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March 6, 2003.

Kimberley Crook
Project Manager
International Accounting Standard Board
30 Cannon Street,
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Dear Ms. Cook,

I am pleased to submit my comments with respect to the Exposure Draft – ED 2 Share-Based Payment.

There are outlined in the attached Management Paper.

Yours very truly,

Len van der Heyden

Enclosure

**EARNINGS MANAGEMENT AND
CORPORATE EARNINGS QUALITY:
THE IMPACT OF EXPENSING STOCK OPTIONS
AND, INDIRECTLY, THE MANAGEMENT OF
EXECUTIVE STOCK OPTION GRANTS**

Leonard J. van der Heyden *; Dr. Richard Welford**

Abstract

Enron, WorldCom, Global Crossing, Ahold and Elan – the erosion of standards has reached a crescendo. Investors are entitled to intervention at all levels through new statutes, regulations, and professional codes of ethics to eliminate the widespread practice of ‘*earnings management*’ and to restore the belief in the quality of reported corporate earnings. Various initiatives by institutions regarding ‘*expensing stock options*’ - such as by the IASB, FASB, S&P, Merrill Lynch, the U.S Federal Reserve Board and many other involved stakeholders – with respect this as yet little academically researched aspect of ‘*earnings management*’ are reviewed. The pros/cons of ‘*expensing stock options*’, and issues flowing there from, afford an interesting and informative contrast to further investigate and extend the ‘*earnings management*’ literature. The paper suggests that initiatives in these regards need to be expanded to beyond mere accounting rules. Broader Board of Directors’ driven protocol covering the granting of such executive stock options appears warranted. Overall efforts could converge on delivering a transparent and comprehensive contemporary industry ontology appropriately adapting to evolving accounting system and financial information reporting requirements.

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1. INTRODUCTION

“Core earnings 45% less than reported – Pension and stock option accounting helped boost reported earnings at big US companies by about 45 per cent in the year to June, according to Standard & Poor’s.”

“AOL inflated ...revenues by nearly \$200m – Internet giant admits irregularities in months prior to closure of Time Warner merger.”

*“Congress warns on **increase in restated accounts** – About 10 per cent of US public companies have restated their accounts in the past six years, an accelerating trend that seems to have shaken investor confidence and shows the need for corporate reforms, according to the US Congress.”*

*“Investors win millions in arbitration cases – As state attorneys-general line up to collect **multimillion-dollar fines** from Wall Street brokerage firms, investors are forming their own resolution queue.”*

*“Companies may delist to avoid new governance rules ... legislation introduced in the wake of **recent corporate scandals**.”*

These quotes are but a small sample of the many indications of corporate malfeasance and egregious executive behaviour that could have been culled from The Financial Times on October 22, 2002. From Enron to WorldCom to Tyco International to Global Crossing, Martha Stewart to Arthur Anderson, the top corporate news is about scandals and losses not profits and dividends. All are indicative of a pressing need to develop tools to push and pull corporations, the financial services industry, pension funds, and the average investor towards enabling them to make more informed decisions based on ‘standardized’ and quality corporate earnings results.

Hopefully this time, this extraordinary confluence of less-than-honest financial reporting, expense capitalization, greed, outright fraud, bad faith, appeasement, ignorance, stock price manipulation and continued indulgence in aggressive litigation evident from the above excerpts will lead to an exception to Churchill’s alleged view of human nature: *“Men occasionally stumble over the truth, but most of them pick themselves up and hurry off as if nothing happened.”* Particularly so, given Greenspan’s (2002) recent admonishments that sound corporate governance – including the accurate measurement of corporate performance – is essential for the most efficient use of resources.

BusinessWeek (2002) claimed that it has not always been thus: *“... there was a time when the American accounting and financial accounting systems were the envy of the world. Its transparency, uniformity, and credibility allowed investors world-wide to make intelligent comparisons among U.S. corporate earnings statements. It encouraged millions of average people to invest directly or through their 401k plans, thus transforming America into the world’s first mass equity culture.”*

However, ‘*Earnings Management*’ – the extent to which managers modify reported earnings for their own benefit – is not a new phenomena. It has been the subject of a number of academic studies since the 1970s and has now developed into a significant body of empirical literature.

Hires (1989) noted: “... *managers act unreservedly in their own narrowly defined economic self-interest with, if necessary, guile and deceit.*”

Jones and Sharma (2001) reported that:

“...the viewpoint adopted in this literature is that explicit and implicit contracts between stakeholders and the firm can afford a range of incentives for managers to manipulate earnings for a variety of reasons (see Jensen and Meckling, 1976; Smith and Warner, 1979) ...Empirical investigations have systematically tested three basic hypotheses ... (i) the executive compensation hypothesis; (ii) the leverage hypothesis; and (iii) the political cost or ‘firm size’ hypothesis (Watts and Zimmerman, 1990; Watts, 1995; Dechow et al, 1996). Christie (1990) found that the executive compensation plan and leverage hypotheses achieved the greatest statistical significance in explaining managerial incentives to manipulate earnings.”

Studies prior to the mid-1980 have provided ample empirical evidence consistent with executives’ incentives to choose self-serving ways to report earnings; particularly in regulatory and contractual contexts (Holthausen and Leftwich, 1983; and Watts and Zimmerman, 1986). Since then, other studies have focussed primarily on accrual accounting (Beneish, 1998, 2001).

Mangos and Lewis (1995) reported that: “*Research focusing on economic factor influencing managerial behaviour has in the main considered three economic influences in explanation of managerial incentives for selecting accounting policy (Watts and Zimmerman, 1990). These economic influences are management compensation, debt covenant and political cost variables. The first economic influence, managerial compensation is usually made up of the following components: salaries, bonus compensation and share compensation...*”).

Beneish (2001) and Jones and Sharma (2001) provided the following literature summary of definitions of ‘*Earnings Management*’:

- (1) *Managing earnings is “the process of taking deliberate steps within constraints of GAAP to bring about a desired level of reported earnings.” (Davidson, Stickney and Weil, 1987, cited in Schipper, 1989, p.92).*
- (2) *Managing earnings is “the purposeful intervention in the external financial reporting process, with the intent of obtaining some private gains (in contrast to a ‘neutral’ involvement in the process such as improving the quality of financial information).” (Schipper, 1989); and*

- (3) *Earnings management occurs when managers use judgement in financial reporting and in structuring transactions to alter financial reports to either mislead some stakeholders about the underlying economic performance of the company or to influence contractual outcomes that depend on reported accounting number.*” (Healy and Wahlen, 1998, p.6).

Beneish (2001) reviewed several other sources of incentives for inflating income through ‘*earnings management*’ empirically explored in prior research:

- (i) “*debt contracts* (Beneish and Press, 1993, 1995; Sweeney 1994; Defond and Jiambalvo, 1994; and DeAngelo, DeAngelo and Skinner, 1994);
- (ii) *compensation agreements* (Healey, 1985; Gaver et al, 1995; and Holthausen, Larker and Sloan, 1995);
- (iii) *equity offerings* (Leland and Pyle, 1977; Hughes, 1986; Titman and Trueman, 1986; Teoh, Welch and Roa, 1998; Teoh, Welch and Wong, 1998a and 1998b; Rangan, 1998; and Datar et al, 1991); and
- (iv) *insider trading* (Beneish, 1999; Summers and Sweeney, 1998; Seyhun and Bradley, 1997; Jaffe, 1974; Carlton and Fischel, 1983; Dye, 1984; Noe, 1997).”

‘*Earnings management*’ is widespread amongst public companies as they face pressure to meet analysts’ expectations (Levitt, 1998). Bagnoli and Watts (2000), cited in Beneish (2001, p.5), suggest that the evidence of relative performance evaluation leads firms to manage earnings if they expect competitor firms to do so. Similar prisoner’s dilemma-like arguments for the prevalence of earnings management appear in Erickson and Wang (1999) in the context of mergers; and in Shivakumar (2000) in the context of equity offerings. Other recent studies by Burstahler and Dichev, 1997; DeGeorge, Patel and Zeckhauser, 1999; cited by Beneish (2001, p.7), are informative about which firms are likely to have managed earnings, but are silent about the form and extent of such activities. Evidence of managers deflating income on a temporary basis, for example, to increase the likelihood of a desired union negotiated or regulatory outcome has found by Jarrell, 1979; Watts and Zimmerman, 1978; Jones, 1991; Liberty and Zimmerman, 1986; DeAngelo, 1986; Nelson et al., 2000; Moyer, 1990; Beatty et al., 1995 and Collins et al., 1995.

Roadblocks to regulatory changes do not help these situations of ‘*earnings management*’. For example, intense political pressures on the U.S. Financial Accounting Standards Board (“FASB”) by 1995 forced it to water down its unpopular Exposure Draft which dealt *inter alia* with full disclosure (as opposed to a footnote) of ‘*stock option expensing*’.

In this first Management Paper, of a trilogy, I will begin assessing a new aspect of corporate earnings quality and ‘*earning management*’ not previously explored, i.e., the current popular issue of whether to, or not to, “*expense stock options*”. While the global significance of this issue is unequivocal, there has been comparatively little academic research attention given to

either the examination of *'earning management'* from the perspective of applying or avoiding the expensing of stock options, quantified using the Black-Scholes model; or the impact the Boards of Directors can have when managing executive compensation (including the granting of stock options) on the motivation of executives. In other words, what levers is the Board pushing/pulling overtly or subconsciously which incentivize or disincentive executives to engage in, or cease, certain self-serving behaviours, i.e. *'managing earnings'*. Board of Directors need to ask what are the causes of executives perpetrating corporate greed and excess and how they can incentivize executives to operate within acceptable norms. Most industry insiders are acutely aware that the granting of mega grants and huge cumulative stock option holdings did, and likely will continue to, affect the manner in which executive optionees drive and influence corporate strategy to *'manage earnings'* and thus maximize their own returns with, so far, little apparent downside to themselves.

The motivation for this review is three-fold. First, the paper seeks to provide practical single-case evidence of potential *'earnings management'* and accounting numbers manipulation which can be brought about by the avoidance or application of *'stock option expensing'*. The latter quantified using the Black-Scholes model. Secondly, it contributes to the literature on both *'stock option expensing'* and executive compensation by identifying key links between the two. Thirdly, it provides practical evidence of the potential for the management process of stock option valuation, using Black-Scholes modeling, being a key factor in *'earnings management'* and executive compensation manipulation.

The second Management Paper will deal with another equally challenging issue related to *'managing earnings'* or earnings quality, i.e., *"pension expensing"* and management's particular current penchant to take into earnings all or part of the excess of pension plan assets over actuarially determined long-term liabilities – again, of course, all compliant with current accounting guidelines.

In the third Management Paper, I will explore some other corporate governance aspects that provide evidence of *'managing earnings'* and impact on *'earnings quality'*, such as *'executive stock ownership, stock options and corporate performance'* and *'stock repurchases'*, all available to management to *'manage earnings'* and mis convey information, manage the perception of the corporation, and *'mislead'* the investment community. And, as well, review why actual ownership, not options, drives performance.

As noted at the outset, several recent infamous developments in the U.S. and Europe, evident through the collapse of WorldCom and Enron and cooking of the books at Ahold and Elan, have further accentuated deficiencies in commitments to proper corporate governance and the continuing erosion of standards and provided ample evidence of continued *'earnings management'* throughout the corporate world. In fact, *'Enronitis'* and other accounting scandals; customized and managed pro forma earnings; and growing doubt about Wall Street's veracity have all combined to seriously undermine people's belief in the integrity and honesty of accounting and the financial reporting information and systems integrity and their ability to project quality corporate earnings. Consistent with the findings of Bagnoli and Watts (2000), such distortions and disincentives to prudent accounting seem to have been driven by an unhealthy focus on short-term results. Quarterly earnings growth, *'demanded'*

by analysts, investments banks, rating agencies and the media, led to perpetual and arbitrary approaches to 'pro forma' or 'operating earnings' determination. Many executives have acted in their own self-interest by artificially showing an ever compounding annual growth record, which in turn resulted in an iterative succession of misstatements building on one another. And evidently, at some firms, everything eventually spiralled totally out of control.

It seems that the average investor, if not indeed most analysts and professional investors, have little option but to rely on often-conflicting measures to value the shares of corporations. A case in point is BCE Inc., Canada's largest communications company. The National Post (Karleff, 2002) reported that: "*BCE earned \$4.36 billion over the past three and a half years. Canadian accounting standards inflate this to \$10.77 billion, but if BCE were to report under U.S. GAAP, it would have lost \$1.25 billion. BCE's earnings measure excludes restructuring charges, gains and losses on the sale of businesses, and asset write-downs. Canadian GAAP includes such items. U.S. GAAP goes one step further in that the income statement includes the write-down of intangible items like goodwill.*" What might be the implications for the average investor? Pick an earnings number between -\$1 and +\$11 billion; it all seems more akin to throwing darts than the application of sound ontology.

While the FASB continues to dither, presumably suffering from "*once bitten, twice shy*", the International Accounting Standards Board ("IASB") has taken front row by issuing for public comments Exposure Draft ED 2 *Share Based Payments*, proposals on how companies should account for share-based payment transactions, including grants of share options to employee groups. The draft focuses too narrowly on '*stock option expensing*'. Neither professional body seems to adequately heed Greenspan's (2002) advice that: "*...the very complexity and dynamism of our system dictates a constant re-evaluation of the tools employed for measuring corporate performance to ensure that they adapt appropriately to the evolving financial and economic environment...*" and, more specifically, in that regard "*...the increase of stock option grants to employees has raised new challenges for our accounting system.*" [Underlined for emphasis]

As noted earlier, this paper will explore one aspect of '*earnings management*' not addressed in the research identified by Beneish (2001), i.e., that related to Executive stock options. Such options are by no means new. First created in the early 1970s, stock options have become a material and entrenched component of executive compensation in North America and their use is growing globally. At the end of 2001, 90 per cent of large U.S. companies issued stock options (NCEO, 2002). Executive stock options were initially viewed by both investors and issuers as a way of aligning the interest of management with those of shareholders, i.e., in particular, a higher stock price. Because of their incredible appeal, stock options have become an obsession for many senior executives who fixate on short-term corporate results to effect short-term stock price fluctuations (volatility) and wait for their golden moment; as Winnick did at Global Crossing did, who netted over half-a-billion dollars (BusinessWeek, 2001). Often times, such an executive has the benefit of what economists call '*asymmetric information*', i.e. they have inside awareness of what is about to occur at a company. Such '*insider*' information is not available to buyers of their stock. '*Insider trading*' does not lend itself to efficient market dynamics (Beneish et al., 2000,

Summers and Sweeney, 1998; Seyhum and Bradley, 1997; Jaffe, 1974; Carlton and Fishel, 1983; Dye, 1984; and Noe, 1997).

A review of academic studies show there are several theories regarding stock option use. Holmstrom (1979) pioneered a model for compensation, which along with subsequent theoretical work (Baiman and Demski, 1980; Banker and Datar, 1989) begins with two assumptions: (i) the actions of executives “*are not observable (and therefore cannot be contracted upon)*”; and (ii) employees are “*effort-averse or will not voluntarily act in the best interest of*” owners. This leads to “*a so-called agency problem. When these two conditions exist, standard principal-agent models show it is not possible to motivate the employee with salary alone. Instead, the owner must create an incentive contract that varies with observable outcomes. These models have been applied to the executive compensation setting.*” Furthermore, ‘*managing earnings*’ incentives are considered to be one of the key reasons for increased stock option use. Most payouts of compensation, except for stock options, reduce reported net income. Thus, firms that face greater pressures to show ever increasing income are hypothesised “*to use stock options to a greater degree.*” This relationship is borne out by research studies that focus on this issue (Matsunaga, 1995).

Recent events, however, have demonstrated an unanticipated drawback of prolific granting of options to senior executives. Namely, they can create incentives for executives to engage in self-serving activities, inter alia, manipulation of financial results, institutionalizing ‘no-dividend’ policies, and the repurchasing of their company’s shares. All result in increased volatility which drives stock prices up and push options further ‘into the money’; most often without adding any true intrinsic value to the corporation (at least short-term).

While the use of stock options has increased dramatically over the past decade, another coincident event has been a similar dramatic rise in stock repurchases (as opposed to dividend payouts) by companies (Liang and Sharpe, 1999), allegedly to offset dilution. In 1998, total corporate cash outlays for repurchases of their own equity exceeded those for dividends. ESRC sponsored research carried out by Young and Oswald (2003) examined firms involved in buybacks and discovered that the most frequently cited motive by executives was their desire to increase earnings per share. Again, given recent history, the researchers concluded: “*...this has more than a whiff of greed about it.*” Paraphrasing Weisbenner (2002): “*...dilution in reported earnings per share is important not dilution of actual stock ownership*”, Klassen (2002) goes on to state: “*Since diluted earnings per share attempt to capture the potential dilution from stock options before they are exercised, firms may try to maintain their earnings per share with repurchases, which would occur earlier than the actual dilution that occurs on exercise.*” In any event, by distributing net income to effect share buybacks rather than paying out dividends (whether before or after the exercise of a batch of executive options), the value of the options is expected to rise and, as well, such buybacks are generally seen as a positive sign by market watchers. Executives are well aware that such buybacks typically drive up the share price and maximize their options’ value and the actions of many appear to have been motivated accordingly (Klassen and Sivakumar, 2002; Jolls, 1998).

The Association for Investment Management and Research (“AIMR”) (2001), representing close to 4500 investment professionals in 78 countries, has gone on record by stating it is high time to improve the quality of information displayed in the company financial statements so that all stakeholders, investors, pension funds, unions, and creditors have greater confidence in them. Eighty per cent of U.S. financial analysts support ‘*stock option expensing*’. AIMR members are much less likely exposed to conflict of interest than management and/or public accountants, as has been amply evident over the past year. They are neither neophytes nor academics, but hands-on practitioners whose educational standards are as rigorous as any of the professions. Nor are they prone to sensationalism or lobbying through the press. AIMR members have an overriding obligation to adhere to their Code of Ethics, likely one of the most onerous in the industry.

Now, having read both the FASB’s *Accounting for Stock-Based Compensation – Transition and Disclosure: an amendment of FASB Statement No. 123* issued October 2, 2002 and IASB Exposure Draft ED 2 *Share Based Payments* issued November 2002, a valid question remains whether these agencies, heavily staffed or influenced by professional public accountants hailing from the large ‘independent’ public auditing firms, are capable of thinking outside the box when they retreat behind their mantra of: “...*financial reporting standards should be based on conceptual framework*...” It again seems that Greenspan’s admonishments referred to earlier have fallen on barren ground. Public accountants, who have been handed a near monopoly with respect to accounting standards ontology, continue their quest to self-regulate; years ago having been handed a near monopoly by regulators on developing such standards and ontology. Many amongst them are routinely accepted on secondment to regulatory and accounting standards setting bodies, including the SEC, FASB and the IASB (Fortune, 2002). With what has gone on over the past year or so, one cannot help but question their independence. Moreover, when reading their usual bland template-like Independent Auditors’ Reports, they profess no liability for any trouble that the use of their product may cause. I suspect to the great envy of the automobile manufacturers as the latter continue to get hammered with liability suits when they produce shoddy products.

And, where are the pronouncements of the professional bodies representing Management Accountants, who profess to be so closely plugged in to strategic matters within corporations? So far, the silence is deafening. I believe we are missing another golden opportunity to accentuate our strategic role by continually deferring on such matters to our confreres the ‘independent’ external auditors. Professional Management Accountants should at least seize the present opportunity for a more meaningful role of corporate communications to investors. Perhaps, we need a ‘management accountant’ Galileo or Copernicus who is prepared to challenge: “*the way it has always been done.*”

Fortunately, even if change from within the accounting profession seems to take its long arduous course, ratings agency Standards & Poor’s (S&P) has put forth a tough new measure of corporate earnings that may be a catalyst for improving U.S. financial reporting. Not that I believe there is much altruism involved. Likely, S&P is spurred on by a need to salvage its reputation after it failed to project the problems at Enron. S&P is displaying a pragmatic desire to now maximize on perceived business opportunities by differentiating itself from the rest of its competition while concurrently staving off overtures of others to attain status as a

‘*nationally recognized statistical ratings organization*’ (NRSRO) – an industry coveted designation (Financial Times, 2003).

As well, various investment advisors, such as Merrill Lynch are joining S&P to fill the need for a ‘better’ or ‘standard’ ontology for accounting and financial reporting. Thus, in these regards, S&P in its October 24, 2002 Standard & Poor’s Core Earnings Market Review (2002) stated:

“...Standard & Poor’s presented its definition of ‘S & P Core Earnings’ as the preferred approach for companies to report and for analysts to review the earnings of companies’ principal or core businesses... objectives were to provide consistency and transparency to earnings analyses and makes it easier for investors to form comparisons between companies and over different time periods... the last few years, a growing number of companies began using ‘pro forma’ earnings or ‘operating earnings’ when they felt the Net Income as defined by GAAP did not give an accurate picture of their results. However, these alternative earnings measures were rarely defined. Further, even when definitions could be located, the definitions varied from company to company and often from one period to another for the same company.”

Similarly, Merrill Lynch (2002c) recently released a special research report focusing on taking a multi-dimensional view of company earnings. In its August 8, 2002 document entitled: *An Overview: Assessing Quality of Earnings*, it states: *“This diagnostic approach looks at quality-of-earnings measures, generally accepted accounting principles and cash flow to provide its clients with further clarity and transparency when making investment choices.”* Merrill Lynch defined six ‘quality of earnings’ measures: *Return on Total Capital; Cash realization; Productive asset reinvestment rate; Tax rate; S&P common stock rating; and S&P credit rating.* Merrill Lynch further defined high quality earnings as those that: *“... are earned by achieving superior returns on total capital; are close to being realized in cash; should be repeatable because the level of capital invested in productive assets is maintained; should not depend on potentially transitory low-reported tax rates; and should not be at risk because of high financial leverage and dividend obligations.”*

I expect that whoever can claim authorship or ownership of a new set of ontologies for measuring and succinctly conveying corporate earnings to investors stands to make both substantial financial and ‘recognition’ gains.

Later herein, I will proceed to show that ample voids in agreed-upon accounting and financial reporting ontologies remain, and are likely to remain, for the foreseeable future. Moreover, this situation will continue to enable management of corporations, if they are so inclined or are incentivized to do so, to ‘*manage earnings*’ – all the while staying within the theoretical bounds prescribed by accounting regulations and in full compliance with various government interventions, including the introduction of the Sarbanes-Oxley Act, a ground-breaking piece of U.S. corporate governance legislation (Coxson, H.P. & A.L. Neely, 2002). It is interesting to note that the terminology: *“in accordance with generally accepted accounting principles”* is absent from this statute.

In the case of Enron, top executives were financially motivated to engage in engineering sophisticated financial fraud by using financing vehicles known as Special Purpose Entities (SPEs) and derivative instruments to intentionally overstate earnings. There was tremendous pressure on its senior management to meet Wall Street's earnings expectations. A culture of arrogance and greed was evident amongst its top executives. Their compensation plans were geared towards enriching themselves rather than create shareholder value. Its auditors, Anderson, were incentivized to retain Enron through its substantial nonaudit service fees. Enron's servile Board of Directors and adjunct Board Committees failed in exercising proper oversight functions thus providing opportunities for: cooking the books; management engaging in high-risk accounting; demanding and getting fat cat compensation packages; carrying out related party transactions; and, doing off-balance-sheet financing. Internal audits were conducted by Anderson, more than likely creating conflicts of interest and impairing Anderson's objectivity and integrity (Rezaee, 2002). WorldCom's story is not dissimilar; it classified day-to-day expenses as capital expenditures, making the firm appear to have made \$3.9 billion more profit than it actually had. It took a routine internal audit to uncover the fraud, and after public disclosure, only one day for the value of markets, shares and pension funds to plunge. Ahold overstated earnings at subsidiaries in the US and Argentina by at least \$500 million and Elan hid R&D expenses in off-balance sheet entities.

The Institute of Internal Auditors (Applegate, 2002) has seized this opportunity to increase its efforts to force more of a focus on corporate governance and transparent financial reporting by asserting that:

“Internal auditors are uniquely qualified – through their training, experience, and organizational placement – to offer an independent perspective on the quality of financial disclosures that is not always available from corporate accountants or external auditors... Internal auditors, arguably the most important control in corporate governance, can fill the breach if we are willing to take steps towards revising the focus of our work.” [Underlined for emphasis]

2. A FRAMEWORK TO ASSESS EARNINGS QUALITY - ACCOUNTING FOR STOCK OPTIONS

A. BACKGROUND

In Section 3, I will show that estimating stock option expense requires little additional burden to a company. More importantly, if markets do not fully take into account that certain real factor inputs are not being properly expensed, then market values are being distorted and real capital resources diverted from their most efficient uses.

The traditional way of accounting for stock options in the U.S. is the *intrinsic value based method*. This is based on FASB Opinion 25 issued in 1972 (Hull & White, 2002).

However, because of APB related criticisms, coupled with concurrently increasing attention to managing compensation policies within corporations through the use of stock options in lieu of salary and bonuses during the 1980's, the FASB began work on an alternative to APB 25. And, in 1993 the FASB, in keeping with its long history of issuing worldwide trend-setting pronouncements, issued an Exposure Draft that would have required employers: (i) *to recognize the asset Prepaid compensation for the 'fair value' of granted stock options at their grant date, and (ii) to recognize the related compensation expense from amortizing that asset over the options' vesting period.* The offsetting entry credits the equity account *Options Outstanding* and would have been extinguished only as options were forfeited, expired, or exercised. In fact, in paragraph 63 of the Exposure Draft, the FASB justified and decreed Balance Sheet treatment via a *Prepaid Compensation* asset account by stating: "*employee stock options represent probable future benefits because employees have agreed to render future services to earn their options. Stock options also reduce future cash outflows otherwise necessary to compensate employees.*" Thus, the Exposure Draft required both Income Statement and Balance Sheet disclosure (Bell, Landsman, Miller & Yeh, 2002).

However, this 1993 Exposure Draft triggered an avalanche of controversy. FASB received over 1,700 comment letters almost all of them in opposition, most notably from preparers, i.e. corporations, who were concerned by the prospect of having to deduct stock option-related employee compensation expense in the income statement which would deflate their net income and negatively affect their P/E ratios, one of a company's most closely followed key ratios by analysts and investors. When issuing SFAS 123 two years later, the FASB had capitulated and conceded; it yielded to political pressures in Washington and the lobbying efforts of the Capital Venture/High Tech firms. (Merrill, 2000b). Thus, while the FASB legitimately asked whether markets saw through the non-expensing of options by postulating that, if they did, the explicit recognition of expenses associated with stock option grants in reported earnings would be a nonevent; these arguments were effectively shunted aside. The format of reports to shareholders would have changed somewhat, but little more would have been involved.

The 'final' SFAS123 sets a standard for accounting for stock-based employee pay. In particular, it defines a 'fair value' method¹ of accounting for employee stock options via the Black-Scholes valuation. However, by also allowing for continued use of the 'intrinsic value based' method² prescribed by APB Opinion 25, FASB put a lot of water in its wine by backing away from its 'purer' earlier 1993 Exposure Draft position of requiring both Income Statement and Balance Sheet disclosure. Consequently, although FASB advocates the 'fair value' method; the majority of companies use APB 25 with a pro forma disclosure of the

¹ Under the '*fair value*' method, the expense is measured using an option-pricing model at the grant date and is recognized over the vesting period. It is not subsequently adjusted for changes in any of the parameters over the vesting period (Merrill, 2002b).

² Under the '*intrinsic value based*' method, the discount between current share price and exercise price is expensed. Typically, options are not granted at a discount to market and as such have no intrinsic value at the grant date. Thus, there is no expense to be booked and the compensation value on the grant date is zero (Merrill, 2000b).

impact to earnings of FAS 123 in the footnotes to financial statements. The pro forma amounts required under APB 25 to be disclosed in the footnotes reflect the difference between what has been expensed and what would have been expensed had the 'fair value' method been instead applied.

However, I have looked at several of such pro forma footnote 'disclosures' and readily admit my inadequacy in these regards as I have not been able to make much sense of any of them. While others might disagree with me that they are less than transparent, Keehan (2002) puts it as follows: *"The problem is that the companies are their own worst enemies. They have requirements for disclosure yet they disclose the absolute minimum and generally that disclosure is in the range of disparate forms so that investors and analysts need to be Sherlock Holmes to make any sense of it"*. And, U.S. Federal Reserve Board Chairman Greenspan (2002), as well, is now questioning the FASB for allowing firms to footnote the impact of stock options. He states that the decision did accelerate earnings during the period 1995-2000.

Not that I am claiming to not understand a corporation's rationale for continuing to prefer to use APB 25. It is rather flawless. Companies have picked this accounting treatment alternative, as their preferred, to enable them to continue to make jumbo stock option grants rather than have to pay cash compensation. All with the objective of not triggering lower net income. Companies also take advantage of the ability to tax deduct the equivalent of the optionee holders gains but only when he/she exercises options and triggers an immediate ordinary tax liability on any gains. Also, companies have found this a neat way to circumvent the 'miserly' Section 162(m) executive salary cap of \$1 million imposed under U.S. statutes. After all, *'what was Congress thinking'* when legislating that a corporate CEO shouldn't earn triple-digit multiples of that of the average productive employee? Senator Levin's collected research showing that 10 years ago, CEO pay was 100 times average worker pay. In 2001, it was 500 times (Tuthill, 2002).

The FASB' 1995 capitulation to political pressure may well have become the turning point for both the U.S. leadership position in setting international accounting standards and its claim to the moral high ground to one of *'blowing with the political wind'*. FASB now appears to be comfortably hiding behind the increasingly aggressive initiatives of the International Accounting Standards Board ("IASB"). For example, while FASB last October issued an *amendment of FASB Statement No. 123* revisiting the accounting for stock options issue: *"Proposed Statement of Financial Accounting Standards – Accounting for Stock-Based Compensation – Transition and Disclosure"* (30), it has indicated it is likely to hold any further pronouncements until the IASB first concludes its deliberations with regards to option expensing.

In fact, last December, the IASB did release its Exposure Draft on *"Accounting for Share-Based Payment"* and continues to take the leadership role in developing an accounting standard which, it expects, will provide a basis for international convergence as to ontology in this area.

Yet, while the IASB is charging ahead with its 'European' solution, it remains to be seen whether those in the U.S. who are pressing for reform in this area can carry enough weight in Washington against the powerful tech lobby to make the IASB standard a truly international one. History shows that any current and new proposals could well be as effectively torpedoed as were the 1993 FASB draft proposals. In retrospect, it seems regretful that FASB did not stick with those draft regulations requiring Income Statement and Balance Sheet disclosure of stock option expenses. It might have prevented some of the shenanigans since.

Balance Sheet disclosure requirement is superior to the current proposals by the IASB because such disclosure reflects the nature of the obligation (a liability) while avoiding the EPS impact. This type of disclosure would continue to enable investors to do a pro forma calculation to calculate the impact on EPS. All in all, a compelling argument that, before tinkering with rules, one should consider going back to basic principles. Platt paraphrased Whittlesey as follows (2002): *"In fact, whether it is a liability or contra-equity item, an expense that is amortized will result in a right-side balance sheet item. For any income statement expense there will be a counterbalancing entry, such as a reduction in a liability or a reduction in shareholder equity. Accounting concepts don't allow putting something on the balance sheet instead of the income statement. A liability always flows to the income statement as an expense or equivalent entry; and an expense almost always starts as a liability"*.

Brenner of McGill University and Luskin (2002a), as well, are vocal advocates of putting options on the balance sheet:

"For all the billions of dollars of options that have been issued and exercised, no one has understood options for what they really are: risky assets and liabilities that should live first and foremost on a firm's balance sheet. Every investment and activity entails risk. Enron, for example, with its massive hidden debt, was a risk-control problem. So are stock options, which entail elements of both hidden debt and of derivative securities. Thus the solution to options abuses will be a risk-control solution, beginning with proper risk-disclosure on the firm's balance sheet. Option abuses happen for precisely the reason that Enron blew up: because accounting rules permit them to be kept off a firm's balance sheet – despite the fact that they represent a material risk. And that keeps investors, analysts, regulators and boards of directors in the dark about the true risks being taken by the firm. Options issued as part of compensation packages are risky derivatives. Such risks should appear on balance sheets for all the world to see and should be marked to market to reflect their current value." [Underlined for emphasis]

Elsewhere they are quoted by Alden (2002):

"We dismiss the typical op-ed columns that rail against expensing

options under the banner of ‘options are good for the economy’, no matter how they are accounted for. Form matters, because it reflects reality, and brings clarity and transparency to important issues of risk. The question is simply how to best reflect this risky form of compensation in financial statement”. [Underlined for emphasis]

And, such balance sheet solution would supersede any further discussions about taxation of options’ expenses. Income statement disclosure of cumulative expenses would mirror-image the tax deduction to which the company is entitled, ending the so-called ‘double standard’ between ‘accounting’ expensing rules and ‘tax’ treatment targeted by Senators Carl Levin and John McCain in Senate Bill 1940 (Luskin, 2002; Merrill 2002b).

Only the most well-informed, technically adept and tenacious investors would venture through the myriad of footnotes to enable them to succinctly crystallize what the facts are. Little wonder, S&P and Merrill Lynch have jumped into this void to deliver products that profess to clarify and facilitate financial statement interpretation. However, from my assessment of their proposals so far, it appears that interpretation of their interpretation of ‘quality of earnings’ is still far from simple. So, again like before, the average investor is left to rely on the experts, like the AIMR CFAs.

These matters go far beyond mere accounting. For example, the more interesting figures are those that disclose, for example, the so-called options overhang, or the potential dilution if all a company’s outstanding employee stock options were exercised and sold. For example, Microsoft’s market cap is around \$300 billion and there are roughly 5.4 billion shares outstanding, for a price of \$52. Microsoft’s 2001 Annual Report lists 898 million stock options as outstanding. Thus, the addition of all those shares will make each one worth \$45, \$7 less (Lashinsky, 2002). The average options overhang of the companies in the S&P 500 was 14.6 per cent of outstanding shares in 2000, up from 13 per cent 2 years earlier (Standard & Poor’s, 2002).

Moreover, I will show later that any form of stock compensation is an expense and is simply an alternative to cash compensation in a company’s overall Total Compensation strategy and design. So far, much of the public debate on options has focussed rather narrowly on the accounting for them. Such narrow focus misses some broader issues.

Mathur, Kirschenheiter and Thomas (2002) have drawn attention to this same critical issue. They argue that “*good accounting should inform shareholders fully about the amount given to employees and any exposures caused by unhedged option liabilities.*” They have shown that there is the more substantive issue of: “*how to account properly for events following the grant date*”. They, like others (Brenner and Luskin, 2002b; Mathur, Kirschenheiter and Thomas, 2002) believe that regulators: “*should switch to the proprietorship view, which considers that all hybrid securities as liabilities and include only current shareholders as equity.*” Mathur et al (2002) report that if Microsoft’s stock price were to increase markedly between the grant date and exercise date, the liability for outstanding options would increase accordingly. Large projected profits would instead turn into large losses in the \$50 billion dollar range and seriously affect Microsoft’s market cap. [Underlined for emphasis]

So far, the IASB (2002) has dismissed Balance Sheet treatment as meriting neither consideration nor discussion stating: “... *the conceptual framework requires there to be an obligation to transfer cash or other assets to another party as one of the criteria for that financial instrument to be classified as a liability.*” (IASB, 2002).

So while it is not clear what the IASB or FASB’s final position will be in these regards, what does seem clear is that, as in the past, regulators are likely to defer to the judgement of public accountants who have not been overly concerned with fair presentation of financial results from an investor point of view. Nevertheless, we can take some comfort from President Bush’s (2002) remarks on Corporate Responsibility in New York on July 9th: “*Self regulation is important, but it’s not enough. Government cannot remove risk from investment...or chance from the market. But government can do more to promote transparency and ensure that risks are honest*”. Thus, given Bush’s track record, it appears likely that we will end up with a hybrid of self-regulation and government intervention.

B. THE CASE ‘AGAINST’ STOCK OPTION EXPENSING

Many ‘preparers of accounts’ continue to rail against the introduction of stock option expensing at ‘fair value’ claiming that there is no reliable way to measure such fair value of employee stock options; a rather disingenuous claim as I will show later. Moreover, lobby groups representing the Venture Capital (NVCA, 2002) and Technology sector in the U.S., such as TechNet which has some 250 company members (TechNet, 2002; Yu, 2002) and the International Employee Stock Option Coalition (2002) of which TechNet is a major supporter, which include such heavyweights the likes of Microsoft, Cisco, Dell and Intel, have counselled against making the changes to current practices and allegedly bragged about how it spent \$70 million to lobby Congress to prevent stock option expensing (Kahn, 2002). AOL Time Warner, Cisco, Dell, Intel and Microsoft enjoyed a combined \$6 billion in option related tax benefits in 2000, with no effect on the bottom line; these large tech companies claim inter alia (Merrill, 2002b):

- that new policies would shatter corporate profits, endanger valuations and make raising capital more difficult;
- that the use of stock options enables companies to recruit more-productive employees and that the result of a switch in policy would weaken their ability to recruit and retain the resources required for success;
- that such options are important to the High-Tech and VC industry, and that their use is an exceptionally valuable compensation mechanism and that ‘stock option expensing’ will reduce options’ use, irreparably harming their industries;
- that pro forma disclosure, i.e., fully diluted earnings per share adequately reflects the number of shares that could obtain with options; and
- that the cost of options cannot be measured with sufficient accuracy to justify their disclosure on the Income Statement and Balance Sheet. More specifically, many argue that the Black-Scholes formula, the one most prevalent for quantifying option expense, is too approximate”.

The ‘against’ camp has some powerful political backers. Long-time industry ally Senator Lieberman, who introduced a bill back in 1993 to block the original FASB proposal, has urged the Bush cabinet to join him. In a letter to Senate leaders Tom Daschle and Trent Lott, the nine members of the High Tech Task Force stated that requiring companies to ‘*expense stock options*’ would harm entrepreneurship and reduce employee ownership (Allen, 2002). Recent SEC Chairman Pitt (2002), who just resigned, prefers the status quo; he has told Congress that he would be “*exceedingly reluctant to re-open the issue.*”

C. THE CASE ‘FOR’ STOCK OPTION EXPENSING

On the other hand, more and more ‘users of accounts’ organizations, like the AIMR as well as some powerfully influential people on Wall Street, are advocating the ‘proper’ expensing of employee stock options as part of calculating reported earnings. Greenspan (2002) puts it as follows: “... *we need to remember that expensing is only a bookkeeping transaction; nothing real is changed in the actual operations or cash flow of the corporation.*” Furthermore, that if “...*lower reported earnings as a result of expensing*” indeed dissuade investors, it confirms “...*only that they were less informed than they should have been about the true input cost of creating corporate revenues. Capital employed on the basis of misinformation is likely to be capital misused.*” APB 25 pro forma disclosure “...*corrects only the denominator of the earnings per share ratio. It is the estimation of the numerator that the accounting dispute is all about.*”

A Who’s Who of financial heavyweights has weighed in with their support. Greenspan (2002) suggests that:

“... *expensing stock options is required to record the economic cost of labor services purchased with option grants... but like all such balance-sheet-related costs (depreciation, for example), their final accounting disposition can often take years... but depending on how the corporation chooses to hedge option grants, these changes can affect the net worth of the corporation; and that option expensing in no way precludes the issuance of options. To be sure, lower reported earnings as a result of expensing, should it temper stock price increases, could inhibit option issuance. But, again, that inhibition would be appropriate because it would reflect the correction of misinformation.*”
[Underlined for emphasis]

While Warren Buffet (2002), who controls some \$ 3 Billion, did present a very simple argument for expensing options. He said: “*If options aren’t a form of compensation, then what are they? If compensation isn’t an expense then what is it? And if expenses shouldn’t go into the calculation of earnings, where in the world should they go?*”

A coalition of union funds representing \$210 billion in assets is engaging en mass by filing shareholders’ resolutions at over 100 companies demanding stock options be expensed and tied to financial performance. For example, the Teamsters (2002) sent a shareholders’ resolution to Mercury Computer Systems urging stock option expensing.

Large pension funds and institutional investors, who had previously used behind-the-scenes tactics, have also come out in favour of stock option expensing. The Teachers Insurance and Annuity Association – College Retirement Equities Fund (TIAA-CREF), one the U.S. largest institutional investors, last year sent a letter to the chairmen of 1,754 major U.S. companies strongly urging them to expense stock options (WorldatWork Journal, 2003).

The Council of Institutional Investors (2002; Merrill 2002b), an association of approximately 120 public, corporate and Taft-Hartley pension funds and over 100 money managers, law firms and other financial services firms collectively with some \$2 trillion in retirement assets under management -- voted to reverse their previous stance on options accounting and now supports requiring companies to expense them. And, while the Council does not advocate a particular method to value stock options it urged the IASB to consider this issue in its deliberations. It is noteworthy that the FASB wasn't asked to do so.

The U.S. Mutual Fund industry, representing some 93 million shareholders, last August urged the FASB to propose and adopt a new accounting standard that would require stock option expensing (Investment Company Institute, 2002).

Also, companies have been put on notice and are now scrambling to minimize the damage of a proposed bill in the US by senators McCain and Levin who see options as a form of “stealth” compensation which is the only form of executive compensation that is not shown as a business expense on a company's financial statements and who want companies to treat stock options for employees as an expense for accounting purposes if they want to claim the expense as a deduction for tax purposes (Merrill, 2002b; WorldatWork Journal, 2003). This may be overkill as there is already symmetry in allowing companies to take a deduction for tax purposes that equals the amount declared as income by beneficiaries of stock options coincident with exercise.

With the Enron and WorldCom collapse and the thirst in the investment world for increased transparency in company accounts, ‘expensing options’ has taken on increased importance. Most executives must believe expensing is more than a mere matter of pro forma accounting disclosure. FASB 123 encourages companies to expense option grants. However, according to S & P, only two of its S&P 500 firms reportedly elected to do so in 2000. If proper expensing does matter, then at least questionable reported earnings may have exacerbated some of the ‘irrational exuberance’ that became the hallmark of dot.com investing at its peak. Thus, the issue of accounting for stock options is especially timely because of the proliferation of inconsistent reporting which is undermining the investment community.

At this point, I consider it important to step back and reflect on what has been largely overlooked in this debate, i.e., what has actually been happening for several decades and without much fuss with regards to the rationale for issuing stock options and their cost (or accounting expense) within a Total Compensation Policy framework; and the determination of executive compensation which use the very same models – such as Black-Scholes - to lend credence and respectability to the processes of Executive Compensation determination described in the next section.

3. EXECUTIVE COMPENSATION WITHIN A TOTAL COMPENSATION POLICY FRAMEWORK

The nub of the ‘*earnings management*’ issue as it relates to options (and thus executive compensation) is that executive compensation is determined on the basis of industry standards, instead of awarded on the basis of some productivity, profitability or industry performance standard. As shown earlier, the value of stock options is increasingly tied to market swings and shows little relationship to a company’s intrinsic worth, they have a pure upside with no downside for most senior executives.

Stock options are in effect a no-risk “call” on the unilateral transfer of value from existing shareholders to employees. It involves the transfer of, at times, a substantial part of the market capitalization (e.g. Microsoft) owned by existing shareholders pursuant to decisions made on their behalf by their proxy, a Board of Directors. Options are granted to acquire services and presumably have a tangible worth approximately equal to the cash or other compensation costs that otherwise would have been paid for those same services; what economists call ‘opportunity cost’. Obviously, that value is a function of the options’ particular parameters; when, and under what conditions do they vest and become exercisable. The important point to note is that there is not necessarily any congruency or alignment of executives with shareholders interest. Options, as derivative instruments, have completely different characteristics from common equity. Moreover, an option grant not tied into attaining corporate objectives is akin to an option whose value fluctuates with corporate performance of the firm relative to the competition, matched with a call option on an S&P or similar stock index.

For example, there have been several disturbing examples of CEOs who drove their companies to their knees and reigned over a significant drop in the companies’ share price relative to that of their peers and the market overall. They, nonetheless, made large gains because the strong upward momentum across the whole stock market inflated the prices of the less-than-stellar companies’ along with it. Greenspan (2002) points us in the right direction: “*Stock options policy should require that rewards reflect the success or failure of managements’ decisions... by tying such grants through time to some measure of the firm’s performance relative to a carefully chosen benchmark. Many corporations do tie the value of stock and option grants to relative performance, but most do not.*” [Underlined for emphasis]

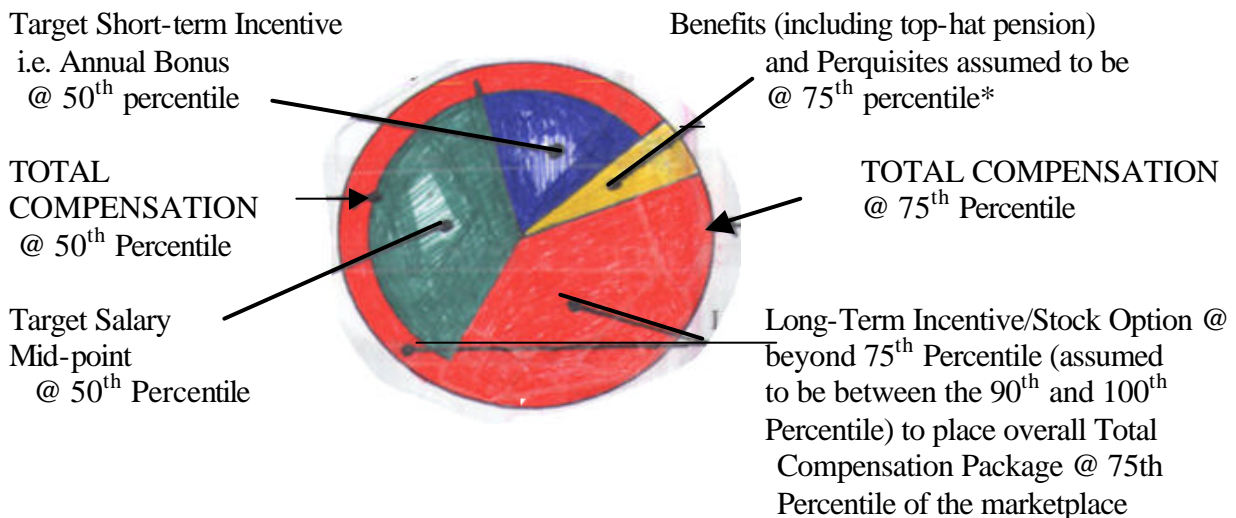
When this is not done effectively, there is no congruence between wealth creation for the different classes of stakeholders. One case in point is that of the CEO of Nortel, John Roth, who managed to cash in several hundred of millions of dollars of stock options while the company’s common shares tanked to less than one-twentieth of its peak \$80 value. Others include those of Enron infamy Jeffrey Skilling and Kenneth Lay who in 2000 respectively made \$62.5 and \$123.4 million by cashing in Enron stock options. Skilling conceded last February before Congress that stock options were an ‘egregious’ way to inflate a company’s earnings. He reportedly stated (Thompson, 2002): “*Essentially what you do is you issue stock options to reduce compensation expense and, therefore, increase your profitability.*” Back in the early 1980’s, I was involved in developing the executive compensation policy for a large Canadian corporation. Its Board of Directors approved a policy which the company

has to a large extent maintained to the present day and which is publicly reflected in any of its Management Proxy Circulars since 1985 (**Appendix 1**).

Its Chairman & CEO A.J. de Grandpre recognized early on that stock option grants were a matter of competitive necessity. In addition, when properly constructed, such grants can be highly effective as a retention device and in getting corporate officers to internalize the interests of the shareholders; and that such alignment is an essential element in ensuring a company's long-term market value and viability. Companies typically compare data from credible surveys and consultants, then award an increasing number of options to ensure pay packages are competitive (Foulkes, 1991; Kay, 1992; and Miller & Ng, 2002).

In summary, an executive of this company has his/her Total Compensation set at the 75th percentile of the 'marketplace', defined in this context as a comparator group of 26 Canadian and U.S. companies with sales in excess of \$1 billion with which the company (i.e. top management) considers it competes with for executive level human resources. This total 75th percentile Compensation 'envelope' is subsequently paid out as follows: (i) a base salary and (ii) an annual bonus/incentive at the 50th percentile; (iii) benefits, including pensions, and (iv) perquisites at the 75th percentile; and (v) a long-term incentive component (stock options) in excess of the 75th percentile. Thus, this company puts quite a large proportion of an executive's Total Compensation envelope 'at risk'. For example, the base salary is determined by setting it at the 50th percentile of the 'marketplace' while, as stated, its long-term incentive stock option program is 'enriched' to beyond the 75th percentile to ensure delivery of an overall 75th percentile Total Compensation level as shown in **Figures 1 and 2**.

FIGURE 1 –Total Compensation 'envelope'



*In fact, this Benefits component may well exceed the 75th Percentile of the so-called 'marketplace'. The company's Supplemental Executive Retirement Plan (SERP) typically provides for an unreduced joint-survivor pension of 2.25 per cent of final 3-year average pensionable earnings (actual salary plus the lesser of actual or target bonus). This would be even more so with ad-hoc grants of 'deemed' pensionable service on hiring.

FIGURE 2 – Components as a per cent of Total Compensation @ 75th Percentile

- Target Salary Mid-Point @ 50 th Percentile	\$1.00	28%
- Target Short-term Incentive Annual Bonus @ 50 th Percentile	<u>\$0.60</u>	<u>16%</u>
TOTAL CASH COMPENSATION @ 50 th Percentile	\$1.60	44%
- Benefits, Pensions & Perquisites - assumed @ 75 th Percentile	\$0.20	6%
- Target Long-Term Incentive/Stock Option @ beyond the 75 th Percentile (assume to be likely between the 90 th and 100 th Percentile) to take overall TOTAL COMPENSATION package to 75 th Percentile of the ‘marketplace’, i.e. Company Comparator Group of 26 U.S./Canadian companies	<u>\$1.80</u>	<u>50%</u>
TOTAL COMPENSATION @ 75 th Percentile	\$3.60	100%

Here then follows a key issue with respect to stock option valuation. In 1997, for example, this company set the target stock option grant level at the Executive Vice-President level at 100 per cent of his/her salary mid-point. Thus, this individual’s salary mid-point expressed in dollars (i.e. not necessarily his actual salary) would have to be converted **using some formula** (in this case the Black-Scholes model) to generate an actual numeric stock option grant level as exemplified in **Figure 3** (data taken from **Appendix 1**).

FIGURE 3 – Stock option implied value determination (Year 1997 Data):

	<u>Actual Salary</u>	<u>Salary Multiple</u>	<u>Options Award</u>	<u>Implied Value</u>
CEO	\$975,000	1.8	183,000	\$9.59
Exec.V.P.	\$362,000	1.0	37,600	\$9.63

Let’s make the reasonable assumption that Actual Salary as shown was, as well, the 50th percentile ‘marketplace’ determined salary mid-point for both executives in 1997. And, since “*Target (stock) grant levels depend on the position of the incumbent relative to the market and ... the value of these grant levels... required to attain the 75th percentile in total market compensation*” was translated to an actual numeric stock option grant level based on an average closing price. That is, \$975K and \$362K would have been used to arrive at the 183,000 and 37,600 options award respectively for these executives (see **Appendix 1**).

Prior to my departure in 1995, the Company used the basic Black-Scholes model for this determination and, if I am correct making the above stated salary mid-point assumptions, the Black-Scholes generated value for each option granted in 1997 would have been approximately \$9.60. The six fundamental factors that would have gone into the model to estimate the ‘fair value’ of the stock options would have been:

- the ‘current’ share price;
- the exercise price;
- the expected life of the option;
- the expected volatility;
- the risk-free rate of interest for the life of the option; and
- the expected dividends on the company stock.

Many companies use the Black-Scholes option-pricing model (or one like it) to determine the ‘fair value’ of their options when converting the long-term incentive stock options slice of the Total Compensation ‘envelope’ from a dollar amount to stock option grants as shown in **Figure 3**. Nowadays, option-pricing spreadsheet-based software to determine the ‘fair value’ of their options can be readily found on the internet - see **Figure 4** (for example: www.rotman.utoronto.ca/~hull/ESOPS). Moreover, management will typically engage a HR Consulting firms as well, such as Towers Perrin, Mercer, Hay, Wyatt, etc., to assist them in these regards. This is primarily done to lend credence to, and remove biases from, the numbers when they are presented to the Compensation Committee of the Board of Directors for consideration, deliberations and award approval.

FIGURE 4 – Use of the University of Toronto model: Using 1997 Data
(Hull & White, 2002):

BASIC FASB 123 Worksheet			
	Stock Price (\$)	33.50	
	Exercise Price (\$)	33.50	
	Expected Life (years)	10	
	Time to Vest (years)	4	
	Employee Exit Rate pre-vesting (% per year)	0.00%	
	Expected Volatility (% per year)	19.50%	
	Risk-free rate (% per year)	8.50%	
	Dividend yield (% per year)	4.00%	
	Which Model? 1=BlackScholes; 2=Bin. Tree	1	
	Value of Option	9.60	

It seems that the position of some corporate managers in these regards has been rather contradictory. On the one hand the valuation tools serve management well to determine their own stock option awards, yet on the other hand these same tools are supposedly inadequate to determine Income Statement expenses.

Moreover, to hide behind the claim that the estimation process is flawed or too difficult is disingenuous. As Greenspan (2002) said:

“The estimation of earnings is difficult enough without introducing biases into the calculations. I fear that the failure to expense stock options grants has introduced a significant distortion in reported earnings – and one that has grown with the increasing prevalence of this form of compensation... Similarly, depreciation charges against income, based on book values, are very crude approximations of the decline in the economic value” of assets which, in any event, will not be factually known until their retirement or change in ownership; and

“...changes in balance-sheet valuations based on fragile forecasts have become a more important element in determining whether a particular corporate strategy was successful. And, as a consequence, cost estimation has become ever more problematic. But the principle of measuring profit as the value of output less the value of input is not altered by the complexity of measurement.” [Underlined for emphasis]

It is ironic that, many corporations which are so vehemently fighting the FASB, IASB, and Canadian rules which require the expensing of options for accounting purposes and some amongst them claiming that the process is seriously flawed, have nevertheless already engaged in the quantification thereof for Executive Compensation determination purposes, as shown. This, of course, assumes that their Board of Directors have insisted on following rudimentary Corporate Governance procedures to determine competitive executive Total Compensation levels similar to the ‘BCE’ processes described earlier. Indeed, there seem to be strong grounds for arguing that the fiduciary duties of directors should prevent them from issuing instruments whose value cannot be established within reasonable parameters. For example, it has been held in a U.S. case that Boards of Directors should be satisfied that the value of the benefits to be received by the corporation from granting the options bears some reasonable relationship to the value of the options granted (IASB, 2000). Moreover, as Greenspan so succinctly put it (2002): *“It is no more valid, in my judgment, to assume that option grant expense is zero than to arbitrarily assume depreciation charges are zero. Both assumptions, excluding interest, increase reported pre-tax earnings. Both imply that the inputs that produce valued corporate outputs are free.”* Barth (2002) puts it more bluntly: *“If they don’t have a handle on the value, you wonder how they know they are making the right decision when they grant them”*. In any event, it is difficult to think of a more compelling reason for justifiable intervention by regulators. These issues accentuate the need for Boards of Directors to consider the true cost of granting options. And, whatever form such expensing

may eventually take, stock option expensing would make the cost of employee options clearer for all to take account of.

As well, compensation experts have known for at least a decade that massive stock option grants without specific long-term ownership requirements and some form of real downside to the option is likely to produce executive behaviour inconsistent with long-term shareholder interest as evidenced by the earlier captured headlines. An authority in the field, such as Ira T. Kay (1992) has postulated that: *“Stock option plans specifically motivate executives to take strategic risks – often in the form of acquisitions – that are more hazardous than the shareholders desire.”* Our ability to produce premeditated Total Compensation levels for executives has also been of great concern to some of us. For years, we have been driving up competitive pay levels through self-fulfilling prophecies of setting executive competitive pay levels at the 75th percentile of the ‘marketplace’ – and using as a proxy for the ‘marketplace’, a group of self-selected companies from which group some are added or deleted to produce desirable outcomes – all with little or no Board of Directors’ oversight. Moreover, if every company adopts a policy of positioning itself at the 75th percentile of the ‘marketplace’ (i.e. its company comparator group), then there likely is little discernable difference between the 50th, 75th or 90th percentile. I am not confident that accounting changes, i.e., more specifically stock option expensing, will change this. More rigorous commitment to proper corporate governance is what is needed.

I once made a tongue-in-cheek comment to my then Chairman & CEO J.V.R. Cyr stating that one could likely affect his Total Compensation package by plus or minus 50 per cent by self-selecting the company’s ‘marketplace’ for executive pay determination, i.e., our company comparator group, our ‘marketplace’ proxy -- the particularly selected group of companies, which were either high-paying (75th to 90th percentile) or average payers (up to the 50th percentile). He challenged us to prove it. We did. Either of the two ‘book-end’ group of comparator companies, constituting our theoretical ‘marketplace’ for executive pay determination could rationally be put forth as ‘a reasonable one’ for our particular firm. I emphasize that, generically speaking, none of this has been done out of malice or personal greed. Such activities tend to be rather driven by so-called ‘staying current’ with prevalent practices enunciated by compensation consulting firms or, simply, to survive in the corporate political environment. I must also point out that our company’s actual approach at the time was somewhere in the middle: prudent, conservative, and consistent with the company’s blue-chip image.

4. STOCK OPTION VALUATION MODELS

A. Quantifying “stock option expenses”

As to the disingenuousness of the high tech industry’s claim, that the estimation process is flawed or too difficult: billions of dollars trade hands every day in the options market. The valuations of these options are generally based on variations of the Black-Scholes model. To claim there is no value in options ex-intrinsic value would suggest constant miss-pricing in this market. This is clearly a fallacious debate. When companies issue employee options they

are granting employees both time value (interest free) and probability (volatility) and there will be intrinsic value some time in the future. The expense to companies is clear and quantifiable. As shown earlier, the latter is implicitly acknowledged by companies when they use similar valuation models to determine stock options awards when determining competitive compensation levels. Nor is the claim that expensing employee stock options would shatter corporate profits and result in less accessible capital markets a supportable argument (Merrill, 2002a). In any event, reported earnings should reflect the true state of a company's performance.

A prescribed IASB/FASB valuation model merits more than careful consideration. I do agree with many, that regulators should be challenged to develop a prescribed model which takes account of the vesting period and lack of tradability of these options; and, more importantly, one on which consensus can be reached as most accurately reflecting the true costs of granting employee options (Council of Institutional Investors, 2002).

Based on its behaviour in the past, management has already tipped its hand once before in these regards. Every corporation which has issued employee stock options *"already implicitly reports an estimate of option expense on its income statement. That number for most companies, of course, is exactly zero"* (Greenspan, 2002). No one really believes that option grants have no real value on the date of grant! It is no more valid to project stock option expenses at zero than to arbitrarily do so for depreciation or amortization projections.

The Council of Institutional Investors (2002; Merrill, 2002b) recognized that valuing stock options is complex and controversial and, while it did not advocate a specific valuation model, it has "urged" the IASB to address ontological issues through roundtables with input from the corporate community, institutional investors and others. With intense scrutiny of accounting practices ongoing this could be one of the easiest wins for regulators given the currently defined standards (SFAS 123) that merely need to be made mandatory.

B. Standard Option Valuation Methods

The basic model for valuing equity options that trade on exchanges and in the over-the-counter market is the Black-Scholes approach. The Black-Scholes is based on the pioneering work of Black, Scholes, and Merton published in 1973 to value European options (Kolb, 1999). Many feel the Black-Scholes method of valuing employee stock options overstates their value (Cox, Ross and Rubenstein, 1979; Huddart, 1994; Rubenstein, 1994). The ability to trade options in a secondary market, risk neutrality of the option holder and non-taxability are key assumptions in this model.

Evolved from it is the binomial tree approach. It is designed to value an American option (an option that be exercised at any time during its life). It is a numerical procedure first developed by Cox, Ross and Rubenstein (1979) that requires the same six standard parameters as Black-Scholes. A tree representing possible future stock price movements is constructed and the option is valued by working back through the tree from the end to the beginning of the life of the option calculating the value of the option at each node of the tree. The American-style feature of the option is handled by testing whether it is optimal to

exercise the option at each node of the tree. This involves setting the value of the option at the node equal to the greater of its value if exercised and its value if not exercised.

Other quantitative approaches to determine the value of non-tradable employee options have been developed by Rubenstein (1994) as a further refinement to his earlier collaborative work with Cox and Ross (1979); and by Hall and Murphy (2000, 2001, and 2002).

Another approach is that used by Institutional Shareholder Services (“ISS”). It uses the Cox, Ross & Rubenstein’s binomial model more fully described later. ISS describes the outcome of Rubenstein’s model as the Shareholder Transfer Value (“SVT”). ISS is unique by going one step further to quantify as well, what they describe as, the Voting Power Dilution (“VPD”). ISS then combines the SVT and VPD values on the basis of a 95 and 5 per cent respective weighing (Davidson & Patel, 2002).

A somewhat different ‘market’ as opposed to ‘academic’ approach is that now being used by Coca-Cola. It has requested two independent investment banks to quote on the economic (opportunity) cost of granting employee options under identical terms to the employee options being granted. While the exact details remain sketchy, Coke CEO Daft said: *“Coke will ask two Wall Street firms to provide binding quotes on options to buy 10,000 shares of Coke stock and options to sell 10,000 shares. The average of the four quotes would be used to determine the options’ value, and thus the charge to earnings.”* (Jordan, 2002). It is interesting to note that this comes close to the method of valuing options from the implied volatility used in valuing ‘regular’ equity options traded on exchanges.

It should also be noted that for stock option expensing, FASB 123 allows for parameter estimates to be expressed as a range of possible outcomes and suggests the following in the absence of a ‘best’ estimate: for Volatility the low end of the range (depressing the Black-Scholes value), for Life the low end of range be used (depressing the Black-Scholes value) and for Dividend yield the high end of the range be used (depressing the Black-Scholes value).

Rubenstein (1994) pointed out that the nature of employee stock options differs from the nature of options traded in exchanges and in over-the-counter markets in several important respects. Accordingly, he refined the 1979 model co-developed with Cox and Ross further by developing an evolved binomial valuation model which simultaneously takes into consideration the most significant differences between standard call options and employee stock options:

- longer maturity – typically 10 years;
- delayed vesting – typically in 25% or 33.33% increments of the total grant on each anniversary of the grant date;
- forfeiture – employees will lose unvested or ‘out-of-the-money’ options when they leave their jobs or retire and may be forced to exercise prematurely the unexercised but vested options;
- non-transferability – employees are usually not permitted to sell their options. They must exercise the options and sell the underlying shares in order to realize a cash

- benefit or diversify their portfolios. This tends to lead to employee stock options being exercised earlier than similar regular options;
- dilution- capital structure and operating income effects; and
 - taxes – in the U.S. options gains are taxed as ordinary income when exercised (i.e. prior to selling them).

Rubenstein's final model requires 16 input variables. The 'standard six':

- *underlying stock price on grant date,*
- *stock volatility,*
- *dividend yield,*
- *risk-free rate of return,*
- *exercise price,*
- *life of the option (maturity);*

and an additional ten 'refinements':

- *option years-to-vesting,*
- *stock expected return,*
- *expected employee forfeiture rate,*
- *minimum and maximum forfeiture rate multipliers,*
- *employee's non-option wealth per owned option,*
- *employee's risk aversion,*
- *employee's tax rate,*
- *percentage dilution, and*
- *number of steps in the binomial tree.*

However, as Rubenstein (1994) himself points out: "Many of these variables are difficult to estimate. Indeed, a firm seeking to overvalue its options might report values almost double those reported by an otherwise similar firm seeking to undervalue its options."

[Underlined for emphasis]

Therefore, it remains likely, if not indeed probable, that firms would skew towards undervaluing options to trigger the double effect of (i) understating their true cost and thus showing higher profits than would have been the case if actual costs were booked, and (ii) effecting inflated stock option grants to executives under a Total Compensation approach and thus exceeding the level of stock option grant than would ordinarily be required to reach a market-competitive target Total Compensation level for executives, for example, at the 50th or 75th percentile of their comparator group.

I will now elaborate as to how such potential manipulation might take place.

5. 'ACCURACY' OF STOCK OPTION VALUATION MODELS

Brenner & Luskin (2002a) said: *"The adversarial prejudices of the politicians, pundits and big business spokesmen have focused the debate on isolated symptoms – deceptive earnings reporting, tax breaks, fat cat compensation, lax corporate governance – and ignored the underlying disease: a fundamental misunderstanding of the nature of options."*

A. Facts versus "Fiction"

By Rubenstein's own account (1994), the above 16-factor model is very complex. I will stick with the basic 6-input Black-Scholes to make my points. Extending it to the 16-factor model would simply further accentuate the model's manipulability.

B. Facts

Three of the inputs are based on facts and, as such, are beyond management's manipulation, to wit: (i) the Current Price; (ii) the Exercise Price; and (iii) the Risk-free Rate.

The share price and the exercise price in this case would be equal to the market value of a company's common stock on the day preceding the grant as described earlier.

Under FASB 123, the risk free rate of interest should be the implied yield available on zero-coupon Treasury issues (or a proxy, such as the LIBOR/swap rate) with a 10-year maturity (or, more accurately, with a remaining term equal to the expected life of the option being valued).

C. "Fiction"

The remaining three inputs are management 'projections' with substantial latitude as to assumptions used and, as such, remain subject to manipulation, to wit: (iv) expected Volatility of the underlying stock; (v) expected Life of the option; and (vi) the projected Dividend-Yield over the life of the option. This is particularly true for start-up companies, or when doing an IPO and issuing Founders' options.

D. Expected Volatility

The expected volatility should be the annualized standard deviation of its continuously compounded rate of return over a period of time or, simply, stock price movement. The period of time is not specified. Accordingly management is free to make the selection. Volatility is typically projected based on historical data. Sometimes, the estimate can be based on the implied volatilities of the company's traded options on the market. However, if management believes that the past stock return history does not provide a reasonable prediction of future experience, the historically derived volatility may be adjusted to reflect 'projected' returns. In particular, in the case of a start-up or an IPO, this factor must be 'projected' by management or by using a proxy, i.e. the stock volatility of a publicly traded

‘similar’ company. Typically, management will have ample choice over a wide spectrum of ‘similar’ companies.

Since high volatility translates into higher Black-Scholes value and thus higher expense, there could be a certain attractiveness to being ‘overly conservative’ in these regards since lower ‘projected’ volatility over the life of the option will significantly lower its Black-Scholes value and hence result in higher stock option grants to management than would have been the case had a more accurate volatility factor been applied.

Modelling of actual situations, carried out by my associates while at BCE Inc., showed volatility as in fact the most important Black-Scholes value driver.

E. Expected Life of the Options

Most Fortune 500 companies grant options with a 10-year term. FASB 123 allows companies to use ‘expected’ option life rather than the stated 10-year term (WorldatWork Journal, 2003). Thus, while one ‘bookend’ for the life of the option may indeed be 10 years, ‘refinement’ factors ‘projected’ by management for past exercise behaviour, early retirement potential, projected forfeiture rates, etc., can bring this parameter down and result in a lower Black-Scholes value and hence result in higher stock option grants to management.

F. Projected Dividends

If the company is already consistently paying dividends, this factor should be able to be projected with reasonable accuracy. If, on the other hand, there is no history of dividend payment management needs to input its ‘projections’ of future events that management may or may not assume will happen. There could be a certain attractiveness to being ‘aggressive’ in these regards since projections of dividend increases over the life of the option will lower its Black-Scholes value and hence result in higher stock option grants to management.

It is also important to note that delivering executive compensation via options effectively disincentivizes management from pursuing a dividend payout policy. So far, this has drawn little attention since management has been able to justify such ‘no-dividends’ policy because of the so-called ‘double taxation of dividends’ in the U.S. With President Bush’s current tax initiative to eliminate double taxation of dividends it will be interesting to see its ramifications on the size of executive option grants once such policy is implemented. While earnings can be of dubious quality and accounting number will also be malleable; dividend payouts require cash which is hard to fake. If passed, many more companies will likely start paying dividends (as Microsoft just did!) which in turn could encourage a shift to other forms of long-term incentives – such as SARs or restricted stock grants. The result would be a more transparent way of having executives ‘internalize’ the interests of the shareholders than stock options have shown to do currently.

G. Summary – Impact of Assumptions on BLACK-SCHOLES Value

Increase In	Impact on Value	Can you Impact?
Current Share Price	Increases	No
Option Exercise Price	Decreases	Yes (granting premium or discounted options)
Expected Volatility of underlying Stock	Increases (the more volatile, the greater the likelihood of exercising at a high point)	Yes (often assumption based)
Expected Life of the Option	Increases (the longer the term, the more time to exercise)	Yes (assumption based)
Projected Dividend Yield on the company stock over the life of the option	Decreases (options generally do not receive dividends)	Yes (assumption based)
Risk-free Rate of Interest for the life of the option	Increases (viewed as an interest-free loan until exercise)	No (tied to zero-coupon Treasury issues)

6. ONTOLOGICAL ISSUES

The general issue of ontology, that is -- how best to structure our concepts for effective accounting and financial reporting, leads to the philosophical and fundamental issue of what capitalism, accounting and financial reporting are.

I subscribe to ontological relativism, i.e., the claim that things are different from different points of view and the idea that different ethical viewpoints are equally valid. Moreover, contrary viewpoints may well be equally valid across particular and peculiar societal settings. Companies are social objects that by definition do business, employ capital (money and human) and decide things like a person might and thus employ a particular language and discourse within their own particular and peculiar social setting and structure. The ontological aspect to be alert to is that cause/effect mechanisms within companies are evolving not fixed.

As Castel (2002) puts it: “*Ontology is the way we carve up reality in order to understand and process it.*” Accounting and Finance, still continuously evolving concepts, are but two products of such carving. They are used to model certain aspects of the corporate world – in all its representational complexity. We have created their structures in order to make sense of the world and communicate among ourselves. Accounting and Financial Information is not only “*functional (it has a purpose), artificial (man-made), and designed (created through specific choices); it is malleable. Ontologies are manmade frameworks. Information is structure; it is organization. Books and documents collect and archive that knowledge for*

later use by others.” (Castel, 2002). For example, a program, triggering a sell of a stock option upon a certain condition, is triggered by an actual human command but also operates within a somewhat unpredictable set of circumstances that extend beyond the parameters of direct human foresight.

There remains confusion as to ontology of Accounting. It was not developed to give valuations for companies but rather as the name suggests: accountability. The problem starts when you want to use income statements and balance sheets and cash flows to try and value a company as the stock market does.

As Greenspan (2002) said:

“...With an accounting system that is, or should be, measuring the success or failure of individual corporate strategies, the evolution of accounting rules is essential as the nature of our economy changes. As the measurement needs change, rules must change with them. This does not lend itself to hard-wired legislation, which makes flexibility of rule-making difficult. We would be best served, in my judgment, by leaving issues such as option grant expense to regulatory bodies and the private sector... Capitalism has wealth expanding primarily through creative destruction – the process by which the cash flow from obsolescent, low-return capital is invested in high-return, cutting edge technologies. But for that process to function, markets need reliable information to gauge the return on assets... Measures of profitability, however, can only be approximate. Although most pre-tax profits reflect cash receipts less cash costs, a significant part of profits results from changes in the valuation of items on the balance sheet. The values of almost all assets are based on their ability to produce future income. But an appropriate assessment of asset value depends critically on a forecast of forthcoming events, which by their nature are uncertain.”
[Underlined for emphasis]

Building ontologies is difficult, time consuming, and expensive; particularly if the goal is the design of an ontology that is formal enough to support automated inference. One reason for this is that ontologies require consensus across communities, i.e. public accountants, management accountants, internal auditors, compensation professionals, investors, financial analysts, creditors, tax authorities, etc., etc., whose members may have radically different visions of the domain under consideration. In practice, the quest for consensus can be dealt with a variety of ways. At one extreme, small lightweight ontologies are developed by large numbers of people and then merged, with a greater need for ontology mapping and merging. At the other extreme, rigorous formal ontologies are developed by consortia, regulators and standards organizations, requiring better support for collaborative design and analysis.

As Holsapple and Joshi (2002) stated:

“A typical reason for constructing ontology is to give a common language for sharing and reusing knowledge about particular issues. Among those who adopt the ontology, its terms are used in asking and answering questions, making assertions, offering insights, describing practices, and discussing investigations regarding such issues. In building and applying ontology, it is important to clearly make the following distinction: on the one hand, there is the ontology itself, which specifies concepts used in a domain of endeavor, concepts whose existence and relationships are true by definition or convention. On the other hand, there are empirical facts about these concepts and relationships. They are not part of the ontology, although they are structured by it. They are subject to context, observation, testing, evaluation, or modification.”;

In the domain of financial services and accounting, for example, concepts such as currency, equities, trade execution, and trade settlement are parts of an ontology. The fact that three days elapse between trade execution and trade settlement in the U.S. context is an example of knowledge that is not part of the ontology, whose effectiveness can be assessed, and which can be modified.”; and

“Ontological commitment is important. It is the agreement by multiple parties to adopt a particular ontology when communicating about the domain of interest, even though they do not necessarily have the same experiences, theories, or prescriptions about that domain. For instance, all financial services practitioners agree that trade execution and trade settlement exist and that execution precedes settlement. However, there may be disagreement about whether the elapsed time should be three days to five days. Where ontological commitment is lacking, it is difficult to converse clearly about the domain and benefit from knowledge of others. It flows that development of an ontology should proceed with an eye toward ensuring that its potential users will find its characterizations to be sufficiently complete, correct, clear, and concise. Working toward ontological commitment should not be an afterthought, but rather an integral aspect of ontological development.” [Underlined for emphasis]

7. CONCLUSION

This paper has shown that the high profile corporate failures and malfeasance which dominated the business news during the last year and raised concerns over the quality of earnings and '*earnings management*' issues are not new but have been the subject of academic research since at least the early 1970s.

Many people continue to raise rational and important concerns with respect to the practice of '*managing earnings*' however defined, including the exact *modus operandi* for expensing of stock options. To accurately reflect earnings and corporate performance in a transparent way, the seemingly narrow accounting matter of '*expensing stock options*' is critically important. Accurate accounting is central to the functioning of free-market capitalism which has delivered such high levels of prosperity throughout the developed world. Greenspan cautioned (2002): "...*the greater risk is to leave the current accounting treatment in place.*

Moreover, if Executive Compensation and Total Compensation Policy framework processes are to be perceived as being done equitably and with integrity, the seemingly widespread practice of '*managing earnings*' must be discouraged by whatever means. Even with the implementation of the IASB/FASB current proposals, there remains too much leeway for corporations to manipulate both the compensation value (while determining executive competitive executive Total Compensation) and compensation cost (for accounting and financial statement purposes). Thus, while the IASB and FASB agree they need to proceed vigorously to protect the interests of investors, by not prescribing some generally agreed-upon employee stock option valuation model and ontology with clearly defined parameters, they may effectively be, albeit perhaps unwittingly, complicit in efforts by management to side-step proper Corporate Governance practices. Non-action on the part of regulators accentuates potential temptations for '*earnings management*' to reduce the Black-Scholes determined stock option value, overstate earnings and inflate executives' compensation contracts.

In these regards, there continue to be at least two temptations for engaging in '*earnings management*'. Firstly, manipulating Black-Scholes assumptions could inflate stock option grants and thus potential payoffs under executive compensation contracts. Secondly, to do so minimizes stock option expenses, this will result in better financial results and presumably increase stock price and hence potentially higher payoffs delivered to the executives when exercising options under their contracts. In short, as noted before, allowing management to set the Black-Scholes parameter values within undefined broad ranges will likely continue to result in larger options grant sizes by a company's Board of Directors than otherwise would have been the case. Black-Scholes has taught us that the more volatile the stock price the higher the present value of the option; therefore, if the underlying assets of the corporation are diverse and unpredictable from a cash-flow standpoint, so will be the stock price and, ultimately, potentially inflated executive gains.

Thus, while the move from APB25 to the proposed 'fair value' method of accounting for stock options is not perfect, given the enunciated conceptual difficulties associated with the

pricing models used to determine 'fair value'; for now, it seems the way to proceed. It is better to have some process in place that provides a dual assessment of value and cost.

As well, it seems desirable that both the IASB and FASB give further thought to both:

- (i) the cautions and proposals advanced by Brenner and Luskin who strongly advocate Balance Sheet treatment of stock option awards; and
- (ii) how to deal with the dichotomy between Greenspan's assertion (2002) that *"...only the market value of the option at the time of the grant matters... this issue would not arise with option grants if the corporation fully hedged its exposure to post-grant capital gains and losses."* and Mathur, Kirschenheiter and Thomas' (2002) recommendation to have *"...the more substantive issue of how to account properly for events following the grant date addressed."* The latter, like Brenner and Luskin (2002b), propose a switch to a proprietorship view by having *"all hybrid securities, including employee stock options, be characterized as liabilities."*

While few dispute the high tech industry assertion that the APB25 treatment of option grants has been crucial to raising capital to fund the rapid development and deployment advanced technologies, Boards of Directors need to pay more attention as to how such capital is used. The industry would be well served by heeding Greenspan's observation (2002): *"While the vital contribution of new technology to worldwide growth is evident to all, not all new ideas create value."* Evidently, following the collapse of the dot.coms, substantial capital was wasted on large numbers of flimsy ventures whose prospects, in retrospect, appeared far more promising than what they could have realistically been expected to deliver. In short, not all new ideas should be financed.

While stock options are issued to align executives' interests with those of shareholders, this has not always turned out to generate desired corporate behaviour. As I noted earlier, options are derivative instruments and, thus, completely different from common equity. The challenge remains for Boards of Directors to structure an adequate link between compensation and corporate performance. The issue a Board of Directors needs to address in an informed manner is: On balance, are all the company stakeholders equally well served when too much of the executives' total compensation is tied to the vagaries of economy-wide forces and myriad of other stock market related forces; or should stock option awards and their vesting schedule instead be tied through time to corporate performance and the attainment of Board approved corporate objectives which serve all the stakeholders equitably? Moreover, as Sahlman (2002) cautions: *"The big issue is not the accounting treatment of managerial decisions but whether those decisions make sense in the first place."*

"In light of the adversarial prejudices of the various stakeholders" (Brenner & Luskin, 2002a), it remains to be seen whether the combination of: the lessons that lie beneath; new penalties imposed by statutes; the S&P and Merrill Lynch initiatives; market repricing; and/or regulatory decrees can adequately meet expectations of better informing the average investor. It is possible that such new initiatives won't affect the market any more than switching from gallons to litres affects how much it costs to fill up one's car. Thus, while

certain conditions and corporate structural issues that led to ‘Enronitis’ seem to have been addressed, the jury is still out on others. After all *“it remains as true as ever that all too often, the more the books are cooked, the higher the executives’ compensation.”* (Rosen, 2002).

In closing, continuing revelations of accounting deficiencies and abuses of extravagance continue to haunt companies – even those of stellar reputation. While these abuses are contemptible, they are certainly not without precedent. The early years of any industry – whether railway, newspapers, steel, automobile, or liquor – seem typically accompanied by a fresh crop of robber barons; individuals who believe their contribution merits unconscionable levels of compensation. It remains to be seen whether, this time, the motivations, opportunities and rationalizations for the commission of financial reporting fraud have been adequately removed (Applegate, 2002) and whether Boards of Directors will ensure that Total Compensation (including options) become more aligned with corporations’ ability to pay. And, perhaps more importantly, whether regulators will: (i) venture beyond solving mere accounting issues; (ii) reconcile the diverging views on the merits of Balance Sheet treatment; and (iii) decide how to deal with and value accruals in the post-option-grant period.

And, a note of caution: in these times of drastically falling global GDP growth, those involved in the change processes need to vigilantly guard against overzealousness or temptation to over-regulate or ‘over-self-regulate’. Over-regulation may well result in unnecessary and irrational caution in corporate behaviour and exacerbate already declining global growth patterns. Regulators need to guard against knee-jerk reactions. For example, as shown in this paper, legislation to curb certain behaviour often leads to a widespread adoption of legislated caps – for example, the \$1 Million cap resulted in executive pay quickly and generally floating up to this ceiling. In these regards, the jury is out regarding the impact of the Sarbanes-Oxley Act. As Greenspan observed (2002): *“Despite evident shortcomings that have emerged from time to time, we should not lose sight of the fact that these arrangements over the decades have effectively promoted the allocation of the nation’s savings to its most productive uses. Generally speaking, the structure of business incentives, reporting and accountability has served us well.”*

Lastly, it may well turn out that through a combination of investor advocacy, the ever-more-evident prospect of mediate-term meagre stock market returns, the introduction in the U.S. of the Sarbanes-Oxley Act and dividend treatment taxation reform may well mean the stock option problem will largely take care of itself. However, whatever the outcome of the deliberations, the improvement in the transparency and credibility of the information supplied in financial statements will benefit those trying to better understand the cost to a company of granting employee stock options. Evidently, further research is needed to provide a broader understanding of how the compensation contracting environment is impacted by the continued broad latitude available to management to set the assumptions used in the Black-Scholes model when quantifying the value of employee stock option grants, if no changes to the IASB draft proposals as to the use of this model are forthcoming.

APPENDIX 1

EXTRACT FROM BCE INC.'S 1997 MANAGEMENT PROXY CIRCULAR

“The objectives of the Company’s executive compensation policy are to assist in attracting and retaining executives, and to motivate them to achieve individual and group performance objectives consistent with creating shareholder value and advancing the Company’s corporate success.

The compensation philosophy of the Company is to offer Total Compensation based on a comparator group of major Canadian and U.S. corporations. A substantial portion of the cash compensation is contingent upon corporate performance. In addition, there are long-term incentives programs designed to motivate the attainment of longer-term objectives, to align executive and shareholder interests and to ensure opportunities for capital accumulation as share prices increase.

Underlying the Company’s compensation programs is an emphasis on share ownership, and officers of the Company are required to attain specified share ownership levels over a five-year period. Such levels are expressed as a percentage of annual base salary and range from 50 per cent for a vice-president to 300 per cent for the Chairman and Chief Executive Officer.

TOTAL COMPENSATION

Total compensation, which comprises salary, annual short-term incentive awards, long-term incentives, benefits, and perquisites, is compared to a group of 26 widely-held Canadian and U.S. corporations which have annual revenue in excess of \$ 1 billion. Total compensation levels are set to reflect both the marketplace (to ensure competitiveness) and the responsibility of each position (to ensure internal equity). The total compensation policy is positioned at the 75th percentile, i.e. 25 per cent of the companies pay more and 75 per cent of the companies pay less.

Salary

The target salary is the mid-point of a salary range for an executive officer which is set at the median levels in the comparator group to reflect similar positions in these companies using either a direct comparison of responsibilities, or a widely-accepted job scope evaluation system. Base salaries for executive officers are then determined by the Compensation Committee of the Board within the above policy.

Annual short-term incentive awards

The Compensation Committee of the Board, as part of the executive compensation policy, established annual short-term incentive target awards ranging in 1997 from 35 per cent of salary mid-point for the lowest eligible officer position to 60 per cent for the Chairman and Chief Executive Officer.

Annual awards are based upon two factors:

- (1) corporate performance – this is assessed on the basis of strategic business objectives and quantifiable financial targets both set at the beginning of the year as the Corporate Mandate by the Board of Directors... Strategic business objectives might include, for example, a specific corporate objective with respect to a particular subsidiary, the development of new businesses, the improvement of management development, or the strengthening of certain relationships. Quantifiable financial target might include, for example, earnings per share or contribution to earnings from core businesses. Although none of these objectives has a specific weight, primary consideration is generally given to the quantifiable financial targets; and*
- (2) individual contribution – this is evaluated on the basis of criteria which affect corporate performance, such as creativity and initiative in addressing business issues, succession planning and management development.*

On the basis of the above factors, the Compensation Committee of the Board determines the size of the annual short-term incentive award. Executive Officers' short-term incentive awards are more dependent on the corporate performance factor than on the personal contribution factor. The size of the corporate factor tends to decrease the lower the rank of the officer, while the personal factor increases. Actual awards may vary between zero and twice the target awards depending on achievement of the above factors. They are paid at the beginning of the year with respect to performance in the previous year.

Long-term compensation

Stock Options

...Stock options awards vary according to salary level and do not take outstanding options into account. Target grant levels depend on the position of the incumbent and the total compensation relative to the market. For example, the target grant at the Chief Executive Officer level in 1997 was 180 per cent of the salary mid-point, at the Executive Vice-President level, 100 per cent and so on, decreasing to 70 per cent at the lowest eligible officer level.

The value of these grant levels, plus the value of additional options, if any, required to attain the 75th percentile in total market compensation was

translated to options based on the average closing price of the Company's common shares on the Toronto Stock Exchange and the Montreal Stock Exchange the day prior to the effective date of the grant of the options ("Market Value").

The term of an option is normally ten years from the date of the grant except in the case of retirement, cessation of employment or death, in which case the term is reduced in accordance with the provisions of the Company's Stock Option Program and decisions made from time to time by the Compensation Committee of the Board under such program. The right to exercise an award of options in its entirety accrues by 25 per cent annual increments over a period of four years unless otherwise determined by the Compensation Committee of the Board at the time of the grant. The exercise price payable for each common share covered by an option is the Market Value.

Simultaneously with the granting of an option, right to a Special Compensation Payment ("SCP") may be granted. The SCP is a cash payment representing the excess of the average closing price of the shares on The Toronto Stock Exchange and the Montreal Exchange on the date of the exercise over their Market Value. The SCPs are provided for the purpose of paying taxes upon the exercise of an option. When SCPs are attached to options, the SCPs are triggered when the options are exercised."

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