Tax Deductibility of Employee Stock Options

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KEYWORDS: EMPLOYEE STOCK OPTION PLANS ■ EXECUTIVE COMPENSATION ■ PHANTOM SHARES ■ TAX DEDUCTIONS ■ ACCOUNTING

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MOTIVATION FOR USING EMPLOYEE STOCK OPTIONS

Employee stock options are complex instruments that have grown in popularity for many reasons, including their potential for aligning incentives between shareholders and managers. However, the efficacy of employee stock options is increasingly being questioned. In recent times, many senior executives have accumulated substantial wealth from stock options as their companies have floundered by both accounting and stock market measures.¹ The side effects and unintended consequences of

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¹ For example, the 2000 Management Information Circular of Nortel Networks Corporation reveals that John Roth, former chief executive officer, exercised options to earn $135 million in 2000, just before the company’s share price dropped drastically.
Employee stock options are increasingly being articulated, with a call by academics and corporate governance experts for recognition of the cost of stock options granted as an expense in the financial statements. If corporations are forced to acknowledge the economic costs of options granted in their financial statements, it seems reasonable to expect that they will use the “economic cost of doing business” argument to demand a corresponding tax deduction for a similar amount. Under current Canadian tax rules, no tax deduction is allowed for employee stock options at the employer level. This paper explores the conceptual and practical issues involved in permitting such a deduction.

The context and business purpose of employee stock options need to be considered before their tax treatment is discussed. Changing the accounting context from footnote disclosure to income statement expensing will arguably influence tax policy on the deductibility of employee stock options. The tax revenue implications will also depend on the context and therefore the use of employee stock options.

The lack of a tax deduction in Canada for employee stock option benefits may explain why stock options are not as widespread here as in the United States, where a tax deduction is available. To the extent that excessive use of employee stock options contributed to corporate governance distortions and failures such as Enron and WorldCom, Canadian tax rules may explain in part why Canada has experienced relatively few corporate governance failures as compared with the United States.

The organizational behaviour, corporate governance, accounting, and finance literature suggests at least three reasons why firms may prefer to use stock options to compensate their employees:

1. Stock options can reduce agency costs by aligning the employees’ interests and long-term incentives with those of shareholders.
2. Stock options can better preserve cash flows relative to alternative forms of compensation (an argument that is particularly persuasive for high-growth firms in the technology sector).
3. The value of stock options does not have to be expensed on the employer’s income statements.

These three benefits of using stock options as compensation must be balanced against the major drawback that the cost of such options cannot be deducted for tax purposes. The deduction is disallowed in any situation “where a corporation has agreed to sell or issue shares . . . to an employee of the corporation,” whether the shares are issued from the treasury or purchased in the open market.

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2 Subsection 7(3) of the Income Tax Act, RSC 1985, c. 1 (5th Supp.), as amended (herein referred to as “the Act”). Unless otherwise stated, statutory references in this paper are to the Act.

3 In contrast, the UK tax code allows an employer-level deduction for the cost of shares purchased on the open market and given to the employee upon exercise of options, while disallowing the cost of shares issued to the employee from the corporate treasury. The UK tax rules are described in further detail in Don Egginton, John Forker, and Paul Grout, “Executive and Employee
Focusing the debate on simply the tax deductibility of employee stock options is too narrow, just as focusing on accounting for stock options is too narrow. One must understand the broader context in order to understand why the use of employee stock options has exploded despite the lack of a tax deduction at the corporate level. This paper first explores the broader context in which employee stock options are used and then discusses the issue of tax deductibility.

**Aligning Incentives Between Employees and Shareholders**

One hundred percent of the 100 largest public corporations in Canada used stock options in 2000, as compared with 33 percent in 1991 and 66 percent in 1995. The average cash salary and bonus for a sample of 184 Canadian chief executive officers (CEOs) during the period 1993-1995 was $630,000, while the average Black-Scholes value of option grants during the same period was $1.67 million. In the United States, the National Center for Employee Ownership estimates that approximately 10 million employees received stock options in 2000, as compared with less than 1 million in 1990. The ratio of option grants to cash for the top five executives in the United States increased from 0.5 in 1992 to 2.5 in 1999; the value of option grants increased 683 percent between 1980 and 2000; and in 2000, the top five executives ended up holding an average of 1 percent of the market value of their firm.

When this dramatic growth took place, it was widely believed that stock options aligned the interests of the employees with those of the shareholders, and that the resulting motivation improved corporate performance. More recently, the presumed alignment of interests is increasingly being challenged. Martin goes as far as to say that instead of aligning interests, stock options may actually pit employees against shareholders by “encouraging them to pursue strategies that fatten their wallets at shareholders’ expense.” Stock options give corporate insiders the opportunity

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6 See the National Center for Employee Ownership Web site at http://www.nceo.org/library/option_distribution.html.
9 Kenneth J. Klassen and Ranjini Sivakumar, Stock Repurchases, Managerial Incentives and Stock Options, University of Waterloo Working Paper (Waterloo, ON: University of Waterloo, School of Accountancy, 2002).
to profit extravagantly from the release of temporary good news or the deferral of bad news. Martin’s reasoning is that stocks are driven by expectations of future profits, and therefore stock-based compensation drives managers into raising expectations rather than increasing actual earnings. By way of analogy, he points out that the National Football League bans its players from betting on their games, since they can influence or manipulate the way the game turns out. Kedrosky offers other examples of “how options, far from aligning management with shareholders, distort markets and induce errant behaviour.”11 According to Michael Wilson, the former Canadian finance minister, “giving a generous stock-option package to those responsible for financial controls is like dangling raw meat in front of them.”12

Yermack suggests that the increased use of executive stock options is not an incentive alignment mechanism but an exercise in managerial self-interest, or rent-seeking behaviour by senior management, that has generally escaped scrutiny.13 Yermack documents empirical evidence that the timing of option grants to senior executives is linked to favourable movements in company stock prices, “consistent with an interpretation that CEOs receive stock option awards shortly before favorable corporate news.”14 To prevent such wealth transfers from other shareholders to executives, Yermack recommends that stock options be awarded on a fixed date each year, or at a time when there are no other news announcements.

Subjective Value of Stock Options to Employees

While employees always welcome stock options as additional compensation, they soon find themselves undiversified in their financial and human capital, and therefore eager to divest themselves of employer-specific risk. The lack of diversification and the trading restrictions placed on employee stock options make them less valuable to the employee relative to the market value of an unrestricted option with similar features that can be traded at any time. Moreover, the more options an employee holds in one company, the less diversified is the employee’s portfolio, and the subjective marginal value of such options is further reduced as compared with that of similar options that can be traded in the open market. Using a Black-Scholes option pricing model with modified parameters, Ingersoll estimates the personal valuation of stock options as a percentage of market value for moderately and highly risk-averse individuals based on the fraction of their portfolio wealth already invested in their employer’s stock.15 He finds that the “subjective value is less than

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15 Jonathan E. Ingersoll, The Subjective and Objective Evaluation of Incentive Stock Options, International Center for Finance Working Paper no. 02-07 (New Haven, CT: Yale School of
half the market value in many circumstances which should occur frequently and is
less than 10% of the market value in cases which should not be exceptional.” 16
These findings may justify the taxation of option recipients on only a fraction
(currently half in Canada) of the benefit realized. A partial extract of Ingersoll’s
data is reproduced in table 1.

**Hedges and Monetization of Employee Stock Options**

Employers wishing to retain the alignment or incentive effects prohibit option
recipients from assigning or transferring their stock options to other parties within
the vesting period, and often grant additional options as the vested options are
exercised in order to maintain or even increase the incentive. However, option
contracts rarely seem to explicitly prohibit hedging by employees, nor is any infor-
mation pertaining to employee hedges readily disclosed. For example, the employee
could sell a call option similar to the one received in the compensation package to
an investment dealer, thereby improving diversification and making up for any
potential cash salary given up in a competitive labour market (which determines
total compensation). Thereafter, any gain (or loss) on the privately written option
would exactly offset the loss (or gain) on the compensatory option. The effect of such
a hedge would be the same as if the employee were allowed to sell the compensatory
option, since both strategies offer cash proceeds and immunity from subsequent
returns on the employer’s stock price.

The following example is based on Schizer’s description of how a hedge works
in this context. 17 Suppose an employee received 5,000 options with an exercise
price of $8. Suppose the Black-Scholes value of this grant was $20,000. If the
employee sold a similar option to an investment dealer for $20,000, her net return
in both the good state (stock price greater than exercise price, or \( P > X \)) and the bad
state (stock price less than the exercise price, or \( P < X \)) would be $20,000 as shown
in table 2.

The employee could hedge the options in a more subtle or indirect way by
writing a call option on an index or security that is highly correlated with the
employer’s stock and has similar variance. While such hedges are harder to detect,
they offer a hedge only against industrywide or marketwide price movements, and
not against firm-specific risks.

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16 Ingersoll, supra note 15, at 11.
17 David M. Schizer, “Executives and Hedging: The Fragile Legal Foundation of Incentive
In a 1991 insider trading case, the Ontario Securities Commission (OSC) recommended disclosure requirements that are neutral as between alternative equity-based compensation plans. More recently, the OSC has started to clamp down on timely disclosure of equity monetizations by corporate insiders receiving employee stock options. Such derivative transactions or synthetic sales allow option holders to effectively liquidate their in-the-money vested options without triggering taxes or publicly disclosing their insider trades. Reguly describes one of many methods of monetization that allow employees to divest their shares without any immediate tax liability, diversify investments into other holdings, and escape scrutiny from other shareholders focusing on insider trading disclosures. The method in question involves borrowing approximately 90 percent of the current market value of the shares (not the options) from an investment dealer at the going interest rate, to be repaid when the shares are actually sold. The dealer would finance the loan by

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**TABLE 1** Employees’ Subjective Value of Stock Options Computed by Ingersoll (2002)

<table>
<thead>
<tr>
<th>Percentage of employee wealth invested in company stock</th>
<th>Subjective value of stock options (as a percentage of market value)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>To a moderately risk-averse employee</td>
</tr>
<tr>
<td>10</td>
<td>94</td>
</tr>
<tr>
<td>25</td>
<td>87</td>
</tr>
<tr>
<td>50</td>
<td>79</td>
</tr>
<tr>
<td>75</td>
<td>76</td>
</tr>
</tbody>
</table>


**TABLE 2** Numerical Example of Hedging Employee Stock Options with a Market Option

<table>
<thead>
<tr>
<th>Stock price at option expiry</th>
<th>Return from exercise of compensatory option</th>
<th>Return from sale of market option</th>
<th>Return from exercise of market option</th>
<th>Total return</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>nil</td>
<td>20,000</td>
<td>nil</td>
<td>20,000</td>
</tr>
<tr>
<td>30</td>
<td>5,000 [30 – 8]</td>
<td>20,000</td>
<td>–5,000 [30 – 8]</td>
<td>(110,000)</td>
</tr>
</tbody>
</table>

In a 1991 insider trading case, the Ontario Securities Commission (OSC) recommended disclosure requirements that are neutral as between alternative equity-based compensation plans. More recently, the OSC has started to clamp down on timely disclosure of equity monetizations by corporate insiders receiving employee stock options. Such derivative transactions or synthetic sales allow option holders to effectively liquidate their in-the-money vested options without triggering taxes or publicly disclosing their insider trades. Reguly describes one of many methods of monetization that allow employees to divest their shares without any immediate tax liability, diversify investments into other holdings, and escape scrutiny from other shareholders focusing on insider trading disclosures. The method in question involves borrowing approximately 90 percent of the current market value of the shares (not the options) from an investment dealer at the going interest rate, to be repaid when the shares are actually sold. The dealer would finance the loan by

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short selling the shares pledged by the executive. Legal ownership would continue to be retained by the executive, enabling avoidance of both the tax (triggered only when the shares are legally disposed of) and the insider trading disclosure. The loan from the dealer does not trigger any immediate tax liability, allowing the gross proceeds to be used for consumption or portfolio diversification. A publicly disclosed example includes the monetization of 138,800 shares of CHC Helicopter Corporation for $3.5 million on January 7, 2003 by one of its directors, Steven Hudson.20

Monetization or hedging allows employees to escape potential restrictions on the exercise or sale of their options and shares. Such escape provisions weaken or eliminate the incentives or motivational effects desired by the shareholders who incur the economic or opportunity cost of the option grants, and are therefore a source of inefficiency. Transaction costs for employers to set up the plans and employees to undo them are also unproductive and socially wasteful.

The employee’s benefits from hedging or monetization include liquidity, diversification, deferral of capital gains taxation, and receipt of a potential risk premium without the corresponding risk. A growing number of banks’ private banking units are advising their executive clients to hedge. For example, Toronto-Dominion Bank admittedly allows such transactions for tax- and estate-planning purposes,21 and RBC advertises hedging services to its “platinum” clients with stock portfolios exceeding $5 million.22

The demand for monetization products and services arises from employee option holders wishing to divest and diversify their investment portfolio, from corporate insiders wishing to avoid scrutiny of their insider trades, and from general investors wishing to defer their capital gains tax. For insider executives with large holdings of their employer’s shares, divesting and diversifying may be the major reason to monetize, with tax deferral serving as a secondary motivator. This hypothesis could be empirically confirmed if data revealed that most monetization is undertaken by employee option holders for shares of their employer corporation. On the other hand, if monetization is undertaken mostly by general investors (non-employees) for a large variety of shares, tax deferral could be inferred as the major driving force for such products and services. Unfortunately, such data are currently unavailable since monetization transactions by employees or corporate insiders do not have to be publicly disclosed.

In February 2003, the OSC released draft proposed regulations that would require public disclosure of monetization and hedging contracts as part of insider trading reports.23 The disclosure requirement would apply to existing monetization and

22 As reported in Reguly, supra note 19.
hedging contracts that are in effect when the new rules are introduced. However, these new rules will not prohibit monetization or hedging by insider shareholders. Insider trading and the stake of senior executives is often scrutinized by investors as a sign of management’s expectation of future share prices, and failure to disclose monetization and hedging deals shields shareholders from knowing the insiders’ true economic position in the company.

Employers aware of such hedging practices would tolerate them if there were no substantial risk premium paid (for contingent compensation), or if the financial reporting benefits (of avoiding expense recognition on income statements) were substantial. Employers may also acquiesce with their employees’ monetization practices as a means of compensating them indirectly. Roulstone’s empirical study found that firms that did not prohibit insider trading (within legal constraints) paid their executives an average of $54,000 less each year compared with firms that restricted trading on inside information. Thus, the opportunity to trade discretely (via monetization or other methods) on inside information may serve as a substitute for other forms of compensation.

Monetization may not necessarily prevent stock prices from reflecting information about option exercise. Stock markets efficiently impound the potential dilution from the exercise of stock options, without necessarily requiring actual exercise. Core, Guay, and Kothari find evidence that stock prices are lower at firms with greater potential dilution from exercise prices, while Garvey and Milbourn illustrate a trading rule that yields abnormal returns based on the probable dilution from stock option exercises.

Stock Options Versus Shares

Another strand of literature points out that employee stock options are not as effective as stocks in aligning the interests of employees and shareholders. Unlike stocks, options offer all the upside gains without any downside risks, potentially inducing employees to take on excessive risks. The lack of downside risk avoids the direct risk of reduced wealth that accompanies a drop in share price and has been considered a safeguard for undiversified employees. However, the loss of option value resulting from a drop in share prices is as real to employees as to shareholders. The Canada Pension Plan (CPP) Investment Board has explicitly stated that it will

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27 Gerald T. Garvey and Todd T. Milbourn, Evidence That the Stock Market Underestimates the Cost of Employee Stock Options, Peter F. Drucker School of Management Working Paper (Claremont, CA: Claremont Graduate University, Peter F. Drucker School of Management, 2002).
vote against stock option plans because “the important goal of aligning the interests of senior executives with the interests of shareholders was accomplished better through share ownership than it was through any form of option plan.”

The theoretical and empirical literature also recognizes stocks as options with a zero exercise price, the tax implications of which are discussed later in this paper.

Preserving Corporate Cash Flows
Preservation of cash flows has often been cited as a major reason for corporations to prefer employee stock options to other forms of (cash) compensation. This argument
has been particularly emphasized by companies in the technology industry, with its higher proportion of startup firms experiencing growing pains. However, empirical studies have not found evidence that cash-constrained firms use a greater proportion of stock options in their compensation mix.33

Significant use of employee stock options can not only preserve cash outflows, but also serve as a source of cash inflows. Landley points out that for the fiscal year ended July 1999, Microsoft received more cash from the proceeds of exercise (at the exercise price) by its employees and the tax deduction for non-qualified options exercised by its employees than it did from sales of all of its goods and services.34 With an after-tax net income of $7.8 billion in 1999, Microsoft enjoyed $3.1 billion in “stock option income tax benefits.”35 Microsoft enjoyed an additional $1.3 billion in cash from payroll deduction, plus substantial cash savings from substituting employee stock options for cash compensation. Such huge cash inflows resulted from approximately $60 billion of employee stock options outstanding as at July 1999.

One problem with the cash preservation argument in Canada is that it ignores the opportunity cost of selling the shares (from the treasury) at a discount, when such shares could have been sold through a private placement to an investment dealer for the market price, less a transaction cost for the private placement.36 Furthermore, the proceeds from such private placements could be used to give the employee a tax-deductible cash payment, allowing for a win-win situation for both the employer and the employee.37 The firm’s capital structure, claims of existing shareholders, and earnings dilution remain the same whether the firm sells the shares to the employee at an exercise price below market price, or to an investment dealer at market price, and pays cash to the employee who would otherwise have exercised the option. Such phantom-option plans do not necessarily require greater cash outflows (relative to allowing employees to exercise their options), even after paying employees a higher amount to compensate for the employees’ unfavourable tax treatment of regular cash compensation,38 as illustrated in the following numerical example.

33 Klassen, supra note 4.
38 Stock option benefits (or spreads) for employees are subject to half the inclusion rate by virtue of paragraph 110(1)(d) of the Act. This deduction is not available for regular cash compensation.
Example: Stock options versus phantom options

Assume that three years ago, Sierra Corporation granted its executive 30,000 at-the-money options\(^{39}\) with an exercise price of $7.00, and the options are now vested (that is, exercisable). Sierra shares are currently trading at $9.75, and the executive wishes to exercise her options. Sierra’s marginal tax rate is 38 percent, while the executive’s marginal tax rate is 46 percent. Sierra has the choice of allowing the options to be exercised by selling the underlying reserved shares to the executive for $7.00 each, or selling the underlying shares to an investment dealer at the current market price of $9.75 (less a 3 percent discount), and using the proceeds of this private placement to make a tax-deductible cash payment to the executive.

The executive must be kept indifferent in after-tax dollars under both alternatives, since otherwise the deal will not be feasible. If the executive were to exercise her 30,000 stock options and sell the shares immediately, she would receive

\[ n(P_e - X)(1 - 0.5t) = 30,000(P_e - X)(1 - 0.5)(0.46) = 63,525. \]

Paragraph 110(1)(d) of the Act allows 50 percent of the option exercise benefit to be excluded from income as long as options were not granted in the money (that is, the exercise price \(X\) was not less than the fair market value of the share on the date of the option grant).

To keep the executive indifferent or no worse off, the compensatory payment \((CP)\) would have to leave the same amount of consumable (or after-tax) cash in her hands. Therefore, the \(CP\) would have to be $117,638, computed as follows:

\[ CP(1 - 0.46) = 63,525, \]

where $63,525 is the after-tax benefit from exercising options.

The above equation recognizes that the compensatory payment is fully taxable to the recipient. However, unlike the stock option benefit, the compensatory payment is tax-deductible for the corporation (partly because it is not distinguishable from any other cash compensation payment).

At first glance, exercise of the options by the executive may be perceived as an additional cash inflow of $210,000 (30,000 options at the $7.00 exercise price) for the firm, while the compensatory payment may be perceived as a cash outflow of $72,936 ($117,638[1 – 0.38]). Cash flow statements would record an inflow of $210,000 versus an outflow of $72,936, since accounting conventions do not recognize opportunity costs. However, Sierra incurs an opportunity cost if it sells shares that have a market value of $9.75 for $7.00. Instead of issuing 30,000 shares to the executive at a discounted price of $7.00, Sierra could issue the same 30,000 shares in a private placement to an investment dealer at a typical discount of 3 percent below market. Sierra’s cash flows for these two alternatives are as follows:

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\(^{39}\) “At-the-money” options imply that the stock price \((P)\) is equal to the exercise price \((X)\) at the date of grant. Paragraph 110(1)(d) is not available to employees receiving options that are already “in the money” on the grant date (that is, \(P > X\)). “Out-of-the-money” options imply that the stock price is less than the exercise price on grant date (that is, \(P < X\)).
Allow CEO to exercise her options

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exercise price received from executive (30,000 options × $7.00)</td>
<td>$210,000</td>
</tr>
<tr>
<td>30,000 shares from the treasury given to the executive</td>
<td>nil</td>
</tr>
<tr>
<td>Tax consequences to Sierra upon exercise by the executive</td>
<td>nil</td>
</tr>
<tr>
<td>Net cash inflow from exercise</td>
<td>$210,000</td>
</tr>
</tbody>
</table>

Cancel options, issue private placement, and offer cash payment

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proceeds from sale of 30,000 shares from treasury @ $9.75 market price via private placement</td>
<td>$292,500</td>
</tr>
<tr>
<td>Private placement fee or discount of 3%</td>
<td>(8,775)</td>
</tr>
<tr>
<td>Cash payment made to executive</td>
<td>(117,638)</td>
</tr>
<tr>
<td>Tax shield from cash payment (0.38 × $117,638)</td>
<td>44,702</td>
</tr>
<tr>
<td>Net cash inflow from cancelling and paying cash</td>
<td>$210,789</td>
</tr>
</tbody>
</table>

The cash payment made to the employee in lieu of issuing shares is deductible to the employer for tax purposes.\(^\text{40}\) If the decision to pay cash in lieu of shares is the employer’s, subsection 7(1) of the Act does not apply, and paragraph 7(3)(b), which denies a deduction to the employer, also is inapplicable.\(^\text{41}\) If the decision to receive cash in lieu of shares is the employee’s, again paragraph 7(3)(b) does not apply to deny an employer a deduction.\(^\text{42}\)

The cash payment alternative is marginally better from a cash flow perspective, but any minor changes in corporate marginal tax rate or private placement discount rates may reverse the ranking of the two alternatives. Cancellation strategies also benefit from escaping scrutiny from the financial press, as well as avoiding insider trading disclosure requirements. Note that the incentive effects of options (if any) are not lost by the substitution of a cash payment for options, since the employee receives the same after-tax dollars, and at the same time, as she receives under the option exercise strategy. The dilution effects of transferring value from existing shareholders to the employee exercising the options are also largely avoided, since dilution in this context arises only when shares are issued for less than their market value. Both forms of income are considered employment income, and, to the extent that the employee sells the shares immediately after exercise, the resulting tax is triggered at the same time under both alternatives.

Employees generally prefer to sell the underlying shares at the time they exercise their options. This preference to hold options or cash, but not the intermediate

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\(^{40}\) Cash compensation is required to be included in the employee’s income as regular employment income under subsection 5(1) and is not excluded from deduction by the employer under paragraph 18(1)(a).


\(^{42}\) Ibid. This interpretation is also confirmed in CCRA document no. 2000-0048355, November 14, 2000.
stock, is consistent with the opportunity cost of exercising the option early, since holding the option instead of the stock allows the employee to delay payment of the exercise price while continuing to enjoy the leveraged returns of any future increase in the stock price. Thus, holding an option dominates holding the underlying stock, since the former does not require an immediate investment of the exercise price and yet allows the employee to realize the future prospects of the firm’s stock. The employee could hold the option and invest the amount of the exercise price for additional (risk-free) return, without sacrificing any future returns on the underlying stock. Furthermore, employees are generally undiversified in their human capital and therefore hesitant to retain their financial capital in the same firm unless required to do so as a condition of employment. These two factors explain the dominant observed practice of “cashless exercise,” whereby the broker immediately sells the stock and issues a cheque to the employee for the difference between the stock price and the exercise price.43

Companies such as Bank of Nova Scotia, CI Fund Management Inc., and Talisman Energy Inc. have recently opted to settle their stock appreciation rights (SAR) in cash rather than in shares to achieve valuable tax deductions and greater transparency, and to avoid earnings dilution.44 Talisman Energy’s cash-exercise option allows employees to elect, after an appropriate vesting period, “to be paid in cash the equivalent of the gross profits they would make from selling the shares resulting from an exercise of their options.”45 To obtain a tax deduction, CI Fund Management Inc. also amended its stock option plan to allow employees to receive cash from the company instead of acquiring shares and selling them in the open market.46 This amendment required CI to expense approximately $36 million in the fiscal year ending May 31, 2003 for all “in-the-money” options, with the resulting tax savings constituting a major component of its annual free cash flow of about $165 million.47

The basic point of this tax-planning scheme is that the option exercise strategy does not offer a benefit to the employee that is sufficient to make up for the loss of deduction to the employer. While the 50 percent exclusion from income for the employee seems generous, it may not offset the penalty to the employer of completely losing the deduction. Multilateral tax planning suggests that if one party gains a special benefit from one particular method of structuring a deal, the best approach is often to select that method and find a way to share the benefits with the other party.

43 Over 90 percent of the stock options exercised by over 50,000 employees were “cashless exercises” as documented in Chip Heath, Stephen Huddart, and Mark Lang, “Psychological Factors and Stock Option Exercise” (1999) vol. 114, no. 2 The Quarterly Journal of Economics 601-27.


47 Ibid.
The above example can also be seen as an attempt to change a particular compensation stream from one category of taxation to another, more favourable category, while making neither party worse off. The employee’s exercise transaction is not tax-advantageous to the employer, since the employer does not receive a corresponding deduction on either the grant or the exercise date. In contrast, a cash payment would be fully deductible to the employer. The cash for this payment to the employee could be financed by selling the employer’s shares from the treasury to an investment dealer as a private placement instead of selling it to the employee at a reduced (exercise) price. The employer would be better off disallowing the exercise of employee stock options and substituting cash payment, as long as its corporate marginal tax rate were sufficiently high.

Since not all forms of compensation are treated in the same manner for tax purposes, careful tax planning can offer a win-win situation for both the employee and the employer. Thus, compensation planning should not be done in isolation from tax planning, and tax planning should not be done in isolation from compensation planning. To appreciate the role of taxes in compensation planning, it is important to consider the tax consequences to both the employee and the employer, since taxes can affect both the form and the amount of total compensation paid to employees. Focusing only on the employer’s tax position may make it difficult for the employer to attract, deal with, and retain employees. Employers that consider only their own tax position may find it difficult to transact or contract with employees in a competitive labour market. For example, insisting on offering compensation in the form that is most attractive to the employer (say, 100 percent deductible immediately) without considering that it may be relatively tax-disadvantageous to the employee can make the compensation package relatively unattractive in a competitive labour market, particularly if other employers are offering compensation in forms that give employees a more favourable tax result. Employers pursue the objective of minimizing total after-tax compensation costs for a given level of labour services, while employees attempt to maximize total after-tax compensation income for a given level of labour input. When both stakeholders are considered simultaneously, it is not always obvious which party’s interests should prevail. It is often possible to restructure a compensation arrangement in a way that improves the after-tax positions of both contracting parties, usually at the expense of the tax authority. Therefore, while a compensation contract may seem like a contract between two parties (employer and employee), it is usually designed with a third party in mind, namely, the tax authority.

The actual form in which stock-based compensation is offered to employees affects the tax consequences. As confirmed, in a different context, by the Supreme Court in the *Shell Canada* decision, “a taxpayer is entitled to be taxed based on what it actually did, not based on what it could have done, and certainly not based on what a less sophisticated taxpayer might have done.” In the absence of neutrality, tax planning is therefore important for employee stock options.

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48 *Shell Canada Limited v. The Queen et al.*, 99 DTC 5669, at paragraph 45 (SCC).
Avoiding Reduction of Book Profits

In light of the arguments presented in this paper so far, it is difficult to explain or justify the widespread use of employee stock options in Canada. Employee stock options have been shown to be not particularly effective in aligning incentives between employees and shareholders, and may have played a role in many recent failures of corporate governance. Their subjective value to undiversified employees is often significantly less than the objective value given up by the employer, so that employees are led to monetize or hedge their options. Employee stock options may also not necessarily preserve corporate cash flows, as shown in the previous section. Furthermore, employee stock options are cumbersome in that they require shareholder approval and timely disclosure for grants, exercises, and sale under insider trading rules, and they remain politically sensitive under the scrutiny of the financial press. Stock options can encourage managers to take on excessive risk, since greater risk increases the value of options. Stock options can also discourage managers from paying dividends, since dividends reduce share prices (and options are generally not dividend-protected).

The one major advantage of using employee stock options is that they do not need to be expensed in the employer’s income statements, thereby allowing option granters to report higher income than if they had compensated their employees using cash. In fact, stock options are the only form of compensation that does not reduce reported profits, and empirical studies show that firms with greater need to report higher income tend to use more stock options in their compensation mix.\(^\text{49}\)

This seems to be the principal reason for the widespread growth of employee stock options, since all other stated benefits can be replicated with phantom options, stock appreciation rights, or other means, at a lower cost.

As discussed earlier, stocks may arguably be better than stock options as compensation for aligning incentives between employees and shareholders. However, the use of stock options has significantly exceeded the use of stocks, largely because the latter require expensing in the income statements, even though both involve no immediate cash flows. Stocks can also be viewed as options with an exercise price of zero. It seems absurd to allow an option on a $50 stock with an exercise price of $1 to escape being expensed on the income statement, while requiring an expense of $50 in the income statement if the exercise price is reduced to zero (that is, an outright grant of a stock). Many practitioners are testing the limits of how far they can reduce the exercise price (without reaching zero), and still get away without expensing on the income statement.

The accounting regulator’s attempts at requiring expensing of stock options have met strong resistance from the corporate community in all jurisdictions. In 1992, the US Financial Accounting Standards Board (FASB) tried to implement accounting

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\(^{49}\) Examples of empirical studies documenting this result in a Canadian context include Klassen and Mawani, supra note 5; and Mawani, supra note 37.
standards requiring firms to expense the cost of their options granted, but faced strong opposition from executives and politicians. The FASB received a record 1,649 letters, most of them against the proposed standard. The opinions were “so overwhelmingly opposed and vitriolic that the FASB’s chairman expressed concern that the organization’s future was jeopardized by the project.”50 In late 1993, Senator Joseph Lieberman (Democrat—Connecticut) sponsored a bill that would have allowed the US Securities and Exchange Commission to block the FASB from implementing the stock option expensing requirement. The proposed standard was withdrawn because the strong corporate lobby (particularly in the technology sector)—with the aid of politicians—argued that the lower reported profits would impair the ability of firms to raise capital to finance growth and create jobs. Similar arguments linking reported earnings and firm valuation continue to be asserted by lobby groups such as the Financial Executives International Canada51 and the International Employee Stock Options Coalition in the United States, comprising trade associations and corporations. The ability of an accounting journal entry to have direct cash flow consequences and stock price impact is given undue credence.

The opposition to accounting standards requiring the expensing of employee stock options is based partly on technical valuation issues. Expensing the value of stock options when granted is based on the fiction that employees receive cash compensation and then use the cash to buy the options. However, the valuation of any stock option is technically complex and requires several assumptions, such as the expected volatility of the underlying stock price. Vesting and trading restrictions imposed on employees make objective valuation even more difficult. However, Warren Buffet points out that many other areas of accounting, such as the useful life of machinery or actuarial pension liabilities, require far more complicated calculations and assumptions before they are reported, as required, in annual financial statements.52 Bodie, Kaplan, and Merton offer the latest and most comprehensive arguments why employee stock options need to be expensed on the income statements of public corporations.53

Almost everyone recognizes that the economic value of employee stock options is not zero at grant date, even if the options are not in the money and therefore have no intrinsic value. Divorce courts have led the way in awarding ex-spouses 50 percent interest in employee stock options, even if they were not vested or out of the money.

at the time of the divorce.\textsuperscript{54} Such awards recognize the economic value of stock options, even if the immediate cash return from exercising is zero. Warren Buffett has also made it clear that “Berkshire [Hathaway] will be happy to receive options in lieu of cash for many of the goods and services that we sell.”\textsuperscript{55} Stock-based awards for goods or services made to non-employees already must be accounted for on their fair value under both Canadian and US accounting rules.

The dollar amounts involving employee stock options that escape income statement expensing are not trivial. Lorinc reports that the aggregate 2001 earnings of the S&P 500 companies would drop by 20 percent if employee stock options were expensed.\textsuperscript{56} For 53 companies in the S&P/TSX index—Canada’s 60 largest public companies—the median reported income would have been 3.3 percent lower had stock option costs been expensed on the income statement.\textsuperscript{57} This sample included Nortel Networks Corporation’s US$952 million stock option expense, or 27 percent of reported loss, and ATI Technologies’ US$17 million stock option expense, deepening losses by 38 percent.\textsuperscript{58} Financial Executives International Canada reports that the median ownership dilution from employee stock options in 2001 was 9.2 percent for TSX companies and 15 percent for S&P 500 companies.\textsuperscript{59}

Such material discrepancies, as well as recent corporate reporting scandals, have impelled accounting standard setters to call for mandatory expensing of employee stock option grants. In November 2002, the International Accounting Standards Board (IASB) issued an exposure draft inviting comments on its proposed mandatory expensing of employee stock options. The IASB seems determined to set the terms for the global debate and to adopt such measures.\textsuperscript{60} Accounting scandals have opened the door to international influence on Canadian and US financial reporting, with the expected result of making financial statements much more informative and transparent under global standards.

In March 2003, the Canadian Accounting Standards Board expressed support for the IASB’s proposal requiring all stock-based payment transactions to be expensed and employee stock options to be accounted for at fair value.\textsuperscript{61} Pressured by the desire for global convergence, the FASB also has agreed to issue an exposure


\textsuperscript{55} Buffet, supra note 52.


\textsuperscript{58} Ibid.

\textsuperscript{59} Naglie, supra note 51.

\textsuperscript{60} “International Accounting Board Plans To Treat Options as Costs,” \textit{Wall Street Journal Europe}, November 7, 2002.

\textsuperscript{61} Accounting Standards Board, “Decision Summary,” March 6, 2003 (available online at http://www.cica.ca/index.cfm/ci_id/11388/la_id/1.htm).
draft in 2003 (for effect in 2004) that would mandate the expensing of the compensation cost relating to employee stock options at grant date, using a fair-value-based method.\textsuperscript{62} In addition, the UK Accounting Standards Board has proposed accounting standards that would “require companies to recognise an expense when goods or services are received or acquired in return for a share-based payment.”\textsuperscript{63}

It is hoped that these new accounting standards will mandate one consistent approach to recognition of the costs associated with employee stock options and thereby make financial reporting comparable across companies and years. If outright harmonization of reporting standards does not take place, it seems likely that jurisdictions imposing tougher standards will be regarded more favourably by the capital markets, since corporate reporting in those jurisdictions will presumably be more reliable. Alternatively, corporations may seek a listing on stock exchanges in jurisdictions that do not require expensing of employee stock options. Improving financial reporting and disclosure is considered one of five key issues in fostering confidence in Canada’s capital markets.\textsuperscript{64} Major Canadian corporations such as Abitibi-Consolidated Inc., Nortel Networks Corporation, and Toronto-Dominion Bank have volunteered to expense the cost of their stock options beginning in 2004, even if such reporting is not mandated by accounting standard setters. In the United States, 110 of the S&P 500 companies have agreed to treat stock options as compensation expense.\textsuperscript{65}

Leonhardt reports that 38 percent of surveyed finance professors responded that a drop in reported earnings arising from option expense would have no effect on stock prices, and 46 percent responded that the effect would be minor.\textsuperscript{66} Leonhardt also cites a Towers Perrin study of the 103 companies that voluntarily expensed their options charges in 2002 and were found to have performed no better or worse than the market as a whole.

While some companies claim that the requirement to expense options will reduce the use of stock options in employee compensation, others claim there will be no difference since information about employee stock options is already disclosed in footnotes to the financial statements, and cash flows do not change across the two reporting regimes (expensing in income statements versus disclosure in financial statement footnotes). Companies reluctant to expense their options, and claiming


\textsuperscript{64} Canada, Department of Finance, “Fostering Confidence in Canada’s Capital Markets,” updated to June 12, 2003 (available online at http://www.fin.gc.ca/activity/pubs/fostering_e.html).


that they already disclose sufficiently in footnotes, seem inconsistent when they also claim that the requirement to expense will force them to reduce their use of options.

If financial statement expensing of stock-based compensation becomes a reality, cash-settled phantom plans (like the one described in the Sierra Corporation example above) will likely become more popular than stock-settled option plans. Generally accepted accounting principles (GAAP) in both Canada and the United States allow cash-settled plans to be recorded as a liability for an amount by which the stock price (at fiscal year-end reporting dates) exceeds the exercise price, with changes in stock price resulting in changes in compensation expense and liability. If the stock price remains flat for a year or two after the grant date, no (or very limited) expense needs to be recorded. In contrast, equity-settled option plans generally (with some exceptions) be recorded as an expense at the option grant date, with no subsequent changes resulting from changes in stock price or other valuation parameters. Tunney describes the current and proposed accounting rules in more detail and concludes that “expensing options creates a much larger hit to annual profits than expensing the comparable amount of cash compensation.”

**DENIAL OF TAX DEDUCTION FOR EMPLOYEE STOCK OPTIONS**

Table 3 describes the current tax treatment of employee stock options in Canada and the United States. Paragraph 7(3)(b) of the Act denies a deduction to the corporation for the (taxable) option benefit received by the employee, while a corresponding cash payment that is contingent on stock price in exactly the same way (and for the same amount) as a stock option is fully deductible to the corporate payer. The current financial reporting regime does not require stock option benefits to be expensed, while corresponding cash payments for compensation must be fully expensed on the income statements. Thus, firms with sufficient cash or firms with less of a need to report higher book income can compensate their employees at a lower after-tax cost, without necessarily losing out on the incentive benefits (if any) of stock options.

Since neither accounting income nor cash flows reflect the economic ability of firms to pay, tax provisions that differ across cash or accounting consequences are not neutral and may be unfair. Two firms with identical economic ability to pay, for example, currently face different income tax liabilities if one of them offers stock-based cash compensation while the other offers stock options that are exercised by the employees. There does not seem to be any obvious reason for this difference in

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68 Avoiding stock options may also benefit the corporation in curtailing dilution and avoiding insider trading reporting, as discussed earlier in the paper.
### TABLE 3  Tax and Financial Reporting Treatment of Employee Stock Options in Canada and the United States

<table>
<thead>
<tr>
<th>Treatment at grant date</th>
<th>Financial reporting treatment</th>
<th>Firm tax treatment</th>
<th>Individual tax treatment</th>
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<tbody>
<tr>
<td><strong>Canadian treatment</strong></td>
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</tr>
<tr>
<td>All employee options</td>
<td>No expense(^a)</td>
<td>No deduction</td>
<td>No inclusion</td>
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<tr>
<td><strong>US treatment</strong></td>
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<tr>
<td>Non-qualifying options</td>
<td>No expense</td>
<td>No deduction</td>
<td>No inclusion</td>
</tr>
<tr>
<td>Incentive stock options</td>
<td>No expense</td>
<td>No deduction</td>
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<td>(g \cdot t_p \cdot n \cdot (P_e - X))</td>
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<tr>
<td>Non-qualifying options</td>
<td>No expense</td>
<td>Save</td>
<td>Pay</td>
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<td>(t_c \cdot n \cdot (P_e - X))</td>
<td>(t_p \cdot n \cdot (P_e - X))</td>
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<tr>
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<td>No expense</td>
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<td>No deduction</td>
</tr>
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Note: This table presents a summary of the Canadian and US financial reporting treatment and the tax treatment of employers and employees for compensatory stock options. Implications at grant and at exercise (if exercise occurs) are presented for Canadian options granted that are not in the money (that is, with an exercise price less than or equal to the stock price at the grant date), and for US options granted as non-qualifying options and those granted as incentive stock options.

The following notation is used:

- \(g\) = inclusion rate in Canada, 50% (capital gains rate),
- \(t_p\) = marginal tax rate of individual,
- \(t_c\) = marginal tax rate of corporation,
- \(n\) = number of options granted,
- \(P_e\) = stock price at the date of exercise,
- \(X\) = exercise price of the option.

\(^a\) In the rare case of options granted in the money, the nominal value of the option at the grant date (that is, the exercise price less the stock price at grant) is amortized over the period until the options vest and the individual’s inclusion rate, \(g\), is 100%.
tax treatment, since the government’s policy reasons for favouring one form of option-based compensation over another are not clear. The policy objective is certainly not to help corporations conserve cash, since it is the cash form of compensation that is tax-favoured. Furthermore, large-scale empirical studies have not found any support for the hypothesis that cash-constrained corporations use stock options to a greater degree.69

It seems reasonable to assume neutrality as a government objective with respect to the form in which compensation is paid. Tax neutrality as a normative guide is based on the premise that resources can be efficiently allocated (at least on an interim basis) only if taxes do not distort business decisions. Such a norm is consistent with the functioning of a competitive economy. Recent tax reform measures undertaken throughout the industrialized world have attempted to tax fringe benefits at the same effective rates as cash compensation, thereby illustrating the underlying normative guide of neutrality.

If the form of stock-based compensation is determined by a firm’s tax loss position or financial reporting costs, for example, the resulting differential tax burden across firms with different amounts of tax losses or financial reporting costs seems distortionary. To justify such differential tax burdens would require persuasive efficiency-based arguments explaining why firms with high financial reporting costs, for example, should pay relatively higher taxes than firms with low financial reporting costs.

MacKnight refers to paragraph 7(3)(b) (denying a deduction to the corporation for the stock option benefit received by the employee) as “an unnecessary and, indeed, distortionary provision.”70 Sandler also recognizes that the benchmark treatment should allow deductibility of stock option benefits at the employer level.71 However, Sandler does not take into account the cost of this non-deductibility in deciding whether the tax treatment of employee stock options is “generous to a fault.” His conclusion that “employee stock options are taxed more favourably in Canada than in the United States”72 might be reversed if the benefit to the employee were compared between the two countries for a given dollar of after-tax cost to the employer, or if the after-tax cost to the employer were compared between the two countries for a given dollar of after-tax benefit to the employee.

Tunney considers both the employer and the employee perspectives in his plan to deliver a certain number of shares to the executive on the option exercise date at

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69 Klassen, supra note 4.

70 MacKnight, supra note 36, at 430.


72 Ibid., at 261. The potential for two contracting parties (for example, employer and employee) to share the tax benefits available to one party is recognized in Joseph Frankovic, “The Income Tax Treatment of Prepaid Expenses and Similar Costs: A Time Value Analysis” (2000) vol. 48, no. 5 Canadian Tax Journal 1371-1443, at 1399.
no out-of-pocket cost to the executive.73 His plan involves a separate bonus (or side) payment by the employer to reimburse any tax liability incurred by the executive upon receipt of the stock appreciation benefit at the time of exercise. However, Tunney ignores the potential dilution and opportunity costs of issuing shares from the treasury and thereby overstates the magnitude of the difference in costs between the stock option and the bonus alternatives.

The Canadian Advanced Technology Alliance (CATA), an industry association of technology companies, has lobbied the federal government for tax changes relating to employee stock options.74 CATA justifies its lobbying with its stated aims to reduce the “brain drain” from Canada into the United States and to make Canadian companies more competitive over their US counterparts in executive compensation. Sarauer and Morris point out that the “main [competitive] advantage of stock option grants under US tax laws actually lies with the employer.”75 The availability of a tax deduction to the corporation equal to the employees’ stock option benefits reduces the after-tax compensation costs of US employers relative to their Canadian counterparts.

Brooks suggests six criteria or principles that should determine whether an economic outlay is deductible for income tax purposes.76 Four of the principles underlying deductibility seem to be met at first glance: stock options are not personal expenses;77 stock options are (arguably) not unreasonable expenses;78 stock options are not awarded only to avoid paying income taxes;79 and there does not seem to be any public policy reason to curtail the use of employee stock options.80

The fifth principle underlying deductibility is that an outlay should be deductible only if the payer’s wealth (or income) is diminished. That stock options represent a

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74 Examples of CATA’s tax advocacy can be found on its Web site at http://www.cata.ca/cata/advocacy/taxbud/index.cfm.


77 One argument against the deductibility of employee stock options is that such benefits are granted at the expense of existing shareholders via a dilution effect, and not an expense of the corporation.

78 However, as noted earlier, it has been estimated that the aggregate 2001 earnings of the S&P 500 companies would drop by 20 percent if employee stock options were expensed: see Lorinc, supra note 56.

79 Stock options have been used extensively in a regime where no tax deduction is available.

80 Notwithstanding the earlier sections of this paper that described the dysfunctional consequences of employee stock options in corporate governance.
real (opportunity) cost to the company is considered beyond dispute by most economists whose bread is not buttered by stock options. Many of the public companies that use employee stock options for compensation also have publicly traded options that are bought and sold on exchanges or in over-the-counter markets. If these companies issue $100,000 worth of stock options to the capital market, and require employees to buy the options with their own cash compensation and hold them for three years (the typical vesting period), then the economic effect of giving away the options (or the opportunity cost to the corporation of $100,000) is clear. The corporation’s wealth, as well as its ability to pay, has been reduced by $100,000 by the granting of stock options to its employees. The tax rules do recognize and offer a tax deduction for opportunity costs (or cash proceeds otherwise received from the sale of such shares) incurred when an employer grants stocks rather than options.

The opportunity cost to the employer corporation is also clear if a tax deduction is being contemplated at the time of exercise (as in the United States). As shown earlier in the example of Sierra Corporation, the employer could just as easily have sold its shares to an investment dealer at the market price \( P \) and used the proceeds to compensate the employee for the amount of the option spread \( P - X \). Therefore, selling the shares to the employee at a price (the exercise price \( X \)) below market price triggers a clear opportunity cost to the corporate employer, reducing its wealth and its ability to pay taxes.

Another argument in favour of a tax deduction for the employer is that employees can, and often do, convert their stock options into cash by monetizing or hedging. Such monetizing or hedging readily and objectively establishes the economic value of the employee stock options. To allow a tax deduction for a direct cash compensation payment, but not for an indirect or in-kind payment, seems unfair.

The fact that stock options may be worth less to employees owing to their undiversified human and financial capital does not influence the (opportunity) cost to the corporation of awarding such options.\(^81\) Employers are allowed to deduct the full cost of providing day-care services to their employees, for example, even though some employees attach lower subjective values to such fringe benefits.

The sixth principle underlying deductibility is that capital expenses should not be immediately deductible, but instead be amortized over the estimated useful life of the asset. This principle follows from the “ability to pay” principle based on income defined as consumption plus changes in net worth.\(^82\) It could be argued that employee stock options are a capital expenditure, with benefits accruing over the tenure of the option recipient,\(^83\) or the vesting period of the options (typically 3 years), or

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81 It could arguably influence the employees’ taxation on employee stock option benefits.

82 This is the widely accepted Haig-Simons definition of income. See Henry C. Simons, Personal Income Taxation: The Definition of Income as a Problem of Fiscal Policy (Chicago: University of Chicago Press, 1938), 50.

83 Former federal Finance Minister Michael Wilson, supra note 12, at 43, reports a recent “disturbing statistic: The average tenure of CEOs at major U.S. corporations is down to 18 months.”
the average holding period, or the life of the option (typically 10 years), and are therefore not immediately deductible in full. The motivational or incentive benefits from employee stock options can reasonably be expected to accrue over one of these four periods. However, it could also be argued that the incentive effects (and benefits for the employer) are the greatest around the option grant date and decline over time if options become increasingly out of the money. Benefits realized in the year of expenditure should clearly be deducted in the year of expenditure.

If the benefits of employee stock options accrue to the corporation over several taxation periods, they could be viewed as prepaid (compensation) expenses. To the extent that the employer and the employee are transacting in a competitive labour market, at arm’s length, in good faith, and with sound corporate governance, it seems reasonable to assume that the value of the prepayment by the employer will equal the value of the future services to be provided by the employee.84 The applicable provision in this context would be subsection 18(9), which defers the payer’s deduction to the year in which the services can reasonably be considered to have been rendered. If the services are not rendered, for whatever reasons, paragraph 18(9)(b) could conceivably allow the unamortized or undeducted portion of the prepaid expense to be deducted in the year in which it was realized that the services would no longer be rendered.

Paragraph 18(9)(b), however, presumes that the payer (of prepaid compensation expenses) experiences a loss in the year in which it realizes that it will no longer receive services. In the case of employee stock options, the employer may not necessarily face an economic loss if the employee resigns or is terminated before exercising the options, no matter whether the options are as yet unvested, or vested but out of the money. It seems that the predominant issue in respect of employee stock options is whether the costs (or loss) to the payer will be realized, rather than whether the services will be rendered,85 although both the value and the cost of the services could change between the time of granting the options and the time period in which the services are performed. In the Haig-Simons framework,86 deductions should coincide with corresponding decreases in value. However, both the benefit and the value loss patterns are unpredictable for employee stock options. As Frankovic describes, the “normative rule under an ex ante system is an allocation of costs to periods based on anticipated loss in value owing to the passage of

84 The concept of a “leased employee” exists under both Canadian and US GAAP. See Tunney, supra note 67.

85 In contrast, Frankovic, supra note 72, at 1395, describes a prepaid warranty expense, where the payer is essentially making a bet that it will collect on the warranty services. If the payer wins the bet, services are rendered, and the prepayment can be viewed as consideration paid for future services. If the bet is lost, none of the payment can be viewed ex post as consideration for future services. In the context of such uncertainty about future services, Frankovic argues that paragraph 18(9)(a) should not apply, and prepayments should be fully deductible in the year of expenditure.

86 Supra note 82.
time, and under an ex post accrual or accretion system, to periods of actual loss.”

For the most part, our income tax system relies on “ex ante determinations for
deductions. Ex post adjustments are obviously allowed, but such adjustments have
been, until now, strictly creatures of the statute.” Examples of ex post adjustments
include recapture and terminal loss provisions that are applicable when depreciable
assets are divested.

Employee stock options may also be viewed as employee inducement payments,
analogous to tenant inducement payments. Stock option grants are often included
in contracts with new long-term key employees, in much the same way that tenant
inducement payments are included in lease agreements with new long-term anchor
tenants. Both payments can theoretically be justified as substitutes for lower cash
compensation or (compensation for) higher rents, as well as by the stronger bar-
gaining power of key employees and anchor tenants. Both payments can be viewed
as prepaid current expenses that offer corresponding future benefits (and not
necessarily as capital expenditures). Subsection 18(9) requires matching and amor-
tization when they result in a more accurate portrayal of the taxpayer’s ability to
pay—that is, if the expenditure generates additional income-earning capacity in
future taxation years.

The accounting treatment contemplated for employee stock options, however,
is not expected to require capitalizing and amortization. Furthermore, the Supreme
Court of Canada’s decisions in the Canderel and Toronto College Park cases allowed
all expenses for tenant inducement payments to be deductible in the year in which
they were incurred. In these cases, the Supreme Court argued that amortization
would not necessarily provide a more accurate portrayal of the taxpayers’ income
and therefore ability to pay. The allocation of expenses to future years seemed
unduly arbitrary to the court. Immediate deduction was allowed because the prac-
tical apportionment between future benefits and immediate benefits was difficult
to implement.

In Canderel, the Supreme Court recognized that the taxpayer’s immediate “less
tangible benefit” of maintaining competitiveness and reputation was realized in the
year in which tenant inducement payments were made. A similar intangible benefit
in the year of option grants could be argued in the case of employee stock options.
In Toronto College Park, the benefits from inducement payments to prospective
tenants were deemed to be realized as soon as the tenants signed up. A similar
argument can be made when awarding stock options to attract or sign up new
employees. The emphasis of both these payments is to induce tenancy or employment
in the current year, and not necessarily to realize benefits in future taxation years.

87 Frankovic, supra note 72, at 1422.
88 Ibid., at 1421.
89 However, empirical analysis consistently reveals that cash compensation and option grants are
positively correlated, and not negatively correlated as is required for substitutes.
90 Canderel Limited v. The Queen, 98 DTC 6100 (SCC); and Toronto College Park Limited v. The
Queen, 98 DTC 6088 (SCC).
The court further suggested that amortization might be applicable if the expense was “related directly to specific items of future revenue”\textsuperscript{91} or incurred “principally for the specific purpose of earning a discrete and identifiable item of revenue.”\textsuperscript{92} It would be difficult to claim that employee stock options could be traced to a specific, identifiable stream of revenue,\textsuperscript{93} so that deferral and amortization would be an unacceptable tax outcome. These Supreme Court decisions suggest that in the absence of a specific statute denying deduction or requiring amortization, intangible expenditures such as employee stock options will likely enjoy immediate deductibility, despite potential future benefits, as long as some benefits are realized in the year of payment.

All of Brooks’s six principles or criteria for deductibility seem to be met in the case of employee stock option grants. It may be argued that the timing of this deduction could include the time at which the employee exercises the options. As shown in table 3, US rules provide a tax deduction for employee stock option benefits when the options are exercised, and not when they are granted. Macnaughton and Mawani further discuss firm-level deduction at the exercise date.\textsuperscript{94}

The next section discusses the interaction of accounting and tax treatment for employee stock options.

**INCOME TAX VERSUS FINANCIAL REPORTING COST TRADEOFFS**

Tax-paying firms in Canada face a tradeoff between reporting higher accounting income (by using employee stock options) and paying lower taxes (by using phantom options that are settled in cash).\textsuperscript{95} Firms are interested in appearing successful to their shareholders and other financial statement users, while at the same time appearing less successful to the tax authorities. While the publicized reason for using employee stock options may be to align incentives between shareholders and employees, alternative stock-based compensation schemes provide similar incentive effects. Key aspects that differentiate these alternative stock-based plans are the tax liability incurred by the employee and the employer, and the impact on reported income or financial reporting costs.

The strong resistance to attempts by Canadian and US accounting standards boards to mandate option expensing illustrates the importance that firms attach to

\textsuperscript{91} Canderel, supra note 90, at 6109.
\textsuperscript{92} Ibid.
\textsuperscript{93} Many corporate governance experts argue that the problem with employee stock options is that increases or decreases in the value of the options often have everything to do with a bull or bear market, and nothing to do with employee performance.
\textsuperscript{94} Alan Macnaughton and Amin Mawani, *Neutral Taxation of Employee Stock Options*, University of Waterloo Working Paper (Waterloo, ON: University of Waterloo, School of Accountancy, 2003).
\textsuperscript{95} Examples of empirical studies documenting this tradeoff in a Canadian context include Klassen and Mawani, supra note 5; and Mawani, supra note 37.
the reporting of high book income. Lobbying positions taken by heavy users of employee stock options make it obvious that the major reason for the popularity of employee stock options is their current ability to bypass the corporation’s income statements.

Despite their imperfections, accounting income and other accounting-based measures are often used by providers of capital to assess firms’ long-term potential and their debt- or dividend-servicing capabilities. Explicit or implicit earnings-based measures pressure firms to manage their reported results, since otherwise firms may experience difficulties in raising new capital, incur higher debt charges, or face restrictions on growth opportunities imposed by current or prospective debt and equity holders. The actual or potential renegotiation of existing contracts on terms that are less favourable to the firm constitutes a financial reporting cost to the firm.

The tradeoff between paying lower taxes and reporting higher book income faced by tax-paying Canadian firms will end once accounting neutrality is restored by requiring book expensing of both stock option benefits and stock-based cash payments.

Table 4 summarizes the current and proposed tax and accounting regimes in Canada and the United States. Any movement away from the current Canadian regime will remove the tradeoff between taxes and financial reporting costs, since firms in the bottom-right cell are the only ones experiencing this tradeoff. The use of stock options is expected to be dramatically reduced in a regime requiring expensing for financial reporting but providing no employer deduction for tax purposes. Once expensing is required for financial reporting purposes, firms will likely lobby for a corresponding tax deduction to escape from a “worst-of-both-worlds” regime.

The next section discusses the implications of divergent book-tax conformity in the United States, where options are deductible for tax purposes but are not required to be expensed for financial reporting purposes.

**BOOK-TAX CONFORMITY**

While book-tax conformity is not currently a problem in Canada, a number of studies have documented the growing divergence between book income and taxable income in the United States, and the increasing role of stock option benefits in the variation in the book-tax spread. Hanlon and Shevlin found stock option benefits to constitute approximately half of the book-tax difference, thereby contributing to a 50 percent reduction in firms’ effective tax rates.


97 Michelle Hanlon and Terry Shevlin, “Accounting for Tax Benefits of Employee Stock Options and Implications for Research” (2002) vol. 16, no. 1 Accounting Horizons 1-16.
The growing divergence between book and tax profits triggered the bipartisan Levin-McCain bill (S. 1490), titled the Ending the Double Standard for Stock Options Act, in February 2002. This bill would force corporations to expense stock option benefits in order to claim the corresponding tax deduction. Senator Levin cited the example of Enron, which posted aggregate profits of $1.8 billion over a five-year period and deducted $600 million in stock option expenses that were never expensed in financial statements. In 2000 alone, Enron received a tax refund of $278 million by using employee stock options. Restoring accounting neutrality in regard to the expensing of employee stock options will also restore tax-accounting conformity in the United States.

**Tax Revenue Implications of Allowing a Deduction for Employee Stock Options**

If the accounting standards start requiring expensing of employee stock option benefits, the direct tax revenue implications of any new tax rule allowing an employer-level deduction for the stock option benefit will be minimal for two reasons. First, if the financial reporting benefit of avoiding expensing disappears, there are strong reasons to believe that the use of options for compensation will be significantly curtailed. Second, the use of stock options for compensation will likely decline as employers find more effective and efficient means to compensate and motivate their employees. The requirement to expense employee stock options will make the accounting treatment more neutral between cash and options, thereby allowing firms to make their decisions based on direct and more certain economic cash flows rather than on indirect and probable financial reporting benefits.

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99 Ibid.
With the accounting benefit gone, many more firms will find it in their interests to sell their shares via private placements and pay the cash proceeds to their employees as tax-deductible compensation, even without any new tax rules for employee stock options. The practice of substituting cash payments for option benefits is not currently popular largely because the substitute cash payments have to be expensed on the income statements, whereas option benefits do not have to be expensed.\(^\text{100}\) There will be obvious tax revenue implications for firms offering phantom options since the payments on phantom plans will likely be designed to be tax-deductible. However, the specific new provision that allows deductibility of the stock option benefit is not expected to incur any significant tax revenue loss.

**CONCLUSION**

Employee stock options, as currently designed, may not be the most effective instruments to align the interests of employees with those of shareholders. They are also not effective in saving taxes, preserving cash flows, or avoiding earnings dilution, as compared with other stock-based compensation. Customized phantom-option plans may be able to deliver the same after-tax benefit to the employee at a much-reduced after-tax cost to the employer, while avoiding earnings dilution and insider trading disclosures.

Current accounting rules favour employee stock options by not requiring them to be expensed on income statements. If these accounting rules change to require expensing, as is expected, the use of employee stock options will likely be drastically curtailed as firms switch to alternative stock-based compensation plans that will serve them better in respect of tax, cash flow, dilution, and insider trading disclosure. A change in accounting treatment to require expensing will also trigger a demand for a corresponding tax deduction.

This paper illustrates that the current tax rules for employee stock options are not neutral by comparison with those applying to other forms of stock-based compensation. Furthermore, the deductibility of employee stock options seems justified according to the six principles underlying deductibility for tax purposes. In light of the Supreme Court of Canada’s decisions on the treatment of tenant inducement payments, treating employee stock options as prepaid expenses would also likely result in the immediate deductibility to employers of the economic cost of stock options (in the absence of any specific provision denying the deduction).

Repealing the current denial of a deduction in paragraph 7(3)(b) will not likely be costly in terms of direct tax revenues forgone, since the financial reporting costs arising from new accounting rules will likely curtail the use of employee stock options. Firms will likely redesign their stock-based compensation to preserve cash flows and avoid earnings dilution and insider trading disclosures, and thereby not rely on the specific tax deduction provisions for employee stock options.

\(^{100}\) Mawani, supra note 37.