The Misunderstanding Behind all the Angst Around Executive Reward

How a misunderstanding embedded in the *performance measurement frameworks* and *executive reward plan designs* used in most listed companies can distort management behaviours, and hamper a Board in steering its company towards long-term success

A Discussion Paper for Directors of Listed Companies

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Executive Summary

A Breakthrough in Understanding

A recent breakthrough in applied corporate finance has revealed a misunderstanding that calls into question the core premise that underpins the design of most *financial performance measurement frameworks* and *executive reward plan designs* in use in ASX and LSE-listed companies. Because of this breakthrough, we now have a much better understanding of how wealth is created over time by successful listed companies; as well as how the performance produced by management in the *market for a company's products and services*, translates into the *capital market* outcomes experienced by shareholders.

There is a Problem with the Performance Metrics Currently Being Used

Ranked relative TSR was introduced as a capital market performance metric in LTI plan designs to try to adjust for the impact of market movements unrelated to management action, and to provide a benchmark against which to assess capital market performance. It failed on both counts. It also introduced a lottery-like dimension.

As a result, 'false positive' vesting outcomes where executives benefit at the expense of their company and its shareholders, or a 'false negative' where companies and their shareholders benefit at the expense of executives, now occur more than half the time.

Attempts to mitigate the lottery-like aspects of *ranked relative TSR* by augmenting it with accounting measures like *EPS growth* have also failed. This initiative introduced an incentive to engage in short-termism. Recent moves to discard LTIs in favour of *hybrid incentive plans* centred on much larger STIs may also be vulnerable to this and other problems, and should be approached with caution.

Applying the Principles of Applied Corporate Finance Provides a Solution

A sound mechanism with which to adjust for the impact of market movements and to provide a meaningful benchmark for capital market performance has always existed within the principles of applied corporate finance. Making use of this requires the use of economic performance measures in both the *product and services market* and the *capital market*.

This mechanism reveals exactly how the performance produced by management in the market for their company's products and services, translates into the capital market outcomes experienced by shareholders. But it is not possible to establish this link when using measures like *ROE, EPS* and *EPS growth* in the *product and services market*, and *TSR* or *ranked relative TSR* in the *capital market*.

A Bow Wave of Expected Economic Profits

Several studies have shown that capital market performance is much more closely related to growth in *economic profit (EP) per share* than growth in *earnings per share (EPS).*

Building on this understanding, we can demonstrate that there is a *Bow Wave of Expected Economic Profits* embedded in the share price and market capitalisation of every listed company at every point in time. Shaped like a child's 'slippery dip' or 'slippery slide', the *EP Bow Wave* is analogous to the bow wave of a ship moving through the ocean. A bigger bow wave denotes greater momentum.

Shareholder wealth will be preserved in the *capital market*, and *TSR* will equal the cost of equity capital (*Ke*), when a company delivers an *EP* stream consistent with the *EP Bow Wave* embedded in its share price and market capitalisation at the beginning of a given measurement period.

Wealth will be created (*TSR > Ke*) when management find a way to enhance the shape of their *EP Bow Wave* – making it higher with enhanced returns, wider through greater growth, or longer though actions that make the business more sustainable.

Two Sources of Wealth Creation

The *EP Bow Wave* reveals that there are two potential sources of wealth creation for every listed company over any measurement period. The first is that arising from exceeding *EP* expectations during the measurement period. The second is that arising from establishing new and higher *EP* expectations to be delivered beyond the measurement period.

For successful companies, the wealth created by establishing new and higher *EP* expectations to be delivered in the future, is much greater and far more important than that arising from exceeding existing *EP* expectations.

Successful companies create wealth by establishing capabilities and harnessing innovation to devise better customer value propositions and to develop higher value strategies. These lead to a series of new and higher *EP* expectations to be delivered in the future. They then deliver, or go close to delivering, these new and higher expectations. But they tend not to exceed existing *EP* expectations over the short-to-medium term – and certainly not to any great degree.

Studies in the ASX, LSE and NYSE show that the more successful a company is in *continually creating shareholder wealth* over time, the higher the proportion of the wealth they create that comes from establishing new and higher *EP* expectations to be delivered in the future, and the greater the proportion of this that comes from making their business more sustainable.

The Problem with Stretch Targets in Short-term Incentives

This understanding calls into question the focus on 'stretch targets' we see in most executive reward plans, and particularly in STIs. It casts quite a shadow over the recent shift towards *hybrid incentive plans* built around much larger STIs that incorporate a deferred equity component, but in which stretch targets in relation to short-term performance will play an even more prominent role.

A Better Way to Measure Capital Market Performance

The most meaningful way to assess capital market success is with *TSR-Ke* over the long term (15-20 years or more), and with *TSR Alpha* over the short-to-medium term. Over any measurement period, these two measures are linked by the following relationship.

TSR-Ke *= Risk Adjusted Impact of Market Movements +* ***TSR Alpha***

The *Risk Adjusted Impact of Market Movements* has nothing to do with the efforts of management. But *TSR Alpha* has everything to do with management effort. It is driven primarily by the market's reaction to the decisions made and the actions taken by management.

Businesses that succeed in creating wealth *on an ongoing basis* tend to systematically enhance the shape of their *EP Bow Wave* by making it higher, wider and especially longer over time. They do this by meeting *EP* expectations in the short term, while at the same time creating new and higher *EP* expectations to be delivered in the future. They then deliver the new expectations, while creating a further series of new and even higher *EP* expectations to again be delivered in the future. And then they do this again, and again, and again.

For companies that are already economically profitable, increasing the width of the *EP Bow Wave* (through growth) and increasing its length (by making the business more sustainable) can be more important, and sometimes much more important, than improving returns.

Action taken in the *product and services market* that leads to a steady improvement in the shape of the *EP Bow Wave*, will tend to produce positive *TSR Alpha* outcomes in the *capital market*.

A Better Approach to Executive Reward Plan Design

One executive reward plan structure that would align with the understanding we now have would comprise three elements. The first would be a base salary. The second would be a small STI that would be paid if expectations were met, with no incentive to outperform expectations in a financial or economic sense (i.e. no stretch targets), and potentially with some scope to underperform expectations to a minor degree. The third element would be a significant LTI making up the bulk of the at-risk component of reward, to encourage continual enhancement in the shape of the *EP Bow Wave.*

The measures used would all be economic measures, namely *EP* and *EP growth* in the product and services market, and *TSR Alpha* in the capital market.

Alignment with Corporate Purpose

The approach to performance measurement and executive reward proposed is closely aligned with the idea that from an *investor standpoint*, the economic objective of the Board is to build an enduring institution that can create value for its customers and wealth for its shareholders *on an ongoing basis* – in ways that enhance the wellbeing of all legitimate stakeholders.

Establishing an enduring institution of this nature is fundamental to the ability of any listed company to succeed in the pursuit of a noble business purpose.

Implications for Boards

One of the most important roles a Board performs is to appoint a CEO. But just as important is 'getting the settings' right for the business – or setting the business up for long term success.

However, unless there is a clear understanding in place in relation to how wealth is created on an ongoing basis in an enduring institution; as well as how the performance achieved by management in the *market for their company's products and services*, translates into the *capital market outcomes* experienced by shareholders; management behaviours could distort the settings that the Board has worked so hard to put in place. This paper presents a breakthrough in understanding in relation to both these issues.

Correct application of that understanding in structuring a company's performance measurement framework and executive reward plan design is crucial for a Board setting out to build an enduring institution that will prosper well beyond the tenure of any one executive leadership team.

Introduction

Executive reward is a mess. While this assertion may seem a little coarse to some, most people with any real exposure to the topic would agree with the underlying sentiment.

It has even been suggested by the former head of governance for the *Australian Prudential Regulation Authority* that in the case of Australia's big four banks, poorly structured executive reward plans are a significant contributing factor in behaviours that have attracted widespread criticism from politicians and from the wider community.

Over the past fifteen to twenty years, there have been several significant changes to the design of executive reward plans, and particularly to the design of long-term incentive (LTI) plans. Each has sought to deal with a particular problem, weakness or shortcoming that has surfaced. However, while well-intentioned, these changes have all been dealing with symptoms. They have not tackled the primary underlying issue. And contrary to what many believe, it is not related to quantum or structure. These are both secondary issues. The real problem is more fundamental.

A recent breakthrough in applied corporate finance has revealed a deep-seated misunderstanding that calls into question the most basic premise that underpins the design of virtually all financial performance measurement frameworks and executive reward plan designs in use in both ASX and LSE-listed companies today.

There are two aspects to this breakthrough. One is conceptual, and the other is research-based. Together, they are likely to catalyse a fundamental rethink as to how wealth is actually created in successful listed companies, as well as how the financial performance produced by management in the market for their company's products and services, translates into the capital market outcomes experienced by its shareholders.

This breakthrough relies on a fundamental truth embedded within the principles of applied corporate finance. Properly applied, it offers a platform upon which Boards can structure executive reward plans that are beneficial to their company, and fair to both shareholders and executives.

Crucially, it can also be used to help align an executive team with its true purpose. This we believe, is to build an enduring institution that will prosper well beyond the executives' own tenure as leaders. Such institutions must have the ability to create value for their customers and wealth for their shareholders *on an ongoing basis* – and be prepared to pursue these two joint goals in ways that at minimum preserve, and wherever possible enhance, the wellbeing of all legitimate stakeholders, including the wider community and the environment.

Ranked Relative TSR and the Evolution of LTI Plan Design

The UK and Australia are two countries where the mess that executive reward has become is perhaps most evident. They are also the two countries where the use of *ranked relative TSR* as a performance metric in LTI plan design is the most widespread. This is no co-incidence.

Ranked relative TSR emerged as a performance metric roughly a generation ago, largely in response to the quantum of performance bonuses earned by executives of companies that had been privatised by Governments in the UK and Australia. Often the amounts earned by the senior executives of those companies were completely at odds with the performance the companies achieved under their leadership. *Relative TSR*, and particularly *ranked relative TSR* which compares a company's *TSR* performance to a selected group of comparators or peers, was introduced as a means by which to manage this situation.

Absolute TSR has two fundamental flaws when employed as a vesting mechanism. Firstly, if used in isolation, it lacks a meaningful benchmark that can establish what constitutes acceptable capital market performance. Secondly, it can be influenced by market movements that have nothing whatsoever to do with the efforts or the performance of management.

Those responsible for introducing *ranked relative TSR* argued that it could deal effectively with both these issues. But they were wrong. It failed to deal effectively with either issue.

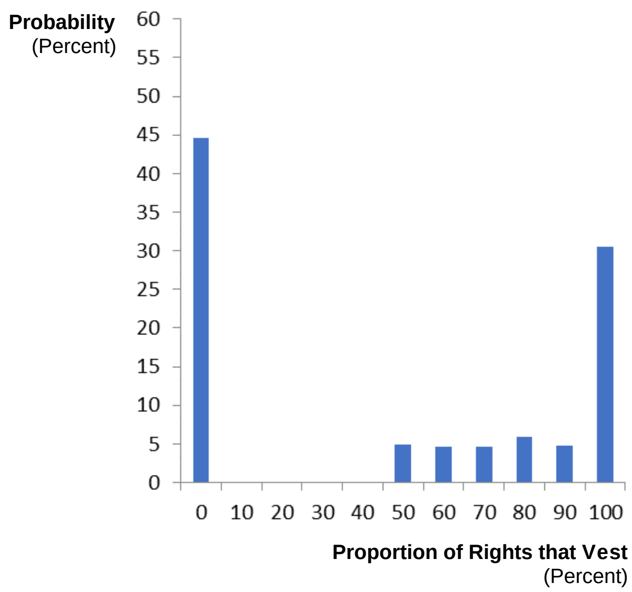
Ranked relative TSR based executive reward schemes typically allocate shares at the beginning of a measurement period, which then vest based on a company's *TSR* performance relative to that of a defined group of comparable companies. In most cases, no shares vest if the *ranked relative TSR* is below the 50th percentile (P_{50}); fifty percent vest at a *ranked relative TSR* at the P_{50} threshold, and one hundred percent vest at P_{75} or above, with a linear vesting scale between the two thresholds.

Unfortunately, *ranked relative TSR* was and remains an utterly flawed metric, and the lottery-like nature of LTI plans built around its use as a vesting metric quickly became evident. This was widely recognised at least ten to fifteen years ago. However, its use has persisted.

We can get a good sense of the magnitude of the problem with LTI vesting based on *ranked relative TSR* from the graphic in Figure 1, which is based on a 1,000 iteration *Monte Carlo Simulation* of the LTI of a typical ASX 20 company that employed *ranked relative TSR* as a vesting metric with twenty comparator companies. This simulation reveals a fatal flaw.

Figure 1 shows the probability of a full, a partial or a zero-vesting outcome, when all twenty-one companies in the simulation are expected to deliver performance that is broadly consistent with that implied by or embedded in their respective share prices at the beginning of a three-year measurement period. These vesting outcomes are a direct consequence of the probabilistic nature of *ranked relative TSR*, and the way that vesting thresholds are expressed in statistical terms, as percentile levels within the comparator group.

***Figure 1**. Vesting Based on Relative TSR when all Companies Deliver Performance in Line with Expectations*



The simulation shows that when companies deliver *TSR* outcomes broadly in line with capital market expectations, executives can expect zero vesting 45 percent of the time, full vesting 30 percent of the time and partial vesting 25 percent of the time. It is unlikely these outcomes would be anywhere near what the Board would have intended or what executives would have expected, having met market expectations.

There are many factors that contribute to this situation. They include the fact that companies with higher risk profiles require higher *TSR* outcomes to preserve shareholder wealth, and tend to 'win' in terms of *TSR* and *ranked relative TSR* performance in a rising market but lose in a falling one (and *vice versa*), irrespective of management performance. But the main problem is the probabilistic nature of the *ranked relative TSR* metric, and the way that target performance and vesting thresholds are expressed as percentile levels within a comparator group.

To begin with, it can be difficult to identify a meaningful comparator group for a listed company. Even if one can be found, in calculating *ranked relative TSR,* the performance of each individual comparator is just as important as the performance of the company itself. To make matters worse, the statistically defined P_{50} and P_{75} vesting thresholds within the comparator group are poor indicators of underlying capital market performance. They have no discernible relationship whatsoever to the wealth created for shareholders over any given measurement period, or to that component of the wealth created that might be attributable to the actions of management. Contrary to what some might believe, a P_{50} *ranked relative TSR* outcome does not signify that expectations have been met or shareholder wealth has been preserved.

A second fundamental flaw becomes evident when we overlay the extent to which vesting outcomes are consistent with underlying capital market performance.

We are only able to do this because of the breakthrough in understanding presented later in this paper. This breakthrough lets us answer questions related to the simulation such as: 'when *ranked relative TSR* performance was below P_{50} and the vesting outcome was zero, how often did the underlying capital market performance actually imply a positive contribution to shareholder wealth creation that could be attributed largely to the efforts of management (after stripping out the effect of market movements)?" Or alternatively, 'when the *ranked relative TSR* performance was P_{50} or above and some vesting was warranted under the LTI Plan, how often did the underlying capital market performance actually imply a negative contribution to shareholder wealth creation that could be attributed largely to the efforts of management?'

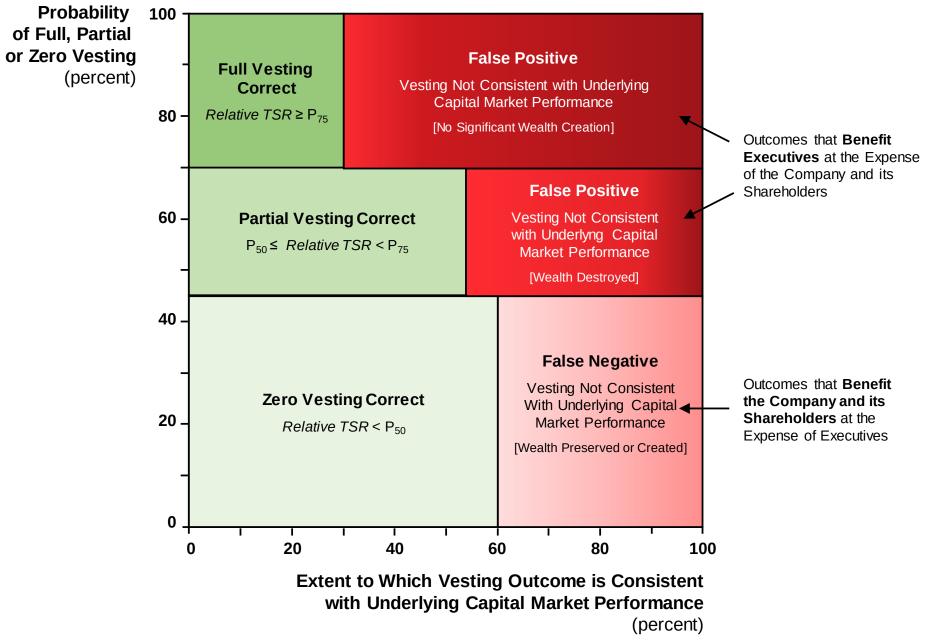
The simulation reveals that vesting based on *ranked relative TSR* produced an incorrect outcome in the form of either a 'false positive' where executives benefited at the expense of their company and its shareholders, or a 'false negative' where the company and its shareholders benefited at the expense of executives, a little over half the time. As can be seen from the graphic in Figure 2, there were slightly more 'false positives' than 'false negatives'.

Of the 45 percent of occasions when the *ranked relative TSR* outcome was less than P_{50} and a zero-vesting outcome ensued, two out of five were 'false negatives'. In other words, *ranked relative TSR* was below P_{50} but management's contribution to wealth creation was positive.

Of the 25 percent of occasions when the *ranked relative TSR* outcome was at least P_{50} but less than P_{75}, and a partial vesting outcome ensued, just under half were 'false positives'. In other words, *ranked relative TSR* was between P_{50} and P_{75}, but management's contribution to wealth creation was negative.

Of the 30 percent of occasions when the *ranked relative TSR* outcome was P_{75} or above and a full vesting outcome ensued, three quarters were 'false *positives*'. In other words, *ranked relative TSR* was P_{75} or above, but management's contribution to wealth creation was below a quite conservative benchmark for good capital market performance.

Figure 2. Vesting Outcome Based on Ranked Relative TSR versus Underlying Capital Market Performance



This outcome presents a problem and a challenge for the Boards of listed companies that use *ranked relative TSR* as a vesting criterion in their company's executive reward plans.

Augmenting Ranked Relative TSR Through the Introduction of Accounting Metrics

In an attempt to mitigate the lottery-like nature of vesting outcomes based on *ranked relative TSR*, roughly ten years ago, remuneration consultants began to introduce secondary LTI vesting metrics. These were all accounting-based financial metrics. By far the most common were *earnings per share (EPS)* and *EPS growth* – although some schemes used *return on capital (ROC)*, or *return on equity (ROE)*. Occasionally quite unusual metrics like *compound annual growth in ROE* were used.

Under these new schemes, allocated performance rights were split into two tranches, with 50 percent vesting based on *capital market performance* assessed using *ranked relative TSR*, and 50 percent vesting based on *product and service market performance* measured using an accounting metric.

Target *EPS growth* was generally set at a level considered appropriate given past performance (say 8 percent), and a *stretch target* was typically set at a level 50 percent higher (say 12 percent per year).

Unfortunately, this 'solution' not only failed to overcome the lottery-like nature of that element of the LTI that continued to vest based on *ranked relative TSR*, it created another problem. This was the risk of encouraging *short-termism* as executives switched their focus to meeting the stretch *EPS growth* targets that underpinned the new and more controllable part of their LTI.

By splitting the available performance rights into two tranches, with a high probably of a zero outcome for those that vest based on *ranked relative TSR* even when market expectations were met, scheme designers inadvertently introduced a very real incentive for executives to "go for broke" in relation to meeting stretch *EPS* or *EPS growth* targets in order to achieve an overall 50 percent vesting of the total performance rights available under their LTI scheme. Executives could achieve this through full vesting of rights linked to stretch *EPS* or *EPS growth* outcomes (over which they had a fair degree of control), even if they achieved zero vesting of rights linked to *ranked relative TSR* (over which they had no real control).

Transitioning Away from LTIs to Much Larger STIs

Over the past twelve months, in large part because of the problems with LTI plans centred on *ranked relative TSR*, several companies have chosen to do away with existing LTI structures altogether, and place the entire “at-risk” component of reward within a modified STI framework.

Such schemes are still in their infancy, and there is a good deal of variation in the structures employed by early-adopters. The scheme described in the 2017 remuneration report of Telstra Corporation provides a useful case study with which to explore some of the dynamics of these schemes.

Under the proposed Telstra scheme, the CEO can expect to earn an STI equivalent to 200 percent of base salary for achieving ‘target performance’, and up to a maximum of 400 percent of base salary for achieving ‘stretch performance’.

In the case of Telstra, the metrics used to assess performance over a given measurement period include three financial metrics (*total income*, *EBITDA* and a variant of *free cash flow*) which make up 50 percent of the overall weighting; two customer centric metrics (*Strategic Net Promoter Score* and *Episode Net Promoter Score*) that represent 40 percent of the weighting; and individual performance metrics which make up the remaining 10 percent.

The Telstra remuneration report does not identify the performance levels that constitute ‘target performance’ and ‘stretch performance’ for these metrics. However, it does indicate how the quantum or dollar amount of STI once determined, will be paid out. 35 percent of the STI will be paid in cash, 26 percent will be held in restricted shares in two tranches (one held for 1 year and the other for 2 years), and 39 percent will be held as performance rights available to vest based on a *ranked relative TSR* threshold of P_{50} measured over 5 years.

The comparator companies in the *ranked relative TSR* measure are drawn from the ASX 100 excluding resource companies. None of the available performance rights will vest if Telstra fails to achieve a median or P_{50} *ranked relative TSR* outcome. But all of the rights will vest if it achieves P_{50} or above.

In the section to follow, we present a breakthrough in understanding in relation to how wealth is really created in successful listed companies, as well as how the financial performance produced by management in the market for their company’s products and services, translates into the capital market outcomes experienced by its shareholders. An important realisation that emerges from this breakthrough is that reward schemes like that adopted by Telstra with large STI awards – a portion of which is subsequently retained as restricted equity or converted to performance rights that vest on either *ranked relative TSR*, an accounting metric like *EPS*, or some combination of the two – should be approached with some caution. Ideally, their adoption would only be contemplated by a Board after it had first familiarised itself with the understanding presented in this paper, and particularly that contained in the next section.

A Breakthrough in Understanding

In September this year, *Palgrave Macmillan* published *Customer Value, Shareholder Wealth, Community Wellbeing*. This book provides a roadmap for Boards of listed companies that are seeking to build enduring institutions capable of creating value for customers and wealth for shareholders *on an ongoing basis* – and so prosper well beyond the tenure of the current executive leadership team. Central to the thinking presented was a breakthrough in understanding with two mutually supportive aspects – one conceptual and one research-based.

The conceptual aspect centred on the realisation that there exists a *Bow Wave of Expected Economic Profits* embedded in the share price and market capitalisation of every listed company at every point in time. The *EP Bow Wave* construct provides the first meaningful and actionable bridge through which to link the *product and services market performance* produced by management, with the *capital market outcomes* experienced by shareholders.

The research aspect of the breakthrough made use of the *EP Bow Wave* construct to explore how wealth is created on an ongoing basis by truly successful companies. The conclusions were very clear. Just over 60 percent of the wealth created by the 63 top performing companies in the ASX 100 that succeeded in creating wealth for their shareholders over the five years to 31 December 2015, came from increasing the sustainability of their businesses. Only 35 percent arose from improving the underlying economics of their businesses, in the form of increased expectations in relation to future economic profitability and / or growth. And in what will be a surprise to many, just 5 percent came from outperforming expectations over the five-year measurement period.

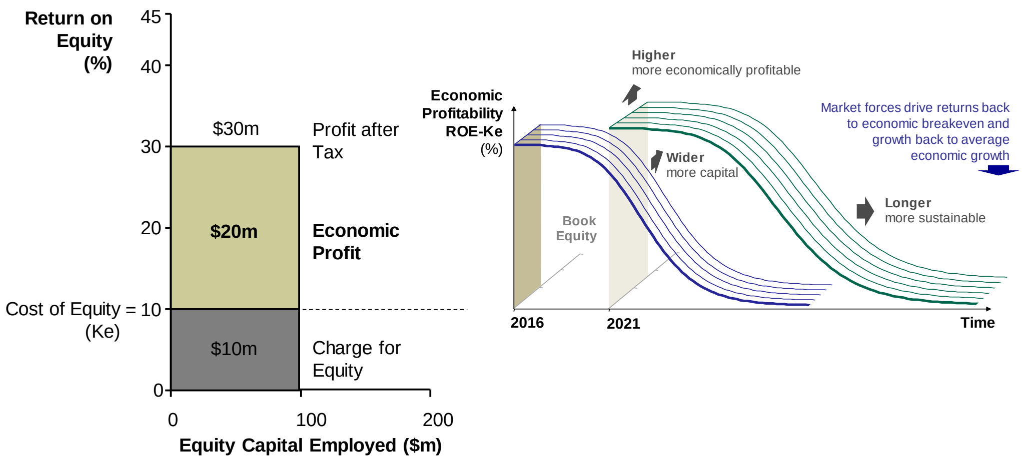
The picture was even more skewed towards sustainability and long-term performance in the case of top performing companies listed on the *New York Stock Exchange* and the *London Stock Exchange*.

This understanding was unlocked by examining the change in the shape of the *EP Bow Wave* over the five years to 31 December 2015, for each of the top 100 companies by market capitalisation in each market. So before going further, we need to explain the *EP Bow Wave* concept.

Understanding the EP Bow Wave

The *EP Bow Wave* is illustrated in Figure 3. Shaped like a child's 'slippery dip' or 'slippery slide', it is analogous to the bow wave of a ship moving through the ocean. A bigger bow wave denotes a ship that has built up greater momentum.

***Figure 3**. The Bow Wave of Expected Economic Profits*



Shareholder wealth will be preserved in the *capital market*, and *TSR* will equal the cost of equity capital (*Ke*), when a company delivers an economic profit (*EP*) stream consistent with the *EP Bow Wave* that was embedded in its share price and market capitalisation at the beginning of a given measurement period.

Wealth will be created (*TSR > Ke*) when management find a way to enhance the shape of their *EP Bow Wave* – making it higher with enhanced returns, wider through greater growth, or longer though actions that make the business more sustainable.

Understanding How Wealth is Really Created

One of the important realisations that emerges from the *EP Bow Wave* construct is that wealth is not created in the *capital market* simply by making returns higher in the *product and services market*.

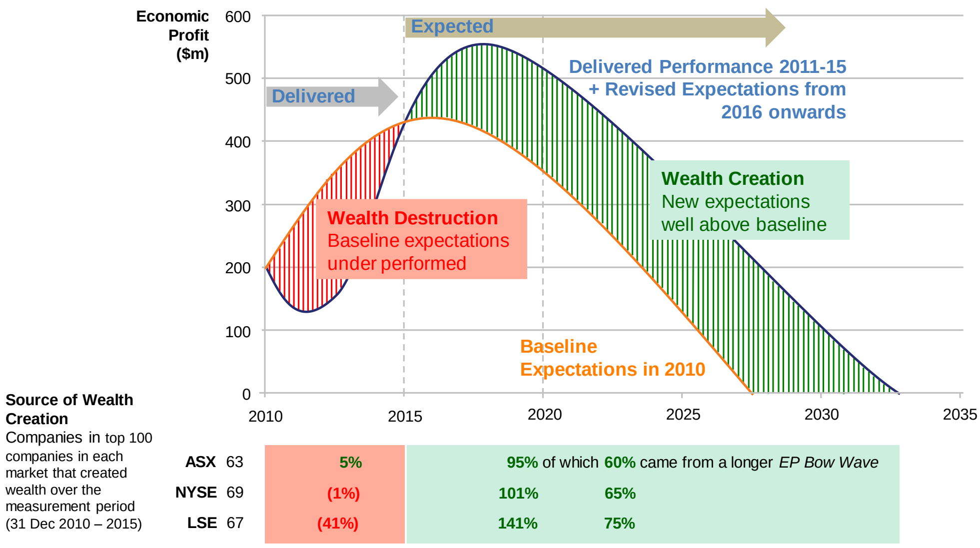
Some companies include metrics such as 'the compound annual growth rate in *ROE'* in executive reward plans. But the *EP Bow Wave* construct suggests such metrics could encourage behaviour more likely to destroy shareholder wealth than create it.

It is not about making the *EP Bow Wave* higher with higher returns. In a mechanistic sense, the objective is to increase the 'volume under the slippery dip' in Figure 3. Making the *EP Bow Wave* wider and especially longer can be much more important – particularly for companies that are already quite economically profitable.

We can use a *Pair of EP Bow Waves,* constructed at the beginning and the end of a measurement period, to identify and quantify the two sources of wealth creation that always exist for every listed company over any measurement period. The idea is illustrated in Figure 4 using a two-dimensional version of the *EP Bow Wave,* where the vertical axis is *EP* in dollars and is equivalent to the shaded planes in Figure 3. The two potential sources of wealth creation will always be:

- The wealth created by delivering an *EP* stream that exceeded the expectations in place at the beginning of a given measurement period (the red area in Figure 4, in this case representing wealth destruction by failing to meet expectations), and
- The wealth created from any increase in expectations during the measurement period, in relation to the *EP* to be delivered beyond the measurement period (the green area in Figure 4).

***Figure 4**. Sources of Wealth Creation in Successful ASX, NYSE and LSE Companies – Five Years to 31 Dec 2015*



When we examine performance over time using the *Pair of EP Bow Waves*, we find that for more successful companies, the wealth created from establishing new and higher EP expectations to be delivered in the future, is far more important than that arising from exceeding existing expectations.

Successful companies create wealth by establishing capabilities and harnessing innovation to devise better customer value propositions and to develop higher value strategies. These lead to a series of new and higher *EP* expectations to be delivered in the future. They then deliver, or go close to delivering, these new and higher expectations. But successful companies tend not to exceed existing *EP* expectations over the short-to-medium term – and certainly not to any great degree.

Each of the studies we have conducted in the ASX, the LSE and the NYSE shows that in general, the more successful a company is in *continually creating shareholder wealth* over time, the higher the proportion of the wealth they create that comes from establishing new and higher *EP* expectations to be delivered in the future, and the greater the proportion of this that comes from making their business more sustainable (with a longer *EP Bow Wave*).

Figure 5 summarises the results of a quite recent study of the largest 120 ASX-listed companies by market capitalisation (excluding resources companies and REITs) divided into three groups; top performers, good performers and relatively poor performers. In this case, we looked at the aggregate wealth creation for five rolling three-year periods over the seven years to 31 December 2016. Figure 5 shows each of the components of the wealth creation outcome in percentage terms.

***Figure 5**. Sources of Wealth Creation in 120 ASX Listed Companies– Seven Years to 31 Dec 2016*

Aggregate Outcomes for Five Rolling Three-Year Pairs of EP Bow Waves over the Seven Years to 31 Dec 2016			**Left Hand Side of Pair of EP Bow Waves**	**Right Hand Side of Pair of EP Bow Waves**		
		Aggregate Wealth Creation Outcome	**Component Arising From Exceeding EP Expectations**	**Component Arising From Establishing New EP Expectations**	Component Due to EP Bow Wave Extension	Component Due to Improvement in Underlying Economics
Significantly Outperformed Market on a Risk Adjusted Basis (TSRA > 10%)	49	**100%**	**(1%)**	**101%**	52%	49%
Outperformed Market on a Risk Adjusted Basis (TSRA >0%, <10%)	26	**100%**	**7%**	**93%**	51%	42%
Matched or Underperformed Market on a Risk Adjusted Basis (TSRA <0%)	45	**(100%)**	**(62%)**	**(38%)**	5%	(43%)
All Companies	120	**100%**	**(31%)**	**131%**	84%	47%

For the 49 'top performing' companies, all the wealth created came from establishing new *EP* expectations to be delivered in the future. More than half of this came from enhancing the sustainability of the business, or from increasing the length of the *EP Bow Wave*. [1]

For the 26 'good performers', 93 percent of the aggregate wealth creation came from the establishment of new *EP* expectations. Again, more than half of this came from an increase in the length of the *EP Bow Wave*. [2]

The Problem with Stretch Targets – Particularly in STI Plans

This understanding calls into question the focus on 'stretch targets' we see in most executive reward plans and which underpin the budgeting and performance management processes in many listed companies. It casts quite a shadow over the recent shift in thinking towards much larger STIs incorporating deferred equity, in which stretch targets will play an even more prominent role.

Stretch targets as they are employed in executive reward plans, challenge management to extract more performance from a business (and particularly more short-term performance) than its strategy was intended to deliver. In imposing stretch targets, and then asking management to pursue them, a Board runs the risk of encouraging the destruction of shareholder wealth by inadvertently encouraging short-termism. Any attempt to push hard to meet stretch *EPS growth* is likely to lead to short-termism. This often involves under-investing in the business, or taking action that supports

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[1] Top performing companies were defined as those which produced an annualised *TSR Alpha* of 10 percent or more. As is defined later in this paper, *TSR Alpha* is that component of wealth creation (*TSR-Ke*) that remains after stripping out the effect of market movements unrelated to the actions of management.

[2] Good performing companies were defined as having produced an annualised *TSR Alpha* of between 0 and 10 percent.

EPS in the short term but erodes the value of the company's franchise with customers, and at the same time harms other non-shareholder stakeholders.

As we will demonstrate towards the end of this paper, in companies that achieve long-term success and become enduring institutions, non-shareholder stakeholders need to be regarded as allies in the creation of customer value and shareholder wealth over the long term, not as adversaries in the pursuit of *stretch EPS* outcomes over the short-to-medium term.

The problem with stretch targets is exacerbated by the fact they are usually expressed in terms of accounting measures. *Earnings*, *EPS* and *EPS growth* are the most common measures used. Their use further increases the risk of short-termism, due to the existence of the *EPS Myth*.

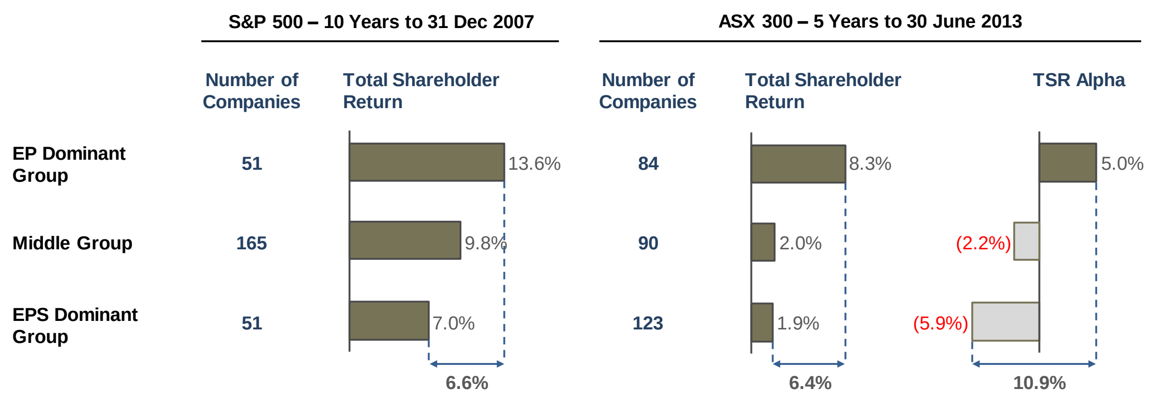
The EPS Myth – A Driver of Short-termism and an Impediment to Ongoing Wealth Creation

There is a widely held but nonetheless misguided belief throughout the business and investment communities, and also within the financial press, that enhancing short-to-medium term *earnings* and *EPS* will enhance shareholder wealth. This is simply not true. In fact, widespread adherence to this belief has been a major driver of short-termism. It has also been a significant impediment to the building of enduring institutions that can wealth for shareholders on an ongoing basis.

Over the years, there have been many studies demonstrating that *earnings* and *EPS* are poor indicators of management performance because they can be 'bought at any price'. Their use in justifying acquisions because they are 'earnings accretive' or '*EPS* accretive' can be particularly problematic. Being *earnings* or *EPS* accretive says nothing about the impact of an acquisition on shareholder wealth.

The fundamental problem with *earnings* and *EPS* is that the amount and the cost of the capital required to underpin an *earnings* or *EPS* outcome is not captured in *earnings*, *earnings growth*, *EPS* or *EPS growth*. Similarly, the widely held view that expressing *earnings* on a per share basis by using *EPS* will normalise it for the additional capital required is simply not true. New shares required to fund growth are issued at market value not book value. Consequently, *earnings* and *EPS* move in lock step – as is demonstrated in Appendix 1 of *Customer Value, Shareholder Wealth, Community Wellbeing*. To the extent that there is any divergence at all between *earnings growth* and *EPS growth*, it arises because new shares might at times be issued at a slight discount to market value in a placement. But the impact of this is not significant. As a consequence, the relationship between *EP growth* and *TSR* is an order of magnitude stronger than the relationship between *EPS growth* and *TSR*. The relationship between *EP growth* and a measure called *TSR Alpha* is even stronger – as shown in Figure 6 below.

Figure 6. *The Strong Relationship Linking EP per share With TSR and TSR Alpha*



Source. Kontes, Peter; *The CEO, Strategy and Shareholder Value*, Wiley, NJ, 2010; KBA Analysis

Figure 6 captures the results of two studies. One was completed by former Marakon CEO Peter Kontes (*dec.*) and a team from the *Yale School of Management*. It covered S&P 500 companies over the ten years to 31 December 2007. The second was done by KBA and covered ASX 300 companies over the five years to 30 June 2013. In both cases, the difference in *annualised TSR* between companies whose *EP per share growth* was significantly greater than their *EPS growth*, and those companies whose *EPS growth* was significantly greater than their *EP per share growth*, was more than six percentage points. The difference expands to nearly 11 percentage points when we use *TSR Alpha*, which is a more appropriate indicator of relative performance over these timeframes. [3]

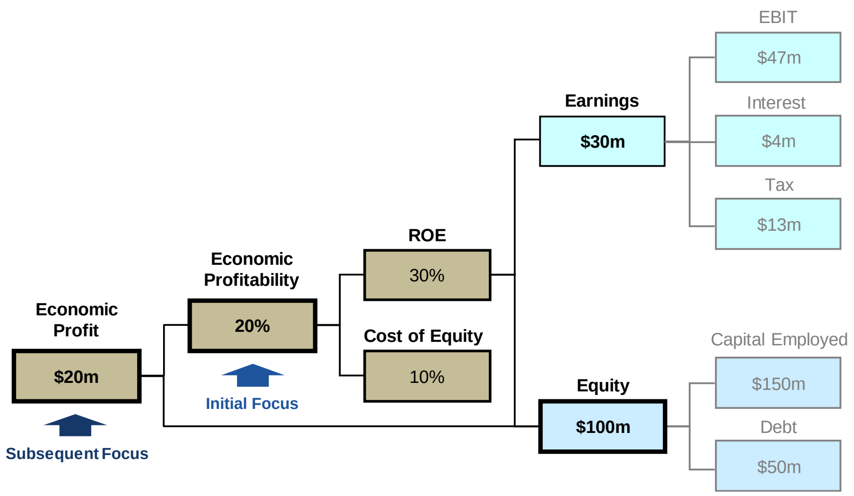
TSR Alpha – The Metric that Captures Management's Contribution to Wealth Creation

To build a meaningful bridge between the *product and service market performance* produced by management and the *capital market outcomes* experienced by shareholders, we must use economic measures. It is impossible to construct this bridge using accounting measures to assess *product and service market performance,* in conjunction with non-economic capital market metrics like *TSR* and *ranked relative TSR*.

The reason we can build this bridge is because with economic measures, the performance benchmark in both markets is the same. It is the cost of equity capital Ke. Book value is preserved in the *product and services market* when *ROE* matches *Ke*. Market value is preserved in the *capital market* when *TSR* matches *Ke*. In both cases, market forces drive returns back to *Ke* over time.

At least initially, the measure of success in the product and services market is to be economically profitable with an *ROE* greater than *Ke* – as is illustrated in Figure 7. However, once a business is economically profitable, the goal transitions to the pursuit of a growing and more sustainable *EP* stream.

Figure 7*. Measuring Success in the Product and Services Market*



The three drivers that underpin that growing *EP* stream are the three dimensions of the *EP Bow Wave*. So, the focus should be on making the *EP Bow Wave* higher through enhanced returns, wider through greater growth, and longer through making the *EP* stream more sustainable.

[3] There is a much more detailed examination of the *EPS Myth* in Chapter 2 of *Customer Value, Shareholder Wealth, Community Wellbeing*, and in an easily accessible form in *this address to the Governance Institute of Australia* annual conference in 2015. https://www.youtube.com/watch?v=_aHRWKuLr1E

On the other hand, capital market success is measured with *TSR-Ke* over the long term (15-20 years or more), and with *TSR Alpha* over the short-to-medium term. Over any measurement period, these two measures are linked by the following relationship.

TSR-Ke** = Risk Adjusted Impact of Market Movements + **TSR Alpha

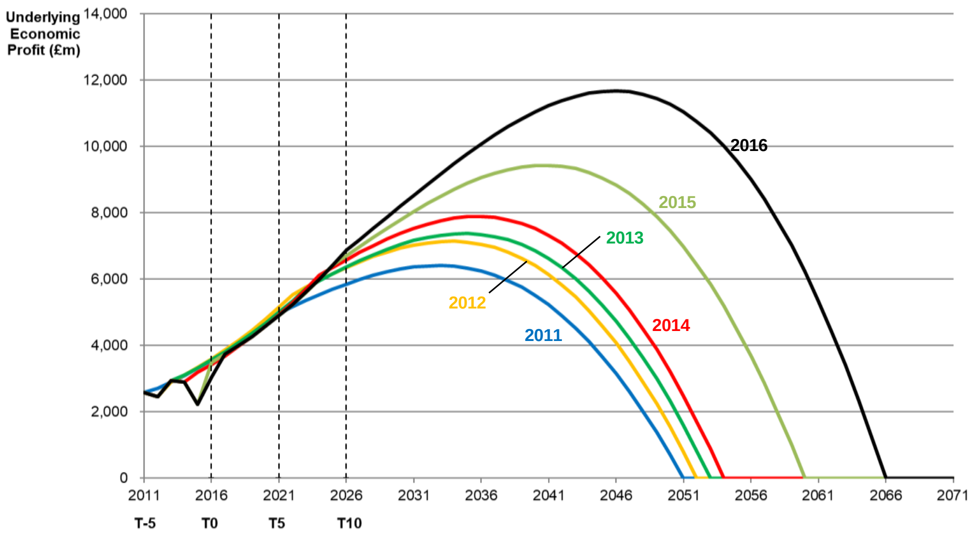
The *Risk Adjusted Impact of Market Movements* has nothing to do with the efforts of management. On the other hand, *TSR Alpha* is driven primarily by the market's reaction to the decisions made and the actions taken by management.

The market expects *TSR-Ke* to converge to zero over the long term. It expects *TSR Alpha* to converge towards zero over the short-to-medium term. In both cases the benchmark performance is zero, indicating performance commensurate with wealth preservation.

A *TSR-Ke* of zero means wealth was preserved for shareholders, but it incorporates the impact of market movements. A *TSR Alpha* of zero means that management's contribution tended to preserve shareholder wealth, independent of the impact of market movements.

Businesses that succeed in creating wealth for shareholders *on an ongoing basis* tend to systematically enhance the shape of their *EP Bow Wave* by making it higher, wider and especially longer over time. They do this by meeting (or going close to meeting) *EP* expectations in the short term, while at the same time creating new and higher *EP* expectations to be delivered in the future. They then deliver the new expectations, while creating a further series of new and even higher *EP* expectations to again be delivered in the future. And then they do this again, and again, and again, as is illustrated in Figure 8 in the case of Unilever Plc – an exemplar in terms of such performance.

***Figure 8**. Progression of EP Bow Waves for Unilever – as at 31 December from 2011 to 2016*



In all listed companies, shareholders experience a return (*TSR*) and a wealth creation outcome (*TSR-Ke*). Each measure is affected by the efforts of management and the impact of underlying market movements. *TSR Alpha* represents the component of the wealth created for shareholders (*TSR-Ke*) arising largely from the actions of management.

Systematic action taken in the *product and services market* that leads to a steady improvement in the profile of the *EP Bow Wave*, will tend to produce a positive *TSR Alpha* outcome in the *capital market* – as illustrated in Figure 9 for Unilever.

The analysis presented in Figures 8 and 9 also offers an insight into the type of 'false negative' vesting outcomes that *ranked relative TSR* can produce.

***Figure 9**. Wealth Creation (TSR-Ke) and TSR Alpha Outcomes for Unilever*

	Three Years Ended			Five Years Ended
	31 Dec 2014	31 Dec 2015	31 Dec 2016	31 Dec 2016
Total Shareholder Return (**TSR**)	11.3%	11.7%	13.9%	12.8%
Cost of Equity Capital (**Ke**)	8.7%	8.7%	8.7%	8.7%
Long-Term Economic Return on Market Value (**TSR-Ke**)	2.6%	3.0%	5.2%	4.1%
Risk-Adjusted Impact of Market Movements	(0.1%)	(3.2%)	(5.6%)	(4.4%)
TSR Alpha	2.7%	6.2%	10.8%	8.5%

In delivering the *product and services market performance* summarised in Figure 8, and the *capital market outcomes* shown in Figure 9, Unilever created a total of £18.8b in shareholder wealth over the five years to 31 December 2016. Importantly, 75 percent of this wealth creation came from making its business more sustainable with a longer *EP Bow Wave* – exactly the type of performance that the Board and the long-term investors in the company would be wanting to see.

So, it is ironic that the component of the Unilever LTI plan which vested based on *ranked relative TSR*, delivered a zero-vesting outcome to executives over the three years to 31 December 2016. [4]

Implications of the Breakthrough

The evidence is clear. Successful companies create wealth for shareholders on an ongoing basis by focusing on the long term – not the short term. They create new capabilities and harness innovation to enhance both the value they provide to customers and the wealth they create for shareholders. This translates into the continual establishment of new and higher *EP* expectations which they then deliver over time. Crucially, they tend not to exceed expectations over the short term.

Performance management processes and executive reward plans need to reflect and reinforce this understanding. That means avoiding the use of stretch targets. It also means avoiding the adoption of any reward plan design that might tend to encourage short-termism – however inadvertently.

The recent emergence of new reward plan designs that discard LTIs in favour of much larger STIs should be approached with caution. These new structures tend to emphasise short-term performance in the first instance. They use accounting metrics to assess short-term financial performance, which is then used in combination with non-financial performance measures to determine the STI award. They then use disconnected non-economic capital market metrics (like *ranked relative TSR*) to determine how much of the STI award that is retained as deferred equity, will vest.

Such mechanisms will tend to promote short-termism – albeit inadvertently. This is because any action taken with the primary intention of pushing up returns in the short term, can have a negative effect on the shape of the *EP Bow Wave*. When it does, it can undermine the ability of a management team to create shareholder wealth both now and in the future. [5]

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4 As reported in the Unilever Plc 2017 Remuneration Report

5 This issue was discussed in some detail in an address to the *GIA* national conference in 2015 (https://www.youtube.com/watch?v=_aHRWKuLr1E).

Short-termism, or the pursuit of short-term financial performance outcomes at the expense of longer-term value creation, makes no sense at all. It exists because of a lack of clear thinking born of an incomplete understanding of applied corporate finance and the true economics of listed companies. Boards should do everything they can to avoid creating conditions that encourage it.

How Might We Structure Executive Reward Plans Given This New Understanding?

The breakthrough in understanding we have documented tells us many things that both individually and collectively, challenge conventional thinking in relation to process of creating wealth within listed companies. Six are particularly important from the perspective of performance measurement frameworks and executive reward plan design.

1. The goal is not to create wealth *per se* or to maximise shareholder value. It is to build an enduring institution that can create value for its customers and wealth for its shareholders *on an ongoing basis*. In an economic sense, success in this endeavour stems from continually finding ways to make the company's *EP Bow Wave* higher, wider and / or longer over time.
2. Most of the improvement in the shape of the *EP Bow Wave* we observe in successful listed companies (and therefore the wealth they create) comes from establishing new and higher *EP* expectations to be delivered in the future, and then meeting those expectations over time.
3. These new and higher *EP* expectations stem from enhanced customer value propositions and higher value strategies – which in turn arise through establishing new capabilities and harnessing innovation within the organisation.
4. Successful listed companies tend not to exceed existing expectations over the short-to-medium term – and certainly not to any great degree. They understand (at least intuitively) that to improve *short-term capital market outcomes*, they need to focus on developing the ability to deliver better *long-term product and service market outcomes*.
5. For companies that are already economically profitable, increasing the width of the *EP Bow Wave* (through growth) and increasing its length (by making the business more sustainable) can be more important, and sometimes much more important, than improving returns.
6. We can break the wealth created for shareholders over any measurement period (the *TSR-Ke* outcome) into that attributable to movements in the market as a whole, and that attributable largely to the efforts of management. The latter is captured in *TSR Alpha*. *TSR Alpha* is a particularly important capital market performance metric.

Current approaches to performance measurement and executive reward are not consistent with this understanding. Nor are the changes to reward plan design that involve transitioning away from LTIs and incorporating much larger STIs that have been proposed recently.

While we are neither remuneration experts nor motivational psychologists, if we were starting with a clean sheet of paper, one structure that would align with the understanding we have presented would comprise three elements. The first would be a base salary. The second would be a small STI which would simply be paid if expectations were met. There would be little if any incentive to outperform expectations in a financial or economic sense (which means no stretch targets), and there might be some scope to underperform expectations to a minor degree without significant penalty. The third element would be a significant LTI that would comprise the bulk of the 'at-risk' component of reward, and which would seek to encourage continual enhancement in the shape of the *EP Bow Wave* by focusing specifically on the right-hand side of the *Pair of EP Bow Waves* in Figure 4.

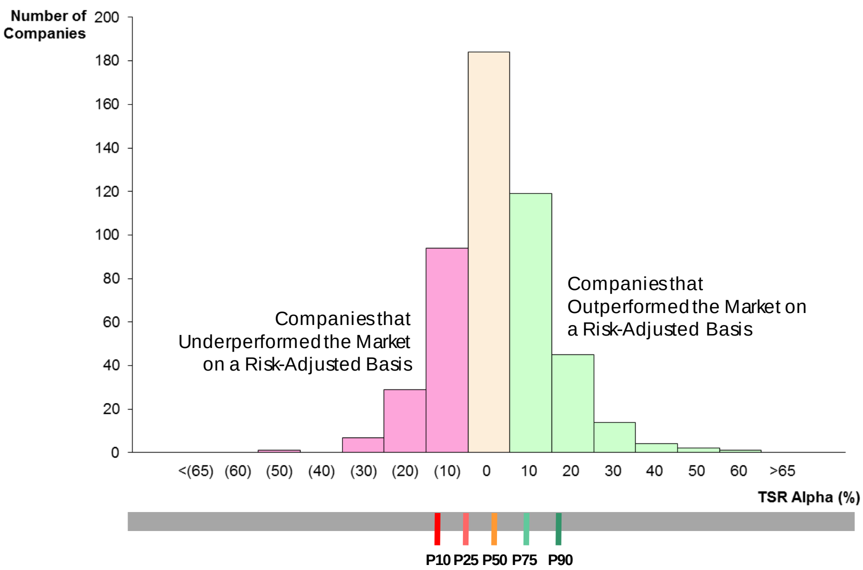
The measures used would all be economic measures, namely *EP* and *EP growth* in the product and services market, and *TSR Alpha* in the capital market.

The issue of quantum could be addressed by answering two questions.

1. *What would be the total quantum of pay available for delivering truly outstanding performance over the measurement period?* This would mean meeting all non-financial targets, meeting (but not exceeding) *EP* expectations in the product and services market, and making a significant contribution to shareholder wealth creation by achieving a *TSR Alpha* outcome of 10 percent per annum or more over each rolling three-year period.
2. *What would be the total level of reward available for meeting expectations over the measurement period?* This would mean meeting all non-financial targets, meeting *EP* expectations in the product and services market, and preserving shareholder wealth by meeting capital market expectations (i.e. *TSR Alpha* = 0).

While we believe a *TSR Alpha* of 5 percent per annum is the most realistic wealth creation 'target' to set, a *TSR Alpha* of 10 percent constitutes truly outstanding performance. This is supported by empirical evidence in Figure 10, which shows the *TSR Alpha* outcome for the S&P 500 over the five years to 31 December 2015.

***Figure 10**. Distribution of 5-Year TSR Alpha Outcomes for S&P 500 – Five Years to 31 December 2015*



Aligning Performance Measurement and Executive Reward with a Noble Business Purpose

The approach to performance measurement and executive reward we are proposing is closely aligned with the idea that from an *investor standpoint*, the economic objective of the Board of a listed company is to build an enduring institution that can create wealth for its shareholders *on an ongoing basis*.

It will be difficult to succeed in this endeavour unless a Board understands how the performance its executive team achieves in the market for their company's products and services, translates into the capital market outcomes experienced by shareholders. And without that understanding, there is also some risk of becoming caught up a theoretical debate about the purpose of a listed company.

In recent years, a debate had developed between those who believe shareholder wealth creation is an objective, and those who see it as an outcome. But with the right understanding, there is really no difference between these two positions.

If we start from the premise that shareholder wealth creation should be an objective, then the true objective is to build an enduring institution that can create wealth for shareholders *on an ongoing basis*. The words '*on an ongoing basis'* are seminal. This is because *the way* a company goes about creating shareholder wealth has a huge impact on its ability to continue to do so.

A company can only continue to create wealth *on an ongoing basis* if three conditions hold in relation to *the way* it goes about creating wealth.

Firstly, it must have an explicit focus on both customer value creation and shareholder wealth creation – seeing them as joint and mutually reinforcing objectives. Whether consciously or not, they are generally pursued in tandem, at the level of an individual needs-based customer segment.

Secondly, it must have a noble purpose that goes well beyond simply seeking to maximise value for existing shareholders. In a generic sense, this involves setting out to create value for customers and wealth for shareholders in ways that enhance the wellbeing of all legitimate stakeholders. How this is done, and how a company's actual purpose is articulated, remains company specific.

Thirdly, it must regard all its stakeholders as allies in creating value over the long term, not as adversaries in the pursuit of *earnings* or *EPS growth* over the short term.

With this understanding, the difference between seeing shareholder wealth creation as an objective or as an outcome, is entirely superficial, as all stakeholders benefit from their interaction with the company.

Implications for Boards

One of the most important roles a Board performs is to appoint a CEO. But just as important is 'getting the settings' right for the business – or setting the business up for long-term success.

Enduring institutions that have thrived over the long term tend to exhibit the following characteristics.

- The have a strong and clear purpose.
- They maintain a long-term perspective.
- They maintain a stakeholder mindset, with a balanced view as to who their key stakeholders are and what needs to be done to ensure each stakeholder group benefits from their interaction with the company.
- Their leadership is obsessed with creating and delivering customer value, driving a strong innovation culture and developing a new generation of leaders.
- Their leadership harnesses this innovation energy and applies it to the creation of value for customers, to driving down the unit cost of operations and support (where appropriate), and to expanding the reach of their products and services.
- They have an "always on" strategy mindset and strategy development process.
- They have a strong culture underpinned by properly aligned performance measurement and remuneration systems.
- They have a strong Board with a director tenure of around nine years.

The Board has a crucial role to play in each of these aspects of the business, once the CEO has been appointed. However, unless there is a clear understanding in place in relation to how wealth is created *on an ongoing basis* in an enduring institution; as well as how the performance achieved by management in the *market for their company's products and services*, translates into the *capital market outcomes* experienced by shareholders; management behaviours could distort the settings that the Board has worked so hard to put in place. This paper has presented a breakthrough in understanding in relation to both these issues.

Correct application of that understanding in structuring a company's performance measurement framework and executive reward plan design is crucial for a Board setting out to build an enduring institution that will prosper well beyond the tenure of any one executive leadership team.