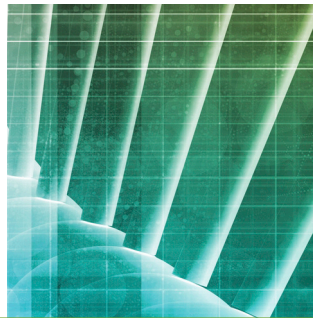


Pearl Meyer

RESEARCH REPORT

The Myth and Reality of TSR as an Incentive Metric



THANK YOU TO OUR RESEARCH PARTNER:



Cornell University



Table of Contents

I.	The Myth and Reality of Total Shareholder Return as an Incentive Metric	4
II.	Introduction	5
	<i>Exhibit 1: Research Framework</i>	
III.	Research Findings and Analysis	6
	<i>Chart 1: Percent of Companies Using TSR as an Incentive Metric</i>	
	<i>Chart 2: Companies with TSR Incentive Awards by Industry 2004 vs. 2013</i>	
	<i>Chart 3: Weight of TSR Plans</i>	
	<i>Chart 4: Relative Performance of Firms Using TSR versus Non-Adopters</i>	
	<i>Chart 5: Breakout of Estimates of TSR-Based Incentive Plans on Firm Financial Performance</i>	
	<i>Chart 6: Breakout of Estimates of TSR-Based Incentive Plans on Firm Shareholder Return</i>	
IV.	TSR: The View from the Boardroom and C-Suite	10
	<i>Chart 7: Number of Incentive Metrics Used</i>	
	<i>Chart 8: Length of Time Using TSR as an Incentive Measure</i>	
	<i>Chart 9: Perceived Impact of TSR-Based Incentives on Firm Performance and Shareholder Return</i>	
	<i>Chart 10: Perceived Impact of TSR-Based Incentives on Executive Team</i>	
	<i>Chart 11: Reasons to Include TSR and Their Importance</i>	
V.	What are the Implications?	12
	<i>Exhibit 2: Key Takeaway</i>	
VI.	Recommendations: What Path Should you Take?	13
	<i>Exhibit 3: Aligning Measures with Strategy</i>	
VII.	Appendix	15
	<i>The Research Teams</i>	
	<i>Additional Resources and Information</i>	

The Myth and Reality of Total Shareholder Return as an Incentive Metric

Over the course of several years, we have had an increasing number of discussions with Boards on the use of Total Shareholder Return (TSR) as a dominant metric in public companies' long-term incentive (LTI) plans. It seems there is a generalized perception that because TSR is a well-understood benchmark, meets the expectations of major proxy advisors, and aligns to investor interest, it is an appropriate and possibly even ideal performance measure.

While TSR absolutely has merit as a summary indicator of long-term performance and it offers clear alignment between the interests of management and shareholders, we have had some concerns as its use becomes more prevalent. Our suspicion that it may not be the definitive incentive measure lies in the concept of line of sight, which is a clear path from management's actions to ultimate results. Further, as a summary performance measure that may lead or lag financial performance, it lacks another fundamental requirement of a strong incentive, that is information about what needs to be done (or done differently) to create value. On the surface, TSR doesn't appear to have the hallmarks of a model incentive measure.

So what does the data say? We felt it was time to get to the bottom of this issue. Because no definitive research was available to tell whether or not the inclusion of TSR in long-term

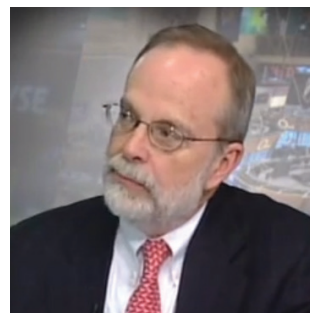
incentives actually resulted in improved performance, our firm collaborated with the Cornell University ILR School's Institute of Compensation Studies to find out. The resulting empirical research of S&P 500 compa-

nies over a ten-year timeframe shows that while this approach may conform to market norms, it is simply not effective and does not lead to stronger company performance.

We believe the far more effective option for Boards is to dig deep into the factors that guide business value generation for the company in question and ensure a clear understanding of the corporate strategy, both the long-term aspects and the short-term milestones that help drive to longer-range objectives. Only then can we be comfortable that the right correlating goals and measures are in place.



David Swinford
President and CEO, Pearl Meyer



Introduction

Pearl Meyer approached the Cornell University ILR School's Institute of Compensation Studies to collaborate on a research project designed to learn more about the links between the use of TSR and a firm's subsequent performance. This research of S&P 500 companies was undertaken to explore a principal question: *"Does the inclusion of TSR measures in long-term incentive plans result in improved firm performance?"*

Pearl Meyer also conducted an independent survey of Board members and senior executives to uncover views and information about the use of TSR in their company's incentive plans.

Research Framework and Methodology

Details on the framework, depth, and methodology of each study is important to understanding the definitive nature of the results.

Along with our principal research question, *"Does the inclusion of TSR measures in long-term incentive plans result in improved firm performance?"* we examined additional supporting questions which yielded informative data.

The dataset is based on firms in the 2014 S&P 500 index, using compensation and financial data from 2004 to 2013 (excluding 47 firms due to incomplete data and two firms due to outlier

trimming). The compensation data included base salary, bonus payouts, stock awards, and multiple incentive plan awards. The corporate financial metrics included one-, three-, and five-year total shareholder return, annual return on equity, earnings per share, and total revenue growth.

The Institute for Compensation Studies at Cornell University's ILR School conducted the technical research using descriptive and regression analysis. A baseline analysis of each question was based on eight different regression models. The study, [TSR, Executive Compensation, and Firm Performance](#), produced more than 200 tables of statistical analysis and several significant findings.

A companion survey was conducted online in August 2015 by Pearl Meyer and queried a total of 257 organizations, including 173 public companies. The respondents included 193 senior executives and HR professionals and 64 non-employee Directors.

“Does the inclusion of TSR measures in long-term incentive plans result in improved firm performance?”

EXHIBIT 1: RESEARCH FRAMEWORK

1. Does the inclusion of TSR measures in long-term incentive plans result in improved firm performance?
2. What percent of the S&P 500 has a TSR measure in their plans?
3. How has the weight of TSR plans with respect to compensation changed over time?
4. What is the relative performance of firms that use TSR versus those who do not?
5. Does the introduction of a TSR plan impact firm performance results?
6. Does the weight of the TSR plan impact financial results?

Research Findings and Analysis

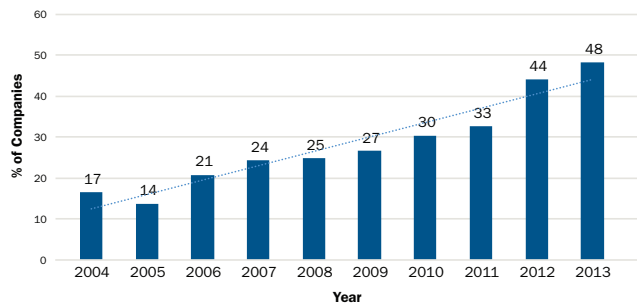
The research and resulting data uncovered a clear answer to our principal question and addressed five additional key points that have important implications in executive compensation plan design. We found that:

- TSR has dramatically increased in use as an incentive metric over a ten-year timeframe;
- This trend exists across all major industries;
- Recent converts to TSR are putting less emphasis on it as an incentive metric than those who adopted it earlier;
- Larger and less profitable firms are more likely to rely on this metric;
- There is no evidence that its inclusion leads to improved firm performance; and
- There is a slight negative relationship between proportion of long-term incentives focused on TSR and revenue growth.

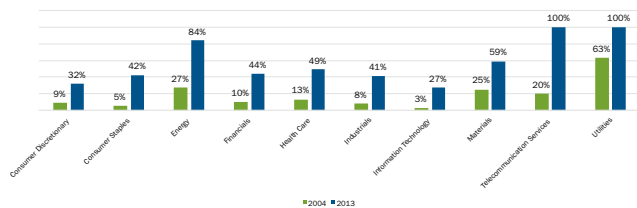
TSR's Use as an Incentive Metric Has Grown across All Major Industries

As expected, we uncovered data that confirms the growing use of TSR. The presence of a TSR element in long-term incentive (LTI) plans among the S&P 500 has increased almost three-fold, from 17% in 2004 to 48% in 2013. This dramatic growth is seen across all studied industry sectors. In fact, almost all energy companies (84%) use TSR and all telecom and utility firms have bought in to the measure.

1. Percent of Companies Using TSR as an Incentive Metric



2. Companies with TSR Awards by Industry 2004 vs. 2013



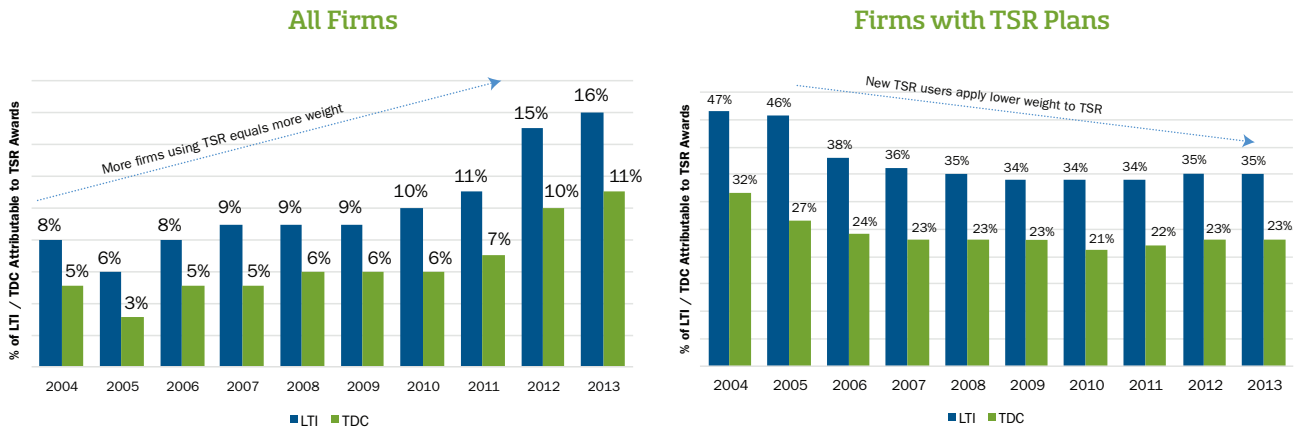


Recent Adopters De-Emphasize the Metric

While the overall trend is growing, the data does show that companies new to using TSR as an incentive measure are putting less emphasis on it than the firms who have been using it longer.

We believe this indicates that some companies are hesitant to place considerable emphasis on the measure, yet are feeling more pressure to include a nod to TSR to some degree in their incentive plans, possibly due to proxy advisory firms, large investors, or other outside influencers.

3. Weight of TSR Plans



LTI = long-term incentives / TDC = total direct compensation (base salary + annual bonus + long term incentive awards)

Larger, Less Profitable Companies More Likely to Rely on TSR as an Incentive Measure

Additional data looked at the size of the firms based on 10-year average market cap and total revenue, and a range of 10-year compound annual growth rate (CAGR) performance indicators, including:

- Net income;
- Return on invested capital (ROIC);
- Earnings before interest and taxes (EBIT);
- Earnings per share (EPS);
- Return on assets (ROA);
- Return on equity (ROE); and
- Free cash flow (FCF).

A comparison of firms that used TSR versus those that did not across this range of factors showed that those who did use TSR were both larger (based on market cap and total revenue) and lower performing within the S&P 500.

The Central Question Answered: No Evidence the Inclusion of a TSR Metric Leads to Improved Firm Performance

Next, we move into the data that provides an answer to the central research question: “Does the inclusion of TSR measures in long-term incentive plans result in improved firm performance?” As noted in the methodology description, these relationships were analyzed using a baseline regression model and additional model variations that accounted for size, industry sector, and firm performance, and other statistical sampling techniques referred to as “fixed effects.”

The estimate of a TSR-based incentive plan’s impact on a firm’s financial performance shows no statistically significant relationship between its use and return on equity or earnings per share. There is a weak but statistically significant relationship between TSR plans and revenue growth the year after a TSR plan is put in place.

4. Relative Performance of Firms Using TSR versus Non-Adopters

	EVER TSR	NEVER TSR	DIFFERENCE	p-VALUE
Market Cap - Avg (\$B)	\$25,366	\$19,339	\$6,027	0.11
Total Revenue - Avg (\$B)	\$17,683	\$14,856	\$2,827	0.3
10 Yr Net Inc CAGR (%)	7.45	11.7	-4.25	0
10 Yr ROIC CAGR (%)	0.55	1.85	-1.31	0.15
10 Yr EBIT CAGR (%)	7.09	12.74	-5.66	0
10 Yr EPS CAGR (%)	6.34	11.56	-5.22	0
10 Yr ROA CAGR (%)	0.06	0.07	-0.02	0
10 Yr ROE CAGR (%)	0.18	0.19	-0.01	0.78
10 Yr FCF CAGR (%)	7.74	11.48	-3.74	0.02
Observations	251	200		



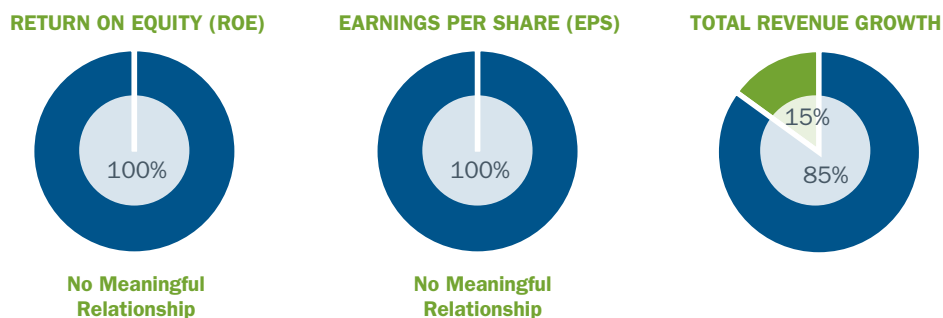
This same pattern emerges when looking at a TSR plan's impact on total shareholder returns, where few meaningful relationships exist between implementation of the TSR-based plan and subsequent shareholder returns. From the analysis, we only find a weak negative statistical relationship between the implementation of a TSR plan and five-year TSR performance.

Finally, the research considered the question of the weight of the TSR metric and its impact on the same financial and shareholder metrics. Of these metrics, only revenue and ROE performance contained a statistically significant finding.

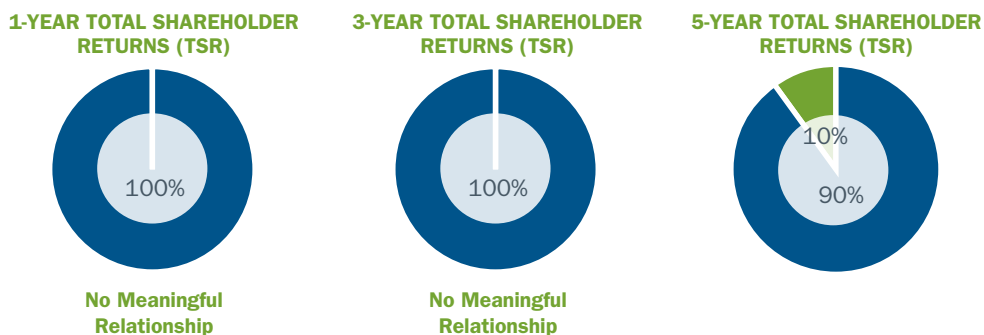
Both ROE and revenue were explored using eight variant models accounting for a three-year history of TSR plan usage. These models collectively show a consistent pattern of negative relationship between the portion of the long-term incentive focused on TSR and total revenue growth, as well as a slight positive relationship with ROE in the current year over two models, although that economic impact isn't strong.

Overall, this evaluation further supports the evidence that TSR is not a clear driver of financial performance or shareholder returns.

5. Breakout of Estimates* of TSR-Based Incentive Plans on Firm Financial Performance



6. Breakout of Estimates* of TSR-Based Incentive Plans on Firm Shareholder Returns



*Regression estimates explain the relationship between one dependent variable and one or more independent variables.

TSR: The View from the Boardroom and C-Suite

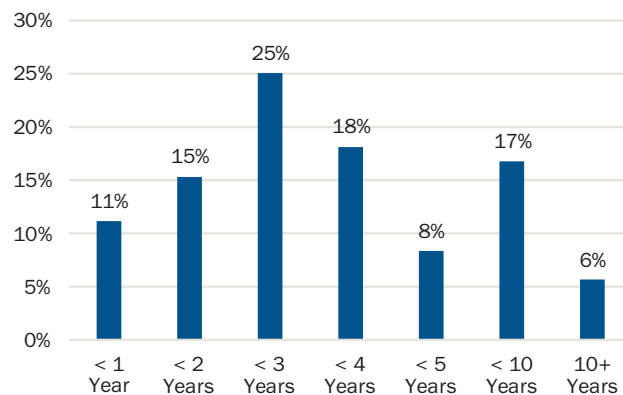
Additional information, independent of the joint research study with Cornell, was obtained through a survey of Board Directors and senior executives conducted by Pearl Meyer. The *On Point: Looking Ahead to Executive Pay Practices in 2016* report provides findings on the effectiveness of TSR as an incentive metric that align with and support the empirical data.

The Pearl Meyer survey shows that just under half of public firms indicate TSR is a measure in their long-term incentive programs. Of those who use TSR as a metric, almost two-thirds use it along with one or more additional performance measures, although more than one-third rely on it as their sole measure in LTI plans.

The survey data also show that, consistent with findings from our study with Cornell, the popularity of TSR as an LTI measure is growing, with half of the surveyed firms indicating they have used it for three or fewer years.

Interestingly, while more firms surveyed are including TSR in their incentive plans, very few believe it has a significant positive influence on either their firm's financial performance or shareholder return—an opinion confirmed by the empirical research. More than 40% believe it has

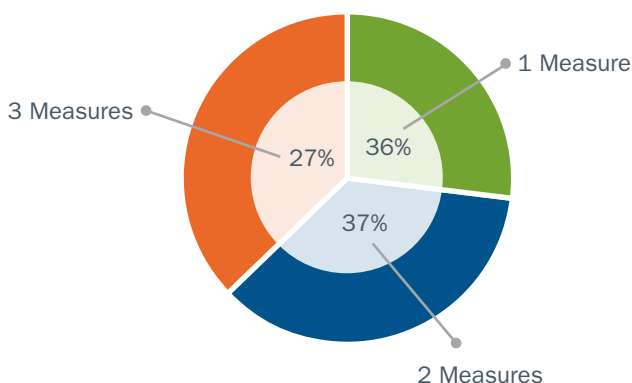
8. Length of Time Using TSR as an Incentive Measure



no or negative impact. Similarly, very few of those surveyed believe the inclusion of TSR as a long-term incentive metric plays a very important role in fostering desired executive behavior and even fewer believe it reflects the overall performance of the executive team.

Despite the apparent inconsistency between the growing adoption of TSR as an incentive metric and clear lack of faith in its effectiveness, the Directors and executives surveyed offered some very telling information about this trend—namely, that it is largely driven by external pressure.

7. Number of Incentive Metrics Used

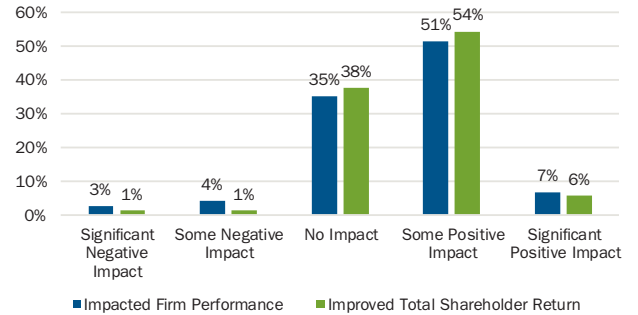




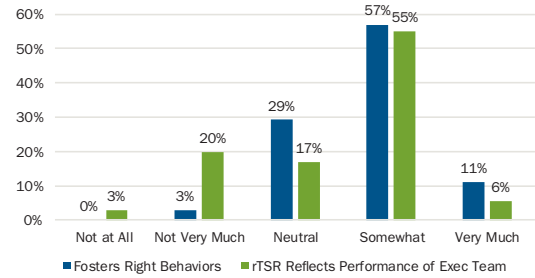
The most common reason cited for incorporating TSR in compensation plans is to *align* investor and management interests, followed by a desire to create balance with other existing financial metrics—two goals that we endorse and believe to be reasonable uses of the measure.

Yet, regardless of beliefs about its effectiveness, the outside pressure to include TSR plays an obvious role, with 75% of respondents citing peer practices as a somewhat or very important reason for the use of TSR and 56% saying investor concerns play a somewhat or very important role in its use. More than half indicate that responding to proxy advisory group concerns plays a somewhat or very important role in including TSR in their LTI plans.

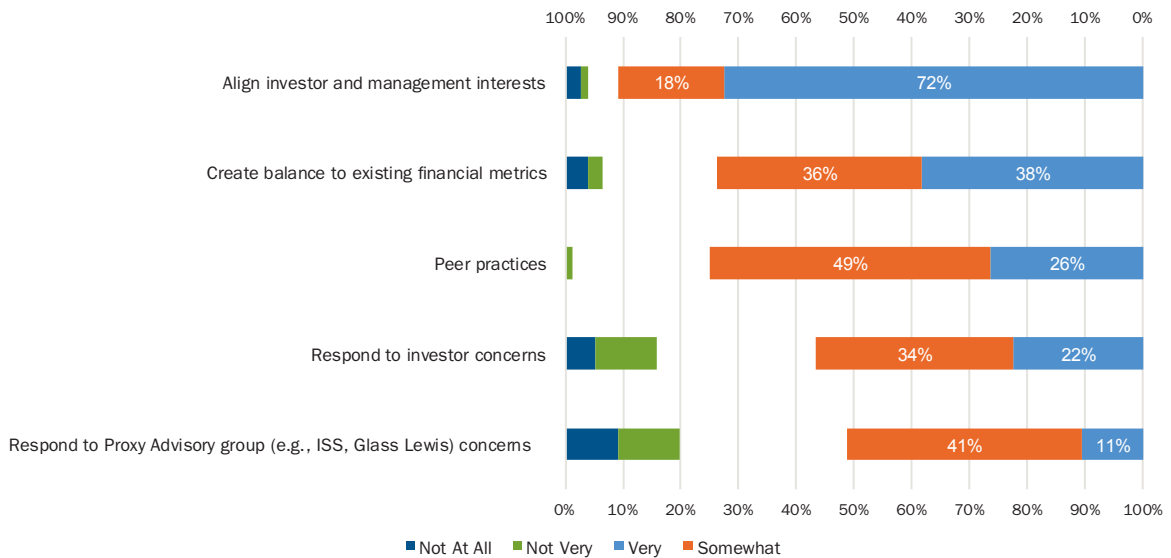
9. Perceived Impact of TSR-Based Incentives on Firm Performance and Shareholder Return



10. Perceived Impact of TSR-Based Incentives on Executive Team



11. Reasons to Include TSR and Their Importance



What are the Implications?

The appeal of TSR has become widespread. At the same time we have seen this proliferation of TSR as an incentive measure, the most influential proxy advisory firms have consistently used it as the definition of performance in the CEO pay-for-performance relationship. Compounding this, the SEC has recently proposed new guidelines that would mandate proxy disclosure of the link between pay and performance primarily in terms of TSR.

Further, we can point to several assertions commonly found in the media and in Boardrooms that attempt to bolster its use in incentive plans, including:

- The use of TSR in comparison to peers levels the playing field, removing market movements and industry cycles from the evaluation of executive performance;
- TSR can ensure that incentive awards align to shareholders' interests; and
- Using relative TSR allows a company to circumvent the use of difficult-to-set, multi-year financial goals.

As with many myths, looking below the surface of what may at first appear to be a near-perfect solution will reveal some flaws in logic. In this

case, we know that using total shareholder return as an incentive measure cannot convey any information to a management team about what to do or how to improve performance. Moreover, TSR cannot serve as a standalone evaluation of management performance. It simply cannot perform the job it's being asked to do. Given what we see in the empirical evidence and supported by the opinions of those in the Boardroom and in the C-suite, we know overreliance on TSR is both insufficient and ineffective. **On balance, there is no evidence that using the metric in an incentive plan leads to increased firm performance.**

We advise clients to opt for metric selection that meets their unique set of business circumstances and aligns to their specific long-term plan. In our experience, emphasis on TSR can crowd out other important design objectives, including communication about *how* to achieve value creation. While there are valid reasons for its use, such as alignment and balance, we believe there are unintended consequences as well. We believe it is possible that pressure to adopt TSR as an incentive may be driving undue focus on external optics, short timeframes, and management behaviors that are counter-productive to long-term value creation.



EXHIBIT 2: KEY TAKEAWAY

On balance, there is no evidence that using TSR in an incentive plan leads to increased firm performance.

Recommendations: What Path Should You Take?

So, if TSR is not the solution, what is? The answer is not a simple one, but for any organization, the following steps can help:

1. Understand the objectives of the executive compensation program at your company, as well as the balance and trade-offs between them. Some examples include:
 - Attract, retain, motivate;
 - Prioritize and communicate performance objectives;
 - Pay for performance;
 - Align with shareholders; and/or
 - Adopt best practices.
2. Understand your organization's business objectives, long-term strategy, and the company's path to value creation and ensure these are reflected in the compensation program.
3. Based on the above, identify the specific financial, operational, and strategic measures of performance that drive and signal success. With respect to compensation design:
 - Select metrics that are understandable and actionable with substantial line of sight by the plan participants who are responsible for the performance goals;
 - Focus on the strong centerpiece financial metrics that can validate growth, efficiency, and value creation in line with your company and industry;
 - Include driver or "lead" measures that push the short- and long-term changes necessary to enact strategy; and

- Clarify the role of a TSR metric in the overall framework.

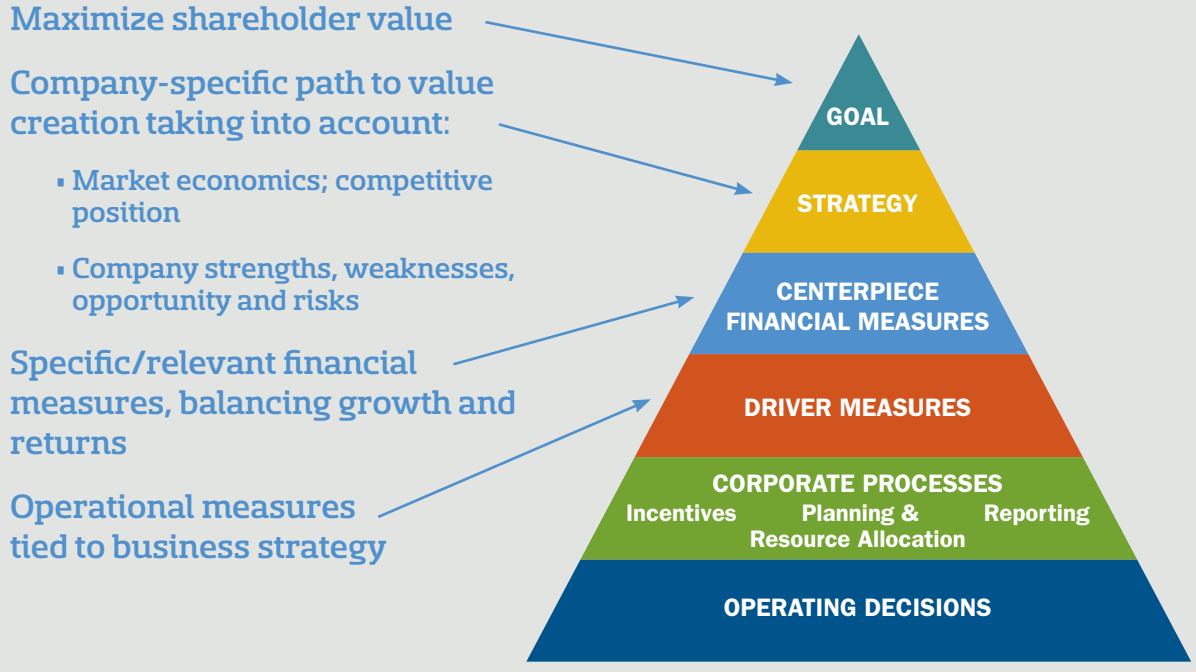
4. Ensure the performance objectives associated with the selected measures are calibrated fairly and correctly, with alignment to long-term value creation.
5. Modify compensation programs as needed.

This suggested approach is not a set-and-forget exercise. Although it is not necessary to conduct a detailed analysis annually to ensure the incentive plans include the most appropriate metrics, Compensation Committees should conduct this metric review exercise every few years or sooner if the company changes its strategy, if an industry is experiencing fundamental changes, or other significant business issues arise.

It is important to note the inclusion of TSR as an incentive metric does not guarantee proxy advisory support or even alignment with their CEO pay-for-performance testing. Proxy advisory firms select their own peer group when conducting CEO pay-for-performance evaluation and therefore it's possible that a company's relative TSR performance could be materially different from the results produced by a proxy advisory firm. It's even possible for two proxy advisory firms to come to completely different conclusions on the CEO pay-for-performance relationship for the same

“Understand your organization's business objectives, long-term strategy, and the company's path to value creation and ensure these are reflected in the compensation program.”

EXHIBIT 3: ALIGNING MEASURES WITH STRATEGY



reason. This offers yet another reason to seek out those metrics that align with strong organizational performance and give the executive team clearer line of sight.

In our experience, executive compensation programs that place emphasis on supporting business objectives and long-term value creation—while being mindful of external requirements and

optics—will best serve program needs and will align with shareholders’ interests.

Finally, as all companies operate under increasing external pressures and scrutiny, it’s critical to be proactive with your stakeholders and community, and to continually educate and communicate on the rationale for your unique and thoughtful compensation design. ■

Appendix

The Research Teams

The companion study [TSR, Executive Compensation, and Firm Performance](#) was conducted by teams at Pearl Meyer and the Cornell University ILR School's Institute of Compensation Studies (ICS). The ICS team included: Professor Kevin Hallock, the Kenneth F. Kahn Dean and the Joseph R. Rich Professor of Economics and Human Resource Studies in the ILR School at Cornell University; ICS Executive Director Linda Barrington; and Research Associates Hassan Enayati and Stephanie Thomas. The Pearl Meyer team included President and CEO David Swinford; and Managing Directors Beth Florin, Peter Lupo, Terrence Newth, Simon Patterson, and Matt Turner.

The survey [On Point: Looking Ahead to Executive Pay Practices in 2016](#) was led by Pearl Meyer Managing Directors David Bixby, Beth Florin, Jim Heim, Sharon Podstupka, Greg Stoeckel, Matt Turner, and Steven Van Putten.

Additional Pearl Meyer Resources

[As We See It – Total Shareholder Return: It's Not the Magic Metric](#)

[Compensation as a Catalyst: Value Creation and Executive Compensation](#)

About Cornell University ILR School Institute for Compensation Studies

The Institute for Compensation Studies (ICS) is an interdisciplinary center housed in the ILR School of Cornell University. Its mission is to improve teaching, research, practice, and public discourse around compensation and rewards to work by bridging between academic researchers and compensation practitioners. ICS seeks to enhance understanding of how rewards to work can influence outcomes for companies, individuals, and economies.

About Pearl Meyer

Pearl Meyer is the leading advisor to Boards and senior management on the alignment of executive compensation with business and leadership strategy, making pay programs a powerful catalyst for value creation and competitive advantage. Pearl Meyer's global clients stand at the forefront of their industries and range from emerging high-growth, not-for-profit, and private companies to the Fortune 500 and FTSE 350. The firm has offices in New York, Atlanta, Boston, Charlotte, Chicago, Houston, London, Los Angeles, and San Francisco.

Locations

NEW YORK

570 Lexington Avenue, 7th Floor
New York, NY 10022
(212) 644-2300

ATLANTA

One Alliance Center
3500 Lenox Road, NE, Suite 1708
Atlanta, GA 30326
(770) 261-4080
atlanta@pearlmeyer.com

BOSTON

93 Worcester Street, Suite 100
Wellesley, MA 02481
(508) 460-9600
boston@pearlmeyer.com

CHARLOTTE

3326 Siskey Parkway, Suite 330
Matthews, NC 28105
(704) 844-6626
charlotte@pearlmeyer.com

CHICAGO

123 N. Wacker Drive, Suite 860
Chicago, IL 60606
(312) 242-3050
chicago@pearlmeyer.com

HOUSTON

Three Riverway, Suite 1575
Houston, TX 77056
(713) 568-2200
houston@pearlmeyer.com

LONDON

3rd Floor
58 Grosvenor Street
London W1K 3JA, UK
+44 (0)20 3384 6711
london@pearlmeyer.com

LOS ANGELES

550 S. Hope Street, Suite 1600
Los Angeles, CA 90071
(213) 438-6500
losangeles@pearlmeyer.com

SAN FRANCISCO

595 Market Street, Suite 1340
San Francisco, CA 94105
(415) 651-4560
sanfrancisco@pearlmeyer.com

www.pearlmeyer.com