53) in Figure 9, which does not account for changed behavior. This result does not comply with the traditional understanding of the tension between equity and efficiency. Line-drawing generally creates inefficiency because it would prompt changed behavior. Given the existence of a line, changed behavior appears to reduce inequity. The effect that changed behavior has on inequity suggests that inequity and inefficiency may be related in ways unanticipated prior to the creation of this model.

FIGURE 18
MODIFIED INEQUITY WITH LINE AT 100

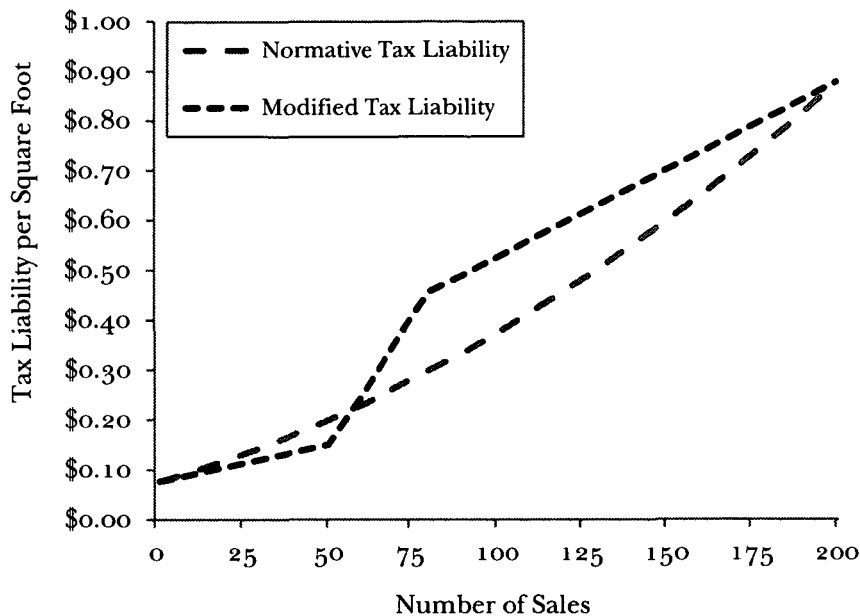


Note also that the inequity curve that derives from the modified tax liability is bimodal. The bimodality appears to result from the two kinks in the modified-tax-liability curve. Because the law causes one to change their behavior, it in effect draws two lines—one at the 100-sale point (the point of the actual line) and one at the 146-sale point (the right boundary of the no-sale range). After seeing the double-kinked line, the bimodal inequity curve is less surprising.

Now consider the results if the law draws the line at different points. The modified tax liability resulting from the line drawn at the 50-sale situation is another double-kinked curve (see Figure 19). The no-sale range for such a curve spans between the 51-sale situation and the 80-sale situation.

FIGURE 19

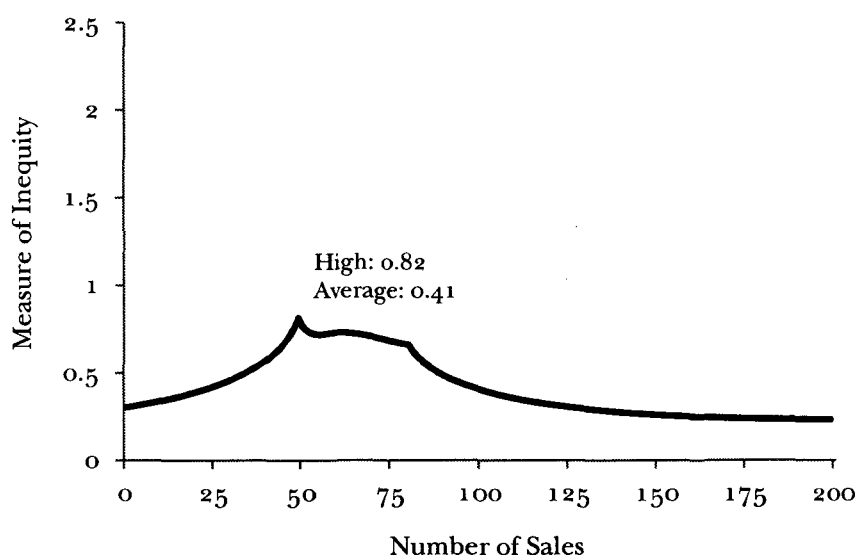
MODIFIED TAX LIABILITY COMPARED TO NORMATIVE TAX LIABILITY
WITH LINE AT 50



The inequity curve for the line drawn at the 50-sale situation is not quite bimodal (see Figure 20), but it does have two distinct changes in direction. The slight rise between the distinct points is the highest where the normative-tax-liability curve and the modified-tax-liability curve intersect.¹¹¹ The reason for that rise, however, is not apparent. Again, the highest single-point inequity (0.82) and the average (0.41) derived from the modified-tax-liability curve are lower than those derived using the actual-tax-liability curve (1.81 and 0.43, respectively) (see Figure 10).

FIGURE 20

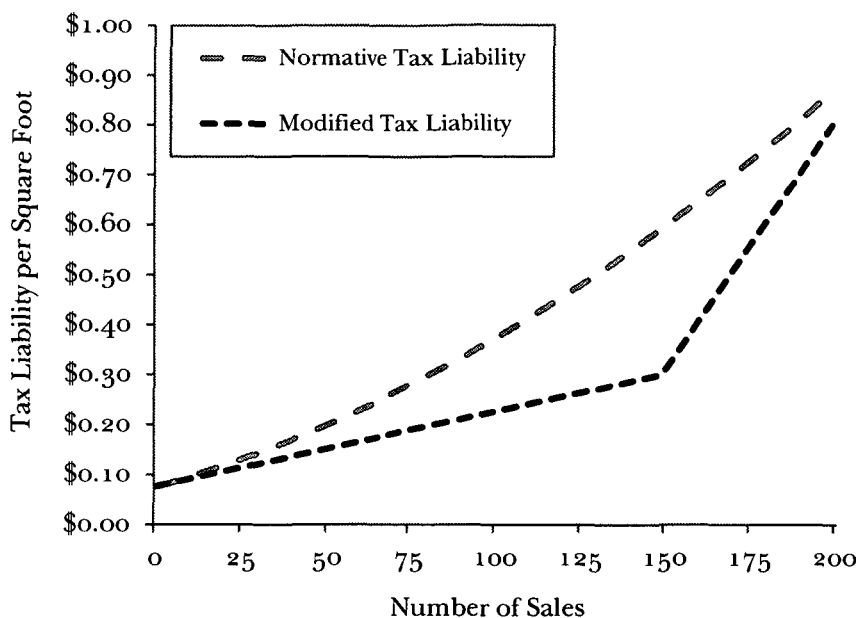
MODIFIED INEQUITY WITH LINE AT 50



111. Indeed, a slight rise appears to correspond to the point of intersection when the line is drawn at the 100-sale situation. See *supra* Figures 17–18.

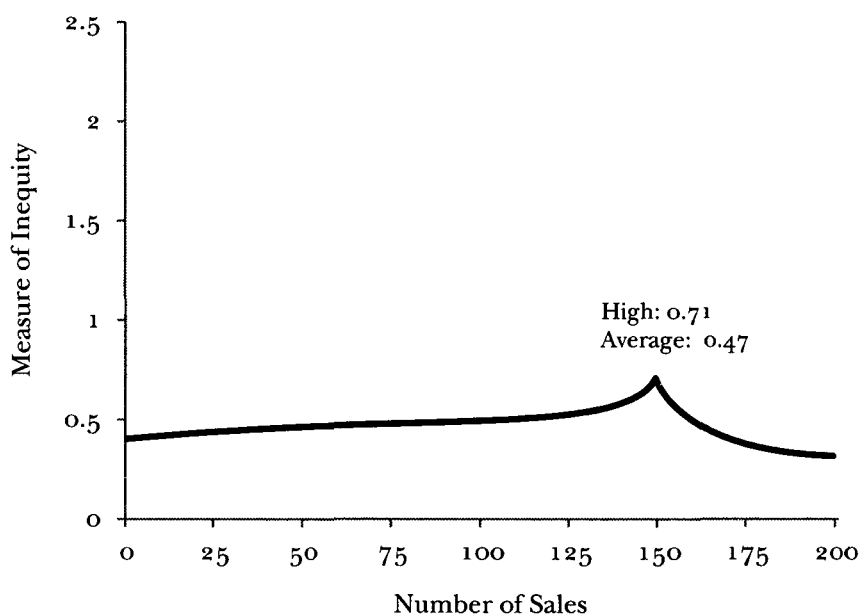
The inequity curve with the line drawn at the 150-sale situation is not bimodal because the curve of the modified tax liability runs off the chart before it reaches a second kink (see Figure 21). This occurs because, at the 200-sale situation, the modified tax liability is less than the normative tax liability (see Figure 21).

FIGURE 21
MODIFIED TAX LIABILITY COMPARED TO NORMATIVE TAX LIABILITY
WITH LINE AT 150



When the line is drawn at the 150-sale point, the measurements of the inequity curve derived from the modified-tax-liability curve (0.71 and 0.47, respectively) are again lower than the comparable measures of inequity derived from the actual-tax-liability curve (2.17 and 0.61, respectively) (see Figure 22). This is not surprising because the result is consistent with the results obtained when the line is drawn at different points.

FIGURE 22
MODIFIED INEQUITY WITH LINE AT 150



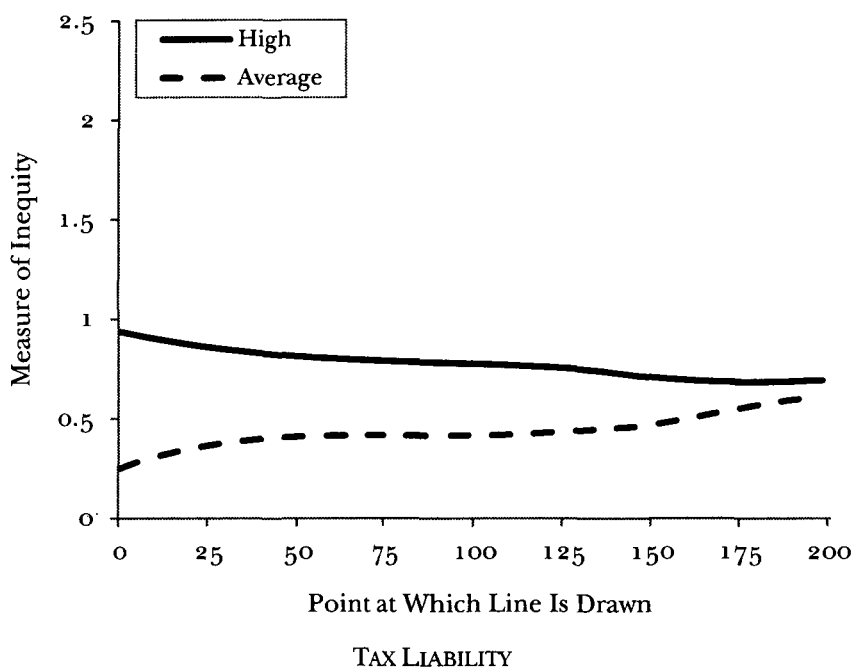
The location of the line affects the amount of inequity derived from the modified-tax-liability curve. The pattern of inequity is, however, less obvious using the modified-tax-liability curve. The highest single-point inequity is closer to its lowest value when the line is drawn at the 199-sale situation than when it is drawn at the 1-sale situation (see Figure 23).¹¹² The average inequity, however, is lowest when the line is drawn at the 1-sale situation and highest when drawn at the 199-sale situation. These close-to-opposite trends are inexplicable.¹¹³ Nonetheless, the average inequity is perhaps more important than the highest single-point inequity. The highest single-point

112. The highest single-point inequity is not, however, lowest when the line is drawn at the 199-sale point. After decreasing with each additional sale, the highest point increases at some point after the 175-sale situation.

113. Indeed, the trend of the highest single-point curve is different from the trend using the actual tax liability, *see supra* Figure 12, and the trend using the tax liability for the lock-in structure, *see supra* Figure 23.

inequity only applies to a small number of property owners, so the probability that someone would be affected by it is low. Consequently, the model suggests that even if property owners change their behavior, inequity will be lower if the line is closer to the 1-sale situation—the same result found above using the actual tax liability.¹¹⁴

FIGURE 23
OVERALL INEQUITY BASED ON PLACEMENT OF LINE WITH MODIFIED



B. POSITIVE CORRELATION BETWEEN EQUITY AND EFFICIENCY

The theory discussed in Part V.A suggests that behavioral changes cause inefficiency, and that inefficiency would be lowest if the line were at the 199-sale situation.¹¹⁵ But the model allows for a more precise measure of inefficiency, which refutes that theoretical conclusion. A more technical measure of inefficiency is the excess burden that results when a law causes behavioral changes.¹¹⁶ Excess burden is the excess of the economic loss incurred from changed behavior over the increase in tax revenue raised by

114. See *supra* Figure 12.

115. See *supra* Part V.A.

116. See ROSEN & GAYER, *supra* note 34, at 329-47.

the higher tax.¹¹⁷ The model provides an opportunity to measure inefficiency using the equivalent of excess burden in this scenario. To measure inefficiency, the model uses the 1-sale situation as the baseline and considers how drawing the line at different points would affect tax revenue and the cost of changing one's situation. At the 1-sale situation, tax revenue is at its highest because all situations, other than the 1-sale situation, are subject to the 35% rate.¹¹⁸ Consequently, tax revenue will decrease if the line is drawn at some other point, and generally, the reduction in tax revenue will be greater the further the line is drawn from the 1-sale situation (see Figure 24).¹¹⁹

Change in pre-tax gain measures the opportunity costs that property owners incur as a result of changing their situation to obtain more favorable tax treatment. Pre-tax gain is the sum of the amount of gain each property owner would recognize, measured on a per-square-foot basis, assuming those in the no-sale range change situations. Thus, the pre-tax gain of all situations in the no-sale range will equal the pre-tax gain of the situation immediately to the left of the line. A decrease in the pre-tax gain that results from drawing the line at some point other than the 1-sale point represents the cost resulting from drawing the line at some other point. The cost of changing situations is lowest at the extremes because the no-sale range is the narrowest at the extremes. The cost of changing situations will be higher if the line is drawn at other situations that create a large no-sale range.¹²⁰ Thus, the amount of pre-tax gain decreases, as a general matter, the further the line is from the 1-sale situation (even though that trend reverses after about the 145-sale situation as the no-sale range begins to narrow) (see Figure 24).

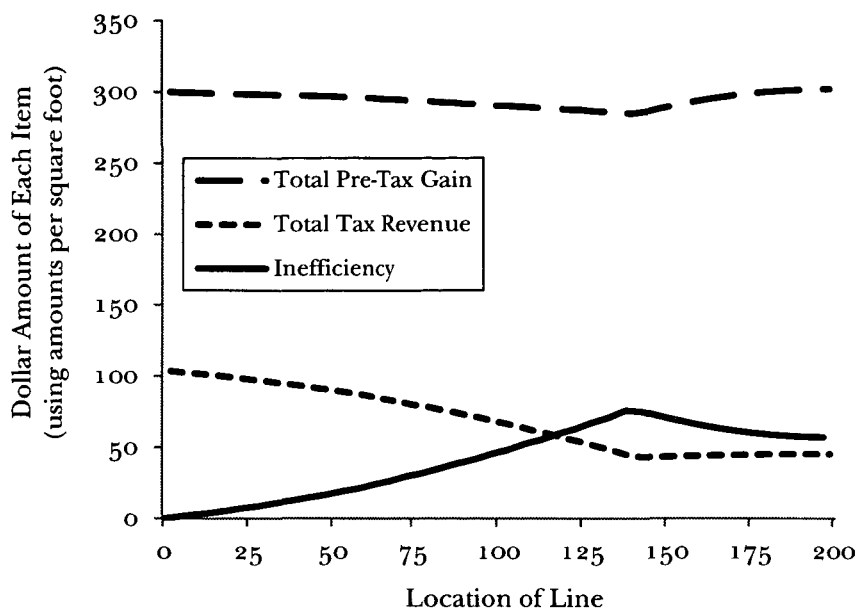
117. See *id.* at 337–43 (describing excess burden, using a commodity tax based upon a demand curve as the difference between the drop in consumer surplus resulting from a tax increase and the increase in taxes raised).

118. This analysis assumes the law must draw a line at some point, so at least one situation will be subject to the 15% rate and at least one will be subject to the 35% rate. Thus, at the extremes, the line is either at the 1-sale situation or the 199-sale situation.

119. Tax revenue is the amount of revenue that the government would collect from all two hundred property owners, on a per-square-foot basis, assuming that several owners will change their situations to reduce their tax liability. All of the property owners who move from the no-sale range will have the same tax liability as the property owner to the immediate right of the line. Notice that the curve represents the change in tax revenue kinks around the 145-sale point. After that point, the drop in tax revenue levels off. The curve levels off because no situation would be subject to the 35% rate if the line was drawn at that point. Every situation to the right of the line would obtain more favorable after-tax consequences by changing situations. Taxing all situations at 15% thereafter results in only slight changes in tax revenue.

120. The size of the no-sale range gets increasingly large as the line is drawn at points further from the 1-sale situation. When the line is drawn after about the 145-sale situation, the no-sale range begins to shrink, moving to the right, because all people to the right of the line will change situations, but the number of situations at the right of the line decreases as the location of the line moves to the right.

FIGURE 24
INEFFICIENCY BASED ON LOCATION OF LINE



Inefficiency results if the amount of the tax raised from drawing the line at a different point does not increase sufficiently to cover the cost of moving. In this scenario, the amount of tax raised actually decreases if the line is drawn at some point other than the 1-sale point, and the decrease in the amount of tax revenue generally is greater the further the line is from the 1-sale situation. The cost also increases as the pre-tax gain decreases as the line moves further from the 1-sale point. As a result, inefficiency generally grows the further the line is from the 1-sale situation. Thus, inefficiency and inequity are at their lowest when the line is drawn at the 1-sale situation (see Figure 24). The positive correlation between inequity and inefficiency refutes conventional wisdom and casts doubt on Professor Weisbach's efficiency analysis.¹²¹ Further, both inequity and inefficiency analyses appear to support the narrower definition of capital asset.

The measure of inefficiency used in this analysis considers only the cost to the property owner. The result may change if the analysis considers the cost to society. The model uses the pre-tax gain of the property owners to measure the cost of drawing the line at different points. Some observers may

121. According to Professor Weisbach's efficiency analysis, the law would draw the line close to the 200-sale situation because that is where the compensated elasticity is the lowest. See *supra* text accompanying note 106. Figure 24 suggests, however, that efficiency is lowest at the 1-sale situation.

claim that the undeveloped property reduces social welfare because the owner is not using the property for its most optimal use. As a consequence, critics argue that the sale of undeveloped property thereby harms social welfare. Even if the property owner does not develop a portion of the property due to the higher tax rate, however, the effect on social welfare will likely be nominal.

The benefit of developing the property will likely shift from the seller to the purchaser, but the societal benefit will not be lost as a whole. For example, the original owner of property may fall within the no-sale range and decide to sell the property using 100 sales instead of, say, 125 sales.¹²² Those fewer sales indicate that the original owner did less to develop and market the property. The purchasers of the property may, however, realize the property has additional economic gain to capture, and may further subdivide the property and use the equivalent of an additional 25 sales to dispose of the property. If the purchaser performs the services and sells the property in proximity to the purchase, the gain the purchaser recognizes will likely be ordinary income to the purchaser, fixed at the 35% rate.¹²³ Consequently, the government will recover the revenue it would otherwise lose if the property were not developed. The economic benefit from selling the property using 125 sales will not be lost, but a portion of that benefit will shift from the original owner to the purchaser. If the highest and best use of the property can only be obtained with 125 sales, the property will reach its most optimal use following the work of the purchaser, thus imposing little social cost.

Now consider why line-drawing may nominally affect efficiency in the property-ownership scenario. The original property owner would not develop and sell the property using any number of sales within the no-sale range because any number of sales above the 100-sale point would convert all of the property owner's gain to ordinary income without sufficient economic benefit to compensate for the increased tax rate. The purchasers, on the other hand, may purchase the property and immediately take steps to improve it and sell it using the additional 25 sales or more. That immediate effort and disposition would result in the income from the sale being ordinary income to the purchaser subject to the 35% rate. Because the purchaser never stood to obtain the 15% rate, the purchaser would not trigger higher rates by using additional sales. Significantly, the government

122. For example, the original owner could sell 99 lots in individual transactions with 99 buyers and sell the remaining property to 1 buyer.

123. See *Estate of Segel v. Comm'r*, 370 F.2d 107, 108–09 (2d Cir. 1966) (holding that gain from the sale of two lots seven months after acquisition was ordinary income). If the purchaser sells the property within one year following acquisition, the gain will be a short-term gain taxed at ordinary rates. See I.R.C. § 1(h)(1)(A) (2006) (taxing gain other than net capital gain at ordinary rates); *id.* § 1222 (defining net capital gain to exclude gain from a capital asset held for not more than one year).

does not lose tax revenue with this arrangement because it collects 15% on all the property from the original seller, and it collects tax at a 35% rate on the gain recognized by the purchaser on the subsequent disposition.¹²⁴

The nominal social cost overstates the earlier computation of inefficiency that results from line-drawing in this scenario. In fact, line-drawing may cause little or no inefficiency in this scenario. If inefficiency is nominal, inequity would be the only measure of importance. Thus, contrary to earlier understandings, inequity analysis may take precedence over inefficiency analysis in some line-drawing scenarios.

VI. THE RELEVANCE OF A LINE'S ORIENTATION

The split between gain derived from a property's appreciation in value and from services is not precise under a system that draws the distinction based upon the number of sales a property owner uses to dispose of property. The effect of line-drawing based on sales may nonetheless result in a somewhat accurate division of gain from the property's appreciation in value and income from services. For example, assume that a property owner expends effort to develop and sell 99 lots. Those sales do not cross the 100-sale threshold, so all of the gain on those sales will be subject to the 15% rate. The original owner sells the remaining portion of the property in 1 sale to a developer who finishes the work and sells that portion of the property using 101 sales. The law taxes the gain recognized by the original owner (attributable to the property's appreciating in value) at 15%, and taxes the developer's gain (attributable to the developer's services) at 35%. With respect to the 101 lots, the transfer and subsequent disposition bifurcates the total gain (the sum of the property owner's gain and the developer's income) into two categories: gain from the property's appreciation in value and income from the developer's services. The former is appropriately taxed at 15%, and the latter is appropriately taxed at 35%. Of course, that bifurcation does not occur with respect to the 99 sales, all the gain of which was taxed at 15%, even though some of it derived from the property owner's services.

Selling a large portion of the property to a developer helps bifurcate the income but does not appear to reduce social welfare. Nonetheless, changes in linear behavior shift some economic benefit from the original owner to the developer. Property owners recognize the consequence of linear changes in behavior and may consider other alternatives that, for example, will allow them to gain the economic benefit of developing the property without converting capital gain to ordinary income. The law

124. This analysis does not apply to every line-drawing situation. For example, if a person changes behavior to drive within the speed limit, that changed behavior does not necessarily mean that another person will drive faster to obtain the benefit forfeited by the slower driver. Furthermore, the driver's slower speed does not necessarily reduce social welfare, so the analysis would not look to see if someone else can fill the void created by the slower driver.

sanctions these alternatives,¹²⁵ apparently realizing that doing so will not affect social welfare but will allow the original owner the full benefit of ownership. Sanctioning alternatives results in a de facto reorientation of the line and a cumbersome law. Assuming de facto reorientation is not abusive, lawmakers may recognize that it occurs and take steps to formally reorient the line to further eliminate inequity and to make the law simpler.

Thus far, this Article has primarily considered the consequences of drawing the line at some point based upon sales. The number of sales is a crude proxy for determining the source of income, and the all-or-nothing approach of a single line does not accurately identify the different sources of income. It is very rare that a sale does not require some activity on the part of the owner, and every sale at a gain conceivably consists of some appreciation in the property's value that occurs independently of the property owner's efforts. As a consequence, gain from most sales of property consists of both gain derived from the property's appreciation in value and gain attributable to the property owner's efforts.¹²⁶ The all-or-nothing approach ensures that some income from services is taxed at capital gains rates or some gains from appreciation in value are taxed at ordinary income rates. To accurately tax the respective types of income, the law would have to draw the line using criteria other than the number of sales.

A. DE FACTO REORIENTATION

A single property owner may adopt a court-sanctioned structure to lock-in the gain from the property's appreciation in value and expose only the portion of income derived from services to the 35% rate.¹²⁷ Thus, owners may lock-in the portion of gain attributable to appreciation in value at capital gains rates and retain all of the economic benefit of developing the property. The structure requires the property owner to form multiple tax entities (see Figure 25). One entity holds the property as investment property and allows it to appreciate in value (the "investment entity").¹²⁸

125. See generally *Bramblett v. Comm'r*, 960 F.2d 526 (5th Cir. 1992); *Bradshaw v. United States*, 683 F.2d 365 (Ct. Cl. 1982); *Boyer v. Comm'r*, 58 T.C. 316 (1972).

126. Many factors affect the property's appreciation in value. For example, a property owner could expend considerable effort on improving and selling property but realize a significant boost in value when a major retailer announces it will build a store next to the property. Different criteria could reorient the line and make the law more equitable. In the absence of de jure reorientation, property owners resorted to self-help strategies, which courts have since sanctioned. See *supra* note 125. Lawmakers could go further, explicitly reorient the line, and make the law simpler. Similarly, rezoning of a piece of property may not require significant effort but could affect a property's value.

127. See generally *Bramblett*, 960 F.2d 526.

128. Generally, property has several owners who own the property in an entity treated as a partnership for tax purposes. For example, the owners may form a limited liability company to hold the property for investment purposes. A limited liability company with two members is treated as a tax partnership, see Treas. Reg. § 301.7701-3(b) (2012), so the gain it recognizes will flow through to the owners with the same character recognized by the limited liability

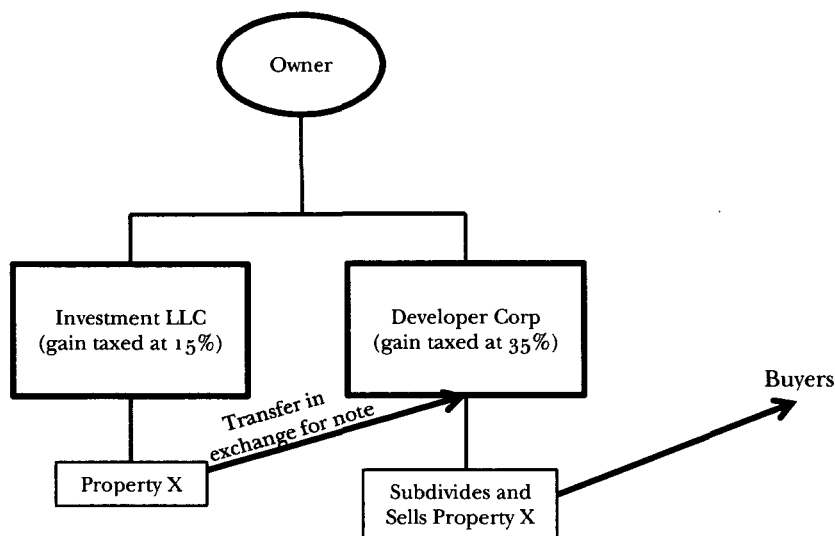
When the property owner is prepared to develop the property, the investment entity transfers the property to a separate entity that is designated as the developer of the property (the "developer entity").¹²⁹ In exchange for transferring the property, the investment entity takes back the developer entity's installment note.¹³⁰ The face value of the note should equal the fair market value of the property at the time of the transfer, which should include only the property's appreciation in value up to the time of transfer. Because the investment entity disposes of the property in one sale, any gain it recognizes on the transfer to the developer entity should be capital gain subject to favorable capital gain rates. The property in the developer entity's hands will be inventory, and the gain the developer entity recognizes will derive primarily from the developer entity's activities—and thus, should be ordinary income.

company. See I.R.C. § 701 (providing that income flows through to the partners, and the tax partnership does not pay tax on the income); *id.* § 702(b) (providing that the character of gain that a partner recognizes carries through from the partnership).

129. The property owner generally has the developer entity elect to be a subchapter S corporation. Subchapter S status allows the gain from the sale of property to pass through to the shareholders untaxed at the corporate level. See I.R.C. § 1363(a) (providing that an S corporation is not subject to income tax); *id.* § 1366(a) (providing that the shareholders of an S corporation shall report the corporation's income). The developer entity cannot be a tax partnership because the transfer from the investment entity to a related tax partnership would cause the gain recognized by the investment entity to be ordinary income. See *id.* § 707(b)(2). Consequently, the developer entity in this type of structure is almost always a subchapter S corporation.

130. See *Bramblett*, 960 F.2d at 529. The use of the installment note is not unexpected. The developer entity would likely not have funds available to purchase the property. The developer entity will borrow funds or receive them from the owners to develop the property. When it ultimately sells the developed property, it will use a portion of the proceeds to pay the note to the investment entity. The developer entity's lack of funds to acquire property from the investment entity is not surprising. The structure exists primarily to lock-in the gain attributable to the property's appreciation in value. The investment entity and the developer entity are part of the same economic unit. The property owner, who controls the economic unit, has already invested to acquire the property in the investment entity. That owner would not invest additional funds to acquire the property from the investment unit.

FIGURE 25
LOCK-IN STRUCTURE



The lock-in structure can be both advantageous and disadvantageous, depending upon a property owner's situation in relation to the line. The lock-in structure would be disadvantageous to property owners to the left of the line. All of the gain recognized by those property owners will be taxed at 15%. The lock-in structure would not improve their situations, and could even make their situations worse by causing them to incur the costs to form the lock-in structure and converting some gain (i.e., the gain recognized by the developer entity) to ordinary income.¹³¹ The after-tax gain with the lock-in structure would be less than the after-tax gain at the point with no structuring. Consequently, rational property owners to the left of the line would not use the lock-in structure.

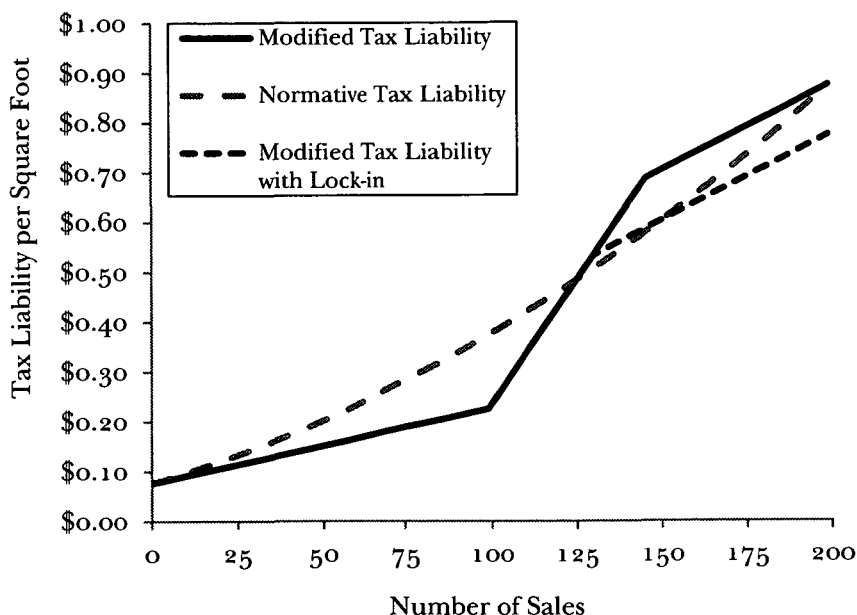
The lock-in structure could be advantageous to property owners to the right of the line. Those property owners have the option of using the lock-in structure or changing their situations by using fewer sales to move to the left of the line. They will change their situations if the opportunity cost of changing situations plus the tax at the new situation is less than the cost to use the lock-in structure plus the tax liability with the lock-in structure at their original situation.¹³² The result of some property owners changing

131. If the number of sales would not cause the property to be inventory in the hands of the investment entity, the same number of sales should not cause the property to be inventory in the hands of the developer entity. Consequently, a change in tax rate would be attributable to the developer entity's shorter holding period.

132. This scenario assumes the cost of the lock-in structure is nominal per square foot because the size of the property is so large. Consequently, it disregards the cost. The cost of the structure could become important for smaller projects.

situations by moving to the left of the line generates a curve similar to the modified-tax-liability curve, but it narrows the no-sale range and shifts downward to the right of the second kink. Figure 26 represents the modified-tax-liability curve, the modified-tax-liability curve with lock-in, and the normative curve. Notice that the modified-tax-liability curve and modified-tax-liability curve with lock-in are parallel for situations to the right of the second kink. The difference between the two curves after that point is attributed to the portion of gain taxed at 15% as a result of the lock-in structure.¹³³

FIGURE 26
EFFECT OF LOCK-IN STRUCTURE

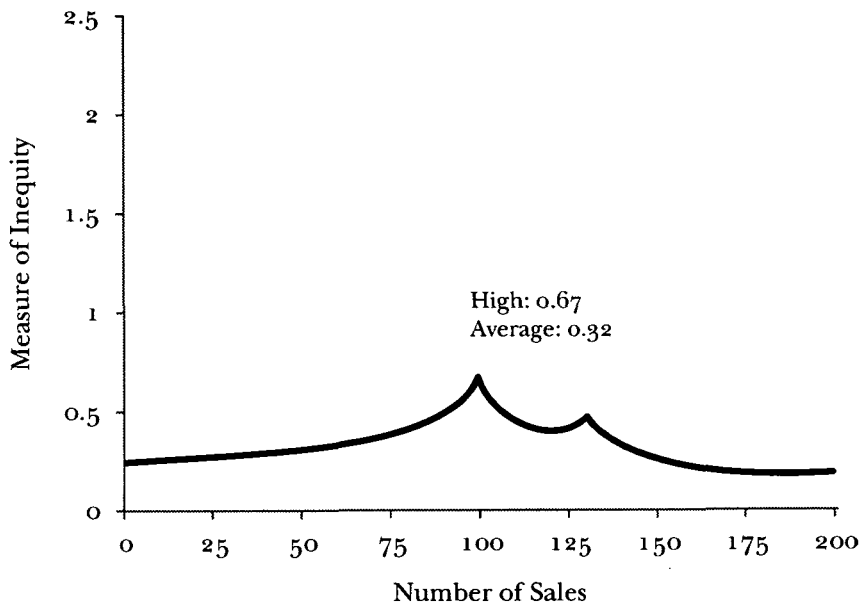


133. The difference is equivalent to 20% of the \$0.50 gain per square foot taxed at 15% instead of 35%.

Figure 27 suggests that inequity will be lower if property owners have the option to use the lock-in structure. The highest single-point inequity in that curve (0.67) is lower than the highest single-point inequity resulting from the modified tax liability (0.78) (see Figure 18). The average inequity (0.32) of the modified tax liability with lock-in is also lower than the average (0.42) of the modified tax liability (see Figure 18).

FIGURE 27

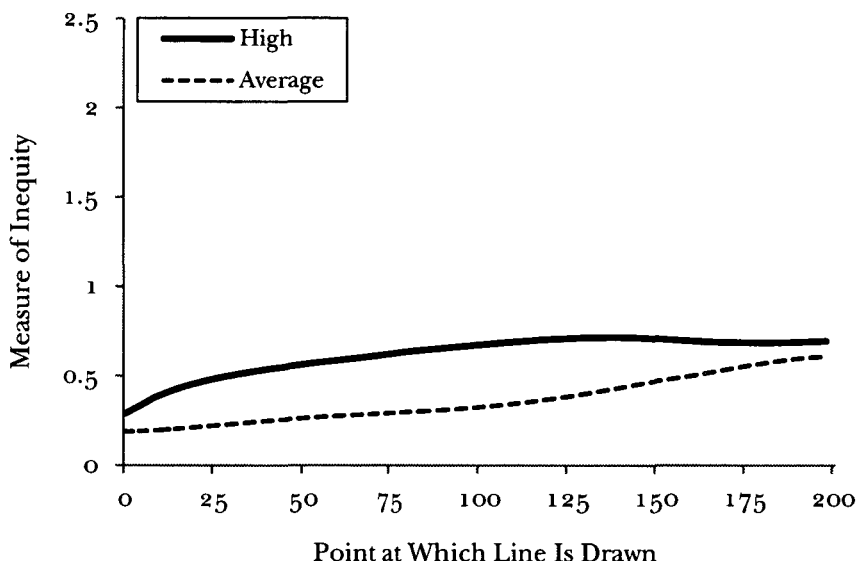
MODIFIED INEQUITY WITH LOCK-IN STRUCTURE



Because the modified tax liability with lock-in generates a curve similar to the modified-tax-liability curve, the overall-inequity that results from using a lock-in structure (see Figure 28) should be similar to the overall inequity curve derived from the modified tax liability (see Figure 23).¹³⁴ Even though the lock-in structure helps reduce line-drawing inequity, some nominal amount of inequity will exist.¹³⁵ Thus, while the judicial sanction of the lock-in structure does not eliminate inequity, it does reduce it significantly.

FIGURE 28

OVERALL INEQUITY BASED ON PLACEMENT OF LINE WITH LOCK-IN STRUCTURE



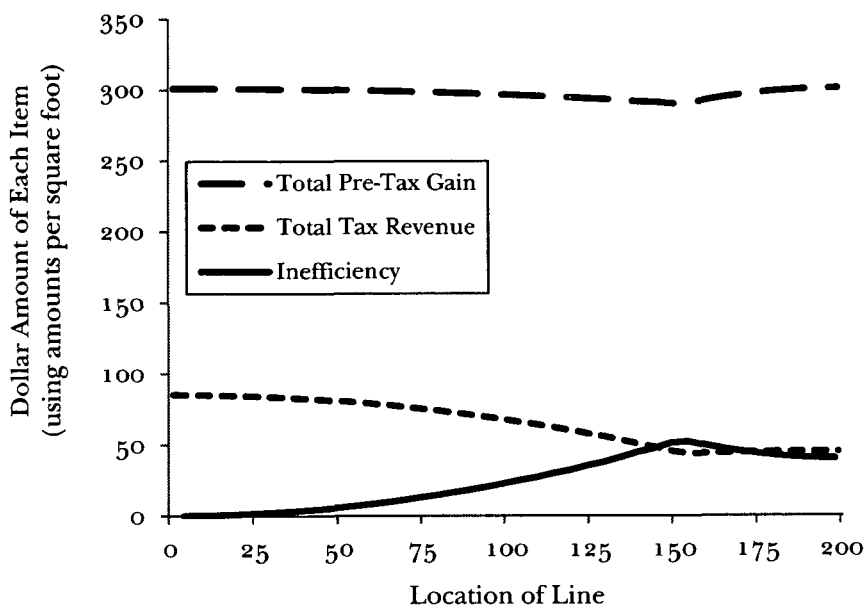
¹³⁴ The curves in Figure 28 are based on expected results, leaving the nature of the curve representing the highest single-point inequity in Figure 23 somewhat of a mystery.

¹³⁵ The lock-in structure creates other inequities because such structures are cost-prohibitive for low-value deals. The owners of low-value property could justify incurring the cost to form the lock-in structure because the tax savings obtained by forming the structure would not be sufficient to cover the costs of the structure. In this scenario, all property owners have property of the same value, so each could similarly afford the cost of using the lock-in structure. If the property in question were smaller, however, the property owner may not benefit from the lock-in structure because the cost of creating it may outweigh the tax benefits.

The line-drawing inequity analysis provides further evidence that the closer the line is drawn to the 0-sale situation, the less inequity there will be in the system. Thus, one way to eliminate the inequity is to draw the line at the 1-sale situation and require all other property owners to either pay tax at 35% or use the lock-in structure. Drawing the line close to the 1-sale situation also reduces the inefficiency of line-drawing (see Figure 29).

FIGURE 29

INEFFICIENCY BASED ON LOCATION OF LINE (ASSUMING BIFURCATION)



The inefficiency in this scenario is lower than it was when the model did not account for the lock-in structure.¹³⁶ The lower inefficiency results in part from the lower overall tax revenue raised using bifurcation. The law could, of course, raise the same amount of tax revenue using bifurcation by adjusting the tax rates. That would allow the government to collect the same amount of revenue with a fairer, more efficient law. With either structure, inefficiency is at its lowest when the line is drawn close to the 1-sale situation. The lock-in structure probably would not affect social costs significantly because the owner would develop the property to its most optimal use and pay tax at the appropriate rates on the respective types of income. Nonetheless, the lock-in structure allows the owner to retain the full economic benefit of developing the property.

136. See *supra* Figure 23.

The lock-in structure effectively reorients the line with respect to all situations to the right of the second kink on the modified-tax-liability curve with lock-in. For all of those situations, a lower tax rate applies to gain on the transfer of property from the investor entity to the developer entity, and the higher tax rate applies to gain the developer entity recognizes. Consequently, the structure separates the gain into gain from appreciation in value and gain from services. The tax rate for those situations does not depend upon the number of sales. Instead, it depends upon the source of income. Thus, the structure uses criteria other than sales to draw the line. As this Article next illustrates, the lock-in structure is a *de facto* reorientation of the line, but lawmakers could institute *de jure* reorientation as well.

B. *DE JURE REORIENTATION*

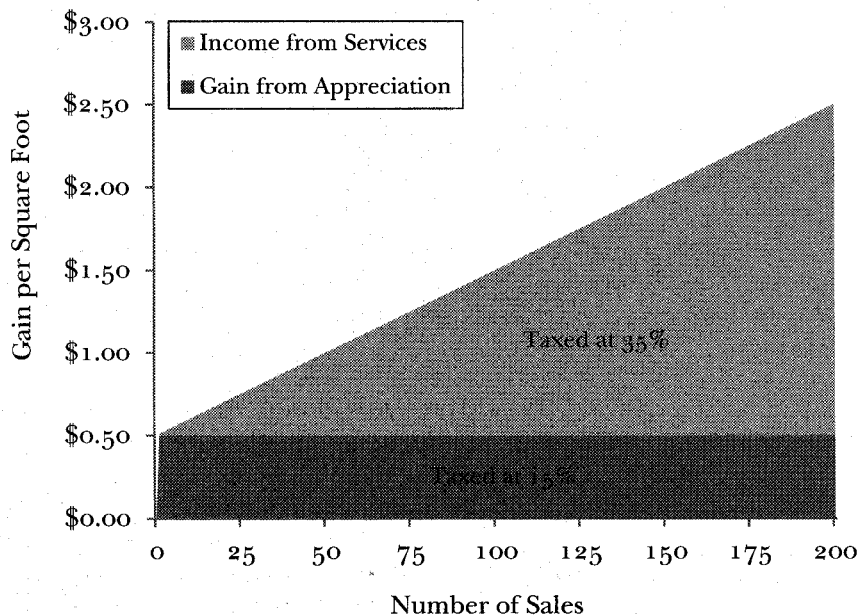
Consider how lawmakers could bifurcate the gain and explicitly reorient the line. Assume that if a property owner uses 1 sale to dispose of the property, the property owner will recognize \$0.51 of gain per square foot. Because the property owner uses a single sale to dispose of the property, the property owner's activities will have a negligible effect on the income derived from the sale. Consequently, the gain from the sale of the property using 1 sale derives almost exclusively from the property's appreciation in value, and all but a small portion of the gain should be taxed at ordinary rates. For the sake of analysis, assume that \$0.01 of the gain per square foot at the 1-sale situation derives from services, and \$0.50 of the gain per square foot derives from the property's appreciation in value.¹³⁷

If \$0.50 of gain per square foot derives from the property's appreciation in value, any gain in excess of that amount must derive from the property owner's services. Thus, the model assumes that property owners have a choice to sell the property with no additional effort and recognize \$0.51 of gain per square foot (including the \$0.01 of gain that derives from the nominal services), or they can expend effort to sell the property using more than one sale. Regardless of how many sales a property owner uses to dispose of the property, gain equal to \$0.50 per square foot will derive from the property's appreciation in value. As a result, if the property owner uses 200 sales to dispose of the property and recognizes \$2.50 of gain per square foot, \$0.50 of the gain will derive from appreciation in value and the

137. Making such a determination would, of course, be fraught with difficulty. With such a small portion of the income deriving from services, the law should not require the property owner or the IRS to dissect the gain at this level. Instead, it would most likely allow the property owner to report all of the gain at capital-gain rates if the services are *de minimis*. At some point, however, the gain from the services would cease to be *de minimis*, at which point, the law would have to require the property owner to determine the source of the gain. The point at which the law would draw such a line would raise line-drawing questions. For the sake of analysis, this model assumes that the property owner can accurately and inexpensively determine the source of the income.

remaining \$2.00 of that gain will derive from services. Figure 30 depicts the source of income at each point on the continuum and identifies how the law could tax that gain if it had perfect information to bifurcate income.

FIGURE 30
SOURCE OF INCOME AND TAX LIABILITY



Notice that in Figure 30, a horizontal line, as opposed to a vertical line, separates the gain from the property's appreciation in value and income from services. The number of sales affects the amount of income that derives from services but does not affect the amount of gain that derives from appreciation in value. Bifurcating the income based upon its source thus reorients the line. By reorienting the line, the law uses a different criterion (i.e., source of income) and disposes of the less-effective proxy (i.e., sales) used to identify source.

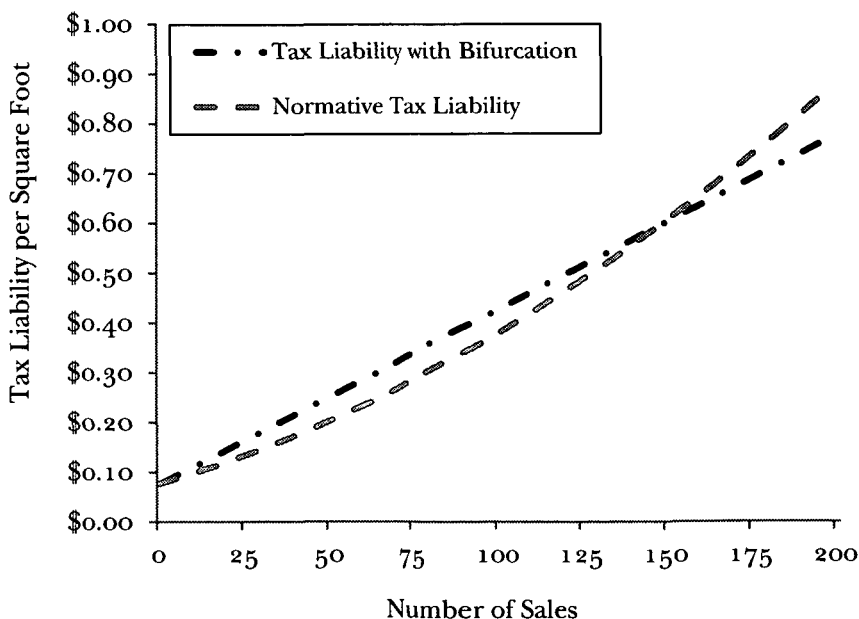
Because the number of sales does not affect the amount of gain that derives from the property's appreciation in value, using it as a proxy will invariably cause inequity. Some of the gain on the left side of the vertical sales-oriented line will derive from services, but all of it will be taxed at 15%. As expected, some of the gain on the right side of the line will derive from the property's appreciation in value, but all of it will be taxed at 35%. The reason for this result is that the number of sales does not perfectly identify the source of income. Optically, the vertical line is inappropriate because the line separating income from appreciation in value and income from

services is properly horizontal. Surely a vertical line will not adequately capture a distinction represented by a horizontal line. The law could reorient the line from vertical to horizontal by changing the criteria it uses to draw the line.

Figure 30 suggests that the law should impose a tax of 15% on the gain derived from appreciation in value and 35% on the income derived from services. The tax liability computed using that formula would increase as the number of sales increases, which would likewise cause the income from services to increase. The curve representing the tax liability would slope upward in a straight line. Comparing the tax-liability curve derived from bifurcating income with the normative-tax-liability curve (see Figure 31) suggests that inequity would almost completely disappear if the law bifurcated income.¹³⁸

FIGURE 31

TAX LIABILITY WITH BIFURCATION COMPARED TO NORMATIVE TAX LIABILITY



138. The bifurcation approach solicits a question: Should the tax-liability curve that derives from the bifurcation approach be the normative curve? A convincing argument could be made that it should be because the bifurcation approach considers the source of income, which reflects the purpose of the distinction between the two tax rates. If the analysis adopted the tax-liability curve with bifurcation, using the bifurcation approach would eliminate inequity. The use of the bifurcation curve as the norm would not, however, materially alter the results above because the bifurcation tax liability is similar to the normative-tax-liability curve.

Despite the obvious benefits of bifurcating income, the difficulty of bifurcation lies in accurately identifying the source of income. Such a determination requires an actual value of the property computed without regard to gain from services, which would entail a factual inquiry into every disposition of property. Critics may argue that such an inquiry would be too onerous and result in litigation over the proper bifurcation of the gain. Under the current system, however, both property owners and the government already struggle to identify the line that separates capital assets from inventory, a costly endeavor in and of itself.¹³⁹ Moving to a bifurcation method may not cause more litigation or costs, but might, in the worst case scenario, merely replace existing costs. If changing the orientation of a line would result in a more equitable, efficient, and accurate measurement of tax liability at no additional cost, the law should change the orientation of the line.

In fact, the issue of valuation already exists with the lock-in structure, and the law appears to handle it sufficiently. The lock-in structure bifurcates gain and requires valuation of the property at the time the investment entity transfers property to the developer entity. If the IRS wished to challenge the tax consequences of a lock-in structure it could attack the value assigned to the property at the time the investment entity transfers it to the developer entity.¹⁴⁰ The published cases on point generally have not considered whether the value assigned to the property at the time of transfer is accurate.¹⁴¹ This suggests that the IRS does not often challenge the value assigned by property owners, or that the IRS and property owners are able to agree upon a reasonable value during pre-trial negotiations.¹⁴² Thus, the valuation issue does not appear insurmountable.

Recognizing that valuation is no absolute barrier, lawmakers could focus on refining the law to adopt de facto reorientation. This could be accomplished by merely requiring property owners to establish the portion of gain derived from the property's appreciation in value and the portion

139. The cases that have considered whether property is a capital asset or inventory are legion. See cases cited *supra* note 44.

140. If the property owners do not properly structure the transaction, the IRS could challenge the transaction on other grounds. See, e.g., *Bradshaw v. United States*, 683 F.2d 365, 371-77 (Ct. Cl. 1982) (considering whether the transfer to the developer corporation was a sale or a contribution); *Boyer v. Comm'r*, 58 T.C. 316, 323-26 (1972) (considering whether a corporation was a mere alter ego of the shareholder). With existing case law available to inform property owners how to structure lock-in transactions, valuation should remain the only issue subject to dispute, assuming property owners follow precedent in structuring the arrangements.

141. The cases that consider lock-in structures focus on other issues. See cases cited *supra* note 140.

142. Under § 482 of the Internal Revenue Code, the IRS has authority to reallocate items of income and deduction among the related parties. See *Treas. Reg.* § 1.482-1 (as amended in 2009). The IRS could use that provision to challenge the value assigned to the property at the date the investment entity transfers property to the developer entity.

derived from services related to the property. Property owners who deploy the lock-in structure establish the value of property at the time the investment entity transfers the property to the developer entity. That transfer signals a conversion of the property from capital asset to inventory and also signals that gain following the transfer will derive from services. Thus, the lock-in structure creates a specific event that helps property owners identify the amount of gain that derives from their property's appreciation in value and the amount that derives from services.

The option to use the lock-in structure makes bifurcation *implicitly* elective. The law could eliminate the cost of the lock-in structure, though, by making the lock-in *explicitly* elective.¹⁴³ In the case of property that appreciates in value and is then developed, the law could require property owners to state the value of the property at the time they begin subdivision or other efforts to sell the property. Property owners could do that by completing information on a tax return or by filing a separate report. An affirmative statement of the property's value will put the IRS on notice that the property owner is bifurcating income. The property owners will know that the IRS has that information and that it could challenge the validity of the amount stated on the return. That awareness may encourage property owners to exercise greater care in establishing the value of the property prior to performing any services. The report would serve the purpose now served by the note transferred to the investment entity under the lock-in structure.

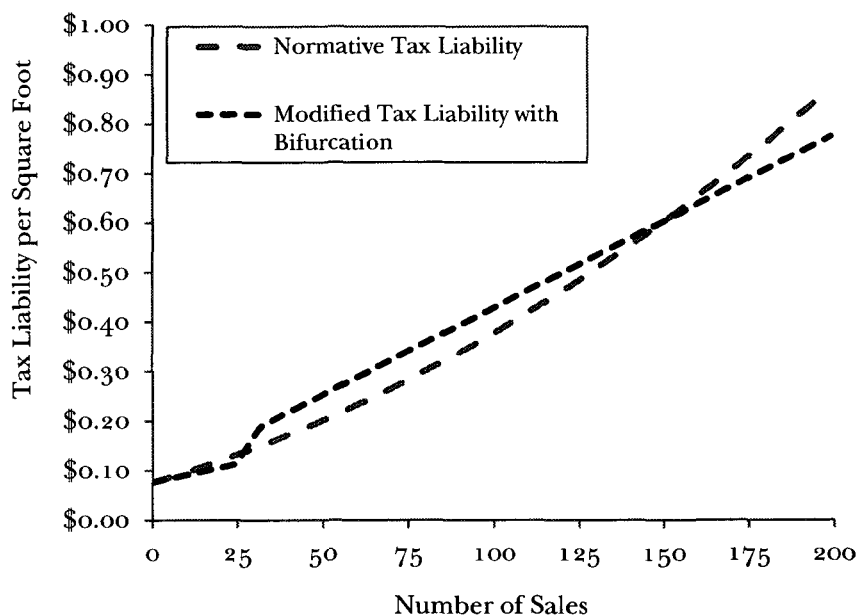
The law probably should not require bifurcation for every situation on the continuum. At the far left, only a small portion of the gain derives from services. Requiring property owners to bifurcate gain at the far left of the continuum may create more costs than bifurcation justifies. Not requiring bifurcation will result in some inequity because a portion of income from services would be taxed at 15%, but recall that the inequity of drawing a line close to the 1-sale point is fairly low.¹⁴⁴ The cost to remove that small amount of inequity may not justify its elimination. For example, the law might draw a line at the 25-sale point and tax the 25-sale situation and all points to its left at 15%. It would tax all other situations using the bifurcation method, resulting in a modified-tax-liability curve that is very similar to the normative-tax-liability curve (see Figure 32). The inequity resulting from drawing the line at that point should also be very low (see Figure 28). Thus, the law may

143. Lock-in is implicitly elective under current law, but it requires property owners to assemble the lock-in structure. The Author attributes the idea of the lock-in election to E. John Wagner, II, a tax attorney at Williams, Parker, Harrison, Dietz & Getzen, PA, in Sarasota, Florida, who originally conveyed the idea to the Author in an informal discussion. Interview with E. John Wagner, II, Tax Attorney, Williams, Parker, Harrison, Dietz & Getzen, PA, in Boca Raton, Fla. (Jan. 22, 2011). A more detailed discussion of the idea is the topic of a planned article by the Author, Mr. Wagner, and Nathan R. Brown.

144. See *supra* Figure 28.

adopt the bifurcation method but allow for a de minimis amount of activity without triggering bifurcation and taxing some gain at ordinary income rates.

FIGURE 32
MODIFIED TAX LIABILITY WITH BIFURCATION AND
MODIFIED TAX LIABILITY WITH LINE AT 25



This discussion illustrates that reorienting a line may help reduce the inequity that results from line-drawing. If line-drawing does appear to cause inequity, lawmakers and commentators should ask whether the line's orientation is proper, which will generally require carefully examining the criteria used to draw the line. Doing so may reveal that the criteria do not adequately align with the purposes of the law, and also may indicate that the line may be oriented incorrectly. As a case in point, the number of sales is not the best criterion for determining source of income from the disposition of property. Instead, source of income appears to be a better criterion than number of sales, and using that criterion can in fact reduce inequity.¹⁴⁵

145. Granting property owners the authority to bifurcate gain is not without potential limitations. The discussion up to this point has assumed that property owners acquire and hold property for some time before deciding to develop and sell it. The analysis also assumes that any change in value of the property after the date of value designation derives from the services. In many situations, the property owner may begin to perform services with respect to the property on the date of acquisition. Furthermore, some of the increase in the property's sales price after the services begin could be attributable to the increase in the value of the property. The lock-in

VII. INEQUITY SIGNALS LINE-DRAWING DEFECTS

The model developed in this Article sheds new light on line-drawing analysis. In particular, it may help identify the existence of defective lines in the law. To understand its uses, however, one must consider its limitations. The model only applies to line-drawing along a continuum, and the conclusions it reaches only apply to line-drawing scenarios that involve continua. The inapplicability of the model may, however, signal that a law is equitable.

To illustrate this point, the model would not apply to the bifurcation method because that method does not create a continuum. Instead, the bifurcation method merely divides the gain into two categories based upon the source of income—on one side is gain from appreciation in value, and on the other is income from services. The income could not be sorted on either side of the line based on the degree to which the income is from a particular source. The gain from both sources, whether appreciation in value or gain from services, will be static within the category. No portion of the gain in either category will be closer to or further from the line. As a consequence, the model will not help determine the inequity of drawing a line between the two types of gain.

Furthermore, if the gain is categorized appropriately, the system will not create inequity. By design, the law treats gain from appreciation in value differently from income from services. The relevant criterion for such treatment is the source of income. If the law accurately determines the source, taxing the sources differently will not be inequitable, assuming the differentiation has merit.¹⁴⁶ The result is a completely equitable system, even though the tax rates for the two types of income vary significantly. The inapplicability of the model in the bifurcation scenario signals the effectiveness of the line.

Other scenarios that cannot order situations along a continuum may benefit from quantitative inequity analysis, and the initial apparent inapplicability of the model may signal the law's failure to identify the purpose for drawing the line. Indeed, inequity model would be useless if the law were to have no clearly defined purpose. For example, the law distinguishes between the various tax entities (e.g., tax corporations, tax partnerships, and disregarded arrangements).¹⁴⁷ The law has had terrible difficulty drawing lines between these various entities. For decades, courts and the Federal Treasury tried to identify the relevant differences between

(whether formalistic or elective) does not account for that portion of the gain as gain from the property's appreciation in value. Even with these weaknesses, however, the lock-in method appears to be more equitable and efficient than the current system.

146. See *supra* text accompanying notes 20–30 (stating the assumption).

147. See Treas. Reg. § 301.7701-3 (2012).

tax corporations and tax partnerships.¹⁴⁸ The Treasury finally threw in the towel and promulgated an elective regime (known as “check-the-box regulations”), which classifies state-law corporations as tax corporations and grants all other domestic multi-number business entities the election to be tax corporations or, in some cases, tax partnerships.¹⁴⁹ The model would have difficulty testing the inequity of this system of line-drawing because the criteria for separating the entities are unclear due to the lack of defined purpose for having these different tax entities.¹⁵⁰

The entity-classification regime clearly creates inequity because the law treats identical situations differently. For example, two limited liability companies with at least two members could be a tax corporation and a tax partnership, respectively, even though they are identical in every other respects. This obvious inequity, and the inability to measure it using quantitative inequity analysis, confirms the lack of clear purpose and relevant criteria for the distinction. These problems suggest that more effort is required to identify the purpose of corporate tax and tax-entity classification. If that purpose were known, the model may help identify the appropriate locations of lines separating the different entities. The rationale for the elective regime is that it codified the implicit elective regime that existed prior to the promulgation of the check-the-box regulations.¹⁵¹ Unlike the elective lock-in structure, however, the elections in both tax-entity classification regimes failed to account for the purpose of the tax-entity classification rules, so they were both faulty. The law must better identify the purpose of tax-entity classification to eliminate inequity, such as the inequity caused by implicit elections. The inability to do so signals a deficiency in the rules governing tax-entity classification.

148. See Steven A. Dean, *Attractive Complexity: Tax Deregulation, the Check-the-Box Election, and the Future of Tax Simplification*, 34 HOFSTRA L. REV. 405, 421–51 (2005) (recounting the history of tax-entity classification prior to the check-the-box regulations).

149. See Treas. Reg. § 301.7701-2 (providing that a state-law corporation is an association for tax purposes); *id.* § 301.7701-3 (providing the elective regime).

150. Theorists are unable to reach a consensus regarding the purpose of the various tax entities. See, e.g., Jennifer Arlen & Deborah M. Weiss, *A Political Theory of Corporate Taxation*, 105 YALE L.J. 325, 359–62 (1995) (arguing that managers may support a corporate tax because it provides a disincentive to distribute excess capital); Kim Brooks, *Learning To Live with an Imperfect Tax: A Defence of the Corporate Tax*, 36 U. BRIT. COLUM. L. REV. 621, 630–54 (2003) (listing the following factors as support for the corporate tax: it is progressive, it facilitates efficient raising of tax revenue, it prevents unlimited deferral, it has political support, it is entrenched in the current system, and repealing it would raise significant costs); Heather M. Field, *Checking In on “Check-the-Box,”* 42 LOY. L.A. L. REV. 451 (2009) (critiquing the various theories presented in support of the corporate tax).

151. See 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, 600 (1995) (“[T]he well advised have always been able to avoid the corporate tax by forming as a partnership or LLC that complies with the classification regulations . . .”).

The line between tax partnerships and disregarded arrangements remains to be drawn. A significant body of law has considered whether an arrangement falls into one of those two categories, but the various authorities are inconclusive.¹⁵² The Author has recommended different types of residual risk as the criteria that the law should use to draw the distinction.¹⁵³ If the law were to adopt those criteria, a continuum would not be obvious, as the differences between methods for computing residual risk are generally apparent. So using different types of residual risk would create bright lines with no degree of separation within categories. The potential disappearance of the continuum suggests that the current criteria are inappropriate. Different criteria may help establish a line similar to that resulting from bifurcating income in the property-owner scenario.

These few examples help illustrate how quantitative inequity can inform line-drawing analysis. Lawmakers and commentators must be familiar with the nuances and purposes of laws to effectively analyze the appropriateness of line-drawing in each scenario. This model reveals techniques that may help assess the inequity that may arise from line-drawing in those various scenarios.

VIII. CONCLUSION

This Article introduces a model for quantifying inequity that results from drawing a line to classify situations that lie along a continuum. The model reveals several important attributes of line-drawing. First, the model reveals that inequity analysis is a substantive analytical tool that helps quantify line-drawing inequity. Second, the model reveals that the location of a line may affect the amount of the resulting inequity. Third, this model reveals that the behavior of those governed by lines in the law may affect inequity that the law has created. If individuals can change their situations at little cost to obtain more favorable treatment under the law, the inequity inherent in line-drawing decreases. Fourth, the criteria used to draw the line may not be perfect proxies for the law's purpose, which may manifest itself in a line's orientation. Lawmakers may be able to reduce inequity by eliminating weak proxies and appropriately reorienting the line. Finally, the law may become more equitable if it adopts explicit elections that relate to the purpose of the law.

152. See Bradley T. Borden, *The Federal Definition of Tax Partnership*, 43 HOUS. L. REV. 925, 975–1001 (2006) (presenting various tests that lawmakers use to determine whether an arrangement is a tax partnership or some other type of arrangement).

153. See Bradley T. Borden, *Residual-Risk Model for Classifying Business Arrangements*, 37 FLA. ST. U. L. REV. 245, 291–94 (2010) (recommending that the distinction between tax partnerships and disregarded arrangements should turn on whether a particular arrangement requires the partnership tax accounting rules—i.e., whether the arrangement has allocation-dependent residual risk).

The model also challenges long-standing assumptions about the tension between equity and efficiency. Applying the model to the property-owner scenario showed that inequity and inefficiency may correlate positively. Because line-drawing occurs in many scenarios that include continua, further study is needed to know whether this outcome is unique to the tax scenario discussed herein, or if the analysis has a more universal application. To the extent that inefficiency becomes nominal, as it may do in the property-owner scenario, quantitative inequity becomes the prominent analytical tool. Thus, its significance may be grossly underestimated.

The implications of quantitative inequity are substantial. In addition to expanding the general understanding of inequity analysis and the consequences of line-drawing, the analysis may inform lawmakers and commentators when they are tasked with drawing lines in the law. If the inequity from line-drawing appears excessively high, one or more of several problems may exist. The line may be in the wrong location, the governed may be unable to change their situations at low cost, the criteria may be inappropriate, or the elections may be implicit. Recognizing these potential problems will allow lawmakers to change laws to help reduce inequity.

