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Measuring and Improving Pay for Performance

Board Oversight of Executive Pay

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Executive pay in public and private for-profit companies has three basic objectives: provide strong incentives to increase shareholder value, retain key talent, and limit the cost of executive pay to levels that will maximize the wealth of existing shareholders. The key responsibility of the board is to ensure that the company's executive pay program achieves the three basic objectives of executive pay.

In this chapter, I will argue that:

- The board cannot effectively discharge its responsibility without meaningful measures of incentive strength, that is, pay sensitivity to performance, and the pay premium at peer group average performance, what we call performance adjusted cost.
- The measures commonly used for board oversight of executive pay—percent of pay at risk and competitive position—are very poor proxies for incentive strength and performance-adjusted cost.
- There is a simple, but very informative, analysis that provides measures of incentive strength and performance-adjusted cost that can be used for

benchmarking and, more importantly, to understand the pay-plan design needed to achieve perfect pay for performance.

The chapter is organized in the following sections:

- The three basic objectives of executive pay.
- A brief history of executive pay.
- Why percent of pay at risk is not a meaningful measure of incentive strength.
- Measuring the three basic objectives of executive pay.
- The design implications of the measurement analysis: perfect pay plans.
- Benchmarking pay for performance against peers.
- Why say-on-pay approval rates are so high.
- Why the guidance from CalPERS, NACD, ICGN, and ISS is not very helpful to directors.
- The challenge facing the individual director.
- Conclusion.

The Three Basic Objectives of Executive Pay

There is little disagreement that the key objectives of executive pay are providing strong incentives, retaining key talent, and limiting shareholder cost. Virtually every public company's proxy statement mentions performance incentives and retention as key compensation objectives. Limiting shareholder cost is rarely mentioned as an explicit objective, but is an implicit objective for every company. For example, Dow Chemical's four primary compensation objectives include "motivate and reward executives when they deliver desired business results and stockholder value" and "attract and retain the most talented executives to succeed in today's competitive marketplace." Dow's other two objectives are just means of achieving strong shareholder incentives.¹ Dow limits shareholder cost by targeting the median of its survey peer group, but its stated rationale for targeting the median is "to attract, motivate, develop, and retain top level executive talent."

A Brief History of Executive Pay

While the basic objectives of executive pay have never really changed, the common approach to executive pay is much different now than it was in the first half of the

twentieth century. In the first half of the twentieth century, management incentive plans were largely value-sharing plans that provided strong incentives and controlled shareholder cost, but led to retention problems if a company did not build up an adequate bonus reserve in good times to maintain relatively competitive pay in bad times. The incentive plan adopted by General Motors in 1922 illustrates the common approach in the first half of the twentieth century. The plan made the total incentive pool equal to 10 percent of profit in excess of 7 percent of book capital. The pool covered all incentive compensation, both cash and stock, for all management employees at General Motors. The management share and threshold return were maintained without any change for 25 years. The plan was a management–investor partnership that provided a minimum return to employees (base salary) until investors also achieved a minimum return (7 percent of capital) and then shared the excess return in fixed proportions (10 percent to management and 90 percent to investors).

The General Motors plan is an economic value added (EVA)² or economic profit sharing plan. A 1936 study by Harvard Business School professor George Baker found that 18 of 22 companies studied had similar plans.³ A plan with this structure provides a strong incentive as long as the management share is fixed and sufficiently large to provide bonuses that are significant relative to base salary. The fixed share means that management can only gain by increasing economic profit, not by stealing share from investors. At General Motors, bonuses were significant relative to base salary. In 1947, for example, GM president Charles E. Wilson was awarded a bonus equal to 177 percent of his salary.⁴ An economic profit sharing plan also controls shareholder cost because the sharing percentage is fixed.

The big challenge for an economic profit sharing plan is limiting retention risk. To be able to provide relatively competitive pay in bad times, a company needs to build up a bonus reserve in good times. Failure to maintain an adequate reserve led to the demise of the management–investor partnership at General Motors in 1977. In that year, the company abandoned the single pool concept by establishing a separate reserve for stock option grants. Previously, stock option grants had been charged against the bonus reserve. The company's proxy statement said "the fact that options could only be granted in relation to bonus awards places GM's plan at a distinct disadvantage compared with option plans at other firms. This is particularly true in years of minimum, or no, bonuses when added incentive for management is needed and stock market conditions are favorable for long-term appreciation."⁵

The second half of the twentieth century saw the rise of modern human resource management and increased focus on measures of job value and competitive pay. The Hay Guide Chart for job evaluation was standardized

in 1951 and the American Management Association began regular surveys of executive pay in 1950. Increasingly, management incentive plans were based on target pay levels defined in dollars and derived from labor market analysis.

There is now a widely held belief that an executive pay plan that provides competitive pay with a high percent of pay at risk achieves the three basic objectives of executive pay. The high percent of pay at risk ensures that the plan provides a strong incentive. The competitive position target, for example, fiftieth percentile pay, limits retention risk by ensuring that target pay levels do not fall below competitive levels and limits shareholder cost by ensuring that target pay levels do not rise above competitive levels. Explicit discussion of total compensation sensitivity to performance is extremely rare, but it's common to see graphs showing the CEO's percent of pay at risk. For example, Johnson & Johnson's 2015 discussion of CEO performance and compensation includes only one graph and that graph is a pay-mix pie chart showing that the CEO's 2014 total compensation was 7 percent base salary, 18 percent annual performance bonus, and 75 percent long-term incentives.⁶

Why Percent of Pay at Risk Is Not a Meaningful Measure of Incentive Strength

The flaw in the conventional wisdom is that percent of pay at risk is not a meaningful measure of incentive strength. To see why, consider a simple pay plan that provides an annual stock grant with a value equal to competitive compensation. Since 100 percent of pay is in stock, this pay plan should provide consistently strong incentives. Let's assume that the stock price is \$50 and competitive compensation is \$4 million, so the first year's grant is 80,000 shares. The problem with this plan—and the reason it fails to provide consistently strong incentives—is that it creates a systematic performance penalty. Poor performance leads to more shares, while superior performance leads to fewer shares. If the stock price drops to \$10, the annual grant must be increased to 400,000 shares to provide competitive pay of \$4 million, while if the stock price quadruples to \$200, the grant must be reduced to 20,000 to keep pay at a competitive level.

With normal stock price volatility, the competitive pay promise leads to widely varied stock grant shares, and hence, widely different rewards for the same cumulative performance. In a 2013 paper, Mark Gressle and I took this simple example and simulated 1,000 scenarios of five annual grants providing competitive pay of \$4 million for a company with median S&P 1500 stock volatility.⁷ We found that total grant shares at the seventy-fifth percentile were 76 percent more than total grant shares at the twenty-fifth percentile, and that

total grant shares at the ninetieth percentile were 208 percent more than total grant shares at the tenth percentile. These wide variations in total grant shares lead, in turn, to wide variations in cumulative stock value for the same cumulative performance. For achieving shareholder wealth of \$80 at the end of 1Q year 6, cumulative stock value ranges from less than \$20 million at the tenth percentile to more than \$60 million at the ninetieth percentile. If pay plan uses at the money stock option grants instead of simple stock grants, the differences in cumulative value for the same cumulative performance are even more extreme, ranging from \$11 million at the tenth percentile to \$121 million at the ninetieth percentile, a difference of 11 times! When the reward for the same performance varies by a factor of 11 times, we can't possibly say that the pay plan—even though it has 100 percent of pay at risk—provides consistently strong incentives.

Measuring the Three Basic Objectives of Executive Pay

A useful measure of incentive strength should quantify the sensitivity of management pay to company performance. The analysis will be more meaningful to the extent it captures the sensitivity of pay to controllable company performance, that is company performance net of market and industry factors beyond management's control. The analysis will be more useful to the extent it provides an incentive strength measure that can be easily compared across companies. To see why this comparability is important, let's take a look at a pay analysis that doesn't have it—the pay for performance disclosure recommended by The Conference Board Working Group on Supplemental Pay Disclosure, shown in Exhibit 27.1.⁸

The Conference Board proposal has three major weaknesses. First, it fails to report the pay line equation. The equation of the line in Exhibit 27.1 is realizable pay = \$7.6 million + \$0.381 million x TSR (total shareholder return). Second, the graph makes no effort to isolate management's contribution to TSR by controlling for industry performance, for example, by using relative TSR as the performance measure. Third, the analysis is not designed to provide a measure of incentive strength that can be easily compared across companies. The slope of the line is a measure of incentive strength. It says that each one percentage-point increase in TSR increases realizable pay by \$381,000. But this measure of incentive strength can't be compared across companies without adjusting for differences in company size. For a small company, \$381,000 for an additional percentage point of TSR may be a strong incentive. For the Exxon CEO, who made \$33 million in 2014,⁹ \$381,000 for an additional percentage point of TSR

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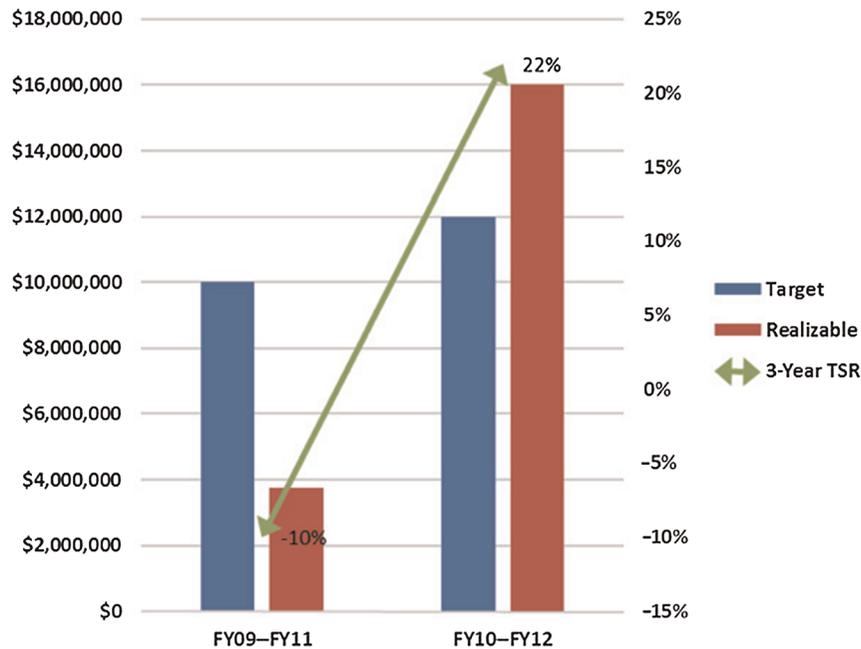


EXHIBIT 27.1 Target and Realizable Pay versus 3-Year TSR (Total Shareholder Return)

Source: The Conference Board, “2013 Report on Supplemental Pay Disclosure.”

is a very weak incentive. Exhibit 27.2 shows a much more useful analysis of incentive strength.

In this analysis, relative pay is plotted on the vertical axis against relative performance on the horizontal axis, and a regression trend line relating relative pay to relative performance is calculated (the dashed line). The slope of the trend line is a measure of incentive strength. It gives the change in relative pay associated with a one-unit change in relative performance. When relative pay and relative performance are plotted on a log scale, the slope of the trend line is the percent change in relative pay associated with a 1 percent change in relative performance. This is a measure of incentive strength that can be compared across companies without any need for size adjustment.

The graph provides three additional measures of pay effectiveness. The correlation of relative pay and relative performance is a measure of alignment. The intercept, which is where the trend line crosses the light blue vertical axis, is the pay premium at zero relative performance, that is, the pay premium at peer group average performance. This pay premium, on the negative side, is a measure of retention risk. The more pay for average performance falls below average pay, the greater is the likelihood that a capable executive can find a better paying job. The pay premium, on the positive side, is a measure of shareholder cost. The more pay for average performance rises above average pay, the greater

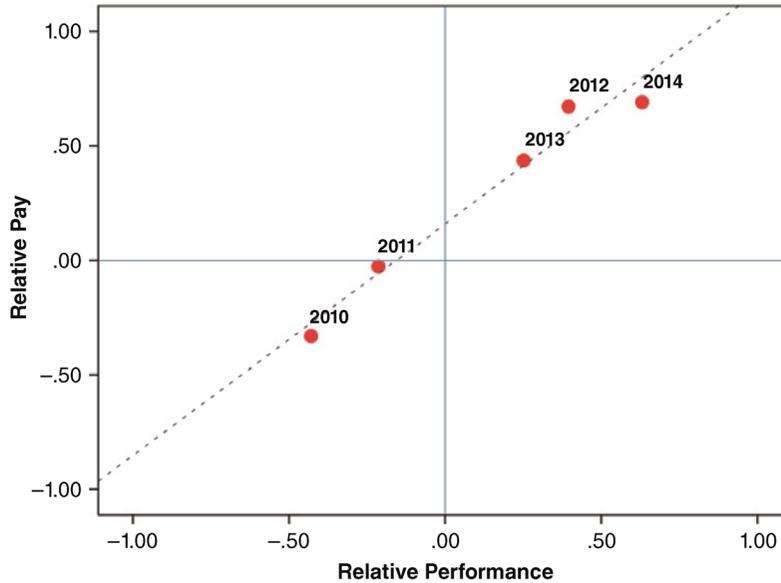


EXHIBIT 27.2 Relative Pay versus Relative Performance

Source: Shareholder Value Advisors.

is the burden of shareholder cost. The third measure of pay effectiveness is the ratio of the slope to the correlation. This ratio is the ratio of relative pay variability to relative performance variability, and hence provides a measure of pay risk. When relative pay is much more volatile than relative performance, pay is likely to provide an incentive to take excessive risk.

This simple graph provides a very flexible and powerful framework for measuring and improving pay for performance. It can be used with mark-to-market pay¹⁰ that captures the incentive provided by changes in the value of unvested equity compensation or it can be used with grant date pay. It can be used with market measures of performance, such as TSR, where relative performance is relative TSR. It can also be used with operating measures of performance, such as operating return,¹¹ where relative performance is operating return adjusted for either the company's ex-ante cost of capital or the average operating return of peer companies.

Exhibit 27.3 shows this analysis for Monsanto CEO Hugh Grant using mark-to-market pay data for the first nine years of his CEO tenure. In this graph, each data point represents cumulative pay and cumulative performance from the start of Grant's first year as CEO, 2004. The vertical axis is the natural logarithm of relative market to mark pay. The horizontal axis is the natural logarithm of (1 + relative TSR). The slope of the line, or what we call pay leverage, is 0.84. This means that 1 percent in relative shareholder wealth increases relative pay by 0.84 percent, on average. The squared correlation is 48

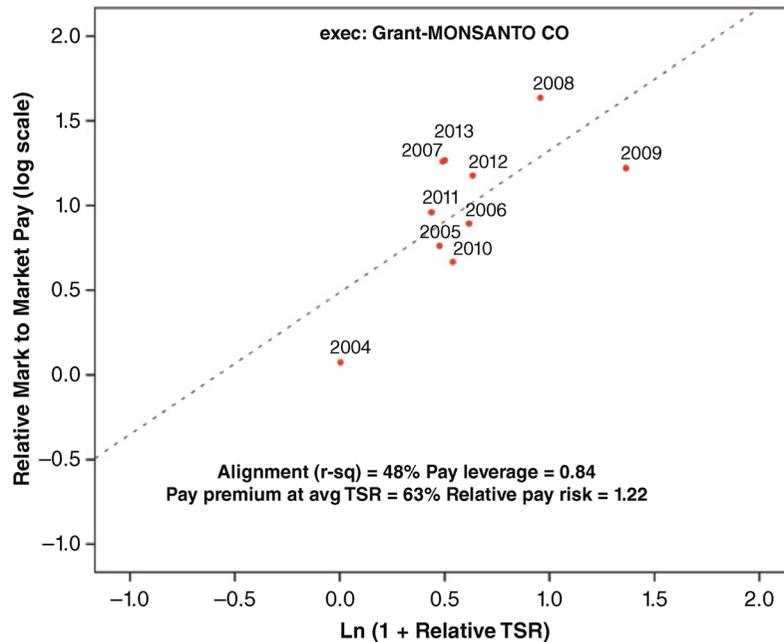


EXHIBIT 27.3 Relative Pay versus Relative Total Shareholder Return

Source: Shareholder Value Advisors.

percent. This means that relative performance explains 48 percent of the variation in relative pay over the nine measurement periods. The pay premium at peer group average performance, that is, zero relative TSR, is +63 percent. This means that Grant's pay, measured on a mark-to-market basis, is 63 percent above average when Monsanto's TSR matches the industry.

Mark-to-market pay for a period is cumulative pay with equity compensation valued at the end of period stock price (or vesting date stock price if earlier). Relative mark-to-market pay is mark-to-market pay for a period divided by cumulative market pay for period. Market pay is trend line grant date pay taking account of position, industry, and company size and adjusted for the expected accretion of equity compensation. For example, for Monsanto CEO Hugh Grant, the position is CEO, the industry is the materials industry group (GICS 1510), and company size is Monsanto's revenue size at the start of the nine-year period. We calculate market rates using company size at the start of the pay for performance analysis period rather than company size in each year of the analysis period. The expected accretion of equity compensation is the average percentage increase (for all company years in the database) in the value of equity compensation from date of grant through the end of the pay for performance analysis period.

Our calculation of market rates using initial, not current, sales and our use of expected, not actual, equity compensation values are both designed to provide

a better definition of perfect pay for performance. We define perfect pay for performance as a pay plan that provides a perfect correlation of relative pay and relative performance with a zero pay premium at peer group average performance. If we adjust market pay for annual sales growth, we build in the assumption that perfect pay requires pay increases for annual sales, not just relative TSR. If we use actual peer company mark-to-market pay, not grant date pay adjusted for expected accretion, we build in the assumption that perfect pay requires matching the peer companies' actual compensation for industry performance. Since the goal of perfect pay for performance is to pay for superior management performance, not industry performance, this makes no sense at all. It is appropriate, however, to say that perfect pay provide the expected accretion in equity compensation. Put another way, the expected future value of perfect pay needs to be competitive with the expected future value of market pay.

Relative TSR must take account of Monsanto's industry beta. A great deal of pay for performance analysis defines relative TSR as $[(1 + \text{TSR}) / (1 + \text{industry TSR})] - 1$. This calculation assumes that the company's industry beta is 1.0, that is, a 1 percent change in industry shareholder wealth will increase company shareholder wealth by 1.0 percent. That's a pretty good assumption for the median company because the median company has an industry beta of 0.95, but a poor assumption for many other companies. When we look at S&P 1500 companies and use GICS industry groups as peer groups, we find that 20 percent of companies have industry betas greater than 1.65, while another 20 percent have industry betas below 0.25. For about 10 percent of S&P 1500 companies, the GICS industry group is not a meaningful peer group because the industry beta is zero or negative. Exhibit 27.4 shows that Monsanto's industry beta is 2.38.

The Design Implications of the Measurement Analysis: Perfect Pay Plans

Once we develop a good way of measuring pay for performance, we can do two important things. We can ask, what is a perfect pay plan, that is, a plan that provides alignment of 1.0 with a zero pay premium at peer group average performance? And we can benchmark our pay for performance against our peers.

There is a simple performance share plan that provides perfect pay for performance. Exhibit 27.5 shows the math behind the plan design, using target pay leverage of 1.0. In the first year, the number of performance shares granted is equal to market compensation divided by the current stock price. Thus, in the first year, target compensation is equal to market compensation. In subsequent years, however, target compensation is market compensation

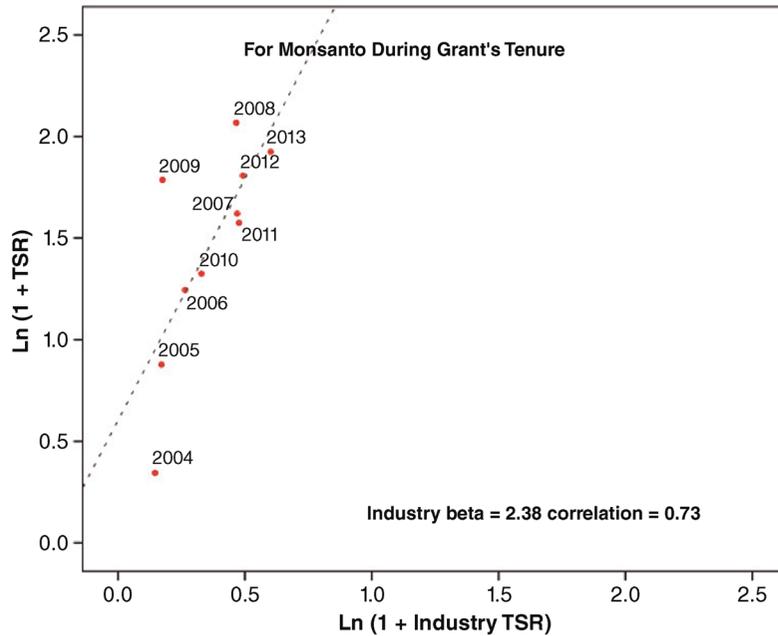


EXHIBIT 27.4 Company versus Industry Total Shareholder Return
 For Monsanto, relative TSR = $[(1 + \text{TSR}) / ((1 + \text{industry TSR})^{2.38})] - 1$.

adjusted for trailing relative performance, that is, target compensation = market compensation \times (1 + relative TSR). This ensures that every grant reflects relative performance up to the time of grant. To achieve perfect pay for performance, the value of every grant must also reflect relative performance after the time of grant. This is accomplished by the performance share vesting. The vesting provisions need to take out the industry component of the stock return, so that the vesting stock value only reflects relative TSR from the date of grant forward. This can be accomplished by making the vesting multiple inversely proportional to the industry return, as Exhibit 27.5 shows.¹² We can see that the vesting stock value from any year's grant is equal to market compensation for the year adjusted for relative performance over the CEO's

Target compensation	= market compensation \times (1 + relative TSR from start of CEO tenure to end of grant)
Performance shares granted	= target compensation / stock price
Vesting multiple	= $1 / (1 + \text{industry TSR from date of grant})$
Value of performance shares granted	= stock value \times vesting multiple
	= grant value \times (1 + TSR from date of grant) $\times 1 / (1 + \text{industry TSR from date of grant})$
	= grant value \times (1 + relative TSR from date of grant)
	= market compensation \times (1 + relative TSR from start of CEO tenure to date of grant) \times (1 + relative TSR from date of grant)
	= market compensation \times (1 + relative TSR from start of CEO tenure to end of measurement period)

EXHIBIT 27.5 The Math Behind the Perfect Performance Share Plan

entire tenure. A final component of the perfect pay for performance plan is that any nonperformance pay is treated as a draw against the value of the performance shares.

The perfect pay for performance plan helps us see that three widely accepted pay-plan features undermine pay for performance. First is the concept of fiftieth percentile pay regardless of past performance. The design of the perfect pay for performance plan shows that the concept of competitive pay regardless of past performance needs to be replaced by the concept of competitive pay for average performance. Second is the concept that vesting should leverage operating performance. The design of the perfect pay for performance plans shows that the role of vesting is to take out the industry component of the stock return, not to leverage operating performance. Third is the concept that nonperformance pay is an independent entitlement. Nonperformance pay, as well as any drawdown of the performance share value, must be treated as a draw against the value of the performance shares, not a separate entitlement.

If market compensation is constant, the perfect pay for performance pay plan, with pay leverage of 1.0, makes cumulative pay equal to cumulative market pay plus a fixed percentage of the cumulative dollar excess return, *which may be negative*. Exhibit 27.6 shows the derivation of the sharing formula.¹³

This expression for cumulative perfect pay shows that the perfect performance share plan integrates the two strands of executive pay history. It provides competitive pay *and* fixed sharing, so it is able to limit retention risk while still providing strong incentives.

Remarkably, there are two other perfect plans that also imply that perfect pay is equal to cumulative market compensation plus a fixed share of an excess return. One is the perfect fee structure for investment managers developed by

Value of performance shares granted	= market compensation x (1 + relative TSR from start of CEO tenure to end of measurement period)
Cumulative perfect pay	= cumulative market compensation x (1 + relative TSR)
	= initial grant shares x initial grant price x CEO years x (1 + relative TSR)
	= initial grant shares x initial grant price x CEO years x initial grant shares x initial grant price x CEO years x relative TSR)
	= cumulative market compensation + (CEO years x initial grant shares x initial grant price x relative TSR)
	= cumulative market compensation + (CEO years x initial grant shares x [shares outstanding] x shares outstanding x initial grant price x relative TSR)
	= cumulative market compensation + (CEO years x [initial grant shares / shares outstanding] x shares outstanding x initial grant price x relative TSR)
	= cumulative market compensation + (CEO years x [initial grant shares / shares outstanding] x dollar excess return)
	= cumulative market compensation + sharing percentage x dollar excess return

EXHIBIT 27.6 Perfect Pay Calculation: Derivation of Sharing Formula

Don Raymond, the chief investment strategist of the Canada Pension Plan Investment Board.¹⁴ The second is the Dynamic Incentive Account developed by finance professors Alex Edmans and Xavier Gabaix. Their paper was named best paper of 2009 by the Financial Research Association and was a finalist for the McKinsey/HBR management innovation of the year award.¹⁵

Benchmarking Pay for Performance

Pay alignment, performance adjusted cost, that is, the pay premium at industry average performance, and relative risk are well suited to benchmarking and ranking because they can be compared across companies without any need for industry or size adjustment and there is a high level of agreement about the ordinal ranking of each dimension. Few would dispute that more alignment is better than less alignment, that a larger positive pay premium is worse than a smaller positive pay premium or that a relative risk ratio well above 1.0 is worse than relative risk ratio closer to 1.0. By contrast, there is not a lot of agreement about an ordinal ranking of pay leverage. Some people feel that pay leverage of 1.25 is better than pay leverage of 0.75, while others feel that pay leverage of 1.25 is worse than pay leverage of 0.75.

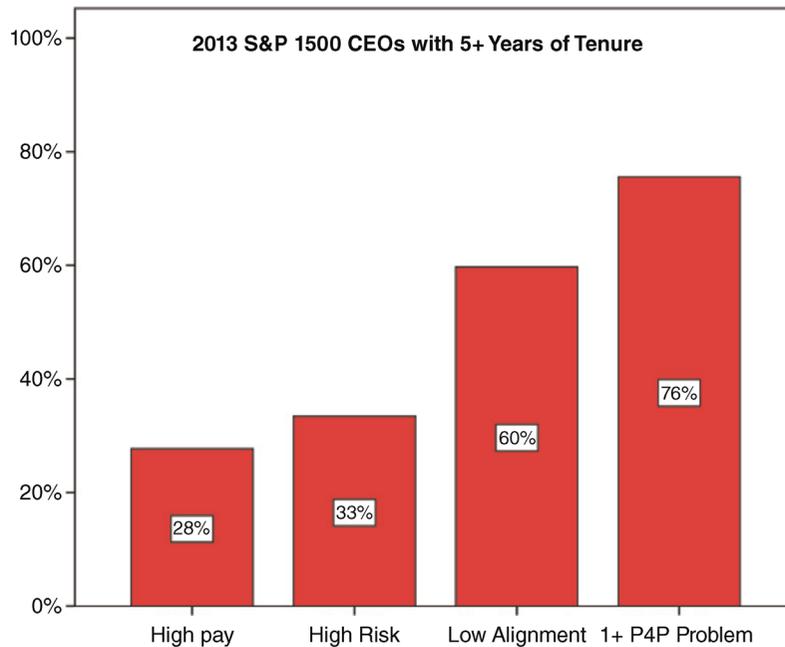


EXHIBIT 27.7 Pay for Performance Problems

Exhibit 25.7 shows the prevalence of pay for performance problems among S&P 1500 CEOs with 5+ years of CEO tenure in 2013. The three problems are low alignment, namely, where relative TSR explains less than 50 percent of the variation in relative pay, high pay, that is, where the pay premium at industry average performance is 50 percent or more; and high risk, that is, where relative pay variability is 50 percent or more greater than relative performance variability. Seventy-six percent of CEOs in 2013 had at least one of these three problems, although only 10 percent had all three.

Why Say On Pay Approval Rates Are So High

It is surprising, given this objective data on the prevalence of pay for performance problems, that approval rates on say on pay are so high. Research by the consulting firm Semler Brossy shows that the median approval rate for Russell 3000 companies in 2015 was 91 percent and that only 2.7 percent of companies failed to receive majority approval.¹⁶ Despite these high approval rates, a 2014 survey of 64 asset managers and owners with \$17 trillion in assets, conducted by the Rock Center for Corporate Governance at Stanford University, R.R. Donnelley, and Equilar, found that “only one-fifth (21 percent) of institutional investors believe that CEO compensation among companies in their portfolio is appropriate in size and structure.”¹⁷ One possible reconciliation of these two findings is that institutional investors believe that negative say on pay votes are ineffectual and costly. They are ineffectual because they are unlikely to change pay practices and they are costly because they are likely to annoy operating company clients of the institutional investor.

If institutional investors believe that say-on-pay votes are ineffectual, they would be unlikely to invest a lot of effort in making discriminating voting decisions. A 2014 study by Mark Van Clieaf of Organizational Capital Partners for the Investor Responsibility Research Center found evidence that institutional investors are not very discriminating in their say-on-pay votes. Van Clieaf divided a sample of 128 S&P companies into performance quartiles based on relative TSR and economic profit. The top quartile had a median relative TSR of 24 percent, a median return on capital of 16 percent, and aggregate economic profit growth of \$88 billion, while the bottom quartile had a median relative TSR of -52 percent, a median return on capital of 5 percent, and aggregate economic profit decline of \$62 billion. Despite these performance differences, there was little difference in say-on-pay votes. The good performers had average support of 84 percent versus 82 percent for the poorly performing companies.

Why the Guidance from CalPERS, NACD, ICGN and ISS Is Not Very Helpful for Directors

CalPERS' guidelines on executive pay articulate two high level principles: compensation should "align management with the long-term economic interests of shareowners" and "compensation committees should have a well-articulated philosophy that links compensation to long-term business strategy."¹⁸ Unfortunately, CalPERS doesn't provide explanation, much less measurement, of alignment with shareowner interests or alignment with strategy.

CalPERS guidelines don't reflect clear thinking on whether pay should be tied to a measure of management's contribution to shareholder value or to the gross shareholder return. On one hand, the guidelines say that "equity compensation plans should incorporate performance based equity grant vesting requirements tied to achieving performance metrics." This suggests a belief that stock value reflects factors beyond management control and that performance metrics should be used to help isolate management's contribution to stock value. But, on the other hand, the guidelines say that "the use of derivatives or other structures to hedge director or executive stock ownership undermines the alignment of interest that equity compensation is intended to provide." This would seem to bar a performance or phantom share that takes out the industry component of the TSR return.

It's difficult to make any progress in designing better executive pay plans without separating industry from management performance. The industry and management components of stock value lead to conflicting rules for achieving the basic objectives of executive pay. When the stock price change reflects industry factors, a declining stock price should lead to an increase in shares to retain key talent, and a rising stock price should lead to a reduction in shares to limit shareholder cost. When the stock price change reflects management, not industry, factors, a declining stock price should lead to constant or declining shares to provide strong incentives, and a rising stock price should lead to constant or increasing shares to provide strong incentives.

In practice, grant share response to performance is guided by simple, but quite inefficient, rules. Stock price changes prior to grant are assumed to fully reflect industry factors and lead to share changes that offset price changes. This is the rationale for fiftieth percentile pay regardless of past performance and it significantly weakens performance incentives. Stock price changes after grant are assumed—for option and restricted stock grants—to fully reflect management factors and lead to no adjustment in shares. For performance shares, stock price changes after grant are subject to a management factors test and, if

passed, are assumed to fully reflect management factors and lead to constant or increasing shares. These rules lead to significant payment for industry performance.

NACD's compensation principles also reflect ambivalence about whether pay should reflect management contribution or gross shareholder return.¹⁹ On one hand, it says that "in selecting performance measures, committees should link pay to desired outcomes that the CEO and senior management can affect, rather than to stock price alone." But on the other hand, it says that "tying bonuses, stock grants, or other compensation to an increase in the company's long-term value can help align a CEO's personal financial interests with those of shareholders."

The International Corporate Governance Network (ICGN) articulates the broad principle that "well-structured remuneration arrangements should be aligned with shareholders' interests of creating and sustaining long-term shareholder value"²⁰, but, like CalPERS, doesn't suggest any approach to measuring alignment. ICGN is also ambivalent, like CalPERS and NACD, about whether incentives should be tied to a measure of management's contribution to shareholder value or to gross shareholder return. ICGN strongly supports vesting conditions for equity compensation as well as indexed stock options where the exercise price is tied to an "index of comparable companies" but, at the same time, argues that managers should be prohibited from using derivative contracts "to hedge their exposure to the company's shares."²¹ This would bar a derivative contract that takes out the industry component of the stock return.

ICGN advocates a risk disclosure discussion that corresponds to our measures of relative pay risk and pay leverage, but, drafting its guidelines in 2012, wasn't aware of the opportunity for quantitative measurement: risk disclosure "should include both a defensive perspective: how the committee ensures potential remuneration does not incentive excessive risk, and an offensive perspective: how the arrangements are designed to incentivize appropriate risk and aligns the interests of management with those of long-term shareholders."²²

ISS is also looking for alignment with both management contribution and gross shareholder return. ISS uses three measures to assess pay for performance: relative degree of alignment (RDA), multiple of median (MOM) and pay-TSR alignment (PTA). RDA focuses on alignment with relative performance, that is, the difference in "percentile ranks of a company's CEO pay and TSR performance, relative to an industry-and-size derived comparison group, over one- and three-year periods."²³ But PTA focuses on alignment with gross return: "The concept is simple: company pay and TSR trends to determine whether shareholders' and executives' experiences are directionally aligned."

The three ISS pay-for performance measures loosely match to pay leverage, performance adjusted cost, and pay alignment, but they are so poorly designed that they provide nothing more than a crude proxy for cost. The underlying assumption of the RDA measure—that pay percentile should equal performance percentile—is a normative leverage concept. Pay percentile = performance percentile implies very high grant date pay leverage, about 1.4 for the upper half of the performance distribution,²⁴ but ISS has never articulated why this is a reasonable pay leverage norm. Multiple of median is “CEO pay as a multiple of the median pay of its comparison group,” that is, a cost measure without any performance adjustment. PTA is a correlation or alignment measure. In a 2012 study,²⁵ I compared the ISS measures with pay leverage, pay alignment, and the pay premium at peer group average performance across a sample of 15,860 five year periods for S&P 1500 companies, and found that RDA had correlations of $-.02$ with pay leverage, $-.01$ with pay alignment and $-.45$ with the pay premium at peer group average performance; PTA had correlations of $.02$ with pay leverage, $.02$ with pay alignment and $.10$ with the pay premium at peer group average performance, and MOM had a correlation of 0.46 with the pay premium at peer group average performance. These correlations show that the ISS measures capture 21 percent ($= 0.46 \times 0.46$) of the variation in one of the three pay for performance dimensions—performance adjusted cost—but less than 1 percent of the variation in other two: pay leverage and pay alignment.

The fact that ISS continues to use these poorly designed measures is a sad testament to the limited compensation knowledge of the major institutional investors in the ISS client base. ISS clients don't seem to realize that the measures capture nothing but cost and don't voice complaints that would motivate ISS to improve the measures.

The Challenge Facing the Individual Director

The key responsibility of the board in overseeing executive pay is to ensure that the company's executive pay program achieves the three basic objectives of executive pay: provide strong incentives to increase shareholder value, retain key talent, and limit the cost of executive pay to levels that maximize the wealth of existing shareholders. To effectively discharge this responsibility, the board needs meaningful measures of incentive strength and performance adjusted cost, such as measures of pay leverage, relative pay risk, pay alignment, and the pay premium at peer group average performance. This chapter shows how these measures can be calculated, how they can be used to understand the pay design needed to achieve perfect pay for performance, and why the measures commonly

used for board oversight—percent of pay at risk and competitive position—are very poor proxies for incentive strength and performance adjusted cost.

The perfect performance share plan highlights three major shortcomings of current executive pay practice. First, the concept of fiftieth percentile pay regardless of past performance. This must be replaced by the concept of fiftieth percentile pay for average performance, not any performance. Second, the concept that vesting should leverage operating performance. This must be replaced by the concept that vesting should take out the industry component of the stock return. Third, the concept that nonperformance pay is an independent entitlement. This must be replaced by the concept that nonperformance pay is a draw against the value of the performance shares, not a separate entitlement. Given the prevalence of these bad practices, it is not surprising that pay-for-performance problems are common among S&P 1500 CEOs: 28 percent of CEOs show high pay, 33 percent show high risk, 60 percent show low alignment, and 76 percent show at least one of these three problems.

Conclusion

The individual director seeking to create effective executive pay programs faces a big challenge when, as now, conventional wisdom endorses uninformative measures such as percent of pay at risk and competitive position, discourages efforts to isolate management's contribution to value, and promotes pay programs that frequently show low alignment, excessive pay, and high risk. The director must do a significant amount of consciousness raising with fellow board members, corporate staff, and institutional investors to have any hope of moving the company toward the perfect pay plans.

The best place to start is measuring and benchmarking pay for performance. Once in a great while this will show that bad pay policies lead to high levels of pay for performance. In 2015, a *Wall Street Journal* analysis showed that Apple CEO Tim Cook's relative pay has had very high alignment (96 percent r-squared) with Apple's relative TSR over his tenure as an executive officer despite two bad corporate pay policies: paying for revenue regardless of performance and granting stock without performance conditions that take out the industry component of the stock return.²⁶ These bad pay policies didn't undermine pay for performance in Cook's case because Apple's revenue was very highly correlated with its excess return and industry performance accounted for very little of Apple's stock return.

More commonly, measuring pay for performance will highlight a significant issue: low alignment, excessive risk, or high pay at peer group average

performance. Once the director gets some buy-in on the problem (and the measurement analysis), he or she can start to move the program toward one of the perfect pay plans.

Notes

1. The other two objectives are “support the achievement of Dow’s vision and strategy” and “create ownership alignment with stockholders.” Dow Chemical 2015 proxy, p. 27.
2. Economic value added, or EVA, is a widely used term for economic profit. It’s a trademark of Stern Stewart & Co., a consulting firm.
3. John C. Baker, “Incentive Compensation Plans for Executives,” *Harvard Business Review* 15 no. 5 (Autumn): 44–61.
4. General Motors proxy statement, April 17, 1948, p. 8.
5. General Motors proxy statement, April 15, 1977, p. 36.
6. Johnson & Johnson 2015 proxy, p. 36.
7. Stephen F. O’Byrne, and E. Mark Gressle, “How ‘Competitive Pay’ Undermines Pay for Performance (and What Companies Can Do to Avoid That),” *Journal of Applied Corporate Finance* 25, no. 2 (Spring 2013): 26–38. Median S&P 1500 stock volatility is 0.4.
8. The Conference Board Working Group on Supplemental Pay Disclosure, “Supplemental Pay Disclosure: Overview of Issues, Proposed Definitions, and a Conceptual Framework”, The Conference Board (2013).
9. Exxon Mobil 2015 proxy, p. 48.
10. Mark-to-market pay for a measurement period is the sum of 1. salary, bonus and other compensation; 2. the end of period value of equity compensation granted during the period; 3. the end of period value of cash long-term incentive awards made during the period; and 4. the change in pension value during the period. The end of period value of equity compensation is based on the stock price at the end of the period and, for performance shares, estimated vesting multiples. The end of period value of cash long-term incentive awards is based on target award values and estimated vesting multiples. Estimated vesting multiples for performance share grants and cash long-term incentive awards are based on relative TSR versus the GICS industry group, assuming a common vesting schedule, i.e., threshold vesting of 50 percent at twenty-fifth percentile performance, target vesting of 100 percent at fiftieth percentile performance and maximum vesting of 200 percent at seventy-fifth percentile performance. Maximum vesting is less than 200 percent if they company reports a lower maximum award. Mark-to-market pay is similar to what others call realizable pay.
11. Operating return is total return with estimated future growth value. Market enterprise value = capital + EP/WACC + future growth value where EP is economic profit and WACC is the weighted average cost of capital. Operating value = capital + EP/WACC + predicted future growth value where future growth value is predicted from operating drivers such as R&D, advertising, sales growth, EBITDA growth and sales growth × EP margin. Operating return = (change in operating value + future value of free cash flow)/beginning operating value. Relative operating return measured against ex-ante cost of capital is $[(1 + \text{operating return}) / (1 + \text{WACC})^{\text{years}}] - 1$. Relative operating return measured against ex-post peer performance is $[(1 + \text{operating return}) / (1 + \text{peer group operating return})] - 1$.

12. This assumes the industry beta is 1.0. If the industry beta is not 1.0, the vesting multiple is $1 / ((1 + \text{industry TSR})^{\text{beta}})$.
13. Cumulative perfect pay (with leverage of 1.0) = cumulative market pay \times (1 + relative TSR) = cumulative market pay + cumulative market pay \times relative TSR; cumulative market pay \times relative TSR = years \times initial grant shares \times initial grant price \times relative TSR = years \times initial grant shares \times [shares outstanding/shares outstanding] \times initial grant price \times relative TSR = [years \times initial shares/shares outstanding] \times [shares outstanding \times initial grant price \times relative TSR] = sharing percentage \times aggregate excess return.
14. Donald M. Raymond, "Paying (Only) for Skill (Alpha)," *CFA Institute Conference Proceedings Quarterly*, June 2008.
15. Alex Edmans, Xavier Gabaix, Tomasz Sadzik, and Yuliy Sannikow, "Dynamic CEO Compensation," *Journal of Finance* LXVII, no. 5 (October 2012).
16. Semler Brossy, "Russell 3000 Say on Pay Results," September 28, 2015, www.semlebrossy.com/say-on-pay/.reports.
17. David F Larcker, Brian Tayan, Ronald Schneider and Aaron Boyd, "2015 Investor Survey Deconstructing Proxy Statements—What Matters to Investors," Stanford University Rock Center for Corporate Governance, www.rockcenter.law.stanford.edu.
18. CalPERS, "CalPERS Global Governance Principles," March 16, 2015, www.calpers.ca.gov.
19. National Association of Corporate Directors, "Report of the Blue Ribbon Commission on the Compensation Committee," NACD (May 2015), NACDonline.org. Quotes are from p. 6.
20. International Corporate Governance Network, "ICGN Guidance on Executive Remuneration," ICGN.org, 2012, 9, www.icgn.org/sites/default/files/ICGN_Executive-Remuneration_2015.pdf.
21. *Ibid.*, 15, 20.
22. *Ibid.*, 10.
23. Carol Bowie, Steve Silberglied, and Liz Williams, "Evaluating Pay for Performance Alignment: ISS' Quantitative and Qualitative Approach," Institutional Shareholder Services, November 2014, 6, www.issgovernance.com/file/publications/evaluatingpayforperformance.pdf.
24. Stephen F. O'Byrne, "Assessing Pay for Performance," *Conference Board Director Notes* 3, no. 19 (October 2011): 6.
25. *Ibid.*, 10.
26. Gregory J. Millman, "Apple's Pay for Performance Plan Works There, Not Elsewhere," *Wall Street Journal*, February 27, 2015.