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Evaluating Pay for Performance Alignment

ISS' Quantitative and Qualitative Approach

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TABLE OF CONTENTS

EXECUTIVE SUMMARY

Investor feedback on the issue of pay-for-performance has indicated a preference for putting the focus on long-term alignment, board decision-making, and pay relative both to market peers and to absolute shareholder returns. As a result, ISS' approach to evaluating pay-for-performance comprises an initial quantitative assessment and, as appropriate, an in-depth qualitative review to determine either the likely cause of a perceived long-term disconnect between pay and performance, or factors that mitigate the initial assessment.

The quantitative methodology utilizes two components:

A relative evaluation -- primarily, rankings of CEO pay and performance relative to peers over three years, and
An absolute evaluation -- CEO pay trends relative to shareholder return trends over five years.

Both are considered from an investor's perspective in evaluating the efficacy of top executive pay packages on a long-term basis. For the relative evaluation, peer groups are designed not for pay benchmarking or stock-picking but rather to compare pay and company performance within a group of companies that are reasonably similar in terms of industry profile, size, and market capitalization. The evaluation focuses on disclosed pay and equity grants, since they represent the pay and award opportunities the board determines should be provided to its top executive each year, and should be aligned with the company's performance trends – or if not, should be appropriately performance based, as ISS' qualitative analysis will address.

The quantitative methodology, described in detail in this paper, is designed to identify outlier companies that have demonstrated significant misalignment between CEO pay and company performance over time. Extensive back-testing has also validated that this approach generally aligns with shareholder opinions as expressed through say-on-pay votes. The follow-up qualitative assessment, applied to companies with apparent pay-performance disconnect, is designed to uncover mitigating factors (such as rigorous performance-based award opportunities that are designed to drive improvement) or potential causes of the misalignment, such as problematic pay benchmarking practices.

INTRODUCTION

Escalating CEO pay packages in the last few decades have stirred considerable debate, culminating in a Congressional mandate for advisory shareholder votes on executive compensation under the Dodd-Frank Act of 2010.[1] The advent of say-on-pay in the U.S. has also highlighted pay-for-performance as the most significant factor driving investors' voting decisions on the issue.[2]

Doubts about the strength of pay and performance alignment may stem from "agency problem" conflicts of interest, perceptions of weak board oversight and aggressive pay benchmarking; abuses such as options backdating; and most recently, concern that pay practices at some firms likely contributed to the financial meltdown that triggered the latest economic and market malaise. Further, while executive pay has increased at a fairly rapid pace since the 1980s, investor

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[1] The SEC delayed implementation of advisory votes at small issuers (less than $75 million in public float) until 2013.

[2] An overwhelming 94 percent of institutional respondents to ISS' 2009-2010 policy survey indicated that pay-for-performance would be a critical or important consideration for their "say on pay" vote determinations.

portfolios have experienced multiple market swings – booms and busts that often appear disconnected from individual executives' impact -- adding to skepticism about the pay process.

Still, in the absence of a universally accepted method to evaluate executive pay relative to performance, investor and issuer perceptions vary widely. Unlike many markets, the U.S. has no governance code establishing guidelines for pay practices, and performance may be measured on multiple dimensions. It is also clear that most institutional investors do not want to micromanage or interfere with a board's ability to devise programs that will help create and protect shareholder value, even while they recognize a responsibility to monitor the process.[3] From a voting policy perspective, ISS has regularly polled both clients and other market participants on the issue of executive pay, and has developed evolving methodologies to detect potential pay-performance disconnects of concern to shareholders. In the last few years, the approach has utilized a quantitative methodology to identify underperforming companies -- i.e., those with both 1- and 3-year total shareholder return (TSR) below the median of peers in their 4-digit Global Industry Classification Standard (GICS) group. Underperforming companies then received an in-depth qualitative review, focused primarily on factors such as the year-over-year change in the CEO's total pay, the 5-year trend in CEO pay versus company TSR, and the strength of performance-based pay elements.

A substantial majority of institutional respondents to ISS' 2011-12 policy survey confirmed two factors as very relevant to evaluating pay-for-performance alignment: pay relative to peers and pay increases that are inconsistent with the company's performance trend. Most issuer respondents also indicated that pay versus peers is an appropriate factor and that pay increases in light of company performance should be a consideration. In addition, both institutions and issuers have contended in roundtables and other feedback that pay–performance alignment should be viewed in a long-term context. It is on this basis that ISS decided to refine our approach to pay-for-performance evaluations and develop a more sophisticated methodology to drive the quantitative component of the analysis. The remainder of this paper provides an overview and rationale for the elements considered, as well as detailed discussion of the new quantitative methodology and ongoing qualitative factors.

What We Measure -- Pay

A key question in any analysis is what to analyze. Per SEC disclosure requirements, each annual meeting proxy statement includes an array of pay data, with a three-year look-back, for the five highest-paid executives including the CEO and CFO. The centerpiece of these disclosures is the Summary Compensation Table, which enumerates the key elements found in typical top executive compensation packages, including cash, indirect pay, and equity grants:

- Salary
- Bonus and/or Nonequity Incentive Plan Compensation[4]
- Stock Awards (grant date value)
- Stock Option Awards (grant date value)
- Annual Change in Pension Value/Nonqualified Deferred Compensation Earnings (above market rate)
- All Other Compensation

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[3] Inferred from overwhelming support seen for annual say on pay votes; approximately 80% of companies that presented say-on-pay frequency votes in 2011 saw majority support for the annual frequency option, regardless of management's recommendation.

[4] Per disclosure rules, payouts of cash awards earned on the basis of pre-established goals are reported under the "Nonequity Incentive Awards" column; other cash incentive awards are reported under the "Bonus" column.

Other tables provide, among other details, summaries of equity- and nonequity-based grants in the last fiscal year, unexercised/unvested equity-based awards, and the realized gains of vested and exercised grants. But the Summary Compensation Table presents the most comprehensive picture of each named executive officer's total planned and earned compensation for the year – specifically, the pay and pay opportunities that the compensation committee and board determined they ought to receive. It is those decisions that investors generally wish to monitor and evaluate, since their aim is to ensure that executives will be paid fairly, but not overpaid, for the performance they ultimately deliver and sustain. ISS focuses on the CEO's pay because that package sets the "compensation pace" at most companies; also the compensation committee and board are most directly involved in and accountable for the decisions that generate the CEO's pay.

Some observers suggest that shareholders evaluate "realized" rather than granted pay in determining whether pay and performance are aligned (see page 13 for discussion of ISS' consideration of "realizable" pay, beginning in 2013). This comprises compensation that results (or could result) from the exercise/vesting of an executive's previously granted equity awards at a given point in time. Since equity-based awards are by far the largest component of most top managers' pay, it is true that future shareholder returns will have substantial impact on those realized values – in other words, the pay realized from equity-based awards at underperforming companies is likely to be lower than that realized by executives at better performing companies, all else being equal. Nevertheless, those values are also significantly influenced by the award opportunities themselves, which reflect the compensation level the board has determined top executives deserve and that will appropriately incentivize future performance. Since all equity-based awards are sensitive, to some degree, to market trends beyond the control of individual executives, it is important that pay elements be considered if long-term company performance is misaligned with past pay and award opportunities. In that case, shareholders may expect the board to ensure that future incentive awards are clearly designed to promote performance improvements that will lead to shareholder value creation.

Finally, in the interest of protecting their assets, investors may have another reason to monitor granted pay: corporate pay benchmarking. Companies themselves measure their executives' compensation against competitors with respect to pay and pay opportunities, not "realized" pay. The awards delivered to executives become the basis for future realizable pay.[5]

Thus, in evaluating pay–performance alignment, ISS's quantitative analysis focuses on Total Compensation as reflected in the Summary Compensation Table, but utilizing a standard set of assumptions to value equity-based grants. All elements, including the Annual Change in Pension/Deferred Compensation Interest (not generally considered "direct" pay) are taken into account, since companies that do not provide components such as supplemental pensions and nonqualified deferral plans may compensate executives by making larger equity grants; thus, all elements are considered to help ensure equitable comparisons. (See also page 13 for discussion of how ISS considers "realizable" pay beginning in 2013.)

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[5] A number of academic studies have found weaknesses in corporate benchmarking practices that may have the effect of driving up CEO pay regardless of other factors. See "Compensation Benchmarking, Leapfrogs, and The Surge in Executive Pay," Thomas A. DiPrete & Greg Eirich, Columbia University and Matthew Pittinsky, Arizona State University, November 23, 2009. http://www.ssc.wisc.edu/soc/faculty/docs/diprete/frog11302009.pdf. Also "Inside the black box: the role and composition of compensation peer groups," M. Faulkender and J. Yang, Journal of Financial Economics, May 2010.

What We Measure -- Performance

There are, of course, myriad ways to measure corporate performance, and key metrics may vary considerably from industry to industry and from company to company depending on their particular business strategy at any given time. Investors expect that incentive plan metrics will stem from that strategy and be designed to motivate the behavior and executive decisions that will lead to its successful execution. But the key measure for investors in the context of a long-term pay-for-performance evaluation is total shareholder return (TSR).

Note that ISS does not advocate that companies use TSR as the metric underlying their incentive programs; on the contrary, shareholders may prefer that incentive awards be tied to the company's short- and long-term business goals. If the business strategy is sound and well executed, the expectation is that it will create value for shareowners over time, as reflected in long-term total shareholder returns. For this reason, TSR, which is objective and transparent, is the primary metric ISS utilizes in evaluating pay and performance alignment: TSR is the only measured used in ISS' quantitative pay-for-performance alignment screens, although various financial and operational metrics are considered in the qualitative review of company practices and compensation decisions.

What We Measure -- Relative and Absolute Alignment Over Time

In 2011, a substantial majority of institutional respondents to ISS' policy survey confirmed two factors as important in determining pay-for-performance alignment: pay relative to peers (which 62 percent said is very relevant), and pay increases that are disproportionate to the company's performance trend (considered very relevant by 88 percent of institutional survey participants). Most issuer respondents also indicated these factors as at least somewhat relevant to a pay-for-performance evaluation.

In light of this and similar feedback in roundtables and other discussions, ISS has incorporated both perspectives into the quantitative component of its revised pay-for-performance analysis, as discussed in detail below. This ensures a balanced evaluation from both relative and absolute pay-for-performance perspectives. As noted, in cases where the quantitative assessment indicates significant pay-for-performance misalignment, an in-depth qualitative analysis (also discussed in more detail below) is conducted to determine either the probable cause or any mitigating factors that should be considered.

ISS' QUANTITATIVE EVALUATION OF PAY-FOR-PERFORMANCE ALIGNMENT

The first step in ISS' evaluation of pay for performance has historically been a quantitative assessment of how well a company's CEO pay has been aligned with its financial performance. This screen identifies companies that have underperformed over 1- and 3-year periods, relative to a broad industry category, combined with CEO pay increases. The screen is intended to flag companies where a potential misalignment of pay and performance may exist and therefore where additional qualitative assessment is warranted. Recommendations based on pay-for-performance evaluations are determined after that qualitative assessment.

ISS' new quantitative pay-for-performance model maintains this approach but, based on feedback from our institutional investor clients and the market, has new factors. Broadly speaking, ISS had three main goals in developing the new pay-for-performance methodology:

Measure alignment over multiple time horizons. Business cycles and compensation plans' performance cycles span multiple years. An assessment of alignment between shareholders and executives should accordingly see pay across timeframes that approach the length of performance and business cycles. However, it is important to note that the say-on-pay proxy resolution is typically directed at the prior year's compensation, and special attention should be paid to recent experience.

Use multiple measures to assess alignment. No single quantitative measure can conclusively indicate that pay and performance are aligned. ISS sought, therefore, to identify multiple measures, each of which assesses a company's pay for performance alignment from a distinct perspective. Where one or multiple measures fail to demonstrate pay for performance, a pay-for-performance concern may exist.

Provide more information about pay-for-performance concerns to investors and issuers. The current pay-for-performance screen is a binary pass/fail performance-oriented screen that is triggered for close to 30 percent of companies – less than one-third of which are ultimately determined to have a pay-for-performance disconnect of immediate concern to shareholders. The new screen is designed to provide more robust information about pay-for-performance alignment by evaluating and reporting the degree of alignment found.

Measures of Pay-for-Performance Alignment

At the core of the new quantitative methodology are three measures of alignment between executive pay and company performance: two *relative* measures where a company's pay-for-performance alignment is evaluated in reference to a group of comparable companies, and one *absolute* measure, where alignment is evaluated independently of other companies' performance.

The three measures, which are discussed in greater detail below, are:

- **Relative Degree of Alignment**. This relative measure compares the 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.
- **Multiple of Median**. This relative measure expresses the prior year's CEO pay as a multiple of the median pay of its comparison group for the same period.
- **Pay-TSR Alignment**. This absolute measure compares the trends of the CEO's annual pay and the value of an investment in the company over the prior five-year period.

Measures of Relative Alignment

Relative Degree of Alignment (RDA)[6]

This measure addresses the question: Is the pay opportunity delivered to the CEO commensurate with the performance achieved by shareholders, relative to a comparable group of companies? The measure compares the percentile ranks of a company's CEO pay and TSR performance, relative to a comparison group of 14-24 companies selected by ISS on the basis

[6] See Appendix III for RDA calculation change effective February 1, 2014

of size, industry, and market capitalization, over one- and three-year periods. For more information on ISS' process for selecting peers, see Appendix I.

To determine this measure, the subject company's percentile ranks for pay and performance are calculated for one- and three-year periods. One- and three-year pay amounts (annual and average, respectively) for each comparison company are based on the most recently disclosed three years of pay data available in the ExecComp Analytics database for that company.

Because of the sensitivity of TSR to overall market performance, annualized TSR performance for all companies (subject company and comparison companies) will be measured for the same period: that is, the one- and three-year periods ending on the last day of the month closest to the fiscal-year end of the subject company. To illustrate: if a company's fiscal year ends on November 29, 2011, then all TSRs will be measured over the periods December 1, 2010-November 30, 2011 (for one-year) and December 1, 2008-November 30, 2011 (for three-year).

Combined percentile ranks for pay and for performance are calculated, based on a 40 percent weighting for the one-year and a 60 percent weighting for the three-year ranks. The Relative Degree of Alignment is equal to the difference between the ranks: the combined performance rank minus the combined pay rank. (Note that if three years of data are not available for the subject company, the combined measure will reflect only the one-year rankings.)

The table below illustrates how the factors combine to determine the final measure – in this case, the relative degree of alignment is -27.

	Performance	Pay	Difference
1-Year	42	52	-10
3-Year	26	64	-38
Combined (weighted)	32	59	-27

Values for the Relative Degree of Alignment measure range between -100 and +100, with -100 representing the high pay for low performance (i.e., 100th percentile pay combined with 0th percentile performance), zero representing a high degree of alignment (the pay rank is equal to the performance rank), and positive values representing high performance for low pay. More information is available in the Back-testing section, below.

Multiple of Median (MOM)

This measure addresses the question: Is the overall level of CEO pay significantly higher than amounts typical for its comparison group? Is the company significantly more than comparable companies, even for strong performance?

Calculating this measure is straightforward: the company's one-year CEO pay is divided by the median pay for the comparison group. (For more information on ISS' process for selecting peers, see Appendix I.)

Values can therefore range from zero (if the subject company paid its CEO nothing) to infinity. In ISS' back-testing analysis, the highest observed value was just over 25 times peer median.

Measure of Absolute Alignment

For the past two years, ISS has incorporated into its pay-for-performance analysis an appraisal of the last five years alignment of pay and performance, as embedded in a chart displaying the values of a company's pay and "indexed TSR" – the value of a $100 investment at the end of each fiscal year (assuming dividends are reinvested). This chart was intended to provide ISS analysts and clients with a means to assess the general alignment of pay and performance for a company over a 5-year period.

The new approach is designed to quantify and put analytical rigor around this long-term assessment. The concept itself is simple: compare pay and TSR trends to determine whether shareholders' and executives' experiences are directionally aligned.

There are, however, a number of theoretical and implementation challenges involved, for instance:

- Pay and TSR are measured conceptually differently: pay as a number of dollars delivered in a year, and TSR as a percentage change over the course of a year
- Pay and TSR are measured on different scales and different timeframes
- Pay is "lumpy," with significant swings on a year-to-year basis that can obscure longer-term trends
- TSR measurements – even over a long term – are sensitive to the endpoints of the periods being measured

Pay-TSR Alignment (PTA)

ISS' new measure of long-term absolute alignment is intended to tackle these challenges and address the question: have shareholders' and executives' experiences followed the same long-term trend? It is important to note that PTA is not designed to measure the sensitivity of CEO pay to performance – whether pay and performance go up and down together on a year-over-year basis. It is a long-term measure of directional alignment.

At a high level, the measure is calculated as the difference between the slopes of weighted linear regressions for pay and for shareholder returns over a five-year period. This difference indicates the degree to which CEO pay has changed more or less rapidly than shareholder returns over that period. For technical information on how the regressions are calculated, see Appendix II.

By using regressions to estimate the long-term trends for pay and TSR, the method avoids the pitfalls of evaluating pay and performance over time:

- Performance over a fiscal year and pay granted over that period are measured in a consistent fashion, on the same scale, and are matched in time.
- Volatility of pay and lumpiness of performance are smoothed but not eliminated – addressing in a consistent fashion both the "lumpy pay" problem as well as the sensitivity of TSR to choice of endpoints.

The trend lines calculated by these regressions are analogous to a 5-year "trend rate" for pay and performance, weighted to reflect recent history. The final Pay-TSR Alignment measure is simply equal to the difference: performance slope minus the pay slope. Potential values for PTA are theoretically unbounded, but in practice they range from just over -100% to just over 100%, with a slightly negative median value (see Back-testing, below, for more details).

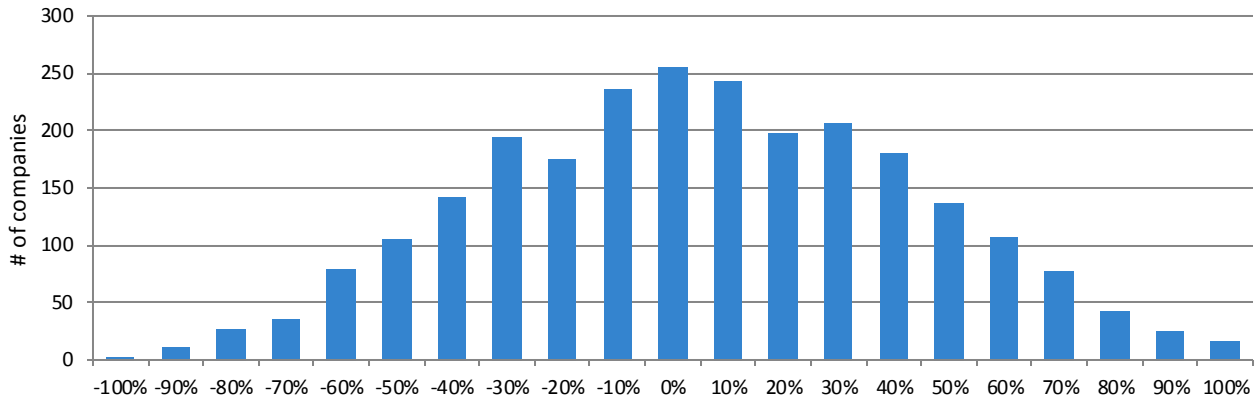
Back-testing the Measures 2006-2010[7]

To back-test these measures, ISS analyzed pay and performance data for 2,500 companies from the years 2006-2010. Comparison groups were constructed for each company, and each of the three measures was calculated, according to the methodology described above. Note that the comparison groups for this analysis comprised company peer groups derived via the methodology in place for 2012, which was revised for 2013 (see Appendix I for the updated methodology); back-testing of data using the new peer group methodology did not indicate significant changes in the analysis described herein, except some narrowing of the distribution range

Relative Degree of Alignment

RDA measures are normally distributed across the back-test sample, as indicated in the chart below. The median value is indistinguishable from zero, meaning that the percentile pay and performance ranks are nearly equal for the median company in the sample.

Figure 1. Distribution of Relative Degree of Alignment Measures



Twenty-five percent of companies have RDA measures of less than -28 (where lower values represent higher pay for lower performance), while 10 percent fall below -51. Approximately half of companies fell in the range between -28 and +30.

Multiple of Median

The multiple of median measure, as expected, exhibits a slightly skewed distribution – as there is no natural upper bound to the measure. Notably, both the median and modal values for this measure are almost exactly 1.0 – meaning that the typical company in the back-test sample pays very close to the median pay of the ISS-selected comparison group. This finding provides evidence that in general, ISS' comparison group methodology selects appropriate companies.

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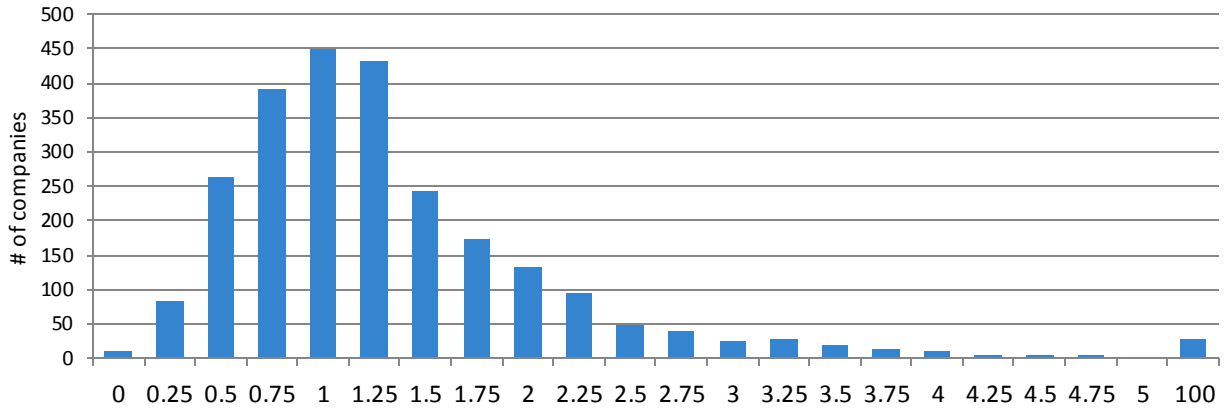
[7] Back testing conducted for 2014 is in presented in Appendix IV

Figure 2. Distribution of Multiple of Median Measures

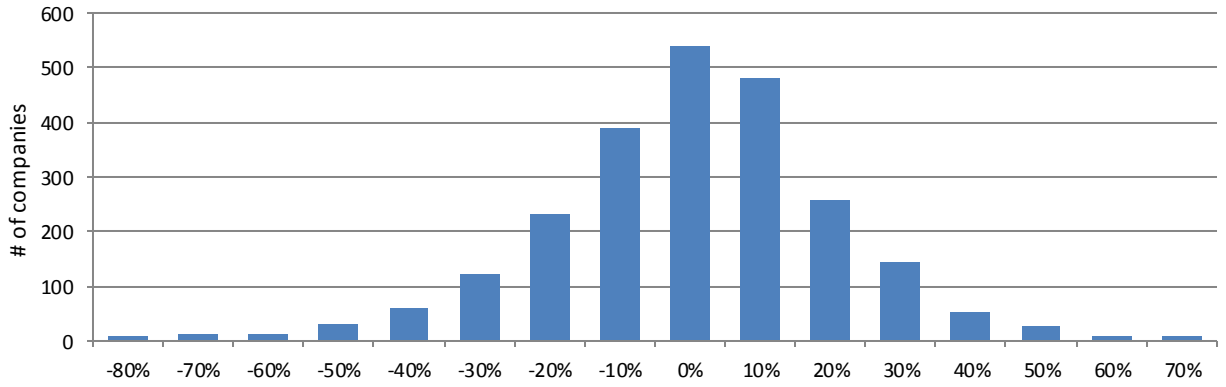


Values for the multiple of median measure range from 0 (for the handful of companies that pay close to zero) to 25 times. Approximately 25 percent of companies pay more than 1.5 times the comparison-group median; ten percent of companies pay more than 2.1 times median.

Pay-TSR Alignment

This measure, too, exhibits a normal distribution. The values range from -106 percent to 129 percent, with a median value of -3 percent - meaning that the median company saw pay changing at a trend rate approximately 3 percentage points higher than the performance trend.

Figure 3. Distribution of Pay-TSR Alignment Measures



Approximately 25 percent of companies had PTA measures less than -16.2 percent and 10 percent had values under -30.6 percent. Half of companies had PTA measures between -16.2 percent, and 7.7 percent.

Relationship to Vote Results - 2011[8]

Another assessment of the effectiveness of these measures to determine pay-for-performance alignment is the relationship they have with the outcomes of management say-on-pay (MSOP) votes at companies' annual meetings in 2011. Using a panel of 1,967 companies where vote results and all three measures were available, we regressed vote results against the three measures. The results indicate that all three measures are statistically significant ($p<.02$) predictors of vote results, with the strongest effect coming from the RDA measure.

[8] See additional data on 2014 vote results in Appendix IV

Figure 4. Regression Results for MSOP Support and P4P Measures

Multiple R	0.415			
R Square	0.172			
F-Test	135.81	Significance:	6.00128E-80	
	Coefficients	Standard Error	t Stat	P-value
Intercept	0.906	0.004	226.04	0
PTA	0.043	0.012	3.69	0.0002
RDA	0.110	0.007	15.25	1.06264E-49
MOM	-0.006	0.002	-2.38	0.017

Pay for Performance Measures and ISS Policy

These three measures provide the raw material for ISS' initial quantitative evaluation of pay-for-performance alignment under its Executive Compensation Evaluation Policy. ISS has developed a framework to determine whether the measures indicate the presence or absence of a potential pay-for-performance disconnect.

The philosophy of the framework is simple: if a pay-for-performance measure for a company lie within a range of typical values, then it has demonstrated some evidence of pay-for-performance alignment; if the company's measure is an outlier beyond that range, however, it begins to raise some degree of concern that a potential disconnect may exist.

The evaluative approach thus begins by identifying companies that are significant outliers in each measure. The approach is based on empirical observation of the distribution of the measures within the back-testing universe, and on the relative strength of the relationship of each measure to voting outcomes. Additionally, the methodology, where possible, avoids arbitrary threshold effects by using a continuous scoring approach. As a result, scores are additive – concerns raised for multiple measures can accumulate to provide evidence for a potential pay-for-performance disconnect.

Thus the methodology identifies whether: (1) a company's particular measure is a sufficient outlier to demonstrate a likely pay-for-performance disconnect by itself, or (2) it is a sufficient outlier to demonstrate a potential pay-for-performance disconnect in conjunction with one or both of the other measures. The table below shows the levels, for each measure that indicate, based on initial testing analysis, where a company would be considered an outlier (triggering Medium concern) or a significant outlier (which would trigger High concern). High concern for any individual factor will result in an overall High concern level for the quantitative component of the pay-for-performance evaluation, and multiple Medium concern levels may also result in an overall High concern.

2011 Levels[9]:

Measure	Level that may trigger high concern in conjunction with other measures		Level that triggers high concern by itself	
Relative Degree of Alignment	-30	~25th percentile	-50	~10th percentile
Multiple of Median	2.33x	~92nd percentile	3.33x	~97th percentile
Pay-TSR Alignment	-30%	~10th percentile	-45%	~5th percentile

As noted, levels of concern for each measure are calibrated based on their empirical distribution and the strength of their relationship with voting results. This effectively "weights" the strongest measure (RDA) somewhat more heavily in the overall evaluation, since outlier status with respect to RDA begins at the 25th percentile (compared, for example, to outlier status with respect to PTA, which is triggered at the 10th percentile). Also note that each measure is assessed on a cumulative basis -- so that a company with an RDA measure of -28 generates a stronger concern level than a company with RDA of -20, even though neither would trigger a Medium concern.

Back-testing of Methodology

Concern levels were calculated for ISS' panel of 1,973 companies, and these were tested against vote results on the say-on-pay resolution at these companies. On average, the typical High-concern company received about 11.5 percentage points less support on the say-on-pay resolution than a Low-concern company, a difference of approximately one standard deviation.

Figure 5. Vote Results for Pay-for-Performance Concern Levels

Quantitative Concern	Average MSOP Support
High	80.9%
Medium	86.9%
Low	92.3%
Total	89.8%

[9] 2014 Levels are in Appendix IV

ISS' QUALITATIVE EVALUATION

(Updated with regard to shareholder meetings held on or after Feb. 1, 2013)

The purpose of ISS' pay-for-performance evaluation is to identify companies where shareholders may wish to communicate concern about the pay-setting approach, given misalignment of compensation decisions relative to the company's performance track record. ISS' new quantitative assessment is designed to detect such misalignment, based on both relative and absolute pay-performance evaluations, as well as to identify apparent good or satisfactory alignment that investors appreciate being aware of.

An important step when pay and performance appear disconnected is to assess how various pay elements may be working to encourage, or to undermine, long-term value creation and alignment with shareholder interests. All cases where the quantitative analysis indicates significant misalignment will continue to receive an in-depth qualitative assessment, to determine either the likely cause or mitigating factors. This step in the analytic process may include consideration of some or all of the following:

Strength of performance based compensation and rigor of performance goals: This key consideration includes a review of the ratio of performance- to time-based equity awards as well as the overall ratio of performance-based compensation to total compensation, focusing particularly on the compensation committee's most recent decision-making (which reflects its current direction).

A company that exhibits significant misalignment of pay opportunities and performance over time would be expected to strongly emphasize performance-based compensation (though not by simply increasing the size of the pay package in order to make it more performance-based). ISS will review both recent cash awards paid and the award opportunities (long-term incentive grants) intended to drive future performance, to evaluate their performance conditions. Time-based awards (including standard stock options and time-vesting stock awards) that are not granted due to the attainment of pre-set goals are not considered strongly performance-based in this context. Shareholders would also expect such a company to fully disclose performance metrics and goals, which should be reasonably challenging in the context of its past performance and goals, guidance the company has provided to analysts, etc. Use of a single metric, or very similar metrics, in either or both of the short- and long-term incentive programs may suggest inappropriate focus on one aspect of business results at the expense of others. If the company uses non-GAAP metrics, adjustments should be clearly disclosed (along with compelling rationale if such adjustments are nonstandard).

The company's peer group benchmarking practices: Several studies have pointed to companies' peer group benchmarking practices as a source of pay escalation that is divorced from performance considerations. Companies undertake benchmarking in order to ensure that their top management pay packages will stay competitive, in the interest of attracting and retaining key executives. While this is an important objective, there are no established standards or rules for the practice, which has been described as "more of an art than a science" by many companies. Peer selection may be influenced by many considerations. While disclosure on this issue is not robust (according to a recent analysis, only 66 percent of S&P 1500 companies clearly specify benchmark targets, and even less beyond that group), among companies that do disclose target peer group percentiles, 40 percent target above the median level for a least one pay element.[10] If a company exhibits long-term disconnect between pay and performance, ISS closely examines its disclosed benchmarking

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[10] D. Cheng, "Executive Pay Through A Peer Benchmarking Lens," Institutional Shareholder Services, 2011. http://www.isscorporateservices.com/White_Paper_Request

approach to determine whether that may be a contributing factor. For example, a preponderance of self-selected peers that are larger than the subject company may drive up compensation without regard to performance. Above-median targeting may have the same effect.

Results of financial/operational metrics: If a disconnect is driven by cash pay, ISS considers the rigor of performance goals (if any) that generated the payouts. Recent (GAAP) results on metrics such as return measures and growth in revenue, profit, cash flow, etc. -- both absolute and relative to peers – may also be examined to assess the rigor of goals and whether the quantitative analysis may be anomalous (if other metrics suggest sustained superior performance). As noted above, company disclosure about the metrics, goals, and adjustments to results, should be clear and fulsome.

Special circumstances: The qualitative analysis may also consider exceptional situations, such as recruitment of a new CEO in the prior fiscal year or unusual equity grant practices (e.g., bi- or triennial awards) that may distort a quantitative analysis. We note, however, that such circumstances do not automatically invalidate other aspects of the analysis, including the quantitative results, since that methodology's long-term orientation is designed to smooth the impact of timing anomalies. Further, while shareholders may welcome a new CEO in light of lagging performance, they may nevertheless be concerned about a board that has been forced to pay dearly for outside talent but fails to appropriately link the new CEO's pay to performance improvement.

Realizable pay: As noted above, the value of pay opportunities that depend on future stock prices and/or achievement of performance goals, may not ultimately be delivered, and many investors believe that this should be a consideration in a pay-for-performance analysis. ISS has generally considered amounts of "realized" equity and performance grants, as appropriate, in the qualitative analysis phase of its pay-for-performance analysis. Based on feedback from investors and issuers, beginning in proxy season 2013, ISS is incorporating a defined calculation of "realizable pay" more systematically into the qualitative review of S&P 500 companies.

Specifically, ISS' standard research report will show three-year total realizable pay compared to the three-year total grant-date pay for S&P 500 companies starting with Feb. 1, 2013 meeting dates. Realizable pay will generally be discussed in cases where the S&P 500 company's initial quantitative analysis shows a high or medium concern. For these companies, ISS will analyze the cause if total pay granted during a 3-year measurement period is significantly higher or lower than its "realizable" value at the end of that period, and identified reasons will be considered as part of the qualitative review. For example, lack of goal achievement resulting in no long-term incentive award earned, or a decline in stock price resulting in a lower-than-grant-date value for equity-based awards, may demonstrate the company's adherence to a pay-for-performance philosophy and mitigate the quantitative pay-for-performance disconnect, assuming that the company does not providing discretionary payments to make up for the shortfall. Conversely, if the value of total realizable pay is higher than granted pay for the same period -- e.g., due to above target payouts in performance based awards where goals do not appear rigorous -- that may contribute to a determination that pay and performance are not sufficiently aligned, given concerns indicated in the quantitative analysis.

The fact that realizable pay is lower than grant-date pay for the same period will not necessarily obviate other strong indications that a company's compensation programs are not sufficiently tied to performance objectives designed to enhance shareholder value over time. However, in the absence of such indications, realizable pay that demonstrates a pay-for-performance philosophy will be a positive consideration.

Calculating Realizable Pay

For the CEOs of S&P 500 companies, ISS will calculate an amount of total realizable pay based on amounts paid or earned or gains realized -- or the current value of ongoing incentive grants made-- during a specified measurement period[11].

Realizable pay will include all non-incentive compensation amounts paid over the measurement period (as reported in the Summary Compensation Table), plus the updated value of equity or long-term cash incentive awards made during the period and either earned or, if the award remains on-going, revalued at target level as of the end of the measurement period. Total realizable value for these grants and payments will thus be the sum of the following:

- Base Salary reported for all years in the measurement period;
- Bonus reported for all years;
- Short-term (typically annual) awards reported as Non-equity Incentive Plan Compensation for all years;
- For all prospective long-term cash awards made during the measurement period, the earned value of the award (if earned during the same measurement period) or its target value in the case of on-going award cycles;
- For all share-based awards made during the measurement period, the value (based on stock price as of the end of the measurement period) of awards made during the period (less any shares/units forfeited due to failure to meet performance criteria based on complete and clear disclosure); or, if awards remain on-going, the target level of such awards;
- For stock options granted during the measurement period, the net value realized with respect to such granted options which were also exercised during the period; for options granted but not exercised during the measurement period, ISS will re-calculate the option value, using the Black-Scholes option pricing model, as of the end of the measurement period;
- Change in Pension Value and Nonqualified Deferred Compensation Earnings reported for all years; and
- All Other Compensation reported for all years.

Note that ISS' realizable pay amount will be based on a consistent approach, using information from company proxy disclosures. Since current SEC disclosure rules are designed to enumerate "grant-date" pay rather than realizable pay, these estimates will be based on ISS' best efforts to determine necessary inputs to the calculation. In cases where, for example, it is not sufficiently clear whether an applicable award has been earned or forfeited during a measurement period, ISS will use the target award level granted.

ISS uses a Black-Scholes calculation to value stock options at the end of the measurement period (using assumptions as of the end of the measure period because top executives' stock options typically expire after seven to 10 years, meaning that even if an option is underwater in the first three years after its grant, there is a substantial likelihood it will ultimately deliver some value to the holder prior to expiration. Shareholders recognize that in considering "realizable" pay as a pay-for-performance factor, it is important to include the economic value of underwater options (which will also reflect the impact of a lower stock price, if applicable).

[11] generally three fiscal years, based on the company's fiscal year

CONCLUSIONS

While many investor portfolios were still recovering from the 2008-2009 market collapse, top management pay levels resumed their upward trajectory in 2010, and controversy about executive compensation continued to rage. Congress and the SEC have put the onus for monitoring it squarely in the hands of shareholders, who demonstrated through the first broad say-on-pay votes that a critical determinant of their votes is pay-for-performance alignment. Institutional investors, in particular, are approaching their responsibility carefully, recognizing that effective incentive programs are a key ingredient in the recipe for value creation. But where pay packages are clearly inefficient -- where they are providing wealth opportunities to top executives that are misaligned with shareholder return trends over time -- investors will communicate dissatisfaction.

ISS' quantitative methodology combines two analytical perspectives – pay and performance relative to a comparison group of companies, and pay relative to absolute shareholder returns – to detect significant long-term disconnects. The comparison groups are based on a transparent methodology that reasonably accounts for company size, market cap, and general industry categorization -- not for the purpose of benchmarking pay (or picking stocks) but to evaluate whether pay is generally commensurate with market peers and performance. Extensive back-testing has validated that this two-pronged approach addresses what concerns investors. Qualitative overlays will determine whether pay-performance disconnects are being addressed with appropriately performance-based awards. While shareholders are not interested in micro-managing executive pay programs, they have a huge stake in ensuring that they are efficient and effective. ISS' robust, transparent pay-for-performance methodology will facilitate investor evaluations of this critical aspect of corporate governance and shareholder value.

APPENDICES

Appendix I. Constructing Comparison Groups - Updated with regard to shareholder meetings held on or after Feb. 1, 2013 (as further revised for meetings on or after Feb. 1, 2015)

ISS constructs a comparison group, generally between 14 and 24 companies, for each subject company covered by the quantitative Pay-For-Performance screen, using a methodology that strives to maintain the subject company to within 15 percent of the median size of the ISS selected peer group. Peer groups are constructed utilizing the company's industry (based on GICS classification), the GICS classification of companies disclosed in the subject company's self-selected peer group (which are assumed to reflect the types of firms that the company competes with), and the company's revenue (or balance sheet assets with respect to certain financial companies) and market value. Peer groups for all Russell 3000 companies analyzed under this methodology are constructed twice per year, using data provided by an independent source (Research Insight Quarterly Data Download -- QDD) as of December 1 and June 1, as follows:

1. Revenue – Sum of most recent trailing 4 quarters' revenues for each QDD date
2. Total Assets – Most recent quarter's Total Assets for each QDD date
3. Market value – 200 day average price X shares outstanding for each QDD

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GICS codes for each subject company's self-selected peers are drawn from its last disclosed list of peers used to benchmark CEO pay (or updates provided by the company during an opportunity ISS provides for such updates prior to each peer group construction date). The process for selecting comparison companies is as follows:

1) Build a "seed group" of peers, to include the following:
   - All companies within subject's 4-digit GICS group
   - All companies within subject's peers' 6-digit GICS groups
   - Include only companies with as many years of compensation and TSR data as are needed for comparison with the subject company (generally 2 years, but fewer if subject has only one or two years of TSR or pay data)
   - Include only companies within size parameters:
     - If subject is not-asset-based and not market-cap-based (i.e., not within GICS groups specified below), use revenue to compare
     - If subject is asset-based (within GICS specified below), then qualify all peers within asset-based GICS using assets, but qualify all peers outside asset-based GICS using revenue
     - GICS where assets test is used to qualify a peer, when included as a peer within these GICS
       - 40101010 Commercial Banks
       - 40101015 Regional Banks
       - 40102010 Thrifts + mortgage
       - 40202010 Consumer Finance
       - 40201020 Other diversified
     - GICS where only market cap test is used to qualify a peer, when included as a peer within these GICS
       - 10102010 Integrated Oil & Gas
       - 10102020 Oil & Gas Exploration & Production
       - 10102030 Oil & Gas Refining & Marketing
       - 10102040 Oil & Gas Storage & Transportation
       - 10102050 Coal & Consumable Fuels

- Size basis is a range of 0.4x to 2.5x the subject company, which will be expanded when the subject company's revenue/assets/market cap (as applicable) exceed $5 billion; the range is also locked to $0-$250 million for companies under $100 million in size; for companies between $100 million and $250 million, the floor is equal to the subject's revenue/assets/market cap minus $100 million.
- Companies are classified into one of four market capitalization buckets; valid peers generally fall within ranges as follows (market cap in millions)[12]:

Bucket	Subject mktcap between	and	Peer lower limit	Peer upper limit
Micro	0	200	0	800
Small	200	1,000	50	4,000
Mid	1,000	10,000	250	40,000
Large	10,000	No cap	2,500	No cap

›

2) Peers are chosen from the seed group in the following order of priority, aiming to maintain the subject company at or near the median size[13]:
   - Subject's own 8-digit GICS group
   - "Underrepresented" 8-digit GICS groups from the subject company's own selected peers (i.e., where the proportion of peers in that GICS group is less than 1.15 times the proportion in the company's self-selected peer group); initial priority on GICS groups with at least 2 peers in the company's self-selected group
   - Subject's own 6-digit GICS group
   - "Underrepresented" 6-digit GICS groups as above
   - Subject's own 4-digit GICS group
3) When multiple seed peers qualify in the same group, priority is ranked by the following:
   - First, by whether the subject has chosen the seed peer in its own peer group
   - Next, by whether the seed peer has chosen the subject company as a peer
   - Third, by the number of peer selections among the seed peer and the subject company's peers and the companies that have chosen the subject as a peer
   - Fourth, by the distance in size (by the appropriate revenue or asset size comparison) between the subject and seed peer
4) The desired size of the peer group begins at 24, is reduced to 18 once any peer is drawn from the subject company's 6-digit GICS group, to 16 once any peer is drawn from "underrepresented" 6-digit GICS, and to 14 once any peer is drawn from the subject's 4-digit GICS.
5) Exceptional cases: If the minimum desired peer group size cannot be obtained via the above methodology, or in other cases where certain selected peers appear to be inappropriate (e.g., a peer is bankruptcy), ISS will customize a

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[12] Peers chosen only by market cap will be constrained to 0.4x to 2.5x the subject company's market cap, without also being classified into market cap buckets

[13] For companies in GICS 10102010 and 10102020, peers will only be selected from within the company's 8-digit GICS group and/or the 8-digit GICS groups of its selected peers

reasonable peer group for purposes of the quantitative pay-for-performance screen. The minimum number of peer companies in a group where the desired size cannot be obtained is 12.

For more information about ISS peer groups, please see the "Determining Peer Groups" section of ISS' US Compensation Policy Updates FAQ at http://www.issgovernance.com/policy/USCompensationPolicyUpdatesFAQ.

Appendix II. Calculating Pay-TSR Alignment Regressions (as revised for shareholder meetings on or after Feb. 1, 2013)

The regressions that calculate Pay and TSR trends are weighted least-squares regressions of Pay and TSR against the independent (x) variable time.

Because the timing of the measurements for pay and for TSR is different, however, the regressions are handled differently. The indexed TSR values represent "fence posts" -- fiscal year-end markers -- that connect the "fence rails" of pay delivered between those markers.

- For the pay regression, five values are measured, at times (years) 1, 2, 3, 4, and 5. The dependent (y) values for the pay regression are the total CEO compensation values for the five most recent fiscal years.
- For the TSR regression, six values are measured, at times (years) 0, 1, 2, 3, 4, and 5. The dependent (y) values for the TSR regression are determined by hypothetically "investing" $100 in the company on the day five years prior to the most recent fiscal year end, and measuring the value of that $100 investment on each of the subsequent five year fiscal year end dates, for a total of six indexed TSR values.

The following table traces a hypothetical company's Pay and Indexed TSR values for the five-year period in question. The TSR % change column indicates the percentage return over the one-year period in question, for reference.

Year (X)	Pay	Indexed TSR	TSR % change
2005 (0)	-	100	-
2006 (1)	1,231	109	9.0%
2007 (2)	2,553	118	8.3%
2008 (3)	1,821	91	-22.9%
2009 (4)	1,789	99	8.8%
2010 (5)	2,226	104	5.1%

The regressions are weighted to place slightly more emphasis on recent experience. Because there are a different number of data points for the two regressions, pay and TSR each have their own weights calculated. The weights are constructed such that the geometric mean of the weights is equal to 1, and that the weight for a pay period is equal to the geometric mean of the weights for the TSR periods that "fencepost" it (e.g., the weight for pay period 2 is equal to the geometric mean of the weight for TSR periods 1 and 2. Finally, the weight for any period is equal to the weight for the next period times a decay factor (set to .85 for the ISS model), yielding weights as follows:

	Period 0	Period 1	Period 2	Period 3	Period 4	Period 5
Indexed TSR weights	0.6661	0.7837	0.9220	1.0847	1.2761	1.5012
Pay weights	n/a	0.7225	0.8500	1.0000	1.1765	1.3841

The indexed TSR calculation depends on a continuous series of TSR data. If TSR data for only the first period is missing, PTA will be calculated on the basis of 4 years of data, otherwise PTA will not be calculated. If pay data are missing for any one period, then that period carries zero weight for both pay and TSR in the calculation.

The slope of the weighted least-squares regression is calculated as follows, if $\boldsymbol{P_i}$ represents the pay or performance value for period i, $\boldsymbol{W_i}$ represents the corresponding weight for period i, and $\boldsymbol{X_i}$ is simply i:

$$slope = \frac{\sum W_i \sum W_i X_i P_i - \sum W_i X_i \sum W_i P_i}{\sum W_i \sum W_i X_i X_i - \sum W_i X_i \sum W_i X_i}$$

In order that the two slopes are comparable to one another, each must be normalized by dividing by their respective weighted-average values:

$$norm.factor = \frac{\sum W_i P_i}{\sum W_i}$$

The normalized slopes are therefore analogous to a 5-year "trend rate" for pay and performance, weighted to reflect recent history.

Appendix III. Revising the Relative Degree of Alignment Measure for Shareholder Meetings on or after Feb. 1, 2014

To further improve the relative degree of alignment (RDA) measure, ISS revised the calculation from a 40/60 weighted average of 1- and 3-year RDA measures to a single, annualized RDA measure for the 3-year measurement period (shorter periods are used if pay and performance data are not available for all three years).

Under the new model, each year of TSR will be weighted equally and calculated to produce the annualized TSR for the measurement period, thus more appropriately emphasizing longer-term pay and performance than the prior methodology (where one-year performance was represented in both the one- and three-year measures). The single measure also avoids being overwhelmed by periods of volatility and mean-reversion; by smoothing out the impact of volatility, the new methodology better reflects overall long-term performance. Additionally, this approach better addresses companies that have at least two years, but less than three years of TSR data available; under the prior model, only one year of pay and performance were able to be assessed in such cases. Finally, using a single 3-year measure also further diminishes certain issues relative to the timing of equity awards. Many companies grant equity early in the fiscal year, before the corresponding performance year; longer-term "average" performance helps alleviate some of this timing mismatch.

Back testing of the US universe indicates that the distribution of RDA anticipated scores is substantially similar to the former distribution of scores, albeit with some (relatively small – affecting about 15 percent of companies) changes in individual concern levels.

Summary

As of analyses for shareholder meetings as of Feb. 1, 2014, each company (both subject companies and peers) will have three-year TSR and pay levels calculated as unweighted averages of annual pay and TSR over the relevant 3-year measurement period. Pay will be a simple arithmetic average; TSR will be a geometric average.

Appendix IV. Revising Quantitative Measures for Shareholder Meetings on or after Feb. 1, 2015

To ensure that the quantitative measures have continued to identify outlier levels of potential misalignment between pay and performance, ISS conducted a comprehensive analysis of these factors, based on 2014 data and results.

The first exercise was testing whether RDA, MOM, and PTA were still significant factors in ISS vote recommendations and vote results. ISS used a total of 1,966 cases from January 1-June 30, 2014 where all three quantitative values were available. Each quantitative factor showed significance for both the voting recommendation and results. The t-statistics were > 2 for RDA and PTA, while MOM was < -2 (MOM has an inverse correlation with the vote recommendation; that is, the higher the value of MOM, the greater chance of a negative recommendation or vote result). Since each value showed significance, we remain confident that these values are proper assessments in capturing the quantitative values.

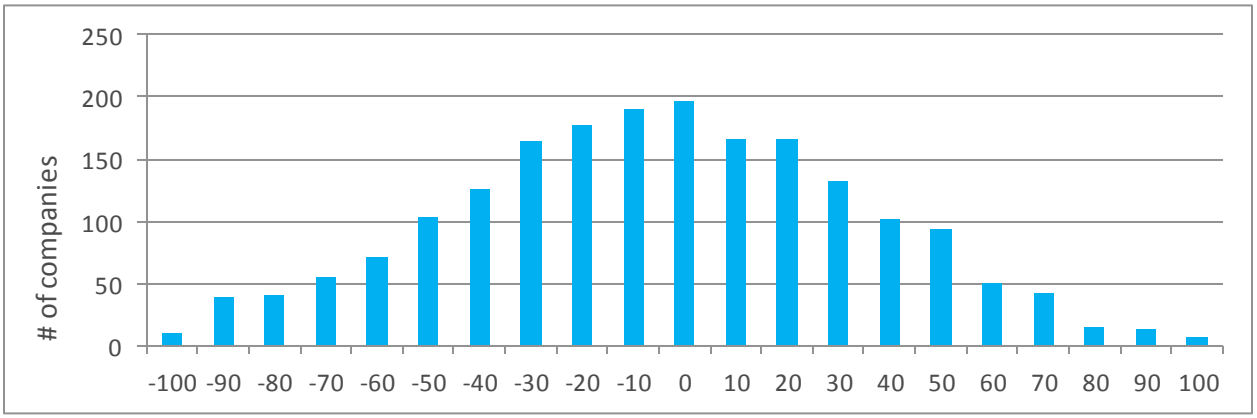
t- statistics		
Quantitative	Vote	
Factors	Recommendation	Results
MOM	-9.9	-4.8
PTA	3.6	3.9
RDA	14.1	5.3

As these factors are still pertinent in determining pay-for-performance alignment, the next step was applying values established from 2011 to the data from 2014.

Relative Degree of Alignment

RDA measures are still normally distributed, as indicated in the chart below. The median value is close to zero (0.2), meaning that the percentile pay and performance ranks are nearly equal for the median company in the sample

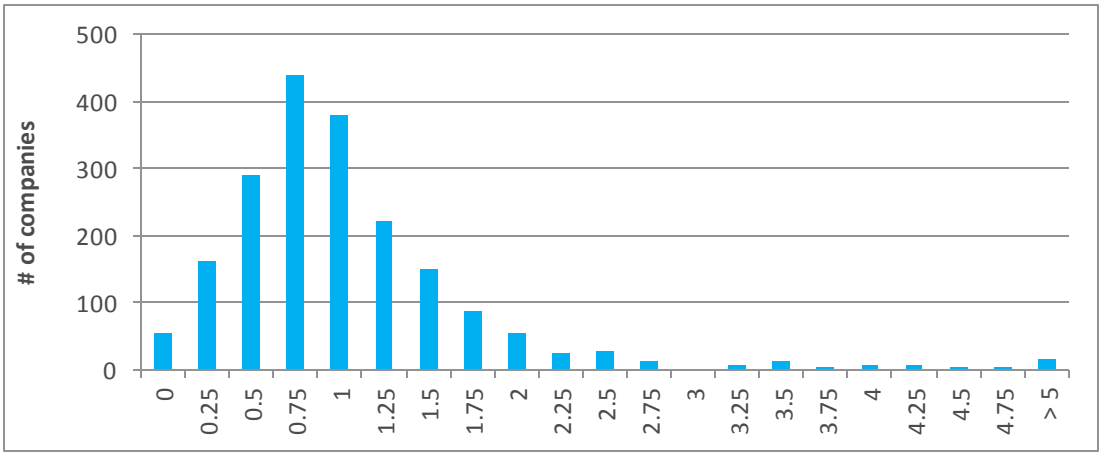
Figure 1 Distribution of Relative Degree of Alignment Measures 2014



Multiple of Median

The multiple of median measure, as expected, exhibits a slightly skewed distribution – as there is no natural upper bound to the measure. Notably, the median and mode values for this measure are near 1.0 (Median: 1.1; Mean 1.2) – meaning that the typical company in the sample pays very close to the median pay of the ISS-selected comparison group. This finding provides evidence that in general, ISS' comparison group methodology selects appropriate companies.

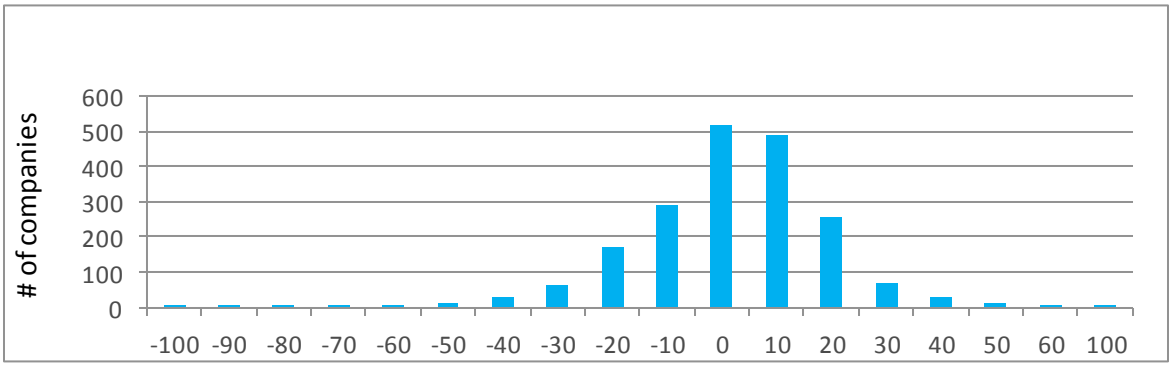
Figure 2 Distribution of Multiple of Mean Measures 2014



Pay-TSR Alignment

This measure did not exhibit a normal distribution. The values range from -100% to 100%, with a median value of 6.8% meaning that the median company saw the performance trend approximately 7 percentage points higher than the pay change. This compares to the -3% in the 2011 findings. The updated results for PTA are not unexpected. The 2011 testing was completed during a recessionary period for the previous five years. The current five-year period has seen predominately positive stock returns.

Figure 3 Distribution of Pay-Relative TSR Alignment Measures 2014



After looking at the distributions, we tested the quantitative factors using the values and percentiles from pg. 10 to determine the change to the target percentile with the value held constant and the change to the value with the target percentile held constant.

	RDA	MOM	PTA
Current Score/Percentile for Medium Concern	-30/25th	2.33/92nd	-30/10th
Using 2014 Data			
Percentile kept constant; resulting score	-27.2	2.10	-14.9
Score kept constant; resulting percentile	23%	94%	3%

The results indicate minor changes for RDA and MOM, but larger discrepancies for PTA. The original PTA score for a medium concern was pegged to the 10th percentile of scores of Russell 3000 companies; in 2014 the same score would equate to only the 3rd percentile. Holding the 10th percentile constant for 2014 would result in a score of -15.

Keeping the scores consistent with the original level used to identify outliers requires a change for PTAs with respect to both the medium and high concern levels. In order to balance the approach between flagging more outliers while not providing a level that would potentially capture an excessive amount of companies, -20 was determined to be the appropriate threshold. To keep the spread between medium and high concern constant (15 points), the score for a high concern was changed to -35 versus -45 previously.

The percentiles and raw scores related to the RDA screen did not change significantly between the analyses completed in 2011 and 2014. However, further analysis, which considered ISS vote recommendations (based on qualitative evaluations) at various demarcation points of RDA indicated that the impact of RDA was insignificant until a score of -40 was reached. As such, revising the RDA threshold to -40 will improve identification of potential pay-for-performance misalignment cases that merit intensive qualitative analysis.

No change was deemed necessary for the RDA high concern variable. The expected proportion of companies as originally anticipated was flagged at this level, and based on vote recommendation outcomes, was found to remain appropriate for warranting a higher concern level.

The MOM measure did not exhibit any material change between the original and updated analysis. In addition, the vote recommendations were consistent with respect to the current thresholds.

Back-testing of the US universe indicates that changing the distribution of PTA would result in an additional 32 companies receiving a Medium concern (from a Low concern) and 29 companies generating High concern as opposed to Medium. Lowering the RDA threshold resulted in 112 companies receiving Low concerns as opposed to Medium.

The revised scores are not anticipated to significantly increase or decrease the overall number of companies receiving a negative recommendation, though it will change results for some individual companies (both positively and negatively).

Summary

Based on updated analysis of distributions, recommendations, and vote results from 2014 proxy season relative to ISS pay-for-performance quantitative measures, the following changes are implemented for meetings as of Feb. 1, 2015:

- Lower the RDA threshold that triggers a Medium concern from -30 to -40 (i.e., reducing the number of companies flagged for concern under this screen).
- Raise the thresholds triggering a Medium and High concern for PTA. The Medium level would increase from -30 to -20, while High would increase from -45 to –35 (i.e., increasing the number of companies flagged for concern under this screen).

Variable	Concern Level	Current value	Change
PTA	Medium	-30	-20
PTA	High	-45	-35
RDA	Medium	-30	-40

The percentiles associated with the new scores are updated minimally, as follows:

Measure	Level that may trigger high concern in conjunction with other measures		Level that triggers high concern by itself	
Relative Degree of Alignment	-40	~16th percentile	-50	~11th percentile
Multiple of Median	2.33x	~94th percentile	3.33x	~97th percentile
Pay-TSR Alignment	-20%	~6th percentile	-35%	~2nd percentile

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