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## Reforming the Taxation of Derivatives – An Overview

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## Reforming the Taxation of Derivatives—An Overview

Alex Raskolnikov\*

*This brief essay outlines three benchmarks for evaluating alternative ways of taxing capital income, summarizes anticipatory, retroactive, and accrual-based proposals for reforming the taxation of derivatives, and offers guidelines for evaluating more limited reforms. It is intended as an introduction to key concepts, tensions, and ideas for reforming the taxation of financial instruments.*

Derivatives (or financial instruments) are challenging—challenging to understand, challenging to price, and, most importantly for the purposes of this essay, challenging to regulate. All of this is old news. Yet few people realized just two years ago that a failure to meet the challenge of regulating financial instruments would be a major contributor to the global financial crisis, leading to an enormous destruction of wealth, a global recession, and an unprecedented threat to the existence of the European Union in its current form. Many realize this now. Not surprisingly, a comprehensive regulation of derivatives appears on legislative agendas of most policymakers.<sup>1</sup>

Another item on many legislative agendas is revenue. The financial crisis put a tremendous strain on national budgets, led to skyrocketing deficits, and produced increasingly dangerous debt-to-GDP ratios. While austerity measures will certainly be required to bring fiscal imbalances under control, additional revenue will just as certainly be part of the solution. Legislators will be thinking about taxes even more than they usually do.

The need for new tax revenue combined with the willingness to regulate derivatives point strongly toward a possibility that taxation of financial instruments will become a subject of serious discussions in policy (and not just academic) circles. This essay aims to help policymakers start these discussions. Rather than developing a particular detailed reform proposal, it highlights the difficulties of taxing financial instruments, outlines and evaluates fundamental reform alternatives, and suggests approaches to incremental reforms, all while using the U.S. tax system as an example.

### 1. Challenges of Taxing Financial Instruments

Gains and losses from financial instruments are capital income, at least in most cases.<sup>2</sup> Taxation of capital income is what makes an income tax different from a consumption tax. In an income tax

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<sup>1</sup> See Sewell Chan, *After Health Care Win, Democrats Put Financial Overhaul at Top of Agenda*, N.Y. Times, March 25, 2010, at B3 (discussing current legislative initiatives in the U.S.); Sam Jones et al., *Call for Derivatives Rules Reform*, Fin. Times, March 11, 2010 at 2 (discussing EU reform proposals).

<sup>2</sup> Derivatives may be used as compensation, for example when part of a salary is paid in stock options. However, once that compensation is paid, further appreciation (or depreciation) of these options is capital

system, both labor income and capital income are taxed. In a consumption tax regime, only labor income (and, in some cases, unique, abnormally high economic returns) are included in the tax base. Taxation of capital income makes a significant contribution to the progressivity of the U.S. tax system.<sup>3</sup>

Generally, returns to capital consist of three components: a risk-free (or time value) return, a risk premium, and inflationary gain (or deflationary loss). The U.S. tax system often under-taxes the first two components and over-taxes the third one. Because the question of incorporating inflationary gains and losses into the income tax goes well beyond the taxation of derivatives, this discussion focuses on taxation of risk-free returns and risk premiums.

Even without considering derivatives, the U.S. tax system does a mediocre job of reaching capital income. The realization requirement allows taxpayers to accelerate losses from depreciated assets while deferring gains of appreciated ones. The basis step-up at death often eliminates these gains from the tax base altogether. Special provisions exempt from taxation time value and risk-based returns from home sales, pension savings, life insurance, municipal bonds, and so on. The U.S. tax law did not appropriately account for simple interest accrual until 20 years after America sent a man into space. Thus, in evaluating the effect of derivatives, it is important to remember that a significant portion of capital income from “traditional” investments is under-taxed.

Derivatives exacerbate the problem dramatically. These innovative and socially useful products of financial engineering have an undesirable side effect: They give rise to remarkably potent tax reduction strategies. Without repeated congressional intervention over the past two decades, derivatives would have allowed taxpayers to disguise high-taxed time value returns (interest income) as low-taxed risk-based returns (long-term capital gains),<sup>4</sup> convert high-taxed risk-based returns (dividends and short-term capital gains) into low-taxed ones (long-term capital gains),<sup>5</sup> effectively sell appreciated assets without recognizing taxable gains,<sup>6</sup> and circumvent long-standing rules designed to assure the taxation of capital income.<sup>7</sup>

Congressional efforts to curb tax planning using derivatives are well-advised. Left unchecked, this planning can eliminate capital income from the tax base, essentially converting an income tax system into a consumption tax. Moreover, derivatives may also be used to disguise labor income (wages) as risky returns—an inappropriate result even in a consumption tax regime. Yet, despite

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income (or loss). If the option is not taxed upon receipt by the employee, an overall gain from this option may combine labor and capital income.

<sup>3</sup> This is true because on average high-income households receive a larger fraction of their income in the form of capital income than do low-income households.

<sup>4</sup> This was accomplished by a so-called conversion transaction that involved a purchase of an asset and its forward sale. Congress responded in 1993 by enacting section 1258 of the Internal Revenue Code.

<sup>5</sup> This was the purpose of the so-called hedge fund derivatives, addressed in section 1260 added to the Code in 1999.

<sup>6</sup> The constructive sale rules of section 1259 were enacted in 1997 to limit this kind of planning.

<sup>7</sup> For instance, cash settlement derivatives were used to circumvent the wash sale rule of section 1091. While Congress responded by adding subsection 1091(f) in 2000, some continue to argue that cash settlement notional principal contracts remain outside the scope of section 1091. See David M. Schizer, *Scrubbing the Wash Sale Rules*, Taxes, Mar. 2004.

persistent legislative and regulatory action, the current U.S. tax rules for taxation of derivatives are far from satisfactory. They are unnecessarily complex,<sup>8</sup> both under- and over-inclusive,<sup>9</sup> ineffective in some respects<sup>10</sup> and outdated in others.<sup>11</sup> More generally, they fail to meet any theoretical criterion describing a coherent regime for taxing capital income.

## **2. Evaluating Tax Systems—the Three Benchmarks**

Legal tax academics and public finance economists have been searching for comprehensive and principled ways of evaluating alternative tax systems for decades. Three benchmarks have emerged as a result of this search.

The first benchmark is *symmetry*. If both sides to every transaction are taxed under the same timing rule and rate, they face equal and opposite incentives, which allows the system to police itself. In a fully symmetric system the government collects no net revenue from the taxation of derivatives. Importantly, the government does not lose any revenue either. In other words, derivatives cannot be used to shelter income from real investments and labor.

Unfortunately, symmetry is unattainable. Tax-exempt entities and foreigners often pay no U.S. income tax. Securities dealers may be thought of as tax-exempt as well because their derivative trades with clients are hedged and mark-to-market accounting assures that only dealers' fees are taxable.<sup>12</sup> The presence of these tax-indifferent counterparties means that the taxation of derivatives will remain asymmetric as long as taxable taxpayers are on the other side of trades.

*Consistency* is another recognized benchmark. The tax treatment of derivatives is consistent if all economically comparable transactions (or sets of transactions) are taxed the same, regardless of the labels attached by taxpayers. For instance, an equity forward, an equity futures contract, and an equity swap on the same stock all have identical tax consequences in a consistent tax system, as does a leveraged purchase of that stock. Because tax treatment is independent of transactional

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<sup>8</sup> The proposed Treasury regulations for taxation of contingent swaps are perhaps the most egregious example. See Prop. Treas. Reg. § 1.446-3.

<sup>9</sup> The wash sale rules of section 1091 are an example of over-inclusiveness. They cover transactions where a depreciated share of stock sold at a loss is replaced by an option (including an out-of-the-money option) on the same stock even though such option is very different economically from the share itself and, therefore, the transaction does not come close to leaving taxpayer in the same position with respect to the stock as he was before selling it—an abuse targeted by the wash sale rules. The anti-extinguishment regime of section 1234A is under-inclusive, arguably not extending to derivatives that, while capital assets themselves, have underlyings that are not capital assets.

<sup>10</sup> See David M. Schizer, *Frictions as a Constraint on Tax Planning*, 101 Colum. L. Rev. 1312 (2001) (describing relative ineffectiveness of the constructive sale regime of section 1259).

<sup>11</sup> The taxation of credit default swaps, for instance, is highly uncertain. See Notice 2004-52 (offering five possible ways to characterize credit default swaps for U.S. federal income tax purposes and requesting comments).

<sup>12</sup> This is because any taxable gain from a client's position is offset by an equal loss on the hedge and vice versa (setting aside the fee built into the price of the client's position). The character of gain and a loss is always ordinary. The mark-to-market regime for securities and commodities dealers is set forth in section 475.

form in a fully consistent regime, it is impossible to game the system by choosing one form or the other.

Yet complete consistency is impossible without fundamental tax reform. The U.S. tax system has always relied on familiar cubbyholes such as debt and equity, ownership and non-ownership.<sup>13</sup> Basic derivatives like options have a long-established tax treatment. As new financial products emerged, some were subjected to unique tax regimes while others were taxed by analogy to the well-established “precedents.” The result is a patchwork of rules that imposes significant planning and compliance costs. While some of these rules have been quite effective in constraining tax planning, others have done little to impede it. Overall, this patchwork is anything but consistent. Adjusting, reforming, or even repealing one or a few of these rules will do little to diminish the overall inconsistency.

The problem is more fundamental than it may first appear. As long as the tax system continues to rely on cubbyholes, consistency is impossible. This is because basic instruments such as a coupon bond, a share of common stock, and a put and call options on that stock are inextricably linked—a relationship established by the so-called put-call parity theorem.<sup>14</sup> A share of stock and the two options may be used to produce an economic return equivalent to the interest on a bond. A share of stock and a put are equivalent to a bond and a call. Many other combinations may be constructed. As long as debt, stock and options continue to be taxed inconsistently, the fundamental economic equivalence established by the put-call parity theorem will assure that similar cash flows with the same risk profile will continue to receive dissimilar tax treatment—the hallmark of an inconsistent regime.

The third and final benchmark for taxing derivatives is *balance*, which is achieved if gains and losses from derivatives are treated alike (taxed at the same time and at the same rate). If this criterion is met, the government loses no revenue due to tax planning involving derivatives even if their tax treatment is neither symmetrical nor consistent. The intuition is that when a taxpayer enters into a “pure” derivative (that is, a derivative that involves a risky bet that has neither a time value element nor a return to labor), he cannot know whether he will win or lose the bet. If he wins, he would prefer a lower tax rate and a deferral of gains. If he loses, however, he would prefer a higher tax rate (making a loss deduction more valuable because it offsets highly-taxed income) and an acceleration of losses. If this taxpayer has to choose the form of derivative bet *before* knowing whether he will win it or lose it, this basic market uncertainty provides a powerful constraint on tax planning in a balanced system.

Only a fundamental reform will move the U.S. tax system to a balanced regime. The realization requirement that is deeply embedded in this system gives taxpayers a timing option—a choice of triggering tax consequences *after* they have learned whether a transaction produced a gain or a loss. Capital loss limitations, the progressive rate structure, and the nonrefundability of losses produce unequal tax rates on gains and losses (with gains taxed at a higher rate). As long as these

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<sup>13</sup> See Edward D. Kleinbard, *Equity Derivative Products: Financial Innovation’s Newest Challenge to the Tax System*, 69 Tex. L. Rev. 1319, 1320 (1991).

<sup>14</sup> See Alvin C. Warren, Jr., *Financial Contract Innovation and Income Tax Policy*, 107 Harv. L. Rev. 460, 465-70 (1993).

features remain in place, no incremental revisions will produce balance in the taxation of derivatives.<sup>15</sup>

### 3. Thinking About Fundamental Reforms

Academics, lawyers and policymakers have devoted considerable effort to devising and evaluating possible ways of reforming the taxation of capital income. One way of generalizing potential alternatives to the realization-based system currently prevalent in the United States is to divide all approaches into three categories: anticipatory taxation, retroactive taxation, and accrual taxation, which is also frequently referred to as a mark-to-market regime.<sup>16</sup> Most of the specific regimes in each category need not be limited to the taxation of derivatives. The broader the scope of the reform proposal, however, the more objections it would need to overcome. This section describes the three categories and outlines several alternative tax regimes belonging to each one.

**A. Anticipatory taxation.** Anticipatory taxation gives rise to income and deductions based on one's anticipation of a return from an investment or a financial bet. In this type of system, tax liability arises before a contingency underlying a financial instrument is resolved and before any payments under this instrument are made or even fixed. This approach could be used to reach only the time value return (if any) embedded in a derivative or a risky return as well. The ultimate goal is to eliminate or reduce the benefit of deferring income that is available in a realization-based regime. Because in the U.S. time value returns are taxed at a higher rate than returns to risk, another benefit of the anticipatory approach may be eliminating an incentive to convert high-taxed ordinary income into low-taxed capital gains.

Interest imputation regimes for prepaid derivatives are examples of anticipatory taxation of the time value of money. In the United States, this approach is actually used for taxation of contingent debt—a financial instrument combining an ordinary bond with a derivative such as an equity call option.<sup>17</sup> A similar methodology has been proposed for prepaid forwards as well as long-dated and deep-in-the-money options.<sup>18</sup> More generally, it can be considered for all derivatives that provide for upfront payments. The intuition behind this approach is that a party making a payment at the inception of the contract expects to receive at least an interest-like return on its investment, so the pricing of the instrument must reflect this expectation. If so, the tax system should do so as well, and it should do so regardless of the actual cash flows (or absence of any cash flows) during the term of the derivative.

Interest imputation regimes may employ a variety of rates for imputation purposes. One alternative would be to impute income at a rate determined by the government from time to time (such as the so-called Applicable Federal Rate in the United States). This rate would be the same

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<sup>15</sup> For a fuller discussion of symmetry, consistency, and balance, see David M. Schizer, *Balance in the Taxation of Derivative Securities: An Agenda for Reform*, 104 Colum. L. Rev. 1888, 1893-1901 (2004).

<sup>16</sup> Other categorizations are possible. See, e.g., Warren, *supra* note 14, at 474-75.

<sup>17</sup> See Treas. Reg. Sec. 1.1275-4.

<sup>18</sup> See *NYSBA Suggests Changes to Timing and Character Rules for Prepaid Forwards and Options*, 2001 Tax Notes Today 64-23. Legislation using a similar approach has been proposed in 2008. See Yoram Keinan & Ray Beeman, *The Tax Treatment of Exchange-Traded Notes: Here We Go Again*, 2008 Tax Notes Today 88-32 (describing recent proposed legislation aimed at establishing an interest imputation regime for certain prepaid derivatives).

for all taxpayers and all financial instruments entered into during the same relevant period (a day, a month, etc.). Alternatively, this rate may be floating rather than fixed, varying for each outstanding prepaid derivative each time the government-announced rate changes. Another option would be to use a rate that is specific to each taxpayer. This is the approach chosen in the U.S. contingent debt regulations that require imputation at the so-called comparable yield—a rate that the issuer of a contingent bond would pay on a debt instrument that is similar to that contingent bond but does not have a derivative attached to it.

An anticipatory approach for risky (rather than time value) returns would require taxpayers to determine the expected value of the contingency (perhaps disaggregating a complex financial instrument to produce several instruments each with a single contingency) and to include in income the difference between this expected value and the derivative's cost on a yield-to-maturity basis.<sup>19</sup> If the actual gain or loss turns out to be different from the expected one, that difference would be taken into account when the contingency is resolved.<sup>20</sup>

The weaknesses of all anticipatory approaches are not hard to see. Imputing time value returns raises questions about the appropriate rate of imputation. Imputing contingent returns is based on uncertain expectations about possible resolutions of future contingencies. Both types of imputations give rise to phantom income that is currently taxed yet may never be received.<sup>21</sup>

**B. Retroactive taxation.** Retroactive taxation avoids both weaknesses of anticipatory taxation (with the exception of one regime discussed at the end of this section). The returns are taxed retroactively—at the end of the transaction when gain or loss is known with certainty and when the payment is received by a taxpayer who ended up winning the financial bet.<sup>22</sup> The main feature of retroactive taxation regimes is to spread this gain (or loss) backward and allocate it over the term of the derivative. Once this allocation is accomplished, gain deemed realized in earlier years

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<sup>19</sup> See Reed Shuldiner, *A General Approach to the Taxation of Financial Instruments*, 71 Tex. L. Rev. 243 (1992).

<sup>20</sup> For example, “*I* pays *J* \$100 today; in exchange, *J* promises to pay *I* either \$166 or \$100 in three years depending on the toss of a coin at that time. The expected value of the contract in year 3 is \$133, because there is a 50% probability of receiving \$100 and a 50% probability of receiving \$166. [ $0.5 \times \$100 + 0.5 \times 166 = 133$ ] That expected value implies an expected gain of \$33 and a yield-to-maturity of 10%, because  $\$100 \times (1.1)^3 = \$133$ , so the taxable income would be allocated \$10 to year 1, \$11 to year 2, and \$12 to year 3 ... *I* would include, and *J* would deduct, those amounts each year. *I*'s basis would then be \$133, and gain or loss on the coin toss would be taken into account in year 3.” Warren, *supra* note 14, at 479, based on Shuldiner, *supra*, note 19.

<sup>21</sup> Most imputation proposals (and the actual contingent debt regime in the U.S.) provide for adjustments when the contingency is resolved and it becomes certain that taxpayers were required to include excessive amounts in income in earlier years. Such delayed reconciliations are small consolation for overpaying taxes in earlier years, unless the government compensates taxpayers for such overpayments with interest.

<sup>22</sup> Unlike a cash settlement, a physical settlement of derivatives does not lead to receipt of a cash payment by the winning counterparty. Yet liquidity concerns do not loom large in this case either because that counterparty (i) had enough cash to purchase the underlying asset (unless the contract was prepaid, in which case the party had the requisite amount of cash at the contract's inception) and (ii) acquired an asset that could be sold (in whole or in part) or monetized in other ways (for example, by being used as a collateral for a loan).



gives rise to tax liability that accrues interest over the derivative's term.<sup>23</sup> As a result of this retroactive allocation combined with interest accrual, a benefit of deferring the gain until maturity is reduced.

Proposals differ on how to spread the gain over the term of the instrument, and even how to calculate the gain in the first place. An early retroactive taxation proposal aimed at recreating the actual pattern of accrual of the realized gain.<sup>24</sup> One approach adopted in the Internal Revenue Code presumes that the realized gain accrued at a constant rate over the term of the derivative.<sup>25</sup> A simpler solution adopted in a different part of the Code is a ratable allocation achieved by dividing the realized gain by the number of days a financial interest was held by a given taxpayer and attributing the resulting daily gains to taxable years that include each given day.<sup>26</sup> The first of these allocation approaches requires annual valuation of positions. The other two introduce obvious deviations from actual changes in value, producing unintended winners and losers.<sup>27</sup>

Furthermore, all of these solutions expose the government to the credit risk of taxpayers entering into derivative contracts. Because derivatives are zero-sum bets, one side's win is always equal to the other side's loss. In a retroactive tax regime, the losing side would rest assured that it eventually would collect overpaid taxes from the government, with interest. The government, however, cannot be similarly certain that the winning side will actually be able to pay a very large tax, which may be much larger than the tax resulting from the same gain in a realization-based system. The reason for this difference is that in a retroactive regime the payment would include not just the tax on gain, but also interest on earlier deemed tax underpayments. That interest, that could accrue over many years for a long-term derivative, may equal or exceed the tax liability itself, producing a very large total tax obligation.

Another retroactive taxation approach determines tax liability on the basis of presumed, rather than actual, gain.<sup>28</sup> As with other retroactive proposals, the tax would be imposed when the derivative is settled, and the amount realized would be equal to the payment actually made. The gain would be calculated, as in a realization-based system, by subtracting cost (or basis) from the amount realized. However, that cost would be an imaginary number determined by discounting

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<sup>23</sup> If the derivative ends up producing a deductible loss, then (at least in balanced proposals) this loss is similarly allocated to prior years, giving rise to deductions and interest payable to the taxpayer for the overpayment of tax on account of not taking these deductions in earlier years.

<sup>24</sup> See William Vickrey, *Averaging of Income for Income Tax Purposes*, 47 J. Pol. Econ. 379, 382-96 (1939).

<sup>25</sup> See section 1260.

<sup>26</sup> See section 1291 describing taxation of the so-called passive foreign investment companies.

<sup>27</sup> For instance, a taxpayer whose position in a ten year forward appreciated substantially in the first year and then remained unchanged would be better off under either the second or the third regime than under a mark-to-market system that would tax the large gain in the first year of the contract. A taxpayer whose position in a ten year forward did not change in value for nine years and appreciated a lot in the last year would be worse off under either retroactive regime than he would be under a mark-to-market system.

<sup>28</sup> See Alan J. Auerbach, *Retrospective Capital Gains Taxation*, 81 Am. Econ. Rev. 167 (1991); Alan J. Auerbach & David F. Bradford, *Generalized Cash-Flow Taxation*, 88 J. Pub. Econ. 957 (2004). As the titles of these papers suggest, this approach is not limited to derivatives.

the actual amount realized at the risk-free rate over the term of the derivative.<sup>29</sup> The beauty of this approach is that *from an ex ante perspective* it is equivalent to an accrual-based (or mark-to-market) tax regime. Yet this retroactive method avoids valuation and liquidity problems associated with mark-to-market taxation, does not give taxpayers an opportunity to defer gains and accelerate losses, and does not lock taxpayers into their investments. From an *ex post* perspective, however, the results under this method are very different from an accrual-based tax as this retroactive regime clearly ignores actual gains and losses. Moreover, the *ex ante* equivalence obtains only if investors make optimal portfolio choices—an assumption of questionable validity in real world.

**C. Mark-to-market taxation.** In a mark-to-market system, all gains and losses would be taxed as if each position is terminated (or sold) at the end of each taxable year and re-entered (re-acquired) at the beginning of the next year. Thus, this system would base tax liability on annual fluctuations in value, whether or not any given asset is sold or retained by a taxpayer.<sup>30</sup> Losses from derivatives would be deductible only against gains from derivatives. Excess losses would be either immediately refundable or available to reduce gains from derivatives in other tax years—either in the future or with a limited carryback. Importantly, the rate applying to gains and losses would be flat and, ideally, equal to the top marginal rate, individual or corporate, as appropriate.<sup>31</sup> Derivatives used as business hedges would be excluded from mark-to-market rules. Instead, hedges would be integrated with the positions being hedged and the resulting aggregate positions would be subject to a mark-to-market regime if the combined position includes a derivative.

The main objections to mark-to-market taxation are valuation and liquidity concerns. The former highlights informational demands of obtaining valuations of all derivatives as well as administration and enforcement concerns with verifying these valuations. The latter reflects unease with forcing taxpayers to pay tax on “paper gains” before they receive any cash related to these gains.

**D. Why Single Out Derivatives?** In addition to objections unique to each fundamental reform proposal, any such proposal limited to financial instruments encounters arguments about its scope. Why single out derivatives? Without providing an exhaustive answer to this question, the following observations suggest a partial response.

Any reform introducing a special regime for derivatives raises a line drawing problem. If derivatives are taxed differently from everything else, taxpayers must know how to distinguish a

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<sup>29</sup> For example, “[c]onsider an asset that is sold for \$100 when the riskless rate of return is 10% and the tax rate is 30%. If the asset had been held for one year, the tax would be \$2.70, which is 30% of an amount of gain determined by subtracting from the amount realized (\$100) a hypothetical cost (\$91) based on the assumption of a 10% return ( $\$91 = \$100/1.1$ ). If the asset had been held for two years, the tax would be 30% of  $\$100 - [\$100/(1.1)^2]$ , or \$5.21.” Warren, *supra* note 14, at 481.

<sup>30</sup> For discussions of a mark-to-market regime, see Daniel Halperin, *Saving the Income Tax: An Agenda for Research*, 77 Tax Notes 967 (1997); David J. Shakow, *Taxing Without Realization: A Proposal for Accrual Taxation*, 134 U. Pa. L. Rev. 1111 (1986); David A. Weisbach, *A Partial Mark-to-Market Tax System*, 53 Tax L. Rev. 95 (1999); Warren, *supra* note 14, at 474.

<sup>31</sup> A more precise approach would set the rate at the top individual or corporate rate applying to any given taxpayer in any particular tax year. In other words, the taxpayer’s rate determined without regard to gains and losses from derivatives would automatically apply to these gains and losses.

derivative from a non-derivative. In my view, a broad definition of a derivative is appropriate, although one's conclusion about the optimal breadth may be affected by one's choice of the new treatment for derivatives. In any case, if all derivatives are treated the same, it will be much easier (and cheaper) to draw and maintain just one line—between derivatives and non-derivatives—than it is to continually delineate forwards from swaps from options from futures from prepaid derivatives and so on, as the existing U.S. tax rules attempt to do.<sup>32</sup> That is, while a line drawing exercise will still be needed, the number of lines will be dramatically reduced.

It may also turn out that the new regime will result in a less favorable tax treatment of derivatives compared to that of “plain vanilla” investments such as stocks, bonds, and real estate. This, one might argue, will be both unfair and inefficient. The criticism is not particularly convincing. “Equal treatment” is certainly not the hallmark of the U.S. tax system today (the same is probably true of most others). In the U.S., for example, growth stocks are treated more favorably than dividend-paying stocks. Bonds (especially discount bonds) have a particularly disadvantageous tax treatment (accrual of income before its receipt) while real estate and municipal bonds are especially tax-favored. Some derivatives are currently taxed less heavily than other economically similar financial instruments. Rather than adding to the number of tax-favorable and unfavorable regimes, a reform following any of the approaches laid out above will *reduce* this number by taxing all derivatives the same.

The choice between an anticipatory approach, a retroactive approach, and a mark-to-market approach is not an obvious one. If one thinks, for example, that derivative counterparties are sophisticated individuals well described by a rational investor model who make optimal portfolio decisions and are influenced only by expected returns, retroactive taxation based on presumed returns has a strong appeal. If, on the other hand, one worries about *ex post* outcomes and believes that market values may be determined for most derivatives rather easily, mark-to-market is an attractive solution.

Reasonable minds certainly can differ about the merits and limitations of the various fundamental reforms. But it is hard to ignore the fact that all these reforms have serious limitations and require bold legislative action. While assuring symmetry, consistency, or balance by overhauling the entire tax system for derivatives is appealing, incremental reform may be the only—or the only realistic—policy option at any given moment. How should policymakers evaluate whether a particular derivative merits their action and, if so, what form this action should take?

#### **4. Evaluating Limited Reforms**

When a novel financial instrument creates a tax planning possibility, policymakers should consider taking action. Three inquiries should be of great importance, while two other factors should be given much less weight.

First, and most importantly, policymakers needs to ascertain the magnitude and nature of the potential problem. What is the tax effect of a new derivative instrument? Is it deferral of income, conversion of high-taxed returns into low-taxed ones, or both? Do non-tax constraints (such as market frictions or securities, bank regulatory and other laws) limit the number of taxpayers who can take advantage of this tax planning? Overall, how much revenue is at stake?

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<sup>32</sup> This list does not mention the need to delineate various *transactions* involving derivatives, such as straddles, constructive sales, constructive ownership, several integration regimes and the like.

Second, in evaluating legislative proposals, policymakers should ensure that new legislation is effective in constraining future tax planning—in other words, it is difficult to game.<sup>33</sup> Otherwise, taxpayers will expend even more resources in order to reduce their tax bills, yet little new revenue will be raised. Of course, opponents of any given reform will argue that it will be easy to avoid. These arguments should be put to a serious test. Policymakers should require opponents to demonstrate with some specificity how this easy avoidance will take place. If they do, policymakers will have an opportunity to remedy the weaknesses of the proposal. If the weaknesses are incurable, the proposal should be abandoned.

Third, policymakers should consider the administrative and compliance costs of any proposed legislation. These are real social losses, even when they are incurred by private parties and are “invisible” in government budgets. Of course, most new rules will produce *some* increase in administrative and compliance costs. The question is how substantial it is compared to the expected revenue raised by the proposed legislation.<sup>34</sup> The key factors affecting these costs are the complexity of legislation, the number and financial sophistication of taxpayers affected by it, and the existence of relevant information in the marketplace.

In sum, in evaluating new legislation, legislators should focus on the magnitude of the problem, the resistance of the proposed rule to future gaming, as well as the administrative and compliance costs imposed by it. Two other commonly raised considerations, discussed next, are less important.

Adding further complexity to the tax law is hardly desirable. Yet, charges that proposed legislation would add to the tax law’s inconsistencies should be taken with a grain of salt. Tax rules for derivatives are already extremely complex, at least in the United States. Adding yet another regime not entirely consistent with the existing patchwork of rules may not make much of a difference. For the same reason, just about any legislative proposal is likely to be consistent with some of the current tax provisions, or at least some of their features. In short, although overall consistency is a worthy goal, adding some further inconsistency will not necessarily do a lot of additional harm. Whatever harm may result should be balanced against allowing a significant amount of capital income to escape the tax base.

In addition, and perhaps counterintuitively, policymakers should eschew reasoning by analogy. This mode of analysis is appropriate for courts interpreting legislation and judicial precedents, but not for a legislature when it enacts new rules. Whether a novel derivative is more “like” debt, equity, or some other existing instrument or investment (such as a commodities or securities index) does not tell us a lot about the derivative’s tax reduction potential or a legislative proposal’s capacity to constrain it.<sup>35</sup>

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<sup>33</sup> Effective legislation in this case is also more likely to be efficient, that is, to minimize total social costs per dollar of revenue. See David A. Weisbach, *Ten Truths About Tax Shelters*, 55 *Tax L. Rev.* 215, 231-39 (2002).

<sup>34</sup> For the formal analysis of this insight, see Joel Slemrod & Shlomo Yitzhaki, *The Costs of Taxation and the Marginal Efficiency Cost of Funds*, 43 *IMF Staff Papers* 172 (1996).

<sup>35</sup> *Unhelpful* reasoning by analogy in deciding whether tax planning using a given derivative should be stopped should not be confused with *helpful* arguments that a proposed solution is unlikely to work because if it is enacted, taxpayers will find close tax-favored substitutes (analogies) to the strategy foreclosed by the

For example, inquiries into whether short sales and equity forwards entered into by taxpayers holding appreciated equity positions were really more “like” selling these position or retaining them produced little useful information in evaluating the merits of the constructive sale rules enacted in the U.S. in 1997. The same is true of the debates about whether entering into hedge fund derivatives was really “like” becoming an owner of the underlying hedge fund or not, debates that took place when the constructive ownership regime was under consideration in 1999. These inquiries did little to ascertain the magnitude of the respective problems. And they failed to predict that one of these regimes would prove to be substantially more effective than the other. The difference, it turned out, has nothing to do with what ownership “truly” means, but is due to the fact that financial intermediaries could hedge derivatives that avoid the constructive sale regime much more easily than they could hedge derivatives that would escape the reach of the constructive ownership rules.<sup>36</sup>

In sum, if a fundamental reform of derivatives taxation is unlikely, legislators should not let the perfect be the enemy of the good. When a new derivative creates a potential for a large amount of capital income to disappear from the tax base, or when only a partial reform is politically acceptable, policymakers should respond by enacting legislation that is effective (difficult to game) and does not impose high administrative and compliance costs, while paying less attention to arguments about consistency and analogies based on the “true nature” of any given instrument.

That said, only a more sweeping reform holds a promise of resolving the perplexing questions raised by any piecemeal taxation of financial instruments. As importantly, a fundamental reform—and not incremental measures—is likely to raise substantial revenue much needed for urgent fiscal repairs around the world.

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new legislation. The latter argument is really about effectiveness of the proposal (its resistance to gaming), an important factor discussed above.

<sup>36</sup> For a detailed explanation, see Schizer, *supra* note 10.