

## The Relative TSR Conundrum



**It is commonly said** that when a bear approaches your camp in the woods you don't need to outrun the bear, you just need to outrun the other campers. It's not your absolute running speed that matters but how well your speed relates to that of your competitors. In the executive compensation world, relative

total shareholder return (TSR) works in a similar way.

More than 50% of S&P 500 companies use some form of relative TSR to determine executive compensation. Advocates say that relative TSR effectively rewards success while mitigating the risk that large payouts might accumulate and attract media attention simply because of an upward drifting stock market. But how effective is relative TSR at attracting and motivating executives?

To answer this question, it's important to first understand what relative TSR is and how it typically is used. TSR is determined as an annualized rate of return based on dividends and changes in the stock price. If you bought a stock for \$20 that was worth \$22 at the end of the year and it paid an annual dividend of \$1 at the end of the year, the TSR would be 15%. This is simply the \$2 stock price increase plus the \$1 dividend divided by the starting price of \$20. Of course, investors prefer a higher TSR and this is what we aim to motivate.

Relative TSR typically is determined as a percentile ranking of a company's TSR over time against a list of companies that can be a stock index, an industry or a list of peers. The amount of time is often three years for executive compensation. To smooth the day-to-day stock volatility, many companies average the share price at the start and end of the period over 30 to 90 days. The company with the highest TSR is at the 100<sup>th</sup> percentile, the company with the lowest is at zero and the rest of the companies are distributed in between based on their TSR ranking.

### Relative TSR: A Conundrum in Practice

"Relative total shareholder return" is the most common executive incentive metric, but although it seems ideal, unfortunately the approach introduces considerable random variability in pay and is not well correlated with shareholders over the long term.

The point of relative TSR is to separate skill from luck and provide rewards that seem fairer. If two companies have the same TSR, the intent is to provide a larger reward to an executive team that got there by leading a tough industry than giving it to a different executive group whose company trails the pack in a high-performing industry. The TSR approach was originally popularized in the energy and utilities industries where there are many common market factors, such as commodity price exposures, that affect all companies. But use of relative TSR has become common in all sectors.

Although there are a variety of ways companies translate this relative TSR into compensation, most often management is granted a number of performance share units (PSUs), which are provisional shares in the company's stock. There also can be performance share options. The number of shares or options granted at the end of the cycle is based on a relative TSR performance test. One common practice is that if a company's relative TSR during the three-year cycle is 75<sup>th</sup> percentile or higher, an executive vests in twice as many shares as indicated by the number of PSUs. From the 50<sup>th</sup> percentile up to the 75<sup>th</sup> percentile, they vest in between 100% and 200%. Between the 25<sup>th</sup> and 50<sup>th</sup> percentile, they vest in between 50% and 100% of the shares. If their percentile ranking is less than 25<sup>th</sup> percentile, they forfeit their PSUs.

So, an executive team that leads its comparison group gets a double benefit. First, the relative TSR ranking can deliver twice as many shares as the number of PSUs if the TSR is in the top quartile. And of course, to be top quartile, the share price typically has risen, so executive team members not only get more shares, but each share is worth much more as well. But if the only reason the stock did well was because the market did well, the team's shares each may be worth more but, depending on how the relative TSR ranks, they may forfeit all or some of their PSUs.

In principle, this emphasis on both absolute and relative performance seems ideal but, as shown next, it doesn't work as well in practice.

### Testing the Relative TSR Performance Test

Fortuna Advisors conducted two capital market studies on the relative TSR of all the companies in the Russell 1000 that were public for the full period of each study. In every case, the starting and ending share prices were averaged over 60 days to reflect the 30- to 90-day conventions companies typically use. The first study showed the weakness of the pay-for-performance link.

We studied the 712 Russell 1000 companies that were public from the end of 2005 through the end of 2017. Ten cycles were studied, with the first being from the end of 2005 to the end

of 2008, the next from the end of 2006 to the end of 2009, and so on through the end of 2017. Each company's TSR was compared with the whole group and was assigned a percentile rank in each cycle. The researchers ranked each company in each cycle through the typical PSU vesting logic, mentioned earlier, and averaged the vesting for each company through the 10 cycles. Comparing this average of the 10 cycles to what the vesting percentage would have been based on cumulative relative TSR performance over the full period shows many distortions.

For example, over the full period, NVIDIA's cumulative TSR was 1,712%. This was 98<sup>th</sup> percentile as it was better than 695 of the 712 comparison companies — outstanding for a company with market capitalization of more than \$100 billion at year-end. This extremely high performance should have generated a very high reward. Indeed, if cumulative relative TSR mattered, it would be worthy of the maximum 200% vesting. But because of the pattern of the cycle-by-cycle relative TSR, NVIDIA's average relative TSR ranking was only 44<sup>th</sup> percentile. If NVIDIA had used exactly the above described version of the relative TSR performance test, its executives would have only averaged 79% vesting. Not great in terms of alignment with shareholders.

And NVIDIA wasn't alone. Many companies would have had meaningfully higher or lower vesting distortions. Across the whole group, management teams would have either over-vested or under-vested, on average, by 45% of their total number of PSUs. This isn't just a few outliers, it's a rather large average deviation.

From a manager's perspective, there are many who would look at their cumulative performance and probably feel as though they were underpaid relative to shareholders. From a shareholder's perspective, there are just as many companies in which shareholders

would wish they had earned a better TSR, yet the executives were paid well. The first problem can be demotivating for management and the second can be a public relations setback that can even provide ammunition to potential activist investor campaigns.

The second study examined a single cycle ending in 2017, and Fortuna Advisors found the vesting percentages varied considerably depending on the start and end dates. To demonstrate this, the researchers examined the 880 members of the Russell 1000 that were public from the start of 2014 through the end of 2017. The relative TSR percentile ranking was calculated for each company during 52 three-year cycles ending as of each week in 2017.

If the relative TSR versus the Russell 1000 for Celgene was measured at the start of 2017, it would have vested in 148% of its PSUs. This dropped slightly to 122% if the cycle concluded at the end of that month. The vesting percentage soared upward during the following weeks until it peaked at the cap of 200% by mid-April, where it stayed for eight weeks. Starting in June there was a rather steady and significant decline. For the last four weeks of the year, its vesting would have been 0%. If the vesting date moved just a few months either way, the payout on this supposedly long-term incentive would have varied all the way from 0% to 200%, and that is after smoothing the TSR by averaging the share price over 60 days at the start and end of each cycle. Again, depending on the date that the PSUs vest, either the executives or shareholders are likely to be frustrated.

Interestingly, the volatility in this second study seems to vary considerably by industry. There were 25 companies that, like Celgene, would have had vesting that ranged all the way from 0% to 200% depending on the week of the performance test in 2017. The largest concentrations of these were in health care, followed by tech, consumer discretionary and consumer staples. There were very few in energy, utilities, materials and industrials, and none in financials, telecom or real estate. Also, prior Fortuna Advisors research found these week-by-week volatilities get worse, not better, if you only compare TSR to the smaller sample of companies within each company's sector.

The findings in these two studies were consistent with the findings of similar studies in 2016.

### What Should the Compensation Committee Do?

Although relative TSR seems appealing, in practice it does not prove to be very well correlated with shareholder rewards over long periods. And, within a given year, the executives will face very different reward opportunities depending on the month and day that the three-year cycle ends. Some executives already value stock awards much lower than so-called

fair value, and linking the vesting of awards to relative TSR rankings would likely decrease their perception of value, which may hurt retention. This reduced relationship between performance and pay makes it seem more like a lottery, which does not help in attracting and motivating top executives.

Fortuna Advisors has advised several clients during the past year to reduce their reliance on relative TSR and implement performance tests based on fundamental growth, margin and/or return metrics. A cash-based economic profit measure also can be used. In each client situation, historical simulations of the company and its peers were used to link targeted performance levels to expected TSR in order to set objectives that, if met, should lead to strong TSR. That should produce a strong link to TSR, but in a way that removes the exposure to share price volatility and provides very clear strategic and operating objectives to management. Given these findings, the author is not convinced it is necessary, or desirable, but if there is a place for relative TSR, perhaps it should be limited to providing guiderails for PSU vesting to ensure there is a cap on PSU vesting when relative TSR is bottom quartile and a floor when it is top quartile.

Incentives should be designed and properly calibrated to balance the tradeoffs between attraction/retention, total cost and the motivation of executives to maximize the long-term TSR of the company. Although relative TSR is appealing in principle, it proves to be a conundrum in practice. There are far better ways of establishing incentive performance tests. **WS**

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