RADFORD ALERT

Unlocking ISS' Quantitative Approach for Assessing the Alignment of CEO Pay and Performance

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As a follow-up to its November release covering new voting policies for 2012, Institutional Shareholder Services (ISS) has now published an updated set of guidelines for assessing the alignment of CEO compensation and corporate performance. The refreshed testing regime, while still applying a broad-brush methodology across all companies, represents a serious rethinking on the part of ISS, and seeks to address many of the complaints aired by companies last proxy season. To assist clients in understanding ISS' new approach for evaluating CEO pay-for-performance alignment, the following client alert summarizes the three new quantitative tests to be employed by ISS in 2012, along with the firm's new pay-for-performance peer group selection process.

Going forward, ISS will use its updated pay-for-performance alignment methodology, along with other qualitative inputs, to make voting recommendations on management say-on-pay proposals and director elections for Compensation Committee members (and in rare cases the full Board of Directors). While the three quantitative tests described herein will not determine ISS recommendations outright, they will serve as the first screen for the ISS research team as it seeks to identify companies in need of extra scrutiny. In addition to pay-for-performance alignment tests, ISS will use last year's say-on-pay voting results to select companies in need of further examination. Companies that received a favorable say-on-pay vote of 70% or less will be subjected to a detailed review of executive compensation and disclosure practices regardless of their pay-for-performance alignment results this year.

Before diving into the details, it is important to note the quantitative tests described in this client alert should not be viewed in a vacuum. As was mentioned above, the new tests only serve as a screen for identifying potential pay-for-performance disconnects. Thus, while we focus most of our attention on ISS' data driven analyses, Appendix A of this alert also provides further insight into how the quantitative and qualitative elements of ISS' revised methodology work together. Furthermore, Radford encourages clients to work directly with their largest institutional shareholders to learn how investor voting policies might differ from ISS in this, and other important corporate governance areas.

Overview of ISS' Quantitative Testing Approach

ISS' new pay-for-performance testing regime includes three parts: two relative assessments designed to review how well a company's CEO compensation decisions align with peer companies, and one absolute test intended to measure the degree to which changes in CEO pay align with changes in corporate performance. In aggregate, the tests consider data covering one-, three- and five-year periods and focus on the relationship between CEO total compensation and total shareholder returns (TSR). Companies will receive separate ratings of “Pass,” “Medium Concern,” or “High Concern” on each of the three tests, which can then combine to produce a recommendation for a more detailed qualitative review of compensation practices.

A single High Concern rating on any one test or a Medium Concern rating on any two tests will trigger such a review. Each test produces its own numeric outcomes, which ISS compares to predetermined Medium and High Concern thresholds developed through back testing of historical data. Below we provide detailed summaries of each test, and Appendix B provides a complete breakdown of the specific rating thresholds used in each assessment.

Relative Degree of Alignment Test

ISS’ relative degree of alignment (RDA) test examines the connection between CEO total compensation and TSR over one- and three-year periods. As its title suggests, this test reviews these factors on a relative basis against a peer group of companies selected by ISS. For more information on peer group selection, please see page five of this report.

Total CEO compensation for both the subject company and its peers is measured using a methodology aligned with the total pay figures disclosed in the Summary Compensation Table. However, ISS values all equity awards using an internal set of assumptions. To the surprise of some observers, ISS also includes deferred compensation gains and annual changes to pension plans in its pay figures. For companies with such plans, especially in industries like technology and life sciences where these programs are relatively rare, the impact on ISS analyses could be significant.

In the RDA test, the subject company’s CEO pay and TSR are ranked (using a simple percentile rank calculation) against the peer group, producing two scores ranging from one to 100. The difference between the TSR score and the CEO pay score produces an RDA score, where a negative value indicates a CEO is overpaid vs. their relative TSR performance. Both a one-year and three-year RDA score are generated by ISS and subsequently blended on a 40/60 basis respectively to create a final weighted score. The three-year score examines average CEO pay over the past three years against three-year TSR.

A final weighted RDA score of -50.0 or lower produces a “High Concern” rating and a final score between -30.0 and -49.9 produces a “Medium Concern” rating. Any blended RDA score higher than -29.9 will generate a passing grade. For more information on the full ISS rating system, please see Appendix B.

For illustrative purposes, the table below provides a sample RDA score output from Radford’s in-house model designed to estimate results under ISS’ new pay-for-performance methodology:

Sample RDA Score Estimate (all values are hypothetical)

Measurement Period	TSR Performance Rank	CEO Compensation Rank	RDA Score (TSR Minus Pay Rank)	RDA Test Result
1-Year (40% Weight)	15	53	-32	Medium Concern
3-Year (60% Weight)	80	72	18	Pass
Final Weighted Score	**55**	**57**	**-2**	**Pass**

In the above table, the one-year TSR performance rank of “15” indicates the subject company is at the 15th percentile for one-year TSR vs. its ISS-selected peer group. The subject company’s actual TSR over this period may be positive or negative, but only its relative position is taken into account. Further tests described below consider actual TSR performance on an absolute basis.

As the sample on the previous page suggests, weaker performance in the short-term can be offset by stronger long-term performance, and a “Medium” or “High” concern rating over a one-year period does not always translate into an overall failing grade. However, even companies with strong three-year performance should still estimate and review their RDA score on an annual basis, as this year’s results can help to predict potential issues in future years.

Multiple of Median Test

Among the three quantitative tests described by ISS in its latest release, the multiple of median (MOM) analysis is easily the most straight-forward. Designed to identify outlier pay packages, this analysis translates CEO total compensation at the subject company into a multiple of median CEO total compensation at its peer companies. Peer companies used for the MOM test are identical to those used in the RDA analysis described above. For more information on peer group selection, please see page five of this report.

A final MOM multiple in excess of 3.33x will generate a “High Concern” rating and final scores between 2.33x and 3.32x will produce a “Medium Concern” rating. Any multiple under 2.33x generates a passing grade, as ISS is principally focused on identifying significant outliers. For more information on the full ISS rating system, please see Appendix B.

For illustrative purposes, the following table provides sample MOM scores for several companies using the output generated by Radford’s model to estimate results under ISS’ new pay-for-performance methodology.

Sample MOM Score Estimates (all values are hypothetical)

Company Name	CEO Pay	Median Peer Group CEO Pay	MOM Score	MOM Test Result
ABC Corp.	$4,642,323	$3,598,700	1.2x	**Pass**
DEF Inc.	$41,389,535	$16,359,500	2.53x	**Medium Concern**
GHI LLC.	$5,165,046	$1,253,652	4.12x	**High Concern**

Notably, as the examples above demonstrate, actual pay levels for the subject company do not influence the final rating, only the relative scale of CEO pay packages vs. the ISS-selected peer group. Furthermore, year-over-year changes in pay do come into play here.

Pay-TSR Alignment Test

In contrast to the RDA and MOM tests described above, the pay-TSR alignment (PTA) test is an assessment of the connection between the subject company’s CEO pay and its historical stock performance without any reference to a peer group. This test is simply a measure of the degree to which the change in CEO pay over time has tended to correlate or trend with the company’s own stock price performance over the same period.

Measured over a five-year window, this analysis examines the difference between the trend line in annual changes to CEO pay and the trend line in annual changes to TSR. If the trend lines for pay and TSR move in similar directions and at similar rates, ISS will consider the company to have developed a strong connection between pay and performance. However, if the opposite is true, then the company will be labeled as having made CEO pay decisions misaligned with shareholder results.

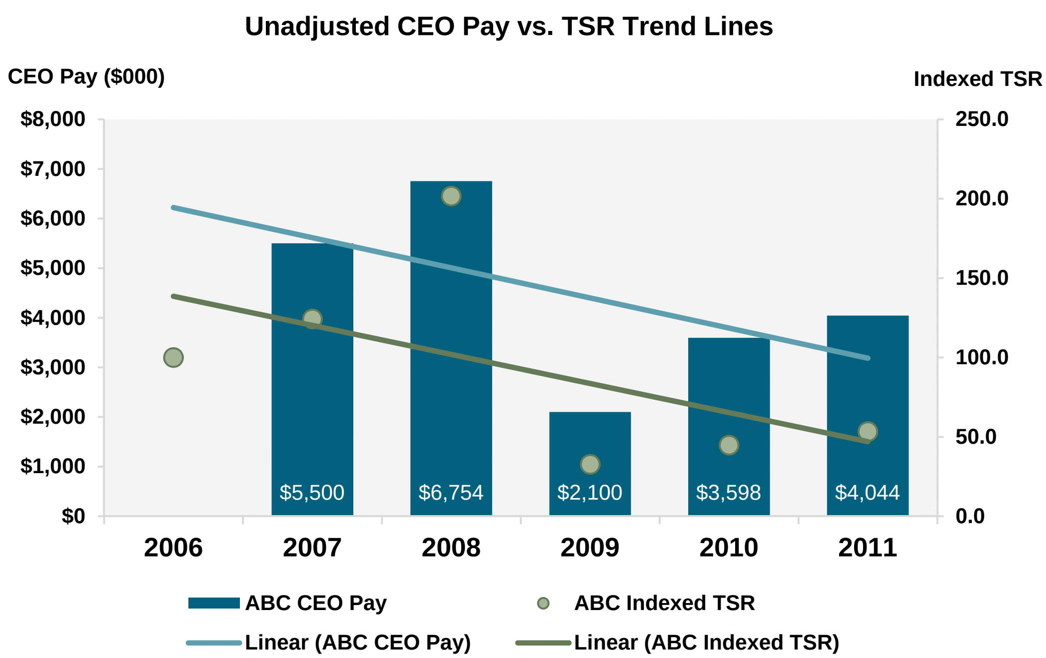
To generate the specific inputs for this analysis, ISS starts by collecting CEO total compensation figures for the subject company over the last five fiscal years. The methodology for determining CEO pay is identical to the RDA and MOM tests. For the shareholder return inputs, ISS next collects successive one-year TSR results for each of the last five fiscal years (not overall five-year TSR). Assuming an initial investment of $100 in the subject company at the start of year one, ISS then uses the five separate one-year TSR values to produce “Indexed TSR” data points expressed in dollar amounts.

For illustrative purposes, the table below lists a full set of sample inputs used by Radford to estimate the PTA portion of ISS' new pay-for-performance methodology:

Sample Unadjusted PTA Test Inputs (all values are hypothetical)

Raw Inputs	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
CEO Compensation	n/a	$5,500,368	$6,754,280	$2,100,400	$3,598,125	$4,043,650
Successive 1-Year TSRs	n/a	+24.3%	+62.3%	-83.8%	+36.9%	+19.3%
Indexed TSR	$100.0	$124.3	$201.7	$32.7	$44.7	$53.4

To help clients visualize the relationship between the CEO compensation and TSR data points listed above, we generate charts like the one shown below. These charts also include simple linear regression lines for both CEO pay and Indexed TSR, which serve as good reference points for understanding final PTA test outcomes.



However, ISS' PTA assessment, along with the in-house model developed by Radford to estimate PTA results, uses a slightly more complex approach to generate actual results. To start, ISS weights the data set using a series of predetermined constants to ascribe greater importance to more recent pay decisions and TSR results. Next, the formula used by ISS to determine trend lines is a "weighted least squares linear regression" rather than a simple linear regression. This approach aims to minimize the squared distance between the lines of best fit and each data point in a series. As a result, from a visual perspective, the chart shown above, when adjusted using ISS' constants would appear distorted and skewed heavily to the right. For more detail on the math underlying the PTA test, please see Appendix C.

Final PTA scores are determined by subtracting ISS' weighted CEO pay slope factor from ISS' weighted TSR slope factor. This generates a single number ranging from approximately -100% to 100%. If pay and performance are perfectly aligned, the slopes of both lines would be equal, and a final result of 0% would be generated. In the illustrative example below, a final score of -11.3% means the trend rate for pay changed at 11 percentage points higher than the performance trend, indicating a very slight pay-for-performance disconnect. According to ISS, most companies have a slightly negative final output.

Sample PTA Test Estimate (all values are hypothetical)

PTA Formula Outputs			
TSR Slope	**Pay Slope**	**PTA Score (TSR Slope Minus Pay Slope)**	**PTA Result**
-23.8%	-12.5%	-11.3%	**Pass**

ISS views a final PTA score of -30.0 to -49.9% as grounds for "Medium Concern" rating, while a score of -45.0% or lower would trigger a "High Concern" rating. Any PTA score of -29.9% or higher would receive a "Pass" rating. For more information on the full ISS rating system, please see Appendix B.

Peer Group Selection Process

Both the RDA and MOM assessments described above rely on ISS-selected comparator groups. In a break from past methodology, ISS now aims to build highly specific peer groups for all subject companies based on industry, revenue and market capitalization metrics. Going forward, pay-for-performance peer groups will also include 14 to 24 companies, a significant increase from past years. Generally speaking, these changes will likely be viewed in a favorable light by most companies.

However, despite the fact ISS released fairly specific guidelines to describe its new peer group selection process, its analysts still reserve the right to use discretion in their research. As such, ISS may choose to weight selection factors differently from one company to the next. This makes fully accurate peer group predications problematic and may be a source of frustration as proxy season progresses. Furthermore, ISS explicitly notes its comparator groups are not intended to mimic the compensation benchmarking peer groups listed in Compensation Discussion & Analysis (CD&A) statements. Thus, clients should not expect forward-looking ISS comparator groups to be any more or less aligned with their existing compensation peer groups.

Despite variability in the system, ISS generally aims to select peer companies so that all members of the comparator group meet the following selection criteria:

> Comparator company revenues must fit within a range of 0.45x to 2.1x of the subject company's revenues;

> Comparator company market capitalizations must fit within a range of 0.2x to 5.0x of the subject company's market capitalizations; and

> Comparator companies should be in the same industry as the subject company, as defined by 6-digit GICS codes.

In situations where all three criteria cannot be fulfilled, ISS will relax the GICS code match to four digits and eventually two digits until a minimum of 14 companies are found. Financial criteria are typically only relaxed as a last resort if at least 14 peers cannot be identified after stretching the industry screen. In addition, ISS also aims to place subject companies as close as possible to the median for both revenue and market capitalization of their respective peer groups. For example, if ISS identifies 35 potential peers based on the three primary factors listed above, it will cut down to 24 peer companies by alternating between companies bigger and smaller in size than the subject company (ideally 12 above and 12 below).

Given the fact pay-for-performance results are highly dependent on peer group selection, Radford has developed an in-house tool to model ISS peer groups using the methodology described above (along with several other factors discussed in ISS' latest policy release). In total, Radford's estimated process uses a 15 step progression designed to simulate ISS' methodology as closely as possible.

For reference, the annual revenue figures considered by ISS represent the sum of revenues for a company's last four quarters and the market capitalization inputs used by ISS represent a company's market value based on its 200-day average stock price multiplied by total common shares outstanding. Since ISS refreshes its revenue and market capitalization data on June 1 and December 1 of each year, its peer groups will likely change only twice per year.

Potential Areas of Concern

After thoroughly reviewing ISS' new CEO pay-for-performance alignment methodology, Radford has identified the following areas of concern around which companies may want to engage directly with ISS and/or institutional shareholders:

- **High Volatility** – As evidenced by the major stock market swings last summer, overall volatility remains high, and could potentially have a significant impact on quantitative pay-for-performance analyses, which are all tied to TSR. This is especially true for companies in the technology and life sciences sectors, where volatility has traditionally outpaced most other industries. Significant stock price changes at the start or end of the last fiscal year will most likely move the needle in quantitative assessments in a material way.

- **CEO Transitions** – ISS' quantitative analyses may not always take CEO transitions into consideration, which can significantly impact testing outcomes, particularly if severance payouts or new-hire awards are included. While ISS will consider the impact of a CEO change in its qualitative review, clients are encouraged to proactively reach out to ISS and/or institutional shareholders to alert them to CEO transitions and related compensation decisions.

- **Aspirational Peer Groups** – Companies with aspirational compensation peer groups (e.g. those peer groups based on growth projections or larger competitors for talent) are very likely to be susceptible to poor pay-for-performance ratings. If estimated ISS peer groups differ significantly from existing compensation peer groups, clients may want to investigate how differences between the peer groups might drive impressions of CEO pay-for-performance.

- **Over-Reliance on TSR** – ISS' methodologies represent the wishes of its client base of institutional shareholders, who are understandably interested in strong shareholder returns. However, ISS' sole reliance on TSR to assess CEO pay-for-performance alignment runs the risk of ignoring other measures of corporate success. As such, companies should develop plans to describe compensation decisions in the context of other performance metrics when relevant.

- **Comparator Group Development** – Although many observers of ISS' processes for developing comparators groups would consider the latest round of changes a step in the right direction, ISS' reliance on GICS codes to define industry groups remains a concern. Several companies disclosed issues with GICS code-based comparisons last proxy season, and there is little evidence to suggest these concerns will dissipate. Clients with past complaints about the GICS code system should expect to revisit those issues again in 2012.

Next Steps

For additional information on the latest ISS policy releases, clients can visit the online ISS Policy Gateway here: http://www.issgovernance.com/policy/2012/policy_information.

For assistance with estimating potential ISS pay-for-performance test results, including ISS-generated peer groups and relative degree of alignment (RDA), multiple of median (MOM) and Pay-TSR alignment (PTA) outputs, please contact the Radford Consulting team at consulting@radford.com.

Furthermore, given that the data-driven tests employed by ISS are only the first set of screens used to identify potential pay-for-performance disconnects, Radford is prepared to assist clients with in-depth qualitative assessments of compensation programs, including the identification of problematic pay practices. As we noted in the introduction, to gain further insight into how the quantitative and qualitative elements of ISS' revised methodology work together, please see Appendix A.

Appendix A – ISS Pay-for-Performance Methodology Summary

ISS' qualitative review process, Part 2 below, is triggered if a "High Concern" rating is identified in any one of three of the quantitative tests described in Part 1. Additionally, if a "Medium Concern" rating is identified in any two of the three tests, ISS will also subject companies to a qualitative review.

Part 1 – Quantitative Methodology

Designed to identify pay-for-performance disconnects vs. TSR and peers

A medium concern score on any two tests or a high concern score on any one test will trigger a Part 2 qualitative review.

For additional detail on medium and high concern scoring thresholds, please see Appendix B.

Part 2 – Qualitative Methodology

Designed to identify potential factors leading to disconnects in pay and performance

Part 1

Relative Degree of Alignment (RDA) Test

> Relative test against ISS selected peers
> Percentile rank of CEO pay is compared to TSR percentile rank among peers
> Conducted over 1 and 3-year periods (weighted 40% and 60%, respectively)

Multiple of Median (MOM) Test

> Relative test against ISS selected peers
> Subject company CEO pay is converted into a multiple of peer median CEO pay
> Only the last fiscal year is considered

Pay-TSR Alignment (PTA) Test

> Absolute test covering the subject company only
> Explores the difference between the trend in CEO pay and the trend in TSR
> Measured over a 5-year period

Part 2

Strength of performance-based pay

> Ratio of performance to time-based equity compensation
> Overall ratio of performance-based compensation to total compensation
> Disclosure of performance metrics and goals (including rationale for non-GAAP adjustments)

Peer group benchmarking practices

> Aggregate organizational size of peers
> Target percentile for pay positioning

Results of financial/operational metrics

> Applies to disconnects driven by cash compensation
> Rigor of performance goals compared to historic company performance

Special circumstances

> Recent CEO recruitment
> Unusual grant practices (e.g., bi or triennial)

When considering the quantitative methodology described above, it is important to take the following points into consideration:

> For relative analyses, ISS identifies 14-24 peer companies generally within the same 6- or 4-digit GICS classification as the subject company and within a range of 0.45-2.1x of revenue and a range of 0.2-5.0x of market capitalization. Companies included in the ISS database include the Russell 3000 index and their peers.

> ISS defines "pay" to include base salary, bonus payouts, the grant-date value of equity, change in pension/non-qualified deferred compensation and other compensation as disclosed in the proxy

Appendix B – ISS Pay-for-Performance Scoring Thresholds

Based on the scoring system outlined below, if a company's pay practices present a "Medium" level of concern under any two of the three pay-for-performance alignment tests, or a "High" level of concern under any single test, ISS will conduct a qualitative review of the company's CEO pay program.

ISS Test	Medium Concern Triggers	High Concern Triggers
Relative Degree of Alignment	**-30** (Company pay rank percentile exceeds TSR rank by 30 to 49 points)	**-50** (Company pay rank percentile exceeds TSR rank by 50+ points)
Multiple of Median	**2.33x**	**3.33x**
Absolute Pay-TSR Alignment	**-30%** (5-year CEO Pay trend is 30-44% higher than 5-year TSR trend)	**-45%** (5-year CEO Pay trend is 45%+ above the 5-year TSR trend)

To determine the thresholds described above, ISS completed extensive back testing of historical data through its new pay-for-performance methodology. As such, we have a clear understanding of the position to market for companies triggering medium and high levels of concern.

ISS Test	Medium Concern Position to Market	High Concern Position to Market
Relative Degree of Alignment	**~ 25th Percentile** (Read as bottom 25%)	**~ 10th Percentile** (Read as bottom 10%)
Multiple of Median	**~ 92th Percentile** (Read as top 8%)	**~ 97th Percentile** (Read as top 3%)
Absolute Pay-TSR Alignment	**~ 10th Percentile** (Read as bottom 5%)	**~ 5th Percentile** (Read as bottom 5%)

Appendix C – ISS Pay-TSR Alignment Formulas

The contents below are reproduced directly from ISS' *Evaluating Pay-for-Performance Alignment* white paper published in December 2011:

The regressions that calculate Pay and TSR trends are weighted least-squared regressions of Pay and TSR against the independent (x) variable time. The slope of the weighted least-squares regression is calculated as follows, if ***Pi*** represents the pay or performance value for period ***i***, ***Wi*** represents the corresponding weight for period ***i***, and ***Xi*** 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 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

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