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Thinking Outside the Little Boxes:
A Response to Professor Schlunk

David A. Weisbach[*]

Herwig Schlunk, in his article, "Little Boxes: Can Optimal Commodity Tax Methodology Save the Debt-Equity Distinction,"[1] addresses a problem that I think is key to much tax policymaking. The problem, which goes well beyond the debt-equity distinction, is that policymakers are frequently forced to draw lines between essentially similar things, treating them differently for tax purposes. Debt and equity are fundamentally similar methods of financing a business yet are treated differently for tax purposes. Independent contractors and employees are both service providers but are taxed differently. Imputed returns from services and market-purchased services can be very similar but are taxed differently. This line-drawing problem pervades tax policymaking.

Schlunk focuses on what he calls the "optimal commodity tax methodology" for drawing lines such as these.[2] The optimal commodity tax methodology provides some specific rules of thumb for line drawing based on a particular model of the problem. This methodology, however, is part of a much more general family of theses.[3] At its most general level, the thesis is that if we must distinguish between two activities, we should do so in a way that maximizes welfare. The point is that we should not focus on traditional "tax policy" theories, such as the definition of income, horizontal equity, notions of platonic forms of things like debt or equity, or any other nonsense that does not focus directly on outcomes.

A slightly more specific thesis is that lines should be drawn to minimize the deadweight loss from the distinction at issue. That is, the focus of line drawing, with some exceptions, should be on the efficiency effects of distinctions rather than the more general welfare effects.

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1. Herwig J. Schlunk, *Little Boxes: Can Optimal Commodity Tax Methodology Save the Debt-Equity Distinction*, 80 TEXAS L. REV. 859 (2002).

2. *Id.* at 860.

3. For a general statement, see David A. Weisbach, *Line Drawing, Doctrine, and Efficiency in the Tax Law*, 84 CORNELL L. REV. 1627 (1999), and for a more specific model, see David A. Weisbach, *An Efficiency Analysis of Line Drawing in the Tax Law*, 29 J. LEGAL STUD. 71 (2000) [hereinafter Weisbach, *An Efficiency Analysis*]. For examples of similar analysis, also see Daniel N. Shaviro, *An Efficiency Analysis of Realization and Recognition Rules Under the Federal Income Tax*, 48 TAX L. REV. 1 (1992), Mark P. Gergen & Paula Schmitz, *The Influence of Tax Law on Securities Innovation*, 52 TAX L. REV. 119 (1997), and David A. Weisbach, *Should a Short Sale Against the Box Be a Realization Event?*, 50 NAT'L TAX J. 495 (1997).

The most narrow thesis is that line-drawing problems have a common structure and, therefore, are susceptible to similar solutions. One of the items is inevitably taxed at a higher rate than the other. Taxpayers have an incentive to shift to the low-taxed item and such shifting produces deadweight loss.[4] The degree of taxpayer shifting is related to the compensated cross-elasticities of demand for the two items. Using standard formulas for deadweight loss that key into these elasticities, we can model the choice and solve for the decision that minimizes deadweight loss. At this level, the theory provides a general approach for solving line-drawing problems and ties together areas of law that might previously have seemed quite distinct. The debt-equity problem looks much like the independent contractor/employee problem which looks like the realization/nonrealization problem.

The thrust of Schlunk's argument is that lines in the tax law should be eliminated where possible.[5] The debt-equity line—the main example in his article—seems senseless to most observers and probably should be eliminated. Even the most enlightened line drawing cannot solve the central problem with the distinction. The same can be said for numerous other tax-law lines, such as the distinction between capital gains and ordinary income or the distinction between partnerships and corporations. Schlunk's push to eliminate lines in the tax law is surely right, and line-drawing theses at any of the levels described above do not suggest otherwise. We should always be mindful that good line drawing is a band-aid that does not eliminate the deadweight loss from discontinuities in the tax law. The most beautiful line-drawing edifice cannot stand for long on a rickety foundation.

In making this general argument for the elimination of lines in the tax law, however, Schlunk also makes more specific criticisms of line-drawing theories. In particular, Schlunk argues that optimal line drawing leads to path-dependent results.[6] Suppose the world starts out with a few commodities and lines are drawn. When new commodities are discovered, their classification will depend on the lines drawn in the first period. When even newer commodities are discovered, their treatment depends on the prior periods' decisions, and so forth. The treatment of the various commodities would be different if the order of introduction had been reversed. He concludes that "[i]f the existing items are themselves inconsistently taxed, the inquiry can only lead to ex post arbitrary tax results and/or to discontinuities. At the end of the day, the most robust approach is simply to eliminate the inconsistent tax treatment of the existing items."[7] Therefore, he says (later in the article), "[i]t makes no sense to add incrementally to the

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4. Schlunk, *supra* note 1, at 860.
5. *Id.*
6. *Id.* at 861–62.
7. *Id.* at 861.

learning on the debt-equity distinction [his example of line drawing], whether by means of optimal commodity tax methodology or otherwise."[8]

Schlunk's specific criticisms of line drawing are overly broad and often miss the mark. In this comment, I explain why that is so. Part I examines his general conclusions. Part II examines his specific claim that the optimal commodity tax method of line drawing is path-dependent and, therefore, arbitrary. Part III examines his discussion of hybridization, with particular reference to the debt-equity distinction.

I.   Schlunk's General Conclusions

As discussed above, Schlunk believes that the most robust approach to distinctions in the tax law is to eliminate them. Schlunk is advocating a tax law that does not distinguish between similar items. That is, Schlunk is calling for broad tax reform. Schlunk is surely correct that the most robust approach to bad lines in the tax law is to eliminate them. As a general proposition, rather than be stuck drawing "little boxes" in the world of line drawing, we should always be mindful of the possibility of broader reform.

The possibility of tax reform, however, has little to do with the line-drawing problem, at least as conceived in the existing literature. The arguments about line drawing do not say that we should not adopt broad tax reforms if these reforms are available. For example, there is nothing in the existing literature to say that elimination of the debt-equity distinction is not better than trying to maintain the distinction through difficult lines.

The focus of the line-drawing arguments is on a different question. The assumption is that the policymaker faces a limited set of choices and *must* draw a line. This focus is intended to address the daily issues faced by a policymaker. My personal interest in line drawing grew out of frustration with determining whether the regular pronouncements coming out of the Treasury Department or Congress made sense. Were the check-the-box regulations a good idea? Should a short-against-the-box be a realization event? Is MIPS debt or equity? Should the *Morris Trust* decision[9] be repealed? The policymakers making these decisions could not avoid these decisions by proposing tax reform. Tax reform is very important, but these questions are the daily fare of tax policymaking, and we should have a theory for thinking about them.

More important, the line-drawing problem will persist even under the broadest reforms. Every tax system draws lines, such as the differences between consumption and investment, imputed and non-imputed returns,

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8. *Id.* at 890.

9. Comm'r v. Morris Trust, 367 F.2d 794 (4th Cir. 1966). This decision was repealed by I.R.C. § 355(e), which was part of the Taxpayer Relief Act of 1997.

barter and cash, and taxpaying units and units not subject to tax. Arguments for tax reform cannot solve the line-drawing problem.

Finally, suppose Schlunk's specific criticisms of the optimal commodity tax method of line drawing are correct. For example, suppose that it is arbitrary. Schlunk argues that his criticisms show that it does not make sense to add to the learning about drawing lines. The conclusion, however, should be the opposite. We would need more, rather than less, study of the line-drawing problem, because his criticisms would mean that we do not yet understand the problem.

II. Path-Dependence

A. Limited Power of Policymakers

As noted in Part I, the focus in the line-drawing literature is on the typical position of a senior policymaker, such as the Secretary of the Treasury or the Chairman of the Ways and Means Committee. These senior policymakers have considerable flexibility but are subject to a variety of constraints. In particular, they almost always have to take the basic outline of current law as given. While their limitations will vary with the context, they cannot generally make broad reforms, such as eliminating the corporate tax or the realization requirement. Moreover, most of the time, their freedom of action is substantially constrained—their choices are far more limited than simply not making broad reforms. Instead, they can only make incremental decisions. Policymakers may feel limited by this situation, preferring complete freedom to make policy, but they are stuck and want to make the best decisions given the circumstances.

Consider some recent examples of this limited ability of policymakers to make changes. Partnerships and corporations are taxed differently. In recent years, there has not been an option to tax them the same way. The Treasury Department, which could not conceivably decide to eliminate the distinction between partnerships and corporations, had to decide how to differentiate between them. Another recent example is tax treatment of a short-against-the-box transaction. A short-against-the-box transaction looks much like a realization event. The policymakers (Congress this time) did not have the option of eliminating the realization requirement but, instead, had to decide whether to classify shorts-against-the-box as a realization event. Debt and equity are fundamentally similar. Policymakers have been faced with a wide variety of financial instruments that push the line between them in one direction or another. As much as the policymakers may pine for the elimination of the debt-equity distinction, they had to respond to these various instruments (including by not doing anything). The number of examples fitting this pattern of incremental decisionmaking is nearly infinite. These are the problems policymakers routinely face. The question these problems raise is how should a person decide in these circumstances

(keeping in mind that a person must decide, because not doing anything *is* a decision).

B. *Line-Drawing Theory*

Line-drawing theory attempts to provide some rules of thumb for determining the consequences of decisions like these. The key observation of line-drawing theory is that many of these decisions look fundamentally the same, so a general theory can apply. In particular, in all these questions, two or more tax treatments potentially apply. One of these treatments will impose a higher tax than the other. Policymakers do not have the option of changing these core tax regimes. The policymaker may, however, change the dividing line between the regimes to a limited extent. Taxpayers will respond to any dividing line by shifting their behavior toward the lower-taxed regime. This shifting of behavior causes efficiency losses—taxpayers might prefer to do one thing but end up doing another because of the perverse tax incentives. The goal of line-drawing theory is to understand how to differentiate the regimes so as to minimize the efficiency losses from this unhappy situation.

This is where differential commodity taxes come in. There are a variety of "off-the-shelf" models that consider the efficiency-maximizing set of taxes on commodities. In all of these models, the tax on at least one commodity is fixed at zero, and there is a budget constraint so that the government must have non-zero taxes on some of the other commodities. The non-zero taxes will cause individuals to shift their behavior, leading to efficiency losses.[10] Because of the assumption of a fixed, zero tax on one item, the optimal tax structure is not a level tax on all commodities. Instead, we adjust the structure to minimize the effect of shifting to the zero-taxed item. Loosely, we lower the tax on substitutes for the non-taxed item and raise the tax on complements to the non-taxed item.[11] This tax structure results in the differential taxation familiar to many in simplified form as Ramsey taxation.

The line-drawing model looks much like the above tax structure, but there are two fixed items with different tax rates. We must tax a third item at the same rate as one of these two, and adjust overall tax rates to stay within the budget constraint. The resulting intuitions are quite similar to the intuitions in the more general commodity tax case. We care about

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10. This description of the economics is quite loose. We can rigorously define how (and which) behavior shifts cause efficiency losses. A heuristic but more accurate description can be found in Weisbach, *An Efficiency Analysis of Line Drawing in the Tax Law, supra* note 3. Mathematical versions can be found in many places, including Alan J. Auerbach, *The Theory of Excess Burden and Optimal Taxation, in* 1 HANDBOOK OF PUBLIC ECONOMICS 61 (Alan J. Auerbach & Martin Feldstein eds., 1985).

11. *See* W. J. Corlett & D.C. Hague, *Complementarity and the Excess Burden of Taxation,* 21 REV. ECON. STUD. 21 (1953).

substitution effects and want to classify items to minimize the costs from shifting across the boundary.

C. The Alleged Path-Dependence of Line Drawing

An important fact about the line-drawing problem is that the answer depends on the initial constraints. If the fixed points change, the answer changes. One can readily see this in the above model, where the mathematical formula refers to the fixed points for its solution. But this facet of the line-drawing problem is not an artifact of the above model. Instead, policymakers in the real world will often make different decisions when their degrees of freedom change.

Schlunk's path-dependence claim boils down to this fact. The answer one gets depends on the options one is given. Schlunk shows path-dependence by serially changing the fixed points. We start with an initial set of fixed points and make decisions based on those fixed points. Schlunk then prohibits revisiting those decisions, so they become new fixed points. New questions and new answers arrive, and these answers are then fixed. And the process continues. If the initial fixed points or the sequence of questions had been different, the decisions at various points in time would have been different. These different decisions would have been fixed in stone, and the subsequent answers would be different. Schlunk shows this with an extended mathematical example.[12] But the core idea is simple: if we are prohibited from revisiting old decisions when new problems arise, we get path-dependence. Schlunk then argues that this means that the line-drawing theories should be discarded in exchange for efforts to eliminate distinctions.[13]

I discussed above the reasons why line-drawing theories (whether this one or another one) cannot be discarded. Here, I will explore the strength of the path-dependence claim. I have three points. First, the path-dependence argument is not really about the commodity tax theory of line drawing. *Any* theory of making decisions, line-drawing decisions or not, tax or not, where decisions are fixed in stone is subject to exactly the same criticism.

For example, the path-dependence argument applies to the tax reforms Schlunk calls for as an antidote for line-drawing problems. Schlunk would enact a neutral system for corporate capital that would tax all capital at the nominal corporate rate by eliminating the debt-equity distinction.[14] This neutral system is probably a good idea. Suppose we decide to enact Schlunk's neutral system and fix the system in stone. Suppose further that

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12. Schlunk, *supra* note 1, at 862–73.

13. *Id.* at 887–91.

14. *See generally* Herwig J. Schlunk, *The Zen of Corporate Capital Structure Neutrality*, 99 MICH. L. REV. 410 (2000).

the next day we decide to switch to a consumption tax and not tax capital at all. The initial decision, however, cannot be changed under our assumptions, so all we can do is exempt non-corporate capital. This exemption would probably be a bad idea because it would worsen the distinction between corporate and non-corporate capital. Had we not first fixed the corporate tax, we would be able to make better decisions about the consumption tax. The decision to fix the corporate tax, under this analysis, leads to path-dependent results and, therefore, is as arbitrary as the line-drawing theory. This bizarre result is a consequence of Schlunk's assumption that we cannot revisit past decisions.

Schlunk might have argued, but he did not, that there is something special about the line-drawing approach that makes us less likely to revisit past mistakes. Therefore, we are justified in holding the line-drawing theory, but not other theories, to this high standard. I do not think such an argument could be supported, however. The line-drawing regime considers how best to make decisions given the constraints on the policymaker but says nothing about what those constraints might be. If the constraints are loosened, the decision changes. There is no reason to impose tighter constraints on policymakers in the line-drawing context than anywhere else.

Second, failure to revisit is not more likely or more important in the tax law (generally as opposed to just in line drawing) than in other areas. Schlunk's model completely prohibits reversals of prior decisions. But this prohibition is probably just a simplifying assumption for heuristic purposes rather than a claim that we never reverse past decisions. We reverse past decisions in the tax law all the time.[15] But the strong claim of arbitrariness relies on this artifact of modeling. To the extent we revisit past decisions, the arbitrariness is reduced or eliminated. The question raised is whether we should be more concerned about failure to revisit decisions in the tax law than in other areas.

Path-dependence claims typically rely on increasing returns to scale or network externalities. The classic, although disputed, claim of path-dependence is the QWERTY keyboard.[16] The claim is that the QWERTY typewriter keyboard was initially adopted to slow down typing because keys

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15. Consider a few examples from the business-tax world. The corporate tax was governed by the *General Utilities* doctrine until 1986, when it was repealed. Losses could be transferred, but then Congress enacted § 382 to restrict this. *Morris Trust* governed the treatment of spin-offs followed by a tax-free acquisition, but was subsequently repealed. *Bausch and Lomb* limited the availability of C reorganizations, but has been overturned. The continuity-of-interest rules have been overhauled. The consolidated-return rules were almost completely rewritten. Shorts-against-the-box were not realization events, and now they are. Original-issue discount was accrued on a straight-line basis, and now it is accrued on a constant-yield basis. The list is endless. For a more detailed discussion of many of these examples, see generally Weisbach, *An Efficiency Analysis*, *supra* note 3.

16. *See* Paul David, *Clio and the Economics of QWERTY*, 75 AM. ECON. REV. 332 (1985); S.J. Liebowitz & Stephen Margolis, *The Fable of the Keys*, 33 J. LAW & ECON. 1 (1990).

would get stuck on old manual typewriters if the typing was too fast. Once a large number of people had learned to type using this keyboard, it became too costly to change it even though there is no longer a problem with keys jamming. Worse, the costs of switching to a superior keyboard, the Dvorak keyboard, are claimed to be relatively low (the costs are said to be recovered in about ten days) but path-dependence prevents the change. We are left with an inefficient keyboard. Similar stories are told about the Beta video recording system and the Apple Macintosh operating system.[17]

These path-dependence claims are all controversial. The historical basis for the claims has been challenged. For example, it is not clear that Beta was superior to VHS or that the Dvorak keyboard was superior to the QWERTY keyboard. In addition, the path-dependence claims require early adopters to choose the inferior technology notwithstanding that another technology yields greater payoffs. The claims also require a failure to switch to the superior technology once information about its superiority is known. The assumptions needed to produce these results are highly restrictive.[18]

Schlunk does not claim his path-dependence argument is based on increasing returns to scale; therefore, it must be based on something else. One possible argument is that legal rules tend to be path-dependent in ways economic decisions are not because of public-choice problems. The rationale might be that legal decisions are self-perpetuating because they benefit particular groups. These benefited groups then become concentrated constituencies, thereby ensuring the decision long life in the public-choice world. Lucian Bebchuk and Mark Roe make this claim in attempting to explain why we have not seen convergence in corporate forms around the world.[19]

A public-choice explanation of path-dependence, however, is likely to be extremely sensitive to how legal change is achieved.[20] For example, if legal change offers transition relief to winners under the old law, they may not object. The public-choice explanation is complicated because the extent of transition relief also affects incentives for the winners under the new law to lobby for change (because it affects both how much they gain immediately from the legal change and how much they will preserve if the law is changed yet again). While we have yet to sort out this issue completely, it is not at all obvious that public-choice concerns would make legal rules more path-dependent than other types of decisions.

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17. *See* Brian Arthur, *Positive Feedbacks in the Economy*, 262 SCIENTIFIC AMERICAN 92 (1990).

18. For a general discussion of the economics of path-dependence, see S.J. Liebowitz & Stephen Margolis, *Path Dependence, Lock-In, and History*, 11 J.L. ECON. & ORG. 205 (1995).

19. Lucian Arye Bebchuk & Mark Roe, *A Theory of Path Dependence in Corporate Ownership and Governance*, 52 STAN. L. REV. 127 (1999); *see also* Mark Roe, *Chaos and Evolution in Law and Economics*, 109 HARV. L. REV. 741 (1996).

20. *See* Saul Levmore, *Anticipations and Reparations*, 99 COLUM. L. REV. 1657 (1999).

There is nothing to make us think that the tax law is especially important or unique with respect to revisiting past decisions. Tax law poses few increasing returns to scale or unique public-choice problems. If anything, we might guess that tax law revisits more frequently than other areas of the law. The entire literature on transition relief stemmed from concerns about changes to tax regimes, perhaps indicating that legal change is particularly prevalent in the tax law.[21] Other scholars have studied the extraordinary and increasing pace of tax-law changes and tried to explain these changes in public-choice terms.[22]

Schlunk's only support for his path-dependence claim is a brief recital of history in the debt-equity area. This history does not extend to a more general claim in the tax law. Debt-equity is fairly unique in the tax law, as it is based on court decisions rather than legislated rules. Court decisions may differ from legislated rules in their deference to the past. Where legislative rules have been used in the debt-equity area, they have generally reversed past decisions.[23] Finally, Schlunk's path-dependence story is incomplete. To show irreversibility, one has to show that it would have been smart to reverse the decision earlier than it was done given the information and markets at the time. Schlunk does not even attempt this showing.

We can see the strength of Schlunk's irreversibility assumption in his footnote 41.[24] In the example in the footnote, the government draws a line that is scaled between zero and 100. Zero and 100 have fixed treatments, and taxpayers prefer the zero treatment. (The line represents debt and equity, but this is not particularly relevant.) The government is prohibited from revisiting past decisions or anticipating future decisions, but taxpayers can strategically present problems to the government. The government decision criterion is to divide the "open space" in half. The taxpayer first sends up the number 49, which the government classifies with zero because it is closer to zero than 100. The open space is now only from 50 to 100 because the decision about 49 and everything lower is fixed forever. The taxpayer next ponies up 74, which the government classifies with the 0 to 49 category because the decision criteria looks only to the remaining open space. The number 74 is less than half way up the remaining space. The next number would be 87.4, which again is put in the zero box. This process continues so that eventually only the number 100 is in the 100 class. In Schlunk's example, the government ends up classifying everything as debt.

21. *See* Michael Graetz, *Legal Transitions: The Case of Retroactivity in Income Tax Revision*, 126 U. PA. L. REV. 47 (1977).

22. *See* Richard L. Doernberg & Fred S. McChesney, *On the Accelerating Rate and Decreasing Durability of Tax Reform*, 71 MINN. L. REV. 913 (1987).

23. *See* Schlunk, *supra* note 1, at 867 n.15.

24. *Id.* at 883 n.41.

This example looks unrealistic to me. It seems more likely that once it is apparent that the law is on a path toward putting everything in the zero-tax box, the government will revisit past decisions. In Schlunk's example, the tax base is gradually disappearing. The government is unlikely to be able to live with the reduced tax base for long, at least if it wants to collect revenue from this source (and if it does not, the example represents a good result rather than a claim of perverse path-dependence).

Rather than being governed by some unique form of path-dependence, line-drawing decisions are likely to be subject to the same sort of mundane durability that all decisions have. We cannot revisit everything every day. Instead, we can only focus on the most pressing problems, so decisions tend to be more durable than we might like. Where the problems are pressing, we revisit. We can see this dynamic in Schlunk's argument that we should revisit the debt-equity distinction. His claim is precisely that the problem is pressing and that revisiting it is necessary.

There is a third problem with Schlunk's path-dependence argument. Suppose there is some degree of path-dependence. That is, suppose that today's decisions involve sunk costs and that we are unlikely to revisit them quickly. We would not learn from this path-dependence that minimizing deadweight loss from decisions is a bad idea or that it is arbitrary. Instead, we would learn that the policymaker must adjust the decision criteria for the fact that decisions are sunk. The policymaker would have to be more forward-looking, but the fundamental analysis would not change.

There is an extensive literature on how to make decisions when some or all of the costs will be sunk.[25] The literature analyzes decisionmaking as the exercise of an option. Under this analysis, the decision-maker must not only consider the direct cost of the project but also the loss in flexibility from giving up the option. The decisionmaking methods in the literature attempt to price the option and determine the optimal time to incur the sunk costs given this option.

Consider Schlunk's fruit example.[26] If the government knows that a decision on kiwis will be fixed in stone even though unknown fruits will surely be developed in the future, it needs to take the loss of flexibility with regard to kiwis into account when it makes its initial decision. It may very well defer the decision for some time to see what the future holds.

This is an important point, and if Schlunk is arguing that we must adjust line-drawing theories for an option element, he may be right, at least to the extent we believe that past decisions are irreversible. The real world probably looks a bit like this. Past decisions are not irreversible but there are

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25. *See generally* RICHARD A. BREALEY & STEWART C. MYERS, PRINCIPLES OF CORPORATE FINANCE ch. 21 (6th ed. 2000); AVINASH K. DIXIT & ROBERT S. PINDYCK, INVESTMENT UNDER UNCERTAINTY (1994).

26. Schlunk, *supra* note 1, at 862.

costs to changing them. There will be some option element in most decision-making. But this option argument is a more general point about decision criteria, not a particular point about line drawing. It is also not inconsistent with prior line-drawing theory. Instead, it shows the importance of having a line-drawing theory that accounts for contingencies. If we cannot reverse today's decisions, we had better be sure they are as good as possible.

We can see how finding an option element does not make a decision arbitrary by considering an analogy. Suppose a developer is thinking about building a building. Once built, the costs cannot readily be recovered should the project turn out to have been a mistake. These costs are sunk. Based on all the information the developer has today, the decision to build seems to make sense. But it may be the case that at some unknown date in the future, something will happen causing the developer to regret the decision. For example, another structure may be built next door that ruins the views. The developer would not have built the initial building had he known about the second building.

The choice to put up the first building is path-dependent in exactly the same way that Schlunk claims the line-drawing theory is. Had the order of choices been different, the developer would have decided differently. We do not conclude, however, that the decision criteria used by the developer are arbitrary. Instead, we say that the decision criteria must take into account the fact that the future is uncertain. Option theory is an attempt to formalize this. The same is true with line drawing. Minimizing deadweight loss is not an arbitrary goal. Instead, if decisions are sunk, we must take this into account and adjust the particular decision criteria.

D. Conclusion

The path-dependence claim is not really about optimal line drawing. Instead, the path-dependence claim applies to all decisionmaking to the extent that decisions cannot be reversed. Nothing about line drawing makes it better or worse than any other decision criteria in this regard. Path-dependence, instead, is a much more general problem.

It is not clear the extent to which path-dependence is a special problem in the tax law. There are few increasing returns to scale and no special public-choice problems. Where the consequences of path-dependence are bad, there is a strong incentive to reverse course. Moreover, the costs of reversing course are likely to be low in tax law compared to, say, changing network standards. More work remains to be done in this area, but a bald and virtually unsupported claim of strong irreversibility is insufficient for drawing conclusions.

Finally, to the extent line drawing is path-dependent, we do not learn that it is arbitrary. Instead, we learn that we must do our best to anticipate the future and take into account that decisions are sunk. We can think about

this using options, but the basic point does not require that level of sophistication. If we cannot reverse course in the future, we must be more careful about decisions we make today. But this prudence in decision-making makes good line-drawing theory more, rather than less, important.

III. Hybrids, Arbitrage, and the Debt-Equity Distinction

Hybrids are two or more items that net to equal a third. For example, financial instruments can often be held in combinations that replicate other financial instruments. Much of Schlunk's article is about hybrids.[27] They appear in two different parts of the article: in an explicit model of hybridization using fruits, and in the example of the debt-equity distinction. This Part discusses each of these sections in turn.

A. Schlunk's Fruit Model

Schlunk's conclusions in the hybrid-fruits model are unclear. His claim seems to be that if hybrids are available, the line-drawing exercise is indeterminate. Using kiwi fruits as his example of a hybrid, Schlunk states that optimal commodity tax methodology provides no guidance to the taxing authority because both taxing kiwis and not taxing kiwis lead to the same consumption patterns.[28]

As Schlunk notes, the claim that the commodity tax methodology provides no guidance in this case is only true if we do not care about how much revenue the tax raises. All the models in Schlunk's article have this feature. They ignore revenue. In the hybrid-fruit model, taxing kiwis produces substantially more revenue than not taxing kiwis with the same underlying consumption patterns. It is hard to imagine why the choice in this case wouldn't be clear: the taxing authority should pick the line that gives the highest revenue because the extra revenue is lump sum. Unless all other sources of revenue are nondistortive and we have otherwise already optimally redistributed wealth and purchased public goods, lump-sum revenue can be used to increase welfare.

It is difficult to understand models that do not hold the budget constraint fixed.[29] If two tax systems raise differing amounts of revenue, comparing their deadweight losses is not meaningful. The tax that raises more revenue should be expected to have a higher deadweight loss, and this tax may still be more desirable. In Schlunk's hybrid-fruit model, a tax that raises more revenue has the same deadweight loss as the other tax, but Schlunk's model

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27. *Id.* at 873-79, 885-87.

28. *Id.* at 873.

29. Alternatively, the budget constraint can be made endogenous so that the higher the deadweight loss from taxation, the lower the budget constraint. For an example, see Louis Kaplow, *Optimal Taxation with Costly Enforcement and Evasion*, 43 J. PUB. ECON. 221 (1990).

concludes that the higher revenue tax is not preferable. This conclusion only highlights the oddity of this comparison.

Schlunk justifies this model by arguing that there is generally no immediate or even long-term direct tax rate response to windfalls or deficits because of changes to tax rules.[30] But in the long run the government is subject to a budget constraint that cannot be ignored in thinking about taxes. Otherwise, the prescription based on deadweight-loss measurements would be to have no taxes at all. This budget constraint is why offsetting tax changes are and must be observed in practice. We have taxes because the budget constraint is real. The changes may come as overall rate changes, or they may come through changes to the tax base. They may also come in future years, with current-year changes increasing or reducing government borrowing. But regardless of how offsetting changes are made, the budget constraint is relevant and cannot be ignored. If budget constraints cannot be ignored, the results in the hybrids case are not indeterminate.

The conclusions about hybrids are more muddled once we consider the case with an infinite number of hybrids. In such a case, Schlunk shows how to compute a unique, non-path-dependent line that minimizes deadweight loss.[31] The path dependency disappears because all of the commodities are introduced at once via hybridization.

The disappearance of path dependency is at odds with the path-dependency claim from the case without hybrids. If one believes the path-dependency claim, one must wonder whether Schlunk's hybrids case or the case without hybrids is more plausible. Here, Schlunk argues that hybrids are likely to be introduced only over time,[32] and I agree. Even though the income tax looks at cash flows that can be split up or combined, doing so is often costly. But note that this high cost also limits concerns about arbitrage—when splitting up or combining cash flows is costly, various financial identities that look good on paper are unlikely to be perfect substitutes in the real world.

B. Debt-Equity Distinction

It is perhaps best, then, to turn away from the hybrid-fruits model and focus on the example, the debt-equity distinction. Schlunk goes through an extended example of using betas to distinguish debt from equity.[33] Part of the example attempts to show path-dependence, a result that I have already commented on.[34] Another part of the example focuses on hybridization, the topic here.

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30. *See* Schlunk, *supra* note 1, at 877.
31. *Id.* at 878.
32. *Id.* at 879.
33. *Id.* at 888–90.
34. *See* discussion *supra* Part II.

While the example is quite complicated, it relies on a single core idea: issuing debt and a swap creates the same economics as issuing equity. Equity, however, is high-taxed, while the combination of debt and a swap is low-taxed. Taxpayers have an incentive to replace high-taxed equity with low-taxed debt-and-swap combinations. At the extreme, equity would disappear altogether.

The argument underlying this observation is that if two identical items are taxed differently, people will choose the lower-taxed item.[35] Over time, they will completely switch to the lower-taxed item, with the result that there is a loss in tax revenues, but no deadweight loss. These results may be true, but they are not particularly relevant to the line-drawing problem. Even if we never face a line-drawing problem again and no new exotic hybrid financial instruments are ever created in the future, we would still end up with zero tax in this example. Line drawing is not driving the result.

We can see how distinct the argument is from the line-drawing problem by considering how it applies to other tax theories. If we adopted every tax reform that every theorist has ever posed but retained Schlunk's assumptions that the combination of debt and swap is taxed at a zero rate while identical equity is taxed at some positive rate, we would end up with a zero tax on corporations. The example is not a criticism of line-drawing theory. It is a criticism of the taxation of swaps.

One way to see why the example is not about line drawing is to consider an extreme, if silly, hypothetical. Suppose there were, by mistake, a rule that if a taxpayer files his return on blue paper instead of the normal white paper, the taxpayer owes no tax. This is like Schlunk's assumption that if a taxpayer issues equity through a combination of debt and swap, the taxpayer owes no tax. Schlunk concludes that, in such a world, the line-drawing theory does not work.[36]

The problem with this goofy hypothetical tax system, however, is not with faulty line-drawing theories. The problem is that filing on blue returns should not change your tax liability. But Schlunk has assumed that the line-drawing theory cannot address the "blue return" problem—the "blue return" rule is fixed for purposes of evaluating the line-drawing theory. If Schlunk were to make similar assumptions about any theory, it would lead to similarly faulty results. The most lofty theories of perfect income taxation or consumption taxation would fail this test. If Schlunk posits a problem that he

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35. This observation has also been made numerous times in the context of financial instruments. *See, e.g.,* Alvin C. Warren, Jr., *Financial Contract Innovation and Income Tax Policy,* 107 HARV. L. REV. 460 (1993); David A. Weisbach, *Colloquium on Financial Instruments: Tax Responses to Financial Contract Innovation,* 50 TAX L. REV. 491 (1995); Jeff Strand, *Taxing New Financial Products: A Conceptual Framework,* 46 STAN. L. REV. 569 (1994); Joseph E. Stiglitz, *The General Theory of Tax Avoidance,* 38 NAT'L TAX J. 325 (1985).

36. Schlunk, *supra* note 1, at 889.

assumes cannot be fixed, he cannot criticize a theory for failing to fix it. Moreover, he cannot then offer a solution to fix the problem, effectively relaxing the constraint on his theory but not on others.

I do not mean to suggest that the "blue tax return" problem is not important. We must fix this sort of problem, and Schlunk is right to point out that we should watch out for this sort of thing. But the "blue tax return" problem is unrelated to the line-drawing problem. Even if we fix the problem, we need a line-drawing theory. If, under the extreme assumptions of perfect substitutes, we do not fix it, no tax theory does any good. And most theories of the tax law, including the line-drawing theory, would suggest that the problem be fixed.

In the debt-equity model, all hybrids are available at once. It is like the infinite-number-of-hybrid-fruits case. But in the infinite-number-of-hybrid-fruits model, we get a clean, determinate result that raises revenue. Recall that if oranges have the characteristic 100, apples have characteristic 0, and the tax on oranges is 20%, we can calculate an optimal place, in this case 75, to divide the line between the taxed and the untaxed.[37] Everything above 75 is taxed at 20%, and everything below is not taxed at all. This number is unique, is not path-dependent, and (under his assumptions, particularly that we do not care about revenue) maximizes welfare.[38] In the debt-equity case, however, we end up foundering. Why the difference?

Schlunk models the debt-equity distinction linearly by using beta.[39] Like in the hybrid-fruits model, we would calculate some beta, Schlunk throws out 0.3, that would divide debt from equity. But along come swaps to ruin the picture. Where do they fit on the line? Basically, they don't. Recall that the optimal beta was calculated assuming full hybridization. All products were assumed to exist. So why is the beta we calculated no longer optimal? Adding swaps is like adding a new commodity that is very much like equity but not taxed as equity. It is, in the fruit world, as if a new type of orange, say orange flavoring, with characteristic 101, were suddenly invented and is taxed like apples at a zero rate. Immediately, all tax disappears. This is why we end up with a different result in the debt-equity case than in the fruit case. In the fruit case, there are no two things that are identical but taxed differently. This illustrates why the swaps example, unlike the fruit example, is not about line-drawing problems. The problem is that the new thing, the orange flavoring, is taxed inconsistently with a perfect substitute, the orange. It is the "blue tax return" problem.

Another reason why the debt-equity model is not like the fruits model is that the debt-equity model is all about revenue. The only reason we are

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37. *Id.* at 878.
38. *Id.* at 877–78.
39. *Id.* at 888.

concerned about swaps is that they reduce the revenue raised through the tax on equity. Nothing else matters. In the fruit model, it is revenue that does not matter. If we strictly apply the lesson of the fruits model, we would conclude that there is no deadweight loss from the hybridization we see in the debt-equity model.

It is worth making one final point about the debt-equity example. The assumption Schlunk makes of perfect substitutes may only be for purposes of the example, but it is important to note how uncommon and temporary such a situation is. The tax law cannot tolerate such a situation and usually adjusts rapidly when one crops up.

For example, in the real world, the combination of issuing debt and a swap is not a perfect substitute for issuing equity, at least in any volume. The bankruptcy risks, liquidity risks, or other risks in the two cases are likely to be different. For this reason, we see limited substitution of debt for equity. The same is true with all the other highly problematic lines in the tax law. Independent contractors are not perfect substitutes for employees. Holding a security with a hedge is not the same as selling. Imputed income is not the same as market income. All these items are fairly good substitutes for one another, but they are not perfect substitutes. This imperfection in substitution is the reason we collect so much tax every year. Tax planning is very difficult. Although it is important to recognize the problems that highly liquid and sophisticated financial markets pose for the tax system, we should not assume that hypothetical equivalences mean that taxpayers can really eliminate tax by using simple methods.

C. Conclusions on Hybrids, Arbitrage, and the Debt-Equity Distinction

We can draw several conclusions from the hybrids and debt-equity discussion. The line-drawing theory depends critically on various items' being imperfect substitutes. If perfect substitutes are taxed differently, taxpayers will shift to the lower-taxed item. But this phenomenon is not new, and it is not about line drawing. If items are good but not perfect substitutes, the deadweight loss from taxing them differently may be very high. The pressure to conform the treatment should also be correspondingly high. But if the imperfect substitutes absolutely must be taxed differently, the line-drawing theory tells us how best to do so.

IV. Conclusion

I find myself conflicted when reading Schlunk's article. I like his goal—tax reform is important, and the debt-equity distinction is a glaring problem with the tax law. In addition, his arguments that line drawing cannot fix underlying inconsistencies and that financial innovation will put more and more pressure on these inconsistencies are undoubtedly correct. It is important to keep these facts in mind. But I believe his particular

criticisms of optimal line drawing either miss the mark or are so broad that they apply to all decisionmaking. Rather than revisiting these criticisms, let me summarize what we can take away from the article.

First, tax reform is important. No line-drawing theory can eliminate the major inconsistencies or other problems with current law. All the theories can do is advise policymakers on immediate decisions. That is their goal. Reform remains important, even with the best line-drawing theories. I think this is the key claim of Schlunk's article, buried in discussions of path-dependence.

Second, when drawing lines, policymakers should carefully examine their constraints. If decision-makers must act in a world that conforms to Schlunk's assumptions about old decisions' being fixed, they might end up carefully plotting a path to their doom. If, instead, they examine their constraints and discover a degree of freedom previously unknown, they can potentially make much better policy.

Finally, policymakers have to be forward-looking. Even decisions that can be reversed impose some sunk costs. Option theory, the theory of decisionmaking when costs will be sunk, is just beginning to make its way into law, and maybe more attention needs to be paid to the problems it poses.

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