



# Director Notes



## Achieving Pay for Performance

by Stephen O'Byrne

Current views regarding the proper pay plan design to achieve pay for performance vary. This report discusses the three dimensions of pay for performance, demonstrates how to measure them using historical pay data, and presents a simple pay plan that achieves perfect pay for performance (PP4P) using annual grants of performance shares. It also highlights pay practices that weaken pay for performance and offers recommendations for directors to deepen their understanding of pay-for-performance issues.

While there is much discussion about linking executive pay to corporate performance, there is currently no consensus on the pay plan design needed to achieve it. For example, some observers believe that tying compensation to corporate strategy is essential, while others contend that a plan that provides for 50th percentile pay with substantial equity compensation subject to performance conditions is critical. Part of the difficulty in designing a performance-based pay plan stems from the use of poor measures of pay for performance. A common measure, the difference between management's pay percentile and the company's performance percentile, considers only the dollar value of pay relative to the company's peers. This measure implies that any pay plan design can achieve pay for performance as long as it leaves room for an end-of-period bonus that brings the pay percentile up to the performance percentile.

As discussed below, management pay alignment has changed little over the past 15 years and has plenty of room for improvement. At the median S&P 1500 company, relative performance explains only 41 percent of the variation in relative executive pay computed on a mark-to-market basis that takes into account changes in the value of unvested equity compensation. Director pay alignment has been more erratic and has even more room for improvement. Relative performance explains only 30 percent of the variation in relative pay at the median S&P 1500 company. This report presents a case study using past General Electric compensation to demonstrate how directors can analyze their own pay for performance to deepen their understanding of pay for performance issues. Finally, the three measures of pay for performance used in this report are contrasted with the three measures used by Institutional Shareholder Services (ISS).



## The Three Dimensions of Pay for Performance

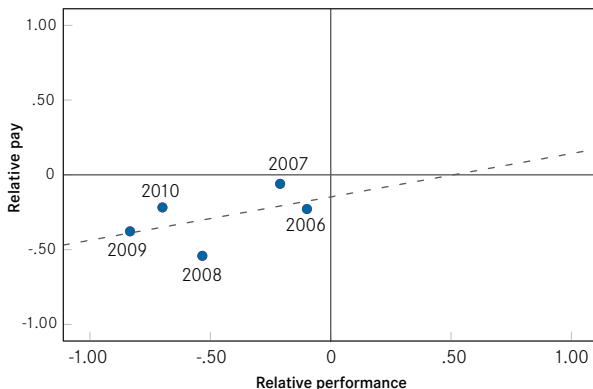
Pay sensitivity to performance has two dimensions: (1) the correlation, or alignment, of pay and performance and (2) pay leverage, or the ratio of percent change in pay to percent change in performance. However, these two measures do not provide a complete measure of pay for performance. Most investors would say that there is no pay for performance if pay for poor performance is far above market (even if correlation and leverage are high). Therefore, a more complete pay for performance measure requires three dimensions: alignment, leverage, and the pay premium at industry average performance.<sup>1</sup> It is easy to visualize these three dimensions by plotting relative pay against relative performance.

Chart 1 shows a scatterplot of relative pay against relative performance. The dashed line is the regression trendline, or line of best fit that expresses relative pay as a function of relative performance. The regression quantifies the three dimensions of pay for performance. The slope of the line measures incentive strength, or leverage, i.e., the ratio of relative pay change to relative performance change. The correlation of relative pay and relative performance measures alignment. Correlation is a quantitative measure of how closely the points track the line. The intercept, where the trendline crosses the center vertical axis, measures the pay premium at peer group average performance.

## Pay Measures and Measurement Periods

We can measure relative pay using either grant date pay or mark-to-market pay. Mark-to-market pay, also known as realizable pay, values equity compensation based on the stock price at the end of each measurement period. Mark-to-market pay provides a more comprehensive measure of pay leverage than grant date pay because it captures the incentive provided by changes in the value of unvested equity compensation.<sup>2</sup> To fully capture the incentive provided by changes in the value of unvested equity, we need to include measurement periods that extend to the length of the vesting period, typically three years. One approach is to measure relative mark-to-market pay for rolling three years periods, e.g., relative mark-to-market pay for 2010 is mark-to-market pay for 2008-2010 divided by peer company average mark-to-market pay for 2008-2010. A better approach is to measure relative mark-to-market pay for cumulative periods starting from the same base year. In Chart 1, 2007 would be relative mark-to-market pay for the one year 2007, 2008 would be relative mark-to-market pay for the two years 2007 and 2008, 2009 would be relative mark-to-market pay for the three years 2007-2009, 2010 would be relative mark-to-market pay for the four years 2007-2010, and 2011 would be relative mark-to-market pay for the five years 2007-2011. As shown below, designing a simple pay plan that provides perfect pay for performance measured from a fixed base year is far easier than designing one that provides perfect pay for performance measured from rolling base years.

Chart 1  
**Relative pay versus relative performance**



Source: Shareholder Value Advisors Inc., 2012

## The Big Picture: Changes in Leverage and Alignment Since 1996

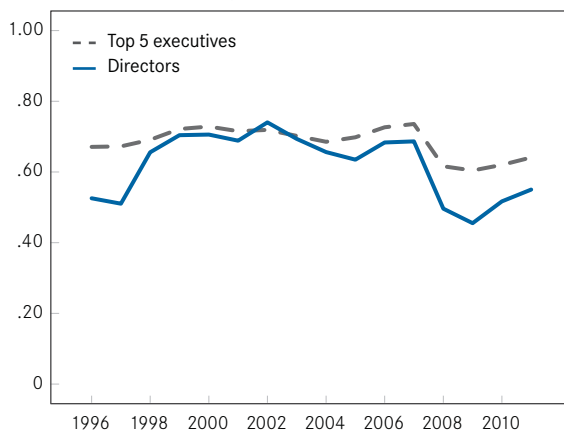
Chart 2 shows alignment, or the correlation of relative pay and relative performance, for the median S&P 1500 company by year. The value at each year is alignment for the five years ending in that year. Alignment for top five executives ranges from a high of 0.74 in the five years 2003-2007 to a low of 0.60 in the five years 2005-2009. Therefore, relative performance explained 55 percent of the variation in relative pay in the best five-year period (0.74 x 0.74) and 36 percent in the worst. Since the chart shows alignment for the median company, it implies that relative performance explained less than 36 percent of the variation in relative pay for almost half of S&P 1500 companies in 2005-2009.

For directors, relative performance explained 55 percent of the variation in relative pay in the best five-year period and 21 percent in the worst. Chart 2 shows that director pay alignment is more erratic than top-five executive pay alignment, and Chart 3 shows that director pay leverage is much more erratic than top-five executive pay leverage. Leverage, as shown below, is the percent change in

relative pay that results from a 1 percent change in relative performance. Leverage for top-five executives ranges from a high of 0.70 in the five years 2003-2007 to a low of 0.52 in the five years 2005-2009, a difference of 0.18. Leverage for directors ranges from a high of 0.69 in 2002-2006 to a low of 0.24 in 1992-1996, a difference of 0.45.

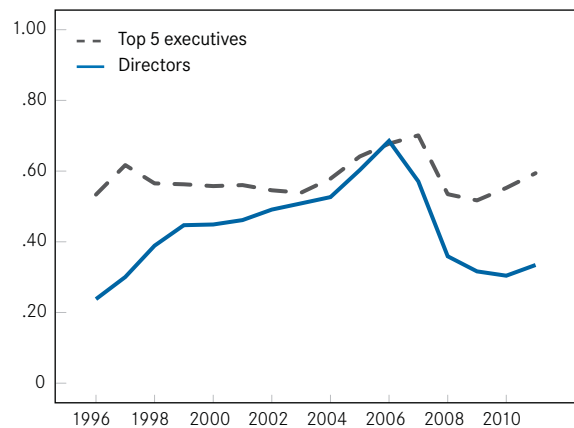
There is also a surprising lack of consistency between individual companies' top management pay alignment and leverage and their director pay alignment and leverage. Across the entire sample of companies, top management pay alignment explains only 13 percent of the variation in director pay alignment, and top management pay leverage explains only 14 percent of the variation in director pay leverage. The inconsistency between management and director alignment and leverage, as well as the greater variability of director alignment and leverage, suggests that directors rarely try to develop a common framework for evaluating both management and director pay for performance.

Chart 2  
**Median mark-to-market pay alignment**  
For S&P 1500 companies



Source: Shareholder Value Advisors Inc., 2012

Chart 3  
**Median mark-to-market pay leverage**  
For S&P 1500 companies



Source: Shareholder Value Advisors Inc., 2012

Directors could benefit from using a common framework because its application to director pay, which is much simpler in design than management pay, would deepen the directors' understanding of pay-for-performance issues and better equip them to tackle the more complex issues of management pay for performance.

## Director Pay for Performance at General Electric

The pay-for-performance analysis can be illustrated using director pay data for General Electric. Pay for performance analysis is simpler for directors than for managers because directors have fewer pay components and less complex incentives, but all the concepts and calculations in this report apply to top-five pay or CEO pay as well. GE is also an example of dramatic change in director pay alignment and leverage. For the last five full years of Jack Welch's tenure as CEO, 1996-2000, director pay alignment was 0.98 and director pay leverage was 1.28, i.e., a 1 percent increase in relative performance increased relative director pay, on a mark-to-market basis, by 1.28 percent. Ten years later, the five years 2006-2010, GE director pay alignment was 0.50 and pay leverage was 0.29, i.e., a 1 percent increase in relative performance increased relative director pay by 0.29 percent.

### GE Director Pay 1996-2000

In 1996, GE directors received a cash retainer of \$50,000, meeting fees of \$1,400 per meeting, and an option grant of 18,000 shares exercisable at the market price at the date of grant. Based on nine meetings, total cash compensation was \$62,600. Including the Black-Scholes value of the option, \$51,090, total grant date compensation was \$113,690. Directors retiring from the board at age 65 or older with five or more years of service also received a joint life annuity in the amount of the annual retainer, but GE did not estimate the expected value of this benefit for the average director, and it is excluded from the compensation totals and pay-for-performance analysis. In 2000, GE directors received a retainer of \$75,000 with half paid in stock, meeting fees of \$2,000 per meeting, and an option grant on 18,000 shares exercisable at the market price at the date of grant. Based on 10 meetings, total cash compensation was \$57,500 (\$37,500 + 10 x \$2,000). Including the value of the stock and options, grant date compensation was \$393,770. Mark-to-market pay adjusts the value of the stock and option grants to reflect year-end prices. Cumulative mark-to-market pay for the average director was \$149,000 at the end of 1996 and \$2,574,000 at the end of 2000.

### GE Director Pay 2006-2010

In 2006, annual director compensation was \$250,000 with 40 percent paid in cash and 60 percent paid in deferred stock units. Directors could defer some or all of their cash compensation in additional deferred stock units, members of the audit and MDCC committees received 10 percent additional compensation, and all directors were eligible to participate in benefit programs providing for discounted product purchases and charitable gift assistance. Including the value of the benefits program, average grant date compensation was \$364,000. In 2010, annual director compensation was still \$250,000 with the same deferral and benefit programs. Including the value of the benefits program, average grant date compensation was \$367,000. Cumulative mark-to-market pay for the average director was \$263,000 at the end of 2006 and \$1,331,000 at the end of 2010.

As shown below, a switch from fixed share option grants to dollar-denominated compensation targets causes a dramatic reduction in pay leverage. Despite its significance, GE made no mention of the change in pay leverage when it explained the rationale for the changes in director compensation it adopted at the start of 2003. The company noted that the new program was "comparable in value to the old program" based on the value of an 18,000-share option grant at the time the new program was approved.<sup>3</sup> GE's board expressed its belief that deferred stock units "more closely align the directors' interests with the long-term interests of shareowners," but offered no explanation for the decision to adopt dollar-denominated targets for stock compensation rather than fixed share targets.

## The Peer Group Used to Measure Relative Pay and Performance at GE

To calculate the relative pay values used in the management and director pay-for-performance analyses in this report, we need to identify a peer group for each company and calculate competitive compensation. We start with a company's Global Industry Classification Standard industry (also called its six-digit GICS category) and select the companies closest in size to the subject company, similar to the ISS peer group selection process. Up to a total of 24 peer companies are added if they are all within the GICS industry. If there are fewer than 24 but at least 14 peer companies, the peer group is complete.

If there are fewer than 14 companies, the industry group (the four-digit GICS category) is used to select companies closest in size, and then the sector (the two-digit GICS category) is used, until there are 14 peer companies. No size restriction is placed on the companies, because a regression trendline is used to statistically adjust for differences in company revenue size.

For GE in 2010, this process results in a peer group with five companies from GE's industry, Industrial Conglomerates (201050)—3M, Tyco, Danaher, Carlisle and Standex—and nine companies from GE's industry group, Capital Goods (2010)—Boeing, United Technologies, Lockheed Martin, Caterpillar, Northrup Grumman, Honeywell, General Dynamics, Deere, and Raytheon. Analyzing peer group director pay for the prior four years (so market pay can be determined before year end), company revenue size explains 38 percent of the variation in director grant date pay with no time trend. Using the regression trendline,  $[\ln(\text{pay in } \$000) = 2.938 + 0.231 \times \ln(\text{revenue in } \$\text{mil})]$  and GE's 2010 revenue of \$149 billion, we get market director pay of \$296,000. Cumulative market director grant date pay for the five years from 2006 to 2010 is \$1.504 million.<sup>4</sup>

## Measures of Relative Pay and Relative Performance

If cumulative director market grant date pay is used to compute relative pay, i.e.,  $\text{relative pay} = \text{cumulative mark-to-market pay} / \text{cumulative market grant date pay}$ , relative pay will normally be biased upward because the numerator includes stock appreciation but the denominator doesn't. If cumulative director market mark-to-market pay is used to compute relative pay, i.e.,  $\text{relative pay} = \text{cumulative mark-to-market pay} / \text{cumulative market mark-to-market pay}$ , relative pay is unbiased but perfect pay for performance is distorted because cumulative market mark-to-market pay will reflect the actual industry return over the five-year measurement period. For GE, the industry return is +195 percent for the five years 1993 to 1997, but 0 percent for the five years 1998-2002. Since most companies grant stock and options with no vesting adjustment for industry performance, most companies reward the industry return as generously as they reward their own excess return. This means that market mark-to-market pay will be much higher, relative to grant date pay, in periods of high industry returns, e.g., 1993-1997, than in periods of low industry returns, e.g., 1998-2002.

Calculating relative pay with market mark-to-market pay implies that perfect pay for performance (i.e., having relative pay track relative performance) can't be achieved without matching the peer company pay impact of the actual industry return. This implies that pay can only track the excess return if it also rewards the industry return, but that makes no sense.

A better solution is to compute relative pay using cumulative director market grant-date pay adjusted for the expected industry return. Using management pay data for 19,000 five-year periods ending in 1996-2011, the median difference between cumulative mark-to-market pay and cumulative grant date pay is 10 percent. This is also the differential over five years if we assume that 50 percent of pay is in stock granted at the end of the year, and the stock appreciates at 9 percent a year. The cumulative market grant date pay is increased by 10 percent to adjust for the expected industry return.

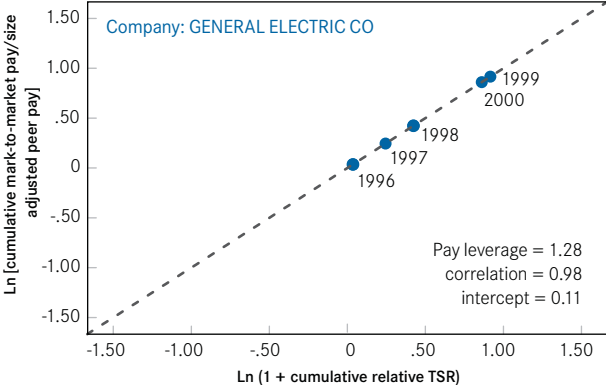
The measure of relative performance is GE shareholder wealth divided by GE's shareholder wealth assuming the median peer group performance. For example, at the end of 2010, GE shareholder wealth had declined to 64 percent of its value at the start of 2006, while median peer company wealth had increased to 128 percent of its value at the start of 2006. This implies that GE's relative shareholder wealth ratio is 0.50 (0.64/1.28). This wealth ratio can also be expressed as  $1 + \text{cumulative relative TSR} = 1 + -50 \text{ percent}$ .

The pay-for-performance charts below plot the natural log of relative pay on the vertical axis against the natural log of relative performance on the horizontal axis. A simple example with two scenarios shows why log relative pay is used rather than relative pay itself. In both scenarios, relative pay improves from 110 percent to 150 percent, a difference of 40 percentage points. In Scenario A, relative performance improves from 110 percent to 150 percent, a difference of 40 percentage points, while in Scenario B, relative performance improves from 50 percent to 90 percent, a difference of 40 percentage points. Looking at the ratio of change in relative pay to change in relative performance, in both scenarios, pay leverage is 1.0. However, when using log relative pay, the result for Scenario B is very different. The change in log relative pay is  $\ln(1.5) - \ln(1.1) = \ln(1.5/1.1) = .31$ , while the change in log relative performance is  $\ln(0.9) - \ln(0.5) = \ln(0.9/0.5) = .59$ . This implies that pay leverage is 0.53 (.31/.59), not 1.00, and this is the correct result. Shareholders have increased their wealth from 50 to 90, an increase of 80 percent, while directors have increased their pay from 110 to 150, an increase of only 36 percent. For small values of  $x$ ,  $\ln(1 + x)$  is close to  $x$ , e.g.,  $\ln(1 + .01) = .00995$ , so the ratio of the changes in log relative pay is very close to the ratio of the percent change in relative pay to the percent change in relative performance. Thus, we can fairly say that pay leverage of  $x$  means that a 1 percent change in relative performance causes an  $x$  percent change in relative pay.

Chart 4 shows the pay-for-performance analysis for GE directors for the five years ending in 2000. Chart 5 shows the same analysis for the five years ending in 2010. The charts show that director pay leverage and alignment has declined dramatically over the last 10 years. A 1 percent change in relative shareholder wealth increased director pay by 1.28 percent in 1996 to 2000, but by only 0.29 percent in 2006-2010, a decline of almost 80 percent. Relative performance explained 96 percent (.98 x .98) of the variation in relative director pay in 1996-2000, but only 25 percent of the variation in 2006-2010, a decline of almost 75 percent. The decline in director pay leverage and alignment at GE is much greater than average for S&P 1500 companies. For the median S&P 1500 company, director pay leverage dropped from 0.45 in 2000 to 0.30 in 2010 and alignment dropped from 0.71 to 0.52.

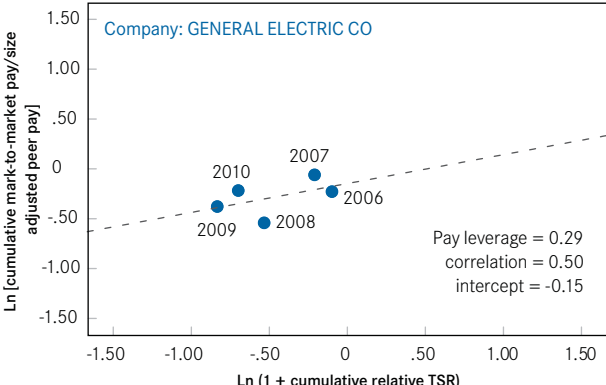
One very significant change in GE director pay is the shift from fixed share option grants to dollar-denominated compensation targets. Fixed share grants make grant-date pay value go up and down with the stock price, while dollar compensation targets make grant-date pay value independent of the stock price. For cumulative pay over a five-year period to track cumulative performance, each year's pay must reflect both performance prior to that year and performance subsequent to that year. With a fixed share grant, the grant-date value reflects stock performance prior to the year and the post-grant change in value reflects performance subsequent to the grant date and grant year. With dollar compensation targets, the grant-date value is unaffected by stock performance prior to the year, hence cumulative pay will be less sensitive to cumulative performance than with fixed share equity compensation.

Chart 4  
**Relative mark-to-market pay versus relative performance**



Source: Shareholder Value Advisors Inc., 2012

Chart 5  
**Relative mark-to-market pay versus relative performance**



Source: Shareholder Value Advisors Inc., 2012

## A Simple Pay Plan That Provides Perfect Pay for Performance (PP4P)

The factors that undermine leverage and alignment are best understood by designing a simple performance share plan that achieves perfect alignment, zero relative cost, and leverage of 1.0, and then modifying the plan in a series of changes that reduce alignment and leverage to median levels. The PP4P plan has two critical features. First, the grant value of the annual performance share grant is equal to market total compensation adjusted for relative performance since the start of the five-year measurement period. Second, each performance share grant vests at the end of the fifth year with a vesting multiple equal to  $1/(1 + \text{the industry return since the date of grant})$ . For simplicity, assume that the performance share grant is made at the end of each year, and that GE pays no dividends (i.e., the actual GE stock price is adjusted to include re-invested dividends since 2006).

Chart 6 shows the calculation of the performance shares granted at the end of each year. For example, market compensation in 2008 is \$308,000. To calculate target compensation, one must adjust for the expected industry return and for relative performance since 2005. Multiply by 10 percent to adjust for the expected industry return, and multiply by the relative wealth ratio, 0.59, to adjust for relative performance since 2005. This results in target compensation of \$199,000 = \$308,000 x 110 percent x 0.59. Dividing by the stock price (adjusted for dividends) of \$18.12, results in a stock grant of 10,976 shares. These calculations assume target pay leverage of 1.0. If target pay leverage is different from 1.0, multiply by the relative wealth ratio raised to the target pay leverage power. For example, if target pay leverage were 0.29, target compensation would be \$290,000 = \$308,000 x 110 percent x  $0.59^{0.29}$ .

Chart 6

### Calculation of target compensation and stock grant shares

| Year | Market compensation (\$000) | Stock value | Company cumulative wealth ratio | Peer group cumulative wealth ratio | Company relative wealth ratio | Premium for loss of expected industry return | Target compensation (\$000) | Stock grant shares |
|------|-----------------------------|-------------|---------------------------------|------------------------------------|-------------------------------|--|-----------------------------|--------------------|
| 2005 |                             | 35.05       | 1.00                            | 1.00                               |                               |  |                             |                    |
| 2006 | 300                         | 38.33       | 1.09                            | 1.21                               | 0.91                          | 10%  | 299                         | 7.799              |
| 2007 | 304                         | 39.36       | 1.12                            | 1.39                               | 0.81                          | 10   | 271                         | 6.877              |
| 2008 | 308                         | 18.12       | 0.52                            | 0.88                               | 0.59                          | 10   | 199                         | 10.976             |
| 2009 | 298                         | 17.91       | 0.51                            | 1.18                               | 0.43                          | 10   | 142                         | 7.943              |
| 2010 | 295                         | 22.27       | 0.64                            | 1.28                               | 0.50                          | 10   | 161                         | 7.235              |

Stock value is GE stock price with reinvested dividends; calculation of stock grant shares assumes stock price = stock value

Target compensation = market compensation x company relative wealth ratio<sup>target leverage</sup> x (1 + premium for loss of expected industry return)

Stock grant shares = target compensation divided by ending stock price

Source: Shareholder Value Advisors Inc., 2012

Chart 7 shows the vesting multiples and the calculation of the cumulative stock value year by year. The vesting multiple depends solely on industry, i.e., peer group, performance since the date of grant. For example, when the 2008 grant is made at the end of 2008, the peer group cumulative wealth ratio is 0.88. At the end of 2010, the peer group cumulative wealth ratio is 1.28. This implies that the peer group return from the end of 2008 to the end of 2010 is  $(1.28/0.88) - 1 = 0.45$ . This makes the vesting multiple  $0.69 = 1 / (1 + 0.45)$ . The rationale

for the vesting multiple is that it strips out the industry component of the stock return, leaving just the excess return.  $(1 + \text{excess return})$  is equal to  $(1 + \text{stock return}) / (1 + \text{industry return}) = \text{stock value} / (1 + \text{industry return})$ . When stock value is multiplied by the vesting multiple, the result is  $\text{stock value} / (1 + \text{industry return}) = 1 + \text{excess return}$ . This vesting multiple calculation is for target pay leverage of 1.0. When target pay leverage differs from 1.0, a slightly more complicated formula is used for the vesting multiple.\*

Chart 7

### Calculation of vesting multiples

| Year | Stock grant shares (000s) | Projected vesting multiple 2006 | Projected vesting multiple 2007 | Projected vesting multiple 2008 | Projected vesting multiple 2009 | Projected vesting multiple 2010 |
|------|---------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|
| 2005 |                           |                                 |                                 |                                 |                                 |                                 |
| 2006 | 7.799                     | 1.00                            | 0.87                            | 1.37                            | 1.03                            | 0.94                            |
| 2007 | 6.877                     |                                 | 1.00                            | 1.57                            | 1.18                            | 1.08                            |
| 2008 | 10.976                    |                                 |                                 | 1.00                            | 0.75                            | 0.69                            |
| 2009 | 7.943                     |                                 |                                 |                                 | 1.00                            | 0.92                            |
| 2010 | 7.235                     |                                 |                                 |                                 |                                 | 1.00                            |

|   |  |       |       |       |       |       |
|---|--|-------|-------|-------|-------|-------|
| Stock price                             |  | 38.33 | 39.36 | 18.12 | 17.91 | 22.27 |
| Stock value                             |  | 299   | 538   | 588   | 578   | 822   |
| Cumulative adjusted market compensation |  | 330   | 664   | 1,003 | 1,331 | 1,655 |
| GE relative wealth ratio                |  | 0.906 | 0.810 | 0.587 | 0.434 | 0.497 |

Projected vesting multiple =  $1 / (1 + \text{peer group return})$

Stock value = shares x price x vesting multiple

Since  $1 + \text{relative TSR} = (1 + \text{TSR}) / (1 + \text{peer group return})$ , the vesting stock value is equal to initial stock value x  $(1 + \text{relative TSR})$ ; this means that the vesting stock value will perfectly track relative TSR from the date of grant forward.

Adjusted market compensation is market compensation plus 10 percent to recognize the expected industry return on equity compensation.

Source: Shareholder Value Advisors Inc., 2012

\* Vesting multiple =  $(1 + \text{TSR})^{(\text{target leverage} - 1)} \times 1 / [(1 + \text{peer group return})^{\text{target leverage}}]$ .



Chart 8 shows the pay-for-performance analysis for the PP4P plan with leverage of 1.0. Chart 9 shows the same analysis for the PP4P plan with leverage of 0.29. With PP4P and target leverage of 1.0, the cumulative mark-to-market pay of a GE director would be \$0.822 million (see Chart 7), or about 38 percent less than actual GE director mark-to-market pay of \$1.331 million. With PP4P and target leverage of 0.29, the cumulative mark-to-market pay of a GE director would be \$1.351 million, or about 1 percent more than actual GE director mark-to-market pay of \$1.331 million. Cumulative mark-to-market pay under the PP4P plan can always be expressed as cumulative market compensation  $\times$  (1 + expected industry return)  $\times$  relative wealth ratio<sup>target pay leverage</sup>. With target pay leverage of 1.0, this is \$0.822 million = \$1.504 million  $\times$  1.1  $\times$  (0.50<sup>1</sup>). With target pay leverage of 0.29, cumulative mark-to-market pay is \$1.351 million = \$1.504 million  $\times$  1.1  $\times$  (0.50<sup>0.29</sup>).

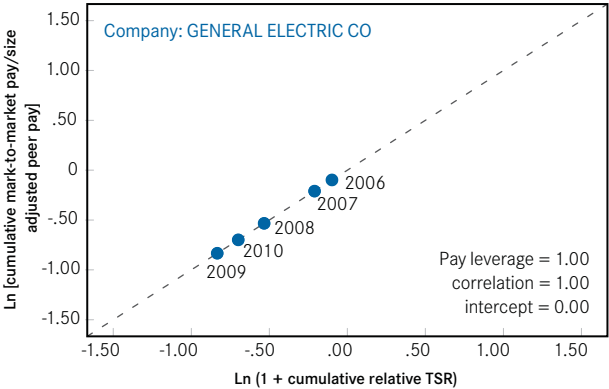
From this example, one can see that leverage must be determined in order to make a judgment that managers or directors are overpaid for their company's performance. If target leverage for GE directors is 1.00 or the 1.28 leverage of 1996-2000, then GE has not only failed to achieve its target leverage, but it has also allowed substantial overpayment for the company's performance. But if target leverage for GE directors is the average leverage of 2006-2010, 0.29, then GE director compensation is perfectly appropriate for the company's performance. However, it is clearly a shortcoming of GE director compensation that alignment has fallen from 0.98 to 0.50. The following is an analysis of the pay plan characteristics than undermine alignment and leverage.

### How Actual Pay Differs from Perfect Pay for Performance

Four factors largely explain why actual alignment and leverage is far less than 1.00: Paying market compensation regardless of past performance, paying cash compensation, stock compensation that is independent of industry performance, and inconsistent leverage from year to year. To demonstrate the impact of these factors, we first simulate a PP4P plan for every five-year period for each of the companies in Standard & Poor's Execucomp database, which includes top management and director compensation data for S&P 1500 companies going back to 1992. Limiting the sample to companies with at least 14 peer companies gives a total of 2,238 companies and 16,643 five-year periods. Each of these simulated plans has leverage of 1.00, alignment of 1.00, and relative cost of 0. We then change a feature of the simulated plan and calculate leverage and alignment. We use the changes in median leverage and alignment across all 16,643 five-year periods to measure the impact of each change.

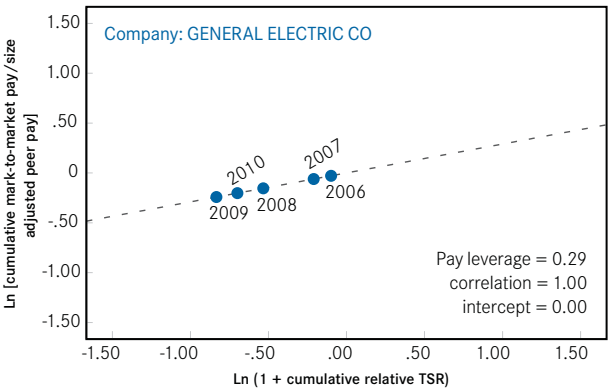
Two of the four factors, paying market compensation regardless of past performance and paying cash compensation, significantly reduce leverage but have a very modest effect on alignment. The other two factors, stock vesting that is independent of industry performance and inconsistent leverage from year to year, significantly reduce alignment but have a very modest effect on leverage. Paying market compensation regardless of past performance only reduces median alignment from 1.00 to 0.96, but it reduces median leverage from 1.00 to 0.62. Paying 52 percent of total compensation in cash (the director average for 2011) causes no further reduction in alignment, but reduces leverage from 0.62 to 0.31.

Chart 8  
Relative mark-to-market pay versus relative performance



Source: Shareholder Value Advisors Inc., 2012

Chart 9  
Relative mark-to-market pay versus relative performance



Source: Shareholder Value Advisors Inc., 2012

This is close to median actual director leverage in 2011, 0.33. Making stock compensation independent of industry performance has no significant effect on leverage, but reduces median alignment from 0.96 to 0.73. Inconsistent leverage also has no significant effect on median leverage, but reduces median alignment from 0.73 to 0.58. This is close to median actual director alignment in 2011, 0.55.

## The ISS Pay-for-Performance Model

The ISS Pay-for-Performance Model differs from the analysis represented in this report in six ways:

- ISS uses grant-date pay, not mark-to-market pay, to assess pay for performance.
- ISS limits the peer group to companies within a narrow size range of the subject company and uses simple median pay rather than size-adjusted pay to measure relative pay.
- ISS uses the difference between performance percentile and pay percentile to measure pay leverage.
- ISS uses the difference between two regression slopes to measure pay alignment.
- ISS measures compensation cost without adjusting for performance.
- ISS fails to provide examples of simple pay plans that achieve perfect pay for performance.

The three ISS measures of pay for performance, relative degree of alignment (RDA), pay-TSR alignment (PTA), and multiple of median (MOM), are poor proxies for leverage, alignment, and relative cost. To demonstrate this, we constructed peer groups for the S&P 1500 companies using the ISS peer group construction rules, calculated leverage, alignment, and relative cost with grant-date pay, and then compared our pay-for-performance measures with the ISS measures.

RDA is the difference between the CEO's average performance percentile and his or her average pay percentile, based on data for the last year and the last three years. The underlying premise of the RDA, i.e., that a company's pay percentile

should equal its performance percentile, implies a pay leverage target, and hence, RDA is an effort to measure deviation from target pay leverage. When the correlations between RDA and the three dimensions of pay for performance are analyzed using the pay leverage regressions for 15,860 five-year periods,<sup>5</sup> RDA has correlations of -.02 with pay leverage, -.01 with pay alignment, and -.45 with the pay premium at peer company average performance. This implies that RDA is not a meaningful measure of leverage or alignment, and simply adds additional weight to compensation cost as an ISS concern.

PTA is the difference between a five-year shareholder wealth growth rate and a five-year CEO pay growth rate, both estimated from regressions using time as the independent variable. The objective of PTA is to measure whether pay and TSR are "directionally aligned."<sup>6</sup> Since correlation measures the degree to which two measures move in the same direction without regard to the absolute magnitude of each measure, it is fair to assess PTA as an effort to estimate correlation. PTA is poorly correlated with all three dimensions of pay for performance. Using the same sample of 15,860 pay leverage regressions, PTA has correlations of .02 with pay leverage, .02 with pay alignment, and .10 with the pay premium at peer company average performance.

The multiple of median (MOM) is the CEO's total compensation for the most recent year, expressed as a multiple of the peer group median total compensation for the year. The MOM is clearly a relative cost measure, albeit one that does not adjust for performance. The MOM has a correlation of 0.46 with the pay premium at peer company average performance. The correlation with the pay premium at peer company average performance would be higher if the MOM were not based on just one year of data. If the MOM were calculated using three years of data, it would have a correlation of 0.59 with the pay premium at peer company average performance.

This analysis shows that the three ISS measures are really cost, a proxy for cost, and a third measure that is not correlated with any dimension of pay for performance.

## Conclusion

A simple pay plan using annual performance share grants can achieve perfect pay for performance (PP4P), demonstrating that there is no technical obstacle that prevents companies from achieving higher levels of pay for performance. At the median S&P 1500 company, relative performance explains only 41 percent of the variation in relative management pay and only 30 percent of the variation in relative director pay, but these percentages could be raised to 100 percent using the PP4P plan.

Directors should use the three dimensions of pay for performance—leverage, alignment, and relative cost—as a common framework for evaluating both management and director pay. Explicit focus on director pay for performance will deepen directors' understanding of pay-for-performance issues and better equip them to tackle the more complex issues of management pay for performance.

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### Endnotes

- 1 Stephen O'Byrne, "Assessing Pay for Performance," *Director Notes*, The Conference Board, October 2011.
- 2 The mark-to-market pay analyses of S&P 1500 companies referenced in this report also take account of the expected vesting of performance share and performance cash awards.
- 3 General Electric Co., 2003 proxy statement, p. 16 ([http://www.ge.com/pdf/investors/financial\\_reporting/proxy\\_statements/ge\\_2003proxy.pdf](http://www.ge.com/pdf/investors/financial_reporting/proxy_statements/ge_2003proxy.pdf)).
- 4 Market pay was higher prior to 2010 because revenue was higher. For example, market pay was \$308,000 in 2008 since revenue was \$181 billion.
- 5 The sample for the ISS analysis is smaller than the sample used earlier in this report because some companies don't have ISS peer groups. This is because fewer than 14 companies satisfy the ISS size restrictions.
- 6 Gary Hewitt and Carol Bowie, "Evaluating Pay for Performance Alignment: ISS' Quantitative and Qualitative Approach," December 20, 2011, p. 7, available at [www.issgovernance.com](http://www.issgovernance.com).



## About the Author

**Stephen O'Byrne** is the president and co-founder of Shareholder Value Advisors, a consulting firm that helps companies increase shareholder value through better performance measurement, incentive compensation and valuation analysis. He has done extensive research to measure the strength and cost-efficiency of top management incentives.

## About Director Notes

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