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## **BOOK/TAX CONFORMITY AND EQUITY COMPENSATION**

Boston University School of Law Working Paper No. 08-23

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# Book/Tax Conformity And Equity Compensation

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\* Acknowledgements to follow.

## Abstract

Should we require companies to report the same amount of income to the IRS as they report to their shareholders? The idea behind “book/tax conformity” is that managers’ desire to increase reported earnings would act as a check on their desire to minimize taxable income, and vice versa. Some scholars have proposed a comprehensive approach, adopting financial income as the basis for corporate taxation. Legislators, meanwhile, have offered a targeted approach that singles out equity compensation, which has historically been a significant source of the “gap” between book income and taxable income.

This Article argues that book/tax conformity carries unexplored costs that reduce its attractiveness, at least in the context of equity compensation (and quite possibly in other areas as well). Conforming the employer’s tax treatment of stock and options with the accounting rules creates a paradox for employee-level taxation. Either employee taxation is also conformed to book, which raises liquidity, fairness, and other concerns, or we must diverge from section 83(h), which limits the employer’s deduction to the amount included by the employee as income. Severing this link between the employer’s deduction and the employee’s inclusion would eliminate an important check on tax gamesmanship that is analogous to the check that book/tax conformity proponents seek to create. Conforming tax deductions for options with book, in other words, may simply trade one form of gamesmanship for another.

More broadly, book/tax conformity must be evaluated in light of (1) the cost of other gamesmanship that may result from conformity, (2) the availability of other means of combating manipulation, (3) potential distortions in compensation design, and (4) effects on the decision to be a private or public company. We conclude that equity compensation should be excluded from comprehensive book/tax conformity regimes, and one-off proposals to conform employer taxation of stock and options with book are probably misguided. On the other hand, we suggest that if targeted conformity of equity compensation is desired, revising the accounting rules for options to match those of stock appreciation rights, which would yield conformity at the tax end of the spectrum, possibly could improve upon the status quo.

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## I. INTRODUCTION

The idea of harmonizing the corporate income tax and financial accounting systems is alluring, as it would simultaneously place a check on two types of wasteful gamesmanship. Managers could massage the books to maximize reported earnings, or they could scheme to minimize taxable income, but at least they could not do both at the same time. Instead, gamesmanship would result in a cost in terms of either reported earnings or taxable income.

Scholars and legislators have offered both comprehensive and targeted book/tax conformity proposals. Comprehensive proposals, such as that suggested by Professor Desai, generally advocate using reported earnings as the base for corporate taxation with a few specific modifications to preserve certain tax preferences, such as accelerated tax depreciation.<sup>1</sup> Most recently, Professor Shaviro has proposed a comprehensive book/tax conformity plan that would increase corporate taxable income by 50% of the difference between a firm's book income and its taxable income computed without the adjustment.<sup>2</sup> Other proposals<sup>3</sup> are targeted more narrowly at equity compensation, a particular non-conforming item that has historically accounted for the largest chunk of the book/tax "gap."<sup>4</sup>

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<sup>1</sup> See Mihir A. Desai, *The Degradation of Reported Corporate Profits*, 19 J. ECON. PERSP. (2005); Mitchell L. Engler, *Corporate Tax Shelters and Narrowing the Book/Tax "GAAP,"* 2001 COLUM. BUS. L. REV. 539; Celia Whitaker, *Bridging the Book-Tax Accounting Gap*, 115 YALE L.J. 680 (2005); George K. Yin, *Getting Serious About Corporate Tax Shelters: Taking a Lesson from History*, 54 S.M.U. L. REV. 209 (2001).

<sup>2</sup> Daniel Shaviro, *The Optimal Relationship Between Taxable Income and Financial Accounting Income: An Analysis and a Proposal* (NYU Law and Economics Research Paper No. 07-38, Feb. 2008), available at <http://ssrn.com/abstract=1017073> (proposing that taxable income of large public corporations be adjusted by 50% of the positive difference between an adjusted earnings figure and taxable income as otherwise determined).

<sup>3</sup> See Ending Corporate Tax Favors for Stock Options Act, S. 2116, 110th Cong. (2007) (bill introduced by Senator Levin on Sept. 28, 2007 that would limit corporate tax deductions for stock options to the amount recognized as an expense in financial statements); *Executive Stock Options: Should the IRS and Stockholders Be Given Different Information?: Hearing Before the Permanent Subcomm. on Investigations of the S. Comm. on Homeland Security and Governmental Affairs*, 110th Cong. (2007) (statement of Sen. Carl Levin, Chairman, Permanent Subcomm. on Investigations of the S. Comm. on Homeland Security and Governmental Affairs) [hereinafter Levin statement]; Mihir A. Desai, *Tax, Accounting Treatment of Stock Options Should Be the Same*, 115 TAX NOTES 1301 (2007) (reprinting testimony presented at the subcommittee hearing chaired by Senator Levin).

<sup>4</sup> See Mihir A. Desai, *The Divergence Between Book and Tax Income*, 17 NBER/TAX POL'Y & ECON. 169, 180 (2003) (finding that stock option exercise accounted for the largest component of the gap between book and tax income in the

The book/tax “gap” associated with equity compensation and other items results from the fact that tax and accounting systems travel on different tracks. The timing and amount of the tax deduction taken by an employer for compensation delivered in the form of stock options or restricted stock differs from the expense recorded for financial reporting purposes.<sup>5</sup> The book/tax “gap” for option compensation has narrowed considerably in recent years, as a new financial accounting rule (SFAS 123R) requires the fair value of options to be expensed over the option vesting period.<sup>6</sup> Nonetheless, the measurement of equity compensation expense for financial accounting purposes remains separate and distinct from the tax calculation.

Book/tax conformity proponents note that the failure to use a single measure of compensation expense allows firms to game the system: they can artificially inflate accounting earnings without suffering a corresponding increase in taxes. Likewise, they can shelter income from tax without taking a hit to earnings.<sup>7</sup> Because firms generally wish to report high income to investors but low income to the IRS, conforming employer-level book and tax treatment would provide a check on abuses of both reporting systems.<sup>8</sup>

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late 1990s); *see also*, OFFICE OF TAX POLICY, U.S. DEPT. OF THE TREASURY, APPROACHES TO IMPROVE THE COMPETITIVENESS OF THE U.S. BUSINESS TAX SYSTEM FOR THE 21<sup>ST</sup> CENTURY 101 (White Paper, Dec. 20, 2007) (concluding that “while full [book/tax] conformity might not be an appealing template for business tax reform, policymakers should keep in mind the potential simplification benefits of more targeted conformity”).

<sup>5</sup> *See infra* Part II.A.

<sup>6</sup> *See* FIN. ACCT. STD. BD., STATEMENT OF FINANCIAL ACCOUNTING STANDARDS NO. 123 (REVISED 2004) [hereinafter SFAS 123R].

<sup>7</sup> *See* Desai, *supra* note 1, at 171-192; Engler, *supra* note 1; Whitaker, *supra* note 1, at 691-93; Yin, *supra* note 1, at 25; Shaviro, *supra* note 2, at 24. A related concern of some commentators is that in recent years aggregate tax deductions for option compensation have far exceeded the aggregate expense reported to investors. *See* Levin statement, *supra* note 3. However, as discussed *infra*, gaming aside, there should be no bias between the expected values of options, which are recorded as an expense, and their realized values, which are deducted for tax purposes. Thus, it is not obvious that we should be concerned about book/tax differences aside from the gaming potential.

<sup>8</sup> *See*, Desai, *supra* note 1, at 190 (noting that closer book/tax conformity will reduce managers’ opportunities to abuse discrepancies between the two systems); Engler, *supra* note 1, at 545-49 (noting that comprehensive book/tax conformity might reduce abuses, but concluding that such a proposal is unacceptably overbroad); Shaviro, *supra* note 2, at 4 (“Absent our two-book system . . . corporate executives would often be forced to choose between the earnings management goal of increasing reported income and the tax planning goal of reducing it, rather than being able, in many cases, to enjoy the best of both worlds”); Whitaker, *supra* note 1, at 697 (“By linking the consequences of tax and book reporting, a unified system could make such abusive accounting more painful and less attractive. If any increase in reported book income also meant increased tax liability, or if intended tax losses had to appear in

This Article argues that book/tax conformity carries unexplored costs that reduce its attractiveness as a policy prescription, at least in the context of equity compensation (and quite possibly in other areas as well). Conforming the employer's tax treatment of stock and options with the accounting rules creates a paradox for employee-level taxation. Either employee taxation is also conformed to book, which yields grant date taxation and raises liquidity, fairness, and other concerns; or else we must deviate from section 83(h), which limits the employer's deduction to the amount included by the employee as income. Severing the link between the employer's deduction and the employee's income would eliminate a check on tax gamesmanship that is analogous to the check that book/tax conformity proponents seek to create. Simply conforming employer tax deductions for equity to book, in other words, may trade one form of gamesmanship for another.

More broadly, book/tax conformity must be evaluated in light of (1) the cost of other gamesmanship that may result from book/tax conformity, (2) the availability of other means of combating manipulation, (3) potential distortions in compensation design, and (4) effects on the decision to be a private or public company. We conclude that equity compensation should be excluded from comprehensive book/tax conformity regimes. Similarly, one-off proposals to conform employer taxation of stock and options with book are misguided, at least as currently proposed. On the other hand, we show that adjusting the accounting treatment for stock options to mirror that of stock appreciation rights would conform option book treatment to tax, largely accomplish the goals of those advocating reform, and avoid the pitfalls associated with option conformity at book. If politically feasible, this alternative could represent an improvement over the status quo.

This Article is organized as follows. In Part II, we review the relevant tax and accounting rules and the gaming incentives they create. In Part III, we analyze the pros and cons of book/tax conformity as it relates to equity compensation. Part IV concludes.

## II. BACKGROUND

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financial statements, the tradeoff would induce corporations to be cautious in reporting to investors and would likely increase the amount of income reported to the IRS"); Yin, *supra* note 1, at 227 (noting that using book earnings as the starting point for federal taxation mitigates the incentive to abuse ambiguities in the tax code, but arguing that accounting abuses and gaming would remain).

We begin with a brief review of the current accounting, tax, and disclosure rules applicable to equity compensation. We then consider why these rules matter to managers and businesses, why firms might manipulate the rules to over- or under-report compensation, and how conformity might mitigate gaming.

## A. Accounting, Tax Treatment, and Disclosure under the Current Rules

### 1. Financial Accounting for Equity Compensation

Ideally, financial accounting for stock, stock options, other equity compensation instruments, and cash compensation should be consistent, as each of these items reflects a cost of employee services. In the eyes of most commentators, the current financial accounting rules largely achieve that goal. Importantly, the anomalous treatment of stock options was rectified by the Financial Accounting Standard Board's (FASB's) adoption of SFAS 123R in 2004. But SFAS 123R did not fix everything: a significant disparity between the accounting treatment of options and economically equivalent stock appreciation rights still remains.

*Stock options.* Since 2005, public companies have been required to expense the expected value of options provided to employees as compensation.<sup>9</sup> Under the current accounting standard, companies must first calculate the fair value of options as of the date of grant using the Black-Scholes, binomial, or other appropriate option pricing model.<sup>10</sup> Then, they must ratably record this amount as an expense over the vesting period of the option.<sup>11</sup> Under GAAP in force prior to 2005, no expense had to be recorded with respect to standard options issued at or

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<sup>9</sup> See SFAS 123R, *supra* note 6. Technically, companies are required to recognize the cost of compensation. Generally, that cost will be recognized as an expense, but in some situations firms are required to capitalize compensation cost. See *id.* ¶ 5 & n.5. For simplicity, we will assume the former and speak throughout of “expensing” compensation cost.

<sup>10</sup> Conceptually, the fair value of an option is the price that would be achieved in an arm's length exchange. See SFAS 123R, *supra* note 6, ¶ A7. However, while vesting requirements would obviously affect the market value of an option, SFAS 123R instructs firms to calculate fair value ignoring vesting restrictions. See SFAS 123R, ¶ A9. Vesting is accounted for separately by recognizing compensation cost only for options that ultimately vest. See *id.*

The following information is required to calculate option value: market price of the stock as of the date of measurement, exercise price of the option, expected time to exercise, estimated volatility, the risk-free rate of return, and the expected rate of dividends. See RICHARD A. BREALEY ET AL., PRINCIPLES OF CORPORATE FINANCE (8th ed. 2006).

<sup>11</sup> See SFAS 123R, *supra* note 6, ¶ 16-20, 39-49.

out of the money,<sup>12</sup> although between 1995 and 2005 firms that failed to voluntarily expense options were required to provide pro forma earnings statements in the footnotes to their financial reports that did include option expense.<sup>13</sup> Despite lingering questions about the suitability of using existing option pricing models, which were designed to value short-term tradable options, to value long-term, non-tradable employee stock options, the FASB and most commentators agree that the current accounting treatment for employee options represents a vast improvement over the prior regime and is reasonably consistent with accounting for cash compensation.<sup>14</sup>

*Restricted Stock.* The accounting treatment for restricted stock is roughly consistent with that of cash compensation. The compensation value of restricted stock as of the date of grant is expensed over the vesting period of the stock.<sup>15</sup>

*SARs.* Stock appreciation rights (SARs) are economically equivalent to stock options, but they are settled in cash, or in cash or stock at the employee's or employer's option.<sup>16</sup> Under SFAS 123R, cash-settled SARs are treated as liabilities, rather than equity instruments. As such, their realized value, rather than their expected value, is ultimately

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<sup>12</sup> See ACCT. PRINCIPLES BD., OPINION NO. 25, ACCOUNTING FOR STOCK ISSUED TO EMPLOYEES (1972) [hereinafter APB 25]. Under APB 25, only the intrinsic value of an option – the degree to which an option was in the money – at the date of grant was recognized as an expense. There were exceptions, however. For example, an option issued at the money with an exercise price indexed to the market or an at-the-money option that vested only if certain performance targets were achieved would have resulted in an accounting expense. See FIN. ACCT. STD. BD., EXPOSURE DRAFT: ACCOUNTING FOR STOCK-BASED COMPENSATION ¶ 66-67 (June 30, 1993). SFAS 123R eliminated accounting-induced preferences for particular option designs.

<sup>13</sup> FIN. ACCT. STD. BD., STATEMENT OF FINANCIAL ACCOUNTING STANDARDS NO. 123 (1995) [hereinafter SFAS 123].

<sup>14</sup> See SFAS 123R, *supra* note 6, Appendix B (discussing the bases for the FASB's decision to mandate fair value accounting for options); *infra* Part III.B.1.a (discussing why option pricing models imperfectly value employee stock options).

<sup>15</sup> See SFAS 123R, *supra* note 6, ¶ 21, 39-49.

For the uninitiated, restricted stock is stock that is provided to an employee at no explicit cost or at a discount to the market price, but is nontransferable and forfeitable up until a specified vesting date. See Judith E. Alden & Murray S. Akresh, *Using Equity to Compensate Executives*, in EXECUTIVE COMPENSATION 67, 82 (Yale D. Tauber & Donald R. Levy eds., 2002). The amount expensed is the full value of stock that is granted at no explicit charge to the employee or the discounted amount for any bargain sales of stock to employees. Restricted stock granted to employees of public companies generally involves no explicit charge to the employee. This will be our assumption in the analysis that follows, although the analysis of bargain sales is analogous.

<sup>16</sup> See Alden & Akresh, *supra* note 15, at 98.

expensed.<sup>17</sup> In brief, firms issuing SARs also utilize an option pricing model to initially value the units, but they are required to update their valuations and modify expense recognition between the dates of grant and exercise. As a result of marking these units to market, the cumulative amount expensed equals the amount realized by the employee on exercise.<sup>18</sup>

## 2. Tax Treatment

The taxation of equity compensation arrangements begins with IRC § 83. That section provides the baseline rule that property received in exchange for services is treated as ordinary income when the property is received. Because of valuation and liquidity concerns, however, recognition is often deferred for tax purposes until a realization event occurs, such as the exercise of a stock option or the vesting of a contractual right to sell one's stock.

*ISOs.* The tax treatment of stock options depends on whether the options qualify as incentive stock options (ISOs). A limited number of ISOs can be granted each year to each employee.<sup>19</sup> If holding period and other requirements are met, the employee is not taxed until the stock received on exercise of the ISO is disposed of, and the entire gain is taxed at long term capital gains rates.<sup>20</sup> In this case, the employer receives no tax deduction.<sup>21</sup>

*NQSOs.* Although important in certain industries, such as the technology sector, ISOs are estimated to account for only about 5% of option grants.<sup>22</sup> We will focus here instead on non-qualified stock

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<sup>17</sup> See SFAS 123R, *supra* note 6, ¶ 28-38. SAR treatment also applies to tandem awards of stock options and SARs that provide the recipient with a choice of exercising the option or the SAR, but not both. See *id.* ¶ A198-A200.

<sup>18</sup> See *infra* Part III.C.1 for an example of SAR accounting.

<sup>19</sup> The grant date fair market value of shares underlying ISOs that first become exercisable by an employee in any year may not exceed \$100,000. IRC § 422(d).

<sup>20</sup> To qualify for ISO tax treatment, the shares may not be sold within one year of option exercise or two years of the option grant. See IRC § 422(a). It is important to note, however, that the spread on an ISO at exercise (the difference between the then fair market value of the shares and the exercise price) is an adjustment for purposes of computing alternative minimum tax. See IRC § 56(b)(3).

<sup>21</sup> See IRC § 421(a)(2).

<sup>22</sup> See Brian J. Hall & Jeffrey B. Liebman, *The Taxation of Executive Compensation*, 14 NBER/TAX POL'Y & ECON. 7 (2000). Not only are ISO grants limited under the Code, at current tax rates they are generally not tax efficient for profitable firms. From a global, i.e., employer plus employee, tax perspective, ISOs are tax preferred only when the present value of the employee's tax savings from ISO treatment exceeds an employer's NQSO deduction. At current top rates of 35% for both corporate income and personal income, even a low 15% rate on long term capital gains does not favor ISO qualification. See MYRON S. SCHOLES ET AL., *TAXES AND BUSINESS STRATEGY* 229 (3d ed. 2005).

options (NQSOs), which make up a much larger share of corporate compensation. A recipient of a NQSO recognizes ordinary income equal to the spread at exercise, i.e., the difference between the market price of the stock at the time of exercise and the strike price of the option.<sup>23</sup> The employer is entitled to a deduction in an amount equal to the income recognized by the employee.<sup>24</sup> In other words, the tax consequences to both the employee and the employer are based on the realized value of the options.<sup>25</sup>

*Restricted Stock.* Absent a § 83(b) election, a recipient of restricted stock granted at no explicit cost recognizes ordinary income in an amount equal to the fair market value of the stock when it vests.<sup>26</sup> Again, the employer is entitled to a deduction of the same amount at the same time.<sup>27</sup> If the employee makes a § 83(b) election, the employee includes the fair market value of the stock as ordinary income at the date of grant, without regard to any restrictions. The employer receives a matching deduction.

*SARs.* The tax treatment of cash-settled SARs effectively mirrors that of NQSOs. The cash received on exercise is recognized as ordinary income, and the employer is entitled to a matching deduction.<sup>28</sup>

*The tax advantage of equity compensation.* Even when the matching principle applies, the tax treatment of equity compensation is not perfectly consistent with the taxation of cash or grant date taxation of unrestricted stock grants. Because corporations are not taxed on investments in their own equity, employers are able to hedge their equity compensation obligations in such a way as to effectively exempt the investment returns on NQSOs and restricted stock from taxation.

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<sup>23</sup> See Treas. Reg. § 1.83-7(a).

<sup>24</sup> See I.R.C. § 83(h).

<sup>25</sup> This analysis assumes that option grants do not run afoul of recently enacted IRC § 409A, which accelerates taxation and imposes penalties and interest on employees participating in deferred compensation plans that do not meet certain requirements. Options are generally subject to § 409A, but NQSOs granted at the money are exempted. See Treas. Reg. § 1.409A-1(b)(5)(i)(A).

<sup>26</sup> IRC § 83(a). Restricted stock is not subject to § 409A. See Treas. Reg. § 1.409A-1(b)(6)(i).

<sup>27</sup> IRC § 83(h).

<sup>28</sup> See Rev. Rul. 80-300, 1980-2 C.B. 165 (holding that possession of SARs does not produce constructive receipt and that the employee-recipient includes the amount received on exercise in gross income in that year). From an employer's perspective, cash-settled SARs are considered deferred compensation. The timing of deduction is thus controlled by IRC § 404(a)(5). SARs are exempted from § 409A on the same basis as NQSOs. See Treas. Reg. § 1.409A-1(b)(5)(i)(A).

However, the extent to which these arrangements are tax advantaged (relative to cash compensation) is subject to debate.<sup>29</sup>

### 3. Disclosure

SEC regulations require detailed tabular disclosure in company proxy statements of the compensation of the most senior corporate executives. The executives for whom disclosure is required are usually the CEO, CFO, and the three most highly compensated executives other than the CEO and CFO (collectively, the “named executives”).<sup>30</sup>

Stock options and SARs received by these executives are reported in a belt-and-suspenders fashion intended to give shareholders a complete picture of executive compensation. First, the amount of stock option/SAR compensation recognized as an expense each year for each executive is reported in the Summary Compensation Table, which is meant to provide a bottom line compensation figure for each named executive for each year.<sup>31</sup> Thus, this table reflects the grant date value of options prorated over the vesting period.<sup>32</sup> Second, for the year of issuance, the entire grant date value of an option/SAR is reported in a table labeled Grants of Plan-Based Awards.<sup>33</sup> Third, the number of shares underlying outstanding options/SARs held by each named executive, as well as exercise price and expiration data, are reported

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<sup>29</sup> For example, if a firm issues restricted stock to an employee in lieu of cash compensation and uses the freed-up cash to repurchase its own shares, effectively hedging the equity compensation, it will not be taxed on the investment in its own equity per IRC § 1032. Moreover, the investment return is not taxed to the employee, since the deferral of taxation on equity compensation is equivalent to exemption of investment returns. As a result, the investment return goes wholly untaxed. That exemption of investment return is advantageous if returns are positive, but disadvantageous if returns are negative. However, depending on one’s assumptions regarding the impact of limitations on the deductibility of capital losses, the symmetry is broken and equity compensation can be significantly advantaged. See David I. Walker, *Is Equity Compensation Tax Advantaged?*, 84 B.U. L. REV. 695, 755-57 (2004) (synthesizing the employee and employer taxation of equity compensation); Michael S. Knoll, *The Tax-Efficiency of Stock-Based Compensation*, 103 TAX NOTES 203, 214 (2004) (finding that “over a range of circumstances” equity compensation is tax advantaged); see also Daniel I. Halperin, *Interest in Disguise: Taxing the “Time Value of Money,”* 95 YALE L.J. 506 (1986) (seminal article on time value issues and taxation, including consideration of the tax efficiency of deferred compensation); but see Ethan Yale, *Investment Risk is Important When Assessing the Tax Benefit of Deferred Compensation* (working paper) (arguing in an analogous context that the tax benefit of deferral should be viewed as only the avoided after-tax cost of financing the resulting incremental investment).

<sup>30</sup> SEC Reg. S-K, 17 C.F.R. § 229.402(a)(2)-(3).

<sup>31</sup> SEC Reg. S-K, 17 C.F.R. § 229.402(c)(2)(vi).

<sup>32</sup> The annual expense recognized for SARs is, of course, reported as well, although SARs are not expensed in the same way as options. See *supra* Part II.A.1 and *infra* Part II.C.1.

<sup>33</sup> SEC Reg. S-K, 17 C.F.R. § 229.402(d)(2)(viii).

annually in a separate table.<sup>34</sup> Fourth, in the year of option/SAR exercise, the number of shares acquired and/or value realized are reported in still another table.<sup>35</sup>

Restricted stock grants to the named executives are disclosed in an analogous fashion. Prorated portions of grant date values and full grant date values are reported in the first two tables mentioned above.<sup>36</sup> The value of outstanding unvested shares is reported in a separate table, as is the value of restricted stock realized on vesting.<sup>37</sup>

The SEC has endeavored to develop a compensation disclosure regime that provides transparency and comparability. With respect to traditional compensation – cash, stock, and options – it seems to have largely achieved that objective.

## B. Behavioral Effects

The patchwork of accounting, tax, and disclosure rules affect the choices that managers make in how they pay themselves and their employees. These rules affect the forms of compensation selected as well as the reporting choices made by managers.

*Tax.* Firms and managers respond to tax incentives. This behavior is unsurprising; taxes directly affect cash flows. Tax minimization can be seen in a wide variety of business decisions, ranging from such fundamental issues as choice of location, organizational structure, and payout decisions, to more esoteric topics, such as the choice between compensating employees with ISOs or NQSOs.<sup>38</sup>

*Accounting.* What's more surprising, at least to academics, is the degree of managerial sensitivity to reported earnings. Managers are sensitive to reported earnings even in cases in which their choices only superficially affect earnings, without affecting cash flows or the overall information provided to the market.<sup>39</sup> Given the general view of

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<sup>34</sup> SEC Reg. S-K, 17 C.F.R. § 229.402(f)(2).

<sup>35</sup> SEC Reg. S-K, 17 C.F.R. § 229.402(g)(2).

<sup>36</sup> SEC Reg. S-K, 17 C.F.R. § 229.402(c)&(d).

<sup>37</sup> SEC Reg. S-K, 17 C.F.R. § 229.402(f)&(g).

<sup>38</sup> See *infra* note 51 and accompanying text.

<sup>39</sup> See David I. Walker, *Financial Accounting and Corporate Behavior*, 64 WASH. & LEE L. REV. 927, 949-65 (2007) (surveying empirical evidence on the effect of cosmetic accounting adjustments on corporate behavior).

economists that the markets see through cosmetic attempts to boost earnings,<sup>40</sup> one might expect indifference to reported earnings as such.

But there are several reasons why managers care about reported earnings for their own sake. First, the positive accounting literature has shown that in some cases, reported earnings matter independently of cash flow because debt obligations, covenants, and other contracts may be tied to reported earnings. Given transaction costs, even cosmetic changes in earnings can affect the value of these contracts and thus shareholder value.<sup>41</sup> Second, managers are particularly sensitive to one type of contract tied to reported earnings – executive compensation contracts. Earnings-based bonuses may be affected by even cosmetic increases in reported income.<sup>42</sup>

Empirical data confirms managerial sensitivity to accounting rules and practices. The evidence indicates that accounting choices vary systematically between firms, that corporations make operational changes in response to changes in accounting rules, and that firms sacrifice cash flows to boost reported earnings.<sup>43</sup>

*Disclosure.* Assuming that there is some validity to the managerial power view of the executive pay setting process, we would expect public company executives to be particularly sensitive to the disclosure of their compensation in company proxy statements. Under the managerial power model, executive pay is constrained in part by the outrage it produces among investors and the financial press.<sup>44</sup> As a result, obfuscation and camouflage assist executives in achieving high levels of compensation, and enhanced transparency of disclosure is (for them) counterproductive.<sup>45</sup>

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<sup>40</sup> See ROSS L. WATTS & JEROLD L. ZIMMERMAN, POSITIVE ACCOUNTING THEORY 72-73 (1986).

<sup>41</sup> See *id.* at 133. The general idea is that in the presence of transaction costs, both renegotiation of earnings-based contracts to adjust for cosmetic changes and failure to do so can be costly.

<sup>42</sup> See Walker, *supra* note 39, at 15-16, see also Gregg D. Polsky, *Controlling Executive Compensation Through the Tax Code*, 64 WASH. & LEE L. REV. 877, 923-24 (2007) (arguing that IRC § 162(m), which disallows tax deductions for certain executive pay in excess of \$1 million per year that is not performance based, encourages firms to adopt objective, formulaic bonus structures that can be manipulated through cosmetic adjustments to earnings).

<sup>43</sup> See Walker, *supra* note 39, Part II.

<sup>44</sup> See LUCIAN BEBCHUK & JESSE FRIED, PAY WITHOUT PERFORMANCE (2004); Lucian Arye Bebchuk et al., *Managerial Power and Rent Extraction in the Design of Executive Compensation*, 69 U. CHI. L. REV. 751 (2002).

<sup>45</sup> See BEBCHUK & FRIED, *supra* note 44; Bebchuk et al., *supra* note 44. Many features of the current executive pay landscape appear to be more compatible with a managerial power view of executive pay than with an optimal contracting approach that views corporate boards bargaining at arms length with executives in a quest to

*Predicted Behavioral Effects.* Although we observe behavioral effects along each of these fronts, the degree of sensitivity varies according to the circumstances. Managers of private companies are less focused on accounting and compensation disclosure than public company managers. Private companies do not file proxy statements disclosing executive pay; nor are they generally required to file audited financial statements. Because private companies often expect to go public or be acquired by public companies in the future, they retain some sensitivity to reported earnings, at least to the extent reflected in pro forma income statements and balance sheets. Still, when tax, accounting, and disclosure motivations collide, private company managers can be expected to focus more on tax and cash flow rather than cosmetic accounting changes. By contrast, public company managers are sensitive to each factor depending on the circumstances, with variance both from firm to firm and over time. When executive compensation for senior executives at public companies is at issue, implicating both expense recognition and proxy disclosure, tax concerns (and the resulting cash flow implications) often take a back seat.

Given these sensitivities, the tax, accounting, and disclosure characteristics of various compensation devices affect their use. There is both a first order distortion effect related to explicit differences in tax, accounting, or disclosure characteristics and a second order distortion effect related to susceptibility to manipulation.

### 1. First Order Distortion Effects

Tax, accounting, or disclosure rules that favor or disfavor a particular form of compensation distort companies' compensation choices. Unless distortions are purposefully created in order to overcome some market defect, these distortions should be expected to result in inefficient compensation arrangements.

For example, prior to the promulgation of SFAS 123R, companies could design stock options to result in no expense against earnings.<sup>46</sup> Almost all options granted by public companies nominally satisfied these requirements and thus were "free goods" from an accounting perspective.<sup>47</sup> This anomalous accounting treatment contributed to the

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maximize shareholder value. See BEBCHUK & FRIED, *supra* note 44; Bebchuk et al., *supra* note 44.

<sup>46</sup> See APB Opinion 25, *supra* note 12. Standard stock options that were granted at the money or out of the money did not result in any compensation expense.

<sup>47</sup> See SFAS 123R, *supra* note 6, ¶ B31. The "nominal" reference refers to the practice of backdating stock options to effectively grant in-the-money options while purportedly granting at-the-money options that did not have to be expensed. See Victor Fleischer, *Options Backdating, Tax Shelters, and Corporate Culture*, 26 VA.

explosion in stock option compensation in the 1990s. Empirical studies of broad-based option plans have concluded that the favorable accounting treatment of options drove their use,<sup>48</sup> and anecdotal evidence suggesting a link is plentiful.<sup>49</sup> Recent evidence indicates that SFAS 123R has resulted in a shift away from stock option compensation.<sup>50</sup>

Similarly, differences in the tax treatment of incentive stock options and non-qualified options affect the use of these instruments. Depending on employer and employee tax rates, which have varied over time and vary from firm to firm based on circumstances, one or the other form of option will be tax advantaged once both employee and employer tax treatment are considered. Empirical evidence shows that the use of ISOs is related to this relative tax advantage.<sup>51</sup>

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TAX REV. 1031 (2007); David I. Walker, *Unpacking Backdating: Economic Analysis and Observations on the Stock Option Scandal*, 87 B.U. L. REV. 561 (2007).

<sup>48</sup> See Steven R. Matsunaga, *The Effects of Financial Reporting Costs on the Use of Employee Stock Options*, 70 ACCT. REV. 1, 23 (1995) (finding a positive relationship between the use of options and other earnings management techniques and between option use and dividend constraints in an analysis of option grants at 123 companies over an eleven year period); Mary Ellen Carter et al., *The Role of Incentives and Accounting in the Design of Executive Compensation Packages* 24 (AAA 2005 FARS Meeting Paper, Aug. 2004), available at <http://ssrn.com/abstract=590841> (concluding as a result of a study of executive option grants reported in Standard & Poor's ExecuComp database "that what is driving the use of options in non-CEO compensation is not the need to realign incentives, but the desire to avoid the expense").

<sup>49</sup> See Walker, *supra* note 39, at 953-55 (reporting comments of Kevin Murphy and other executive compensation specialists).

<sup>50</sup> See Lawrence D. Brown & Yen-Jung Lee, *The Impact of SFAS 123R on Changes in Option-Based Compensation* (Working Paper, May 2007), available at <http://ssrn.com/abstract=930818> (finding a 28% reduction in the proportion of senior executive pay comprised of options around the issuance of SFAS 123R and finding that reductions in option use were consistent with pre-SFAS 123R use of options to manage earnings).

<sup>51</sup> See MYRON S. SCHOLLES ET AL., TAXES AND BUSINESS STRATEGY 231 (3d ed. 2002) (surveying evidence and concluding that on an aggregate level the use of ISOs has varied consistently with the relative tax advantage).

Although companies generally respond as expected to tax rules that affect compensation firm-wide, tax incentives directed at the executive suite do not always have the desired effect. See, e.g., Nancy L. Rose & Catherine Wolfram, *Regulating Executive Pay: Using the Tax Code to Influence Chief Executive Officer Compensation*, 20 J. LABOR ECON. S138 (2002) (concluding that IRC § 162(m) had little impact on executive compensation); Steven Balsam & Qin J. Yin, *Explaining Firm Willingness to Forfeit Tax Deductions Under Internal Revenue Code § 162(m): The Million Dollar Cap*, 24 J. ACCT. & PUB. POL'Y 300, 321-23 (2005) (finding forfeited tax deduction in 40% of firm-year observations and mixed evidence regarding the efficiency of those forfeitures); Polsky, *supra* note 42, at 881 (concluding that § 162(m) has not effectively limited executive pay or improved executive incentive alignment); Bruce A. Wolk, *The Golden Parachute Provisions: Time for Repeal?* 21 VA. TAX REV. 125, 136, 139 (2001) (noting a trend away from executive pay contracts capping golden parachutes to avoid losing corporate tax deductions and incurring

Finally, anecdotal evidence suggests that as equity compensation disclosure requirements have been strengthened to increase transparency and comparability, more compensation has been channeled into less transparent modes, such as perks and supplemental retirement plans.<sup>52</sup>

## 2. Second Order Distortion Effects

Even if tax, accounting, and disclosure rules are non-distortionary if fairly and honestly complied with, companies may prefer a particular form of compensation if those neutral rules allow sufficient leeway to generate favorable tax, accounting, or disclosure results. The option pricing models currently employed for financial reporting and executive compensation disclosure (and proposed for tax) provide considerable scope for creative accounting. Each of the major inputs into these models – stock price volatility, expected time to option exercise, and even the stock’s anticipated dividend yield – is subjective and manipulable. Professor Mark Rubinstein has estimated that a firm seeking to overvalue options could reasonably select inputs and “report values almost double those reported by an otherwise similar firm seeking to undervalue its options.”<sup>53</sup> Moreover, we have evidence that firms have manipulated the inputs into their option pricing models in such a way as to minimize the expense against earnings and the amount of executive compensation disclosed in proxy statements.<sup>54</sup> For some companies, the ability to manipulate the valuation of options will be valuable, and as a result they will tend to favor option compensation relative to cash, restricted stock, and other compensation modes that do not allow for such manipulation.<sup>55</sup>

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excise taxes to contracts “grossing up” executives for excise taxes on excess parachutes). Apparently, when it comes to their own compensation, executives are more willing to overlook negative corporate tax implications.

<sup>52</sup> See BEBCHUK & FRIED, *supra* note 44, at 95.

<sup>53</sup> See Mark Rubinstein, *On the Accounting Valuation of Employee Stock Options*, 2 J. DERIVATIVES 8, 17 (Fall 1995). See also Maribeth Coller & Julia L. Higgs, *Firm Valuation and Accounting for Employee Stock Options*, 53 FIN. ANALYSTS J. 26, 31 (1997) (concluding that the use of equally acceptable measurement techniques can produce surprisingly large differences in option values). Note that the manipulability of option pricing models is an issue separate from their accuracy in valuing long-dated employee stock options. Critiques of the accuracy of these models are discussed in Part III.B.1.a.

<sup>54</sup> See, e.g., Kevin J. Murphy, *Reporting Choice and the 1992 Proxy Disclosure Rules*, 11 J. ACCT., AUDITING & FIN. 497 (1996) (finding evidence that managers adopted option valuation methodologies that reduced footnoted compensation disclosures prior to the advent of SFAS 123R). For more recent evidence, see the sources referenced in Part III.A.2.

<sup>55</sup> See Douglas A. Shackelford et al., *A Unifying Model of How the Tax System and Generally Accepted Accounting Principles Affect Corporate Behavior* 30 (NBER Working Paper 12873, Jan. 2007), available at <http://ssrn.com/abstract=958436>

### C. Book/Tax Conformity as a Restraint on Gamesmanship

Advocates of enhanced book/tax conformity point to the growing gap between the level of corporate income reported to investors (high) and to the Treasury (low).<sup>56</sup> Although much of the gap arises from clearly identified book/tax differences, such as the treatment of stock options and depreciation, a significant fraction is mysterious.<sup>57</sup> Proponents argue that the lack of conformity provides firms with an incentive, or at least an opportunity, to inflate earnings and/or understate taxable income.<sup>58</sup> For example, an entire class of tax shelters has been developed that exploits the gap to reduce taxes without reducing, and in some cases actually boosting, reported earnings.<sup>59</sup>

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(arguing “that the attractiveness of a real decision depends on whether it expands the discretion of both book and tax accounting”).

<sup>56</sup> See Desai, *supra* note 4; Joann M. Weiner, *Closing the Other Tax Gap: The Book-Tax Income Gap*, 115 TAX NOTES 849, 850-51 (2007) (summarizing data from Charles Boynton et al., *Distribution of Schedule M-1 Corporate Book-Tax Difference Data 1990-2003 for Three Large-Size and Three Industry Groups*, 111 TAX NOTES 177, 196 (2006), showing a general rise in the book-tax gap between 1990 and 2003).

<sup>57</sup> See Desai, *supra* note 4, at 169-70 (finding that more than half of the difference between book and taxable income for the largest US public companies for 1998 (\$154.4 billion) was not attributable to depreciation, options, or foreign source income, the “traditional” sources of book/tax differences); *cf.*, George A. Plesko, *Corporate Tax Avoidance and the Properties of Corporate Earnings*, 57 NAT’L TAX J., 729, 733 (2004) (arguing that the Schedule M-1 book/tax reconciliation disclosure was so inadequate that “it is only possible to speculate on the magnitude of specific factors affecting the difference”). In 2004, the IRS adopted a new book/tax reconciliation form, Schedule M-3, which should lead to an enhanced understanding of book/tax differences. See Weiner, *supra* note 56.

<sup>58</sup> See Desai, *supra* note 3; Yin, *supra* note 1; Whitaker, *supra* note 1; Shaviro, *supra* note 2.

<sup>59</sup> A nice example, suggested to us by Gregg Polsky, who we thank, was Enron’s Project Condor. Entered into in 1999 and as described by the Joint Committee on Taxation:

Project Condor was structured to generate approximately \$930 million of Federal income tax deductions without incurring any economic outlay. In addition, because there was no corresponding financial statement expense, the tax savings associated with these deductions were anticipated to generate approximately \$330 million after-tax financial statement income. Enron intended to report the \$330 million of financial statement income over the anticipated 16-year life of the structure, whereas the \$930 million of Federal income tax deductions were not anticipated to be available to offset Enron’s taxable income until beginning in 2015.

STAFF OF JOINT COMMITTEE ON TAXATION, 108TH CONG., REPORT OF INVESTIGATION OF ENRON CORPORATION AND RELATED ENTITIES REGARDING FEDERAL TAX AND COMPENSATION ISSUES, AND POLICY RECOMMENDATIONS 208 (Comm. Print 2003) (footnotes omitted). See also, Desai, *supra* note 1 (describing efforts at Enron, Tyco, and Xerox to boost earnings through aggressive tax structuring).

The primary goals of book/tax conformity advocates are to reduce artificial earnings inflation, which interferes with efficient capital allocation, and to reduce tax sheltering, which burdens the public fisc.<sup>60</sup> A related goal is to increase the transparency of both reporting systems. Proponents generally envision using reported earnings as the baseline for corporate taxation (as opposed to conforming book to tax). However, few commentators argue for 100% conformity. Rather, proposals typically call for adopting accounting income as a default for corporate taxation, while permitting Congress to carve out deviations for tax accounting, such as accelerated tax depreciation.<sup>61</sup>

Opponents of increased conformity point to the different purposes of the two systems, which suggests that using a single set of rules for both would be suboptimal. For example, while clear, consistent, and easily administrable rules are needed to ensure fair distribution of the tax burden, flexibility in GAAP may allow firms to communicate information efficiently to investors.<sup>62</sup>

Equity compensation has become a primary focus of the book/tax debate for two reasons. First, because the old accounting rules created such a large gap between the book and tax treatment of options, options accounted for a large portion of the overall book/tax gap.<sup>63</sup> The other reason is political: Although senior executives actually receive a small fraction of equity compensation grants, the narrative of wealthy executives manipulating the rules with respect to their own pay paints a striking picture of executive greed.

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<sup>60</sup> Theoretically, the burden on the fisc could be offset with higher tax rates, and our primary concern should be two resulting inefficiencies. First, the resources expended by firms purely to shelter income from tax are wasted. Second, higher marginal rates increase the deadweight losses from taxation, and in a non-linear manner. See Alan J. Auerbach, *The Theory of Excess Burden and Optimal Taxation*, in 1 HANDBOOK OF PUBLIC ECONOMICS 74 (Alan J. Auerbach & Martin Feldstein eds., 1985) (noting that the excess burden of a tax “increases with the square of the tax”).

<sup>61</sup> See Yin, *supra* note 1; Desai, *supra* note 1; Engler, *supra* note 1; Whitaker, *supra*, note 1; see also Shaviro, *supra* note 2 (proposing that taxable income of large public corporations be adjusted by 50% of the positive difference between an adjusted earnings figure and taxable income as otherwise determined).

<sup>62</sup> See Ronald A. Dye & Robert E. Verrecchia, *Discretion vs. Uniformity: Choices Among GAAP*, 70 ACCT. REV. 389, 390 (1995) (noting that accounting discretion may enhance comparability by allowing individual firms to select the most appropriate procedures under the circumstances). The flip side, of course, is that managers may exercise the flexibility of GAAP to enhance perceived performance. See *id.* There are, however, other concerns with increased book/tax conformity including increased politicization of the financial accounting standard setting process, potential loss of congressional control over tax policy, and increased instability in tax and accounting rules. See Walker, *supra* note 39, at 976-78.

<sup>63</sup> See Desai, *supra* note 4.

Advocates of increased book/tax conformity for option compensation suggest that the temptation to under-report option accounting expense and over-report tax deductible expense may be mitigated by requiring firms to utilize the same figures for both purposes.<sup>64</sup> If, as has been proposed,<sup>65</sup> the tax deduction for options was limited to the amount expensed, these two conflicting forces would provide a check on over- or under-reporting.

Companies undoubtedly take advantage of the book/tax discontinuity with respect to equity compensation to massage the books. But it's important not to overstate the opportunity for gamesmanship. Not all compensation devices are equally manipulable. Of the most important traditional compensation modes, the valuations of stock options and SARs are singularly manipulable. Under current law, moreover, manipulation is largely confined to *expense* recognition and disclosure, even with respect to these instruments. Expense recognition and executive compensation disclosure for options and SARs are based on values derived from option pricing models with subjective inputs,<sup>66</sup> while taxation is based on realized gains. Salary and bonuses ultimately are reported at realized value for tax and accounting purposes and are disclosed accordingly. For public companies, there is little subjectivity in assessing the value of restricted stock granted to employees. The fair market value of unrestricted stock serves as the measure of value for both book and tax purposes, and this value is transparent.

Moreover, as we argue below, the matching of employer and employee taxation plays a disciplining role that is similar to proposed book/tax conformity. Generally, firms are entitled to a deduction for equity compensation in an amount equal to the income recognized by the employee.<sup>67</sup> The tension between these two forces also provides a check on over- or under-reporting compensation.

If we include executive compensation disclosure, we actually have four forces at play that influence the desired magnitude of reported compensation. Generally, three of these four favor minimizing reported compensation: expense recognition, executive compensation disclosure, and employee income recognition. The employer-level tax deduction is the only one of these factors influencing firms to inflate reported compensation.

Of course, as suggested above, to the extent that accounting, employer and employee taxation, and compensation disclosure are

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<sup>64</sup> See Desai, *supra* note 3; Levin statement, *supra* note 3.

<sup>65</sup> S. 2116, 110th Cong. (2007).

<sup>66</sup> See Murphy, *supra* note 54 and accompanying text.

<sup>67</sup> See IRC § 83(h).

aligned, the balance struck by a firm that has the ability to manipulate compensation will depend on firm-specific factors. Generally, however, we can predict that public companies will tend to be relatively more sensitive to accounting and compensation disclosure and private firms less so.

### III. HARMONIZING BOOK AND TAX

With that background, we are now in a position to assess the pros and cons of conforming the book, tax, and disclosure rules for equity compensation. We will compare the status quo regime with two approaches to creating conformity: revising tax rules to mirror GAAP and vice versa. Our primary focus in Sections A and B will be on NQSOs and restricted stock. As we will see in Section C, the tax and accounting treatment of SARs is already largely consistent.

#### A. Status Quo

As portrayed in the following table, under current rules, financial accounting for restricted stock and options is based on expected value, while employee and employer taxation are based on realized value.<sup>68</sup>

Current Law:  
Measurement of NQSOs and Restricted Stock

Financial Accounting	Expected Value
Employer Tax	Realized Value
Employee Tax	Realized Value

#### 1. NQSO Book/Tax Differences Absent Gamesmanship

Gaming potential aside, there is nothing inherently objectionable about basing accounting expense on expected value and compensation deductions on realized value. Of course, the realized gain on any given option will almost always differ from the expected value calculated at grant. But so long as the inputs to the option pricing model are fairly

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<sup>68</sup> Absent an election under § 83(b), taxation of restricted stock as compensation occurs at vesting, regardless of when the stock is ultimately sold. Unlike the treatment of options, the Code treats vesting as a realization event for restricted stock.

estimated, there will be no bias one way or the other.<sup>69</sup> In other words, over time and in aggregate, the amount of NQSO expense reported to investors in U.S. public companies should correspond with the deductions reported to the IRS.

Nonetheless, in a recent Senate subcommittee hearing, Senator Levin voiced concern regarding large differences in option expense reported to the IRS and investors.<sup>70</sup> He highlighted recent IRS data pointing to a \$43 billion difference between corporate tax deductions for options and reported accounting expense for returns for tax periods ending in the first half of 2005. However, as Levin noted, SFAS 123R was not in effect at this point, so firms generally would have reported zero book expense for options granted in this period.<sup>71</sup>

In order to get an idea of the differences in option valuation post-SFAS 123R, the subcommittee asked nine companies to calculate what the book expense would have been under the new accounting standard for executive stock options exercised between 2002 and 2006. Levin reported that the firms' tax deductions for these options was 575% larger than the corresponding "fair value" expense.<sup>72</sup> However, this snapshot does not give an accurate view of the relationship between book and tax for three reasons.

First, by focusing on option exercise, the subcommittee introduced a "survivorship bias" into the analysis. In order to glean meaningful data from a longitudinal study of this nature, one would have to take into account not just exercised options, but also options that expired unexercised and options still outstanding.

Second, many of the options analyzed were granted in the mid-1990s when stock prices were substantially lower than they were during the

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<sup>69</sup> To be sure, some commentators argue that option pricing models overstate the market value of long-dated options because these models unrealistically assume perfect liquidity. See *infra* notes 108-109 and accompanying text. The presence of a market liquidity discount, however, does not suggest that a model is a biased estimator of expected value. Other criticisms of the applicability of option pricing models to long-dated options suggest only random errors. See *infra* Part III.B.1.a.

<sup>70</sup> See Levin statement, *supra* note 3.

<sup>71</sup> See *id.* The \$43 billion figure comes from data reported on schedule M-3. This schedule, which reconciles book and tax income, is required to be filed by public companies with assets in excess of \$10 million. For further discussion of the M-3 data from this period, see *Executive Stock Options: Should the IRS and Stockholders Be Given Different Information?: Hearing Before the Permanent Subcomm. on Investigations of the S. Comm. on Homeland Security and Governmental Affairs, 110th Cong. 72 (2007)* (written testimony of Kevin Brown, Acting Commissioner of Internal Revenue).

<sup>72</sup> See Levin statement, *supra* note 3.

early to mid-2000s, despite the market correction in 2001.<sup>73</sup> Thus, a substantial portion of the book/tax difference observed reflects the bull market of the 1990s, not any inherent difference between the tax and financial accounting valuation methods.

Third, notes to the analysis prepared by the subcommittee staff explain that some of the options analyzed had been backdated.<sup>74</sup> The staff instructed participating firms to calculate pro forma SFAS 123R expense under the assumption that these grants had not been backdated, i.e., assuming the grants had been made at the money on the actual grant date. But these pro forma expense calculations were then compared to the actual tax deductions taken, although the lower backdated strike prices would have inflated the executives' realized gains and the associated tax deductions. This apples versus oranges comparison further contributed to the reported gap between the aggregate book and tax figures.<sup>75</sup> In sum, it is hard to draw conclusions regarding potential biases between book and tax reporting for options from just a snapshot of historical data, and the methodology employed by the subcommittee staff simply does not provide a useful comparison.

Acting IRS Commissioner Kevin Brown speculated in his testimony to the subcommittee that, in the wake of SFAS 123R, future Schedule M-3 differences for options should be "temporary in nature."<sup>76</sup> This means that while an option grant initially will result in expense recognition without a tax deduction, ultimately a corresponding tax deduction will be taken. For NQSOs, Brown's statement should be generally accurate over time and in the aggregate, reflecting the lack of any bias between the expected values of options expensed under SFAS 123R and the realized values that determine employer tax deductions. Of course, it will not be true on a firm-by-firm basis. Nonetheless, aside from gaming potential, it is difficult to see the importance of ensuring consistency between the accounting and tax expenses for options reported by particular firms for particular periods.

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<sup>73</sup> See *Executive Stock Options: Should the IRS and Stockholders Be Given Different Information?: Hearing Before the Permanent Subcomm. on Investigations of the S. Comm. on Homeland Security and Governmental Affairs, 110th Cong. 236-250 (2007)* (revealing that at each participating firm some of the options analyzed were granted in 1997 or before). Between 1994 and 1998, the Dow Jones Industrial Average averaged about 6000 points. The average for the 2002 through 2006 period was about 10,000 points.

<sup>74</sup> See *id.* at 247.

<sup>75</sup> The appropriate comparison would have been between the actual tax deductions taken and the Black-Scholes values of the in-the-money options granted. In other words, the prevailing market prices on the actual dates of the grants and the lower, backdated exercise prices should have been fed into the models. Of course, even if backdating had been properly accounted for, the other two problems with the methodology would remain.

<sup>76</sup> Brown, *supra* note 71.

## 2. NQSO Book/Tax Differences Due to Manipulation of Book Value

The gaming potential, however, is a significant concern. The lack of conformity between the book and tax treatment of options under current law removes one potential check against under-reporting of stock option expense and executive compensation by public companies. The severity of the option expense under-reporting problem today is unknown. Anecdotal and empirical evidence suggests that companies manipulated the inputs into their option pricing models even prior to 2005, when option expense was only footnoted.<sup>77</sup> Today, of course, the stakes are higher since option expense is now subtracted in arriving at the primary reported earnings figure.<sup>78</sup>

As an example of the anecdotal evidence, the Wall Street Journal reported in 2003 that several companies were abandoning past practice of using five year average historical volatility data for their option pricing models in favor of forward-looking volatility estimates.<sup>79</sup> Black-Scholes option value is particularly sensitive to the volatility assumption, and this change had the effect of reducing reported option expense, and increasing footnoted, pro forma earnings. However, market volatility was indeed significantly lower in 2003 than it had been in previous years,<sup>80</sup> so perhaps the change was justified. On the other hand, had there been a marked increase in market volatility in 2003, one may question whether these firms would have substituted higher estimated volatilities for historical volatility data.

This suspicion is reinforced by empirical evidence provided by Bartov, Mohanram, and Nissim suggesting that firms opportunistically exploited the discretion in SFAS 123 to select volatility measures that would reduce reported compensation expense.<sup>81</sup> They found that while

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<sup>77</sup> As noted above, although firms were not required to expense options prior to the FASB's revision of SFAS 123 in 2004, since 1995 firms that did not voluntarily expense options were required to provide pro forma earnings statements in the footnotes to their financial reports that did include option expense. See *supra* note 13 and accompanying text.

<sup>78</sup> The potential for significant underreporting is apparent from theoretical work suggesting that, without departing from reasonable assumptions, a firm wishing to understate option expense could report values about one half those of an otherwise similar firm wishing to overstate values. See Rubinstein, *supra* note 53, at 17.

<sup>79</sup> See Gary McWilliams, *Dell Joins Wave of Companies Seeking to Soften Options Hit*, Wall St. J., June 27, 2003, at C3. SFAS 123 suggested that firms should take both historical and estimated volatility into account in calculating option values. See SFAS 123 *supra* note 13, ¶ 284-285.

<sup>80</sup> See McWilliams, *supra* note 79, at C3.

<sup>81</sup> See Eli Bartov et al., *Stock Option Expense, Forward-Looking Information, and Implied Volatilities of Traded Options* (Working Paper, Apr. 2004), available at

firms used both historical and implied volatility data in their models, the weight assigned to implied volatility was significant only when implied volatility was lower than historical volatility, in which case inclusion reduced option expense.<sup>82</sup>

Other evidence of manipulation was reported by Hodder, Mayew, McAnally, and Weaver in a 2004 study.<sup>83</sup> The authors compared the inputs firms used in calculating Black-Scholes values and concluded that a subset of firms were using the discretion provided by the accounting rules to reduce pro forma earnings.<sup>84</sup>

By contrast, in a study published in 2003, Balsam, Mozes, and Newman found little evidence of manipulation of overall option valuation. However, they did find significant evidence of manipulation of the allocation of option expense over the vesting period to minimize first year impact.<sup>85</sup> The authors speculated that the difference might have been attributable to greater transparency in the disclosure of the inputs to valuation than in the inputs to the allocation decision.<sup>86</sup>

However, it is important to reiterate that the stakes are higher today than they were when these studies were conducted. Researchers may find even greater evidence of expense manipulation since SFAS 123R has taken effect.<sup>87</sup>

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<http://ssrn.com/abstract=510042>. SFAS 123 dictated the accounting treatment for options between 1995 and 2005.

<sup>82</sup> See *id.* at 3. Using the Black-Scholes model, firms with market traded options can use actual trading information, including the prices of call and put options, duration, etc., to back into the stock price volatility that is implied by this market data. Obviously this data is not available for firms without market traded options.

<sup>83</sup> See Leslie David Hodder et al., *Using Valuation Model Inputs to Manage Employee Stock Option Disclosures* (Working Paper, Apr. 2004), available at [http://www.usc.edu/schools/business/FBE/FEA2004/FEApapers/A-S6\\_MLMcANALLY.pdf](http://www.usc.edu/schools/business/FBE/FEA2004/FEApapers/A-S6_MLMcANALLY.pdf).

<sup>84</sup> See *id.*, see also Murphy, *supra* note 54 (finding evidence that managers adopted option valuation methodologies that reduced footnoted compensation disclosures prior to the advent of SFAS 123R).

<sup>85</sup> See Steven Balsam et al., *Managing Pro Forma Stock Option Expense under SFAS No. 123*, 17 ACCT. HORIZONS 31 (2003).

<sup>86</sup> See *id.* Reporting companies were (and are) required to disclose in the footnotes to their financial statements all of the inputs used to calculate option value – grant date stock price, exercise price, volatility, expected life, the risk-free rate of return, and the expected rate of dividends. With this information, a child (and most adults) could calculate the “fair value” of an option using an online option pricing calculator, such as the calculator found at <http://www.option-price.com>. Allocation of this value across the service period also involves subjective inputs, such as the forfeiture rate of options and the timing and amount of deferred tax benefits. These inputs were not required to be disclosed. See *id.*

<sup>87</sup> Option backdating entailed less subtle manipulation of the inputs into option valuation models. Backdating firms misrepresented the grant dates of options and hence the market price of the stock, which is a key input into option pricing models.

### 3. NQSO Book/Tax Differences Due to Manipulation of Tax Value

It is unlikely that the lack of book/tax conformity results in significant over-reporting of option expense for corporate tax purposes. Matching the employee's inclusion with the employer's deduction eliminates most of the net tax advantage of manipulation. Companies with large tax losses might have an incentive to under-report option gains to reduce employee-level taxes, while firms providing options to employees whose marginal rates are less than 35% might have some incentive to inflate the gain amount. But in cases in which employers and employees pay tax at or near the 35% marginal rate, there would be little or no net tax advantage to over- or under-reporting this compensation.<sup>88</sup> Second, and perhaps more importantly, because option taxation currently is based on realized amounts, the opportunities to manipulate the deduction amount are quite limited even without the countering effect of inclusion and deduction.<sup>89</sup>

### 4. Restricted Stock: Book/Tax Differences

The current book and tax rules applied to restricted stock are unlikely to generate significant book/tax differences. Recall that the unrestricted value of stock at grant determines the book expense, while the fair market value at vesting controls taxation in the absence of a § 83(b) election. Upward drift in stock prices suggests that tax valuation may be slightly greater than book on average, but over the typical one to four year vesting period of restricted stock, that difference is likely to be trivial. More importantly, for firms with publicly traded stock, manipulation opportunities are quite limited.<sup>90</sup> Firms could minimize

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Backdating certainly demonstrates a willingness to manipulate valuation. However, although the effect of backdating was to reduce footnoted compensation expense and executive compensation disclosures, *see* Walker, *supra* note 47, the extent to which backdating was motivated by a desire to conceal compensation expense, versus boosting option values for recipients, is unclear. *See id.*; Fleischer, *supra* note 47. Of course, the revelation of backdating and SEC scrutiny could deter firms from manipulating option values to enhance earnings.

<sup>88</sup> The lack of a net tax advantage does not necessarily mean that firms will not respond to an advantage at the employee or employer level at the cost of the other. We think it less likely that firms would shift tax costs onto rank and file employees who presumably are paid a market wage that would account for extraordinary taxes. On the other hand, there is evidence of firms engaging in net inefficient tax behavior that provides benefits to senior executives. *See supra* note 51.

<sup>89</sup> Option exercise dates could be backdated to over- or under-state gains at exercise. However, evidence of exercise date backdating has been limited to situations in which backdating was used to under-state gains and reduce employee taxation. *See infra* note 134 and accompanying text. No evidence has been uncovered of exercise backdating to increase employer tax deductions.

<sup>90</sup> Firms without publicly traded stock that follow GAAP could manipulate compensation expense by underreporting the value of their stock.

compensation expense by backdating stock grants to low value periods, but doing so would likely have no effect on the value to recipients, so unlike stock option backdating, the driving force would be slight.<sup>91</sup> Moreover, absent a § 83(b) election, manipulation of tax valuation is impossible because vesting occurs on a fixed date determined several years in advance.<sup>92</sup>

## 5. Consistency Across Compensation Instruments

Under current law, both the tax and accounting treatment of various compensation devices is relatively consistent. As discussed above, the current system is not perfectly non-distortionary. In some situations, the current combined employer and employee tax treatment creates a tax-induced preference for equity compensation over cash.<sup>93</sup> In addition, there is a troubling inconsistency in the accounting treatment of stock options and economically equivalent stock appreciation rights, with respect to which realized values ultimately determine compensation expense.<sup>94</sup> The members of the FASB apparently recognized this situation, but decided that within the conceptual framework of GAAP, maintaining the distinction between equity transactions (option issuance) and assumption of liabilities (SAR grants) took precedence.<sup>95</sup> However, even though the difference between stock option and SAR accounting is significant, any bias created is an order of magnitude smaller than the bias inherent in the pre-SFAS 123R treatment of stock options.<sup>96</sup> The tax treatment of stock options and restricted stock and the accounting treatment of these two popular compensation devices are consistent and non-distortionary.

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<sup>91</sup> Backdating restricted stock grants would only be beneficial to recipients if they made a § 83(b) election or if the number of shares granted was a function of share price, i.e., if grants are based on value rather than a fixed number of shares.

<sup>92</sup> There is a tax game for private firms, but it does not flow from lack of conformity. Private firms can convert ordinary income into capital gains for their employees by granting them restricted stock with low reported value. The employees then make § 83(b) elections, paying tax at ordinary rates on the low reported value and taking a correspondingly low basis in the shares. For the firm, the result is an equivalent low tax deduction, but for many private firms, particularly start ups with tax losses exceeding profits, this is a worthwhile tradeoff. See Ronald J. Gilson & David M. Schizer, *Understanding Venture Capital Structure: A Tax Explanation for Convertible Preferred Stock*, 116 HARV. L. REV. 874 (2003) (arguing that tax gaming helps explain the issuance of convertible preferred stock, which can arguably justify a much higher per share value than common, to private equity investors).

<sup>93</sup> See *supra* Part I.A.2.

<sup>94</sup> See *supra* Part I.A.1.

<sup>95</sup> See SFAS 123R, *supra* note 6.

<sup>96</sup> Recall that pre-SFAS 123R firms could issue options with zero earnings cost. No other compensation device was free from an earnings perspective. The post-SFAS 123R treatment of options and SARs differs only in that the recognized expense reflects the expected value of the former and the realized value of the latter.

## B. Conforming Tax to GAAP

Advocates of comprehensive book/tax conformity generally propose modifying the tax rules to match GAAP.<sup>97</sup> This is also the approach put forward by those with specific proposals to conform the book and tax treatment of options.<sup>98</sup> The effect of conforming tax rules to GAAP, as portrayed in the following table, would be to shift the employer's tax deduction for non-qualified options and restricted stock from realized value to expected value.<sup>99</sup>

### Employer Tax Conformed to GAAP: Measurement of NQSOs and Restricted Stock

Financial Accounting	Expected Value
Employer Tax	Expected Value
Employee Tax	Expected or Realized Value?

Basing the employer's tax deduction on the reported accounting expense would reduce the incentive of firms to under-report option values for accounting and disclosure purposes. But a difficult question arises with respect to employee taxation. Would employees continue to be taxed based on the realized value of options, thus driving a wedge between employer and employee tax treatment? Would employees also be taxed based on grant date expected values? Or would employees be taxed on options at vesting, similar to the taxation of restricted stock? Each possibility raises troubling issues; employee taxation may even be the Achilles heel of these proposals to conform employer taxation of equity compensation to GAAP.<sup>100</sup>

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<sup>97</sup> See Yin, *supra* note 1; Desai, *supra* note 1; Engler, *supra* note 1; Whitaker, *supra* note 1.

<sup>98</sup> See Desai, *supra* note 3; Levin statement, *supra* note 3; S. 2116, 110th Cong. (2007) (proposing revision to IRC § 162 to provide that "the deduction ... shall not exceed the amount the taxpayer has treated as an expense with respect to stock options ... and shall be allowed in the same period that the accounting expense is recognized"). As drafted, Levin's bill would apply to NQSOs, but not to restricted stock or SARs.

<sup>99</sup> Because SAR accounting is ultimately based on realized values, conforming SAR taxation to GAAP would affect the timing, but not the amount of employer deductions for SARs.

<sup>100</sup> Senator Levin's bill would not alter the taxation of employees. See S.2116, 110th Cong. (2007); Press Release, Carl Levin, Summary of Ending Corporate tax Favors For Stock Options, S. 2116 Act, Sept. 28, 2007 (noting that the bill "[m]akes no change to stock option compensation rules for individuals.").

## 1. Conforming Employee Taxation of Equity Compensation to GAAP

Suppose a firm issues an option to an employee with grant date value of \$1 million and that the option vests in four years. Per SFAS 123R, the company would recognize compensation expense of \$250,000 for each of the four years between grant and vesting.<sup>101</sup> Existing conformity proposals would allow the firm a \$250,000 tax deduction for each of these years. If the § 83 restriction were waived and employee taxation conformed as well, the employee would have ordinary income of \$250,000 for each of these four years, and on the vesting date she would hold an option with tax basis of \$1 million.

At first glance, it might seem reasonable to tax employees on the grant date value of equity instruments received and to assess the tax on an accrual basis as the instruments vest. After all, despite the risk of forfeiture, at the time of grant the employee has received a valuable right and experiences a contingent increase in net worth. It is not clear whether the employee has income in a Haig-Simons sense; while the option is valuable, it cannot be transferred or exercised prior to vesting, making it unclear whether the right is a property right in the Haig-Simons framework.<sup>102</sup> Moreover, the restrictions on transfer and exercise make the valuation of the right subject to debate, notwithstanding the evolution of sophisticated pricing tools. Still, there is no doubt that the option recipient is better off than her otherwise similarly situated colleague who receives no options.

However, there are numerous practical and conceptual problems with conforming employee taxation of equity compensation to GAAP. Part of the problem relates to the difficulty of achieving individual tax equity in a world of ex ante stock and option tax valuation. The potential for manipulation and avoidance creates a separate set of challenges.

### a. Valuation

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<sup>101</sup> This is not entirely accurate. Firms recognize compensation expense only for equity instruments that vest. Thus, the book expense for the first year would be reduced to reflect the firm's estimated option forfeiture rate, and book expense in subsequent years would be adjusted as that estimate is revised. See SFAS 123R, *supra* note 6, ¶ 43. Forfeiture adjustments pose no difficulty for conforming employer tax to book, but they are obviously problematic for achieving complete conformity between book and employee tax. This point is discussed below.

<sup>102</sup> See HENRY C. SIMONS, *PERSONAL INCOME TAXATION* 50 (1938) ("Personal income may be defined as the algebraic sum of (1) the market value of rights exercised in consumption and (2) the change in the value of the store of property rights between the beginning and the end of the period in question").

GAAP valuation of stock and options is a less than perfect measure of the cost of employee compensation and perhaps an inappropriate basis for taxing recipients. The objective of GAAP option valuation is to estimate a firm's opportunity cost in granting options – the price at which it could sell identical instruments on the market.<sup>103</sup> But the methodologies used to value options were not designed for long-lived, non-transferable, compensatory options, and their adequacy in this service is highly contested.<sup>104</sup> Critics of SFAS 123R point to several inadequacies in the models. First, the models assume geometric Brownian motion in individual stock prices, i.e., a random walk, and the Black-Scholes model relies on an assumption of constant stock price volatility.<sup>105</sup> Critics argue that these assumptions are not borne out by the data,<sup>106</sup> and commentators have suggested that over the lives of typical employee stock options these assumptions may lead to significant valuation errors with respect to individual option grants.<sup>107</sup>

In addition, the option pricing models assume perfect liquidity, instantaneous arbitrage, and negligible transaction costs.<sup>108</sup> Critics point out that liquidity in option markets diminishes with duration and argue that, even if markets in long-dated options existed, they would reflect

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<sup>103</sup> Or nearly identical. As discussed *supra* note 101, firms are instructed to estimate values ignoring vesting requirements. The effect of failure to vest is taken into account at the recognition stage.

<sup>104</sup> SFAS 123R does not specify a particular model for option valuation, listing the Black-Scholes and binomial models as being among the techniques that can be used in estimating fair value. See SFAS 123R, *supra* note 6, ¶ A13.

<sup>105</sup> See SFAS 123R, *supra* note 6, ¶ A15.

<sup>106</sup> Numerous studies have shown that U.S. stock prices do not follow random walks. See, e.g., Ming Dong, *Option Pricing with a Non-Zero Lower Bound on Stock Price*, 25 J. FUTURES MARKETS 775, 776 (2005) (citing studies, but proposing a compensating adjustment to the Black-Scholes model). It is generally accepted that stock price volatility will not remain constant over the life of a compensatory option. See, e.g., Charles Baril et al., *Valuing Employee Stock Options under SFAS 123R Using the Black-Scholes-Merton and Lattice Model Approaches*, 25 J. ACCT. EDU. 88, 95 (2007). Moreover, there is evidence that volatility is negatively correlated with stock price. See Steve Swidler & J. David Diltz, *Implied Volatilities and Transaction Costs*, 27 J. FIN. & QUANT. ANAL. 437, 446 (1992). However, non-constant volatility can be accommodated within binomial pricing models.

<sup>107</sup> See Charles W. Calomiris, *Expensing Employee Stock Options* 38 (AEI Working Paper, Aug. 5, 2005), available at [http://www.aei.org/publications/pubID.22873/pub\\_detail.asp](http://www.aei.org/publications/pubID.22873/pub_detail.asp) (suggesting that valuation errors may exceed 20% in 10% of the cases); Carol A. Marquardt, *The Cost of Employee Stock Option Grants: An Empirical Assessment*, 40 J. ACCT. RES. 1191, 1214 (2002) (finding that while an adjusted Black-Scholes model provided reasonable estimates of ex post option cost, on average, there was “significant variability in the amount of model error on an option-by-option basis”).

<sup>108</sup> See Peter Fortune, *Anomalies in Option Pricing: The Black-Scholes Model Revisited*, NEW ENG. ECON. REV., Mar./Apr. 1996, at 17, 23.

significant liquidity discounts, which are not incorporated in the option pricing models.<sup>109</sup>

Furthermore, GAAP valuation of employee options does not adjust directly for the effect of non-transferability. Rather, SFAS 123R instructs firms to adjust indirectly by incorporating assumptions regarding early exercise into their models.<sup>110</sup> For users of Black-Scholes, this generally means plugging a point estimate of the expected term to exercise into the model, which can lead to overvaluation.<sup>111</sup> This problem can be addressed, although not without added complexity, by modifying the Black-Scholes approach or by using a binomial model which provides the flexibility to incorporate a probability distribution for option exercise.<sup>112</sup>

The FASB has recognized the imperfections in option pricing models, but has concluded that valuation estimates derived from these models are sufficiently reliable for recognition of option expense in financial statements.<sup>113</sup> The FASB points out, quite rightly, that “few accrual-based accounting measurements can claim absolute reliability.”<sup>114</sup> However, it is one thing to conclude that models are sufficiently reliable to determine aggregate option cost and aggregate reductions to accounting earnings; it is another to conclude they are reliable enough to form the basis of taxing individual optionees. Given evidence of significant variability in pricing errors for particular option grants, we remain skeptical.<sup>115</sup>

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<sup>109</sup> See Calomiris, *supra* note 107.

<sup>110</sup> See SFAS 123R, *supra* note 6, ¶ A15.

<sup>111</sup> At-the-money options generally exhibit a concave value profile over time such that the value of an option exercised in six years would be greater than the average value of options exercised in two years and in ten years. As a result, using a single point estimate of term, instead of a distribution of potential exercise dates from vesting to expiration, generally results in over-estimation of option value. See Thomas Hemmer et al., *Estimating the “Fair Value” of Employee Stock Options with Expected Early Exercise*, 8 ACCT. HORIZONS 23, 27-38 (1994); Phelim Boyle & William R. Scott, *Executive Stock Options and Concavity of the Option Price*, 13 J. DERIVATIVES 72, 72-77 (2006).

<sup>112</sup> Hemmer, Matsunaga, and Shevlin (HMS) have proposed an adjustment to Black-Scholes to better account for early exercise. See Hemmer et al., *supra* note 111, at 38-40. Other commentators advocate use of the binomial model to account for option price concavity. See Boyle & Scott, *supra* note 111, at 73-74, 76 (noting that the HMS adjustment becomes less accurate as more dispersed exercise distribution functions are assumed and suggesting that the binomial method is more suitable); Brian Maris et al., *The Effect of Exercise Date Uncertainty on Employee Stock Option Value*, 30 J. BUS. FIN. & ACCT. 669, 693 (demonstrating value overstatement using Black-Scholes and advocating use of the binomial model).

<sup>113</sup> See SFAS 123R, *supra* note 6, ¶ B60.

<sup>114</sup> *Id.*

<sup>115</sup> We should note that option pricing models are used for transfer tax purposes and in determining whether and to what extent an employee has received an excess parachute payment under IRC §§ 280G and 4999. See Rev. Proc. 98-34 (valuation of

The valuation issues with restricted stock are much simpler. The fair value of restricted stock on the date of grant is simply the market value of unrestricted stock.<sup>116</sup> In this case, GAAP valuation clearly does not reflect the diminution in value resulting from non-transferability prior to vesting.

Note that we have not discussed the difference between the opportunity cost to a firm of issuing stock or options and the typically lower value to recipients, who generally are poorly diversified and already face considerable firm-specific risk.<sup>117</sup> GAAP does not consider subjective employee valuation for earnings purposes, and there is no reason to do so for tax purposes either.<sup>118</sup> Of course, valuation discounts arising from a risk of forfeiture would apply to both hypothetical third party purchasers and employee recipients. Thus, even if GAAP stock and option valuation was deemed sufficiently accurate to form the basis of employee taxation, the risk of forfeiture would have to be accounted for under a scheme taxing equity at grant.

#### b. Liquidity

Restrictions on the transfer, exercise and sale of equity compensation instruments raise obvious liquidity concerns for employees taxed in

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compensatory stock options for transfer tax purposes); Rev. Proc. 2003-68 (valuation of options for the purposes of §§ 280G and 4999). However, in these cases, an immediate, snapshot valuation is required. We do not have the option of waiting until option exercise to value the instrument.

As discussed below, we also believe that limitations on the accuracy of the pricing models applied to long-term options, in combination with a number of other factors, suggest revising GAAP accounting for options to conform with that of SARs. *See infra* Part III.C. However, we remain less concerned about inaccurate financial statements than inaccurate employee tax valuations.

<sup>116</sup> *See* SFAS 123R, *supra* note 6, ¶ 21.

<sup>117</sup> *See, e.g.,* Brian J. Hall, *Six Challenges in Designing Equity-Based Pay*, 15 J. APPLIED CORP. FIN. 21, 26 (2003) (noting that inadequate diversification and vesting and other restrictions on disposition create a wedge between the opportunity cost of equity compensation to the issuing firm and the subjective valuation of the typical recipient).

<sup>118</sup> If employees value stock and options below their “cost,” they will demand more of them, or more of some other type of compensation. This value gap is absorbed by firms as the cost of providing performance and retention incentives. However, to be administrable, the tax system must value compensation in the form of property at the fair market value of that property.

Moreover, with respect to options, proper valuation takes into account premature exercise motivated by employee risk aversion, which reduces the gap between firm cost and employee value. This gap is not completely eliminated, however, because employees are not free to exercise options at any time. They are prohibited from exercising options prior to vesting. *See* Rubinstein, *supra* note 53, at 15 (arguing that a differential between employer and employee value of options can only arise during the period prior to vesting).

complete conformity with GAAP. In the example above, if § 83 is inapplicable, the employee receiving an option with grant date value of \$1 million would recognize up to \$1 million of ordinary income before she became entitled to exercise the option.<sup>119</sup> The severity of the liquidity problem would vary considerably. We might have little sympathy for the large public company CEO who has considerable accumulated wealth with which to pay the tax and who can probably negotiate sufficient cash salary to pay the tax in any event. However, we should be concerned about the stereotypical rank and file employee of the cash-strapped Silicon Valley startup who has little accumulated wealth and for whom equity represents a large fraction of compensation. However, liquidity concerns could be alleviated by permitting recipients to defer *payment* of the tax assessed on the grant date value of stock or options until vesting or exercise. Accruing interest over the deferral period would add a further complication, but the liquidity problem alone is not insurmountable, at least for options that are eventually exercised.<sup>120</sup>

### c. Option Expiration Out of the Money

But what about the unlucky employee whose option expires out of the money? Consider two employees – Lucky and Unlucky. Each receives an option with grant date value of \$100,000. Five years later, Lucky's pays off to the tune of \$500,000. If taxed in conformity with GAAP, Lucky would have \$100,000 of ordinary income recognized over the vesting period plus a \$400,000 long term capital gain.<sup>121</sup> Unlucky's option expires unexercised. Options that vest but expire unexercised are still expensed under SFAS 123R and would generate a tax deduction for the employer under conformity proposals. Accordingly, Unlucky would also have \$100,000 of ordinary income and a \$100,000 capital loss. Given current capital loss limitations, this result might seem harsh.<sup>122</sup>

Of course, Unlucky's tax result is identical to that of an employee who receives \$100,000 cash compensation and purchases an option for \$100,000 that expires out of the money. If equity compensation

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<sup>119</sup> Typically, the last portion of income would be recognized in the year the option vests.

<sup>120</sup> The value of conformity as a check on manipulation lies in having the same valuation serve multiple purposes. Nothing turns on the timing of payments. Payments can be deferred, possibly at the taxpayer's option, with interest assessed at the market rate.

<sup>121</sup> Lucky would have \$100,000 basis in the instrument when that amount was taken into income. Recall that our assumption in this section is that § 83 is repealed for equity compensation permitting assessment of tax (and perhaps collection) for unvested compensation.

<sup>122</sup> Under current law, capital losses of individuals may be deducted against capital gains and up to \$3000 of ordinary income. See IRC § 1211(b).

arrangements are just as voluntary, no relief is required. But if Congress felt that relief was warranted because of imperfect information or bargaining, it could allow the recipient an ordinary loss or waive the capital loss limitation. But doing so might provide too much or too little relief. First, from the perspective of Unlucky ex post, unless income recognition was deferred until exercise (or expiration) *without* the collection of interest, Unlucky would still bear a considerable tax cost related to the ultimately worthless option.<sup>123</sup> Moreover, given variations in tax rates and/or Unlucky's income, the value of the subsequent deduction could be greater or less than the tax cost of the initial inclusion.

Others might have little sympathy for Unlucky's tax complaints if Congress treats these losses as ordinary. After all, this approach is perfectly consistent with the tax law's treatment of interest forfeited as a result of early withdrawal from a CD and similar forfeitures.<sup>124</sup> These critics might argue that allowing ordinary deductions is too generous ex ante. The combination of capital gain treatment for appreciated equity compensation and ordinary loss treatment of depreciated awards would cause equity compensation to be significantly tax advantaged versus

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<sup>123</sup> Employee stock options typically expire ten years after grant. For options that begin vesting after one year and expire unexercised, the employee would bear the tax cost for up to nine years unless income inclusion was deferred until exercise/expiration and interest on the deferred tax was ignored.

Although we have focused on the worst case scenario of options expiring out of the money, the issue addressed in this paragraph would arise anytime the realized value of a stock or option grant was less than its grant date value.

Note further that we have experience with a similar problem already. By offering the prospect of further deferred taxation at lower capital gains rates, current tax law encourages ISO recipients to hold the stock received on exercise for a year. *See* IRC § 422(a). However, for AMT purposes, the spread on the ISO at exercise is included in income. *See* IRC § 56(b)(3). As a result, many individuals have been caught up in an ISO trap, exercising options resulting in large paper gains and AMT and finding that the value of their stock has declined precipitously prior to the date on which they could sell and enjoy the capital gains rate preference. *See* Warren Rojas, *Outdated AMT Claims First Victims of the 21st Century*, 91 TAX NOTES 691 (2001); Robert L. Sommers, *ISOs Meet the AMT: Employees Ambushed by the Tax Code*, 91 TAX NOTES 2055 (2001).

While this result may seem unfair (and a number of bills have been introduced in Congress to provide relief (see a list at [www.reformamt.org](http://www.reformamt.org))), generally the ISO recipients *could* have sold their shares on exercise and paid tax at ordinary rates. In the complete tax to book conformity world that is envisioned here, employee taxation would be based on a value that could not be realized due to restrictions on transfer and exercise. (Of course, the terms of NQSOs are subject to negotiation between the parties. Vesting and transfer restrictions are not inherent in option compensation.) Moreover, since NQSO use dominates that of ISOs, this problem would reach a much larger population.

<sup>124</sup> § 1341, which addresses the tax consequences of an amount restored that had been held under a claim of right, is an obvious exception to this rule. But while that provision accounts for changes in marginal rates, it does not compensate taxpayers for time value of money.

cash compensation.<sup>125</sup> To be sure, current taxation of equity may be tax advantaged versus cash compensation in some cases.<sup>126</sup> But grant date taxation combined with ordinary loss treatment would be even more clearly tax advantaged, and could lead employers to inefficiently favor option compensation over other arrangements.

#### d. Forfeiture

Stock and option grants typically are forfeited if the employee's service is terminated prior to a predetermined vesting date.<sup>127</sup> Under SFAS 123R, companies reduce their aggregate accounting expense for stock and option compensation to reflect expected and actual forfeiture rates. Basing employer tax deductions for equity compensation on the same aggregate figures is not problematic, but adjusting for forfeiture at the employee level adds a further complication to full conformity.

There are at least two possibilities. First, forfeiture could be treated in the same manner as the expiration of an unexercised option, i.e., producing a capital loss. Taxing equity recipients on an accrual basis without explicit relief for awards that fail to vest might strike some as particularly unfair because of the resemblance to an endowment tax.<sup>128</sup> An invested grant of equity compensation represents a heightened ability to earn income in the future as the employee performs services that turn her human capital into cash. Taxing prior to vesting – that is, taxing the employee currently based on the performance of future services – comes close to treating mere ability, rather than the actual performance of services, as the basis of taxation, particularly if the taxpayer is not made whole for taxes paid on awards that are forfeited. Taxing such unrealized returns from human capital could be viewed as infringing on the taxpayer's autonomy by forcing her to continue employment in a high-paying job just to pay the tax on services she has

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<sup>125</sup> The comparison is to a case in which the employee is paid in cash and invests the after-tax amount in employer equity. In that case, all gains or losses would be capital.

<sup>126</sup> See *supra* note 29 and accompanying text.

<sup>127</sup> Traditionally, vesting of equity compensation was based solely on continued service. In the late 1990s, responding to criticism that service-vested awards were insufficiently linked to performance, many firms began issuing equity compensation that vested based both on service and on objective performance criteria. See Carr Bettis et al., *Equity Grants with Performance-Based Vesting Conditions* 7 (Working Paper, Mar. 2007), available at <http://ssrn.com/abstract=972424> (finding in an examination of proxy statements of 2,055 firms from 1995 to 2001, 475 utilized performance-based vesting or payout conditions).

<sup>128</sup> For a summary of the objections to endowment taxation, see Lawrence Zelenak, *Taxing Endowment*, 55 DUKE L.J. 1145, 1156-62 (2006) (describing “talent slavery” and other objections).

not yet performed.<sup>129</sup> To be sure, because entering into the employment contract is a voluntary act, taxing the employee on the date of grant is not as objectionable as the usual “enslaving the beachcomber” objection to endowment taxation. Still, taxing employees today for services they will perform in the future cuts against the grain of our realization-based income tax system.

Alternatively, we might choose not to include in income the value of stock or option grants that fail to vest as a result of service termination. This could be accomplished by assessing employee tax based on grant date values, deferring collection at least until stock or options vest, and eliminating the tax obligation with respect to instruments that fail to vest as a result of service termination. Another approach would be to reverse the ordinary income that was recognized prior to forfeiture in the event of service termination prior to vesting, perhaps with relief for time value and adverse changes in marginal tax rates.<sup>130</sup>

If the failure of stock or options to vest is unrelated to the value of the equity, canceling out the income seems reasonable. For accounting, employer tax, and employee tax purposes, it would be as if the equity compensation had not been granted. But, unless all equity compensation losses were treated as ordinary, such a system would raise the specter of opportunistic relinquishment of underwater equity instruments to avoid capital loss treatment.<sup>131</sup>

#### e. Manipulation Potential

Accuracy issues aside, *ex ante* stock option valuation, which requires firm-specific assumptions regarding stock price volatility, expected time

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<sup>129</sup> To be sure, employment is voluntary and compensation arrangements are negotiable at some level. Thus, the “wage-slave” analogy is not as persuasive in this case as it might be with respect to proposals, for example, to tax law professors on the salaries they could earn in private practice.

<sup>130</sup> Providing relief for adverse changes in marginal tax rates would be consistent with the treatment in IRC § 1341 of amounts restored that had been held under a claim of right. *See supra* note 124. An approach that provided relief for time value of money in addition to adverse changes in marginal rates could be thought of as “§ 1341 plus.”

<sup>131</sup> It would not be a good idea, for example, to treat all forfeitures as a result of employment termination as ordinary losses and all other relinquishments/out-of-the-money expirations as capital losses, as this approach might distort employment decisions at the margin. Suppose tax was to be collected at vesting based on the \$1 million grant date value of an option granted to a CEO. Suppose that several months prior to vesting the option is far out of the money and worth only \$100,000. Assume that if the option vests the CEO incurs tax of \$350,000 (at 35%) on property worth far less. If the CEO departs, no tax will be assessed with respect to the option. Of course, the employer’s tax position would be reversed. If employment is terminated prior to vesting, the expense and tax deduction are reversed. However, the value of the tax deduction will not necessarily offset the cost of the employee’s tax obligation, and thus a negotiated solution is not inevitable. In some cases, employment could be affected.

to exercise, and dividend policy, is highly manipulable.<sup>132</sup> Option valuation at exercise is not. Simply put, why would we want to increase the importance of the more manipulable valuation method by using it to assess employee tax as well as employer option expense and employer tax deductions?<sup>133</sup>

In a regime in which both employee and employer tax were based on ex ante option valuation, executives would generally have two incentives to minimize those values – increasing reported earnings and minimizing the personal taxes of themselves and their employees. To be sure, employer deductibility provides a counter incentive. However, it would not be surprising to discover that executives often would find the final consideration – deductibility for the firm – to be the least important of the three.

The recent option backdating scandal provides a cautionary tale. Evidence of backdated option grants suggests a widespread willingness to bend the rules when the compensation of executives and subordinates is at stake. Evidence of backdated option *exercise* indicates a willingness to sacrifice corporate tax deductions for personal tax savings.<sup>134</sup> Moreover, like backdating, manipulation of ex ante option valuation would be difficult to detect.

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<sup>132</sup> See *supra* notes 53-54 and accompanying text.

<sup>133</sup> Professors Ethan Yale and Gregg Polsky have similarly concluded that “the malleability of the accounting valuation rules [for NQSOs] make them a poor guide for assessing taxes.” See Ethan Yale & Gregg D. Polsky, *Reforming the Taxation of Deferred Compensation*, 85 N.C. L. REV. 571, 590-91 (2007). As noted above, restricted stock valuation is much less manipulable than option valuation. Thus, this concern applies almost exclusively to options.

<sup>134</sup> See Eric Dash, *Dodging Taxes Is a New Wrinkle in the Stock Options Game*, N.Y. TIMES, Oct. 30, 2006, at C1 (reporting allegations of exercise backdating at Symbol Technologies and Mercury Interactive); Jennifer Levitz, *Comverse Ex-CEO May Have Fudged Option Exercise Dates, Not Just Grants*, WALL ST. J., Dec. 6, 2006, at C1 (reporting suspicious exercise timing at Comverse). Backdating option exercise to a low stock price date effectively converts a portion of what would be ordinary income for the employee into capital gain. This conversion would reduce the employee’s income tax bill as well as the employment taxes paid by both parties. However, the firm loses an income tax deduction for the portion converted. See Walker, *supra* note 47, at 618 n.219. Unless the issuing firm faced a very low marginal tax rate, this tradeoff is unlikely to be net tax efficient. The tradeoff, in fact, is similar to the choice between granting ISOs and NQSOs. See *supra* note 51 and accompanying text.

Of course, there are many other examples of firms inefficiently sacrificing corporate tax deductions. For instance, firms routinely forfeit tax deductions for executive pay by failing to utilize compensation structures that satisfy § 162(m), e.g., by paying executives salaries in excess of \$1 million per year. See *supra* note 51 for further discussion of that and similar examples. It is also well established that firms sacrifice corporate tax benefits to improve financial accounting results. See Douglas A. Shackelford & Terry Shevlin, *Empirical Tax Research in Accounting*, 31 J. ACCT. & ECON. 321, 327 (2001).

Of course, the incentives of executives to manipulate option values will vary depending on their sensitivity to earnings, corporate tax, and personal tax issues. We will have more to say about this in subpart 2 below. Our point here is simply that scope for manipulation, whatever the desired direction, is greater with respect to ex ante than ex post valuation.

f. Avoidance and/or Distortions

Yet another problem with book/tax conformity based on grant date values for stock and options is that the regime is, in effect, voluntary and elective. Without extensive adjustments elsewhere, companies could choose between grant date book/tax conformity and other regimes that generate economically similar results with better regulatory treatment, depending on their strategic preferences.

First, consider SARs, which are cash awards that mimic stock option contracts and are economically equivalent to options. Under GAAP, SARs are considered liabilities rather than equity and are accounted for on a mark to market basis.<sup>135</sup> Under comprehensive book/tax conformity, SAR taxation (let us assume both employer and employee taxation) would be marked to market as well. SAR recipients would still face liquidity issues, but assuming that gains and losses were treated as ordinary, firms and employees could avoid many of the harshest aspects of grant date tax valuation of options by switching to SARs.

Of course, SAR *accounting* could be revised to be consistent with option accounting. But if it was, that would just shift the inevitable line-drawing problem between incentive arrangements treated as equity compensation and arrangements treated as cash compensation. For example, how would we treat cash bonus plans tied to reported earnings rather than increases in stock prices? Would participants be taxed based on an ex ante estimated value as well? Surely at some point, firms would be able to structure incentive programs that result in ex post taxation of employees, even if such programs were not ideal from the point of view of aligning the employee's incentives with shareholders. Managers might be willing to swallow a small increase in agency costs in order to avoid grant-date taxation.<sup>136</sup>

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<sup>135</sup> See *infra* Part III.C.1 for a detailed example of mark to market accounting applied to SARs.

<sup>136</sup> In their recent analysis of the taxation of deferred compensation, Professors Yale and Polsky question whether reform of deferred compensation taxation is worthwhile if all inconsistencies in the taxation of cash, deferred, and equity compensation cannot be eliminated. See Yale & Polsky, *supra* note 133, at 589-92. Our inquiry here is similar.

Let us suppose, however, that a program of grant date taxation of stock, options, and their close substitutes could somehow be made to be “sticky.” If the participants remain dissatisfied, they will simply substitute old fashioned cash bonuses. This shift might or might not be efficient. (Although the shift looks like a tax-induced distortion in pay practices, we cannot be sure that the status quo baseline is non-distortionary.) However, depending on how relief for liquidity, loss limitations, and forfeiture were handled, the new regime very well could induce an inefficient distortion in corporate pay.

The electivity of grant date book/tax conformity is highlighted by the critical design question of whether to apply the regime to privately-held companies. Professor Shaviro’s proposal, for example, would apply only to public companies.<sup>137</sup> As a result, companies that believed that book-tax conformity would reduce tax deductions and increase their cost of compensation might choose to go private, or remain private, in greater numbers. Book/tax conformity would thus exacerbate the penalty of increased tax and auditing costs associated with going public.

Of course, given the manipulability of ex ante option valuation, it’s possible that some firms might be *more* attracted to options in a world of complete ex ante conformity. The opportunity to game valuation for one purpose or another would provide a planning option for firms utilizing option compensation and represent a distortion in the other direction.<sup>138</sup>

Senator Levin’s proposal, without explanation, apparently applies to all companies, public or private, which obviously raises other gamesmanship concerns.<sup>139</sup> Because many privately-held companies need not comply with GAAP, they would have considerable flexibility in valuing options so as to maximize the tax deduction (and reduce the less important reported earnings). By retaining current rules for employee taxation, the Levin proposal invites massive gamesmanship by privately-held firms. We expand on this issue below.

## 2. De-Linking Employer and Employee Taxation

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<sup>137</sup> See Shaviro, *supra* note 2, at 60-61.

<sup>138</sup> Under current rules, stock options provide firms with an opportunity to minimize compensation expense and executive compensation disclosure. If employer and employee tax were conformed with book, firms would also have the opportunity to minimize employee tax or potentially maximize employer tax deductions. As suggested above, one would expect discretion to be used to minimize the reported value of options under this regime, but situations might arise in which corporate tax concerns dominate other considerations.

<sup>139</sup> See S. 2116, 110th Cong. § (q)(1) (2007) (limiting deduction to the amount taxpayer has treated as an expense “in a report or statement to shareholders, partners, or other proprietors (or to beneficiaries),” without limitation to publicly-traded entities).

If conforming employee taxation of equity compensation to book is unattractive, then proposals (like the Levin proposal) conforming employer taxation to book must give up the matching principle which limits and links an employer's tax deductions to the amounts included by the employee. De-linking employer and employee taxation of equity compensation raises a particularly thorny set of issues.

Severing the link between employer and employee taxation of equity compensation is not inherently objectionable. As Professor Halperin has explained, matching the timing of employer and employee taxation is not necessary to achieve correct and consistent taxation.<sup>140</sup> Consider deferred compensation that is earned in an initial year and paid out in a subsequent year. Halperin demonstrates that deduction and inclusion in the initial year, deduction and inclusion in the subsequent year, and deduction in the initial year and inclusion in the subsequent year all produce the same tax result so long as the investment return on the deferred compensation is taxed at the same rate. This equivalence holds for equity compensation as well, even though the returns are much less certain.<sup>141</sup>

Importantly, however, giving up the matching principle would create new gaming opportunities for companies compensating employees with options. There are at least two possibilities. First, we could simply retain the current tax rules for optionees, while conforming employer taxation to book. Under this approach, employee taxation of options would continue to be based on realized gains. An employer's tax deduction for options, however, would be based on expected values derived from an option pricing model. Thus, firms could adopt assumptions regarding expected time to exercise, stock price volatility, and anticipated dividend yields that inflate calculated grant date values and corporate tax deductions without impacting the amount of income included by their employees.<sup>142</sup>

To be sure, inflating grant date valuation to boost corporate tax deductions would also result in increased compensation expense for financial reporting purposes and increased executive compensation reported in proxy statements. For some firms, these counterweights would limit or preclude inflation of the tax deduction. But privately-held firms, of course, could easily be tempted to trade increased cash

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<sup>140</sup> See Halperin, *supra* note 29, at 520.

<sup>141</sup> See Walker, *supra* note 29.

<sup>142</sup> See Rubinstein, *supra* note 53 (estimating that a firm wishing to over-state option values could reasonably select assumptions yielding expected values almost twice those of a firm wishing to undervalue options). To be sure, employer and employee taxation of qualified plans is also de-linked, but in this case the employer contribution is in cash which presents no valuation or manipulation issue. Option valuation is uniquely manipulable.

flow for a decrease in reported earnings presented to their private investors with a wink and a nod.

Even if conformity is limited to public firms, the gamesmanship issue remains. Reported earnings may be of limited usefulness in constraining gamesmanship among quasi-public companies (such as those that trade on closed exchanges for institutional investors) or those companies that voluntarily follow GAAP (or International Accounting Standards) and therefore might fall within the scope of book/tax conformity.

Moreover, not every traditional public company is a slave to reported earnings. After-tax cash flows also matter to managers, and it is not self-evident that reported earnings and compensation disclosure are better restraints on gamesmanship than employee-level taxes. In any event, firms with a strong focus on cash flow and limited sensitivity to reported earnings and compensation disclosure would be tempted to exploit the tax gap and select option valuation assumptions that produce outsized tax deductions.<sup>143</sup>

A second possibility would be to conform employee taxation of options to book (and employer tax) to the extent possible without violating the principle of § 83. This would mean taxing options at vesting. If implemented consistently with the taxation of restricted stock, options would be revalued at vesting using one of the option pricing models, since the option spread at vesting would not fully reflect the option's value at that point.<sup>144</sup> Although this approach would overcome the employee liquidity and forfeiture concerns, its weaknesses should be readily apparent. Option valuation for employer and employee tax purposes would remain de-linked, allowing firms to select grant date model inputs that increase option costs and employer tax deductions. In addition, unlike the current employee taxation of options, revaluation at vesting would allow firms to select vesting date assumptions that decrease option values and employee tax inclusions.

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<sup>143</sup> We can only speculate as to how severe this problem might be, as there is no precedent of de-linking employee and employer taxation of options. But consider, for example, a public company that is already planning to take a major hit to reported earnings from a one-time event, such as a restructuring. The company may wish to issue stock options to employees that year using a high volatility estimate and thus a high valuation of the options, increasing the firm's tax deduction. This one-time hit to corporate reported earnings is offset by the benefit of increased cash flow from lower taxes. Because the employees would not pay tax until realization, they would have no reason to object to the high estimated initial value of the options.

<sup>144</sup> See BREALEY ET AL., *supra* note 10.

Meanwhile, this approach remains susceptible to criticisms regarding the (in)applicability of option pricing models to employee options.<sup>145</sup>

In sum, severing the link between employer and employee taxation of equity compensation raises severe policy concerns. For companies that are indifferent to reported earnings, the gamesmanship opportunities would be plentiful.

### C. Conforming GAAP to Tax

Book/tax conformity proponents generally take GAAP as a given and assume that conformity would require modification of tax rules to mirror GAAP. That is probably a reasonable assumption for comprehensive book/tax conformity proposals. However, in the particular case of equity compensation, it is conceivable that GAAP could be conformed to mirror the tax rules. The model exists in the GAAP rules applicable to cash-settled SARs. Applying these rules to stock options, and possibly to restricted stock, could produce conformity of tax, accounting, and compensation disclosure, all at the realized value end of the spectrum.

GAAP Conformed to Tax:  
Measurement of NQSOs  
(and Perhaps Restricted Stock)

Financial Accounting	Realized Value
Employer Tax	Realized Value
Employee Tax	Realized Value

#### 1. Example of the SAR Expensing Method Applied to Options

Under SFAS 123R, the expense associated with SARs is initially calculated using an option pricing model and grant date information on the stock price, volatility, etc. However, the ultimate measurement date

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<sup>145</sup> Several improvements could be made to this bare bones approach. For example, the spread of an option at vesting could serve as a lower bound on the permitted valuation for employee taxation. The value of an option with remaining life always exceeds the current spread, but for options well in the money, the difference between option value and spread may be slight. *See id.* Another possibility would be to dispense with revaluation at vesting and tax employee recipients based on the grant date valuation. That approach, however, is the same as full conformity with relief from tax until vesting.

for SAR expense is the exercise date. In the interim, SAR expense is recalculated at the end of each reporting period.<sup>146</sup>

Let's compare expense reporting for options and SARs to highlight the difference. First, assume a firm issues an NQSO to an executive on January 1, 2008 with grant date Black-Scholes value of \$3 million, and assume that the option vests over three years. If the option does indeed vest, the expense recognized for that option would be \$1 million per year for each of the three years between grant and vesting.

However, if the instrument granted is an economically equivalent SAR instead of an NQSO, the value would be recalculated periodically and the book expense adjusted accordingly. Suppose that at the end of 2008, the Black-Scholes value of the SAR based on the then current stock price, volatility, and remaining life is \$4.5 million. The expense recognized for 2008 would be \$1.5 million (1/3 of \$4.5 million) instead of \$1 million. Suppose that at the end of 2009, the recalculated value is \$6 million. Because service has been provided for two years, the cumulative expense that must be recognized is \$4 million. Thus, the expense recognized for 2009 would be \$2.5 million (\$4 million less the \$1.5 million expense recognized in 2008). Suppose at the end of 2010 when the SAR vests, the recalculated value is \$5 million. The expense recognized for 2010 would be \$1 million in order to produce a cumulative expense of \$5 million.<sup>147</sup>

However, marking SAR expense to market does not end with vesting. It continues until the instrument is exercised.<sup>148</sup> Suppose at the end of 2011 the SAR remains unexercised and has a calculated value of \$6.5 million. The issuer would recognize compensation expense of \$1.5 million for 2011. Finally, suppose the SAR is exercised in 2012 and results in a payment to the recipient of \$7 million. \$500,000 of compensation expense would be recognized in 2011, bringing the cumulative recognized compensation expense in line with the realized value of the instrument.

Marking stock options to market in the same fashion would produce eventual conformity between book and tax. Assuming that the SEC continued to base its executive compensation disclosure rules on expense recognition under GAAP, all four measures of compensation would eventually conform. Recall that under current proxy disclosure rules, the summary executive compensation disclosure table includes as option compensation each year the amount expensed per GAAP.<sup>149</sup>

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<sup>146</sup> See SFAS 123R, *supra* note 6, ¶ 36.

<sup>147</sup> See *id.* ¶ A127-A133 for a similar example.

<sup>148</sup> See *id.* ¶ 36.

<sup>149</sup> See *supra* note 31 and accompanying text.

Thus, for our executive, the disclosed option compensation would be as follows: 2008, \$1.5 million; 2009, \$2.5 million; 2010, \$1 million; 2011, \$1.5 million; 2012, \$0.5 million. Of course, the value of option compensation reported in the table detailing grants of equity awards would continue to be \$3 million. SAR and option treatment are identical in that regard, as they must be.

## 2. Pros and Cons of Conforming Book to Tax

The prospect of a final day of reconciliation between the tax and financial accounting books should dampen enthusiasm for under-reporting option expense at grant, but it is possible that this method of conforming the books would do less to dissuade firms from gaming earnings than the alternative of conforming tax to GAAP. Under an expected value approach, firms that care about tax face a stark tradeoff at grant between minimizing taxes and maximizing reported earnings. Under a realized value approach, the tradeoff is postponed, and one can imagine firms shading initial and interim option expense down, all the while realizing that the expense recognized and compensation revealed in the year of exercise will be commensurately larger.<sup>150</sup>

On the other hand, the two approaches to conformity both achieve a primary goal of reformers, which is to ensure that corporate tax deductions do not exceed the amount reported to investors.<sup>151</sup> Moreover, conforming book to tax would leave the current tax rules in place, and doing so has several advantages over conformity at book. First, as we have discussed above, the linkage between employer and employee tax valuation, particularly when both are based on realized value, helps combat valuation gaming with respect to tax. Second, this approach eliminates any possible private company/public company distinction and distortion relating to the tax rules for equity compensation. Third, this approach provides the added bonus of eliminating the inconsistency between the accounting treatment of economically equivalent options and SARs.

What are the downsides to conforming book to tax? Some firms might object to basing ultimate stock option expense on realized values rather than expected values from a salience perspective. The concern would be that investors will ignore all the options that expire out of the money, but will be outraged by the few options that are exercised for

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<sup>150</sup> For example, suppose the firm in our hypothetical manipulates the inputs into the Black-Scholes model to produce an initial option value of \$2.5 million instead of \$3 million. The firm might continue to use assumptions that reduce accruals between 2008 and 2011. However, when the instrument is exercised in 2012, the firm would be forced to recognize the difference between the \$7 million realized value and the cumulative amount recognized as an expense up to that point.

<sup>151</sup> See Levin statement, *supra* note 3.

huge gains, thus unreasonably penalizing the most successful firms and executives.<sup>152</sup> It is not clear, however, that this would be a serious drawback to conforming book to tax. Under current GAAP rules, total gains on executive option exercises are clearly disclosed in a separate table.<sup>153</sup> Presumably, that table would remain unchanged if book were conformed to tax. Of course, that table only discloses compensation for the top five executives. Total compensation expense subtracted from reported earnings would include all annual gains or losses on options. But, again, under a mark to market approach, the total realized values of options would not be subtracted from earnings as a lump sum. The amount would be subtracted on an accrual basis. One would think that from a salience perspective, marking to market would tend to reduce the kind of huge, lumpy compensation expense that is most likely to produce outrage.

A second potential problem lies in implementation. The FASB has only recently addressed this issue, and it concluded that grant date measurement of option compensation is preferable to measurement at exercise, the approach utilized with SARs.<sup>154</sup> Convincing the FASB to reverse its position on this point would be difficult.

However, reversal is conceivable for several reasons. First, it is clear from the statements of the FASB over the last fifteen years that the group's primary concern in this area is that option compensation be expensed.<sup>155</sup> With respect to details – grant or settlement date measurement – the strength of conviction is less obvious. The academic community appears to be split on the option measurement question,<sup>156</sup>

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<sup>152</sup> See Polsky, *supra* note 42, at 909 (arguing that “public uproar over options inevitably occurs upon exercise rather than upon grant”).

<sup>153</sup> See *supra* note 35 and accompanying text.

<sup>154</sup> See SFAS 123R, *supra* note 6, ¶ B43-B48. This view is shared by the International Accounting Standards Board. See *id.* ¶ B48 (noting consistency with international accounting standards); INT'L ACCT. STD. BD., TECHNICAL SUMMARY, IFRS 2: SHARE-BASED PAYMENT 1 (2008) (noting that the “fair value of equity instruments granted [to employees] is measured at grant date”).

<sup>155</sup> See generally FIN. ACCT. STD. BD., EXPOSURE DRAFT: ACCOUNTING FOR STOCK-BASED COMPENSATION (1993); SFAS 123, *supra* note 13; SFAS 123R, *supra* note 6.

<sup>156</sup> Although the FASB ultimately adopted grant date measurement in SFAS 123R, numerous commentators advocated exercise date measurement based on the liability-like character of equity compensation, the lack of a practical difference between options and cash-settled SARs, and the mitigating effect of exercise date valuation on the problems inherent in applying option pricing models to employee options. See SFAS 123R, *supra* note 6, ¶ B43-45. See also, AM. ACCT. ASS'N FIN. ACCT. STD. COMM., RESPONSE TO IASB EXPOSURE DRAFT, “SHARE-BASED PAYMENT,” (2003) (arguing in favor of exercise date measurement of stock option expense); Steven Balsam, *Extending the Method of Accounting for Stock Appreciation Rights to Employee Stock Options*, 8 ACCT. HORIZONS 52 (1994) (same); Michael Kirschenheiter et al., *Accounting for Employee Stock Options*, 18 Acct. Horizons 135 (2004) (same);

and there are advantages and disadvantages to both approaches. Conceptually, one might favor grant date measurement under the view that the tradeoff is made at that point between cash and option compensation and that the cash equivalent should constitute the measure of the expense.<sup>157</sup> On the other hand, as the FASB notes in SFAS 123R, settlement date measurement would mitigate concerns regarding the accuracy of option pricing models and is the usual accounting response to uncertainty.<sup>158</sup> Further, although neutrality is an expressed objective within the FASB's conceptual framework,<sup>159</sup> SFAS 123R does not adequately address the discrepancy between the treatment of economically equivalent options and SARs. Instead it relies on the conclusion that SARs represent liabilities, while options are equity instruments, a distinction of absolutely no moment to firms and their employees and seemingly the weakest possible basis for line drawing. To be sure, this inconsistency could be resolved in either direction and SARs are granted much less frequently than options, so, in isolation, this is not an overwhelming argument for revising the measurement date for option compensation.<sup>160</sup>

There is, however, an additional argument for switching to the SAR approach that is not expressly addressed in SFAS 123R, and that is the susceptibility of option pricing models to manipulation. The FASB recognized that the mark-to-market approach utilized in accounting for SARs would mitigate concerns about the applicability of option pricing models developed for traded options to compensatory options, but they appeared to view this as simply an accuracy of measurement issue.<sup>161</sup> Manipulation is another question. It is conceivable that if the FASB

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Gerald J. Lobo & Joseph C. Rue, *Accounting for Stock Options: Comparison of Alternative Approaches*, 16 J. APPLIED BUS. RES. 27, 36 (2000) (same); Ara Volkan, *The FASB Should Revisit Stock Options*, 2 J. AM. ACAD. BUS. 254 (same).

<sup>157</sup> See SFAS 123R, *supra* note 6, ¶ B46. By this view, SAR accounting conflates compensation expense (grant date value) with a firm's bet on its own stock price (the mark to market requirement).

<sup>158</sup> See *id.* ¶ B45.

<sup>159</sup> See FIN. ACCT. STD. BD., FACTS ABOUT FASB 2 (2007), available at [www.FASB.org](http://www.FASB.org) (providing FASB mission statement which states as a precept that the FASB will "ensure, insofar as possible, the neutrality of information resulting from its standards" and notes FASB's belief that the "public interest is best served by developing neutral standards that result in accounting for similar transactions and circumstances in a like manner").

<sup>160</sup> It remains to be seen, however, whether rationalization of accounting for at-the-money NQSOs per SFAS 123R will revitalize the use of SARs, or whether the remaining difference as described herein will result in a continued preference for options.

<sup>161</sup> See SFAS 123R, *supra* note 6, ¶ B45 ("Concerns about how to apply option-pricing models initially developed for traded options to forfeitable, nontransferable employee options are much less significant if final measurement is based on the intrinsic value, if any, that an employee realizes by exercising an option.").

were convinced that firms were using the discretion inherent in the option pricing models to minimize compensation expense, that factor might persuade them to reverse course. As noted above, there is evidence of valuation manipulation of footnoted option expense prior to the promulgation of SFAS 123R.<sup>162</sup> It is too early for researchers to have produced evidence of manipulation in the new era, but the incentive to manipulate is even greater today.

Although the FASB has disclaimed any intention of including non-accounting considerations in its deliberations,<sup>163</sup> this position should not deter the group from taking susceptibility of manipulation into account in weighing the pros and cons of various measurement alternatives. Ultimately, the potential for manipulation bears on the accuracy, repeatability, and value-relevance of financial statements, which the FASB has pledged to uphold.<sup>164</sup>

However, if the FASB cannot be convinced to adopt the SAR accounting approach for options, Congress or the SEC would have to intervene to conform book to tax. While Congress revises the tax code at the drop of hat, it has rarely intervened in financial accounting matters, and we should be hesitant to encourage Congress to intervene. As one of us has argued elsewhere, congressional meddling in GAAP raises numerous concerns including the potential introduction of significantly greater lobbying effort into the standard setting process and capture of the process by the interest group with the most at stake, corporate management.<sup>165</sup> It is entirely possible that if this question were brought before Congress the result could be reversal of SFAS 123R and a return to optional expensing of options rather than conforming option expense to tax.

### 3. A New Line Drawing Problem – Restricted Stock

However, even if the FASB could be convinced to adjust the measurement date for options, we must be careful that eliminating an inconsistency between options and SARs does not introduce another distortion in corporate compensation arrangements and, if options are

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<sup>162</sup> See *supra* Part III.A.2.

<sup>163</sup> See, e.g., FIN. ACCT. STD. BD., EXPOSURE DRAFT: SHARE-BASED PAYMENT (Mar. 31, 2004), at C33 & 34 (noting that the FASB is required “to consider issues in an evenhanded manner, without attempting to encourage or discourage specific actions” and rejecting as irrelevant arguments that expensing stock options would have adverse economic consequences in causing firms to “reduce, eliminate, or otherwise revise” option programs”).

<sup>164</sup> See FACTS ABOUT FASB, *supra* note 159.

<sup>165</sup> See Walker, *supra* note 39, at y; see also Shaviro, *supra* note 2 (voicing concern with congressional involvement in the accounting standard setting process). (DW – page cite for your Financial Accounting article?)

accounted for like SARs, think about where the new line will be drawn between accounting based on expectation and realization. Consider restricted stock. Under current GAAP, the grant date value of restricted stock is recognized as an expense, which is allocated ratably across the vesting period.<sup>166</sup> This approach is, of course, consistent with the current treatment of options. For restricted stock, the grant date value is simply the fair market value of unrestricted stock – vesting and restrictions on transferability are ignored in determining value – although expense is not recognized for shares that fail to vest.<sup>167</sup>

It is certainly feasible, although perhaps less defensible, to switch to an “SAR approach” in expensing restricted stock. The instruments could be marked to market in each period between grant and vesting, such that the cumulative expenses reported to investors in proxy and financial statements would equate to the market values of the stock on vesting. But this would result in an accounting line being drawn between unrestricted and restricted stock, as unrestricted stock granted as compensation would certainly be expensed at its grant date value. Lack of transferability seems a thin basis for including investment returns in the compensation expense recognized with respect to restricted but not unrestricted stock.

The alternative is to draw the accounting line between restricted stock and options on the basis of the greater uncertainty in valuation and liability-like characteristics of the latter.<sup>168</sup> The concern is that this approach could result in a distortion in firm preferences between these two very important compensation devices. In theory, this approach should not be distorting. Aside from risk, there is no bias between expected and realized value from the decision maker’s ex ante perspective.<sup>169</sup> However, some firms might prefer the certainty of expected value based expense recognition; others might prefer that expense recognition track realized results.<sup>170</sup>

#### IV. CONCLUSION

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<sup>166</sup> See *supra* note 15 and accompanying text.

<sup>167</sup> See SFAS 123R, *supra* note 6, ¶ 21.

<sup>168</sup> See Kirschenheiter et al., *supra* note 156 (advocating treating options as liabilities for accounting purposes, but not share grants).

<sup>169</sup> See *supra* Part III.A.1.

<sup>170</sup> In one respect, drawing the line between stock options and restricted stock could reduce a distortion in accounting choice. Option expense currently is manipulable; restricted stock expense is not. That favors options over stock. If conforming option expense with SARs and tax treatment reduces the incentive to game expense recognition, that distortion is reduced.

There is no free lunch here. As we have seen, increasing conformity along one axis to reduce the gaming of reported earnings may facilitate gaming of corporate tax deductions. Conforming employee and employer tax treatment with GAAP raises concerns about liquidity, fairness, and manipulation. Any move may affect tax- and accounting-induced distortions in the selection of equity instruments.

Given all of these tradeoffs, it is not obvious which of the three equity compensation tax, disclosure, and accounting regimes discussed in this Article is superior – status quo, tax conformed to book, or book conformed to tax. To us, however, it is a realistic possibility that current proposals to conform tax to book represent the third best of these three options and that the status quo may well be the best.

For proponents of comprehensive book/tax conformity, the question must be whether equity compensation should fall under the default rule, i.e., its tax treatment conformed to book, or whether it should stand as an exception. It is not clear within the context of the overall book/tax gap that equity compensation is a serious problem. To be sure, it has historically represented a large fraction of the gap in raw numbers, but SFAS 123R will largely eliminate the aggregate options gap. Moreover, the book/tax difference attributable to stock options is readily identifiable firm by firm; it does not appear to contribute to the lack of transparency and difficulty in identifying the source of the overall gap between a firm's book and taxable income.

We certainly see little value in conforming corporate taxation of options to book as a one-off project. Where is the incremental value in firm X reporting a book/tax difference of \$4 billion post options conformity versus status quo reporting of a gap of \$5 billion, \$1 billion of which is readily attributable to option compensation?

Moreover, to the extent that we are concerned with continued manipulation of option valuation for earnings purposes post-SFAS 123R, enhanced disclosure and perhaps specification of the inputs into option pricing models would appear to be a relatively low cost corrective. The incremental benefit of conformity does not seem equal to the cost of 1) forcing employees to accept grant date valuation of option compensation, 2) introducing the opportunity to game the tax deduction for options, and/or 3) introducing a distortion into the public/private decision as a result of differentiated option taxation.

On the other hand, we think it possible that the status quo could be improved upon by adjusting the accounting treatment of options to match that of stock appreciation rights. This change would result in realization-based valuation for the purposes of accounting, employee

tax, employer tax, and executive compensation disclosure; and it would place a check on gaming option expense recognition. However, we are concerned that this reform might drive a wedge between options and restricted stock. Moreover, implementation requires that the FASB reverse course (perhaps unlikely) or that the SEC or Congress intervene (perhaps undesirable). Given the potential unintended consequences and what we view as minimal concerns with equity compensation post-SFAS 123R, we do not see a strong driving force for departing from the status quo.