

THE DISLOYALTY OF STOCK AND STOCK OPTION COMPENSATION

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INTRODUCTION

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Stock options have grown over the last decade to take up an increasing percentage of the rising compensation of top management.¹ The popularity of options is best understood as arising from deceptive accounting. Current accounting standards allow management to avoid mentioning the cost of its compensation in its earnings statements. But for the opportunity to understate compensation cost, stock and stock option compensation are terrible ideas that will harm the equity investors' interests.

- Stock options give managers an incentive to impose too much risk on shareholders and to accumulate too much of the corporation's earnings. Shareholders who allow their managers significant options may find that they have given their managers a motive to undertake suicidal risks from which the managers are immune.
- Stock and stock options carry an unnecessarily high discount rate in the time-value of money calculations. Better management of the discount rate would lower the corporation's real cost of compensation or increase the recipient's present-value benefit from the cost or both.
- Stock compensation can give employees capital gains, but compensation is almost always more tax efficient if employee capital gains are avoided. The tax harm to a corporation by loss of its compensation deductions in using capital-gains compensation almost always exceeds the tax benefit to the managers. Employee capital gain usually means the managers have not counted the corporation's harm.

Given the harm that stock options can do to investor interests, management's use of stock options and stock compensation are a sign that managers are being disloyal to investors, especially when management chooses not to record the cost of the options in its income statements given to investors.

The insurance industry is an important institutional investor in corporate stock. Life insurance companies held \$1.5 trillion dollars of

¹. See, e.g., Kevin J. Murphy, *Explaining Executive Compensation: Managerial Power versus the Perceived Cost of Stock Options*, 69 U. CHI. L. REV. 847, 848 (2002) (discussing an increase in executive compensation in the 1990s driven predominantly by growth of options from 27% of compensation to 51% of compensation); Kenneth J. Klassen, *Options for Compensation*, CA MAGAZINE, Aug. 2000, at 41 available at http://www.camagazine.com/index.cfm/ci_id/6970/la_id/1/camagazine/1/print/true.htm (last visited Nov. 1, 2004) (citing studies that American CEOs on average received stock options worth \$1.21 million).

corporate equities at the end of 2002 and purchased \$144 billion of stock during that year.² Corporate equities typically represent between a quarter and a third of the gross assets of life and health insurance companies.³ In its role as a heavy investor in corporate equities, the insurance industry needs to understand that stock options, especially those not reported as a compensation expense, are a badge of disloyalty. Managers who use stock option compensation can be presumed to be unfriendly to investor interests.

Moreover, because the insurance industry is such an important institutional investor in corporate equities, it has a special role in insuring that financial reports give investors the information they need. The process of setting financial accounting standards has been overly influenced by management interests on this issue. Management likes to treat its payroll as having no cost and it especially likes having its own compensation reported as if it were free. Off-budget and out-of-mind means that managers can pull away more money from their shareholders with little chance of being noticed. Equity investors, each with very little at stake, do not seem to have been able to organize well enough to guarantee earnings reports that are loyal to their needs. However, the insurance industry's stake, on the investor side, is large enough for the industry to take an interest in fair accounting.

This article first explains the accounting war over how to account for stock option compensation. It then explains the economic drawbacks of stock and stock option compensation that make the use of stock-based compensation such a sign of disloyalty.

I. THE ACCOUNTING WAR

² U.S. CENSUS BUREAU, STATISTICAL ABSTRACT OF THE UNITED STATES: 2003, at 755 (123rd ed. 2003) (data from Federal Reserve Board, National Income and Product Accounts). Other insurance companies held \$208 billion of corporate equities at the end of 2002 and purchased \$12 billion during 2002. *Id.*

³ *Id.* at 764 (data from American Council on Life Insurers) (corporate equities represented \$909 billion/\$3269 billion or 27.8% of life and health insurance company assets in 2001, \$997 billion/\$3182 billion or 31.3% of assets in 2000, 32.2% of assets in 2000, and 26.8% of assets in 1998).

A. NO-INITIAL BARGAIN OPTIONS ARE REPORTED AS IF FREE

Accounting for compensatory stock options is the subject of a political firestorm. Under current accounting standards, stock options can now be reported in earnings statements as if they were free. The Financial Accounting Standards Board has proposed to end the free option privilege. The U.S House of Representatives, but so far not the Senate, has voted to block the change.

In 1972, before the Black-Scholes option-pricing formula had given some precision to the valuation of options, and before accessible option markets were very meaningful, the American accounting profession adopted a simple-minded rule of thumb for valuing compensatory stock options.⁴ Under the accounting rules, the only reported cost of an option to acquire an employer's own stock is the initial bargain, measured at the time the option is granted. If the option is set up to have no difference between the exercise price the option holder has to pay to get the stock and the market value of that stock at the time the option is granted, then the option may be treated in the public reports of earnings as if the option were free.

Zero-costing for an option with no initial bargain is not a good faith attempt to measure the value or cost of the option. If it were certain that no change in value would occur, an option with no initial bargain would be worthless. An option to buy a bank account (but not the interim interest) in a year for its current value is not worth anything because bank accounts do not rise or drop in value. As volatility in the price of the underlying stock increases, however, the value of the option increases, even in absence of any *initial* bargain. The holder of an option with no initial bargain can capture all of the subsequent gains from the appreciation of the underlying stock without having supplied the capital that contributed to that appreciation. Simultaneously, the holder has insurance-like protection on the loss side, because if the stock value drops below exercise price, the option holder can avoid the loss simply by failing to exercise. Holding an option is much like getting to bet on the horse race after the race has been run.

⁴ ACCOUNTING FOR STOCK BASED COMPENSATION, Accounting for Stock Issued to Employees No. 25 (Accounting Principles Bd. 1972). The Accounting Principles Board was the pre-1973 predecessor of the Financial Accounting Standards Board, which now sets U.S. accounting standards. The classic article on option valuation is Fischer Black & Myron Scholes, *The Pricing of Options and Corporate Liabilities*, 81 J. POL. ECON. 637 (1973). See also RICHARD BREALEY & STEWART MYERS, *PRINCIPLES OF CORPORATE FINANCE* 606-08, 632-33 (6th ed. 2000).

For high-risk stocks, a holder of a no-initial-bargain option holds essentially all of the value of the stock. If there were a stock called Cold-Fusion Corporation, for example, which had a one in a million shot of becoming very valuable, the holder of a no-initial-bargain option would be able to grab the value in the rare case that the high value comes to fruition. The value of a no-initial-bargain option would be short of the value of owning the Cold Fusion stock outright by only one-millionth of the current value.⁵

Options that are exercised, moreover, require that the corporate employer issue stock to satisfy the option, and stock is not free to other shareholders. An executive given stock has been given some fraction of the future cash that the corporation will distribute with respect to its stock. Other shareholders have lost that cash. There is no enforceable legal obligation to pay dividends nor to redeem shares, but all new shareholders have a powerful remedy, which younger siblings and toddlers in Day Care have learned to use, namely to shout, "Share!" A corporation cannot distribute money to old or other shareholders without including the new shareholder proportionately. Anything that a new shareholder gets has to be lost by the old. If a new CEO gets 5% of the stock by exercise of an option, the CEO has taken 5% of all future cash on the stock away from the other shareholders. The CEO may or may not be worth it, but it is certain that the 5% of all future cash for as long as the stock is outstanding, is a cost of whatever the CEO can bring in. The CEO is not free.

Stock is nothing but a proxy for the future cash that the corporation must pay out on the stock. Stock has value only because the market is assessing the discounted present value of the future cash that will be paid out. Without the expectation of cash distributions, as dividends or in redemption, stock is not worth the paper it is printed on. The market does not *pay* the compensation. The market just appraises what cash the employer corporation will pay in the future with a heavy dose of skepticism.

The discount rate at which the market evaluates the future cash is ruthless to the issuer: a lot of future cash supports only a little current

⁵. Assume a share of Cold Fusion is worth \$10 because that represents a one in a million chance of having a share with a worth of \$10 million, even when discounted back to the present. Executive X is given an option to buy a Cold Fusion share for \$10 at any time over the next 10 years by which time the doubts about success will be resolved one way or the other. In 999,999 times out of a million, both the stock and option are worthless. Still X has a one in million chance of making \$10 million less the \$10 exercise (\$10,000,000 - \$10)/ 1,000,00 = \$9.99999, which is less than the \$10 current fair market value of the stock only by a millionth of \$10, or one-ten thousandths of a penny.

value. The discount rate, moreover, is not deductible. Debt is one competing alternative to pay future cash and debt is far cheaper to the issuer. Over the last 75 years, the stock market has discounted future cash that it expects to be paid by the issuer, after inflation adjustments, at a discount rate of 7.6%. The corporation must, therefore, bear an average cost of 7.6% per year on stock, after inflation, in the nature of interest or rental cost of capital for deferring payment.⁶ For corporate debt, the discount rate, called interest, starts lower and is made cheaper by the corporate deduction. On average over the same 75-year period, corporate bonds have had an after-tax, after-inflation cost of between 0.7% cost per year and *negative* 0.3% cost per year.⁷ Debt is almost zero interest, and stock bears very high real interest.

Cash payments on compensatory stock are enforced, primarily, by the rule that all shareholders share in distributions pro rata, but there are also some backup threats. If the value of the corporation's stock drops substantially below the value of its assets, that invites a hostile takeover by some outside pirate who will fire management and acquire the company's assets.⁸ To protect their jobs, managers need to keep the price of stock up by continuing to convince the market that there is sufficient cash yet to come that will support the present value of the stock at the brutal discount rate by which the market values stock.

If stocks really were free, then the stewards of the corporation would have no obligation to keep watch over stock or stock options. Management has stewardship responsibility only for economic resources that have some cost or value. Treating the options as free is to teach management to waste them. Top management seems to be acting as if the accounting value assigned to no-initial-bargain options were correct, such that they can issue

⁶. IBBOTSON ASSOCIATES, *Stocks, Bonds, Bills, and Inflation*, SBI 2003 YEARBOOK 22 (2003) (reporting large corporate stocks discount rate at 10.7%, inflation at 3.1%).

⁷. *Id.* (reporting corporate bonds at 5.8% over 75 years). The U.S. corporate tax rate has varied from 13.5% to 52% during the 75-year history, and from World War II through 1993 it was at or above 40%. JOSEPH A. PECHMAN, *FEDERAL TAX POLICY* 290 (3d ed. 1977). The after-tax cost of corporate bonds to the corporation paying 35% tax is interest less tax savings, then minus inflation or $5.8\%(1-35\%) - 3.1\% = 0.7\%$. With corporate tax at 52%, as it was from the Korean War through 1964, the after-tax cost of 5.8% interest is -0.3 of 1%. In inflation adjusted terms, the negative cost means that the debtor makes money, by owing money. See also discussion of the comparative cost of debt and stock *infra* text accompanying notes 41-46.

⁸. See Henry G. Manne, *Mergers and the Market for Corporate Control*, 73 J. POL. ECON. 110, 113 (1965) (arguing that takeover market is a discipline of inefficient managers); Frank H. Easterbrook, *Managers' Discretion and Investors' Welfare: Theories and Evidence*, 9 DEL. J. CORP. L. 540, 567 (1984) (arguing that outsiders will try to take over the company if there is a 20% premium available if management changes hands).

themselves mega-options. It is not mysterious that management would take anything not nailed down. It is mysterious that shareholders seem to be letting them get away with it.⁹

Treating stock options as free also generates non-reflective income statements because economic resources the company needs to give out are stripped out of the public income statements. Assume a company gets executives to work for it only because it gives out stock options worth \$200 million. Assume that the executives together are able to generate only \$50 million in revenue. When income is reported, the value of the stock issued pursuant to a no-initial-bargain option is not mentioned. Instead of reporting a \$150 million loss measured considering the resources it used up, the corporation gets to report \$50 million profit. The \$50 million profit will not be replicated when other non-stock resources must be used in otherwise identical years and situations. The \$150 million loss is the more accurate sample and will be replicated.

For creditors, additional stock and stock options really are free. Since creditors get paid before shareholders, creditors are not hurt by additional stock and they are indifferent to it. Creditors would indeed prefer that the company replace cash expenses of any kind with payments in stock, because cash paid out reduces the collateral securing their debt holdings, but stock does not. Creditors should be worrying about income statements using the zero-costing rule for options as not providing them with a fair indicia of the profits the firm can make in the future or the trouble that the debtor may be in. However, the creditors have not been active in asking the standards board to treat stock options as a cost.

B. POLITICS PREVENTS FAIR ACCOUNTING

1. The Fate of the 1993 Initiative

Accounting has had a great deal of difficulty correcting itself on the zero-costing of stock options. In 1993, the Financial Accounting Standards Board ("FASB") published an Exposure Draft of a proposal that would have ended the zero-cost rule and replaced it with a rule that would have required something closer to the true value of the option, which would be treated as a corporate expenditure when the option was granted.¹⁰ The

⁹. See, e.g., Murphy, *supra* note 1, at 848 (showing that the increase in executive compensation in 1990's was driven predominantly by growth of options from 27% of compensation to 51% of compensation).

¹⁰. ACCOUNTING FOR STOCK-BASED COMPENSATION, Proposed Statement of Financial Accounting Standards No. 127-C (Financial Accounting Standards Bd. 1993); see also

zero-cost rule, however, had by that time created a powerful constituency of managers who liked their compensation to be considered not worth metering, and the managers and their allies defeated the proposed reform with a firestorm of razzle-dazzle, none of it with any accounting merit.¹¹ Investors, shareholders and the country at large would be benefited by more accurate descriptions, but they could not get organized into an effective constituency and nobody important helped the Board. The Statement that finally came out in 1995 allowed a firm to continue to use the no-cost rule for no-initial-bargain options, provided, however, that the firm disclosed in its footnotes the costs computed from value of the options at the time they were granted.¹²

There are some who think that footnote disclosure is sufficient.¹³ Zero-costing may be deceptive, but smart investors are not misled, the argument goes, because they can digest the information about cost given in footnotes. The Financial Accounting Standards Board stated in 1995 that, in principle, disclosure in the footnotes was no substitute for including costs in the

Calvin H. Johnson, *Stealing the Company with Free Stock Options: The Furor Over Accounting Standards—Part II*, 65 TAX NOTES 479 (1994) (arguing that the standard understated value of the stock and that accruing the bargain on the stock as the bargain rises would be better accounting).

¹¹. See, e.g., Senator Joseph I. Lieberman, *...But They Do Create Good Jobs; Stock Options are Necessary Growth Tools for Start-Up Firms*, L. A. TIMES, April 8, 1994, at B7; see also *Employee Stock Options: Hearings Before the Subcomm. on Sec. of the S. Comm. on Banking, Hous. and Urban Affairs*, 103d Cong. 88 (1993) (statement of Lisa Conte, Chairman and CEO of Shaman Pharmaceuticals, Inc.) (testifying she could not get the healing pharmaceuticals from rain forest shamans without stock options). The apparent argument of both Senator Lieberman and Conte is that zero-costing might well be a lie and fraud on investors, but one can get jobs and pharmaceuticals from the rain forest only by such fraud. If the necessary fraud argument is not the argument, I cannot follow the causal connection that is being claimed, much less evaluate it. See Calvin H. Johnson, *Stealing the Company with Free Stock Options: The Furor Over Accounting Standards—Part I*, 65 TAX NOTES 355 (1994) (recounting and dismissing some arguments in favor of treating stock options as cost-free).

¹². ACCOUNTING FOR STOCK-BASED COMPENSATION, Statement of Financial Accounting Standards No. 123 (Financial Accounting Standards Bd. 1995). In December 2002, the Board required more clarity in the heretofore opaque disclosures in the footnotes, requiring, for instance, tables instead of prose paragraphs. ACCOUNTING FOR STOCK-BASED COMPENSATION—TRANSITION AND DISCLOSURE, Statement of Financial Accounting Standards No. 148 (Financial Accounting Standards Bd. 2002).

¹³. See J. Carter Beese Jr., *A Rule That Stunts Growth*, WALL ST. J., Feb. 8, 1994, at A18 (reporting that Big Six accounting firms, Council of Institutional Investors, and Business Roundtable favor disclosure rather than reporting costs in body of financial statements); see also Samuel A. Derieux, *Stock Compensation Revisited*, 177 J. ACCT. 39, 39 (1994) (arguing that full disclosure will serve as well as reporting). In Johnson, *supra* note 11, at 358-60, that argument is rejected.

financial statements themselves, but the Board stated that it had met with such a firestorm of opposition to its exposure draft proposal to end zero-costing that it had decided to “bring closure to the divisive debate” by requiring only that option cost be disclosed in footnotes.¹⁴ The Board recommended, but did not mandate, that option cost be included in the calculation of reported income.¹⁵

Even if smart investors were able to see through the subterfuge, however, that does not justify accounting as deceptive as zero-costing is. Accountants should not be trying to fool the market or trying to raise the barriers that a smart market might or might not overcome. Indeed the difficulty of correcting the silliness is pretty good evidence that someone thinks that the fraud is succeeding. If footnote disclosure were sufficient, there would be no opposition to putting stock option cost into financial statements, since all the effects of including costs in financial statements would already have happened. As Federal Reserve System Chairman Alan Greenspan has said:

There is a legitimate question as to whether markets see through the current nonexpensing of options. If they do, moving to an explicit recognition of option expense in reported earnings will be a nonevent. The format of reports to shareholders will change somewhat, but little more will be involved. Making an estimate option expense requires no significant additional burden to the company.

If, however, markets do not fully see through the failure to expense real factor inputs, market values are distorted and real capital resources are being diverted from their most efficient employment. This *would* be an issue of national concern.

Clearly then the greater risk is to leave the current accounting treatment in place If, however, expensing does affect market values, a continuation of current accounting practice could be costly to capital efficiency.¹⁶

¹⁴. ACCOUNTING FOR STOCK-BASED COMPENSATION, Statement of Financial Accounting Standards No. 123, § 62 (Financial Accounting Standards Bd. 1995).

¹⁵. *Id.* at §§ 61-62 (requiring disclosure of compensatory options in footnotes, but not in income statements that include the costs).

¹⁶. Alan Greenspan, Remarks at the 2002 Financial Markets Conference of the Federal Reserve Bank of Atlanta, Sea Island, Georgia (May 3, 2002), *quoted in* ROBERT HERZ, FIN. ACCT. STANDARDS BD., SUBMISSION TO U.S. SENATE ROUNDTABLE, PRESERVING

The firestorm of politics in 1993 and again currently is superb evidence that the major players think that expensing of options within the income statements makes a difference. There would be no political campaign unless managers and their representatives thought they were establishing something by keeping the costs of their compensation out of the income statement.

2. The Still-Open 2004 Initiative

On March 31, 2004, the FASB released an exposure draft of a proposed new standard which would require the corporate employer to recognize the estimated value of stock options at the time the option was granted to the employee.¹⁷ Under the new proposal, the estimate of value would take into account the price of the underlying stock and the volatility of the stock that contributes to the option's value.¹⁸ Once the value was estimated at grant, however, the cost of the option would not be measured again by reason of subsequent changes in stock price or expected volatility.¹⁹ If it is not possible to measure the fair value of the option when granted, the proposed standard would require the company to measure the bargain or "intrinsic value" of the option at the end of each period and to measure the final cost of the option when it is settled or satisfied.²⁰ Nonpublic entities can choose this "intrinsic value" valuation method; however, valuation of the option when granted is the preferred method and if the nonpublic employer chooses to value the option when granted, the standards will not upset that choice.²¹

In response to the new FASB stock-based compensation proposal, Congress quickly held a flurry of popular hearings on bills to block the proposal from going into effect. The Senate Committee on Government Affairs, Subcommittee on Financial Management chaired by Senator Fitzgerald (Rep., Ill.), held hearings on April 20, 2004.²² The House

PARTNERSHIP CAPITALISM THROUGH STOCK OPTIONS FOR AMERICA'S WORKFORCE 25 (2003), available at http://www.fasb.org/testimony/05-08-03_full_text.pdf.

¹⁷. See SHARE BASED PAYMENT, Proposed Statement of Financial Accounting Standards No. 1102-100 (Financial Accounting Standards Bd., Exposure Draft 2004) [hereinafter Exposure Draft].

¹⁸. *Id.* app. A, §§ 17, 19, at 18-20.

¹⁹. *Id.* app. A, § 19, at 20.

²⁰. *Id.* app. A, § 22, at 21.

²¹. *Id.* app. A, §§ 20-20A, at 20-21.

²². See *Oversight Hearing on Expensing Stock Options: Supporting and Strengthening the Independence of the Financial Accounting Standards Board: Hearing Before the*

Committee on Financial Services, Subcommittee on Capital Markets, chaired by Michael Oxley (Rep., Oh.) held hearings on April 20, 2004.²³ The Senate Committee on Small Business, chaired by Senator Michael B. Enzi (Rep., Wyoming), held hearings on April 28, 2004.²⁴ The Commerce, Trade, and Consumer Protection Subcommittee of the House Committee on Energy and Commerce held hearings on July 8, 2004.²⁵

The U.S. House of Representatives has responded to management demands by passing legislation that would mandate that stock option compensation could continue to be treated as cost free. On July 20, 2004, the House passed a bill that would prohibit mandatory expensing of options for small businesses and for all but the four top executives of large businesses. Even expensing allowable under the bill would be allowed only after studies of the supposed harm that accurate accounting would do to the economy.²⁶ Under the bill passed by the house, stock options would continue to be treated as free money.

The outcome in the Senate, as of the publication date, is not certain. Senator Richard Shelby (Republican, Alabama), the Chairman of the Senate Banking, Housing and Urban Affairs Committee and Senator Fitzgerald (Republican, Illinois), the chairman of the Senate Subcommittee on Financial Management, have announced opposition to measures to stop expensing of stock option or to impede the FASB.²⁷ The battle has joined on the new proposals and the outcome is in doubt. Maybe this time it will be different.

Subcomm. on Fin. Mgmt., the Budget, and Int'l Sec. of the S. Comm. on Governmental Affairs, 108th Cong. (2004), available at http://www.senate.gov/~gov_affairs/index.cfm?Fuseaction=Hearings.Detail&HearingID=170.

²³. See *The FASB Stock Options Proposal: Its Effect on the U.S. Economy and Jobs: Hearing Before the Subcomm. on Capital Mkts., Ins., and Gov't Sponsored Enters. of the House Comm. on Fin. Servs.*, 108th Cong. (2004), (statement of Michael G. Oxley, Chairman, Fin. Servs. Comm.) available at <http://www.savestockoptions.org/pdf/oxley.pdf>.

²⁴. See *Impact of Stock Option Expensing on Small Businesses: Hearing before Subcomm. on Small Bus. and Entrepreneurship*, 108th Cong. (2004), available at <http://enzi.senate.gov/fasbme.htm>.

²⁵. See *FASB Proposals on Stock Option Expensing: Hearing Before the Subcomm. on Commerce, Trade, and Consumer Prot. of the House Comm. on Energy and Commerce*, 108th Cong. (2004).

²⁶. Stock Option Accounting Reform Act, H.R. 3574, 108th Cong. (2004).

²⁷. Senator Richard C. Shelby, *Accounting Reform*, http://shelby.senate.gov/legislation/accounting_reform.cfm; Press Release, Senator Peter G. Fitzgerald, Sen. Fitzgerald Vows to Block Any 11th Hour Attempt by Congress to Reverse Crucial Stock Option Expensing Reform (July 28, 2004), http://fitzgerald.senate.gov/index.cfm?FuseAction=PressReleases.Detail&PressRelease_id=428&Month=7&Year=2004&ShowOthers=True.

C. HOW TO FIX IT: ACCRUING THE BARGAIN

The Accounting profession *should* measure the employer corporation's accrued cost of an option at the end of every year as the bargain the employee can get from the option arises and is finally achieved upon exercise. Fluctuations in the price of the underlying stock would be reflected every year in the bargain that the employee gets and in the cost that the corporation bears. This method is called "intrinsic method" in the new FASB proposals, but the terminology is unnecessarily confusing. "Intrinsic method" in the current rules, Statement 123, and in the APB Opinion No. 25 that preceded it, referred to the zero costing method, that is, the view that the bargain was measured but once at grant and if there was no bargain at grant, there never was a cost. The new "intrinsic cost" method is not zero costing, but a much superior method. To avoid confusion here, this section refers to the method measuring the cost annually by looking at the bargain as the "accruing the bargain" method. Accrual of the bargain as it arises is better accounting than the valuation of the option at grant. The Exposure Draft of the proposed changes limits the use of the "accruing the bargain" method, what it calls the "intrinsic method," inappropriately. The *new* "intrinsic method" is required if the option value truly cannot be estimated at grant, but it is assumed that failure to estimate will occur only when measurement is "virtually impossible."²⁸ Nonpublic entities may elect to use the new intrinsic method, but if they elect to value the option but once at grant, that choice will not be upset. Thus except for a small range where accruing the bargain is mandated or allowed, the overwhelmingly general rule under the Exposure Draft is that the cost of the option must be assessed at the time it is granted, and not again thereafter.

The accounting board is shooting itself in the foot by insisting that the value of the option must be measured when the option is issued. The value of a newly issued option depends upon how volatile the underlying stock is. An option on asset that cannot fluctuate in value is indeed not worth anything more than the initial bargain. Black-Scholes option pricing or indeed any alternative valuation requires a track record to generate volatility measures. New companies, closely held companies and thin markets do not generate enough information about volatility to make up-front valuations work. For a broad range of new and smaller corporations, it is possible to estimate stock prices at the end of each year, especially

²⁸ Exposure Draft, *supra* note 17, at app. A, §§ 21,22 at 21.

since errors can be corrected by a new estimate the next year, and yet there is not enough of a reasonably accurate track record to give volatility measures sufficiently accurate to have any confidence in the one-time-only Black-Scholes valuation. Accruing the bargain as it arises does not require a volatility measure and thus would avoid a major source of trouble in valuing options for nonpublic companies.

Valuation of a compensatory option at grant is usually too early. Even when there is some record of volatility for the stock, value at grant relies on the law of averages. Some options will indeed prove to be free to the issuing company because they expire out of the money. Some will be very expensive. Investors need cost figures that distinguish between expensive or free according to how the story comes out. You can drown in a lake that is only 6 inches deep on average. If you cannot swim, you need to know not the average depth, but the outcome of whether this part of the lake is a muddy half-inch part or the 40-foot deep part. Even if the average sets a fair expectation for the cost value of the option at grant and even if it represents the price an outsider would pay for the option, investors generally need to know the company's costs according to how the costs come out once the big contingency—value of the stock at exercise—has been resolved. Unvested options, moreover, can be exercised by the employee only if he or she stays with the company for long enough for the option rights to vest. New, untested companies have a turn over rate that is large and also unknowable. Mr. Kevin A. Hassett of the American Enterprise Institute has argued that reporting option value at grant of the option is just like reporting next year's best selling novel as profit today.²⁹ A good crystal ball or at least speculation is required. The future is very hard to predict, philosopher Yogi has said, because it has not happened yet.

A one-time only valuation of the option, moreover, means that valuation can be too easily defeated by craft. There is a cottage industry of estate planners who have learned over the history of the federal estate tax how to get property undervalued when it has to pass through one date of valuation. Estate planning techniques for undervaluation can be transferred to undervaluation of stock options too easily if there is just one chance to value the option. Management is too intensely self-interested in the reporting of its own compensation to give unbiased estimates of value. It is not just that option value is too hard for some managers to understand, which is true, but also that managers will be trying to misjudge value to

²⁹ *The FASB Stock Options Proposal: Its Effects on the U.S. Economy and Jobs, Hearing Before the Subcomm. on Capital Markets, Insurance and Government Sponsored Enterprises, 108th Cong. 97 (2004)*, (testimony of Kevin A. Hassett, American Enterprise Institute) available at <http://financialservices.house.gov/media/pdf/108.80.pdf>.

understate the cost of their own compensation because if compensation costs can be understated, then management can tease more compensation out of their company, off-budget and out of sight. If executives can get their compensation measured at ten cents on the dollar on the income statement, they can get more compensation for the cost the company is willing to devote to them. In esoteric areas where valuation is not transparent to investors, managers will hire experts to help them understate value. They will design option packages that exploit tiny cracks in valuation into gaping chasms, so that their compensation will appear less costly. Enron and World Com have also taught us that auditors, regrettably, cannot be counted on to be adverse to management without bright-line cook-book rules. Management estimates of value, even if audited, need to be “trued up” every year to the real bargain, and they need to be trued up to the final actual cost when the option is exercised. Reliable accounting needs to “true up” an option value to the bargain that is in fact achieved on exercise, just to make sure. To provide accurate interim information, a reliable accounting system needs to accrue the bargain annually at the end of each accounting period during the option’s duration.

The difficulty of the valuing options at grant is also being used to continue the even greater error of zero-costing for compensation options:

[The expensing proposal] involves applying an esoteric mathematical operation to an executive’s stock options at the moment they’re granted (i.e. before anyone knows whether they will be worth anything), for the sole purpose of whipping up a dubiously meaningful dollar figure that can be deducted from earnings as the “cost” of the options.³⁰

The criticism should not lead to a conclusion, as the author of the passage used it, that zero-costing of options should continue, but criticism of valuation at grant is meritorious. The Black-Scholes approach is attempting to determine whether this is a high cost or a low cost option by looking to the law of averages and valuation at grant is debiting an unripe unaccrued contingency too early to get it right. Accruing the bargain as it arises does not require a volatility measure and thus would avoid a major source of confusing “esoteric mathematics” that sophisticated opponents of fair accounting are using to beat FASB once again.

³⁰ Holman W. Jenkins, Jr., *Much Ado About Stock Options—The Epilogue*, WALL ST. J., April 23, 2003, at A23.

If the ultimate payment will be in cash rather than stock, the accounting profession correctly accrues the added obligation every year. Stock appreciation rights ("SAR"), for instance, match a stock option by giving the executive any increase in value of the stock (but not the loss) over some period, but SAR plans end by paying the executive in cash. Phantom-stock plans also pay cash and track stock price, but phantom stock plans track losses as well as gains because the employee starts with a share-like unit that will decline in value when the underlying stock does. For cash-payout plans such as SARs and phantom-stock, accounting standards require that the employer must accrue the obligation as it arises even though it is not yet paid. The accrued obligation is measured by the stock price the cash award traces. An increase in the stock price increases the employer's obligation and so increases its reported expense. If the stock subsequently drops in value, the decrease will reduce the employer's cost under the plan and some of the previously accrued expense will be reversed into income. The final payment on the plan in cash is like paying a payable and it creates no newly booked expenditure, except to the extent that the payout has not been accrued previously.³¹

The distinction the accountants make between payout in stock and payout in cash is unprincipled. For example, accounting treats straight stock compensation, that is, a payment in stock without any prior option, as an expenditure equal to the equivalent cash.³² Stock and its cash equivalent are equivalents, we can say tautologically. Fair market value of the stock means the cash equivalent of the stock. The corporation has the same economic burden whether the compensation is to be satisfied in stock or cash. Indeed, we could imagine a single plan could be satisfied either in cash or in stock, perhaps at the option of either the employer or of the employee without that making any difference in the economics of the plan.³³ Yet in the end, FASB makes a distinction between cash and stock and does not accrue the existing bargain if the payout is scheduled to be in stock.³⁴

³¹ See ACCOUNTING FOR STOCK-BASED COMPENSATION, *supra* note 14 § 25; see also ACCOUNTING FOR STOCK APPRECIATION RIGHTS AND OTHER VARIABLE STOCK OPTION OR AWARD PLANS, Financial Accounting Standards Board Interpretation No. 28 (Financial Accounting Standards Bd. 1978).

³² ACCOUNTING FOR STOCK-BASED COMPENSATION, *supra* note 14 §§ 16, 18. The rule is maintained by proposed Exposure Draft, *supra* note 17, app. A, § 25A.

³³ See ACCOUNTING FOR STOCK-BASED COMPENSATION, *supra* note 14 § 39 (requiring a plan to be treated as a cash plan if the employee has the option of choosing cash or stock payment or if there is a pattern in which the corporation pays in cash).

³⁴ *Id.*

The accrued bargain approach also usually matches the accounting cost to the right year automatically. Under a stock option, management makes money by causing the stock to rise during a year. If management causes a big rise in the stock price, that will mean a big compensation cost. If the stock price drops, that reduces or erases cost. The initial valuation approach, by contrast, requires some kind of arbitrary allocation of the big up-front found value across a number of years in which services are provided. Thus for example, if an option vests over 10 years of service, a 10-year option is treated as costing $1/10^{\text{th}}$ of the total value for each year over which the option is earned out, whether the management causes a big rise in price or loss in stock price during the year. The accrued bargain approach tells outside investors more about the economics of how the executive earned his or her stock than does amortizing the initial big value of the option over the life of the option.

II. THE ECONOMIC AWFULNESS OF STOCK AND STOCK OPTIONS

Except for the accounting camouflage available with stock options, stock options and stock compensation would probably disappear for at least the following reasons. Options give management an incentive to take too much risk. Stock and stock options are also inefficient compensation because of their high discount rate. Employees, moreover, undervalue stock and stock options because they under diversified. Employee capital gain, available on stock, is usually something to be avoided.

A. SUICIDAL RISK: THE CONFLICT BETWEEN SHAREHOLDERS AND OPTION HOLDERS

A corporation that has given its top management stock options has given its management a private incentive to go into risks that are suicidal for the company as a whole. A holder of an option does not share in down side risk on the underlying stock. If the stock loses any value, the holder of the option will just fail to exercise and will thus avoid the loss. Thus, risks of loss that would properly scare the flesh off someone who owned the stock are a matter of indifference to the option holder.

Assume, for example, that Company B has \$1 billion assets and no debt and is offered a high-risk scheme for what to do with all its assets. The scheme has a 5% change of being worth \$10 billion, and 95% chance of failing in full. Rationally, Company B should say no to the scheme

because the expected value is not high enough. The expected-value tree looks as follows:

Expected-value Tree for the Scheme			
	Likelihood	x Payout =	Expected-value
Success leg	5%	\$10 billion	\$1/2 billion.
Loss leg	95%	0	0
Sum value	100%		\$1/2 billion

The straight odds say that this scheme is like investing a billion dollars to make half a billion. It is plausible that the straight odds do not even fully capture the awfulness of this scheme in terms of human damage. In 95% of the cases, any one who invested his or her nest egg in Company B will lose it and all employees and many suppliers will need to find other jobs.

Suppose, however, that Company B gave its CEO an option to buy 1% of its stock at current price, and that the CEO has the authority to decide whether to take such schemes. In his or her own interest, the CEO will take Company B into the scheme. If the scheme is a success, the CEO's 1% of the stock will be worth \$10 billion times 1% or \$100 million. The exercise price at 1% of the current value, or \$1 billion, is \$10 million. The scheme and the option together have given the CEO a chance to make \$90 million! The downside risk is uninteresting to the CEO, since option holders do not exercise their option in worthless companies and so do not participate in their losses.

The expected value of the CEO's option is positive if Company B undertakes the scheme:

Expected-value tree for an option			
	Likelihood	x Payout =	Expected-value
Success leg	5%	\$100 mil.- \$10 mil. = \$90 mil.	\$4.5 mil.
Loss leg	95%	0	0
Sum value	100%		\$4.5 mil.

It looks like Company B has given its CEO a very tempting incentive to kill the company in 95% of the cases.³⁵ There is empirical evidence that

³⁵. The hypothetical in the text bears some passing resemblance to Corning Glass, which went from \$20 a share in a mature industry to \$113 and then down to \$1.45 as a fiber optics maker, but I have not tried to determine the degree to which management stock options contributed to the shift to high risk. See

management stock options in fact increase the risks that management imposes on their company.³⁶

There may well be offsetting factors that modulate the incentive for suicidal risk and keep it under tolerable control. It is possible the CEO of Company B will not take the scheme on these facts because his job is worth more than \$4.5 million to him. CEOs tend to be more risk averse than properly diversified shareholders. This is because the CEO tends to have his whole livelihood and expertise tied to the company he works for, whereas diversified shareholders can take some losses on any one stock position without breaking stride. Thus, it might take a more valuable option—perhaps one with a 98% chance of failure—before the CEO will go for the suicidal risk. Some have argued that stock options are part of a well-modulated compensation scheme, in which executive conservatism is offset by options that make them risk seekers because they are under diversified.³⁷ In a world where CEOs and top management are the company, however, the usual situation is that there is nobody who will engineer risk or options who also has the motive to adjust the risk properly. The option that set up the incentive for the suicide was reported to the shareholders monitoring the manager as being cost free.

Shareholders need an absolute prophylactic rule to protect themselves: do not give CEOs positive value from doing dreadful things to shareholders. From that rule a second one follows: do not make anyone an option holder who is deciding what level of risk a company should undertake, as option holders will not share in the pain from shareholder losses. Only managers who share in the shareholders' losses will seek to avoid them.

An option holder's indifference to loss is not duplicated if management is given stock of the same value, rather than options. If stock granted to the

<http://www.shareholder.com/corning/stocklookup.cfm> (stock prices from June 25, 1999, Sept. 1, 2000 and Oct. 14, 2002, respectively) (last visited Nov. 6, 2004).

³⁶. See, e.g., Jouahn Nam et al., *The Effect of Managerial Incentives to Bear Risk on Corporate Capital Structure and R&D Investment*, 38 FIN. REV. 77 (2003) (showing that management stock options incentives for more risk yield increased leverage and R&D investment); cf. Richard DeFusco et al., *The Effect of Executive Stock Option Plans on Stockholders and Bondholders*, 45 J. FIN. 617 (1990) (finding that management stock options increase risk, resulting in a decrease of bond value but an increase in stock value).

³⁷. See, e.g., M. P. Narayanan, *Form of Compensation and Managerial Decision Horizon*, 31 J. FIN. & QUANTITATIVE ANALYSIS 467 (1996); M. Andrew Fields & Phyllis Y. Keys, *The Emergence of Corporate Governance from Wall St. to Main St.: Outside Directors, Board Diversity, Earnings Management, and Managerial Incentives to Bear Risk*, FIN. REV. 1 (2003) (reviewing the literature with an emphasis on cases in which decreasing management risk aversion improves decisions about firm investments).

executive goes down in value, the executive, as owner, is hurt. Yet stock compensation is not a panacea that will guarantee that management will be loyal to shareholders, even if management stock ownership is substantial. A manager with a 1% stock interest in the employer corporation, for instance, would still want excessive compensation, even if 1% of the excess is clawed back by losses on stock that he or she owns. Managers can sell short or buy put options or derivatives that will protect them from loss for a period of time. Managers also learn about bad news before the general public does, and they can usually sell their stock early enough to avoid the consequences of impending doom, even doom that they themselves caused. Still, option holders are by nature indifferent to losses during the option period, whereas actual shareholders are not. Overall, even if stock compensation does not alone guarantee management loyalty to shareholders, stock compensation is superior to stock option compensation because of the option holder's immunity from risk of loss.

B. MANAGING THE TERRIBLE DISCOUNT RATE

1. The High Cost of Stock

It is likely that both stock and stock option compensation would be rare without the accounting camouflage available on no-initial bargain options, because of the high discount rate on stock. Stock options, if successful, require the employer to issue stock, and stock is the most expensive way to pay future cash.³⁸ Stock has value because of the future cash that will be paid out on the stock. The fair market value of stock is nothing but the discounted present value of the cash that the market expects in the future. Stock gives a premium return, not adequately explained by risk, and what is premium for the investor is extraordinary cost to the issuing corporate employer.³⁹ The high discount rate means that the corporation must pay out a large amount of cash to support a quite modest present value. Alternatively stated, the discount imposed by the market, and even more so by executives, means that the present value of the cash to be paid out on stock is very low. Debt, by contrast, is very cheap. The underlying discount rate on fixed obligation is much lower than for stock and the discount rate on debt, called interest, which is usually deductible for tax.

³⁸. Calvin H. Johnson, *Stock Compensation: The Most Expensive Way to Pay Future Cash*, 52 SMU L. REV. 423, 424 (1999), reprinted in 85 TAX NOTES 351 (1999).

³⁹. See, e.g., Jeremy J. Siegel & Richard H. Thaler, *Anomalies: The Equity Premium Puzzle*, 11 J. ECON. PERSP. 191 (1997) (collecting the research showing a high (and not fully explainable) premium paid on stock).

Assume with a simplified model that an employer, Company B, gives Executive X a share of its stock that Company B will redeem in cash at its value in n years in the future when the share has reached a value of \$1000.⁴⁰ Assume that the stock is now worth \$100. Next assume, just for simplification, that the Company B gives no dividends on its stock between the present and time n . The stock is worth \$100 now because that represents the discounted present value of the \$1000 cash at n , at the discount rate R the market uses to value Company B stock. The following equations are illustrative:

$$\text{Equation (1): } \$100 = \$1000/(1+R)^n$$

Equation (1) is just another form of the statement that the stock will grow in value at rate R over period n .

$$\text{Equation (1A): } \$100*(1+R)^n = \$1000$$

Multiplying both sides of (1) by $(1+R)^n$

Growth rate R also represents an interest-like annual rent that Company B would have to pay to the market for giving it equity capital. If Company B sold its stock at the present value point, it would get only \$100 from the proceeds of sale and the \$1000 it pays out represents the company's cost of convincing the equity market to buy its stock initially for \$100.

Over the last 75 years, the average growth rate on stock of large American corporations has been 10.76%.⁴¹ If we use that typical growth rate as the rate on Company B's stock, then n will be a period of 22.5 years, because:

$$\text{Equation (2): } 100*(1+10.76\%)^{22.5} = 1000, \text{ thus,}$$

$$\$100 = \$1000/(1+10.76\%)^{22.5}$$

net present value of stock.

By contrast, Executive X would get more present value out of the \$1000 that Company B will pay in 22.5 years if the discount rate were lower. The same 75-year sample used for stock shows the interest rate on large corporation bonds is 5.8%.⁴² Assume, on the basis of that sample,

⁴⁰ If Company B does not redeem the share at that time, it is of no advantage to the corporation. The market assesses the stock as worth \$1000 because that is the discounted present value of the cash the share is expected to yield under its legal right to share in all distributions after point n .

⁴¹ Ibbotson Associates, *supra* note 6, at 22.

⁴² *Id.*

that the market will accept 5.8% annual return for payments with respect to Company B's corporate bonds (even while demanding 10.76% annual return for future cash with respect to stock). If we assume that interest is reinvested in Company B bonds or is not paid so that interest compounds, then that rate can be used as the discount rate for the \$1000 for the full 22.5 years. The present value is then almost three times better than \$100 at \$281:

$$\text{Equation (3): } \$281 = \$1000/(1+5.8\%)^{22.5}$$

which the net present value of the debt form.

Assume reasonably that the secondary market will use the same discount rates -- typically 5.8% for debt and 10.76% for stock. Thus, Executive X could sell the bonds' \$1000 immediately for \$281, whereas X could sell the stock representing the same future cost to Company B for only \$100. Debt gave Executive X more value Company B's \$1000 payment, just because debt had a lower discount rate.

It is possible to describe the same phenomenon by keeping the executive's present value constant between the debt and the stock while allowing the corporation's ultimately cash outlay to vary. Company B can give \$100 dollar value to Executive X by paying \$1000 in 22.5 years. But, at a discount rate of 5.8% compounded, Company B can give \$100 of transferable debt to Executive X by paying out only \$344.57 in 22.5 years, because:

$$\text{Equation (4): } \$100*(1+5.8\%)^{22.5} = \$344.57$$

When the discount rate goes down, either Executive X will get more present value (\$281 versus \$100) or Company B will have a lower cost (\$344.57 versus \$1000), or possibly some of both will occur. That is how the discount rate drop has to work.

It is possible to drive the discount rate on debt to executives even lower. Corporate bonds, as unsecured debt, carry some risk. Securing the debt with corporate assets means that the debt will be paid ahead of other creditors and so the risk is lower. With a lower risk the interest rate should drop. If we assume, for example, that the interest rate is only 5%, then the set \$1000 future payment has a present value of \$333.

Executives will value future payments like the \$1000 using their own discount rate, drawn from the best after-tax return rate that is available to them. Executives' own discount rate will commonly make the bond present value go even higher. Corporate debt is not usually the source of

the best after-tax return for high tax bracket taxpayers like Executive X because the interest from debt is taxed at high rates annually. Tax exempt or tax advantaged investments usually are better investments after tax. There is a drop on the yield on tax advantaged investments (which is sometimes called the implicit tax) to reflect tax advantages, but historically the drop has not been as large a burden as the burden of paying tax in high brackets.⁴³ Assume that Executive X gets 4.5% from tax exempt bonds when comparable low risk taxable bonds are paying 5%, and that Company B transfers a tax-exempt zero-coupon \$1000 bond maturing in 22.5 years. The bond will have a present value or principal amount of \$371 because that represents the discounted present value of \$1000:

$$\text{Equation (5): } \$371 = \$1000/(1+4.5\%)^{22.5}$$

Equation (5) also describes the present value to Executive X of a reliable payment of deferred compensation of \$1000, payable in 22.5 years. If Company B reliably promises to pay Executive X \$1000 at n years, Executive X, who gets 4.5% return from his best alternative investments, will value the \$1000 as equal to \$371 present value.

The present value of Company B's \$1000 cash payment at Executive X's 4.5% discount rate is not quite four times higher than the present value of Company B's \$1000 cash payment at the 10.76% discount rate for stock. Quite plausibly by using stock instead of the best alternative plan, Company B will take away almost three-quarters of Executive X's value from the \$1000 payment, reducing the present value of X's compensation down from \$371 to \$100.

The problem of a high discount rate can be viewed from the other side as a problem of high cost to Company B as well as low present value for Executive X. To give \$100 of present value now, the corporation must pay \$1000 in 22.5 years. Debt is much cheaper to the company and debt is deductible. At a 35% tax rate, the 5.8% interest has a cost of only 3.8% after tax. To give Executive X \$100 now with debt requires payment in 22.5 years of only \$230. Yet if Company B can secure the debt and drop the interest rate down 5% before tax and 3.25% after tax, then Company B can give Executive X the present value at the cost of only \$205, instead of \$1000. The switch from debt compensation to the alternative stock

⁴³. See Calvin H. Johnson, *A Thermometer for the Tax System: The Overall Health of the Tax System as Measured by Implicit Tax*, 56 SMU L. REV. 13, 23 (2003) (showing data that the drop in interest rate reflecting the tax exemption is below 10%).

compensation increased Company B's ultimate cost by five times for the same current benefit to Executive X.

Corporate cost also commonly needs to be separated from executive benefit just because executives sell the compensation instrument long before the corporation needs to redeem it. Stock is usually a very long term instrument. Corporate debt has a fixed term, but it is usually replaced at the end of its term, so that if you view the debt and its replacements as a common pool or chain, debt too will last indefinitely. Executive X will commonly sell a very long term instrument before it is redeemed just to get some use out of it during X's life. The obligation of Company B, however, will continue for what may be many years after Executive X sells to get cash value. If we assume both stock and debt will be redeemed after 75 years, which is the full length of the Ibbotson Associates sample, then corporate debt will be redeemed at cost of $\$100 \cdot (1.038)^{75}$, which equals \$1,605, whereas stock of \$100 will be redeemed for $\$100 \cdot (1.1076)^{75}$ or \$213,000.⁴⁴ The cost of the stock at \$213,000 is 133 times more expensive in real cash than the debt at \$1,600.⁴⁵ Ironically, the stock could be considered free when issued under zero-costing of options, but debt is never free when issued under accounting standards and it was the "free" stock that turned out to be 133 times more expensive than the debt.

For the more successful company, stock is even more expensive. Debt has the tendency to become cheaper as the success of the corporate employer improves because the corporation becomes a better credit risk and gets lower interest rates. Stock, however, is a compensation plan with the payment contingent on the success of the company. The better the company does, the more expensive its stock becomes. If we assume a company with a 12% growth rate, appropriate for smaller, riskier companies, then the corporation's cost for \$100 stock will be $\$100 \cdot (1.12)^{75}$ or \$491,300 cash for each \$100 of stock, which is over 300 times more expensive than the debt. An executive who issued a modest stock

⁴⁴ See Ibbotson Associates, *supra* note 6, at 22.

⁴⁵ According to the Ibbotson Associates figures, inflation over the 75-year period of its sample has been 3.1% per year. Ibbotson Associates, *supra* note 6, at 22. Over 75 years, a dollar is worth only $\$1/(1+3.1\%)^{75}$ or 1/9.9 or roughly 1/10th. In inflation adjusted dollars, the stock requires payment of \$21,300 per \$100 present value and the debt requires payment of \$160 per \$100 present value. The ratio is still 133 times greater for stock. To get the real meaning of future dollars, there should always be an inflation adjustment. Still, as long as debt and stock are compared by ratio at the same time, the inflation adjustment does not make any difference to the analysis.

bonus of \$1 million, for instance, will ultimately command that the corporation pay \$4.97 billion in cash.⁴⁶

2. Avoidable Costs

Stock has a high discount rate and low value per dollar devoted to the executive for many reasons, yet these factors are easily avoidable within compensation plans. Individual stocks are highly volatile investments and the market hates volatility. The market also discounts the value of accumulated earnings by reason of distrust of management, but distrust of management is not a necessary element when it is management that is getting paid.

a. Volatility

A rational investor is risk averse, because losses hurt asymmetrically more than gains help. Everyone satisfies his or her own most desperate needs first before lesser priorities. Losses, therefore, cut into more desperately needed funds. Gains add less crucial funds. Losses tend to cut into muscle, then bone, while gains tend just to add fat. Stock, even a portfolio of stocks, is highly volatile, risking substantial losses. The premium discount rates that the stock market demands from the issuing corporation are to compensate for the volatility. If the future cash flows that support current value may or may not appear, the market will discount those future values at a brutal discount rate.⁴⁷ The premium discount rate on publicly traded stocks is evidence that investing shareholders do not like volatility. Discount rates on investments that owners like are low; businesses such as interesting boutiques and restaurants, for instance, often give low or negative monetary return rates.

Executives suffer from volatility even more than the market as a whole because their stake tends to be too heavily concentrated in one firm. A single stock is much more volatile than a diversified portfolio.⁴⁸ Executives tend to be especially under-diversified.⁴⁹ Executives shape their skills over time to fit the needs of the firm that they are working for and

⁴⁶. Given inflation, the \$4.97 billion is roughly *only* 1/2 a billion in uninflated dollars. See *supra* note 45.

⁴⁷. See BREALEY & MYERS, *supra* note 4, at 158-60 (discussion of short-term stock volatility).

⁴⁸. See *id.* at 153, 165-69, 178-79.

⁴⁹. See Henry T. C. Hu, *Risk, Time, and Fiduciary Principles in Corporate Investment*, 38 UCLA L. REV. 277, 318-22 (1990) (emphasizing undiversifiable human capital).

they cannot transfer their skills to another firm without significant loss. Given the heavy dependence of executives' future salaries upon the corporate employer, it magnifies the executives' risk to put significant investments from past salaries in the corporate employer as well. Executives should not put all their eggs – both investments and future salary – into one basket.

The market, by contrast, appears to assume that shareholders have diversified portfolios. The market return will be a premium only for returns unique to the firm and will not cover the pain that can be avoided by diversification.⁵⁰ Thus, single-stock positions hurt executives more than the market premium for risk will cover. For this reason, it would be unsound to advise an executive to invest in the stock of his or her own employer.

Consistently, undiversified executives rationally undervalue the options given to them by their company. Because executives are not diversified, as Black Scholes implies they should be, executives should rationally view options as worth only a fraction of the Black Scholes value of the options.⁵¹ Executives, in fact, routinely complain that Black Scholes over-values their options.⁵² Given that executives are so routinely under-diversified and that they so undervalue risky options, options are wasted on executives.

Most of the volatility on stock serves no incentive purpose. It appears that approximately 80% of volatility on a share of stock arises from industry-wide or stock-market-wide factors over which the employee has no control.⁵³ Thus, even if this executive could claim responsibility for all of the value changes in the corporate employer, 80% of the change in stock price would still be random with respect to merit of the executive. This makes stock like a lottery ticket: the lazy can get lucky while the virtuous

⁵⁰. *Id.* at 291-94. See also William F. Sharpe, *Capital Asset Prices: A Theory of Market Equilibrium Under Conditions of Risk*, 19 J. FIN. 425, 441-42 (1964) (market price for stock adjusts to only undiversifiable risk); Robert H. Litzenberger, *Equilibrium in the Equity Market Under Uncertainty*, 24 J. FIN. 663, 665 (1969).

⁵¹. Brian J. Hall & Kevin J. Murphy, *Stock Options for Undiversified Executives*, 33 J. ACCT. & ECON. 3, 7, 8, 11 (2002) (see especially, figure 2.1, computing value of option to executive finding value to executives is far below Black-Scholes especially as to deep in the money options which represent significant fraction of executive wealth).

⁵². *Id.* at 7.

⁵³. See Jeffrey Kerr & Richard A. Bettis, *Boards of Directors, Top Management Compensation and Shareholder Returns*, 30 ACAD. MGMT. J. 645, 659 (1987). See also James J. Angel & Douglas M. McCabe, *Market-Adjusted Options for Executive Compensation* (January 31, 1997), at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=3052 (last visited Nov. 6, 2004) (finding that 41% of variance of individual firm stock is explained by variance of stock market as a whole, but not attempting to identify or filter out industry wide variance).

suffer losses. The loss side of volatility that the executives cannot control is especially painful. Executives have mortgage and tuition payments to make and a reasonably high standard of living that they do not want to lose. Bringing unnecessary and random volatility into the calm employment relationship is like bringing toxic waste into your living room.

b. Market Paranoia

The high discount rates on corporate stock also arise because the market is deeply suspicious of what management will do with undistributed earnings. The market does not receive very good information from corporations about their capital projects. In the absence of reliable information, the market presumes that every investment project the corporation will make will be a lemon, as some surely are.⁵⁴ The market also assumes that managers are going to waste undistributed earnings on self-indulgent projects or steal the earnings as excess compensation. The market has a strong sense of "a bird in the hand is worth two in the bush," and values dividends as cash in hand by enough that dividends actually improve share value. This is true even when taking into consideration the fact that dividends reduce corporate assets and that there is an immediate shareholder tax on dividends.⁵⁵ Stock has a high discount rate in part because the market does not trust the corporate managers in advance. The corporation pays a high cash return to investors because that high cost is needed to overcome the distrust.

The discount arising from market distrust of management has no place in the compensation relationship between the CEO and the artificial entity

⁵⁴. See George A. Akerlof, *The Market for "Lemons": Quality Uncertainty and the Market Mechanism*, 84 Q.J. ECON. 488, 495 (1970) (arguing that markets are destroyed when buyers have inaccurate information because they underbid for assets based on the assumption that the asset is as bad as possible); Hayne E. Leland & David H. Pyle, *Informational Asymmetries, Financial Structure, and Financial Intermediation*, 32 J. FIN. 371, 371-72 (1977) (arguing that information asymmetry will drive down the price of stock and prevent a corporation from using stock to fund projects with positive value); Paul K. Chaney & Craig M. Lewis, *Earnings Management and Firm Valuation Under Asymmetric Information*, 1 J. CORP. FIN. 319, 333-34 (1995) (applying the "lemons" argument to share valuation under bad accounting information); R. Glenn Hubbard, *Capital Market Imperfections and Investment*, 36 J. ECON. LITERATURE 193, 193-95 (1998) (arguing that shareholder-level investors with imperfect information about investments impose discounts that corporate-level managers do not need).

⁵⁵. See Eugene F. Fama & Kenneth R. French, *Taxes, Finance Decisions, and Firm Value*, 53 J. FIN. 819, 840 (1998) (showing that the positive value dividends serve by giving reliable information completely masks the tax effect, so that there is no hint of dividends reducing value).

the CEO manages. Top managers *are* the insiders that the market distrusts. The CEO cannot distrust the CEO. It would be over compensating the CEO to allow him to recover the high return resulting from the market distrust of the CEO. It would be comparable to paying out on a fire insurance claim to an individual that has not suffered any fire loss.

Both the toxic volatility and the market distrust of insiders can be filtered out of a compensation plan, however. A company may still use the appraisals of value by the stock market to measure the executive's reward, but only if the employer gives up on the possibility of zero-cost accounting.

3. Filtered Phantom Stock

If zero-cost accounting for compensation were not available or were not an issue, it would be relatively easy to filter out much of the random pain from stock volatility without losing any of the true incentive value of stock. Filtering out toxic volatility and market paranoia would drop the discount rate to the benefit of the executive, the corporation, or both.

Executive X, for example, might be given units of an industry-indexed phantom stock deferred compensation plan. An initial unit might be worth \$100 and could be redeemed for cash from the employer at the end of 10 years. The index that determines the average growth would be constructed from a portfolio of stocks of other corporations in the same industry, weighted for the size of the corporations. If Company B's stock grows at a rate higher than the average for the company's industry, the redemption price of the unit will grow above \$100. If Company B's stock performs exactly at the industry average, the unit will remain constant at \$100. If the employer stock performs at less than the industry average, the executive would receive less than \$100. If Corporation B's stock performance is relatively better than its industry's competitors, the executive could potentially get a significant augmentation by subtracting out the industry average, even if the industry as a whole faces a decrease in stock price.⁵⁶

⁵⁶. There have been a number of suggestions to filter out market-wide volatility. See Rick Antle & Abbie Smith, *An Empirical Investigation of the Relative Performance of Corporate Executives*, 24 J. ACCT. RES. 1, 32-35 (1986) (arguing that taking systematic risk out of stock volatility reduces risk to executives without reducing incentives). There have also been a number of suggestions to filter out market-wide risk on options by indexing the exercise price. See James Angel & Douglas McCabe, "Market Adjusted Options for Executive Compensation," at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=3052 (last visited Jan. 31, 1997); Aigbe Akhigbe, Jeff Madura & Alan Tucker, *Market-Controlled Stock Options: A New Approach to Executive Compensation*, 9 J. APPLIED CORP. FIN. 93, 96 (1996); Mark Ubelhart, *Business Strategy, Performance Measurement and Compensation*, MIDLAND CORP. FIN. J., Winter 1985, at 67, 74. See generally Alfred Rappaport, *New*

Using the stock market, with an industry index subtracted, is a better idea than a profit-sharing plan. Profit-sharing plans almost always depend upon "profits" as defined by Generally Accepted Accounting Practices ("GAAP"). In high theory, GAAP accounting should be giving potential investors information that is as good as management can get internally about capital investment projects. In fact, however, GAAP is an archaic system at its core, with many evidences of inflexible age.⁵⁷ GAAP rarely gets either their description of corporate investment in intangibles or depreciation right. Conversely, the stock market value, with random volatility filtered out, depends on assessments generated by well-funded buyers and sellers who are trying to figure out value to serve greedy self-interest. By and large, the greed-motivated stock market assessments will do a better job of measuring value than GAAP "profits."

The corporate employer should readily substitute \$100 units of such a deferred compensation plan for \$100 of immediate cash compensation or for fixed amounts to be paid in the future worth \$100. Fixed compensation has the very considerable draw back of paying the executive for showing up, but not necessarily for improving owner value. As Jensen and Murphy have argued, if a corporation pays their corporate managers like fixed salaried bureaucrats, the corporation should not expect the managers to act like value-maximizing entrepreneurs.⁵⁸ From the corporate point of view, an executive replaces his or her cash compensation entirely with \$100 units making an acceptable substitution.

Rational executives, however, should have trouble substituting \$100 in current cash for \$100 of filtered phantom stock, even with compound interest that matches alternative investments. Filtered stock involves risk. There is an optimism bias to self assessment: most people who drive

Thinking on How to Link Executive Pay with Performance, HARV. BUS. REV., Mar.-Apr. 1999, at 91 (hedges his endorsement of strict indexing, however, so as to ensure that even under-average management gets some extra pay out); Mark A. Clawson & Thomas C. Klein, *Indexed Stock Options: A Proposal for Compensation Commensurate with Performance*, 3 STAN. J. L. BUS. & FIN. 31 (1997); see also Lucian A. Bebchuk, et al., *Managerial Power and Rent Extraction in the Design of Executive Compensation*, 69 U. CHL. L. REV. 751, 796-801 (2002). The proposals to index option exercise price for market risk do not do anything about the loss-stripping aspects of options that give management the incentive to go into suicidal risk, and hence are not endorsed here.

⁵⁷ Calvin Johnson, *GAAP Tax*, 83 TAX NOTES 425, 429 (1999), for instance, is critical about the quality of GAAP theory and information. See also BREALEY & MYERS, *supra* note 4, at 339-40, for another discussion of GAAP distortions.

⁵⁸ Michael C. Jensen & Kevin J. Murphy, *CEO Incentives - It's Not How Much You Pay, But How*, 68 HARV. BUS. REV. 138, 138 (1990).

automobiles consider themselves to be above-average drivers,⁵⁹ and most executives will believe themselves to be above-average on business consequences that they can control. Executive control and optimism bias will help maintain the present value of a filtered phantom stock unit near to \$100. Undoubtedly, executive behavior on valuation should be tested empirically: the basic rental or interest addition on a \$100 unit should be set so that executives will choose to take a substantial percentage of their compensation, perhaps half, in filtered phantom stock.

Filtered phantom stock cannot be reported as cost free on financial statements. Even the no-initial-bargain stock options that are reported as free must have a fixed exercise price that cannot be adjusted for an industry or market wide index. Accordingly, for a filtered plan, the amount promised according to facts as of the end of the year is a booked cost. The ultimate payment is just a payment of a previously arising liability and is not a cost except to the extent that there is a change in the amount paid to the executive that was not previously booked. The availability of zero-costing for terrible incentive systems, like stock options, gets in the way of rational design of an incentive system for executives.

Filtered phantom stock will never give the employee any capital gain, but as explained next, employee capital gain is almost always a bad idea.

C. AVOID CAPITAL GAIN

Stock-based compensation plans are sometimes adopted because they give employees favorably-taxed capital gain. Employee capital gain, however, is almost always worse tax planning than is deferred compensation, which delays the taxation of capital. Even when there is no capital, plans that give up employee capital gain usually lose the employer deduction for compensation and the employer deduction is almost always more valuable than capital gain.

1. Delay Tax to Avoid Capital Gain

⁵⁹. JAMES R. BETTMAN ET AL., *Cognitive Considerations in Presenting Risk Information*, in LEARNING ABOUT RISK: CONSUMER AND WORKER RESPONSES TO HAZARD INFORMATION 15, 17 (1987).

Capital gain is taxed at a lower rate than ordinary compensation.⁶⁰ It is not uncommon for tax planners to try to get capital gain to their favored insider executives so as to get them the benefit of lower tax rates. One way this is accomplished is by transferring stock immediately before the company goes public or right before some large appreciation in the stock is anticipated. Capital gain rates are typically 20 percentage points lower than tax rates on ordinary income compensation.⁶¹

Creating employee capital gain in such circumstances is short-sighted tax planning. The parties would be better off deferring the stock transfer until *after* the large appreciation has occurred when the executive needs the cash. Deferred compensation is superior to capital gains. The deferral gives a tax benefit that is usually as good as or better than paying zero rates on capital gains. The equivalence of deferred compensation and zero capital gains is a branch of what is sometimes called the Cary Brown Thesis.⁶² The deferred compensation plan is the more tax efficient choice by the amount of the capital gain tax.

Assume, for example, corporate employer Company B, whose stock goes up from \$100 to \$1000 a share over some period of time. We can describe the appreciation in terms of growth or appreciation of the stock at annual rate R over period n under the compound growth formula so that $\$100 * (1+R)^n = \1000 . With a very high R , n can be very short, perhaps two years, but there is no need to specify what period n or rate R is. Let us compare two plans for the \$100-to-\$1000 appreciation by which Company B can pay Executive X. One plan gives X the \$100 immediately so that the pending appreciation to \$1000 will qualify as capital gain. The other is a deferred cash compensation, giving Executive X \$1000 only at the terminal point (year n).

The comparison is clearest if we assume a phantom stock deferred compensation plan that matches the appreciation of the stock. Under the phantom stock plan, X gets cash when X wants it, here \$1000, at the terminal point. Executive X's tax will decrease the amount that he can keep. Tax at X's rate t_x will reduce the compensation to an after tax fraction of $(1-t_x)$.

⁶⁰. I.R.C. § 1(h)(1)(C), (West 2004) (gives a general 15% maximum tax on individual capital gain).

⁶¹. I.R.C. § 1(i)(2) (West 2004) (gives a maximum tax rate of 35%).

⁶². See, e.g., E. CARRY BROWN, BUSINESS-INCOME TAXATION AND INVESTMENT INCENTIVES IN INCOME EMPLOYMENT AND PUBLIC POLICY: ESSAYS IN HONOR OF ALVIN H. HANSEN 300 (1948); Dep't of the Treasury, Blueprints for Basic Tax Reform 123-24 (1977); Stanley S. Surrey, *The Tax Reform Act of 1969—Tax Deferral and Tax Shelters*, 12 B.C. INT'L & COMP. L. REV. 307 (1971).

$$\text{Equation (6): } \$1000 * (1-t_x)$$

With a maximum tax rate of 35%, the executive, under (5), gets to keep \$650.

Assume, for comparison, that Company B gives Executive X non-deferred compensation but transfers the stock itself to executive X before the ten-time appreciation. Tax has the same effect on the starting \$100 as it has on the ending \$1000 so that the compensation to X at the starting point is $\$100 * (1-t_x)$ after tax. If we assume reasonably that X sells the stock immediately at no gain or loss to pay his or her tax, then the executive will have \$65 worth of stock after tax. The ten-times appreciation of the stock will give the executive \$650 *before tax* at the terminal point:

$$\text{Equation (6A): } \$100 * (1-t_x) (1+R)^n = \$100 * (1-t_x) * 10 = \$1000 * (1-t_x).$$

With tax at 35%, expression (6A) becomes \$650.

Note that equation (6A) is the same as equation (5). The executive has the same after-tax position with deferred compensation after the ten-times appreciation, as X would have (before tax) if given the stock before the appreciation.

Equation (6A), however, fails to reflect the capital gain tax that Executive X must pay on stock at sale. The appreciation, to the extent of nine-times original value, is capital gain. Algebraically, X's after tax position is:

$$\text{Equation (7): } \$1000 * (1-t_x) - cg * [\$100 * (1-t_x) * (1+R)^n - \$100 * (1-t_x)],$$

where cg is capital gain tax rate. The expression within the bracket in equation (7) is a not-so-elegant expression of the fact that capital gain tax is imposed only on appreciation over basis so that the original basis must be subtracted out.

The capital gain tax in equation (7) at the rate of 15% drops Executive X's compensation by $15\% * 9 * \$100 * (1-t_x)$ or $15\% * 9 * \$65$ or $15\% * \$585$ or \$87.75. The Executive with capital gain thus ends up with \$650-\$87.75 tax or \$562.25. Expression (7) is below the phantom stock deferred compensation by exactly the amount of the capital gain tax.

Comparison of expression (6) and expression (7) yields the conclusion that stock given to the employee should be given only when the employee wants cash. Give the stock early and the appreciation will be subject to

capital gain tax. Yet, capital gain tax can be avoided by mere deferral of the taxable compensation.

Capital gain tax is not imposed until the executive sells the stock. If the executive does not need the cash, then the sale can be delayed, and the deferral in tax by delaying the sale reduces the real burden of the tax to lower than the nominal 15%. Delaying any burden drops the present value cost of the burden. Of course, deferred compensation can also be delayed, in parallel, to give cash only when the employee needs it. Moreover, even if the executive succeeds in deferring capital gain tax indefinitely and dropping the capital gain rate to almost zero, he or she will just succeed in getting back almost to expression (6A) and (5), that is, the position achieved by mere deferral. Capital gain tax becomes zero if the executive dies because heirs get a step up in basis.⁶³ Deferred compensation, described in expression (5), however, will allow the executive to have the benefit of a zero capital gain rate with the considerable advantage that X does not need to die.

The most important limitation to the Cary Brown thesis and to the equivalence of expressions (5) and (6A) is the assumption that the amount invested and hence, the amount of appreciation is sensitive to the executive tax on early transfers. Sometimes for stock options there is no tax initially, and sometimes the parties will succeed in undervaluing stock transferred early that the early tax will be paid by borrowing or from other funds and not by reduction of the amount of the stock or the amount of the appreciation. Still, as explained in the following section, all capital gain plans entail loss of the employer deduction, and the employer deduction is almost always more valuable than the incremental advantage of capital gain.

2. Take the Employer Deduction Instead of Capital Gain

Employee capital gain is also usually bad tax planning because the employer gets no tax deduction for amounts qualifying as capital gain to the employee. The employer deduction is almost always more valuable than the advantage of getting capital gain rates.

It is fairly common for a corporation to plan to give employees capital gain while avoiding the upfront tax on capital. Expression (5)(deferred compensation) was more valuable than expression (6a)(stock taxed immediately) because the employee lost capital in expression (6)

⁶³ I.R.C. § 1014(a)(1) (West 2004).

immediately and hence, lost some of the ten-times appreciation, but that premise, immediate tax on capital, can sometimes be avoided.⁶⁴

All employee capital gain planning, whatever its stripe, shares the common detrimental principle that the employer gets no deduction for the amount of the employee capital gain. Deferred compensation can give the same economic benefit, even mimicking stock appreciation, while preserving the valuable employer deduction. Almost always the employer deduction is worth more than the value of transferring the compensation from ordinary income to capital gain. Capital gain at 15% is typically 20% below the maximum tax on employment income (35%) but that 20% spread is less than the 35% tax lost by losing the employer deduction. When employer and employee talk to each other and realize that they are in the same economic pool, they should always conclude that the employer deduction needs to be preserved even with the sacrifice of employee capital gain.

Assume for example that Company B gives Executive X an option to purchase its stock for \$100 at a time when the stock is worth \$100. Because there is no initial bargain the option may be reported on financial statements as having no cost, and the option qualifies. Assume the executive exercises the option, holds on to the stock for two years, and sells the stock for \$1000. The executive will have capital gain in the amount of \$1000 minus the \$100 cost or \$900:

$$(7) (\$1000-\$100) - cg * (\$1000-\$100).$$

With capital gain rate of 15%, expression (7) become \$765

⁶⁴. I.R.C. § 421(a)(1)-(3) (West 2004) (providing that the employee will have no income from a qualified stock option, the employer will have no deduction, and the employee's basis shall be just the price paid). Qualification for employee capital gain from incentive stock options is subject to a number of restrictions. I.R.C. § 422 (West 2004). The option cannot last for more than 10 years. *Id.* There must be no initial bargain between value and exercise price when the option is granted. *Id.* The option cannot be saleable by the employee. *Id.* The employee must hold onto the stock acquired by exercise of the option for a least a year after the option is exercised and for at least two years after the option is granted. *Id.* Options vesting per year may acquire no more than \$100,000 worth of stock. *Id.*

A program called "employee stock purchase plans" also constitutes an opportunity to give employees capital gain. I.R.C. § 423(b) (West 2004). Under employee stock purchase plans, there can be an initial bargain of up to 15% but the option price must be adjusted so that the bargain by exercise of the option never exceeds 15% of fair market value. Employee stock purchase plans must be given to full time employees, employed for more than 2 years, pro rata to salary, and they cannot be offered to shareholders who already own 5%. *Id.*

Now assume, as an alternative, that Company B gives executive X stock-appreciation-rights (SARs) deferred compensation. Under the SARs plan, X will be able to call on cash that will match the amount of appreciation on a fixed number of shares of stock when he needs the cash. Tentatively, with same facts as that for expression (7), X will get \$900 pre-tax.

The cash payment will, however, be deductible to the employer. The deduction will serve as a reimbursement, in that the tax saved by deducting the compensation will save tax the employer would have paid absent the deduction. At the terminal point when the SARs are paid out, there exists some increased compensation amount A , such that $A - t_c * A = \$900$, where t_c is the employer's tax rate. Since $A - t_c * A = \$900$, so $A * (1 - t_c) = \$900$ and $A = \$900 / (1 - t_c)$. An employer willing to pay \$900 to executive X at the terminal point in absence of tax should be willing to pay $\$900 / (1 - t_c)$ to X with the help from its deduction, because that is the same after-tax burden, once the deduction is considered.

The payment of $\$900 / (1 - t_c)$ will be subject to the executive's ordinary income rates (35%) rather than to just capital gain rates (15%). Algebraically, the executive can keep $A * (1 - x)$. Considering both the augmentation of the SARs payout by the employer deduction and the shrinkage due to executive tax, the final after tax position of the executive will be

$$(8) \quad \$900 * (1 - t_x) / (1 - t_c)$$

With both t_c and t_x at 35%, expression (8) turns out to equal \$900, that is, the deduction and executive tax offset each other completely. Expression (8) is more than Expression (7) by exactly the 15% capital gain imposed in Expression (7).

Expression (7) describing a plan to give the employee capital gain gives the employee significantly less for the employee-after-tax than expression (8) describing a plan to give the employee ordinary income because expression (8) preserves the employer deduction. Expression (7) and (8) described stock options and the matching SARs, but the lesson that employee capital gain is a bad idea generalizes for other plans or schemes to give employee's capital gain. Plans that give the employer a deduction for compensation should be used instead.⁶⁵

⁶⁵. Gain from incentive stock plans over price paid for the stock is taxable to the employee as capital gain, even if the exercise is after death. I.R.C. § 421(c) (West 2004). Sometimes, however, the employee's capital gain will be forgiven upon death of the employee by reason of the general step up in basis at death. I.R.C. § 1014(a)(1) (West

The most serious limitation on the inferiority of employee capital gain is not economic, but relates to the availability of accounting camouflage. The deferred compensation of expression (8) had the drawback (for the executive) or the virtue (for outside investors, for the shareholders monitoring executive pay, and for the health of the economy as a whole) of not being eligible for zero-costing of the CEO's pay under current financial reporting. Expression (8) assumes that the corporate employer will increase compensation to reflect its deduction because it can augment or gross up the compensation at the same after tax burden if the deduction is available. Employee capital gain in expression (7), however, is not a charge to earnings and if the corporate employer is massaging earnings reports, as happens, then it cannot use deferred compensation. An employee who suggests that the compensation should shift from capital gain plan to one with a corporate deduction might well find that the move means not a raise to reflect the corporate deduction, but a cut to reflect the new charge to earnings.

There is considerable amount of employee capital gain planning that goes on, even though it is bad tax planning, because the costs to the corporation are disregarded. Executives, for example, commonly get low value stock, pumped out before a public offering, so as to qualify for capital gain on the appreciation. If the planning is done looking to both executive and corporation as a common interest, or if the compensation is grossed up by $1/(1-t_c)$ to reflect the corporate deduction, then the parties would go for the corporate deduction and not the employee capital gain. But management in charge does not consider the corporate deduction because any cost borne by the public or by the corporation is other people's money. Capital gain plans often adopted leave money on the table, or at least make money for the taxing government, simply because management in charge has no loyalty to the corporation they manage.

CONCLUSION

2004). For example, if the employer succeeds in getting undervalued property to the employee, the gain will not be a growth of upfront taxed capital and the capital gain tax will become a zero rate tax upon death of the executive. After employee's death expression (7) will be \$900 and the expression (8) will be greater or less than \$900 depending upon whether t_x or t_c is greater. If employee capital gain were limited to its rational scope of appreciation realized post death on property significantly undervalued when transferred, then employee capital gain would have only a trivial niche. For employees who have a tax rate t_x lower than the corporate employer's tax rate t_c , employee capital gain planning would be bad planning even for amounts realized post death.

Current accounting standards allow a company to report a stock option with no initial bargain between exercise price and stock value as if the option were cost free. Zero-costing of such options is not a good faith appraisal of either cost or value, but corporate managers favor the rule because they can get more pay if they can report their pay as free to their employer. With management so strongly in favor of the rule, zero-costing has survived and become more important over time.

Except for the access they give to deceptive accounting, stock options are a terrible way to compensate. Managers with significant options have an incentive to take the company into suicidal risks because option holders do not participate in the shareholders' losses. Both stock and stock options, moreover, are terrible compensation vehicles because stock entails risks over which management has no control and which management does not like. The high discount rate that arises in reaction to risk and outsider distrust of management will mean that the corporation will have to pay out too much future cash for present value given, or that the executive will get too little present value for cash ultimately paid, or both. Filtering out both the risk and distrust, by using a base line of an industry average, would improve the efficiency of compensation without undercutting the appropriate incentive, but any filtering must be done within a plan in which the accounting does not allow the compensation to be reported as cost free.

Stock compensation is also commonly thought advantageous because it gives employees access to low-tax capital gains. In general, however, deferred compensation is almost always better than employee capital gains because capital gain plans require the employee to pay immediate tax on capital and deferred compensation does not. Even when there is no underlying capital to defer, the employer deduction lost in employee capital gain plans is almost always more valuable than the incremental advantage of employee capital gain.

