Shareholder Value Advisors

April 27, 2012

Ms. Elizabeth M. Murphy
Secretary
Securities & Exchange Commission
100 F Street, NE
Washington, DC 20549-1090

RE: Comments on the pay versus performance disclosure required by Section 953 of the Dodd-Frank Act

Dear Ms. Murphy:

I am submitting this letter to present my suggestions for implementation of the pay versus performance disclosure required by Section 953 of the Dodd-Frank Act.

I am the President of Shareholder Value Advisors Inc., a consulting firm that helps companies improve shareholder value through better performance measurement, incentive compensation and valuation analysis. I have done extensive research on pay versus performance including work to measure the sensitivity of management pay to changes in shareholder value and to assess the impact of incentive strength and compensation cost on subsequent company performance. My published research includes "Assessing Pay for Performance" in the *Conference Board Director Notes* (October 2011), "Six Factors That Explain Executive Pay (and its Problems)" (with Professor David Young of INSEAD) in Morgan Stanley's *Journal of Applied Corporate Finance* (Spring 2010), and "What Investors Need to Know About Executive Pay" (with Professor Young) in the *Journal of Investing* (Spring 2010).

This letter expands on my letter of October 4, 2010 to present a simplified analysis of pay versus performance using data from the Summary Compensation Table, an improved analysis of pay versus performance using "mark to market" pay data and a new analysis of wealth leverage and alignment.

"Pay versus performance" disclosure should show the company's success (or failure) in achieving the three basic objectives of management compensation

Management compensation has three basic objectives:

1. Provide strong performance incentives: give managers sufficient incentive compensation to motivate them to work long hours, take risks and make unpleasant decisions to maximize shareholder value,
2. Retain key talent: give good managers sufficient total compensation to attract and retain them, particularly during periods of poor performance due to market and industry factors, and
3. Limit shareholder cost: limit the cost of management compensation to levels that will maximize the wealth of current shareholders.

To assess a company's success in achieving these three basic objectives, investors need information on *relative* pay and *relative* performance. Information on relative pay is essential

to assess retention and shareholder cost. Retention risk depends on pay vs. peers and compensation cost is excessive if equally capable executives can be hired for less. Information on relative performance is essential to assess incentive strength. Shareholder return reflects market and industry factors as well as management performance. To assess whether pay is sensitive to changes in controllable shareholder wealth, investors need information on relative performance.

A log-log scatterplot of *relative* CEO pay versus *relative* performance with a regression trendline will show (1) a measure of the CEO's performance incentive, (2) a measure of his or her retention incentive and (3) a measure of cost efficiency. To help investors understand whether there is a time trend in the relationship between relative pay and relative performance, it is useful to supplement the scatterplot with a times series graph. The graphs below show our proposed pay versus performance disclosure for Yum Brands. Pages 9-10 of this letter show similar graphs for Monsanto and CSX. All the graphs use the same scale to make visual comparison more meaningful.

Relative pay in the graphs is the ratio of CEO total compensation from the Summary Compensation Table (SCT) to estimated market total compensation. Each reporting company will be responsible for identifying a peer group and estimating market total compensation. Relative performance is the ratio of actual shareholder wealth per share at fiscal year end to shareholder wealth per share assuming the peer group median return for the last two years. Actual shareholder wealth at fiscal year end includes the value of cash dividends and other distributions for the past two years. Two year relative performance is useful in assessing SCT pay because some elements of pay, e.g., equity compensation awards early in the year, tend to reflect prior year performance, while other elements, e.g., year end bonuses, tend to reflect current year performance.

Proposed "pay versus performance" graphs
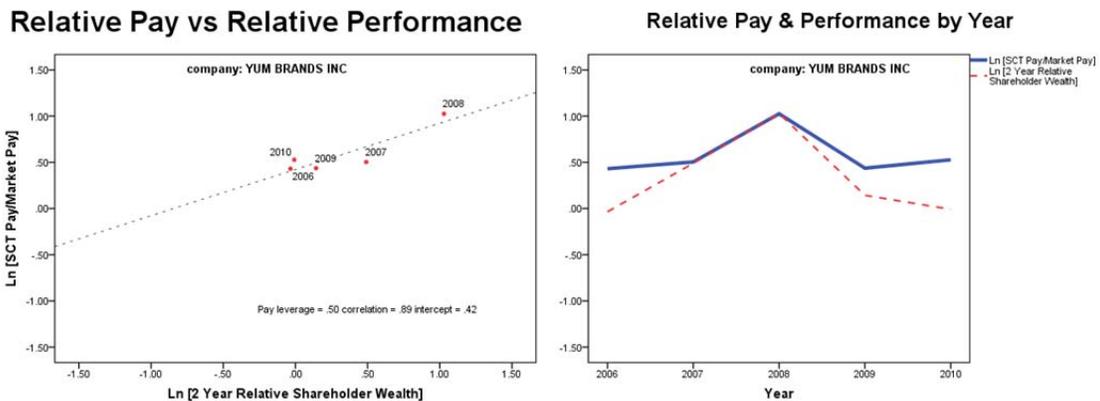
The left panel plots the natural log of relative CEO pay against the natural log of relative shareholder wealth. It's important to use logarithms because log changes, unlike simple percentage changes, are additive. The average percentage change going from 100 to 50 and back to 100 is +25% [= (-50% + 100%)/2] even though the cumulative percentage change is 0%. Analysis using simple percentage changes would imply that 100-50-100 is better performance than 100-100-100.

The dashed line in the left panel is the regression trendline relating log relative CEO pay to log relative performance. The slope of the trendline, which we also call "pay leverage", measures the CEO's incentive to increase shareholder value. It's the ratio of change in log relative pay to change in log relative performance, but for small changes it's very close to the ratio of percent change in relative pay to percent change in relative performance. Yum Brands's CEO pay leverage of 0.50 means that a 1% increase in relative shareholder wealth increases relative pay by 0.5%, on average. If a company's CEO received a fixed number of shares of stock each year (and no other pay), pay leverage would be 1.0 because 10% out-performance would increase pay by 10%. With pay leverage of 1.0, the regression trendline would fall on the graph's main diagonal.

The main diagonal is also where relative pay is equal to relative performance. All the points in the Yum Brands scatterplot are at or above the main diagonal, i.e., relative pay is always at or above relative performance, but the time series graph makes it much easier to see whether relative pay is above, equal to or below relative performance.

The correlation, which we also call "pay alignment", is a measure of how closely the individual points fit the pay leverage trendline. If all the points fall on an upward sloping line, the correlation will be 1.0 and all of the variation in pay will be attributable to performance. If the points are widely scattered around the line, the correlation will be close to zero. The correlation provides a partial measure of cost-efficiency. When it's close to 1.0, pay leverage is provided very efficiently because there is little pay that's unrelated to performance. When it's close to 0, pay leverage is provided very inefficiently.

The intercept is the CEO's log pay premium (or discount) at peer company average performance. The trendline equation for Yum Brands is ln(relative pay) = 0.42 + 0.50 x ln(relative shareholder wealth). When we take the anti-log of the trendline, we get relative pay = exp(.42) x (relative shareholder wealth)$^{0.50}$ = 1.52 x (relative shareholder wealth)$^{0.50}$. From this form of the equation, we can see that Yum Brands's CEO is paid 52% above average at peer average performance. The pay premium at average performance provides a measure of the company's retention incentive and a measure of relative shareholder cost.

The scatterplot doesn't provide a complete measure of cost-efficiency, but it does give investors the information they need to make their own decision about cost-efficiency. The scatterplot doesn't tell investors whether a company's high pay leverage is sufficient to justify its high relative pay (nor whether a company's low relative pay is sufficient to justify its low pay leverage). That requires a judgment by the investor about the impact of pay leverage on management effort and decision making. But with that judgment and the information from the scatterplot, i.e., the company's pay leverage and its pay premium, an investor can make a decision about the cost-efficiency of CEO pay.

It's not difficult to estimate market pay for the latest year when peer proxies are not available

Estimating market total compensation for the last year in the graph is a little more challenging because peer group pay data will rarely be available before the proxy filed is filed. The solution is to use the peer data for the prior four years to estimate the impact of company size and pay inflation (controlling for size) on CEO pay. With that information, a company can

adjust its prior year market pay estimate to reflect the change in its size and expected pay inflation, if any.
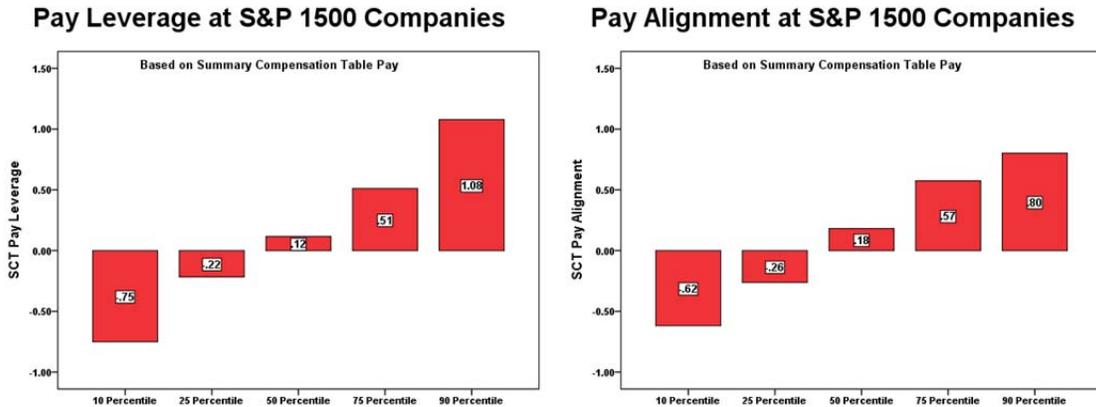
The graph below shows the relationship between CEO pay and company size for the peer companies of Yum Brands over the years 2006-2009. While Yum Brands would select its own peer group for the proposed disclosure, for the illustrations and data in this letter, I've selected 14-24 peers for each S&P 1500 company based on GICS industry and company size (see p. 11 for more details). Yum Brands's peer group is 14 companies in the Hotels, Restaurant & Leisure industry (GICS 253010). Before 2010 data is available, the prior four years provide 56 observations of CEO pay and company revenue size – these are the 56 plot points in the graph, each marked with a ticker symbol and a digit denoting the year. For example, "MCD8" is 2008 data for McDonald's.

The correlation between log pay and log size is 0.54 and the trendline of best fit is log pay = 5.51 + .38 x log revenue. Controlling for revenue, there is no statistically significant pay inflation. For 2009, when Yum Brands's revenue is $10.868 billion, the trendline gives market pay of $8.487 million. For 2010, when Yum Brands's revenue is $11.343 billion, or 4.4% more, the trendline gives market pay of $8.627 million, or 1.7% more. The slope of the trendline implies that a 1% increase in revenue increases pay by 0.38%.

Pay vs Size for Yum Brands Peers
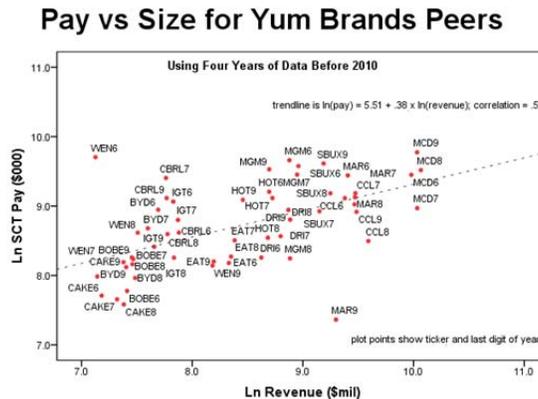
The proposed disclosure will reveal very significant differences across companies

The proposed disclosure will reveal very significant differences across companies that will be very informative to investors. The two charts below show that there are wide variations in leverage and alignment among S&P 1500 companies. These charts show leverage and alignment calculated using relative pay and relative performance for the five years ending in 2010, but prior periods show similarly wide variations.
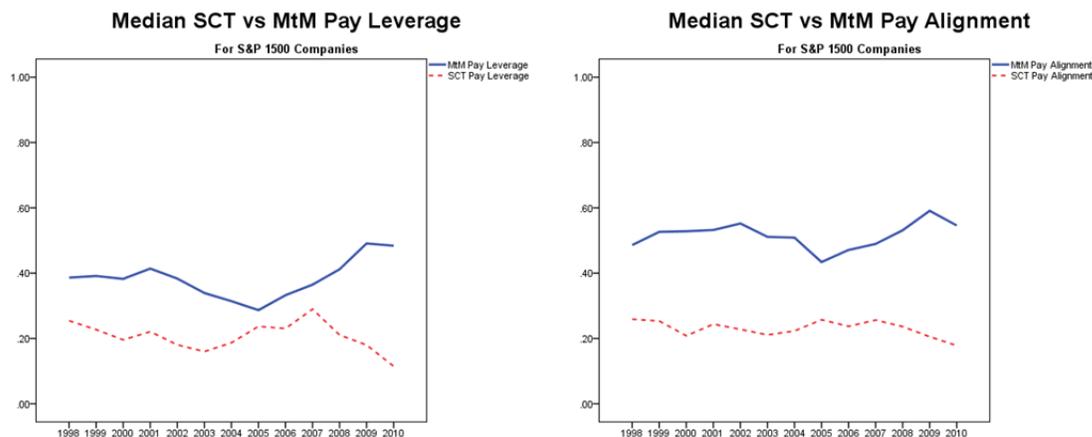
Pay Leverage at S&P 1500 Companies

Based on Summary Compensation Table Pay

Pay Alignment at S&P 1500 Companies

Based on Summary Compensation Table Pay

Companies should be encouraged to provide supplemental graphs

The proposed pay versus performance graphs rely on reported compensation data and easily accessible performance data. They are basic analyses that will be easy for reporting companies to prepare, and, as such, are reasonable requirements for all reporting companies.

All companies should be encouraged to provide supplemental analyses and graphs since many companies will find that the required disclosure does not give investors a complete picture of pay and performance at the company. Supplemental analyses and graphs can highlight many important features of a company's executive program, such as:

- The contribution of unvested equity compensation to incentive strength,
- The contribution of stock ownership to incentive strength,
- Management's incentive to improve operating measures of performance, and
- Greater performance sensitivity over periods longer than two years.

The charts below show that leverage and alignment calculated from mark to market pay are significantly higher than leverage and alignment calculated from Summary Compensation Table pay. The left panel also shows that since 2007 median SCT pay leverage has declined while median mark to market pay leverage has increased.

Median SCT vs MtM Pay Leverage
For S&P 1500 Companies

Median SCT vs MtM Pay Alignment
For S&P 1500 Companies

Monsanto illustrates the benefit of a supplemental analysis based on mark to market pay. The top panel of graphs on p. 9 show that CEO SCT pay at Monsanto is negatively related to performance. However, analysis of "mark to market" pay shows high pay leverage and alignment, as well as below average pay at peer group average performance. In this analysis, mark to market pay is measured over three year periods, with equity compensation valued based on the stock price at the end of the third year. The relative pay plotted at each year is three year mark to market pay divided by peer average 3 year mark to market pay, adjusted for company size. Relative performance plotted at each year is relative shareholder wealth for the same three years, i.e., ending shareholder wealth per share including dividends dividend by beginning shareholder wealth per share increased at the peer company average return. This mark to market pay analysis is explained in more detail in my comment letter of October 4, 2010 and my Conference Board Director Note on "Assessing Pay for Performance".

CSX illustrates the benefit of a supplemental analysis based on wealth. The top panel of graphs on p. 10 show that CEO SCT pay at CSX has almost no correlation with performance. However, analysis of CEO wealth changes at CSX shows high wealth leverage and alignment. In this analysis, wealth is measured over three year periods, with initial stock and option holdings, as well as new equity compensation awards, valued based on the stock price at the end of the third year (or the sale price, if sold earlier). Wealth also includes the present value of expected future pay, so the wealth change also captures the change in the present value of expected future pay beyond the three year measurement period. Relative wealth for the three years is CEO wealth divided by market average CEO wealth where market average wealth includes the initial stock and option holdings adjusted to reflect the average peer company return, peer company average 3 year mark to market pay, adjusted for size, and the present value of expected future pay based on peer company average pay, adjusted for size.

Reporting a pay percentile and a performance percentile is not a meaningful disclosure of pay versus performance

Some commentators believe that "realizable pay" for a single three year period is sufficient to provide meaningful evidence of alignment. These commentators believe that expressing pay and performance in percentile terms for a single three year period provides evidence of

alignment, i.e., pay is aligned with performance if the percentiles are similar, but unaligned if they are substantially different.

A basic flaw in this analysis is its assumption that relative performance should determine relative pay without regard to pay leverage. This assumption implies that all companies should have the same pay leverage and the shared pay leverage should be very high. My Conference Board Director Note shows the norm "pay percentile = performance percentile" implies mark to market pay leverage of 1.4, far above the 90th percentile of actual mark to market pay leverage.

If we accept that companies will choose different degrees of CEO pay leverage, just as investors choose different degrees of value leverage, we can't determine appropriate relative CEO pay without understanding the CEO's pay leverage. Some investors hold bonds, which typically have leverage of 0.1 or less to market enterprise value (i.e., the market value of debt + equity), some investors hold stock, which has leverage of 1.0 to shareholder value and higher leverage to market enterprise value, and some investors hold options, which typically have leverage of 2.0 or more to market enterprise value. If market enterprise value doubles, there is not a single appropriate "pay for performance" wealth return for all three investors. The bond holder's return will be much less than the equity holder's return and equity holder's return will be less than the option holder's return. The bond holder appears to be under-compensated and the option holder over-compensated only because we have failed to take account of their leverage.

Summary

I recommend, for the pay versus performance disclosure required by Section 953 of the Dodd-Frank Act, the requirement of a log-log scatterplot of relative CEO pay versus relative performance with the following features:

1. Relative pay is Summary Compensation Table pay divided by the company's estimate of market SCT pay.
2. Relative performance is ending shareholder wealth per share divided by the company's share price assuming the average return of the peer companies for the past two years.
3. Relative pay and relative performance are shown for each of the last five years.
4. Relative pay and relative performance are shown on the same scale.
5. The graph shows the regression trendline with numeric reporting of the slope, correlation and intercept.

I also recommend the requirement of a time series graph showing relative CEO pay and relative performance for the last five years.

I appreciate the opportunity to comment and I hope this analysis is useful to the Commission in evaluating alternative approaches to pay versus performance disclosure.
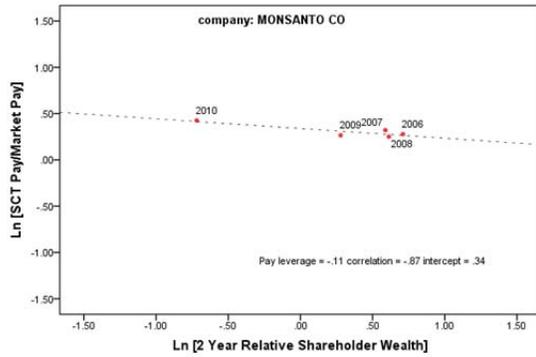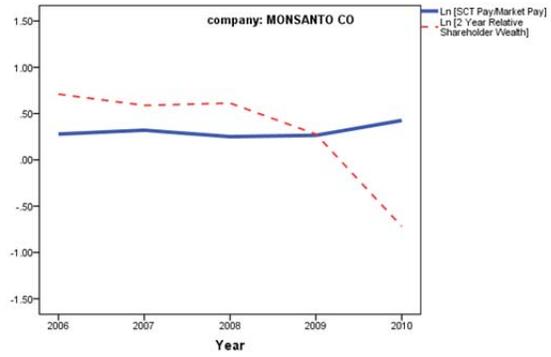
Sincerely,

Stephen F. O'Byrne
President

Monsanto will tell its story using "mark to market" pay leverage and alignment
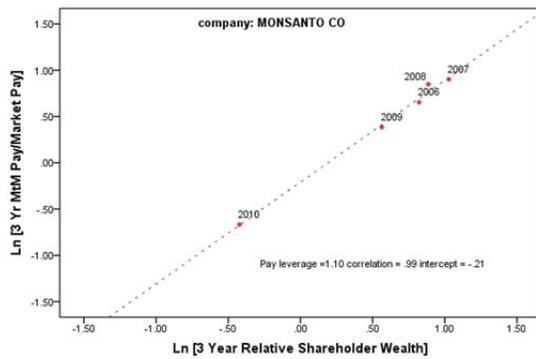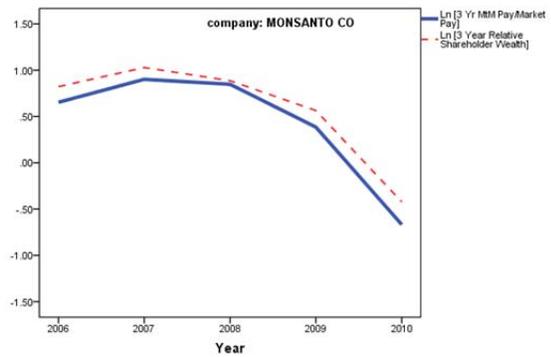

Relative Pay vs Relative Performance

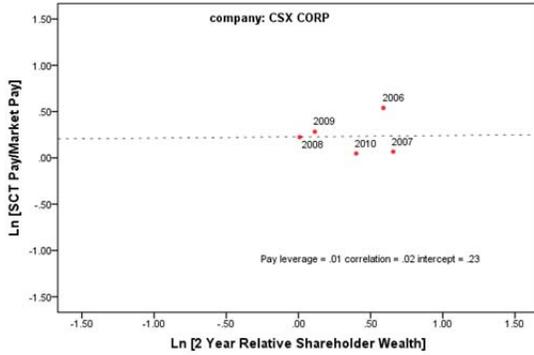Relative Pay & Performance by Year

Mark to Market Pay Leverage

Relative MtM Pay & Performance by Year

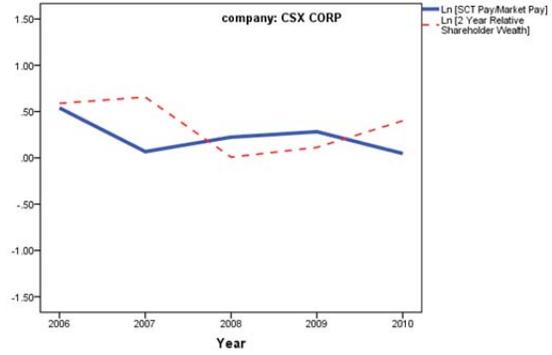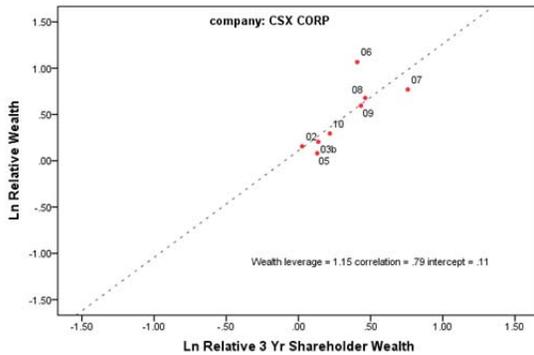**CSX will tell its story using wealth leverage and alignment**

Relative Pay vs Relative Performance
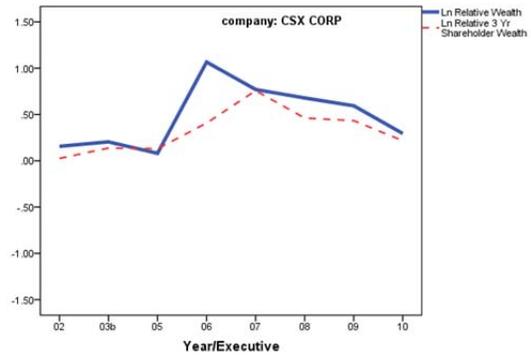
company: CSX CORP

Pay leverage = .01 correlation = .02 intercept = .23

X-axis: Ln [2 Year Relative Shareholder Wealth]
Y-axis: Ln [SCT Pay/Market Pay]

Data points: 2006, 2009, 2008, 2010, 2007

Relative Pay & Performance by Year

company: CSX CORP

Legend:
— Ln [SCT Pay/Market Pay]
--- Ln [2 Year Relative Shareholder Wealth]

X-axis: Year (2006, 2007, 2008, 2009, 2010)

Wealth Leverage

company: CSX CORP

Wealth leverage = 1.15 correlation = .79 intercept = .11

X-axis: Ln Relative 3 Yr Shareholder Wealth
Y-axis: Ln Relative Wealth

Data points: 06, 07, 08, 09, .10, 02, 03b, 05

Executive & Shareholder Wealth by Year

company: CSX CORP

Legend:
— Ln Relative Wealth
--- Ln Relative 3 Yr Shareholder Wealth

X-axis: Year/Executive (02, 03b, 05, 06, 07, 08, 09, 10)

How we identified peer groups

Our illustrations assume a peer group selection process broadly similar to that used by the leading proxy voting advisor, Institutional Shareholder Services (ISS). We start with the companies in the same GICS industry (six digit code) and select those that are closest in size to the subject company. If we can find an equal number of companies larger and smaller than the subject company, we continue to select companies until the peer group reaches 24 companies. If we don't have at least 7 smaller and 7 larger companies, but do have at least 14 companies in total, we stop at 14 companies. If we have less than 14 companies in total, we broaden the search to the subject company's GICS industry group (four digit code) and select additional companies from the industry group until we reach 14 companies in total. If we still have less than 14 companies in total, we broaden the search again to the subject's GICS sector (two digit code) and select additional companies from the sector until we reach 14 companies in total.

Unlike ISS, we don't limit the selection within the industry, industry group or sector to companies within a narrow size range. ISS requires peer companies to be at least 50% of the subject company's size, but no more than 200% of the subject company's size. This limitation is unnecessary because we statistically adjust for size differences. The limitation is also undesirable because it greatly increases the number of companies with "peers" from outside their industry. For S&P 1500 companies, this limitation increases the percentage of companies with "peers" from outside their industry from 21% to 82%.

Yum Brands is in the Hotels, Restaurant & Leisure industry (GICS 253010). In this industry, within the S&P 1500, there are more than 24 companies that are smaller in revenue than Yum Brands, but only 3 companies that are larger in revenue than Yum Brands. Since we don't have equal numbers of larger and smaller peer companies beyond 3 companies, we limit the peer group to 14 companies, taking the three companies larger than Yum Brands and the eleven largest companies that are smaller than Yum Brands.

Stephen F. O'Byrne President	Direct Dial: 914-833-5891
	Email: sobyrne@valueadvisors.com

Steve O'Byrne is President and co-founder of Shareholder Value Advisors Inc., a consulting firm that helps companies increase shareholder value through better performance measurement, incentive compensation and valuation analysis. His publications include:

- "Assessing Pay for Performance" in the *Conference Board Director Notes* (October 2011)
- "Six Factors That Explain Executive Pay (and its Problems)" (with Professor David Young of INSEAD) in the *Journal of Applied Corporate Finance* (Spring 2010)
- "What Investors Need to Know About Executive Pay" (with David Young) in *The Journal of Investing* (Spring, 2010)
- "Why Capital Efficiency Measures Are Rarely Used in Incentive Plans, and How to Change That" (with David Young) in the *Journal of Applied Corporate Finance* (Spring 2009)
- "Why Executive Pay Is Failing" (with David Young) in the *Harvard Business Review* (June 2006)
- "Top Management Incentives and Corporate Performance" (with David Young) in the *Journal of Applied Corporate Finance* (Fall 2005)
- *EVA and Value Based Management* (with David Young), McGraw-Hill (November 2000)
- "Does Value Based Management Discourage Investment in Intangibles?" in *Value-Based Metrics: Foundations and Practice*, edited by Frank J. Fabozzi and James L. Grant (2000)
- "EVA and Its Critics" in the *Journal of Applied Corporate Finance* (Summer 1999)
- "Executive Compensation" in the *Handbook of Modern Finance* (1997)
- "EVA and Market Value" in the *Journal of Applied Corporate Finance* (Spring, 1996)
- "Total Compensation Strategy" in the *Journal of Applied Corporate Finance* (Summer, 1995)

Prior to co-founding Shareholder Value Advisors in 1998, Mr. O'Byrne was head of the compensation consulting practice at Stern Stewart & Co. (1992-1998) and a Principal in the executive compensation consulting practice at Towers Perrin. Prior to joining Towers Perrin in 1979, he worked in the tax department at Price Waterhouse and taught mathematics at Loyola University of Chicago. Mr. O'Byrne holds a B.A. degree in political science from the University of Chicago, an M.S. in Mathematics from Northwestern University and a J.D. from the University of Chicago. He is the vice-chair of the Corporate Governance Committee of the New York Society of Security Analysts, a certified public accountant and a member of the Illinois bar.