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Executives and Hedging: The Fragile Legal Foundation of Incentive Compatibility

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EXECUTIVES AND HEDGING: THE FRAGILE LEGAL FOUNDATION OF INCENTIVE COMPATIBILITY

David M. Schizer*

Options are granted to executives to inspire better performance by tying pay to the employer's stock price. Yet this incentive rationale no longer holds if executives can use the derivatives market to simulate a sale of their options, a practice known as hedging. This Article evaluates the effectiveness of existing legal constraints on hedging by executives, including limits derived from contract, securities and tax law. Although investment bankers have been searching for ways around these constraints, the bottom line is that, at least for now, executives are unable to hedge option grants: While contractual limits are rare, the securities law blocks the most straightforward options hedges by the most senior executives and the tax law blocks the rest (including "basket" hedges by the most senior executives and all hedges by less senior ones). In contrast, executives are relatively free to hedge stock. Whereas this distinction between stock and options can be justified, these legal constraints should be reformed because the relevant tax rules were not meant to pursue corporate governance goals. As a result, tax constraints on options hedging are unstable, as well as over- and under-inclusive. They should be replaced with more effective contractual and securities law hedging limits.

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INTRODUCTION

In the capital markets, the 1990s were the decade of executive stock options and derivatives. Enormous option grants have raised executive pay to staggering new heights, while intensifying its sensitivity to firm stock prices.¹ Growth of the derivatives market has been comparably dramatic.² Simply put, derivatives are financial bets, which might be about interest rates, a stock price, or some other financial fact.³ Some derivatives, such as options, have been used for years. Indeed, executive stock options are derivatives. In contrast, "equity swaps" are relatively new.⁴

1. See, e.g., John Helyar & Joann S. Lublin, *Corporate Coffers Gush With Currency of an Opulent Age*, *Wall St. J.*, Aug. 10, 1998, at B1 (calling stock options "the ultimate '90s status symbol" and noting that "the U.S. Treasury might consider a new motto for the old-fashioned money it mints: In Options We Trust"). In 1998, the five best-compensated CEOs split \$1.2 billion. See Jennifer Reingold & Ronald Grover, *Executive Pay: Special Report*, *Bus. Wk.*, Apr. 19, 1999, at 72, 73; see also *id.* at 74 (noting that "[l]ong-term compensation—mostly from exercised options—made up 80% of the average CEO's pay package, up from 72% in 1997"). The trend also extends to executives below the CEO rank. See Tom Leander, *Raking in the Cash*, *Global Fin.*, Aug. 1998, at 16, 16 (noting 83.91% increase in compensation of 76 surveyed CFOs from 1996 to 1997, with the increase largely attributable to options).

2. See, e.g., Kevin M. Keyes, *Federal Taxation of Financial Instruments and Transactions v* (1997) ("The recent growth in the number and variety of financial products and transactions has been astonishing."); Robert M. McLaughlin, *Over-the-Counter Derivative Products: A Guide to Business and Legal Risk Management and Documentation* xvii (1999) (noting that *CFO* magazine described 1994 as the "Year of Derivatives").

3. See Global Derivatives Study Group, *Group of Thirty, Derivatives: Practices and Principles* 28 (1993) [hereinafter *G-30 Study*] ("In the most general terms, a derivatives transaction is a bilateral contract or payments exchange agreement whose value derives, as its name implies, from the value of an underlying asset or underlying reference rate or index.").

4. See Keyes, *supra* note 2, at 14-3 (swaps "have, to put it simply, revolutionized the financial markets"); Richard L. Reinhold, *Tax Issues in Equity Swap Transactions*, 57 *Tax Notes* 1185, 1186 (1992). A swap is a two-party contract that binds each party to make periodic payments based on an objective financial indicator, such as an interest rate or stock price. For a description, see *G-30 Study*, *supra* note 3, at 31.

Along with new products have come new derivatives dealers,⁵ making it much easier to find a counterparty.⁶

Legal scholars and economists have begun to realize that, in combination, these two trends raise a serious corporate governance concern.⁷ Options are supposed to inspire better performance by tying pay to the stock price, thereby aligning the incentives of managers and shareholders. This condition, known as "incentive compatibility," no longer holds if the executive sells the option. Therefore, firms ban sales by contract.

5. See Paula Froelich, OTC Equity Derivatives Are Popular With Investors, Profitable for Brokers, *Wall St. J.*, July 26, 1999, at B8H ("There is one hot product area that seems to be thriving regardless of the market's fate: over-the-counter equity derivatives."); Stephen Labaton & Timothy L. O'Brien, Financiers Plan to Put Controls on Derivatives, *N.Y. Times*, Jan. 7, 1999, at C1 (noting that \$37 trillion worth of privately traded derivatives contracts were outstanding in January 1999, compared to only \$865 billion in 1987).

6. Because a derivative is a "bilateral" contract (i.e., between two parties), it is impossible to engage in a derivatives transaction alone. Another party (the so-called "counterparty") is needed. The usual counterparty is a derivatives dealer.

7. See Frank H. Easterbrook, *Derivative Securities and Corporate Governance*, in 2 *Alternative Forms of Organization*, 100-01 (June 3, 1999) (cautioning that managers could use derivatives to "liberate their compensation from the firm's performance," so that "both financial and governance devices can be defeated by this maneuver") (unpublished manuscript, on file with the *Columbia Law Review*); see also Eli Ofek & David Yermack, *Taking Stock: Does Equity-Based Compensation Increase Managers' Ownership?* N.Y.U. Working Paper 10 (November 1997) (noting that estimates of selling by executives "are likely to be under-inclusive . . . [because] [i]n recent years derivative securities dealers have developed many ways for managers to realize value from their equity holdings without having to 'sell' their shares in a legal sense") (posted July 28, 1997) <<http://www.ssrn.com>> (manuscript on file with the *Columbia Law Review*); Rick Antle & Abbie Smith, *An Empirical Investigation of the Relative Performance Evaluation of Corporate Executives*, 24 *J. Acct. Res.* 1, 6 n.15 (1986) (cautioning that conventional economic analysis of optimal incentive contracts is potentially flawed because the models do not account for "the effects of an executive's ability to hedge the risk of ownership of shares in his firm of employment"); Steven A. Bank, *Devaluing Reform: The Derivatives Market and Executive Compensation*, 7 *DePaul Bus. L.J.* 301, 303 (1995) ("The real problem with the trend toward stock-based compensation and the assumption that it will properly reward and motivate executives lies in the rapid development of new financial products in the booming derivatives market."); Robert Dean Ellis, *Equity Derivatives, Executive Compensation, and Agency Costs*, 35 *Hous. L. Rev.* 399, 402-03 (1998) (warning that executives can "defease" incentive compensation with derivatives); Paul Bolster et al., *Executive Equity Swaps and Corporate Insider Holdings*, *Fin. Mgmt.*, Summer 1996, at 14, 17-21 (1996) (describing insider's use of equity swap to hedge Autotote stock); *Share Options*, *Economist*, Aug. 7, 1999, at 18 (describing derivatives as a route to "escap[ing] restrictions on exercising or selling their share options"); J. Carr Bettis et al., *Insider Trading in Derivative Securities: An Empirical Examination of the Use of Zero-Cost Collars and Equity Swaps by Corporate Insiders*, *Arizona State University Working Paper* 1-5 (May 30, 1999) (testing frequency of stock hedging by insiders and discussing its corporate governance implications) (posted June 23, 1999) <<http://www.ssrn.com>> (manuscript on file with the *Columbia Law Review*); cf. Chip Heath et al., *Psychological Factors and Stock Option Exercise*, 114 *Q.J. Econ.* 601, 604 n.4 (assuming that executives can hedge compensatory options by shorting stock). But cf. Easterbrook, *supra*, at 99 (noting that the derivatives market can have favorable corporate governance implications as well, such as allowing market pricing of governance terms to work more efficiently).

Once a specified "vesting" period has elapsed, firms allow executives to exercise the option and sell the stock. By this time, though, new unvested grants are supposed to preserve the desired incentive.⁸ Yet, what if an executive could use the derivatives market to simulate a sale of her options (including unvested ones)—a practice this Article calls "hedging"⁹—without violating her contract? The incentive justification for option grants would no longer hold. Nor could the market (or academic commentators) ascertain an executive's true level of ownership if she did not disclose the hedge. In addition, debates about refining incentives would become less compelling.¹⁰

To assess the urgency of these concerns,¹¹ this Article evaluates the effectiveness of existing legal constraints on hedging by executives, in-

8. New unvested options could also *increase* an executive's exposure, instead of merely preserving it. However, executives can avoid an increase by exercising vested options and selling the stock received. See Ofek & Yermack, *supra* note 7. Although Professors Ofek and Yermack describe such behavior as "hedging," see *id.*, this Article refers to such behavior as "exercise." As used here, "hedging" refers instead to a separate derivatives transaction whose return cancels out the return from option holdings. For example, an executive would sell to a derivatives dealer an option like the one received as salary. She would keep the sales proceeds. Thereafter, any pre-tax gain (or loss) on the hedge would offset any pre-tax loss (or gain) on the salary option. See *infra* Part I.B (explaining how options hedging would work, if not for legal constraints).

9. The term "hedging" is commonly used to describe such transactions. See, e.g., Mark A. Zurack et al., *Goldman Sachs Equity Derivatives Research: Investment Considerations for Employee Stock Options 2* (June 30, 1998) (unpublished manuscript, on file with the *Columbia Law Review*) (discussing "practical considerations in hedging ESOs [executive stock options] with non-employee options"). However, Professors Ofek and Yermack use the term slightly differently, see *supra* note 8, as does Treas. Reg. § 1.1221-2 (providing tax character rules for hedging of inventory and indebtedness).

10. For example, many have advocated "indexed" options, in which executives are rewarded for outperforming competitors or the market as a whole, rather than for absolute increases in stock price. See, e.g., Robert Gibbons & Kevin J. Murphy, *Relative Performance Evaluation for Chief Executive Officers*, 43 *Indus. & Lab. Rel. Rev.* 30-S, 35-S (1990) (compensation contracts should filter out industry and market risk); Bengt Holmström, *Moral Hazard and Observability*, 10 *Bell J. Econ.* 74, 82-83 (1979) (same); Geoffrey S. Rehnert, Note, *The Executive Compensation Contract: Creating Incentive to Reduce Agency Costs*, 37 *Stan. L. Rev.* 1147, 1148 (1985) (advocating indexed options in which exercise price varies based on value of an index). However, an option's structure would not matter if executives could neutralize the option with derivatives.

11. This Article focuses on the corporate governance concerns presented by such hedging, as opposed to tax policy concerns. An example of the latter is that hedging allows taxpayers to simulate a sale without triggering a taxable realization. Measured against the Haig-Simons definition of income, this result is not appropriate—but, of course, neither is the tax law's focus on risk as opposed to changes in economic value. See, e.g., Daniel Shaviro, *Risk-Based Rules and the Taxation of Capital Income*, 50 *Tax L. Rev.* 643, 645 (1995) ("In a pure economic accrual income tax, the element of risk or uncertainty underlying a taxpayer's gain or loss would matter only insofar as it affected fair market value."); see also William A. Klein & Joseph Bankman, *Federal Income Taxation* 76 (11th ed. 1997) (noting that income definition of R.M. Haig and Henry Simons, which has become the "rallying call of tax theorists and reformers," defines income as sum of consumption and change in market value of taxpayer's property). On the other hand, if we do not adopt a mark-to-market system (e.g., for reasons of administrability), we need a

cluding limits derived from contract, securities, and tax law. Although investment bankers have been searching for ways around these constraints, the bottom line is that, at least for now, executives are unable to hedge option grants. While contractual limits are rare,¹² the securities law blocks some types of options hedging (i.e., the most straightforward options hedges by the most senior executives)¹³ and the tax law blocks the rest (including "basket" hedges¹⁴ by the most senior executives and all hedges by less senior ones).¹⁵ In contrast, executives are relatively free to hedge stock,¹⁶ as opposed to options. Yet although this practice also raises corporate governance concerns, these concerns usually are less severe because executive stock ownership does not breed unambiguously good incentives. For this reason, and also for ease of exposition, this Article will focus on options hedging, and will refer to stock hedging primarily as a basis for comparison (e.g., to show that a particular legal constraint on options hedging does not apply to stock hedging).

Whereas options and stock hedging should be governed via contracts between executives and firms, within parameters set by the securities law,

line between taxable sale and nontaxable retention of assets. For discussion of this line-drawing exercise, see David A. Weisbach, *Line Drawing, Doctrine, and Efficiency in the Tax Law*, 84 Cornell L. Rev. 1627, 1633-37 (1999). These issues are beyond this Article's scope.

12. Contracts seldom prohibit hedging but often prevent executives from pledging options, a constraint that can raise the transaction costs of options hedging. See *infra* Part I.B & III.A.

13. Section 16 of the Securities Exchange Act of 1934 (codified as 15 U.S.C. § 78p(a) (1994)) requires so-called "insiders" (i.e., 10% owners, directors, and officers) to disclose certain hedges and, in some cases, makes hedging illegal. Yet less senior executives, who still may have sizeable option grants, are not affected by these constraints, and even insiders may be able to sidestep them with subtler "basket" hedging strategies. See *infra* Parts I.B and III.

14. In a basket hedge, the derivative is based—not on the employer's stock price per se—but on a group of stocks whose value is supposed to track the employer's stock price. See *infra* Part I.B.

15. Options hedging could trigger a sizeable tax even when the executive has no pretax profit, because deductions for hedging losses are of limited value, if available at all. Specifically, deductions for hedging losses may be deferred indefinitely for two reasons. First, hedging losses usually are capital, and thus cannot offset ordinary income from the option; second, the hedge and option would be a "straddle" under section 1092, and straddle losses are potentially subject to deferral. See I.R.C. § 1092. Unless otherwise noted, all references in this Article are to the current I.R.C.

Even when available, the deduction is insufficiently generous: An extra dollar of hedging loss reduces tax by less than an extra dollar of hedging gains increases it. The gain generates 39.6 cents in tax (since this capital gain is *short-term* under the straddle rules), whereas the loss reduces tax by only 20 cents (since it typically reduces *long-term* capital gains). See *infra* Part V.

16. An exception is stock that is granted as salary, which sometimes triggers tax constraints similar to those on options hedging. See Part V.F.2. For a case study of stock hedging, see Bolster et al., *supra* note 7, at 20 (describing Autotote swap). Indeed, the Bettis et al. study, *supra* note 7, focused on stock hedges. See Letter from Michael Lemmon, Assistant Professor, Arizona State University, to Author (noting that hedges identified in study are of stock, rather than options) (on file with the *Columbia Law Review*).

the current rules depart measurably from this ideal. Indeed, existing contractual and securities law constraints have significant gaps. In filling these gaps for options hedging, the U.S. tax law performs a corporate governance function not recognized in the academic literature.¹⁷ Nor did Congress intend to use the tax law in this way, as the relevant rules were not meant to address agency costs and managerial incentives.

Although a plausible substitute for better contractual and securities law constraints, at least for now, the tax barrier is potentially unstable and both over- and under-inclusive. It could unravel due to relatively minor changes in the tax law that seem unrelated to corporate governance. Indeed, legislation proposed by the Clinton administration in February 2000, in connection with the 2001 budget, could inadvertently weaken the tax barrier significantly, although the prospects for passing this legislation in an election year are slim.¹⁸ In its current form, the tax barrier

17. This Article offers a counterexample to the conventional wisdom that the U.S. tax law impedes corporate governance, or at least pursues governance objectives ineffectively. For instance, the double tax on corporate profits is said to insulate executives from capital market discipline by favoring reinvestment of earnings. See Jennifer Arlen & Deborah M. Weiss, *A Political Theory of Corporate Taxation*, 105 *Yale L.J.* 325, 327 (1995); James R. Repetti, *The Misuse of Tax Incentives to Align Management-Shareholder Interests*, 19 *Cardozo L. Rev.* 697 (1997). Also, the deductibility of interest is said to discourage corporate innovation. See Michael S. Knoll, *Taxing Prometheus: How the Corporate Interest Deduction Discourages Innovation and Risk-Taking*, 38 *Vill. L. Rev.* 1461, 1496 (1993). Scholars have criticized tax penalties for greenmail and golden parachutes, as well as tax preferences for certain forms of compensation. See Maya Alexandri, *Why Deduction Caps Fail to Solve the "Problem" of CEO Pay*, *Tax Notes*, November 30, 1998, at 1128 (arguing that, although the market for executive compensation is failing, section 162(m) is a flawed solution); Eric A. Lustig, *The Emerging Role of the Federal Tax Law In Regulating Hostile Corporate Takeover Defenses: The New Section 5881 Excise Tax On Greenmail*, 40 *U. Fla. L. Rev.* 789, 828 (1988) (concluding that "the use of this tax to discourage greenmail is not justified from a tax policy perspective"); Susan J. Stabile, *Is There A Role For Tax Law In Policing Executive Compensation?*, 72 *St. John's L. Rev.* 81, 98 (1998) ("Compensation is a matter for the market and private parties and not one requiring government involvement."); Edward A. Zelinsky, *Greenmail, Golden Parachutes and the Internal Revenue Code: A Tax Policy Critique of Sections 280G, 4999 and 5881*, 35 *Vill. L. Rev.* 131, 132 (1990) ("As a matter of tax policy, the Code provisions pertaining to greenmail and golden parachutes . . . are not defensible additions to the tax law."); Kurt Hartmann, *Comment, The Market for Corporate Confusion: Federal Attempts to Regulate the Market for Corporate Control Through the Federal Tax Code*, 6 *DePaul Bus. L.J.* 159, 178-87 (1993) (criticizing use of federal tax system to regulate market for takeovers).

18. This legislation, a proposed change in the straddle rules, is discussed *infra* note 160. It would inadvertently eliminate mismatches in character between option gains and hedging losses, while preserving (and perhaps intensifying) mismatches in timing. Specifically, the proposal would require certain hedging losses to be added to the basis of the hedged asset, instead of simply deferring deduction of these losses (as under current law). As a result, options hedging losses that otherwise would be capital might have the effect of ordinary losses. By adding these losses to the option's basis, executives could reduce their ordinary income from the option, thereby avoiding a character mismatch. Timing mismatches would remain, though, because some of the hedging losses would be allocated to options that were not being hedged. Because it is unclear whether this

punishes options hedging strategies that shareholders might favor,¹⁹ along with those they would not. It also applies only to U.S. taxpayers. Although option grants have been used mostly by U.S. firms (i.e., for executives who are subject to U.S. tax), foreign firms are beginning to use options.²⁰ Export of this U.S. compensation practice is inappropriate unless foreign executives are constrained from hedging, a function the U.S. tax law usually will not serve.

Accordingly, this Article makes two recommendations. First, every firm should address hedging by contract: In general, most forms of options hedging should be prohibited, while stock hedging and options hedging with a broad-based basket hedge should be permitted if disclosed. Second, the U.S. securities law restrictions and disclosure requirements for hedging should be clarified and expanded, and analogous regimes should be adopted in other jurisdictions.

Part I describes stock options and the mechanics of hedging. Part II considers corporate governance concerns raised by options hedging, contrasts the less severe concerns raised by stock hedging, and explains the appeal of these practices to executives. Part III describes existing contractual and securities law constraints on hedging. Parts IV and V show the way U.S. tax law fills gaps in these constraints. Specifically, Part IV describes the way the U.S. tax law discourages (but does not prevent) executives from exercising options. Part V shows the tax law's punitive treatment of options hedging (which currently does prevent the practice), and then describes the more favorable tax treatment of stock hedging. Part VI considers advantages and disadvantages of relying on the tax law for these functions. Part VII offers recommendations. The conclusion considers implications for the literature on stock options, derivatives, comparative corporate governance, and the role of tax law in corporate governance.

legislative proposal will be enacted, and if so in what form, this Article discusses current law, except where otherwise indicated. Yet this proposal reinforces the point that the tax barrier is potentially unstable.

19. Basket hedges that screen out risk of broad market movements, while leaving the executive with firm-specific risk, may be favored by shareholders. See *infra* Part II.A.1. Executives would in effect synthesize the "indexed" options discussed in *supra* note 10.

20. See, e.g., Curtis J. Milhaupt, *The Market for Innovation in the United States and Japan: Venture Capital and the Comparative Corporate Governance Debate*, 91 Nw. U. L. Rev. 865, 890 (1997) (noting that in Japan, legal prohibitions on options were recently lifted, and firms are beginning to offer options); Leslie Chang, *Chinese Firms Find Incentive to Use Stock-Compensation Plans*, Wall St. J., Nov. 1, 1999, at A42 (Chinese firms are beginning to offer option grants); Julia Flynn, *Performance-Based Pay Spreads Across Europe*, Wall St. J., Nov. 17, 1999, at B9D (reporting that Towers Perinn's survey of 460 firms in 13 companies shows that U.S.-style pay-for-performance is becoming increasingly common in Europe); David Cay Johnston, *American-Style Pay Moves Abroad*, N.Y. Times, Sept. 3, 1998, at C1 (noting globalization of options as compensation); Kevin J. Murphy, *Executive Compensation 8-9* (April 1998) (noting that in recent years "interest in stock options is exploding . . . in the Pacific Rim and in Europe and Latin America") (posted May 19, 1999) <<http://www.ssrn.com>> (manuscript on file with the *Columbia Law Review*).

1. DESCRIPTION OF STOCK OPTIONS AND HEDGING

This Part describes executive stock options and how, if not for legal constraints, executives could hedge them with derivatives.

A. Executive Stock Options and the Traditional Exit Strategy: Exercising the Option and Selling the Stock

An executive stock option entitles the executive to buy some number of shares (a step known as “exercising the option”) from her employer at a specified price (the “exercise price”) on or before the “maturity” date.²¹ For example, this “call” option may permit the executive to buy 10,000 shares for \$10 at any time in the next ten years.

An option is a valuable right—indeed, it is valuable even if the stock price has not risen above the exercise price. The option allows the executive to *choose* to buy the stock at \$10 (e.g., if it is trading above \$10) but does not obligate her to do so (e.g., if it is trading below \$10). This choice has value in offering unlimited opportunity for gain (as the stock price rises above \$10) with limited risk of loss. If the stock price falls to zero, the executive loses only what she paid for the option (the so-called “premium”)—which, for the executive, is the cash salary she gave up to get it. In addition, an option is valuable in sparing the holder from committing capital, since the option costs less than the underlying stock. Given these two advantages, an option has value (known as “time value”) beyond its so-called “intrinsic value” (i.e., the amount the holder can earn by exercising it on a given day).²²

Since options appreciate with stock price, executives who hold them have an incentive to drive up the stock price. Instead of keeping an option indefinitely, executives eventually will want to spend their gains or, perhaps, to diversify by investing in something else. Recognizing this reality, firms allow executives to “cash out” by exercising the option (that is, tendering the exercise price in return for stock) and then selling the stock received. To preserve the executive’s incentive, firms take two steps. First, they prevent an executive from exercising the option until a specified “vesting” period has elapsed. For example, the vesting period might be four years, with one-quarter of the grant vesting each year. Second, firms can monitor the number of unexercised options and, if the number falls below a desired level, adjust subsequent pay accordingly

21. For a detailed description of these options, see, e.g., Arthur H. Kroll, *Compensating Executives: Drafting and Managing Tax-Advantaged Arrangements* 41–43 (1998) (describing typical option). Such options to buy are known as “call” options. In contrast, options to sell are called “put” options.

22. For a discussion of an option’s time value, see McLaughlin, *supra* note, 2 at 81 (“Although the mathematics of time value are extraordinarily complex, conceptually time value is simply the value that is attributable to *uncertainty* regarding the price of the underlying fidget over time prior to expiration. . . . [S]ome time prior to expiration the fidget prices *might rise* above the strike price.”); see also Robert W. Kolb, *Financial Derivatives* 91 (2d ed. 1996) (noting that options have value in excess of intrinsic value).

(e.g., by offering relatively less cash and more options and by lengthening the vesting period of new grants).

Exercise is a relatively easy exit strategy for firms to police. Since the firm is the counterparty on the option, executives cannot exercise it without the firm's consent.²³ The firm can keep an executive from selling the option by refusing to honor a successor's rights, thus scaring off potential buyers. Moreover, the economics of options inherently discourages exercise, since this step extinguishes an option's time value. Thus, before it matures, an option to pay \$10 for stock trading at \$50 is worth more than the \$40 the holder could get by exercising it and selling the stock. Finally, the tax law discourages exercise because this step triggers the employee's tax liability.

B. *Hedging as an Alternative Exit Strategy: Illustrative Examples*

If not for legal constraints discussed below, the derivatives market would offer executives a new exit strategy, hedging, that extends none of these advantages to the firm. The executive would enter into a formally separate transaction whose return would cancel out the return on the option. For example, she might sell an option with the same exercise price as the one received from her firm. Just like exercise, then, hedging offers cash proceeds and insulation from changes in the option's value.

However, the firm has less control over this exit strategy. Whereas exercise of an option is a transaction with the firm, hedging is a transaction with a third party—such as a derivatives dealer. Thus, the firm's consent is no longer inherently necessary. Nor will the firm know the executive is "exiting" in this way unless she discloses this information, but disclosure obligations are somewhat porous, under current law.²⁴ Although the firm ought to negotiate for contractual limits on hedging, such provisions are relatively uncommon.²⁵ Indeed, absent some other constraint, executives could hedge unvested options, even though they could not exercise them. Unlike exercise, hedging does not require the executive to forgo the option's time value. Just as selling the option would not extinguish its time value—since the new holder would have the benefit of this time value and thus would pay the seller for it—hedging can also preserve the time value, since it involves the sale of a comparable option. Finally, hedging allows an executive to defer the tax liability otherwise triggered by exercise of the option. In so doing, she also defers

23. Firms will not necessarily know that the executive has sold the stock, absent disclosure. Even so, the disclosure obligation for sales of stock is clear. In addition, firms should probably assume that executives are selling the stock received upon exercise. If the executive wishes to remain exposed to the stock, there are economic incentives to do it through the option (e.g., its time value). Furthermore, it is very common for executives to sell stock received upon exercise. See Heath et al., *supra* note 7, at 606 ("the great majority of option-holders immediately sell the stock acquired on exercise").

24. See *infra* Part III.B.1.

25. See *infra* Part III.A.

the firm's tax deduction, and thus unilaterally shifts a portion of her tax liability to the firm.²⁶

The mechanics of hedging can best be illustrated with examples. Before turning to them, two caveats are in order. First, although existing legal constraints deter options hedging in the United States, the following examples assume away these constraints. Second, whereas the hedged asset in these examples is an option, the mechanic for hedging stock is similar.

Assume that on January 1, 2000, an executive receives a ten-year option (the "Compensatory Option") to buy 10,000 shares of her employer's stock at its January 1, 2000, price of \$10. The option is worth \$30,000 when granted. This amount derives solely from the option's time value, since the stock price is not higher than the exercise price. By contract, the executive can never sell the Compensatory Option and cannot exercise it until it "vests" on January 1, 2003.

To hedge immediately, the executive would sell a comparable call option (the "Market Option") to a derivatives dealer (the "Dealer"). This strategy would yield an immediate cash payment of \$30,000, attributable to the Market Option's time value. As shown in Table 1, the pre-tax returns on the Market and Compensatory Options would always cancel out, netting to \$30,000 (e.g., whether the stock price fell to \$5 or rose to \$25).

TABLE 1: PRE-TAX RETURN FROM IMMEDIATE HEDGE

Maturity Stock Price	Return on Compensatory Option	Return on Market Option	Net Pre-Tax Return
5	0 ²⁷	30,000 ²⁸	30,000
25	150,000 ²⁹	(120,000) ³⁰	30,000

Alternatively, the executive could wait for the Compensatory Option to appreciate before hedging it. Assume that on January 1, 2001, a year after the Compensatory Option was granted, the stock price has soared from \$10 to \$100. The Compensatory Option is now worth at least \$900,000.

26. See *infra* Part IV.B. Yet options hedging triggers adverse tax consequences for the executive that outweigh this benefit. See *infra* Part V.

27. The return would be zero because the Compensatory Option's \$10 exercise price exceeds the \$5 market price, and so the option would expire worthless.

28. The return on the Market Option would be the \$30,000 proceeds from selling it. The executive would make no payments to the holder of the Market Option, since it would expire worthless.

29. Since the stock price has risen \$15 above the \$10 exercise price, the executive would earn \$15 per share, or \$150,000.

30. The executive would be forced to sell stock to the holder of the Market Option for \$10 per share (or \$100,000), even though it is worth \$25 per share (or \$250,000). She thus would lose \$150,000 upon exercise, which is offset by the \$30,000 proceeds from selling the Market Option. Her net loss would be \$120,000.

To lock in past gains without surrendering the right to future gains, the executive could buy the right to sell 10,000 shares for \$100 per share in two years. This "put option" would guarantee a \$900,000 spread on the Compensatory Option, even if the stock price fell.³¹ However, the put would not *obligate* her to sell at \$100 (e.g., if the stock price rises to \$200). This flexibility is expensive: The cost of the put (in this example, assume \$300,000) would reduce her guaranteed return (from \$900,000 to \$600,000).³²

To avoid this expense, the executive could pay for the put by giving her counterparty a call option, instead of cash. In a so-called "collar," she would buy a put (that would protect her past gains) and sell a call (that would transfer future gains to the counterparty).³³ For example, the put might let her sell the stock at \$100 and the call might let her counterparty buy the stock from her at \$120. As Table 2 shows, the collar would lock in a minimum gain of \$90 per share or \$900,000 (since the executive could always sell the stock for at least \$100). Likewise, the collar would limit the potential profit to \$110 per share (since the counterparty would buy the stock for \$120 per share if it were trading higher).³⁴

TABLE 2: PRE-TAX RETURN FROM POST-APPRECIATION HEDGE

Maturity Stock Price	Gain on Compensatory Option	Change From Initial Gain of \$900,000	Return on Hedge	Net Pre-Tax Return
40	300,000	(600,000)	600,000	900,000
200	1,900,000	1,000,000	(800,000)	1,100,000

In some cases the derivatives described above would trigger contractual bans, disclosure requirements, or other securities law constraints.³⁵ To avoid these constraints (but not the tax constraint), executives could use derivatives based not on the employer's stock, but on a group (or

31. If the stock is trading at \$40 on January 1, 2003, she could buy it for \$10 with her Compensatory Option and then sell it for \$100 with the put, thereby netting \$90 per share, or \$900,000.

32. Given its significant expense, this hedging strategy is not popular even when tax and other barriers are absent. Cf. Zurack et al., *supra* note 9, at 7 tbl.8 (noting that a "concern" about put-based hedging strategy is that "[u]p-front cost usually [is] higher than collar"). This cost can be reduced somewhat with a "put spread," which offers loss protection for losses only in a specified range (e.g., dollar-for-dollar reimbursement as the stock price falls from \$100 to \$70, and no payment for further declines).

33. This result can be attained through different types of derivatives, including swaps, contingent debt, and forward contracts. While the economic differences among these forms can be modest, tax consequences can prove very different. For a discussion of the tax treatment of these structures, see *infra* Part V.E.

34. Thus, if the stock price fell to \$40, she would buy stock for \$10 with her Compensatory Option and sell it for \$100 with her put, leaving her a \$90 per share profit (or \$900,000). If instead the stock were trading at \$200, she would buy it for \$10 and sell it for the \$120 she committed to accept on the short call. As a result, her profit would be \$110 per share (or \$1,100,000).

35. See *infra* Part III.

"basket") of stocks whose value tracks the employer's stock price. For example, an executive at an oil company ("OilCo") could use a collar on a basket of oil stocks, on the theory that oil stocks respond similarly to changed market conditions.³⁶ Yet, although it is a hedge against industry or market-wide declines, the basket would offer less protection from firm-specific risk (which might be of particular concern to the undiversified executive). For example, if OilCo caused an oil spill but the rest of the industry was prospering, the executive could lose money on both the OilCo option and the hedge.³⁷ To avoid this scenario, the executive could represent OilCo disproportionately in the basket, but then her argument for not disclosing the hedge would become considerably more aggressive.

To sum up, this Article considers four types of hedges, which are described in the following Table:

TABLE 3: FOUR TYPES OF HEDGES

Name	Description	Effect
Single-stock options hedge	Derivative based on employer's stock	Perfect tracking
Disproportionate basket hedge	Derivative based on basket of stocks, including employer's stock, which is disproportionately represented	Near perfect tracking
Broad-based basket hedge	Derivative based on basket of stocks, and employer's stock is not disproportionately represented	Does not eliminate firm-specific risk
Stock hedge	Hedged asset is stock, instead of option; while each of above variations is possible, a single-stock version of stock hedges is intended in this Article, absent an express statement to the contrary.	Any of the above three results, depending upon type of stock hedge

II. OPTIONS HEDGING AND THE AGENCY PROBLEM

Section A describes three corporate governance concerns raised by options hedging and explains why this exit strategy raises more serious concerns than two others: exercise of the option followed by sale of the stock, and stock hedging. Section B describes the appeal of hedging to executives.

36. For the returns to track, their values should move in the same direction (i.e., positive correlation) by approximately the same amount (i.e., comparable volatilities). The most commonly used standard, "tracking error," equals the square root of the sum of the variances minus twice the covariance. See Neil Chriss et al., *Correlation, Tracking and Risk, and Dynamic Asset Allocation*, Global Equity and Derivatives Markets (Morgan Stanley Dean Witter, New York, N.Y.), June 6, 1997, at 1, 4.

37. See Zurack et al., *supra* note 9, at 7 (expressing concern about "tracking" risk).

A. Corporate Governance Concerns About Options Hedging

1. *Incentive Effects.* — The usual justification for option grants in both academia and the markets is to align the incentives of management and shareholders.³⁸ Options also increase an executive's appetite for risk, an effect that diversified shareholders value because they are otherwise more risk-tolerant than undiversified managers.³⁹ Once sold or hedged, however, an option no longer motivates an executive because her personal wealth ceases to be tied to the stock price.

Whereas this concern applies to hedges that replicate sales, such as single-stock hedging and basket hedging where the employer's stock is disproportionately represented, it does not apply to broad-based basket hedges that screen out industry or market risk, but not firm-specific risk. The latter hedge is a bet that the employer will outperform the industry or market—a bet that *intensifies* an executive's motivation. The executive is, in effect, synthesizing an "indexed" option.⁴⁰

38. See, e.g., Richard A. DeFusco et al., *The Effect of Executive Stock Option Plans on Stockholders and Bondholders*, 45 J. Fin. 617, 617 (1990) ("Improved incentives are the reason most often cited by firms seeking shareholder approval for the adoption of stock option plans."); Michael C. Jensen & William H. Meckling, *The Theory of the Firm: Managerial Behavior, Agency Costs, and Ownership Structure*, 3 J. Fin. Econ. 305 (1976) (proposing equity compensation as substitute for shareholder monitoring); David Yermack, *Do Corporations Award CEO Stock Options Effectively?*, 39 J. Fin. Econ. 237, 242–47 (1995) (noting that options are supposed to reduce agency costs). An option's incentive effects are borne out by some, but not all, empirical literature. For example, firms that pay relatively more of the CEO's compensation in equity tend to have higher returns. See Robert Tempest Masson, *Executive Motivations, Earnings, and Consequent Equity Performance*, 79 Journal of Political Economy 1278 (1971) (higher share price); Hamid Mehran, *Executive Compensation Structure, Ownership, and Firm Performance*, 38 J. Fin. Econ. 163 (1995) (higher Tobin's q and higher return on assets); cf. John J. McConnell & Henri Servaes, *Additional Evidence on Equity Ownership and Corporate Value*, 27 J. Fin. Econ. 595, 603–09 (1990) (corporate performance improves as management's stock ownership rises from 0% to 40%, but declines beyond 40%). For a current survey of the literature, see Murphy, *supra* note 20, at 41–44 ("Overall, the evidence is consistent with the hypothesis that stock-based incentives are important drivers of managerial actions and corporate performance. There remains little direct evidence, however, on the returns a company can expect from introducing aggressive performance-based compensation plans. The evidence is, at best, suggestive . . ."). For studies that question the effectiveness of options, see Ellis, *supra* note 7, at 414 n.58, 415 n.59 (offering citations).

39. Option holders favor risk because their return is asymmetric: They share fully in gains but not in losses. See Ronald J. Gilson & Bernard S. Black, *The Law and Finance of Corporate Acquisitions* 249 (2d ed. 1995) (describing the asymmetric return of options and noting their utility as compensation for risk-averse managers). In contrast, an adverse incentive effect of options is that they discourage managers from paying dividends (assuming the option payoff is not adjusted for dividends). See Calvin H. Johnson, *Stock Compensation: The Most Expensive Way to Pay Future Cash*, 52 SMU L. Rev. 423, 442 (1999) ("Stock options . . . create truly bizarre incentives for management to squelch dividends . . ."). But see Murphy, *supra* note 20, at 17 (some options offer dividend adjustments).

40. With such a hedge, as with an "indexed option," the executive makes money even if her stock price declines—as long as it declines *less* than the industry or market as a

2. *Transparency and Transaction Costs.* — The case against hedging is strongest if options create useful incentives. Even if they do not, however, it is better for the firm not to give options in the first place than for executives to alter the bargain unilaterally.⁴¹ Hedging imposes significant transaction costs on the executive. Moreover, to the extent that hedging can be done secretly, as often is the case under current disclosure rules, boards and shareholders are less able to defend their interests. Only the executive knows her “true” pay. Without this information, it is harder for firms to craft optimal compensation contracts and for shareholders to evaluate the firm.

Even if options constitute inefficient compensation, hedging is the wrong solution. Instead, firms should substitute other types of pay.⁴² Nor must a firm give options—as opposed to other “performance-based” pay, such as bonuses based on earnings—in order to claim a tax deduction.⁴³ Admittedly, the favorable accounting treatment accorded options cannot be duplicated: Certain options never cause expense on a firm’s income statement.⁴⁴ To the extent that accounting rules induce overuse of options⁴⁵—including overuse of a particular type of option⁴⁶—hedg-

whole. Correspondingly, she does not make money when her stock price rises unless it rises *more* than the industry or market as a whole. Such a payment structure offers better incentives than conventional options. See *supra* note 10.

41. Cf. Melvin Aron Eisenberg, *The Structure of Corporation Law*, 89 Colum. L. Rev. 1461, 1474 (1989) (“[A]gents whose interests may materially diverge from the interests of their principals should not have the power to unilaterally determine or materially vary the rules that govern those divergences of interest.”).

42. See generally Kroll, *supra* note 21, at 40–49 (discussing various methods of compensation).

43. Under section 162(m), annual compensation above \$1 million generally is not deductible unless it is “performance-based,” a category that includes options but is not limited to them. See I.R.C. § 162(m). For a discussion, see *infra* Part IV.A.

44. As long as options have a fixed exercise price at least equal to the stock price on the grant date, they do not give rise to expense on the income statement when they are granted or exercised. All the company has to do (and this requirement has been imposed only recently) is list the option’s estimated value in a footnote. For a discussion of these rules, see Pat McConnell et al., *Employee Stock Option Expense Pro Forma Impact on EPS and Operating Margins 2–4* (Bear Stearns Equity Research, May 1, 1998). The inaccuracy of this accounting is easy to see. Even an out-of-the-money option has time value. While the firm does not have to spend cash to supply the option, it does forgo cash it could have earned by selling options in the capital markets.

45. The extent to which accounting rules influence managers’ behavior is a subject of debate. For a discussion, see, e.g., Claire A. Hill, *Why Financial Appearances Might Matter: An Explanation for “Dirty Pooling” and Some Other Types of Financial Cosmetics*, 22 Del. J. Corp. L. 141, 155–56, 190–91 (1997).

46. Favorable accounting treatment is not available to indexed options (i.e., which pay only executives who outperform the market or a peer group). See James J. Angel & Douglas M. McCabe, *Market-Adjusted Options for Executive Compensation* (Jan. 31, 1997) (arguing that indexed options are rare because they do not receive favorable accounting treatment) (posted Apr. 25, 1996) <<http://www.ssrn.com>> (manuscript on file with the *Columbia Law Review*). With a broad-based basket hedge, executives can transform a conventional option to an indexed option. A disadvantage of the tax barrier is that it blocks these pro-shareholder hedges along with the others.

ing might be justified as a "second-best" way to undo these distortions. Even so, it is better to fix the accounting rule. In understating compensation expense, the accounting rule already imposes information costs. Hedging is a poor way to "correct" these distortions because it creates additional information costs.

3. *Pareto Superior Compensation Contracts.* — In undermining the transparency of compensation contracts, hedging can adversely affect the executive, as well as the firm and shareholders. An executive usually wants a premium to accept options instead of cash, since options force her to defer consumption and bear risk.⁴⁷ Options make her less diversified, since her professional reputation is already tied to the firm's success.⁴⁸ In a well-functioning market, boards should not offer a premium if they expect executives to undo the desired incentive by hedging.⁴⁹ For the same reason, the market should discount the firm's stock. To head off these penalties, executives may wish to precommit not to hedge. Otherwise, a Pareto superior contract—a premium for the executive, the incentive effect for shareholders—would not be attained.

4. *Comparison with Exercise of Option and Sale of Stock.* — Just as hedging terminates the incentive provided by an option, so too does exercise of the option followed by sale of the stock received. Even so, hedging is potentially more detrimental in several ways. First, as long as vesting limits apply only to exercise, but not to hedging, hedging can eliminate *all* of an executive's exposure to the stock price in a way that exercise cannot.⁵⁰ Second, if hedging is not disclosed, it obstructs transparency in contracting in a way that exercise does not (i.e., because the firm, as counterparty, is always on notice of exercise). Third, hedging evades a financial penalty—loss of time value—that discourages exercise. Finally, if the tax consequences of hedging were not otherwise unappealing to an executive, hedging would enable her, unilaterally, to transfer a tax bene-

47. See Paul Milgrom & John Roberts, *Economics, Organization & Management* 187–88 (1992) (noting that risk averse managers demand reward for accepting incentive contracts). Of course, if the executive has inside information that the stock price will rise, she will accept options without a premium. See David Yermack, *Good Timing: CEO Stock Option Awards and Company News Announcements*, 52 J. Fin. 449, 462–66 (1997) (presenting evidence that executives increase levels of option compensation prior to favorable announcements).

48. See Milgrom & Roberts, *supra* note 47, at 430 (noting that manager's human capital is tied to firm performance).

49. Boards might favor options not for the incentive effect, but for their favorable accounting treatment. If so, boards might object less strenuously to hedging. Even so, this accounting arbitrage—granting options so they will be hedged—should not be encouraged, as it interferes with transparency.

50. Of course, her human capital remains at risk. In defense of hedging, some hedges eliminate only a portion, but not all, of an executive's exposure to the stock price. For instance, the collar described *supra* in Table 2 leaves the executive exposed to price movements between \$90 and \$110, while exercise of this option and sale of the stock eliminates this exposure. Nevertheless, continued exposure can be ensured through more transparent and effective means, such as longer vesting periods.

fit from the firm to herself. She would attain an outcome like exercise but her tax would be deferred⁵¹—and with it, the firm's deduction.⁵²

5. *Comparison with Stock Hedging.* — While the focus here has been on options hedging, governance concerns also arise when an executive hedges stock (e.g., acquired in a market purchase or through exercise of an option), but existing legal constraints are much less effective. This disparity can prove problematic because stock hedging, if not adequately disclosed, can keep shareholders from assessing the level of executive share ownership. Since the executive can still vote hedged shares, she might use the vote to entrench her position. To the extent that executive stock ownership reduces agency costs, hedging eliminates this benefit.

Yet stock hedging raises less severe governance concerns than options hedging. First, stock may inspire less favorable incentives for executives than options, and so hedging stock would, correspondingly, do less harm. Like an option, stock can make an executive less diversified, making her more risk averse and thus increasing the divide between managers and diversified (and risk-tolerant) shareholders. Unlike an option, though, stock does not contain a built-in antidote for this risk aversion.⁵³ Second, as long as options cannot be hedged, an executive's ability to hedge stock is less important: The options by themselves create an adequate incentive if sufficiently valuable. Finally, the above critique of hedging focuses not only on incentives, but also on transparency and Pareto-superiority in compensation contracts. The latter concerns weigh

51. Exercise triggers an executive's tax liability and the firm's deduction, see *infra* notes 105–106 and accompanying text, but hedging does not. See *infra* Part V.B.

52. Better contracts and disclosure would go a long way toward narrowing the normative gap between hedging and exercise. Some disparity could remain, though, because hedging is inherently harder to monitor. On the other hand, hedging could prove appealing to a firm in at least one circumstance: If the firm has a zero tax rate (e.g., because of net operating losses), it will not incur added tax in facilitating the executive's tax deferral and thus can negotiate to share in the tax savings through reductions in the executive's other compensation. Yet transparency concerns militate against such a compensation strategy. Moreover, from the perspective of society as a whole, as opposed to shareholders, such tax planning arguably is undesirable because it reduces tax revenue while creating transaction costs and distorting taxpayer behavior. However, the effect of hedging on our tax system's efficiency and equity is beyond the scope of this Article.

53. Options increase an executive's appetite for risk by capping risk of loss. Stock returns, in contrast, are not asymmetric in this way. The concern, supported by empirical evidence, is that executives who hold stock are more likely to diversify or hedge excessively at the firm level than executives who hold options. See, e.g., Peter Tufano, *Who Manages Risk? An Empirical Examination of Risk Management Practices in the Gold Mining Industry*, 51 J. Fin. 1097 (1996) (firms whose managers hold more stock are more likely to hedge gold price risk than firms whose managers hold more options); see also Brian J. Hall, *The Pay to Performance Incentives of Executive Stock Options* 11–29 (July 1998) (arguing that options create better incentives than stock) (posted Aug. 18, 1998) <<http://www.ssrn.com>> (manuscript on file with the *Columbia Law Review*). However, the dichotomy between stock and options should not be overstated. Once an option has appreciated (i.e., so that it is “deep-in-the-money”), declines in the stock price can cause loss on the option. An option with such symmetric returns can create similar risk and incentive effects as stock.

less heavily for stock hedging because, unlike an executive's options, her stock holdings are less likely to be governed by a contract with the firm.⁵⁴

In sum, the four types of hedges discussed in this Article have different effects and thus different implications for corporate governance:

TABLE 4: NORMATIVE ASSESSMENT OF FOUR TYPES OF HEDGING

Type	Effect	Reason
Single-stock options hedge	Usually undesirable	Undermines incentives and transparency
Disproportionate basket hedge	Usually undesirable	Same
Broad-based basket hedge	Possibly desirable	Should enhance incentives, but undermines transparency
Stock hedge	Less clear	Might enhance incentives (if stock ownership induces excessive managerial risk aversion), but undermines transparency

B. *Interest of Executives in Hedging*

While options hedging (and to a lesser extent stock hedging) raise governance concerns, the practice could prove tempting to executives. Stock hedging is fairly common.⁵⁵ Because executives frequently ask about the feasibility of options hedging, investment banks have invested considerable time and money in attempts (thus far unsuccessful) to develop a hedging strategy that does not trigger legal barriers described below.⁵⁶ At first blush, executives' interest in options hedging may be

54. In contrast, stock hedging does raise such concerns if the firm contractually requires executives to own a minimum amount of stock.

55. See Ruth Simon, *Hedging a Single Stock Has Ups, Downs*, Wall St. J., Feb. 2, 2000, at C1 ("It's impossible to precisely gauge the popularity of these hedges, but derivatives specialists suggest that hundreds, perhaps even a couple of thousand, are executed each year.").

56. See, e.g., Kroll, *supra* note 21, at 82-83 (noting that "[i]n recent years, investment banking firms have marketed [diversification strategies such as cashless collars] among executives" and deeming requests for assistance in diversifying "a common question that compensation professionals must address"); Shaifali Puri, *New Tools for the Options Crowd*, Fortune, Nov. 10, 1997, at 308 (describing "a growing number of banks' private banking units" marketing derivatives to help executives hedge); Randall Smith, *For Internet Glitterati, It's a Matter of Timing*, Wall St. J., June 28, 1999, at C1 (describing "cottage industry" emerging among Wall Street derivatives experts "to advise Silicon Valley executives whose wealth may be tied up in stock or options"); Renee Deger, *Locked In? Buy That New Mansion Now* (Sept. 23, 1999) (visited Jan. 20, 2000) <<http://www.callaw.com/opinions/stories/edt0923.htm>> (noting that "[c]lients hear about such [hedging] instruments periodically from investment bankers").

This lack of success is reported in a marketing pamphlet prepared by the equity derivatives group at Goldman Sachs. See Zurack et al., *supra* note 9, at 8:

[H]edging ESOs [employee stock options] with non-employee stock options is especially difficult for Insiders because of legal restrictions, but even non-Insiders must address the issues of the different tax treatment between ESOs (ordinary

surprising since hedging may induce reductions in future pay.⁵⁷ Nevertheless, the executive's true self interest lies in no one *knowing* (or *assuming*) that she is hedging. Hedging in secret, which is sometimes plausible under current law, should not trigger reductions in future pay, even if the board is sufficiently independent to punish the executive (which may not always be the case). Similarly, the market would not have evidence to justify discounting the firm's stock, even if such discounting would deter the executive (which, again, may not always be the case).⁵⁸

For the executive, then, options hedging offers the liquidity and diversification advantages of cash salary⁵⁹ along with a risk premium (assuming the board is unaware of the hedge). Once options have appreciated, hedging allows the executive to spend her gains.⁶⁰ The practice is also appealing if she believes the stock price has peaked,⁶¹ perhaps based

income) and "nonemployee" options (capital gains), and the inability of ESOs to serve as usable collateral to offset certain option positions.

Conversations with equity derivatives experts at several major investment banks confirm that no one has yet developed a hedge that avoids these barriers, and so options hedging is uncommon. These individuals did not want their names or institutions identified.

57. See *supra* Part II.A.3. A related concern is that the counterparty might offer a discounted "lemon" price on the hedge, since hedging by an executive could be a negative indication of the firm's projected value. However, an investment bank, the usual counterparty, would not demand this discount if (as is likely) it is hedging its own position by selling short in the public market. See Lewis R. Steinberg, *Using OTC Equity Derivatives for High-Net-Worth Individuals*, in *The Use of Derivatives in Tax Planning* 211, 242 n.110 (Frank J. Fabozzi ed., 1998) (derivatives dealers "will generally not enter into 'long' side of a hedging transaction" unless they can hedge by shorting the underlying equity). Nor would the investment bank worry about the price it gets on the short sales, because they can be completed before the executive discloses the hedge. See Securities Exchange Act of 1934, § 16(a), 15 U.S.C. § 78p(a) (1994) (allowing disclosure up to 10 days after end of month in which change in beneficial ownership occurred); see also 7 C.F.R. § 240.16a-3 (1999) (describing filing requirements for Form 4).

58. A hedged executive, after all, is protected from declines in the stock price (except from reputational effects), assuming she hedges before these declines are triggered.

59. Cf. Heath et al., *supra* note 7, at 603 (diversification and liquidity encourage executives to exercise).

60. This desire to hedge does not derive from risk aversion, but from the executive's preference for current rather than future consumption. Cf. Victor P. Goldberg, *Aversion to Risk Aversion in the New Institutional Economics*, 146 *J. Inst'l & Theoretical Econ.* 216, 216 (1990) (arguing that scholars should "invoke attitudes toward risk only as a last resort"). Note that executives cannot necessarily finance consumption with borrowing, because lenders will be unwilling to risk lending against the full value of an unhedged stock option.

61. Cf. Heath et al., *supra* note 7, at 623 (noting empirical evidence that executives exercise in order to lock in gains above a "reference point" based on previous year's maximum value). To an extent, the executive may expect the firm to "reprice" her options if the stock price declines. See Christopher Gay, *Hard To Lose*, *Wall St. J.*, Apr. 8, 1999, at R6 (when market dips, executives frequently seek to have exercise price on existing grants "repriced," i.e., reduced to current market levels). Recent accounting changes discourage such repricing, however. See Jennifer Reingold, *Slimmer Rewards for a Job Poorly Done*, *Bus. Wk.*, Feb. 15, 1999, at 38 (noting Financial Accounting Standards Board's proposal to force firms to list expense of repriced options on income statement). An executive who hedges, moreover, still benefits from the repricing, which offers her new opportunity for

on inside information or—more likely, if she is going to use the information to trade—on an insider's jaundiced assessment of publicly-available facts. Similarly, appreciation of the options increases the executive's wealth that is subject to firm-specific risk,⁶² thus increasing the executive's interest in diversifying.⁶³

III. EXISTING CONTRACTUAL AND SECURITIES LAW BARRIERS TO HEDGING

Part II of this Article showed that while hedging—particularly options hedging—can have adverse consequences for shareholders (and, indeed, for executives), the practice might nonetheless prove tempting to executives. Given these competing interests, a contractual resolution might be expected, perhaps with input from the securities laws. This Part describes existing contractual and federal securities law constraints on options hedging.⁶⁴ Although these constraints block some types of hedging, they contain significant gaps that are largely filled by the tax law. Contract and the securities laws also contain even fewer restrictions on stock hedging and these larger gaps generally are not filled by the tax law.

gain (i.e., the difference between the old and new exercise prices) that she has not sold through the hedge.

62. See Pallavi Gogoi, *False Impressions: More Companies Require Top Executives to Own Stock. The Result Isn't What Everybody Expected*, *Wall St. J.*, Apr. 8, 1999, at R3 ("A lot of executives, especially below the CEO level, are under pressure from their financial advisers to diversify and not keep all their assets in one company's stock." (quoting Paula Todd, head of executive-compensation research and development at Towers Perrin)); Ruth Simon, *Tax Strategies Aid Option Gains*, *Wall St. J.*, June 28, 1999, at C1 ("An average executive is going to have three-quarters of his wealth tied up in options Planning around those options is essential." (quoting Arthur H. Kroll, a New York executive compensation consultant)); Zurack et al., *supra* note 9, at 5 ("We have found . . . that even the most bullish executives are concerned about the lack of diversification in their personal portfolio because of its high concentration in ESOs [employee stock options]."); cf. Ofek & Yermack, *supra* note 7, at 11–25 (demonstrating that desire for diversification prompts executives to sell stock received from exercising options).

63. Especially for executives who have more wealth than they can consume, the dispositive factor may not be financial. For example, some people especially value what they earn through superior performance. See George Loewenstein & Samuel Issacharoff, *Source Dependence in the Valuation of Objects*, 7 *J. Behav. Decision Making* 157, 158 (1994) (noting studies showing that people prefer to bet on their own judgments rather than on chance devices with matched probabilities of winning). Such executives may not want to hedge because profit would not come from their own efforts. Yet others may view the decision to hedge itself as evidence of their good judgment.

64. State laws, such as New York's limits on short sales by certain corporate insiders, may also impede hedging. See NY Penal Law § 190.35 ("A person is guilty of misconduct by corporate official when . . . (2) Being a director or officer of a stock corporation . . . (b) He sells, or agrees to sell, or is directly or indirectly interested in the sale of any share of stock of such corporation, or in any agreement to sell the same, unless at the time of such sale or agreement he is an actual owner of such share"). These rules are beyond the scope of this Article.

A. Existing Contractual Constraints on Hedging

Just as firms constrain exercise via contract, so too should they constrain options hedging. Nevertheless, direct contractual limits on options hedging are relatively uncommon. Whereas the typical options plan bars transfer or assignment of the option, it does not bar hedging (i.e., a separate transaction in which a different option is sold).⁶⁵ Firms that constrain hedging usually do so in "trading policies." Because these are seldom disclosed to the public,⁶⁶ a detailed survey was not feasible. According to practitioners, many firms do not have trading policies, and among those that do, the policies typically cover only the most senior executives and rarely cover basket hedging.⁶⁷

Although contracts rarely ban options hedging directly, they commonly contain another constraint that raises the transaction costs of option hedging, but would not necessarily stop the practice: Option plans usually prevent executives from pledging their grants. This is significant because, in hedging, executives usually have to pledge something of value. The hedge requires the executive to trade future option gains for protection from option losses. Since future gains are potentially infinite—as the stock price can rise without limit—executives would have to secure this potentially unlimited obligation.⁶⁸ Yet the option is not usable collateral.⁶⁹ Unless the executive has stock to pledge, she must offer security, the value of which will not track her obligation (e.g., mutual fund investments purchased with hedging proceeds). As a result, the

65. See, e.g., Boeing Co., Proxy Statement Pursuant to Section 14(a) of the Securities Exchange Act of 1934, Apr. 27, 1998, app. A, at A-4 (options are "exercisable only by [the employee who received the grant], and shall not be assignable or transferable by such recipient").

66. For a rare exception, see Tetra Techs., Inc., Proxy Statement, May 17, 1999, at 13 ("The insider trading policy also prohibits directors, officers and employees of the Company from purchasing securities of the Company on margin or in short sales and from buying and selling puts, calls or options involving securities of the Company (other than employee stock options).").

67. See notes from interview with Barbara Nims, Davis Polk & Wardwell (Feb. 17, 1999) (on file with the *Columbia Law Review*) (among firms that have considered the issue, hedging restrictions are fairly common; yet many firms have not considered the issue); notes from interview with George Spera, Shearman & Sterling (Jan. 27, 1999) (on file with the *Columbia Law Review*) (many firms do not have trading policies that restrict hedging, and some that do govern only the most senior executives); cf. Zurack et al., *supra* note 9, at 7 tbl.8 (pamphlet issued by Goldman Sachs on hedging employee options does not mention contractual restrictions, presumably because they are not common). Conversations with investment bankers familiar with efforts to develop options hedging techniques confirm that contractual bans on options hedging are relatively uncommon (except in the financial industry, perhaps because of their greater sophistication about derivatives). These individuals declined to go on record.

68. Likewise, a pledge may be necessary if the executive wants to borrow against the option's value.

69. See Zurack et al., *supra* note 9, at 7 (noting that option "will not likely serve as usable collateral"). The contractual ban on pledging usually accompanies (or is subsumed in) the ban on assigning the option grant.

counterparty must monitor the relative value of the collateral and obligation, thereby adding to the hedge's cost, in some cases quite considerably.⁷⁰

Since executives usually are not barred from pledging stock purchased with their own funds, this constraint does not apply to stock hedging. Nor is it common for firms to impose direct contractual constraints on stock hedging. Some firms do require certain senior executives to own a minimum amount of firm stock, but the applicability of such constraints to hedging depends upon their precise wording. In any event, the press has reported that such ownership guidelines often are not enforced.⁷¹

B. Existing Securities Law Constraints on Hedging

1. *Disclosure Obligations.* — Given the potential for reputational sanctions, executives are less likely to hedge if they must disclose the transaction. However, disclosure obligations are somewhat porous under current law.⁷² Until the mid-1990s, many believed there were no disclosure obligations at all for derivatives transactions. Today, there still are no disclosure obligations, to the firm or the market, for executives below the rank of "insider"⁷³ under section 16 of the Securities Exchange Act of 1934. A 1996 SEC release clarified that insiders must disclose the most

70. As for other transaction costs, the investment bank's fee usually is not a barrier, except insofar as it prevents executives from paying in cash for loss protection (i.e., buying a put without selling a call). In addition, long-term options, necessary for hedges that last several years, have recently become available. See Anthony J. Cetta, SIA Disagrees with Coalition on Intermarket Coordination, *Tax Analysts, Tax Notes Today*, Dec. 11, 1998, available in LEXIS, Fedtax Library, TNT File, 98 TNT 238-20 (reprinting letter to IRS noting that the over-the-counter market offers hedges with terms of up to ten years). Finally, an executive may be concerned about losing unvested options upon leaving the firm. If options have appreciated since she hedged them, she will lose these appreciated options upon leaving the firm, but will still owe a corresponding payment to her hedging counterparty. Yet the executive can expect to land on her feet. If she leaves voluntarily, her new employer may "gross her up" for options left behind. Even if she leaves involuntarily, her severance package may protect her. See Murphy, *supra* note 20, at 16 (severance packages often include accelerated vesting provisions). In any event, executives are more likely to be fired when the firm is faring poorly, so that the options would not have appreciated and the profit, if any, would be in the hedge.

71. See Gogoi, *supra* note 62.

72. Obligations to disclose stock hedging are generally the same as those to disclose options hedging.

73. Section 16(a) defines "insiders" as ten percent owners, directors, and "officers" of the issuer. See Securities Exchange Act of 1934 § 16(a), 15 U.S.C. § 78p(a) (1994). Rule 16a-1(f) defines officers to include "an issuer's president, principal financial officer, principal accounting officer [or controller], any vice-president . . . in charge of a principal business unit, division or function . . . , any other officer who performs a policy-making function, or any other person who performs similar policy-making functions for the issuer." 17 C.F.R. § 240.16a-1(f) (1999).

straightforward hedges⁷⁴—single-stock hedges whose value is explicitly based on the employer's stock price.

Nevertheless, the press has reported a perception among derivatives dealers and their advisors that the disclosure obligations for derivatives are not always honored.⁷⁵ Surprisingly, even hedges that are disclosed may not come to the market's attention. According to Professors Bettis, Bizjak, and Lemmon, "[W]hen filed, [insider hedging] transactions appear only on Table II of Form 4 filed by insiders with the SEC. In general, the services that provide insider trading data to the financial markets (and others) do not make available the data needed to identify derivative instrument hedging transactions."⁷⁶

In this climate, aggressive insiders are unlikely to disclose if they can find a plausible legal theory for this position. Basket hedges can supply the desired argument. If the basket is broad-based, disclosure clearly is not required.⁷⁷ What if the basket disproportionately represents the employer? For example, assume that a Proctor & Gamble executive enters into a hedge based on a newly-created "consumer products industries of Cincinnati" index in which Proctor & Gamble represents 90% of the index's value. A careful lawyer would recommend disclosure because the hedge is economically close to a single-stock hedge—indeed, it insulates the executive from firm-specific risk—and because the language of the regulatory exemption, a "broad-based" index approved for trading, no longer clearly applies.⁷⁸ Yet what if the index were defined so the em-

74. See Ownership Reports and Trading by Officers, Directors and Principal Security Holders, Exchange Act Release Nos. 34-37260, 35-26524, reprinted in 61 Fed. Reg. 30,376, 30,387 (June 14, 1996) ("Section 16 consequences arise from an equity swap transaction where either party to the transaction is a Section 16 insider with respect to a security to which the swap agreement relates.").

75. See Ofeck & Yermack, *supra* note 7; see also Greg Ip, Collars Give Insiders Way to Cut Risk, *Wall St. J.*, Sept. 17, 1997, at C1 (indicating belief of official of a firm that monitors insider sales that "the level of insider disclosure of such derivative transactions is far below the actual level of insider activity").

76. Bettis et al., *supra* note 7, at 2; see also Simon, *supra* note 55, at C1 ("Although executives who are required to report 'insider' transactions . . . also must report these hedging transactions, the filings are often so complicated that it would be hard for an average investor to figure out what's going on. As a result, these deals draw less attention than an outright sale . . ."); Deger, *supra* note 56 ("[A]ny disclosure [of hedging with derivatives] is often done in an obscure or overlooked manner.").

77. See Ownership Reports and Trading by Officers, Directors and Principal Security Holders, Exchange Act Release Nos. 34-37260, 35-26524, reprinted in 61 Fed. Reg. 30,376, 30,387 n.141 (June 14, 1996) ("[N]o Section 16 consequences would flow from an equity swap to the extent that the equity swap relates solely to interests in securities comprising part of a broad-based, publicly traded market basket or index of stocks.").

78. See 17 C.F.R. § 240.16a-1(a)(5) ("The following interests are deemed not to confer beneficial ownership for purposes of section 16 of the Act: . . . (iii) Interests in securities comprising part of a broad-based, publicly traded market basket or index of stocks, approved for trading by the appropriate federal governmental authority."); 17 C.F.R. § 240.16a-1(c)(4) (excluding from definition of derivative securities "[i]nterests in broad-based index options, broad-based index futures, and broad-based publicly traded

ployer represented only 70%? At some point, aggressive insiders (and their aggressive counsel) will conclude that disclosure is not required, as long as the hedge has been properly tweaked.⁷⁹ In so concluding, they may take comfort in the reality, fortunate for them only, that the SEC and market are unlikely to learn of this transaction and thus will have no opportunity to challenge it.

2. *Speculation and Short Positions: Section 16(c).* — The most effective securities law constraint on options hedging is section 16(c),⁸⁰ but it, too, is incomplete. Designed to prevent insider trading and to keep managers from trying to depress their employer's stock price,⁸¹ this rule makes it illegal for insiders to sell their employer's stock "short."⁸² However, the statute disallows only short sales, without addressing derivatives that offer comparable economic returns. Hedging with these derivatives is in fact permitted by Rule 16c-4.⁸³

Even so, Rule 16c-4 does not necessarily bless options hedging (although it clearly authorizes stock hedging). The SEC staff interprets the rule to permit hedging only if the executive owns *the stock itself*, but not derivatives such as options. For example, an insider can buy a put on 100 shares if she owns 100 shares, but not if she owns only *an option to buy*

market baskets of stocks approved for trading by the appropriate federal governmental authority").

79. For instance, in seeking to have this index approved for trading, the investment bank counterparty on the hedge might offer regulators the seemingly innocuous (but true) claim that Cincinnati-based investors are likely to be interested in the index.

80. See Securities Exchange Act of 1934, § 16(c), 15 U.S.C. § 78p(c) (1994) ("It shall be unlawful for any [insider] . . . directly or indirectly, to sell any equity security of such issuer . . . if the person selling the security or his principal . . . does not own the security sold . . ."). Unlike section 16(b), which allows plaintiffs to bring civil suits, section 16(c) outlaws the practice. See Steve Thel, *The Genius of Section 16: Regulating the Management of Publicly Held Companies*, 42 *Hastings L.J.* 391, 405 (1991) (contrasting approaches of sections 16(b) and 16(c)).

81. Congress added section 16(c) in response to a widely publicized 1934 short sale by Albert Wiggin, chairman of the board of Chase National Bank. According to Professor Thel, Congress was responding to three concerns: Wiggin's access to inside information; his ability to conceal his activities from the public; and his financial incentive to depress the stock price. See Thel, *supra* note 80, at 428–29.

82. A short sale is a bet that the stock price will decline, implemented by selling borrowed shares. The seller promises to return shares to the lender in the future, and hopes declines in the stock price will make these "replacement" shares cheaper. See David M. Schizer, *Hedging Under Section 1259*, 84 *Tax Notes* 345, 346 n.7 (1998).

83. See 17 C.F.R. § 240.16c-4. Specifically, the rule allows "put equivalent position[s]" (i.e., derivatives that appreciate as the stock price declines), but only "so long as the amount of securities underlying the put equivalent position does not exceed the amount of underlying securities otherwise owned." *Id.*

100 shares.⁸⁴ Nevertheless, aggressive insiders might be tempted to disregard this interpretation because the SEC has not applied it in all cases.⁸⁵

In any event, Rule 16c-4 does not expressly prevent insiders from using basket hedges. The rule turns on the same standard that governs disclosure,⁸⁶ and an executive's calculus will be similar: Whereas the favorable authority explicitly approves only broad-based baskets, aggressive insiders might well use baskets that disproportionately represent their employers, even if more conservative insiders would not do so. Executives below the rank of insider, moreover, are not subject to the rule. As a result, the rule, by itself, would fail to block many instances of options hedging.

3. *Section 16(b)*. — The "short swing profits" rule of section 16(b) proves not to be a serious constraint here. In general, it allows the firm to recover any profit the firm's insiders earn from buying and selling issuer stock within six months.⁸⁷ Whereas hedging with a derivative generally would be treated as a "matchable" sale, an insider could avoid this liability by not buying any stock⁸⁸ within six months of hedging.⁸⁹

84. This distinction, which transforms Rule 16c-4 into a barrier against options hedging, was not meant to safeguard the incentive effects of options. Instead, the SEC invoked congressional concerns about speculation:

The most abusive investment pools of the early 1930's (that involved short selling) involved short selling of the stock while holding options to protect against a price increase. In each pool mentioned in the legislative history, Congress was quite concerned that the pool insiders would not exercise the option but would instead repurchase the stock in the open market. This practice was viewed as unethical. Based on this Congressional concern, no relief is proposed for short selling against derivative securities.

Ownership Reports and Trading By Officers, Directors, and Principal Stockholders, Exchange Act Release Nos. 34-26333; 35-24768, 42 SEC Docket (CCH) 464, 486 (Dec. 2, 1988) (proposing and explaining Rule 16c-4) (internal footnote omitted).

85. For example, two recent SEC letters allow insiders to hedge even though they hold convertible preferred stock (i.e., a derivative) instead of the underlying common. The letters offer no reasoning to explain the departure from the SEC's usual view. See *Berkshire Hathaway Inc.*, SEC No-Action Letter, 1997 SEC No-Act. LEXIS 407 (March 12, 1997); *Time Warner*, SEC No-Action Letter, 1995 SEC No-Act. LEXIS 627 (Aug. 9, 1995).

86. Rule 16c-4 is triggered by a "put equivalent position," a phrase defined in the rules on reporting obligations. See 17 C.F.R. § 240.16a-1(h) ("The term 'put equivalent position' shall mean a derivative security position that increases in value as the value of the underlying equity decreases, including, but not limited to, a long put option and a short call option position."). To have a "put equivalent position," one must have a "derivative security position," see *id.*, and this phrase is defined to exclude "[i]nterests in broad-based index options, broad-based index futures, and broad-based publicly traded market baskets of stocks approved for trading by the appropriate federal governmental authority." See 17 C.F.R. § 240.16a-1(c)(4).

87. In both stock and options hedging, the question is the same: whether the hedge can be matched with another transaction to trigger liability.

88. An executive can hedge within six months of *receiving* an option from the firm, because the latter is not a matchable transaction if it satisfies certain criteria. See 17 C.F.R. § 240.16b-3(d).

89. Section 16(b) of the Securities Exchange Act of 1934 can be more daunting when the executive "cash settles" the hedge (e.g., to avoid securities law constraints on delivering

4. *Material Information and Rule 10b-5.* — All executives, including noninsiders, will want to avoid liability for trading based on inside information.⁹⁰ Although this goal may delay a hedging transaction (e.g., until after an earnings announcement), it will not necessarily stop it. An exception is when the hedge itself is material. Even so, very senior executives, whose hedging is most likely to be material, already are disclosing single-stock hedges.⁹¹ The materiality of a basket hedge could be debatable, on the theory that shareholders are not entitled to know the executive's private expectations about the market as a whole, as opposed to her expectations about the firm. While this argument has less force for disproportionate basket hedging, aggressive executives may consider it adequate, given the low probability of public scrutiny of the hedge.

C. *Summary of Existing Contractual and Securities Law Constraints*

Whereas existing contractual and securities law constraints are sufficient to block many instances of options hedging, they do not provide a complete barrier. Except in the uncommon instance when a broad contractual limit is in place, executives below the rank of insider are relatively unconstrained. They do not have to disclose their hedges and generally are free to engage even in single-stock option hedges, subject only to transaction costs (e.g., arising from contractual constraints on pledging).⁹² Insiders are relatively more constrained. They have to disclose single-stock option hedges and are likely barred from them altogether under the SEC's interpretation of Rule 16c-4. Nevertheless, insiders generally can avoid these constraints with a basket hedge, which is normatively unobjectionable if the basket is broad-based. Yet aggressive insiders might use a disproportionate "basket" that closely tracks their employers'

stock, such as the seller's obligation to deliver a prospectus or the buyer's required holding period for privately-placed shares). Because cash settlement of a "short" derivative could be viewed as a purchase, section 16(b) would be triggered if the executive sold stock within six months of cash-settling a hedge. She might want to sell in order to raise money for cash settlement. The executive might avoid liability by cash-settling with borrowed funds or delaying settlement until she retires and is no longer an insider.

90. Application of this constraint should be the same for stock and options hedging.

91. Section 16(a) does not require disclosure until after the hedge is complete. See *supra* note 57 (discussing requirements of section 16(a) and 17 C.F.R. § 240.16a-3). In some circumstances, Rule 10b-5 may force the executive to accelerate disclosure.

92. This relative freedom might be justified on the theory that noninsiders have less impact on the firm's performance. However, if the incentives of these executives truly are not important, they should not receive large option grants. In fact, noninsiders *are* receiving sizable grants. See, e.g., Helyar & Lublin, *supra* note 1, at B1 (noting that by 1997, 35% of 350 major companies had option programs for all or a majority of workers and that, for example, 1200 of General Electric Co.'s employees have stock options valued at more than \$1 million). While this phenomenon may evidence a pervasive flaw in compensation practices, it could also suggest that incentives remain important at lower levels. Either way, shareholders should object to hedging: Either the incentives of less senior executives matter, or these executives should no longer receive grants (and accompanying risk premiums).

stock price. Thus, contractual and securities law constraints on options hedging have potentially significant gaps. The gaps are even wider for stock hedging: the pledging constraint does not operate and Rule 16c-4 expressly authorizes stock hedging. These constraints are summarized in the following Table:

TABLE 5: CONTRACTUAL AND SECURITIES LAW CONSTRAINTS

Type	Normative Assessment	Effect of Barrier
Single-stock option hedge	Usually undesirable	Insiders blocked; noninsiders permitted, subject to transaction cost from ban on pledging ("pledging cost")
Disproportionate basket hedge	Usually undesirable	Arguably permitted for insiders and permitted for noninsiders, in each case subject to pledging cost
Broad-based basket hedge	Possibly desirable	Permitted, subject to pledging cost
Stock hedge	Less clear	Permitted, subject to disclosure obligation for insiders in some cases

IV. TAX DISINCENTIVES TO EXERCISE

This Part and Part V show the tax law's role in reinforcing contractual and securities law constraints on exercising and hedging. Although Congress sometimes deliberately uses the tax code to pursue corporate governance objectives, the tax constraints on exercising and hedging options do not fall in this category. Rather, the relevant tax rules were meant to pursue tax policy goals, such as making the tax system more administrable (e.g., by averting costly valuations) and defending the tax base (e.g., by blocking certain tax-reduction strategies). In combination, though, the rules generate a significant, if unintended, corporate governance effect. To develop this point, Section A begins with two measures—the incentive stock option rules and section 162(m)'s exception for performance-based pay—that arguably *were* intended to pursue corporate governance goals. By themselves, these "deliberate" measures have not been especially significant. Rather, as Section B shows, the most effective tax constraint on exercising options derives from tax rules for so-called nonqualified options, which were not fashioned with corporate governance in mind. Part V considers tax constraints on hedging, which are daunting if the hedged asset is an option but not if it is stock.

A. *Deliberate Tax Preferences for Options*

Although Congress has offered two tax rules to promote the incentive value of options, these deliberate efforts have had only limited significance. First, Congress crafted a special category of options, "incentive" stock options ("ISOs"), that offer the executive more favorable treatment

than generic "nonqualified" options ("NQOs").⁹³ Congress offered the holder both a timing and a rate benefit, in effect treating an ISO more like an investment than salary. An ISO is not taxed when exercised, as is an NQO, and the ordinary income rate is not applied. Instead, the ISO is taxed at lower capital gain rates,⁹⁴ and the tax is deferred until the executive sells the stock received upon exercise.⁹⁵ Apparently recognizing that an ISO could not induce better managerial performance unless the executive kept it, Congress created an incentive to do so: Favorable tax treatment is available only if the executive satisfies a holding period for both the option and the stock acquired through it.⁹⁶ Yet this inducement is less relevant, and less effective, than it might appear. Incentive stock options represent only a small percentage of the typical senior executive's compensation because the dollar value of annual ISO grants is strictly limited.⁹⁷ Nor is the tax burden on ISOs as low as it seems. The executive often owes alternative minimum tax ("AMT") upon exercising the option.⁹⁸ Even if the executive still reaps tax savings after paying the AMT, this savings can be more than offset by a high tax cost to the employer: The firm cannot deduct the cost of providing the ISO, as it can for an NQO. As a result, if the executive and firm are subject to approximately the same tax rate, the firm can offer the executive more value, on an after-tax basis, with NQOs than with ISOs.⁹⁹

93. See Michael W. Melton, *The Alchemy of Incentive Stock Options—Turning Employee Income Into Gold*, 68 *Cornell L. Rev.* 488, 500–01 (1983) (noting intended incentive effect of ISOs). The tax rules for ISOs are in section 422 et seq. and the rules for NQOs are in section 83. See I.R.C. §§ 422 et seq., 83. For a good summary, see Melton, *supra* at 498–500.

94. Gain from a capital asset is eligible for a favorable rate—20% for stock and ISOs—as long as the asset has been held for the requisite holding period (e.g., 1 year for common stock). See I.R.C. § 1222(3) (defining long-term capital gain as gain from asset held more than 1 year); I.R.C. § 1(h)(1)(C) (designating 20% as maximum rate for long-term capital gain on common stock). In contrast, 39.6% is the maximum rate on ordinary income of individuals. See I.R.C. § 1(a)–(d).

95. See I.R.C. § 421(a)(1); Melton, *supra* note 93, at 500.

96. See I.R.C. § 422(a)(1); Barbara J. Raasch & Judith L. Rowland, *Stock Option Planning*, 77 *Taxes*, 39, 41. It is also difficult to hedge ISOs. See *infra* Part V.E.

97. See I.R.C. § 422(d) (underlying stock cannot be worth more than \$100,000 for annual ISO grant).

98. See I.R.C. § 56(b)(3) (deeming ISO gains a preference subject to alternative minimum tax); Raasch & Rowland, *supra* note 96, at 41. The AMT is a supplemental tax that is supposed to ensure collection of a minimum amount of tax from all profitable taxpayers: The tax applies to those who make excessive use of so-called "tax preferences," such as favorable depreciation methods, tax-exempt interest on certain bonds, etc. See I.R.C. § 57. For a discussion, see generally Daniel Shavero, *Perception, Reality and Strategy: The New Alternative Minimum Tax*, 66 *Taxes* 91 (1988) (explaining the history and rationale behind AMTs). For discussion of a congressional proposal to repeal the AMT, see *infra* Part V.E.1.

99. See Myron S. Scholes & Mark A. Wolfson, *Taxes and Business Strategy: A Planning Approach* 187–90 (1992) (noting that NQOs can offer an executive the same after-tax payment as ISOs at lower cost to the firm, as long as the firm and the executive are subject to comparable tax rates).

In addition to ISOs, another (arguably) deliberate tax preference for option compensation lies in section 162(m). Although the rule generally prevents firms from deducting annual compensation of key employees above \$1 million,¹⁰⁰ an exception is offered for certain compensation "payable solely on account of the attainment of one or more performance goals."¹⁰¹ Since Congress explained the limit as a way to reduce executive compensation,¹⁰² the explosion of option grants is evidence that the measure backfired (or was never intended to work). A more charitable reading is that section 162(m) was *supposed* to promote options (as well as other "performance compensation," such as bonuses based on accounting earnings).¹⁰³ As a preference for options, however, section 162(m) has a notable gap: It contains no unequivocal ban on selling or hedging them.¹⁰⁴

B. *Tax Disincentive to Exercise NQOs*

Ironically, the tax law promotes the incentive value of options more effectively through rules forged with hardly a thought to this issue: the

100. See I.R.C. § 162(m)(1).

101. See I.R.C. § 162(m)(4)(C). The legislative history suggests that this performance-pay exception generally includes executive stock options. See H.R. Rep. No. 103-111, at 648 (1993), reprinted in 1993 U.S.C.C.A.N. 378, 879 ("Stock options or other stock appreciation rights generally are to be treated as meeting the exception for performance-based compensation, provided that the requirements for independent director and shareholder approval are met . . ."). The options also may not be in-the-money when granted. See *id.*

102. See *id.* at 877 ("Recently, the amount of compensation received by corporate executives has been the subject of scrutiny and criticism. The committee believes that excessive compensation will be reduced [by the \$1 million cap].").

103. Congressional hearings contained numerous endorsements of performance-based pay. See, e.g., Executive Compensation: Hearings on S. 1298, H.R. 4727, and H.R. 5260 Before the Subcomm. on Taxation of the Senate Comm. on Finance, 102d Cong. 5 (1992) ("Corporations need to inject performance, scrutiny, and disclosure into the executive compensation equation. And if they refuse, we have an obligation to ensure that tax policy or other public policy provides no comfort.") (Statement of Senator Baucus). Likewise, a former Treasury official, Catherine Creech, said at a meeting of the D.C. Bar that section 162(m) "was not intended to be a revenue-raising provision, but a behavior-shaping provision. The exception for performance-based compensation 'is not a loophole.'"). Meegan M. Reilly, Former Treasury Official Discusses Executive Compensation Cap, 62 Tax Notes 747, 747 (1994).

104. The legislative history almost stumbles into conditioning the firm's deduction on the absence of hedging by providing that "if an executive is otherwise protected from risk of loss (such as through automatic repricing), the compensation is not performance-based." See H.R. Rep. No. 103-111, *supra* note 101, at 649. Even assuming legislative history is authoritative, though, the taint seems to arise only if the firm, and not a third party, supplies this loss protection. Although the firm's role is not an explicit condition, it is implied by the automatic repricing example because only the firm can reprice its options. In addition, the general principle elucidated by this language is that "stock-based compensation"—a phrase that describes the arrangement with the firm, and not with third parties—must not be "dependent on factors other than corporate performance." *Id.* at 648

tax rules governing generic NQOs. Under these rules, the executive owes no tax upon receiving the option and, correspondingly, the firm cannot claim a deduction—even though a valuable right is being transferred.¹⁰⁵ Instead, tax consequences are deferred until the executive exercises the option. At that point, the executive has ordinary income, and the firm may take an ordinary deduction, based on the option's spread (i.e., the difference between the stock's fair market value and the exercise price).¹⁰⁶

This rule encourages the executive to keep the option instead of exercising it. By not exercising, the executive can defer the tax on her profit from the option, thereby reducing the tax's real impact.¹⁰⁷ This tax deferral serves corporate governance purposes quite elegantly.¹⁰⁸ The executive is induced to remain exposed to the stock price. In contrast, if the executive were taxed upon receiving the option, regardless of whether she exercised or sold it, she would have no tax incentive to keep the option.¹⁰⁹

Nor is it costly for the tax system to supply this corporate governance service. The reduced tax burden on the executive (from deferral of the tax) is matched by an increased tax burden on the firm (from deferral of the deduction). A special tax is thus imposed on the benefitting party. If the firm and the executive have roughly equal tax rates, the treasury comes out basically even.¹¹⁰

105. This is an exception to the general rule that receipt of property as compensation generally is taxable. See *United States v. Drescher*, 179 F.2d 863, 864 (2d Cir. 1950).

106. Specifically, under *Treas. Reg.* § 1.83-7(a), an NQO is not taxed when granted if it has no "readily ascertainable fair market value," for example, due to restrictions on transferability. See § 1.83-7(b)(1) (1978) (options have "readily ascertainable" fair market value within meaning of regulation if they are "actively traded on an established market"); § 1.83-7(b)(2) (specifying four conditions that give nontraded options readily ascertainable fair market value, including being transferable and immediately exercisable). Instead, the option's "spread" is taxed as ordinary income upon exercise. See § 1.83-7(a) ("If section 83(a) does not apply to the grant of such an option . . . , sections 83(a) and 83(b) shall apply at the time the option is exercised . . ."); *I.R.C.* § 83(a) (including in gross income "the excess of . . . the fair market value of such property . . . over . . . the amount (if any) paid for such property").

107. Like an interest-free loan from the government, deferral of a tax allows a taxpayer to continue to invest, and earn a return on, amounts that otherwise would fund the tax. For a discussion of the tax-reducing effects of deferral, see generally David M. Schizer, *Realization as Subsidy*, 73 *N.Y.U. L. Rev.* 1549, 1555–63 (1998).

108. I do not mean to suggest that the tax law is *uniquely* able to achieve this function. Contracts can do so as well, through slow vesting or awards that grow with the executive's holding period. For a discussion of the relative merits of a tax-based solution, see *infra* Part VI.

109. If immediate sales are barred by contract, the executive can become locked in once the option has appreciated (assuming the appreciation is taxed under the realization rule). See generally Schizer, *supra* note 107, at 1610–12 (describing lock-in under realization rule).

110. The revenue effects of delaying exercise depend on whether the stock price rises or falls after exercise, after which the issuer no longer can claim a deduction for appreciation. See *I.R.C.* § 1032 (corporations have no gain or loss from transactions in

Nevertheless, an executive's tax incentive to hold the option is not unequivocal. Balanced against the "lock-in" described above is a countervailing tax reason to exercise: The executive can reinvest in an asset that yields capital gain, taxed at a lower rate.¹¹¹ The option, in contrast, yields only ordinary income.¹¹² Of course, this switch is no blessing if the new investment generates less valuable capital losses.¹¹³ Yet if the option and the alternative are each expected to appreciate, the tax law creates competing incentives: Although exercising the option increases the executive's after-tax rate of return, it depletes her investment's size. As the following examples show, the tax incentive to keep the option is usually the stronger one. Moreover, the tax incentive is reinforced by a nontax advantage of keeping the option: the ability to earn a return on the exercise price before paying it. Ultimately, these incentives are not likely to prevent exercise in all cases, but to discourage it in marginal ones.¹¹⁴ In a sense, they reinforce existing contractual restrictions on exercise, but could not substitute for them.

1. *Illustrative Examples.* — Executives might exercise their options and sell the stock for at least three reasons: to diversify; to finance con-

their stock and options). But the holder of the stock (e.g., the executive or her transferee) would typically owe a 20% capital gains tax, leaving the government with 20% of the appreciation. In contrast, if the stock declines after the exercise, the issuer will not have taxable income and the holder will have a 20% capital loss.

111. Most passive investments, such as common stock, are capital assets. See I.R.C. § 1221 (defining capital asset).

112. See I.R.C. § 83(a) (providing for inclusion in gross income of person who performed services). Accordingly, this tax incentive to keep an NQO is weaker than the tax incentive, caused by the realization rule, to keep other appreciated assets. For a discussion of the latter type of "lock-in," see Schizer, *supra* note 107, at 1610–12.

113. A capital loss is less valuable because, in general, it can be used only to avoid (the lower) tax on capital gain, but not (the higher) tax on ordinary income. See I.R.C. § 1211 (capital loss may not be deducted from ordinary income, subject to a maximum \$3000 annual exception for individuals). In contrast, loss on the option is effectively ordinary loss—or, to be precise, a reduction in ordinary income that otherwise would accrue upon exercise. If option losses and gains are equally probable, there is no tax advantage to exercising the option. The prospect of favored capital gains is balanced against the prospect of disfavored capital losses. Cf. Joseph Bankman & Thomas Griffith, *Is the Debate Between an Income Tax and a Consumption Tax a Debate About Risk? Does It Matter?*, 47 *Tax L. Rev.* 377, 396–400 (1992) (under assumed conditions, the tax rate on risk does not matter); David F. Bradford, *Fixing Realization Accounting: Symmetry, Consistency and Correctness in the Taxation of Financial Instruments*, 50 *Tax L. Rev.* 731, 763 (1995) (same).

114. This prediction is consistent with empirical evidence. Professors Ofek and Yermack have noted that executives tend to exercise fewer options than they would if guided solely by a desire to diversify. Specifically, when they receive new grants (and thus new exposure to firm-specific risk), executives do not exercise as many vested options (and thus do not sell as many shares) as needed to cancel out this new exposure. See Ofek & Yermack, *supra* note 7, at 24–25. This reluctance may derive, in part, from the lock-in described above.

sumption; or to avoid expected losses.¹¹⁵ The tax disincentive is more formidable in the first two scenarios than in the third.

a. *Diversification.* — Assume the executive has an option to buy one share of EmployerCo stock at \$50 and the stock is now trading at \$150. If she exercises the option and sells the stock at a \$100 gain, she pays approximately \$40 of tax and has \$60 to reinvest in MutualFund. As Table 6 shows, this switch does not pay even if she expects a 14% return on MutualFund (taxable at the 20% capital gain rates) and only a 12% return on EmployerCo stock (taxable at the 40% ordinary income rate). Exercising the option reduces her investment in two ways: first, by the deferred tax; second, by the exercise price.¹¹⁶

TABLE 6: NQO LOCK-IN AND DIVERSIFICATION

Investment	Amount Invested	Pre-tax Return	Pre-tax Amount Earned	Tax Rate	Tax	After-tax Amount Earned
Mutual Fund	60	14%	8.40	20%	1.68	6.72
Option: Exercise Price Ignored ¹¹⁷	100	12%	12.00	40%	4.80	7.20
Option: Exercise Price Included ¹¹⁸	150	12%	18	40%	7.20	10.80

To generalize with variables, assume the stock is trading at S and the option's exercise price is E . The difference between these amounts, I , is the option's intrinsic value (i.e., the profit that would be earned by exercising the option). In other words, $I + E = S$. Assume that R and N are the (positive) rates of return expected on the option and MutualFund, respectively.

By exercising the option and selling the stock, the executive can extract the option's intrinsic value, I . After taxes, she can reinvest $.6I$ in MutualFund. Her after-tax return will be $.8N * .6I$ or $.48NI$. What if instead she keeps the option? This analysis first considers the effects of tax

115. Motivations to exercise the option will resemble motivations to hedge it. For discussions of the latter, see *supra* Part II.B.

116. The ability to "invest" the exercise price before parting with it gives the option "time value." See *supra* Part I.A; see also Heath et al., *supra* note 7, at 603 ("premature exercise sacrifices substantial value—on the order of 25 percent of the option's expected value"). An offsetting consideration is that exercise allows the executive to share in dividends, but dividend yields are at historic lows. See Ronald J. Gilson & Bernard S. Black, (Some of) the Essentials of Finance and Investment 238 (1993) (making the common assumption, in discussing option valuation, that the option holder receives all cash flows generated by underlying asset); Floyd Norris, Growing Number of Companies Choose Not to Offer Dividends, N.Y. Times, January 4, 2000, at A1 (describing "trend away from dividends").

117. This computation isolates the effect of the tax law by assuming, counterfactually, the executive is investing the \$40 of deferred tax, but not the exercise price.

118. This computation adds in the effect of investing the exercise price, a benefit that derives from the economics of options rather than the tax law.

deferral, while ignoring the ability to invest the exercise price. The executive can invest the full I and her after-tax return will be $.6 * R * I$. Comparing the two, we see that it pays to keep the option as long as:

$$.6RI > .48NI, \text{ or}$$

$$.6R > .48N, \text{ or}$$

$$R > .8N.$$

The tax effect thus discourages exercise if the option's expected return is at least $4/5$ as great as the return on the new investment.¹¹⁹

Once the exercise price is also considered, the effect is more powerful. The executive will invest $I + E$, and her after-tax return will be:

$$.6R(I + E).$$

It thus pays to keep the option¹²⁰ as long as:

$$.6R(I + E) > .6 * .8NI, \text{ or}$$

$$R(I + E) > .8NI.$$

Even if the option's expected return is less than $4/5$ of the return on the new investment, the return on the exercise price (RE) can make up the shortfall.

b. *Financing Consumption.* — By increasing the option's return, tax-deferral increases the opportunity cost of exercising it to finance consumption. For example, exercising the above option would yield \$60 after tax. But the opportunity cost is to forgo the 12% return (or 7.2% after taxes),¹²¹ not just on the \$60 to be consumed, but also on the deferred tax (\$40) and the exercise price (\$50). The opportunity cost rises from \$4.32 to \$10.80.¹²²

c. *Expectation of Loss on Options.* — When the executive expects depreciation on her option and appreciation on an alternative investment, lock-in is weakest, though still a factor.¹²³ By exercising the option, the executive loses the ability to invest other people's money (i.e., the govern-

119. As a result, the executive should not exercise the option early if she intends to keep the stock. Assuming she funds her tax on the option by reducing the size of her position, which usually is the case, the executive would lose 40% of her position (or more if her ability to invest the exercise price is considered). The increase in her rate of return from $.6R$ to $.8R$ is too small to make up the shortfall. Instead of earning $.6RI$ from the option, she will earn only $.8 * .6RI$, or $.48RI$. See Raasch & Rowland, *supra* note 96, at 33; see also Zurack et al., *supra* note 9, at 4.

120. To see how dramatic this effect is, assume that the exercise price is \$100; the stock is at \$200; the expected return on the option is 10%; and the expected return on the new investment is 20%. Even doubling the return does not justify a switch: $.10(200) > .8(.20)(100)$, or $20 > 16$.

121. $6 * 12 = 7.2$

122. In general terms, the opportunity cost of consuming the after-tax proceeds on her option is not just $.6R * .6I$, or $.36RI$. Rather, it is $.6R(I + E)$. In the above example, 12% of 60 is 7.20, or 4.32 after a 40% tax. Yet the return is earned not just on 60, but on 150 (i.e., $60 + 40 + 50$). 12% of 150 is 18, or 10.80 after a 40% tax. While these numbers represent the future value, the disparity would be comparable if the numbers were discounted back to present value.

123. If she expects both to decline, switching is unappealing because losses would become capital instead of ordinary. See *supra* note 113.

ment's deferred tax and the employer's exercise price) at no interest¹²⁴ and with no obligation to pay it back if she loses it. Admittedly, this "non-recourse loan" must be invested in the option, which is expected to depreciate. If this decline is uncertain or expected to be temporary, though, the "loan" may be hard to give up.

2. *Administrability Origin of Tax Barrier to Exercise.* — While the tax rules for NQOs can serve a corporate governance function by discouraging an executive from exercising, these rules were not crafted with corporate governance in mind. Instead, the main concern was administrability. For options to be taxed before they are exercised (e.g., on the grant date), the system would have to value them. Such a timing rule would invite self-serving taxpayer valuations (e.g., in which the firm's deduction could exceed the employee's income from the same NQO).¹²⁵ Thus, *Commissioner v. LoBue* rejects a grant-date tax, advocated by Justice Harlan in dissent, without mentioning corporate governance.¹²⁶ Rather, as Professor Chirelstein has observed, the debate between majority and dissent "appears to have turned on a question of fact, namely, whether the options granted to LoBue did, or didn't, have an ascertainable market value at the date of grant."¹²⁷ As he notes, this valuation concern persists under section 83, *LoBue's* statutory heir.¹²⁸ Yet, sometimes rules crafted to address administrability concerns, such as valuation, can yield unintended benefits. I have construed the realization rule in these terms.¹²⁹

124. For the tax deferral, she will never pay the government interest. For the exercise price, she prepaid this "interest" through the option premium (i.e., the cash salary forgone for the option). See Gilson & Black, *supra* note 116, at 239–40 (value of option includes time value of keeping exercise price until maturity).

125. See Brookes D. Billman, Jr., Tax Mgmt. (BNA), Nonstatutory Stock Options II.A.2.d (1996) (citing valuation and whipsaw concerns as rationale for not taxing option when granted). While options valuation has become more sophisticated, the task is difficult for NQOs because their term is uncertain, since the option may terminate if the executive leaves the firm. This possibility also creates an "all events test"-type rationale for not taxing the option. Until it vests, it arguably does not belong to the executive, and so no tax should be imposed. Like the valuation rationale, the "all events test" rationale has more to do with tax policy (e.g., administrability and fairness) than with corporate governance.

126. 351 U.S. 243 (1956) (Harlan, J., concurring in part and dissenting in part). Interestingly, the tax court offered the option's incentive effect as a reason not to tax it. See *Commissioner v. LoBue*, 22 T.C. 440 (1994); see also *Commissioner v. LoBue*, 223 F.2d 367, 371 (3d Cir. 1955) (upholding tax court's ruling on the same theory). Yet the tax court was not trying to promote better corporate governance, but to measure income more accurately. It was inappropriate to treat the option as income, the tax court said, since the option was given for the employer's convenience. The Supreme Court properly rejected this theory by observing that the option was not a gift and thus had to be income. See 351 U.S. at 247.

127. Marvin A. Chirelstein, *Federal Income Taxation* 372 (8th ed. 1997).

128. See *id.* at 373. For the path from *LoBue* to the current regulations under section 83, see Billman, *supra* note 125, at II.A.2.d.

129. See Schizer, *supra* note 107, at 1552 (defending realization as a credible way to reduce tax burden on investments). Realization is the rule that defers tax on appreciated property until the property is sold.

The tax disincentive to exercising options should also be viewed in this light—in effect, as a corporate governance windfall. As Part V will show, so too should the tax constraints on hedging.

V. TAX BARRIERS TO HEDGING

Part IV showed that the tax rules for NQOs serve a corporate governance function by discouraging executives from exercising options. Discouraging exercise is only part of the battle. The other exit strategy, hedging, must be at least as tax-expensive as exercise. That said, the consequences do not have to be identical. The tax “pain” does not have to be loss of deferral, as long as it is equally costly.

For options hedging, the tax system does indeed supply this “pain”¹³⁰—not as a way to promote better corporate governance but, rather, as a response to tax policy concerns. Section A outlines these concerns. Sections B through D describe three adverse tax consequences that can be triggered by options hedging: forgoing deferral of taxable gain on the option; potentially indefinite deferral of loss on the hedge; and a tax without a corresponding pretax profit, arising because a higher tax rate applies to (ordinary) option gains than to offsetting hedging (capital) losses. Section E discusses planning strategies to avoid these results. Whereas some nearly succeed, none do under current law. In contrast, Section F considers the less punitive tax treatment of stock hedging.

A. Tax Policy Origins of the Options-Hedging Barrier

Before turning to the specific tax provisions that deter options hedging, this Section previews two tax policies implemented by these rules, each of which is far removed from corporate governance and managerial incentives.¹³¹ First, Congress has sought to prevent taxpayers from gaming the realization rule. Because this rule delays tax consequences until the relevant property is sold, taxpayers control the timing of taxable gains and losses. With this “timing option,” they can minimize their overall tax liability by selling depreciated property currently (and claiming a tax loss) while retaining appreciated property (and deferring the taxable gain).¹³² The timing option is especially potent when taxpayers take offsetting positions, such as an asset and a hedge: Over time, one will inevi-

130. If enacted, a pending legislative proposal could significantly reduce this “pain.” For a discussion, see *infra* note 160.

131. Although the theory here is that the U.S. government is merely pursuing its usual revenue-raising goals, without any interest in minimizing agency costs, the two objectives are related. If a stock’s price rises, the government generally shares in those gains by taxing shareholders; if it falls, the government shares in the loss. Likewise, the government loses revenue when executives substitute the nontaxable psychic benefits of shirking for taxable NQO gains.

132. For a discussion, see George M. Constantinides, *Capital Market Equilibrium with Personal Tax*, 51 *Econometrica* 611, 620, 622–23 (1983) (discussing timing option). See also Schizer, *supra* note 107, at 1557–60 (same).

tably generate a currently deductible loss and the other a corresponding deferred gain. Since such gaming could lead to significant loss of revenue, the tax system regulates hedging with care—regardless of whether the hedging could affect the incentives of corporate managers. Indeed, this concern, and the rules addressing it, can apply not only to options hedging, but also to stock hedging and, for that matter, inventory hedging, liability hedging, and the like.¹³³

Options hedging is singled out for particularly harsh treatment because, unlike stock hedging, it also implicates a second tax policy: the system's interest in accounting separately for salary and "active" income and loss, on the one hand, and investment returns and "passive" income and loss, on the other. Various limitations can prevent taxpayers from using investment losses to shelter salary income from tax.¹³⁴ The point of these limits is to ensure that tax is collected from wages and other active income. However, such limits can have a harsh effect on a taxpayer with salary income and an equal amount of investment loss: She could owe tax even though, on a net basis, she has no economic profit. As discussed below, this result is likely to arise when an executive hedges options. Option gain is treated as salary, which often cannot be sheltered by hedging losses, as these usually are classified as investment loss. In contrast, this problem does not arise for stock hedging because gains on stock are not usually viewed as salary. To develop this contrast, the next four sections describe tax rules that burden options hedging, and the final Section describes the relative ease of stock hedging.

B. *Forgoing Deferral of Gain: Constructive Sale Rules*

Of the tax risks associated with options hedging, the least daunting is the risk of having immediately taxable income on the option. The executive can defer this tax by ensuring that the hedge is not treated as a sale under case law¹³⁵ or as a so-called "constructive sale," a statutory concept introduced in 1997 to reinforce the realization rule by taxing hedging transactions that sufficiently resemble a sale.¹³⁶ There is an unreality to this inquiry, in a sense, since the hedge's very purpose is to *simulate* a sale. Even so, "sales" and "constructive sales" are technical concepts, and a hedge can be crafted not to qualify as either. Executives can avoid a sale by keeping legal title to the option and the right to dispose of it.¹³⁷ To

133. Provisions governing the timing option and hedging include the constructive sale rule, see *infra* Part V.B; the capital loss limitation, see *infra* Part V.C.1; the straddle rules, see *infra* Part V.C.2; and the hedging rules, see *infra* Part V.E.5.

134. These limits include the capital loss limitation, see *infra* Part V.C.1; the investment interest rules, see *infra* Part V.E.2; and the passive loss rules, see Part V.E.3.

135. Under section 83, selling the option would trigger a tax, just as exercising it would. See I.R.C. § 83(a).

136. See I.R.C. § 1259. For a discussion, see Schizer, *supra* note 82, at 345.

137. See Edward D. Kleinbard, *Risky and Riskless Positions in Securities*, 71 *Taxes* 783, 786–88 (1993) (properly crafted hedge of publicly traded assets not treated as sale); see also Joint Comm. on Taxation, 105th Cong., General Explanation of Tax Legislation

avoid a constructive sale, the executive should transfer only some—and, in the language of the legislative history, not “substantially all”—of the option’s economic return.¹³⁸ As I have written elsewhere, this standard, which also governs stock hedging, leaves ample room for hedging.¹³⁹ How much economic exposure must the executive keep? Regulatory guidance from the Treasury is expected,¹⁴⁰ since the statute does not offer a quantitative test. As a rule of thumb,¹⁴¹ the New York State Bar Association (“NYSBA”) suggests a band of exposure equal to at least 20% of the asset’s value.¹⁴²

C. *Tax Without Profit: Potentially Indefinite Deferral of Tax Losses*

Options hedging can be deterred not only by accelerating tax on gains, but also by deferring deduction of losses. The point of a hedge, after all, is to cancel out changes in the option’s value. If the option depreciates by \$100,000, the hedge must supply an offsetting \$100,000 of income. Likewise, if the option appreciates by \$100,000, the hedge will yield an offsetting \$100,000 loss. What if, in the latter case, the executive

Enacted in 1997, at 172 (Comm. Print 1997) (“Under prior law [before constructive sale rule was enacted], transactions designed to reduce or eliminate risk of loss on financial assets generally did not cause realization.”).

138. S. Rep. No. 105-33, at 126 (1997). Without retaining any exposure to an NQO’s return, executives still have a technical argument. Arguably, an asset can be the subject of a constructive sale only if a sale would yield “gain,” as opposed to income. See I.R.C. § 1259(a)(1) (“If there is a constructive sale of an appreciated financial position . . . the taxpayer shall recognize gain as if such position were sold. . . .”). NQOs yield only the latter. See *supra* note 112. In my view, however, assets can be constructively sold even if they yield ordinary income. The language about recognizing “gain” should be read to describe the likely (but not exclusive) *consequence* of a constructive sale, as opposed to a precondition.

139. See Schizer, *supra* note 82, at 345 (tax-free hedging can continue under section 1259).

140. See I.R.C. § 1259(f) (authorizing the Secretary of the Treasury to promulgate regulations); Senate Comm. Rep. on P.L. 105-34, reprinted in Stand. Fed. Tax Rep. (CCH) ¶ 31,130, at 56,712 (1999) (“It is anticipated that the Treasury regulations, when issued, will provide specific standards for determining whether several common transactions will be treated as constructive sales.”).

141. The NYSBA’s proposed safe harbor has two other requirements as well. First, the band of exposure must include the current stock price. Second, the hedge must not last more than five years. A problem with this “gross spread” approach is its indifference to volatility. Keeping a 20% band is more meaningful for a nonvolatile utility than for a volatile Internet stock, as the latter is more likely to trade outside that range. To account for volatility, the NYSBA recommends use of options pricing to value retained exposure as a proportion of total exposure. For a discussion, see Schizer, *supra* note 82, at 351. In the interests of full disclosure, I was an author of the report offering these recommendations, but they represent the organization’s views.

142. For example, assume an executive holds options to purchase 10,000 shares for \$10 per share and the stock is now trading at \$100. If the executive buys a put with an exercise price of \$100 and sells a call with an exercise price of \$102, thus leaving herself only a \$2 band of exposure, she will have a constructive sale. On the other hand, under the NYSBA’s guideline, she avoids this result if her short call’s exercise price is \$120.

cannot deduct this \$100,000 loss? She will have \$100,000 of additional taxable income, and a \$39,600 extra tax liability, with no pre-tax gains to pay it. This loss deferral occurs only if the option appreciates, but not if it depreciates, after the executive hedges. Under current law, two separate regimes can trigger loss deferral: the capital loss limitations and straddle rules.

1. *Character Mismatch.* — If the option appreciates after the executive hedges, option gains will be ordinary, since they are deemed salary, and corresponding hedging losses generally will be capital.¹⁴³ Because capital losses cannot offset the tax on ordinary income,¹⁴⁴ the losses will be deferred unless the executive has capital gains from other investments. For example, assume an executive has options to buy 10,000 shares at \$10, and the stock is trading at \$100. She enters into a collar that leaves her exposed to price fluctuations between \$90 and \$110.¹⁴⁵ Thus, her pre-tax profit is guaranteed to be at least \$800,000 and could be as high as \$1 million. Yet as the table below shows, taxpayers who cannot use their capital losses find this pre-tax gain eroded—indeed, it can turn into a loss—as the stock appreciates.¹⁴⁶

TABLE 7: PRE-TAX PROFIT AND TAX BILL: 90–110 COLLAR ON OPTION
WITH \$10 EXERCISE PRICE

Stock Price at Maturity	200	300
Stock Price at Time of Hedge	100	100
Net Pre-tax Profit	1 million	1 million
Taxable Income from Option	1.9 million	2.9 million
Deferred Capital Loss from Hedge	900,000	1.9 million
Current Tax Bill	752,400	1,148,400
After-tax Cash	247,600	(148,400)

143. Compare I.R.C. § 83(a) (ordinary character for compensatory option gains) with I.R.C. § 1234A (losses on derivatives generally capital). See also Steinberg, *supra* note 57, at 221–26 (losses are capital on forwards and collars). For discussion of swaps and contingent debt, which generate ordinary losses, see *infra* Part V.E.1 & 2. For discussion of a legislative proposal that would affect this analysis if enacted, see *infra* note 160.

144. See I.R.C. § 1211. For individuals, the modest sum of \$3000 of capital loss can offset ordinary income each year. Section 1211's purpose is to prevent taxpayers from currently deducting investment losses while deferring inclusion of investment gains. See Robert H. Scarborough, Risk, Diversification and the Design of Loss Limitations Under a Realization-Based Income Tax, 48 Tax L. Rev. 677, 701, 701 n.53 (1993). The limitation thus responds to the timing option and also defends the wage tax base.

145. The collar protects her from risk of loss by allowing her to sell for \$90, but limits her opportunity for gain by obligating her to sell for \$110.

146. If the stock price rises to \$200, she nets a \$1 million pre-tax profit. In addition, she has an extra \$900,000 of ordinary income on the option and a corresponding \$900,000 capital loss on the hedge. Yet she cannot use this loss to avoid tax on the ordinary income. Assuming she does not have capital gains from another investment, her tax bill rises by \$356,400 (i.e., $39.6 \times 900,000$), making her total current tax bill (\$752,400) more than 75% of her pre-tax profit. Moreover, if the price goes to \$300, her almost \$1.15 million current tax bill will exceed her \$1 million economic profit. See Table 7.

This predicament arises in options hedging, but not stock hedging, because option returns are classified as salary. In treating such gain as salary, the tax law is consistent with the incentive rationale for granting options, since the appreciation in the stock price is supposed to result from, and reward, diligent service to the firm. However, it was not inevitable that the tax system would classify the entire return from an option as salary, instead of merely its grant date value. In his *LoBue* dissent, Justice Harlan would have treated the grant date value as ordinary income, while treating subsequent appreciation as capital.¹⁴⁷ If this position had not foundered on the difficulty of accurate valuation, there would be no character mismatch, and so the tax constraints on options hedging would be far weaker, as are the tax constraints on stock hedging.

Given the path the law has taken, however, capital loss limitations prove daunting. Capital loss on the hedge is potentially infinite, since it grows with the employer's stock price. As a result, an executive cannot be sure, *ex ante*, of having sufficient gains to use all her losses. She thus bears a risk without any offsetting reward, because having capital gains allows her, at most, to break even.¹⁴⁸ Even executives who expect to have gain, moreover, could be forced to recognize it prematurely. If the executive would otherwise keep her appreciated capital asset for years after her hedge matures—indeed, until she dies, so that her tax would be forgiven¹⁴⁹—hedging loss would shelter gain that, in effect, does not need sheltering.

2. *Straddle Rules*. — Losses on the hedge may also be deferred by another regime, the straddle rules of section 1092. A limit on the timing option,¹⁵⁰ the straddle rules prevent taxpayers who have straddles (i.e., two offsetting positions) from deducting a loss before recognizing gain in

147. See *Commissioner v. LoBue*, 351 U.S. 243, 251 (1956) (Harlan, J., concurring in part and dissenting in part) ("The option should be taxable as income when given, and any subsequent gain through appreciation of the stock . . . is attributable to the sale of a capital asset and . . . should be taxed as a capital gain."). For a discussion of *LoBue*, see *supra* Part IV.B.2.

148. Thus, as Professor Knoll has observed, hedging an ordinary asset with a capital asset is like writing the government a free call option. See Michael S. Knoll, Hedging in an Economy with Asymmetric Taxes: A Comment on Moshe Ayre Milevsky & Eliezer Z. Prisman, Hedging and Pricing with Tax Law Uncertainty: Managing Under an *Arkansas Best* Doctrine 6–7 U.S.C. Law School Working Paper Series No. 98-16 (1998) (on file with the *Columbia Law Review*).

149. See I.R.C. § 1014 (basis in property acquired from a decedent generally is fair market value on date of death); see generally Lawrence Zelenak, Taxing Gains at Death, 46 Vand. L. Rev. 361, 371–75 (1993) (describing advantages to taxpayer of basis "step-up" at death).

150. See Keyes, *supra* note 2, at 17-3 (describing abuse that prompted enactment of section 1092). For a discussion of the timing option, see *supra* Part V.A.

offsetting positions.¹⁵¹ As economically offsetting positions,¹⁵² the hedge and option generally will be a straddle.¹⁵³ Therefore, the executive cannot deduct hedging losses before exercising the option.¹⁵⁴

Even after exercising the hedged option, the executive still might not be able to use hedging losses if she has *other* appreciated stock or options—even if these others were never hedged. Such indefinite loss deferral for so-called “unbalanced” straddles (i.e., hedges of *less than all* the taxpayer’s positions)¹⁵⁵ follows from a literal application of section 1092(a): A taxpayer who hedges only one of her three shares, for example, arguably may not deduct hedging losses before recognizing gain on *all three* shares.¹⁵⁶ Although Congress authorized regulatory relief for this punitive result almost two decades ago, the Treasury has not yet provided

151. See § 1092(a)(1). The straddle rules also prevent a taxpayer from attaining the long-term capital gains holding period in a straddle position if the holding period has not already been attained before the position becomes part of a straddle. See Temp. Treas. Reg. § 1.1092(b)-2T (1986). The rules also capitalize certain interest incurred to purchase or carry a straddle. See I.R.C. § 263(g). These effects are discussed below.

152. A broad-based basket hedge and option do not always offset each other (e.g., when the industry prospers but the firm fares poorly). As a result, it is arguable that a broad-based basket hedge does not create a straddle with an option. See Steinberg, *supra* note 57, at 243 n.111 (single stock hedged with put based on broad-based index may not be straddle). On the other hand, a disproportionate basket hedge will create a straddle with an option.

153. Although there is a technical argument that an options hedge does not create a straddle, it is not persuasive. A straddle is defined as “offsetting positions with respect to personal property,” I.R.C. § 1092(c)(1), which in turn means that one position “substantially diminish[es] risk of loss” in the other, I.R.C. § 1092(c)(2)(A). As a technical matter, the hedge arguably does not reduce risk of “loss” in the option because “loss” is defined as a capital loss, see Temp. Treas. Reg. § 1.1092(b)-5T (1986) (defining “loss” with reference to section 165), and options generate ordinary rather than capital loss. Even so, the executive does have risk of capital loss *on the hedge*, see *supra* note 143, which is diminished by holding the option. Moreover, the definition of loss as capital loss purports to apply only to certain regulatory provisions (i.e., Temp. Treas. Reg. § 1.1092(b)-1T through 4T). Since the straddle definition is not among them, “loss” arguably is defined in a nontechnical way for that purpose.

154. The executive might counter that losses are deferred only if she has “unrecognized gain,” I.R.C. § 1092(a)(1)(A), and options generate “income” rather than “gain.” Yet such a technical reading of “gain,” though plausible, is arguably inappropriate. Whereas regulations define “loss” as a capital loss, see *supra* note 153, they do not offer an equivalent definition of gain.

155. This issue could also arise in stock hedging, although taxpayers can avoid it under current law through physical settlement of the hedge. See *infra* Part V.F.1.

156. Under I.R.C. § 1092(a)(1)(A), “[a]ny loss with respect to 1 or more positions shall be taken into account for any taxable year only to the extent that the amount of such loss exceeds the unrecognized gain (if any) with respect to 1 or more positions which were offsetting positions with respect to 1 or more positions from which the loss arose.” As long as the two unhedged shares have “unrecognized gain,” selling the hedged share arguably does not release the loss. See Steinberg, *supra* note 57, at 246 (absent relief from the Treasury, “most practitioners believe that . . . the result [for unbalanced hedges] is that none of the loss is currently deductible”).

it.¹⁵⁷ There is a risk, then, that an executive cannot deduct hedging losses before retiring. Until then, she will constantly receive new options and thus will always have appreciated longs. To deflect this indefinite loss deferral, executives might argue that Treasury's eighteen-year delay entitles them to treat the statutorily-mandated regulatory relief as self-executing.¹⁵⁸ A 1999 IRS letter ruling¹⁵⁹ supports this view.¹⁶⁰

157. See § 1092(c)(2)(B) ("If 1 or more positions offset only a portion of 1 or more other positions, the Secretary shall by regulations prescribe the method for determining the portion of such other positions which is to be taken into account for purposes of this section."); see also Priv. Ltr. Rul. 199925044 (Feb. 3, 1999) (noting that such regulations have not been issued).

158. Although deductions are usually viewed as a privilege rather than a right, see *New Colonial Ice Co. v. Helvering*, 292 U.S. 435, 440 (1934) (deductions are a matter of "legislative grace"), several authorities treat regulatory relief as self-executing when the statute mandates it (e.g., by using the phrase "the Secretary shall," as in section 1092(c)(2)(B)) and the Treasury delays for an extended period. See, e.g., *First Chicago Corp. v. Commissioner*, 842 F.2d 180, 182, 184 (7th Cir. 1988) (in enacting minimum tax, Congress ordered Secretary to propose a tax benefit rule; since Treasury had not "gotten around to" this task, court allowed taxpayer to use tax benefit rule). Note, however, that in *First Chicago*, the government conceded that the tax benefit rule was self-executing. See *id.* at 184; see also, e.g., *Occidental Petroleum Corp. v. Commissioner*, 82 T.C. 819, 829 (1984) ("[T]he failure to promulgate the required regulations can hardly render the new provisions of section 58(h) inoperative."); *United States v. Deckelbaum*, 784 F. Supp. 1206, 1207 n.3 (D. Md. 1992) (finding that when the Secretary has failed to promulgate regulations, "the IRS must compute the tax which is due and owing as though regulations had been issued"); *Estate of Maddox v. Commissioner*, 93 T.C. 228, 234 (1989) (with respect to section 2032A(g), which authorizes favorable estate tax valuation for certain family farms, "the Secretary cannot deprive a taxpayer of rights which the Congress plainly intended to confer simply by failing to promulgate the required regulations").

159. See Priv. Ltr. Rul. 199925044 (Feb. 3, 1999) (allowing taxpayer who was collaring less than all her stock to identify which stock was a straddle with her collar, but noting that the ruling "may not be used or cited as precedent"). Unlike a published ruling, a private ruling technically may be invoked only by the party requesting it. Even so, the tax bar frequently relies on private rulings in giving advice, as these are fairly good indicators of the government's view of the law.

160. Although the tax barrier is effective in its current form, a serious risk is that changes in the tax law will inadvertently undo it. As this Article goes to press, a legislative proposal by the Treasury to modify the straddle rules ("the Proposal") could significantly weaken the tax barrier. The Proposal's details have not yet been worked out and its prospects for passage during this election year may prove slim. If it is enacted in its current form, the Proposal would inadvertently enable executives to avoid the capital loss limitations when hedging options. Under the Proposal, a loss from one leg of a straddle would no longer be deferred but, instead, would be added to the basis of the other straddle leg. See Treasury Explains Clinton Budget Revenue Proposals, Tax Analysts, Tax Notes Today, Feb. 9, 2000, LEXIS, Fedtax Library, TNT File, 2000 TNT 27-26 [hereinafter Clinton Budget Revenue Proposals] ("[T]o appropriately match the timing of straddle losses with related gains, the proposal would provide that loss recognized on one leg of a straddle would be capitalized into the other leg of the straddle."). Thus, losses on an options hedge would no longer be (potentially unusable) capital losses. Instead, they would give the executive basis in the option—thereby serving to reduce ordinary income earned on this asset.

Yet the executive could still have an unbalanced straddle problem. She would want hedging losses to create basis in the option *she was hedging*, instead of another option, such

D. Tax Without Profit: Asymmetric Rates

Even an executive who expects to have ample capital gains and is willing to be aggressive about straddle loss deferral is not out of the woods. An options hedge still cannot leave her indifferent, after taxes, to subsequent changes in the stock price. To do so, the hedge must produce a dollar of after-tax *gain* for every dollar of after-tax *loss* on the option. In addition, it must produce a dollar of after-tax *loss* for every dollar of after-tax *gain* on the option. Yet the hedge cannot satisfy both of these conditions, because different tax rates govern option hedging losses and gains.¹⁶¹ Since the option and hedge are a straddle, gain on the hedge is always *short-term* capital gain, generating a 39.6 cent tax for every dollar of hedging gain.¹⁶² In contrast, capital loss on the hedge will typically reduce *long-term* capital gain, thereby reducing the tax bill by only 20 cents for every dollar of hedging loss.¹⁶³ As the following examples show, these asymmetric rates force the executive to pick one of three unappealing

as a new grant. The Proposal would give a taxpayer no control over where the basis goes—a retreat from the identification regime of Priv. Let. Rul. 199925044. Instead, the Proposal apparently would require the new basis to be allocated, first, to positions with the most built-in gain and, thereafter, pro rata to all positions. For example, assume an executive has an option with an exercise price of \$10 (the “old” option), and hedges it when the stock price is \$50. Sometime later, she gets another option with an exercise price of \$100 (the “new” option). If the stock price rises to \$300, she will have \$250 of hedging loss. While the first \$50 would be allocated to the old option, only half of the remaining \$200 would be allocated there, with the balance going to the new option. Thus, the executive would still have \$140 of ordinary income upon exercising the old option (i.e., \$290 minus the \$150 basis), even though her pre-tax profit would be just \$40. While the \$100 of basis allocated to the new option would reduce her income on it, she would not get a current tax benefit from this basis if she were not yet ready to exercise this option. The prospect of such timing mismatches could still deter options hedging, but the deterrent would be considerably less daunting than under current law.

161. Although this issue can arise in stock hedging as well, taxpayers can avoid it under current law through physical settlement of the hedge. See *infra* Part V.F.1.

162. A straddle leg cannot satisfy the long-term capital gains holding period as long as it is part of a straddle, regardless of how long the taxpayer holds it. See Temp. Treas. Reg. § 1.1092(h)-2T (as amended in 1986) (holding period does not begin as long as property is part of a straddle). Short-term capital gains rates are the same as those for ordinary income. Cf. William A. Klein & Joseph Bankman, *Federal Income Taxation* 834 (11th ed. 1997) (after netting, only long-term capital gain is subject to preferential rate).

163. The executive would avoid this problem if her losses were reducing *other short-term* capital gains in her portfolio, since her losses would then reduce her tax by 39.6 cents, instead of 20 cents. Yet an executive will rarely expect to have sufficient short-term capital gains in the year her hedge matures, let alone short-term gains that she otherwise would recognize before satisfying the long-term holding period. On the other hand, the problem is avoided if the executive can use her losses to reduce ordinary income on the option—a course that is not available under current law but could become feasible under the President’s straddle proposals. See *supra* note 160. In other words, enactment of this proposed legislation would alleviate an executive’s asymmetric rate problem.

outcomes: a net after-tax loss as the stock rises; a net loss as it falls; or a smaller net loss in both cases.¹⁶⁴

1. *Protection from Declines/Tax Cost from Increases.* — The cost of breaking even as the stock price falls is after-tax loss as the stock price rises. For example, assume an executive has 10,000 options to buy a share at \$10. After the stock has appreciated to \$100, she enters into a "collar" on all 10,000 options, which leaves her exposed to price fluctuations between \$90 and \$110. The following table shows that, as the stock price declines below \$90, every after-tax dollar of option loss will be offset by an after-tax dollar of profit¹⁶⁵ on her collar.¹⁶⁶

TABLE 8: BREAKING EVEN AS STOCK PRICE FALLS

Stock Price at Maturity	Option Pre-tax Profit	Option After-tax Profit	Collar Pre-tax Profit	Collar After-tax Profit	Net Profit on Both Positions
90	800,000	483,200	0	0	483,200
60	500,000	302,000	300,000	181,200	483,200
10	0	0	800,000	483,200	483,200

Yet, for every dollar the price rises above \$110, the executive loses 19.6 cents after taxes. The reason is that a dollar of pre-tax profit on the option is ordinary income that generates a 39.6 cent tax; a corresponding dollar of capital loss on her collar reduces the tax bill by only 20 cents.¹⁶⁷

TABLE 9: 19.6% HEDGING TAX AS STOCK RISES¹⁶⁸

Maturity Stock Price	Option Pre-tax Profit	Option After-tax Profit	Collar Pre-tax Loss	Collar After-tax Loss	Net After-tax Profit	Compare Profit at 110
110	1,000,000	604,000	0	0	604,000	n/a
111	1,010,000	610,040	(10,000)	(8000)	602,040	(1960)
210	2,000,000	1,208,000	(1,000,000)	(800,000)	408,000	(196,000)
410	4,000,000	2,416,000	(3,000,000)	(2,400,000)	16,000	(588,000)

164. Nor does the executive's counterparty have correspondingly favorable treatment (such as ordinary losses and long-term capital gains). Cf. Bradford, *supra* note 113, at 737 (tax base is protected as long as favorable tax treatment to one party is offset by unfavorable treatment to counterparty). If the counterparty is a dealer in securities, as is likely, it has ordinary income or loss under mark-to-market accounting. See I.R.C. § 475.

165. She makes a profit on the collar as the price declines because the collar allows her to sell the stock for \$90. For example, if the stock is worth \$60, the right to sell it for \$90 has intrinsic value of \$30.

166. A perfect offset is possible because the same tax rate applies to ordinary income on the option and to short-term capital gain on the hedge. See *supra* note 162. For every dollar that the stock price falls below \$90, the executive loses a dollar of ordinary income per option (and 60.4 cents after taxes) and replaces it with a dollar of short-term capital gain on her collar (and thus 60.4 cents after taxes).

167. This calculation assumes the loss is reducing long-term—rather than short-term—capital gains.

168. Another measure of hedging cost is the financial instrument an executive must buy to break even as the stock price rises. She would need an additional 1960 call options to earn an extra 19.6 cents after taxes for every dollar of increase in the stock price above

2. *Exposure to Declines/No Net Cost from Increases.* — To avoid after-tax losses as the stock price rises, the executive can hedge *less than all* of her position: 7550 options, instead of the full 10,000.¹⁶⁹ Whereas the hedge will still generate a tax cost as the stock price rises, appreciation in the 2450 *unhedged* options offsets this cost. The price of breaking even, though, is that 2450 options remain unhedged. As Table 10 shows, the unhedged options will generate after-tax loss as the stock price falls.

TABLE 10: INCOMPLETE PROTECTION FROM DECLINES

Maturity Stock Price	Option Pre-tax Profit	Option After-tax Profit	Collar Pre- tax Profit (on 7550 Options)	Collar After-tax Profit	Net Profit on Both Positions	Compare Profit at 90
90	800,000	483,200	0	0	483,200	n/a
60	500,000	302,000	226,500	136,806	438,806	(44,394)
10	0	0	604,000	364,816	364,816	(118,384)

Although the executive is incompletely protected as the price declines, Table 11 shows that she breaks even as the price rises.¹⁷⁰

TABLE 11: BREAKING EVEN AS PRICE RISES

Stock Price at Maturity	Option Pre- tax Profit	Option After- tax Profit	Collar Pre-tax Loss (on 7550 options)	Collar After-tax Loss (on 7550 options)	Net After-tax Profit
110	1,000,000	604,000	0	0	604,000
111	1,010,000	610,040	(7550)	(6040)	604,000
210	2,000,000	1,208,000	(755,000)	(604,000)	604,000
410	4,000,000	2,416,000	(2.265 million)	(1.812 million)	604,000

\$110. (This calculation assumes she could use existing capital losses to shelter tax on these new calls.)

169. This number is computed as follows:

Let X = the number of hedged options.

Let Y = the number of unhedged options.

Since they sum to 10,000, $X + Y = 10,000$.

Since the after-tax return on the unhedged options must offset the 19.6% cost on the hedged ones,

$$.604Y = .196X$$

$$3.0816Y = X$$

$$4.0816Y = 10,000$$

$$Y = 2450$$

$$X = 10,000 - Y = 7550.$$

170. The loss is 14.8 cents per share for every dollar decrease in the stock price. Because 2450 of the 10,000 options—or .245 of the position—are unhedged, each dollar decline costs the tax payer 24.5 cents per share on a pre-tax basis. Since the tax rate is 39.6%, the tax payer bears only 60.4% of this loss, or 14.8 cents (i.e., $.604 * 24.5$). Thus, to break even as the price falls, the executive must buy puts that generate 14.8 cents per share after taxes for every dollar of declines below \$90. Assuming this gain is taxable short-term capital gain (since her other positions do not generate capital loss to shelter it), she will need 2450 puts (i.e., $24.5 * 60.4 = 14.8$). In other words, she will have to hedge the unhedged options.

3. *Partial Exposure to Declines and Increases.* — Instead of having losses either as the price declines or as it rises, the executive can spread her losses between the two scenarios. For example, she can leave 1225 options unhedged, instead of 2450. As a result, she halves her losses as the price falls below \$90, at the cost of 9.8 cents for every dollar of increase above \$110.

TABLE 12: LOSSES FROM DECLINES

Maturity Stock Price	Option Pre-tax Profit	Option After-tax Profit	Collar Pre- tax Profit (on 8775 Options)	Collar After-tax Profit	Net Profit on Both Positions	Compare Profit at 90
90	800,000	483,200	0	0	483,200	n/a
60	500,000	302,000	263,250	159,003	461,003	(22,197)
10	0	0	702,000	424,008	424,008	(59,192)

TABLE 13: LOSSES FROM INCREASES

Maturity Stock Price	Option Pre-tax Profit	Option After-tax Profit	Collar Pre- tax Loss on 8775 Options	Collar After-tax Loss	Net After- tax Profit	Compare Profit at 110
110	1,000,000	604,000	0	0	604,000	n/a
111	1,010,000	610,040	(8775)	(7020)	603,020	(980)
210	2,000,000	1,208,000	(877,500)	(702,000)	506,000	(98,000)
410	4,000,000	2,416,000	(2,632,500)	(2,106,000)	310,000	(294,000)

E. Planning Around Tax-Without-Profit Effects: Seeking Ordinary Treatment on the Hedge

Whereas the constructive sale rules and straddle loss deferral probably can be avoided, the character mismatch and asymmetric tax rates are more daunting for options hedging. This Section shows that some planning strategies almost counteract them, but none succeed under current law. The objective of each of these strategies is for the return on the options hedge to be ordinary, instead of capital. As a result, there would no longer be a mismatch with the option's ordinary return. Likewise, differences between the short- and long-term capital gains rates would become irrelevant, as would the straddle rules' effect on holding period. With the following six strategies, the hedge's return would be ordinary. Nevertheless, other tax costs render these strategies unusable under current law.¹⁷¹ Even so, the tax law is constantly changing, and tax lawyers

171. An alternative way of avoiding the character mismatch is not to make the hedge's character ordinary, but rather to make the incentive compensation's character capital. There are two instances when this occurs. The first, a so-called "section 83(b) election," is not available for options. It is considered in the discussion of stock hedging at *infra* Part V.F.2. The second type of incentive compensation that generates capital gain is an incentive stock option. Unfortunately for the executive, however, hedging an ISO turns it into an NQO, effectively eliminating this avenue. For the option to qualify as an ISO, the

are a creative group. As Professor Ginsburg has observed, "[t]he tax bar is the repository of the greatest ingenuity in America, and given the chance, those people will do you in."¹⁷² Today's tax barrier may be gone tomorrow.

1. *Swaps*. — Although the tax character of swap¹⁷³ payments is not settled, ordinary treatment is likely for certain swaps.¹⁷⁴ Nevertheless, hedging with swaps bears two severe tax costs, each following from the fact that swap expenses are "miscellaneous itemized deductions."¹⁷⁵ First, these losses are not deductible unless, together with the executive's other miscellaneous itemized deductions, they exceed 2% of her adjusted gross income for the year.¹⁷⁶ More importantly, ordinary swap losses offer no deduction under the AMT.¹⁷⁷ An executive with sizable options income, offset by an equal amount of swap expenses, computes her AMT based

executive most retain it—and the stock acquired from exercising it—for a requisite holding period without making a "disposition." See I.R.C. § 422(a)(1). The government has construed the term "disposition" broadly to include hedging. See, e.g., Rev. Rul. 73-92, 1973-1 C.B. 208 (treating an executive as making a disqualifying disposition by shorting stock while holding identical stock acquired through a qualified option). Hedging would also eliminate the holding period under the straddle rules. See Temp. Treas. Reg. § 1.1092(b)-2T(a) (as amended in 1986) (holding period does not begin as long as position is part of straddle). The executive cannot avoid these results by holding the ISO for a minimum period before hedging, since she still will not have satisfied the holding period for the stock.

172. Legislation Relating to Tax-Motivated Corporate Mergers and Acquisitions: Hearing Before the Subcomm. on Select Revenue Measures of the House Comm. on Ways and Means, 97th Cong. 90 (1982) (testimony of Martin D. Ginsburg) (quoted in Erik M. Jensen, *The Heroic Nature of Tax Lawyers*, 140 U. Pa. L. Rev. 367, 372 (1991)).

173. For a definition of a swap, see *supra* note 4.

174. Ordinary treatment is more likely if the swap uses annual payments, instead of a single payment at maturity, to account for gains and losses in the underlying property. See Priv. Ltr. Rul. 9730007 (Apr. 10, 1997) (ruling that ordinary treatment is required for swaps that settle gains and losses with periodic payments, on theory that such payments are not in connection with "sale" or "termination" of capital asset); see also New York State Bar Association Tax Section, *Notional Principal Contract Character and Timing Issues*, reprinted in 79 Tax Notes 1303, 1305-11 (1998) [hereinafter *NYSBA Swap Report*] (IRS ruling treating swap payments as ordinary may not apply to swap using single payment at maturity). Yet use of annual payments has two disadvantages. First, the executive may face a liquidity crunch. If the stock price rises, she will owe a swap payment but may not have cash to pay it (e.g., if she is not yet ready to exercise her option). In addition, the executive may lose the advantages of tax deferral. If the stock price falls, the payment she receives is immediately taxable.

175. These are a special class of disfavored itemized deductions, which are not excluded from "miscellaneous" status by section 67(b). The deduction under Treas. Reg. § 1.446-3 (1994) for swaps is usually considered an expense for the production of income under section 212. Such expenses are not excluded by section 67(b).

176. See Steinberg, *supra* note 57, at 230 (swap expense subject to 2% limitation). For example, if her adjusted gross income is \$250,000 and she makes a \$50,000 payment, she loses \$5,000 of the deduction.

177. See I.R.C. § 56(b)(1) (disallowing deduction of miscellaneous itemized deductions in computation of alternative minimum taxable income); Steinberg, *supra* note 57, at 230. For a discussion of the AMT, see *supra* note 98.

only on the income. As a result, she will owe a 28% tax on the income even though she has no economic profit.¹⁷⁸

This tax barrier largely depends on the AMT, which has come under fire in recent months. Critics observe that the tax, which originally targeted wealthy taxpayers, now frequently applies to large middle-class families, merely because they have many dependents.¹⁷⁹ Not surprisingly, House Republicans have proposed to scale back and, ultimately, to repeal the AMT.¹⁸⁰ This measure was not enacted in 1999, when Chairman Archer proposed it. If it ever is enacted, option hedging will no longer trigger a significant tax without economic profit.

2. *Contingent Debt.* — Another way to generate ordinary hedging losses is to embed the hedge in a debt instrument by borrowing money and basing the interest obligation on the employer's stock price.¹⁸¹ However, although interest on contingent debt usually gives rise to an ordinary deduction,¹⁸² the so-called investment interest rules severely limit the deduction. Not targeted at corporate governance, this limitation aims at "tax arbitrage" in which taxpayers borrow money (and deduct

178. See I.R.C. § 55(b)(1)(A)(i)(II) (tentative tax for noncorporate taxpayers is 28% of so much of the taxable excess as exceeds \$175,000).

179. See, e.g., Gene Steuerle, *The Crazy Politics of the Alternative Minimum Tax*, 82 *Tax Notes* 1867, 1867-68 (1999).

180. The proposal, offered by Chairman Archer of the Ways and Means Committee, would impose only 80% of AMT liability in 2003, 70% in 2004, 60% in 2005, 50% in 2006 and 2007, and would repeal the AMT entirely for tax years after 2007. See H.R. Doc. No. 2488, at 11 (1999) (describing the Archer proposal). The more moderate proposal of Senator Roth, chair of the Senate Finance Committee, would preserve the AMT but provide a full AMT deduction for personal exemptions. See S. Rep. No. 106-120, at 14 (1999). President Clinton has also proposed a modest approach aimed at helping ameliorate the AMT's impact on families with children. See David Cay Johnston, *Clinton Acts to Change Levy That Affects Middle Class*, *N.Y. Times*, Jan. 21, 2000, at C2.

181. Professor Knoll has observed this tax advantage of contingent debt as a hedge for business risks. See Knoll, *supra* note 148, at 2. For example, assume the employer's stock is trading at \$100 and the executive has options to buy 10,000 shares at \$10, which have \$900,000 of intrinsic value. She can buy a put which allows her to sell the stock for \$90, so that she locks in \$800,000 of gain. To pay for this put, instead of selling a call (at, say, \$110), she can borrow money and structure her interest payments so that they are, in effect, a short call. Thus she borrows \$900,000 and, when the loan matures, she must return this principal amount plus, as interest, the amount by which the value of 10,000 shares exceeds \$1.1 million. If the stock is trading at \$210 at maturity, she will owe \$1 million of interest. If the stock is trading at \$90, in contrast, she will not owe any. Note that the put must be separate from the debt. If it is embedded in the debt (i.e., so that the principal amount declines with the stock price), the instrument is unlikely to qualify as debt for tax purposes—and thus will not generate ordinary deductions.

182. Under the "noncontingent bond method" of Treas. Reg. § 1.1275-4 (1997), this interest is deductible, subject to the investment interest limitation described in the text. Unless such a limitation applies, the deduction is not delayed until the executive makes the payment. Instead, she takes an annual deduction based on her usual borrowing cost (the "comparable yield"). When the debt instrument matures, she adjusts her income in that year (i.e., with inclusions or additional deductions) to rectify any divergence between prior deductions and her actual payment.

interest) to buy assets that yield a tax-exempt or a tax-deferred return.¹⁸³ In response, Congress allows a deduction of "investment interest" only up to the amount of a taxpayer's "investment income" (e.g., taxable interest and dividends).¹⁸⁴ Such interest may not be used to shelter salary income from tax. On the equity-linked debt described above, then, the executive cannot deduct interest (including payments based on appreciation in the underlying stock's value) except to the extent of her investment income. This amount does not include her option gain, which is considered salary.¹⁸⁵ As a result, the executive may owe tax without having any profit, since her option income can be matched by nondeductible investment interest.

While executives have a strained technical argument to avoid this limitation, at least for deductions claimed when the bond matures,¹⁸⁶ the "solution" creates a new problem. The contingent debt rules treat expense at maturity as a "loss" for purposes of the straddle rules, if the debt is part of a straddle.¹⁸⁷ Does this regulation render the payment a "loss"—as opposed to "interest"—for other purposes as well? If it does—and, in my view, this reading is plausible but probably not correct¹⁸⁸—the maturity payment would no longer be "interest" subject to the investment

183. See Chirelstein, *supra* note 127, at 139 (explaining investment interest rules as response to tax arbitrage).

184. See I.R.C. § 163(d)(1) (investment interest may not be deducted to the extent it exceeds net investment income). Disallowed deductions may be carried forward to subsequent tax years. See I.R.C. § 163(d)(2).

185. Salary income is not included in the two statutory classes of "investment income": "gross income from property held for investment" and "net gain attributable to the disposition of property." I.R.C. § 163(d)(4)(B).

186. Specifically, the argument applies to the so-called "positive adjustment," which is an additional deduction for the amount by which the payment at maturity exceeds the tax law's prediction, as of the issue date, of what this payment would be. See Treas. Reg. § 1.1275-4(b)(6) (1997) (discussing positive and negative adjustments). This predicted amount (the so-called "projected payment schedule"), which is based on the issuer's usual borrowing cost, has already been deducted (i.e., through the issuer's annual deduction for the "comparable yield"). See *supra* note 182 (discussing use of comparable yield in noncontingent bond method).

187. Treas. Reg. § 1.1275-4(b)(9)(vi) ("[A]n issuer treats a positive adjustment as a loss with respect to a position in a straddle if the debt instrument is a position in a straddle . . .").

188. By its terms, the language creates a consequence only under the straddle rules (i.e., in deeming the expense "a loss with respect to a position in a straddle"). *Id.* It is possible that in covering this payment under one loss deferral regime (i.e., the straddle rules), the Treasury meant to exempt it from another (i.e., the investment interest rules). However, it is also possible that both regimes are meant to apply. The latter reading is more plausible because a rule with clear a punitive consequence (loss deferral under the straddle rule) should not be viewed as bearing a blessing in disguise (exemption from the investment interest rules), at least absent a clearer indication that this generous result was intended.

interest limits. However, as a "loss," it would be a miscellaneous itemized deduction¹⁸⁹ that is not deductible under the AMT.¹⁹⁰

3. *Mark-to-Market Election for Securities Traders.* — If the executive qualifies as a "securities trader" under section 475(f), she can elect ordinary treatment for all her "trading" securities, including her hedge.¹⁹¹ However, even if she is eligible for the election,¹⁹² which is unlikely, the strategy is too costly. All of her other securities would be treated as ordinary property and marked to market, except those plausibly identified as

189. Not all "losses" are miscellaneous itemized deductions. Indeed, losses from the "sale or exchange of property" are accorded favorable above-the-line status (i.e., they are used to compute adjusted gross income). See I.R.C. § 62(a)(3) (granting deduction for losses from sale or exchange of property). Yet the loss here results from terminating an obligation, not from selling property. Whereas section 1234A treats certain terminations *as if* they were a sale or exchange of property, it explicitly excludes retirement of debt. See I.R.C. § 1234A ("The preceding sentence shall not apply to the retirement of any debt instrument . . ."). Assuming the loss is not interest, no deduction would be available under section 163. See I.R.C. § 163 (authorizing deduction for interest). The statutory basis for a deduction, then, is likely to be as an expense for production of income under section 212. Such expenses clearly are miscellaneous itemized deductions. See Temp. Treas. Reg. § 1.67-1T(a)(1)(ii) (as amended in 1988) (noting that expenses under section 212 are miscellaneous itemized deductions).

However, the need for an unrestricted deduction would fade if the President's straddle proposal is enacted. See *supra* note 160. As straddle loss, the interest expense apparently would be capitalized into the basis of a straddle leg, instead of being separately deducted. As long as this expense is capitalized into the basis of the compensatory option—and not the put held by the executive—the hedging loss would offset ordinary income.

190. Compare *supra* Part V.E.1 (noting that swap expense is a miscellaneous itemized deduction that is nondeductible under the AMT). In addition, still another loss deferral regime can apply, in this case to the "comparable yield" interest deduction otherwise generated before the loan matures. If this interest is incurred to "carry" a straddle, the deduction is disallowed. Instead, the interest is added to the basis of a leg of the straddle. See I.R.C. § 263(g)(1) (requiring capitalization of "interest and carrying charges properly allocable to personal property which is part of a straddle"); see also Clinton Budget Revenue Proposals, *supra* note 160 (proposing to eliminate "purchase or carry" test, so that interest would automatically be capitalized for "straddle-related debt"). If added to the NQO's basis, the interest expense reduces ordinary income, thereby averting any character mismatch. If added to the basis of the put, however, the expense generates capital loss and thus a mismatch.

191. See I.R.C. § 475(f); Prop. Treas. Reg. § 1.475(f)-2(b), 64 Fed. Reg. 4374, 4378 (1999).

192. To be eligible, the executive must have an active business of trading securities in which she constantly places short-term bets. See *Liang v. Commissioner*, 23 T.C. 1040, 1043 (1955) (traditional mark of a "trader" is that "securities are bought and sold with reasonable frequency in an endeavor to catch the swings in the daily market movements and profit thereby on a short-term basis"); see also Daniel S. Shapiro, *Private Securities Partnerships—The Trade or Business Issue Examined*, 56 Tax Notes 85, 92–102 (1992) (describing judicially developed tests for determining whether a securities partnership is engaged in the trade or business of securities trading). This showing is difficult for someone who has a full-time occupation unrelated to such trading.

unrelated to the "trading business."¹⁹³ Thus, she would lose the advantages of deferral for her appreciated assets.¹⁹⁴ This result may prove more tax-expensive than simply exercising the option.

To mark only her hedge to market, and not her other positions, the executive might form a partnership that enters into the hedge and elects to mark its positions to market.¹⁹⁵ Yet this election is available only if securities trading is the partnership's "trade or business."¹⁹⁶ This status is probably unavailable because it requires frequent short-term bets, as opposed to one long-term short position on one stock.¹⁹⁷ Even if the "trader" election were available, moreover, the passive loss rules¹⁹⁸ generally would prevent partnership hedging losses from offsetting the executive's "active" option income.¹⁹⁹

4. *Physically-Settled Derivatives.* — The main problem with options hedging is that the hedge generates losses that, after taxes, may not fully

193. See Prop. Treas. Reg. § 1.475(f)-2(a)(4), 64 Fed. Reg. 4374, 4378 (1999) (securities not identified as investment securities are marked to market and gains and losses are ordinary in character). For the identification to succeed, the trader must "demonstrat[e] by clear and convincing evidence that a security has no connection to its trading activities." Prop. Treas. Reg. § 1.475(f)-2(a)(2), 64 Fed. Reg. 4374, 4378 (1999).

194. Since she would want mark-to-market treatment for her hedge (in order to get ordinary character), the executive could have to settle for mark-to-market treatment for the option. See Prop. Treas. Reg. § 1.475(f)-2(a)(3), 64 Fed. Reg. 4374, 4378 (1999) (securities that are substantially similar generally must be marked to market if at least one has been treated as a "trading" security, but an exception may be available if "the security is held in a separate, nontrading account maintained with a third party").

195. The partnership, as opposed to the partners, elects the partnership's method of accounting, but the choice "shall not apply to any partner's nonpartnership interests." See Treas. Reg. § 1.703-1(b) (as amended in 1992). Thus, a section 475(f) election, if successful, gives the executive mark-to-market and ordinary treatment on any positions in the partnership (i.e., the hedge) but not on any of the positions outside the partnership (i.e., the option and other investments).

196. See I.R.C. § 475(f) (offering election to "a person who is engaged in a trade or business as a trader in securities").

197. To seem more like a trader, the partnership might supplement the hedge with other positions, but this defeats the purpose of using the partnership (i.e., avoiding mark-to-market accounting for other positions).

198. The passive loss rules keep taxpayers from reducing their wage income with "passive activity losses," i.e., losses from activities in which they do not "materially participate." I.R.C. § 469(a)-(d); see generally Joseph Bankman, *The Case Against Passive Investments: A Critical Appraisal of the Passive Loss Restrictions*, 42 *Stan. L. Rev.* 15, 16-24 (1989) (describing passive loss rules). Limited partners are presumed not to be material participants. See I.R.C. § 469(h)(2). In any event, the executive is unlikely to "participate materially" in implementation of the hedge. Executives might eventually use the losses upon selling the partnership interest, but only if the sale is to an unrelated third party. Assuming (as is likely) that an investment bank is the executive's partner, the executive cannot sell her interest to the bank or the partnership. See I.R.C. § 469(g)(1)(B). Given the limited demand for such a partnership interest, the executive probably cannot count on such a sale to release losses.

199. If the passive loss rules are not deterrent enough, the executive must also consider application of the straddle rules, since option gains are economically offset by hedging losses from the partnership.

offset option gains (e.g., because of a mismatch in character and because different tax rates apply to gains and losses).²⁰⁰ However, these problems in using tax losses do not arise if the hedge, as a tax accounting matter, directly caps the executive's taxable income instead of generating a separate (potentially nondeductable) tax loss. For tax purposes, physically-settled derivatives are treated as fixing a sale price, and thus capping the amount realized on the underlying property.²⁰¹ For example, assume an executive has an option to buy 10,000 shares for \$10 per share. When the underlying stock is at \$100, such that the NQO has \$900,000 of intrinsic value, the executive might enter into a contract to sell the compensatory option itself (a "physically-settled forward contract") for \$900,000 in three years.²⁰² Upon delivering the option, the executive has \$900,000 of taxable option income, even if the option is worth considerably more. To use this approach, however, the executive must *actually deliver* her NQOs—a legal impossibility because they are not transferable.²⁰³

5. *Hedging Rules.* — The hedging regulations of Treasury Regulation section 1.1221-2 alleviate character mismatches in other contexts, such as in the hedging of inventory.²⁰⁴ If applicable, the regulations allow ordinary treatment for hedging losses that otherwise would be capital.²⁰⁵ Regulatory relief is unlikely here. It is available only for "hedging transactions," defined as "a transaction that a taxpayer enters into in the normal course of the taxpayer's trade or business primarily—(1) To reduce risk of price changes or currency fluctuations with respect to ordinary prop-

200. See *supra* Part V.C & D.

201. See, e.g., Steinberg, *supra* note 57, at 222 (when a put option is physically settled, no gain or loss is recognized on the put; gain or loss is recognized on underlying property, based on put exercise price instead of underlying's fair market value); cf. *id.* at 248 n.125 (noting that taxpayers can use physically-settled derivatives to avoid "converting" long-term gain to short-term gain on a straddle).

202. Although I use \$900,000 in the text for the sake of simplicity, the price should be higher because forward prices generally equal the spot price plus an amount based on time value.

203. This analysis could change if the President's straddle proposals are enacted. See *supra* note 160. In essence, physically settled options hedges would no longer have an advantage over cash-settled ones, but the latter would become more feasible. Specifically, under the straddle rules, physical settlement would no longer cap the gain recognized on the hedged asset without generating a separate loss. Instead, loss would be recognized as if the hedge were cash-settled. Then, some portion of this loss would be capitalized into the basis of the property being delivered, which would be treated as sold for fair market value. See Clinton Budget Revenue Proposals, *supra* note 160 (proposing to "ensure that the straddle rules are not circumvented in situations where a leg of the straddle is physically settled"). This hedging loss would be capitalized into the basis, not only of the asset that is delivered upon physical settlement, but also into the basis of assets that are retained. Since this basis would not reduce the executive's tax liability until she sold these assets, the executive would face a timing mismatch. Thus, physical settlement would no longer be a solution to the unbalanced straddle problem discussed *supra* in Part V.C.2.

204. For a discussion of the problem that inspired the regulations, see Edward D. Kleinbard & Suzanne F. Greenberg, *Business Hedges After Arkansas Best*, 43 *Tax L. Rev.* 393, 414-40 (1988).

205. See *Treas. Reg.* § 1.1221-2(a) (1996).

erty . . . that is held or to be held by the taxpayer.”²⁰⁶ Even if the executive is hedging “price changes”—a phrase that seems more applicable to inventory or raw materials than to equity compensation—she is not hedging “in the normal course of [her] trade or business.” The hedging obviously is not a work responsibility, since it is not even in the employer’s interest.²⁰⁷

6. *Hedge Provided by Employer.* — If the employer were to supply the hedge as compensation, the hedge would yield an ordinary return and thus would not trigger the capital loss limitations or asymmetric tax rates.²⁰⁸ Employers should be reluctant to provide a hedge, since it would undermine the incentive that option grants are supposed to create and also could jeopardize the employer’s tax deduction.²⁰⁹ Nevertheless, if a firm were to take this step, the hedge would not raise the same concerns as do third-party hedges. As a party to the negotiation, the firm could monitor and protect its interests and, in the case of senior executives, would disclose the hedge to shareholders.

F. Hedging Stock

The tax penalties on options hedging sometimes apply if an executive hedges a grant of stock received as compensation (so-called restricted stock) because such stock is taxed as salary, as is an option. In contrast, these penalties generally do not apply if an executive seeks to hedge stock purchased with her own funds, whether in exercising an option, in a market purchase or, say, in founding the firm.

1. *Stock Purchased with Executive’s Own Funds.* — Assume an executive purchased a share of stock for \$1 with her own funds. Once the stock has appreciated to \$100, she decides to hedge it. Of the tax penalties on options hedging discussed above, the only one that applies with the same force here is the constructive sale rule and that rule is easily avoided.²¹⁰ The capital loss limitation has less bite because, unlike the return on an NQO, the return on stock is capital because it is treated as an investment, not as salary. Thus, returns on the stock and hedge offset each other for

206. Treas. Reg. § 1.1221-2(b).

207. Another problem with applying the hedging rules here is *Whipple v. Commissioner’s* conclusion that “full-time service to one corporation does not alone amount to a trade or business.” 373 U.S. 193, 202 (1963). Yet *Whipple* might be distinguished as applicable “[w]hen the only return is that of an investor,” since Mr. Whipple was a major investor in the firm. *Id.* In contrast, the typical executive’s primary relation to the firm is as an employee, not as an investor.

208. See I.R.C. § 83(a) (providing ordinary character for property received as salary).

209. The option grants would no longer be eligible for the “performance compensation” exception to section 162(m). See *supra* note 104. Yet the firm could avoid this issue by offering “performance” pay based on an easily attainable target (such as a low level of accounting earnings).

210. For instance, the executive could enter into a “collar” in which she retained risk of loss from \$100 to \$90 and opportunity for gain from \$100 to \$115.

tax purposes.²¹¹ While the straddle rules could apply, they have less impact because the two most severe consequences—indefinite deferral of hedging losses²¹² and the asymmetric rate effect²¹³—can be avoided under current law with a physically-settled hedge (i.e., in which the hedged asset is actually delivered in satisfaction of the hedge).²¹⁴ Whereas this structure cannot be used for options (i.e., because contractual restrictions prevent it from being transferred), no such constraint operates on stock (i.e., since it usually can be delivered).²¹⁵

211. For instance, if the stock rose to \$215, the executive would have \$115 of capital gain to absorb the \$100 capital loss on the cash-settled collar.

212. Since this effect does not arise with physically-settled hedges under current law, it is illustrated here with a cash-settled one. Assume the executive had two shares of stock, each bought for \$1, and hedged only one of them (i.e., with a \$90–\$115 collar). If the stock rose to \$215 and the executive settled the collar by paying \$100 to her counterparty (i.e., instead of delivering the stock), the straddle rules arguably would keep her from using this capital loss until she sold *both* shares of stock. For a discussion of this issue, see *supra* Part V.C.2.

213. Since this effect also is solved by physically-settled hedges under current law, it is illustrated with a cash-settled one. Assume the executive had only one share of stock, purchased for \$1, and hedged it with a \$90–\$115 collar. If the stock declined to \$20, she could receive a cash payment of \$70 upon cash settling the collar. This capital gain is *short-term*—regardless of how long she has held the collar or stock—because the collar and stock are a straddle. In effect, the gain replaces a corresponding \$70 decline in the built-in capital gain on the stock (since it declined from \$90 to \$20). If the executive held the stock for more than a year before hedging it, this built-in capital gain would have been *long-term* if she had sold the stock instead of hedging it. As a result, if the collar is cash settled, long-term capital gain on the stock is replaced with less desirable short-term gain on the collar.

214. For a discussion of why physically-settled derivatives avoid loss deferral and asymmetric tax rates under current law, see *supra* Part V.E.4. In general, unlike a cash-settled derivative, which the tax system treats as having tax consequences separate from the hedged asset—that is, separate losses (potentially subject to deferral) or separate gains (potentially rendered short-term)—physically-settled derivatives do not have tax consequences separate from those on the hedged asset, at least under current law. Instead, the physically-settled derivative merely sets the amount of gain on the hedged asset. For discussion of a legislative proposal that would modify this treatment if enacted, see *supra* note 203.

Under current law, in the examples in the preceding footnotes, if the stock falls to \$20 and the executive physically settles the collar, she is treated as having sold the stock at \$90, and thus has a long-term gain of \$89 (i.e., \$90 minus \$1)—instead of a long-term gain of \$19 on the stock and a short-term gain of \$70 on the collar, as she would have if the collar were cash-settled. Likewise, if the stock rises to \$215 and the executive physically settles the derivative, she is treated as having sold the stock at \$115, and thus has a gain of \$114 (i.e., \$115 minus \$1)—instead of a gain of \$214 and a separate \$100 loss on the collar, as she would have if the collar were cash-settled. (Under the President's straddle proposal, in contrast, she *would* have a \$100 loss on the collar, which would be capitalized, generally pro rata, into her basis in both the hedged stock and any unhedged stock. See *supra* note 203 (discussing proposed change in treatment of physical settlement)).

215. If the President's proposed straddle legislation is enacted in its current form, see *supra* note 160, the executive could no longer use physical settlement to avoid indefinite loss deferral. See *supra* note 203. As a result, the proposal would make stock hedging more difficult, while making options hedging easier. The result would be essentially the same tax cost for both types of hedging—a significant change from current law. The

The absence of a tax barrier is not necessarily troubling, since stock hedging presents less serious governance issues than options hedging. If shareholders want to restrict stock hedging, however, they cannot rely on the tax law for this function.²¹⁶

2. *Restricted Stock Grants.* — Although the tax constraints on stock hedging are usually limited, they can be severe—sometimes, almost as severe as on options hedging—if the executive received the stock as salary, instead of purchasing it with her own funds. Such stock hedging resembles options hedging for two reasons. First, like the return on an unexercised NQO (and unlike the return on stock generally), the return on a restricted stock grant is ordinary income.²¹⁷ As a result, if an executive hedges the stock before it vests, stock appreciation would be ordinary but hedging losses usually would be capital, thereby implicating the capital loss limitations.²¹⁸ Second, as with an option (and unlike with stock generally), transfer or sale of the restricted stock is contractually restricted. If the hedge must be cash settled, the straddle rules could trigger loss deferral and asymmetric rates.

On the other hand, if relevant contracts permit the executive to sell the restricted stock after it vests, the executive might structure a physically-settled hedge with a term longer than the vesting period. Then, adverse tax consequences could largely be avoided, including the capital loss limitations (since the hedge would serve to cap the sale price, instead of generating separate losses that could be subject to deferral).²¹⁹

If a physically-settled derivative is not possible, another way around these constraints—though not a cost-free one—is a so-called section 83(b) election. The election's effect is that the value of the property is treated as ordinary income when granted, and any subsequent apprecia-

constructive sale rules and unbalanced straddle problem could apply to either hedging method, but capital loss limitations and asymmetric rates usually would not.

216. Stock hedging should be banned, for instance, when limits on exercising options are eased as a way to encourage executives to own more stock. In so-called "reload" options, executives receive new at-the-money options when they exercise, so the new grant can restore time value lost in exercising the old one. See Gay, *supra* note 61, at R6 (describing reload options); see also Steven Huddart et al., *Valuing the Reload Features of Executive Stock Options* 2, 5–7 (March 1999) (National Bureau of Economic Research Working Paper No. 7020, published at <<http://www.nber.org/papers/w7020>>) (on file with the *Columbia Law Review*) (describing reload options and methods of valuing them). Some of these options also have "tax reload" features, in which new options replace stock that is sold to pay taxes. See Gay, *supra* note 61, at R7 (describing tax reload feature). In effect, the firm deliberately undoes the lock-in described above. See *supra* Part IV. One problem with such options, not widely recognized, is that they replace hard-to-hedge options with easy-to-hedge stock.

217. Under I.R.C. section 83, such stock generates ordinary income, in an amount equal to the stock's fair market value on the vesting date. This analysis assumes that the stock is nontransferable when granted, as usually is the case.

218. See *supra* note 160 for discussion of the President's straddle proposals, which could weaken the hedging barrier posed by the capital loss limitations.

219. See *supra* note 203 for discussion of the President's straddle proposals, which could diminish the distinction between physically-settled and cash-settled hedges.

tion is treated as capital gain.²²⁰ Thus, hedging the property does not trigger a character mismatch. Because the election is available for stock but not for a typical NQO,²²¹ stock grants are easier to hedge than NQOs. Even so, a section 83(b) election comes at a cost. Not only must the executive forgo deferral (i.e., by including the property's value in income in the year she receives it), but she gets no deduction if she forfeits the stock (e.g., upon leaving her job).²²²

VI. DESIRABILITY OF A TAX SOLUTION

Part V has described the tax law's significant role under current law. To sum up, although it has little effect on stock hedging, the tax law blocks options hedging more effectively than existing contract and securities law constraints in three ways. First, the tax barrier applies at firms that do not limit hedging by contract. Second, the tax barrier affects *all* U.S. executives, and not just the most senior ones (as do most securities law barriers). Third, the tax barrier applies to basket hedges that evade other barriers.²²³ The following Table compares the impact of various hedging constraints:

220. See Raasch & Rowland, *supra* note 96, at 39–41 (describing consequences of a section 83(b) election).

221. The reason is that a section 83(b) election is available only for "transfers of property." See Treas. Reg. § 1.83-2(a) (1978) ("property [must be] transferred (within the meaning of § 1.83-3(a))"). Grant of an option that does not have readily ascertainable value is not considered a "transfer of property." See Treas. Reg. § 1.83-3(a)(2) (as amended in 1985) (noting that "[t]he grant of an option to purchase certain property does not constitute a transfer of such property" and cross-referencing § 1.83-7 for "the extent to which the grant of the option itself is subject to section 83"); Treas. Reg. § 1.83-7(a) (1978) (option that does not have readily ascertainable fair market value is not subject to section 83 until it is exercised).

222. See I.R.C. § 83(b)(1) ("[I]f such property is subsequently forfeited, no deduction shall be allowed in respect of such forfeiture."); see also Treas. Reg. § 1.83-2(a) (1978) (same). Any deduction that is still permitted, such as upon selling the stock at a loss, is a less desirable capital loss. This prospect is not of concern to someone who is hedging, though. She is content as long as both the hedge and hedged asset generate gains and losses that can offset each other for tax purposes.

223. For two reasons, aggressive executives cannot avoid the tax barrier, as they can avoid section 16(c) of the Securities Exchange Act of 1934 and disclosure requirements, by relying on a colorable claim and expecting that it will never be challenged. First, there is simply no colorable claim under current law to get the executive the tax treatment she will likely need: usable ordinary hedging losses. Second, the issue cannot remain secret. Indeed, if the executive has hedging losses, she will have to bring them to the government's attention by listing them as a deduction. More generally, the tax system has the unique monitoring advantage of third-party reporting. See *infra* text accompanying note 228.

TABLE 14: CONTRACTUAL, SECURITIES LAW AND TAX CONSTRAINTS

Type	Normative Assessment	Securities Law & Contract	Tax
Single-stock option hedge	Usually undesirable	Insiders blocked; noninsiders permitted, subject to pledging cost	Blocked
Disproportionate basket hedge	Usually undesirable	Arguably permitted, subject to pledging cost	Blocked
Broad-based basket hedge	Possibly desirable	Permitted, subject to pledging cost	Blocked
Stock hedge	Less clear	Permitted	Permitted

Yet the tax law obviously is not the only way to fill these gaps. Without it, shareholders would have a strong interest in finding another. To an extent, executives would have an interest in cooperating (or at least seeming to cooperate) in order to earn extra compensation for taking risk. Given this potential confluence of interests, it seems likely that if the tax barrier is repealed—or, for that matter, if it had never arisen—contracts and the securities laws would be revised to block options hedging more effectively.

The question is, then, how desirable is it to address this problem with the tax law? In my view, it would be better to rely on contract or securities laws, but the tax barrier is a reasonably satisfactory solution in the United States as long as it is not repealed inadvertently. To develop this point, this Part describes the advantages of using the tax law, and then turns to the disadvantages. In brief, although there may be an administrative cost savings in using the tax system (since it is already monitoring options hedging for tax policy reasons), the tax barrier proves both under- and over-inclusive, and is also potentially unstable.

A. *Advantages of Using the Tax System: Administrative Costs and Transition Lags*

Since Professor Surrey's influential work,²²⁴ the costs of pursuing social policy through tax have been well understood. Even so, some of these costs are absent here, for a somewhat atypical reason: The U.S. tax system already monitors and punishes options hedging for tax policy reasons unrelated to corporate governance.²²⁵ Since the tax system is already pursuing these objectives, the added administrative cost is modest when society "subcontracts" this corporate governance task to the tax system.²²⁶ Because no new tax rules must be added, policing this practice

224. See Stanley S. Surrey, *Pathways to Tax Reform: The Concept of Tax Expenditures* 35–39 (1973) (proposing direct expenditure programs as an alternative to tax expenditures).

225. For a discussion of these tax policies, see *supra* Part V.A.

226. Cf. Edward A. Zelinsky, *Efficiency and Income Taxes: The Rehabilitation of Tax Incentives*, 64 Tex. L. Rev. 973, 1010 (1986) ("Tax incentives efficiently communicate government policies through an existing information network, that is, the network of professional advice and assistance that exists to comply with the tax law."). The tax barrier

does not add to the Code's complexity or increase compliance costs. Executives must already keep records, file returns, hire tax advisors, etc. The government, likewise, already is monitoring this compliance.²²⁷ While derivative transactions are hard to monitor, U.S. tax authorities have the advantage of third-party reporting (reinforced by penalties on the third parties for failing to comply).²²⁸

Without the tax barrier, firms and the SEC would have to tighten existing contractual and securities law limits on options hedging. Although attainable, the goal imposes costs. It is harder than restricting sale or exercise, because hedging does not require the firm's participation and thus is hard to detect, absent disclosure.²²⁹ To require disclosure, the firm (or the SEC) must define hedging. This task is not easy, since new forms of hedging are constantly being developed. Narrow definitions are easy to evade, while broad ones (such as those that include basket hedges) will be resisted as infringing on an executive's privacy in making investments unrelated to the firm. Either way, executives will need legal advice about how to comply, in addition to the tax advice they already are procuring. Likewise, firms (and the SEC) will have to hire employees to monitor compliance. Especially if enforced by the firm (rather than the SEC), the regime could impose morale costs. Executives

to exercise shares this administrative cost advantage, since this rule also already exists for tax-administration reasons. A difference, though, is that this constraint is easier to duplicate without the tax system (e.g., through penalties for early exercise or rewards for longer holding periods) since the firm, as the option counterparty, can easily monitor exercise.

227. Unfortunately, IRS enforcement activities are reported to have waned in recent months. Although the extent of the decline is disputed, IRS officials have acknowledged the problem. See, e.g., George Guttman, *The Interplay of Enforcement and Voluntary Compliance*, 83 *Tax Notes* 1683, 1683 (1999) ("[I]t is unclear whether the decrease in enforcement action is as pronounced as some claim. . . ."); David Cay Johnston, *Tax Professionals See Pitfalls in the New I.R.S.*, *N.Y. Times*, July 18, 1999, at 21 ("[I]n the agency's zeal to be friendly . . . tax enforcement has shriveled."); David Cay Johnston, *IRS Is Bolstering Efforts to Curb Cheating on Taxes*, *N.Y. Times*, Feb. 13, 2000, at A1 ("[T]he Clinton administration is proposing more money to find cheaters and make them pay up. And the [IRS's] top official has begun emphasizing that catching cheaters is as important as helping honest taxpayers."). While lax enforcement obviously is not helpful, I suspect the tax barrier to options hedging is largely unaffected. Even though lax enforcement is likely to encourage aggressive but colorable positions, it is hard to find even a plausible case under current law for avoiding the tax barrier. If their only course is to commit tax fraud—that is, to take a wholly unjustified position—executives will have strong reasons not to do so. If nothing else, even in the current environment their high incomes increase the risk of being audited (and, arguably, the reputational cost of being caught).

228. Thus, the investment bank usually must report to the IRS any payments it makes to executives on a hedge. See I.R.C. § 6041(a). Likewise, employers must report an executive's salary (including option gains) to the government and withhold a portion as tax.

229. See Easterbrook, *supra* note 7, at 101 & n.16 (noting that "[d]erivatives markets facilitate anonymous trading" and that "[t]he enforcement problem [associated with insider trading] is considerably more difficult when the trading occurs in derivatives than when it occurs in the stock market").

may resent disclosing to the board personal information unrelated to the firm, even though they are used to disclosing such information to the IRS. For boards, it may be easier to have the tax system prevent hedging, instead of taking on the “bad cop” role themselves.

Given these costs, it would have taken some time for contractual and securities law limits to be refined, and if the tax barrier had not been in place, a significant volume of options hedging could have occurred (and, indeed, could still occur if the tax barrier is repealed). The parties most likely to seek improved restrictions—shareholders and the SEC—are likely to learn of hedging opportunities only *after* executives hear about them. After all, the over-the-counter derivatives market is a recent creation whose implications for options hedging are not equally evident to everyone. Executives have had an informational edge, since investment banks have an incentive to educate them and to keep the education discreet²³⁰—a goal facilitated by porous disclosure obligations. Nor are executives likely to initiate the process of limiting hedging more effectively. Once the process begins, executives may cooperate to avert reputational and financial sanctions, but the onus will be on shareholders and the SEC to initiate the process (e.g., once media coverage has alerted them to the issue).

B. *Disadvantages of Using the Tax System: Imperfect Scope and Instability*

1. *Under-Inclusive Scope.* — Notwithstanding these advantages, use of the tax law here carries disadvantages as well. Since the tax barrier was not crafted with corporate governance in mind, it is not surprising that the barrier to options hedging is both under- and over-inclusive when evaluated from that perspective. In particular, it has three potential gaps. First, the barrier applies with much less force to stock hedging, although such hedging is less of a concern.²³¹

Second, the tax barrier does not affect executives who are not subject to U.S. tax liability because they are not U.S. citizens and their work does not have sufficient nexus to the U.S. economy.²³² This problem takes on particular urgency because option grants outside the United States are becoming increasingly common.²³³ In many cases, foreign firms seek to imitate U.S. compensation practices. Without the tax barrier, a key piece of the puzzle is missing. While tax and regulatory barriers to hedging in other jurisdictions are beyond this Article’s scope, they should be scruti-

230. Investment bankers could expect fees from the hedge, as well as from work that grateful executives could provide (e.g., securities offerings).

231. See *supra* Part V.F and Part II.A.5.

232. U.S. citizens and resident aliens are subject to tax on their worldwide income, regardless of where it is earned. See Treas. Reg. § 1.1-1(b) (as amended in 1974); Joel D. Kuntz & Robert J. Peroni, 1 U.S. International Taxation B1-50 (1992). In contrast, foreigners generally are taxed on salary income only if it is “effectively connected” to the United States. I.R.C. § 871(b). See 2 Kuntz & Peroni, *supra*, at C1-75.

233. See *supra* note 20.

nized. If they are ineffective, as I suspect they may be,²³⁴ contractual or regulatory responses are urgently needed when this U.S. compensation trend is exported.

Third, even in the United States, the tax barrier to options hedging has a gap. Although it creates chilling *ex ante* risks in all cases, some costs (i.e., from the capital loss limitations, straddle rules, and asymmetric tax rates) arise only if the stock price *increases* after the executive hedges, not if it declines.²³⁵ However, this gap may not be very significant. Risk neutral executives should be deterred because these costs as the stock rises are not offset by any benefits as the stock price falls. For risk-averse executives, moreover, the bad outcome is a sufficient deterrent. Nor can executives usually predict a decline in the stock price with certainty. A rational executive will not drive down the stock price merely to break even on her hedge, since the reputational costs of such a "success" could be career-ending. In addition, an executive cannot legally use inside information.²³⁶ Although she may have advantages in assessing public information, it is hard to be certain that the stock price will fall in absolute terms,²³⁷ since even poor performers drift upward in a rising market.²³⁸

2. *Over-Inclusive Scope.* — Not only does that tax barrier *omit* some hedging that should be covered, but it arguably *covers* some hedging that should be omitted. Specifically, the tax barrier penalizes broad-based basket hedges along with disproportionate ones,²³⁹ even though the for-

234. For instance, the U.S. tax barrier is unlikely to be replicated elsewhere. Even jurisdictions that pursue the tax policies underlying the U.S. tax barrier (i.e., limiting the timing option and separately accounting for active and passive income) are likely to do so by different means.

235. The tax risk can be reduced somewhat if the executive pays for a put by giving the counterparty cash, instead of a call option. Then, the maximum nondeductible loss as the stock price rises will be the premium paid for the put. Yet although the tax loss is no longer unlimited, it still can be quite sizable. In any event, purchasing a put for cash is seldom attractive because the out-of-pocket cost is so large. See *supra* Part I.B.

236. Firm trading policies, discussed *supra* in notes 65–67 and accompanying text, also impede use of inside information by preventing executives from trading except immediately after periodic disclosure.

237. Indeed, an executive's predictive powers may be fairly unreliable. In a recent survey, Smartmoney.com noted that, over a twenty-four-week period in which the Dow Jones Industrial Average rose by 9%, the 92 companies in which insiders had increased their holdings had an average drop in stock price of 2.7%. The 227 firms in which insiders reduced their holdings were up an average of 16.8%. See Paul R. La Monica, *The Clueless Insiders*, Smartmoney.com (Feb. 11, 1999) <<http://www.smartmoney.com/smt/screen/index.cfm?story=19990211intro>> (on file with the *Columbia Law Review*).

238. The tax risk also generates two second-order effects. By thinning the ranks of executives who would be interested in hedging, it may discourage investment bankers from marketing these products. From the executive's perspective, moreover, the tax risk creates a signaling cost. If hedging is plausible only for those who expect declines, it becomes all the more embarrassing if detected.

239. In defense of the tax barrier, its penalty for disproportionate basket hedges is more severe than for broad-based ones, because only the former is clearly a straddle—with the attendant risk of loss deferral and asymmetric rates. See *supra* note 152. Yet the capital loss limitations still apply, even to broad-based basket hedges. Unfortunately, if the

mer may appeal to shareholders in replicating an indexed option. More generally, the tax barrier has the disadvantages of a uniform rule imposed by the government. Off-the-rack government interventions may discourage private parties from developing better solutions. Executives are not equally risk averse and do not have uniform preferences, and so a single solution is unlikely to be appropriate in all cases.²⁴⁰

Nevertheless, this concern should not be overstated, because a uniform ban could have advantages in this context—although, if a government-imposed rule is desired, it should be supplied by the SEC rather than the tax system. A uniform ban is less daunting here because substitutes for options hedging remain available. Instead of allowing executives to hedge with third parties, the firm itself can supply a hedge or otherwise adjust the executive's pay. These steps do not trigger the tax barrier to hedging, and they impose fewer transaction costs and are more transparent than third-party hedging.²⁴¹ A uniform ban does have an advantage, moreover. Without a clear prohibition, shareholders may find it expensive to "price" the diverse hedging restrictions that could arise.²⁴² Informed shareholders know that an executive's incentive is to stop the appearance, but perhaps not the reality, of hedging. They also realize that only careful observers can distinguish between "real" and "staged" anti-hedging policies. To ensure that, in the absence of a uniform ban, executives are not exploiting these impediments to monitoring, shareholders will have to scrutinize details of the firm's basket-hedging policy, such as the minimum tracking error it requires and the vigor of the board's enforcement efforts.²⁴³ The game may not be worth the candle,

President's straddle proposal is enacted, see *supra* note 160, the relative severity of the penalties would be reversed. Hedges that create straddles, such as single-stock and disproportionate basket hedges, would avoid the capital loss limitations because the proposal would add hedging losses to the option's basis. Yet this ability to capitalize loss would not be available if the option and hedge were not a straddle. As a broad-based basket hedge arguably would not constitute a straddle with a compensatory option, the capital loss limitations would still apply.

240. Cf. Easterbrook, *supra* note 7, at 103 ("One-size-fits-all is as bad in the corporate market as in the clothing market."). Relatedly, there are efficiencies (and perhaps appealing distributional effects) when parties to a contract internalize the costs of implementing it. This concern is less compelling here because the marginal cost to the tax system of penalizing hedging is low.

241. While the use of puts and noncontingent cash payments could render compensation nondeductible (because they would undermine performance-based compensations, see *supra* note 104), the firm could avoid this issue with nominally performance-based cash bonuses or indexed options, albeit at the cost of less favorable accounting. See *supra* text accompanying notes 42–49.

242. See John C. Coffee, Jr., *The Mandatory/Enabling Balance in Corporate Law: An Essay on the Judicial Role*, 89 *Colum. L. Rev.* 1618, 1678 (1989) ("Put simply, standardization of contract terms through the use of mandatory legal rules reduces information costs for investors.").

243. Sometimes boards enforce policies only as needed to avoid adverse publicity. For example, at the insistence of institutional investors, many boards require managers to purchase stock with their own funds. Yet the *Wall Street Journal* reports that these programs

since any single shareholder will not capture all benefits of monitoring. Instead, rationally ignorant shareholders may assume that hedging is occurring at all firms, and particular firms and executives may have difficulty rebutting this presumption.²⁴⁴ This problem is less likely if the hedging ban and enforcement mechanism are uniform. Understanding one regime is cheaper than scouring variations for hidden loopholes.²⁴⁵ Yet if the government must intervene, the securities laws provide a better vehicle than does the tax law. Although the tax law has a potential administrative cost advantage, described above, the SEC has the offsetting advantage of greater corporate governance expertise. Indeed, the tax system has a poor track record, at least in terms of corporate governance steps it has taken deliberately.²⁴⁶

3. *Instability.* — A further vulnerability, in addition to its under- and over-inclusive scope, is that the tax barrier might be unsettled as inadvertently as it fell into place. The staff advising on tax legislation or administrative pronouncements is unlikely to consider (or even to be aware of) a new tax rule's corporate governance implications. For example, the asymmetric-tax-rate effect arises only if different tax rates govern ordinary income and long-term capital gain—something that was not true as recently as 1986—and that may cease to be true in the future (especially if the Democrats regain control of Congress while retaining the White House).²⁴⁷ More fundamentally, two different legislative proposals in the last two sessions of Congress would inadvertently weaken, or even eliminate, the tax barrier if enacted. Proposed changes in the straddle rules offered by the President in February, 2000, could largely eviscerate the tax barrier.²⁴⁸ Repeal of the AMT, as proposed by Chairman Archer in 1999, would allow options hedging with swaps.²⁴⁹ The latter outcome would also be feasible if swap expenses become deductible under the

often are public relations charades. See Gogoi, *supra* note 62, at R3. Some firms lend executives the purchase price and then forgive or guarantee the loan. See *id.* (citing examples of Baxter International Inc. and Eastman Kodak Co.). The guidelines are seldom enforced. "I would fall over backwards," one compensation consultant said, "if the company fired someone for not meeting guidelines." *Id.* (quoting Carol Bowie, director of publications at Executive Compensation Advisory Services).

244. See Eisenberg, *supra* note 41, at 1522 (describing the problem that potential investors are unsure whether a firm's structural rules are unduly favorable to management as "a special case of the market for lemons").

245. See, e.g., Jeffrey N. Gordon, *The Mandatory Structure of Corporate Law*, 89 *Colum. L. Rev.* 1549, 1565 (1989) ("[W]ith mandatory terms, the investor is on an equal footing with the firm, because the investor can spread the cost of understanding charter terms across all firms considered for investment.").

246. See *supra* Part IV.A (noting flaws in ISO rules and section 162(m)); see also sources cited in *supra* note 17 (criticizing other uses of tax law to pursue corporate governance goals).

247. I have written elsewhere about the instability of the capital gains preference. See Schizer, *supra* note 107, at 1579–82, 1592–93, 1601–06.

248. See *supra* note 160.

249. See *supra* note 180 and accompanying text.

AMT, a more modest step that is reasonably likely in light of the tax bar's ongoing debate about the tax rules for swaps.²⁵⁰

In more general terms, the political currents that can alter the relevant tax laws—or, for that matter, keep them in place—spring from sources broader than, and, indeed, far removed from, corporate governance. This can be a strength, in that executives cannot capture the process. Nevertheless, it is also a weakness. If the tax law changes in response to unrelated pressures and concerns, a likely prospect in my opinion, the tax barrier will be gone. In the coming years, then, other hedging barriers will be needed.

VII. RECOMMENDATIONS

A. *Universal Contractual Prohibitions*

Given the tax barrier's overbreadth and instability, as well as its limited effect outside the United States, all firms should restrict options hedging by contract. Like vesting provisions, these limits should govern all executives who receive options, rather than just senior officers. Thus, firms should restrict single-stock options hedging and disproportionate basket hedging at least as much as exercise²⁵¹ and should punish offenders through measures such as revocation of option grants.²⁵²

Firms should also develop policies on stock hedging and broad-based basket hedging. Since these practices can *improve* managerial incentives in some cases, the concern they raise most consistently is transparency. Instead of a ban, then, firms should permit such hedging as long as it is disclosed to the firm, so the compensation committee can make informed judgments about executives' incentives.²⁵³ Firms may also choose to release this information to shareholders in some cases (e.g., for executives with sufficiently large option grants or stock holdings).

B. *Securities Laws*²⁵⁴

Since basket hedges can affect an executive's incentives—often favorably in the case of broad-based baskets and unfavorably in the case of disproportionate ones—these practices should be disclosed. The SEC

250. See NYSBA Swap Report, *supra* note 174, at 1306–10.

251. In my view, firms should restrict hedging more severely than exercise. Exercise triggers the firm's tax deduction, but hedging does not. Moreover, exercise is discouraged by noncontractual constraints that may not apply to hedging, such as loss of time value.

252. Firms might distinguish disproportionate basket hedging from broad-based basket hedging through tracking error or the extent of the firm's representation in the basket. Alternatively, some firms may prefer to ban *all* basket hedging, while offering indexed options to those who want them.

253. A more restrictive policy, which also is plausible, is to have a general prohibition on these practices, while authorizing the compensation committee to grant exceptions upon request.

254. Although this discussion refers explicitly to U.S. securities law, corresponding adjustments should be made in other jurisdictions.

can accomplish this result by modifying the disclosure rules promulgated under section 16.

More effective hedging disclosure would allow shareholders to make informed judgments, and also should induce boards to negotiate contractual responses, which should decrease the need for mandatory hedging bans. On the other hand, a mandatory ban offers shareholders the ability to evaluate the ban cheaply, which lessens the likelihood of "staged" anti-hedging policies and lemon pricing. On balance, this latter advantage justifies a mandatory ban on single-stock hedging and disproportionate basket hedging, since these practices seldom serve a constructive purpose (or, at least, one that cannot be achieved in a more transparent way).²⁵⁵ However, a mandatory ban is not appropriate for stock hedging and broad-based basket hedging, as such hedging sometimes creates favorable incentives.²⁵⁶ Thus, Rule 16c-4 should not be extended to stock or broad-based basket hedging. However, the rule (and authorities construing it) should more clearly prohibit disproportionate basket hedges by adding a test based on tracking error or representation. Likewise, the SEC should continue to read the rule to bar single-stock options hedging, even if the rule is no longer applied to hedges of other derivative positions (such as convertible preferred).²⁵⁷

Finally, the SEC should expand the group of executives subject to disclosure obligations and section 16(c) so that, in addition to insiders as currently defined, the group includes those who have options on more than a threshold value (or amount) of stock or options. If this group's incentives are sufficiently important to warrant large grants, these incentives are worth monitoring and safeguarding. Alternatively, if these incentives are not important (e.g., because the executives are not senior enough to influence firm performance), firms should stop giving options, rather than giving them and allowing hedging.

CONCLUSION

In revealing the difficulty of options hedging in the United States, this Article confirms the relevance of debates about the proper structure

255. For instance, an executive who wants less firm-specific risk can dispose of vested options and can negotiate for a higher proportion of cash in future compensation. Nevertheless, if scenarios arise in which options hedging would prove desirable for all concerned—a remote prospect given the costliness of hedging and the availability of alternatives—section 16(c) of the Securities Exchange Act of 1934 could be amended to allow exceptions to its ban. Any exceptions should be conditioned on strict procedural safeguards, such as unanimous approval by independent directors coupled with prominent disclosure to shareholders.

256. A ban could plausibly be justified on the theory that other means (such as indexed options) are available to attain these goals more transparently. Yet as long as the transactions are disclosed in an effective manner, the harm from permitting them should be limited.

257. See *supra* note 85, noting that the SEC has offered section 16(c) relief in certain instances without offering a rationale.

of options packages. This Article also demonstrates an advantage, not previously understood, of motivating executives through options instead of stock ownership.²⁵⁸ The tax law makes it much more difficult to hedge options than stock.²⁵⁹ Indeed, stock ownership may not motivate executives, absent effective disclosure and contractual limits on stock hedging. For the same reason, recent empirical studies measuring the effect of stock price fluctuations on CEO wealth are more reliable to the extent that they consider options rather than stock.²⁶⁰

There is a more general lesson here about derivatives. Institutional detail matters profoundly. Many have observed the derivatives market's potential to change the tax system, the capital markets, and, indeed, the economy as a whole. This prediction is clearly correct. Derivatives are already changing our economic lives. Yet in assessing their impact, we must consider the tax and other legal regimes governing derivatives. Although these regimes are obscure and often highly technical, the careful student can reap rich rewards because the devil (or, in this case, the angel) is in the details.

Such careful study is necessary in adapting options for use in other jurisdictions. In the United States, the tax law has facilitated effective use of options. Tax laws in other jurisdictions are unlikely to serve this function, since the U.S. tax barrier arose in response to tax policy objectives that will not be relevant in some other jurisdictions, and will be pursued differently in others. Without effective barriers to hedging, though, use of options is not advisable. This Article offers further evidence that governance practices are creatures of law and culture, as well as economics.²⁶¹

258. Others have already observed the superior risk effects of options. See, e.g., Tufano, *supra* note 53, at 1129 (linking managerial ownership of options and risk management).

259. To be precise, the key distinction for tax purposes is whether the property was received as compensation or was purchased with the executive's own money. Thus, grants of stock as salary can still be difficult to hedge in some cases, whereas stock purchased by the executive (including through exercise of a compensatory option) is not. Rule 16-c(4), in contrast, distinguishes between options and stock—regardless of how they were acquired—and in essence allows all stock hedging. See C.F.R. § 240.16-c(4) (1999).

260. See, e.g., Brian J. Hall & Jeffrey B. Liebman, Are CEOs Really Paid Like Bureaucrats?, 113 *Q.J. Econ.* 653, 668–70 (1998) (concluding that the sensitivity of CEO wealth to fluctuations in stock prices is greater than previously recognized). For measures of stock ownership, the executive's obligation since the mid-1990s to disclose single stock hedges is helpful but the absence of disclosure on baskets represents a potentially significant gap. See also *supra* text accompanying note 76 (commercial services do not report hedging to market).

261. See, e.g., Ronald J. Gilson & Mark J. Roe, Lifetime Employment: Labor Peace and the Evolution of Japanese Corporate Governance, 99 *Colum. L. Rev.* 508, 540 (1999) (Japanese firms were motivated to invest in human capital, not in response to lifetime employment policies, but in an effort to undermine organized labor. Therefore, the U.S. will be unable to induce firms to invest in workers by implementing lifetime employment guarantees alone.)

The impact of tax on corporate governance has been under-explored, perhaps because tax experts seldom think about corporate governance, and corporate experts seldom think about tax. Whereas U.S. tax law sometimes impedes effective corporate governance,²⁶² its impact is more balanced than scholars have recognized. For now, contract and the securities law are not limiting hedging comprehensively. Thus, the tax law is making a significant contribution: It keeps insiders from using disproportionate basket hedges and prevents less senior executives from using these and more straightforward hedges. While the tax law is not the best method of pursuing this goal—particularly because this regime can change for unrelated reasons—the tax law is, nevertheless, serving a useful corporate governance function. There may be similar stories yet to be told.

More generally, we should recognize the profound influence of our tax laws. Their effects ripple throughout the economy, sometimes in ways no one intended and few recognized. We should approach changes in the tax system, especially fundamental ones, with humility. Some collateral consequences will be good. Others will not. The only certainty is that no one can anticipate them all.

262. See *supra* note 17.