

The Accounting and Economics of Executive Stock Options

Part III: Assessing the Role of ESOs in Executive Compensation

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CEO and other executive compensation has received unprecedented attention during the past year. It continues to draw intense scrutiny from the government, investor rights organizations, and the public. One of the key debates, triggered by the recent turmoil in the financial industry as well as less recent debacles like Enron and MCI, is the extent to which the structure of executive compensation can ensure that a company's management operates in the best interest of shareholders.

The debate often focuses on equity compensation, which can represent the largest component of a top executive's compensation package. Equity compensation is widely considered the vehicle of choice to align executives' and shareholders' interests. However, criticism of certain equity-based pay structures, particularly Executive Stock Options (ESOs), has grown recently. Detractors increasingly view ESOs as intrinsically leveraged instruments that do not expose executives to the same level of downside risk as shareholders¹. Furthermore, many published commentaries and articles argue that ESOs induce CEOs and other executives to take excessive risks in pursuit of self-motivated short-term gains — leaving shareholders to absorb any resulting losses.

The ensuing recommendation might favor full value awards such as Restricted Stock Units (RSUs) in lieu of ESOs because they would expose executives to the same profits and losses as shareholders. While it is easy to see the emotional appeal of such statements, they need to be re-examined based on economic principles and in-depth case studies of historical events.

SUMMARY OF ESOs RISK ANALYSIS

In previous articles², we argued that negative perceptions of ESOs may be based on faulty analyses of their accounting and

economic properties from a company perspective as well as from an executive's perspective. We showed that when risk is properly defined, ESOs actually expose executives to higher personal risk than full value share awards and, consequently, to higher risks than shareholders. Compared to full value share awards, ESOs cause greater uncertainty in the executives' realized earnings as the stock fluctuates. Furthermore, an executive who receives ESOs in lieu of cash or RSUs experiences an additional risk in the form of Economic Opportunity Cost because — unlike ESOs — both cash and RSUs retain some value even if the stock under-performs. As a consequence, the common opinion that ESOs provide low downside risk to the executive is flawed.

We also made the case that the Fair Value of an ESO, as calculated using the Black-Scholes or equivalent lattice model for ASC Topic 718 (former FAS 123R) reporting purposes, does not accurately represent the material economic value delivered to executives as compensation: Fair Value systematically overestimates the compensation value, which is better represented by the ESO's Intrinsic Value³. While investors can buy and sell company stock options in the public markets at Fair Value, executives — in the absence of ESOs exchanges — can only exercise their ESOs and monetize the ESOs' Intrinsic Value⁴.

¹ Ravi Nagarajan (www.rationalwalk.com — 30 November 2009) says that "stock options only provide upside potential for managers and do not carry any downside risk" and the RiskMetrics Policy Update, 2010, refers to "mega equity grants with unlimited upside and no downside risk."

² See [Part 1](#) and [Part 2](#) at www.buckconsultants.com.

³ The Intrinsic Value is the value the option's owner would realize upon exercising the option. It is the difference between the Stock Price and the option's Exercise Price, when the Stock Price is greater than the Exercise Price. The Intrinsic Value is zero when the Stock Price is lower than the Exercise Price, i.e. when the option is underwater.

⁴ We remind the reader that an ESO's Intrinsic Value is the difference between the current Stock Price and the ESO's Exercise Price. If the current Stock Price is below the Exercise Price, the ESO has no Intrinsic Value. The ESO's Intrinsic Value is always lower than its Fair Value.

A CRITICAL REVIEW OF COMMON ASSUMPTIONS

The inconsistent use of Fair Value and ESO economics may contribute to the confusion about the role of ESOs in equity-based compensation arrangements, particularly with respect to risk-taking and alignment of executive interests with shareholder interests. Empirical evidence on the subject has been widely analyzed and has produced mixed results (partly due to the lack of good data). It may be counterproductive to make broad and generic statements about ESOs that are visceral reactions to current events or that appeal primarily to emotions. This is more than a technical argument. The negative judgments about ESOs, especially when they come from organizations with considerable influence on corporate boards, may result in new equity compensation plans that are deeply flawed.

At a minimum, the inconsistencies we highlight justify a critical re-examination of many public statements and conclusions about ESOs and, more importantly, the methodology to assess their effectiveness. Any analysis that uses the properties of the Black-Scholes model (or a consistently defined lattice model) to represent the true value of an executive's ESO portfolio can be dismissed as inconsistent with economic reality.

To summarize so far, our key points are:

- The Fair Value methodology from financial options theory should only be used to fulfill the reporting and expensing requirements mandated by Topic 718.
- Any analysis of ESOs derived from the use of financial options theory is likely to have little practical relevance. Worse, it could provide highly misdirected guidance.
- Any ESO policy recommendation or risk assessment that is based on the Fair Value methodology should be revisited or viewed with many caveats.
- Overly simplistic formulaic models cannot answer the question of ESOs' influence on risk-taking behavior.

In addition, ESOs have other problems that are common to all forms of equity-based compensation. For example, revisiting the riskiness of ESOs does not eliminate or diminish executives' ability to manipulate short-term earnings via expedients like excessive leverage, stock repurchases, dividend elimination, or acquisition campaigns. Some practical problems with ESOs and other forms of equity awards are complex, have multiple

contributing factors, and require in-depth analysis. In light of our findings, many questions remain:

- Can we unequivocally conclude that ESOs are uniformly good or uniformly bad as a vehicle for equity-based compensation?
- Can we determine that ESOs can or cannot help to ensure that executives create sustainable long-term value and operate in alignment with shareholders interest?
- Can we state with certainty that ESOs induce excessive risk-taking by company executives in all situations?
- Can we draw firm conclusions about the optimal number of ESOs that should be awarded to executives and their optimal expiration, vesting conditions, and so on?
- Should firms consider eliminating the use of ESOs completely?

The answer to all these questions is emphatically no. Simplistic applications of financial options theory are unlikely to provide a completely useful answer, nor are any other simple metrics.

EQUITY EFFECTIVENESS: A MORE ROBUST FRAMEWORK FOR EQUITY-BASED COMPENSATION DESIGN

A more complete analysis of the issues requires a comprehensive compensation valuation and risk assessment framework that encompasses a broad class of corporate risks, such as strategic, operational, financial, reporting, regulatory, cultural, and reputational. An equity effectiveness framework must look at qualitative and quantitative factors to help define what "effective" means in a company-specific context and to assess a plan's desired incentive-related effects.

To do this requires knowledge of company factors such as the business environment, business strategy, market conditions, and ownership structure (institutional investors, individuals, etc.) as well as the executives' roles in the company and their ability to influence or control certain risk-taking decisions. This analytic process makes it possible to assess more accurately whether or not ESOs, with their higher risk/reward profile, make sense in the context of the company's circumstances.

Whether ESOs, or equity-based compensation in general, are effective in creating long-term shareholder value depends on the overall context in which they are used. Companies like CISCO

have awarded, throughout their history, large quantities of ESOs and have experienced highly successful and sustainable growth. At the other extreme, Lehman Brothers collapsed under extreme risk-taking despite being up to 25 percent employee-owned. There have also been notable cases of abuses related to ESOs (backdating and such) and various forms of earnings manipulations.

Much research has been conducted to prove that ESOs are directly responsible for increased risk-taking behavior. However, the conclusions have been mixed and subject to large statistical errors. Research on the recent credit-related financial meltdown has shown that ESO ownership, or even stock ownership, was not the clear cause of excessive risk-taking. Surprisingly, the CEOs and other executives of many financial firms took huge risks despite their substantial equity and options holdings and suffered great personal losses in the process.

The executives' roles and their personal situations should also be considered. In a simple example, granting ESOs to lower level executives or employees — who most likely do not perceive their actions as having a direct impact on the value of their ESOs — may not be an effective incentive strategy. In another example, executives might be less inclined to take excessive risks to benefit their ESOs if they also hold substantial wealth in stock units that might be exposed to the danger of loss.

In the end, ESOs will make sense in some situations and not others. For example, ESOs would make little sense at utilities companies: They tend to issue larger dividends, they are not likely to grow very fast, and their stock prices are highly influenced by exogenous factors like commodities prices and energy demand. ESOs could be considered risky at a financial company, where it would be easy to add excessive leverage. Finally, ESOs could be effective at a technology company, especially in its early stages, when the company's success depends on a technology being developed or not.

Besides the structure of a particular industry, experience and much of the evidence from considerable research (e.g., the mentioned research on the financial crisis) points to the need to analyze in detail the organizational dynamics of each company individually and to answer specific questions, such as:

- Has the company articulated a mandate for the creation of long-term sustainable value (LTSV)? Is there a clear understanding of the expected "long-term" time horizon, e.g. five, ten, or twenty years?

- What is the ownership structure (i.e. the fraction of institutional, individual, and speculative investors)? Are key shareholders' investment horizons compatible with the LTSV time horizon?
- Have future market, strategic, and business scenarios been properly considered as a function of the risks that need to be taken under each scenario to achieve the stated LTSV?
- What are the most critical types and sizes of risk that company executives would be capable of taking in their current position (e.g. financial, operational, reputational, strategic, etc.)?
- Are these risks well communicated to and understood by the Board and the shareholders?
- Are executives and the Board in agreement about the roles and implications of equity-based compensation instruments like ESOs as they relate to the LTSV mandate?
- Are the ESOs' risk/reward consequences well understood in the context of the future scenarios considered?
- Is there a well-stated agreement that ESOs make sense given the circumstances?

This list of questions is not meant to be comprehensive, but it does provide an idea of the steps required to articulate a sensible, effective, and safe compensation policy that may or may not include ESOs. Our Equity Effectiveness framework outlines this process in greater detail. Ultimately the key message is that emotional judgment and formulaic approaches based on "rigorous-looking" but potentially misleading metrics should be used with due caution.

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