



Linking Economic Profit and TSR Alpha™

Creating a platform for ongoing value uplift through a more meaningful approach to performance measurement and a more balanced approach to executive reward

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Purpose and Executive Summary

The ongoing debate about executive reward shows few signs of abating. In fact, there seems to be less accord on this subject now than there was twelve months ago.

In that context, the purpose of this paper is to explore the possibility of achieving a meaningful consensus on the subject of executive reward, where the interests of shareholders, non-executive directors and executives could be brought into alignment – around the shared belief that the primary economic objective of the Board and executive team of every listed company is to build an organisation that can create wealth for shareholders on an ongoing basis.*

To do this, it is necessary initially to look beyond the quantum and structure of remuneration plans to the underlying measures used to assess the economic performance of companies and their executive teams. Without consensus among stakeholders on how performance should be measured, there is little chance of achieving consensus on how it should be rewarded. If the goal is to create shareholder wealth, or more importantly to build organisations that can create wealth for shareholders on an ongoing basis, then three important questions arise in relation to performance measurement.

1. What is the most meaningful way for management to consider and measure economic performance (the internal perspective)?
2. What is the most meaningful way for investors to consider and measure economic performance (the external perspective)?
3. How can these two perspectives be aligned?

By addressing each of these questions separately and then drawing the answers together, an approach to corporate performance measurement emerges in which the internal management perspective and the external investor perspective can be aligned. That alignment provides real clarity in relation to the economic objectives of the executive team. It also provides the basis for a more effective and much less contentious approach to executive reward.

Central to this breakthrough is the use of economic profit as the primary single period internal performance measure, and intrinsic value uplift as the primary multiple period internal performance measure.

At the same time, using TSR Alpha™ as the primary external performance metric over a specified measurement period enables the market's view of the intrinsic value uplift achieved by management over that period to be determined. This means it is possible to assess performance in terms of management's primary economic objective, using outcomes

* KBA has worked closely with the Godfrey Remuneration Group (GRG) on the executive reward applications of TSR Alpha™, and particularly with Denis Godfrey and Mike Carroll who are two of the leading figures in KMP remuneration consulting in Australia.

derived entirely from market data – providing real clarity and objectivity for executives, Boards and shareholders.

Even more importantly, it emerges that setting a performance target at a particular annualised TSR Alpha™ outcome over an agreed measurement period allows both the intrinsic value uplift that needs to be achieved by management over that period to be determined, as well as the incremental economic profit stream required each year in order to underpin it.

This more meaningful approach to corporate performance measurement, combined with the more balanced approach to executive reward that it permits, are important foundations for any Board and executive team committed to building an organisation that can create wealth for shareholders on an ongoing basis.

Internal Performance Measurement

Let's begin with the basic premise that the primary economic responsibility of managers at all levels in a listed company is to maximise the value of the capital that has been entrusted to them. Managers have many important responsibilities. However from a purely economic perspective, the requirement to at minimum conserve and wherever possible enhance the value of the capital that they control is absolutely fundamental.

What does this responsibility mean in a practical sense? There are many potential responses to that question – and which one we choose can depend at least to some extent on whether our focus is at CEO and executive director level, or elsewhere in the organisation. The most comprehensive response (and one that applies at all levels) is that it means delivering performance that meets or exceeds investor expectations. But this response also begs the next question. How do we determine investor expectations?

Many believe the right way to go in relation to internal performance measurement is to focus on return on capital and impose a performance hurdle that reflects the investors' opportunity cost of capital. Under this approach, the most commonly used and certainly the most meaningful hurdle is the Weighted Average Cost of Capital (WACC), which captures the company's cost and mix of debt and equity capital.

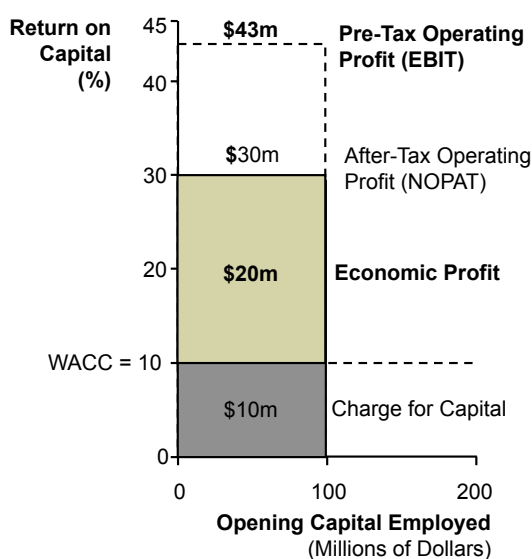
When return on capital is greater than the WACC, a business, or a product or segment within a business, is said to be economically profitable, providing an acceptable return on the capital employed for the providers of both debt and equity capital. This concept is illustrated in Figure 1.

The next question to pose is whether or not this is the right approach given that the goal is to at minimum conserve and wherever possible enhance the intrinsic value of the business.

There are many who believe intrinsic value is conserved when the return on capital matches the cost of capital, and is created when the return on capital exceeds the cost of capital. But

this is simply not true. It is not the capital employed in a business unit that investors have at risk. It is the intrinsic value of the business under the strategy currently being pursued. Intrinsic value is conserved when management delivers the financial performance investors are expecting through the ongoing pursuit of that strategy – and those expectations could include a return on capital above, matching or below the WACC at different points in time. Intrinsic value is created when those expectations are exceeded.

Figure 1. Understanding Economic Profitability



So what does this mean for management? It means that the best way to think about intrinsic value and intrinsic value uplift is to employ the concept of strategy valuation and accept that the intrinsic value of a business depends on the strategy that the management team has chosen to pursue. Intrinsic value uplift occurs when the team delivers performance in excess of expectations under the current strategy, or when it succeeds in developing and implementing a higher value strategy. In both cases, the quantum of value uplift is the present value (PV) of the expected increase in long-term cash flow.

Does this focus on cash flow and intrinsic value ignore return on capital? No it doesn't, because as will be demonstrated in the next few paragraphs, if we are disciplined in the way we measure capital employed, then cash flow is a function of two primary variables: the return on the capital employed at the beginning of each year; and the growth over the year in the capital base upon which the return is earned. This is captured in Equation 1 below.

$$\begin{aligned}
 \text{Intrinsic Value} &= \text{PV of [Cash Flows]} \\
 &= \text{PV of } [(Return\ on\ Capital - Growth\ in\ Capital) \times Opening\ Capital] \quad (1)
 \end{aligned}$$

In fact, so long as the way we measure return on capital each year is consistent with the way both the cash flow and the discount rate used in strategy valuation are calculated, we find that both intrinsic value and intrinsic value uplift can be expressed in terms of future cash

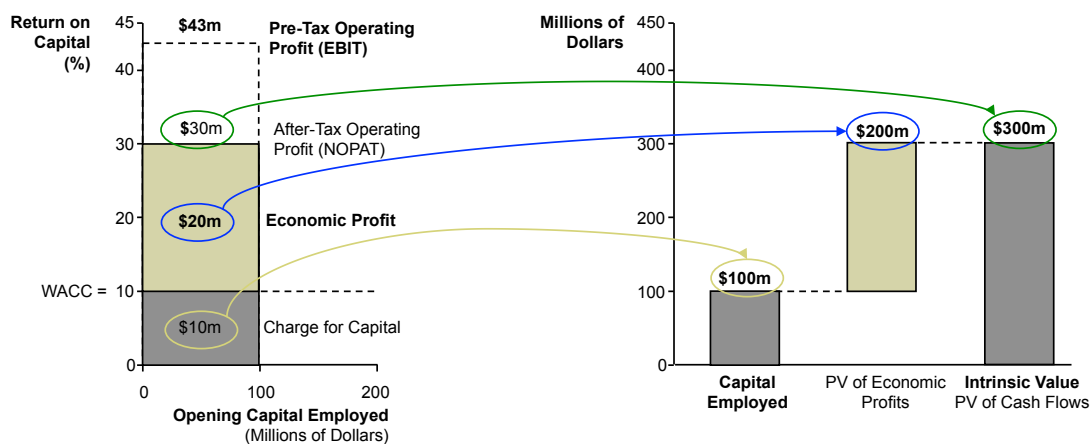
flows and future economic profits.¹ This is extremely helpful from a performance management perspective.

Intrinsic value is equal to the present value of expected future cash flows. It is also equal to the present value of expected future economic profits plus the opening capital employed. This is illustrated in Figure 2 and in Equation 2 below.

For simplicity, the illustration in Figure 2 uses a constant \$30m annual after tax operating profit earned on a capital base of \$100m. With no growth in the capital base on which the return of 30% is earned, the after-tax cash flow stream is equal to the after tax operating profit of \$30m. The value of this in perpetuity is \$300m at a discount rate (WACC) of 10%.

The difference between the intrinsic value of \$300m and the opening capital of \$100m is \$200m, which is the present value of the \$20m annual economic profit stream.

Figure 2. Linking Cash Flow, Economic Profit and Intrinsic Value



$$\begin{aligned}
 \text{Intrinsic Value} &= \text{PV of [Cash Flows]} \\
 &= \text{PV of [Economic Profits]} + \text{Opening Capital} \\
 &= \text{PV of [(Return on Capital - WACC) \times \text{Opening Capital}] + \text{Opening Capital} \quad (2)
 \end{aligned}$$

If management were able to increase the return on capital to 35%, both the annual economic profit and the annual cash flow would increase by \$5m. As a result, both the present value of future economic profits and the present value of future cash flows would increase by \$50m. This is illustrated in Figure 3, which also demonstrates that value uplift can be expressed as either the present value of the expected increase in long-term cash flows, or the present value of the expected increase in long-term economic profits.

The two block arrows in Figure 3 indicate that economic profit can be enhanced by increasing economic profitability (return on capital - WACC), by growing the capital base on which the return is earned, or by some combination of the two. If this enhancement in economic profit results in an economic profit stream over time that is greater than the investors' current expectation, then value will have been created.

The block arrows in Figure 3 also characterise the two fundamental drivers of intrinsic value uplift, namely improvement in return (and therefore in economic profitability), and growth in the capital base on which the return will be earned.

Figure 3. Linking Incremental Cash Flow and Economic Profit to Intrinsic Value Uplift

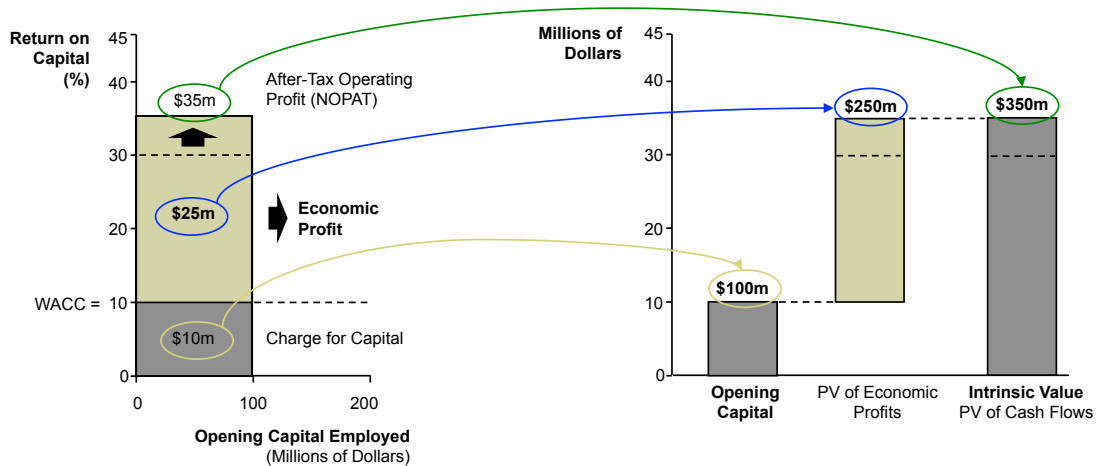


Figure 4 illustrates how these two drivers interact. Economic profitability is plotted on the X-axis. The lines fanning out from the origin represent growth in the capital base. The Y-axis is the ratio of intrinsic value to capital employed – indicating the extent to which the strategy being pursued has added value to the capital employed in the business.

Figure 4. Linking Intrinsic Value to Cash Flow and Economic Profit

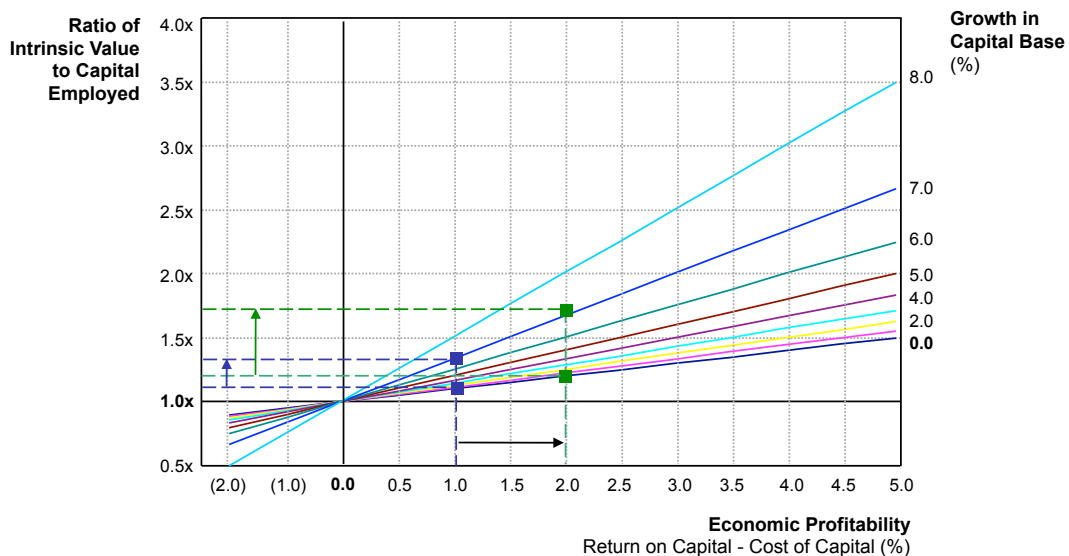


Figure 4 also shows that if economic profitability is zero, growth does not add any value and intrinsic value will always be equal to capital employed. If growth is zero, value increases

steadily with economic profitability – as was the case with the zero growth illustration in Figures 2 and 3. If growth is positive, value increases more quickly as economic profitability increases – and the higher the level of economic profitability, the greater the positive impact of growth on value.

It is evident from Figure 4 that different combinations of economic profitability and growth can produce the same value outcome. So increasing economic profitability is not always the best way to enhance value. Depending on market conditions, it can sometimes be better to focus on growth – or even surrender a point or two of return (by investing in additional marketing, a more effective distribution system or some other non-price-based way to enhance customer value) in order to move onto a higher growth trajectory.

Let's now return to our question. *What is the most meaningful way for management to consider and measure economic performance internally?*

Three things are clear. Firstly, intrinsic value is conserved when investor expectations are met and created when they are exceeded. Secondly, expectations can be meaningfully expressed in terms of an expected future economic profit stream or an expected future cash flow stream. Thirdly, intrinsic value uplift is equal to the present value of the expected increase in long-term cash flows (over and above current expectations), or the present value of the expected increase in long-term economic profits (over and above current expectations).

Consequently, there are in principle two potentially equally meaningful ways for management to consider and measure performance internally. One is by measuring performance relative to expectations expressed in terms of a cash flow stream. The other is by measuring performance relative to expectations expressed in terms of an economic profit stream.

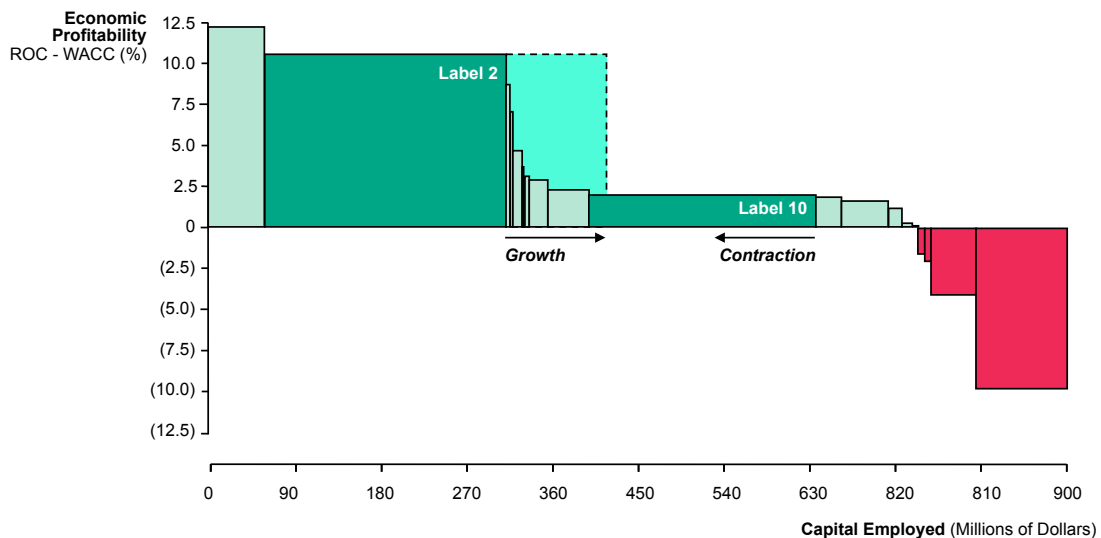
Which is better? In theory, both are equally valid. However the economic profit approach is easier to drive down into the organisation. One of the reasons for this is that it can underpin performance measurement on both a single period basis and a multiple period basis – as illustrated in Figure 5.

Figure 5 presents an analysis of economic profitability by brand or label for a multi-brand wine company. The green shaded labels are economically profitable and the red shaded ones are economically unprofitable. The area devoted to each label represents economic profit for the period measured, and subtracting the red area from the green area gives the economic profit for the business as a whole.

Understanding single period economic profitability is important since competition and other market forces act to drive economic profitability to zero over time. It is almost impossible to manage a business properly without understanding economic profitability at a disaggregated level like this. In this particular case, determining economic profitability by label provided an insight into the economics of the business that gave rise to a proposed strategy involving

reallocation of some of the higher quality fruit used in Label 10 to the much more profitable Label 2.

Figure 5. Economic Profit at a Disaggregated Level



This understanding would have been difficult to unlock had cash flow been used as the fundamental performance metric. Cash flow is by definition a flow. It can move around quite a lot from year to year depending on where the business sits in its investment cycle. While an excellent metric with which to compare performance against plan over time, cash flow does not lend itself to meaningful single period performance measurement. At the same time, while it is possible to calculate cash flow at a product, segment or even at a brand or label level, some managers find it a somewhat difficult concept to apply below the level of a business unit.

Nevertheless, while it is very important to understand economic profitability, it is not the current level of economic profitability or even current level of economic profit that really matters to investors. What matters to them is the change in economic profits over time. So the datum or benchmark performance is not economic breakeven (zero on the Y-axis in Figure 5). It is the current level of economic profits represented by the profile formed by the green and red areas in Figure 5. Growing the green area representing the economically profitable labels will enhance economic profits. But so will reducing the red area representing the economically unprofitable labels. A new strategy involving growing Label 2 at the expense of Label 10 should deliver higher economic profits than would otherwise have been expected over time, and the present value of the expected increase is the intrinsic value uplift that should be achieved.

In summary, a focus on economic profitability and economic profits provides the basis for an effective internal performance measurement system. It can unlock actionable insights when applied on a single period basis such as that illustrated in Figure 5. It also works well on a multiple period basis, since intrinsic value uplift is equal to the present value of the expected

increase in economic profits arising from either a performance improvement initiative under the current strategy, or from a change to what management believes is a higher value strategy.

Actually quantifying intrinsic value uplift requires a strategic planning process that values alternative strategies and ideally then chooses between them based on their intrinsic value. But even without this, simply focusing on growing economic profits can suffice, particularly when coupled to the approach to external performance measurement outlined in the next section.

External Performance Measurement

We began the discussion about internal performance measurement with a basic premise, namely that the primary economic responsibility of managers at all levels in a listed company is to maximise the value of the capital that has been entrusted to them.

Business unit managers often think of the capital entrusted to them as the capital employed in their business in the form of fixed assets and working capital (and captured as such in the accounts). However what is really entrusted to them is the intrinsic value of their business – which is the capital employed plus the present value of the expected economic profit stream stemming from the effective use of that capital in the pursuit of the current strategy. This intrinsic value is conserved when they deliver performance consistent with expectations. It is created when expectations are exceeded and it is eroded when expectations are not met.

The same principle applies when we move from business unit to group level. However at group level, the emphasis shifts from management's internal view of intrinsic value to the externally observed market value.

When investors purchase shares they do so at market price. So they are entrusting the Board and the senior executive team with the market value of their investment. Their primary interest is in market value uplift, which in theory should occur in parallel with intrinsic value uplift – when management either delivers financial performance in excess of expectations under the current strategy, or it convinces the capital market that it has a new strategy in place that will enable it to do so. However in practice, there are other factors that affect the way intrinsic value uplift translates into a change in market value. In fact, market value uplift arises from the combined impact of three factors:

- Uplift in intrinsic value stemming from improved financial performance expectations under the current strategy, or from a new and higher set of expectations arising from the adoption of a new and higher value strategy;
- Changes in company-specific sentiment; and
- Movements in the market as a whole.

Stepping back for a moment, it is important to understand that embedded in every company's share price at any point in time is a series of expectations in relation to future financial performance. These expectations must be met in order to justify the current share price and conserve shareholder wealth. They must be exceeded in order to create shareholder wealth.

Meeting expectations and conserving shareholder wealth does not mean a static share price. It means shareholders get a return that matches their expectations. In fact, share prices move up and down over time in order for shareholders to achieve their required rate of return. If shareholders require a return of 12% on the market value of their investment, their wealth is conserved if the total shareholder return (TSR) they receive from dividends and share price appreciation is also 12%. If the annual dividend yield were 5%, then this would mean a 7% annual increase in share price would be required in order to conserve shareholder wealth. The flip side of this is the realisation that a rising share price is not necessarily an indicator that wealth is being created.

So what does this understanding mean for external performance measurement? The first insight is that TSR is not a measure of wealth creation. It is simply a measure of return on the market value of an investment. Wealth creation only occurs when TSR exceeds expectations. But what is the expectation that must be exceeded in order to create shareholder wealth? One answer that logically comes to mind is the shareholders' required rate of return.

How do we determine the shareholders' required rate of return? The most widely accepted way is to use the capital asset pricing model (CAPM) to determine the cost of equity capital (K_e) for the business.

Let's take a close look at K_e as a performance benchmark or hurdle for TSR. Equity markets move up and down over time, but over the long term, they have delivered a total shareholder return averaging roughly 12% per year – providing an equity risk premium of approximately 6% over the typical return earned on a risk free asset such as a government bond. The CAPM tells us that higher risk, higher return companies like mineral explorers and biotechs have a cost of equity capital (K_e) or required rate of return for shareholders somewhat higher than this; and lower risk, lower return companies like utilities have a somewhat lower K_e . The actual K_e in each case depends on the risk-reward profile of the company in question.

For the sake of illustration, let's focus on a company that has the same risk-reward profile as the market as a whole and therefore has a K_e of 12%. If we were measuring the company's wealth creation performance over the long term (say 20-30 years), then its K_e of 12% would be the appropriate benchmark against which to compare TSR. Wealth would have been conserved if the company delivered an annualised TSR equal to 12% over the 20-30 year period, and it would have been created if the annualised TSR exceeded 12% over the period.

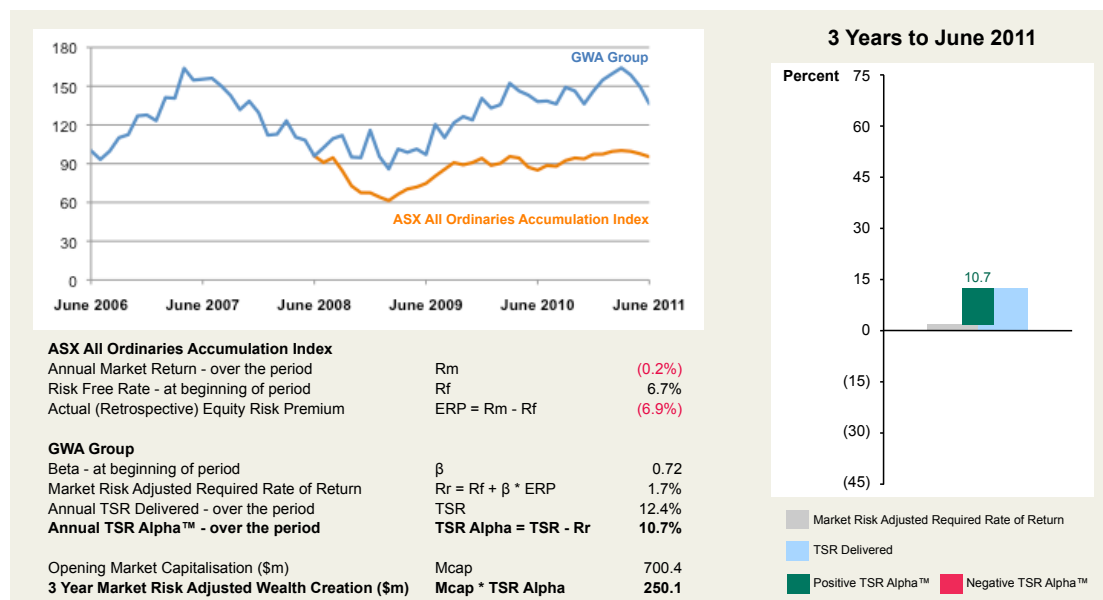
But what happens if we want to measure performance over shorter periods – such as the tenure of a CEO, or the typical 3-5 years of an executive reward plan? The market does not

return the long-term average of 12% every year. Sometimes it moves up, sometimes it falls, and in some years it stays much the same. Therefore it is unlikely that the rate of return of 12% required by shareholders over the long term will be an appropriate benchmark against which to compare a company's TSR performance over the short term – such as for determining whether or not it created wealth over a 1, 3, 5 or potentially even a 10 year measurement period.

So what benchmark should we use? The market itself provides quite a simple solution for which we have coined the term TSR Alpha™. TSR Alpha™ is a measure of the extent to which a company's shares under-performed or out-performed the market over a given period, after adjusting for company-specific risk. It is the difference between the TSR achieved by a company over a given period, and the TSR the market was expecting it to deliver over the same period – a benchmark that can be established retrospectively once we get to the end of the measurement period.

The process of calculating TSR Alpha™ enables us to strip out retrospectively the effect of market movements, enabling us to determine the actual wealth created or destroyed for shareholders on a risk-adjusted basis over a given measurement period. The concept is illustrated for the GWA Group in Figure 6.

Figure 6. TSR Alpha™ Analysis for GWA Group – Three Years to June 2011



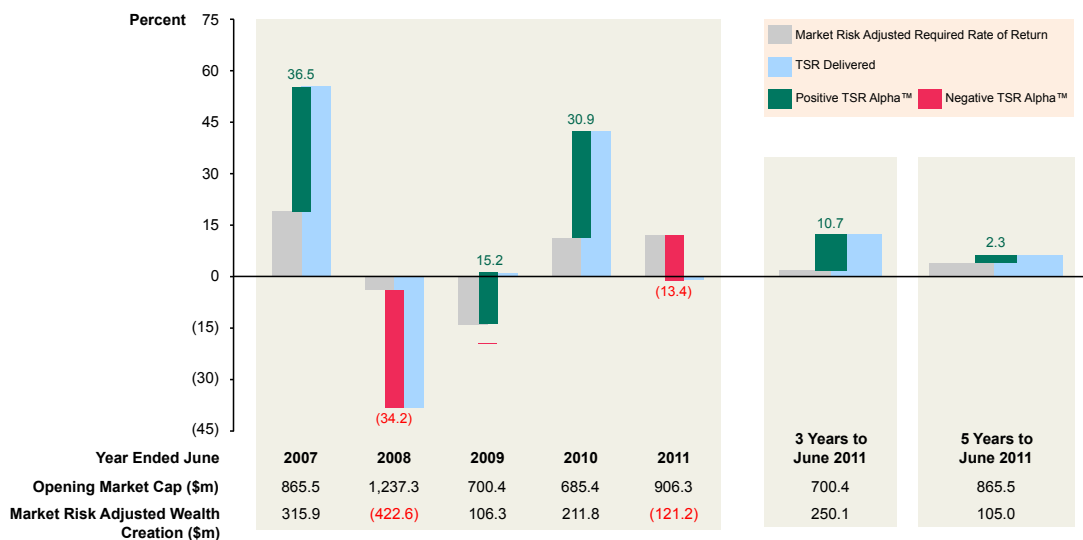
As Figure 6 reveals, over the three years to June 2011, the market return was negative 0.2%, not the long-term average of around 12%. At the same time, the equity risk premium (ERP) was not positive 6% as is normally assumed when calculating the cost of equity capital. It was negative 6.9%.

Consequently, over the three-year period in question, the return that the market was expecting from GWA on an annualised basis was 1.7%. This was the annualised TSR that shareholders required in order to conserve the value of their investment in GWA given what the market did and the relative risk profile of the company itself. GWA delivered a TSR of 12.4% per year over that period. So its TSR Alpha™ was the difference or 10.7% per year.

Earning a TSR Alpha™ of 10.7% on an opening market capitalisation of \$700.4m over three years translates into risk adjusted wealth creation for shareholders of \$250.1m.²

Figure 7 shows the composition of TSR Alpha™ for GWA over the five years to June 2011.

Figure 7. TSR Alpha™ Performance for GWA Group – Five Years to June 2011



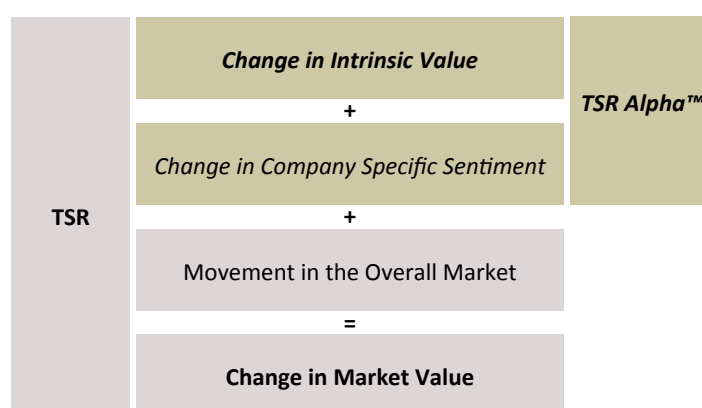
Let's now return to our question. *What is the most meaningful way for investors to consider and measure economic performance externally?*

TSR Alpha™ is the excess return achieved by the shareholders in a company on the market value of their investment over a given measurement period (over and above expectations). Applying it to the market capitalisation of the company at the beginning of the chosen measurement period determines the wealth created or destroyed for shareholders over that period. As is illustrated in Figure 8, when there are no material changes in company-specific sentiment over the measurement period in question, the wealth created by earning TSR Alpha™ on the market capitalisation at the beginning of that period is also the market's view of the uplift in intrinsic value. This makes TSR Alpha™ an excellent external performance metric both for the company in communicating with the market, and for investors in examining company performance.

Of course there will be occasions when TSR Alpha™ is distorted to some degree by changes in company-specific sentiment. However as Warren Buffett suggested some years back, it is

really only share traders who benefit from company-specific sentiment opening up a gap between intrinsic value and market value. He argued that the interests of investors (many of whom are continually investing in the companies in their portfolio) are best served by neutral sentiment where market value is in line with intrinsic value. So in a well-governed company, the wealth created by earning TSR Alpha™ on opening market capitalisation over a given period, should be closely aligned with the change in intrinsic value over that period.

Figure 8. The Components of Market Value Uplift



In summary, TSR Alpha™ provides the basis for an effective external performance measurement system. It provides a clear indication of whether or not a company has created, conserved or eroded shareholder wealth over a specific measurement period. It also provides a market-based mechanism with which to determine intrinsic value uplift.

Another important characteristic of TSR Alpha™ is that it has both forward looking and retrospective applications. Looking forward, it provides a framework for setting corporate goals in relation to shareholder wealth creation as well as a means for driving those goals down into the business (as will be demonstrated in the next section). It also provides a framework for designing executive reward plans. Used retrospectively, it provides a solid basis both for corporate performance measurement and for determining executive reward outcomes.

Linking Internal and External Measures

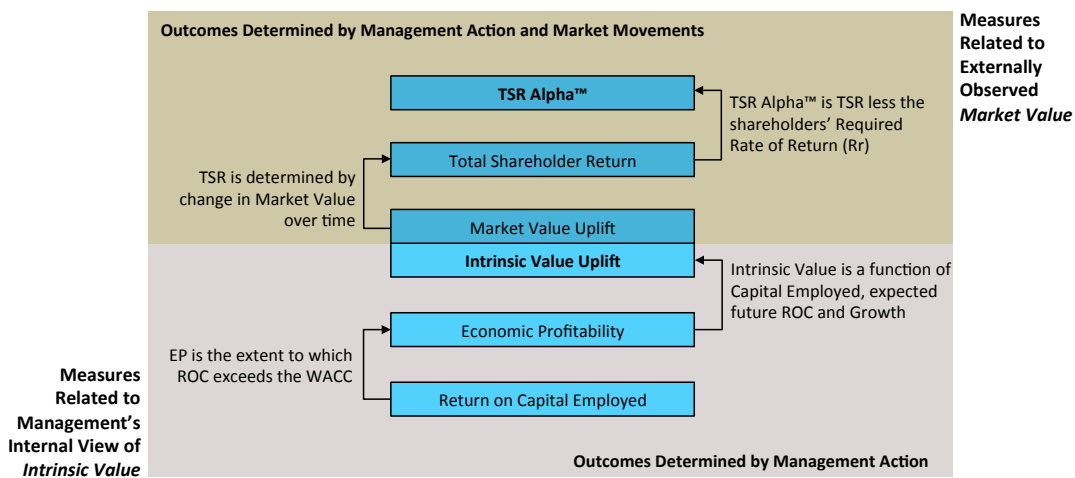
We have outlined an approach to internal performance measurement that focuses on economic profitability as a single period metric and intrinsic value uplift as a multiple period metric. We have also outlined an approach to external performance measurement based on TSR Alpha™. And we have established that in a well-governed company, the wealth created by earning TSR Alpha™ on the market capitalisation at the beginning of a measurement period should closely reflect the market's view of the intrinsic value uplift achieved by management over a that period.

This understanding is reflected in the hierarchy of value-based performance metrics presented in Figure 9.

The bottom half of the hierarchy focuses on internal measures where the performance outcomes are determined primarily by management action. The top half focuses on external measures where performance outcomes are determined by the combination of management action and market movements.

Starting at the bottom, the first measure is return on capital employed. If we subtract the WACC, we get to economic profitability. This is the measure of profitability that should be used to compare performance to that of competitors and that market forces will tend to erode over time unless there is effective intervention from management. Intrinsic value is a function of expected economic profitability and growth. Intrinsic value uplift is a function of the change in expected economic profits over time arising from changes in expected economic profitability and growth.

Figure 9. The Hierarchy of Value-Based Performance Metrics



Market value uplift is a function of intrinsic value uplift, changes in company-specific sentiment and movements in the market as a whole. TSR is the percentage uplift in market value over a given measurement period, defined as dividends plus share price appreciation divided by opening share price.³ It captures the combined impact of intrinsic value uplift, any change in company-specific sentiment, and movements in market as a whole. TSR Alpha[™] then strips out the impact of movements in the market as a whole. In a well-governed company where changes in company-specific sentiment should be minimal, the wealth created by earning TSR Alpha[™] on opening market capitalisation will also be the market's view of intrinsic value uplift.

There is a powerful internal-external symmetry that emerges from this understanding. Intrinsic value uplift was defined earlier as an internal management measure – the change in

management's internal view of value arising from an increase in the expected future economic profit stream. At the same time, TSR Alpha™ is an external measure that enables us to determine the market's external view of intrinsic value uplift. So even if there is no strategy valuation step in a company's strategic planning process – one that values alternative strategies and quantifies the intrinsic value uplift arising from improved performance under the current strategy or from the adoption of a higher value strategy – we can still use TSR Alpha™ to obtain a market derived view of intrinsic value uplift.

More importantly, we can use a TSR Alpha™ target, and the associated market-derived intrinsic value uplift, to determine the level of incremental economic profits that the market is expecting from the company each year. This enables us to drive a TSR Alpha™ target and its associated wealth creation goal down into an organisation. It is also extremely helpful in executive reward.

For the reasons outlined earlier, it makes sense to focus internal performance measurement on the level of and the growth in economic profits. The present value of any increase in expected economic profits over time will translate into intrinsic value uplift – the primary economic goal of management at all levels of a listed company.

Similarly, when describing the economic performance of a company to its external stakeholders, it makes sense for the Board and senior executive team to focus on the wealth created for shareholders as a result of earning a particular level of TSR Alpha™ on the market capitalisation of the company at the beginning of the measurement period.

Because of internal-external symmetry, for a well-governed company, the wealth created for shareholders as a result of achieving a particular TSR Alpha™ outcome will closely approximate the intrinsic value uplift achieved by management.

Implications for Executive Reward

Most incentive-based executive reward plans have a three-tiered structure comprising a base salary, a short-term incentive (STI) and a long-term incentive (LTI). Many companies seek to align their incentive plans with the goal of shareholder wealth creation by designing the STI to encourage behaviour that is expected to lead to intrinsic value uplift, and by structuring the LTI to reward market value uplift when it actually occurs. Not surprisingly, it has often proven difficult to link the behaviours that Boards and senior executives believe drive intrinsic value uplift with actual changes in market value. However that link can be established by making use of the internal-external symmetry that becomes possible with the use of TSR Alpha™.

Internally, managers should be encouraged to focus on the level of economic profitability and the growth in economic profits achieved over time – through either the pursuit of performance improvement initiatives under the current strategy, or through the adoption and successful implementation of higher value strategies.

Externally, investors are interested in the market value uplift over a particular measurement period that arises from earning a TSR Alpha™ on the value of their shares at the beginning of that period – which in a well-governed company will also be the market view of the intrinsic value uplift achieved by management.

So how do we make best use of this symmetry in executive reward? While it has potential implications for both STI and LTI, for simplicity let's focus solely on the LTI.

Most LTI plans in place in Australia today involve performance rights that vest based on certain agreed performance criteria. The most common vesting criterion is Relative TSR, although challenges to its use are now coming from a number of quarters. There are quite a few reasons for this, including the following two quite serious shortcomings.

1. Relative TSR can be calculated using an index, but frequently it is calculated using a basket of comparable companies that at least in theory are drawn from similar sized companies operating in similar industries. This can be challenging given the size and depth of the Australian market. However even if a basket of comparable companies of similar size and from similar industries can be identified, these companies may well have quite different risk profiles. To the extent that they do, the market's expectation of each company will be different over any given measurement period. So in each case, meeting market expectations and conserving shareholder wealth (i.e. $\text{TSR Alpha}^{\text{TM}} = 0$) will produce a different TSR. If each company in the basket met market expectations and conserved shareholder wealth, there would be a predetermined spread of TSR outcomes that would have nothing to do with relative management performance. And the "winner" in a rising market would be different from the "winner" in a falling market.
2. The very nature of TSR means that it will move around from year to year. In a well-governed company, TSR will be high in those years in which a new and higher value strategy is developed and communicated to the market. In the years that follow, it will tend to fall back (towards $\text{TSR Alpha}^{\text{TM}} = 0$) as expectations associated with the higher value strategy are actually delivered. So at any point in time, good performing companies can be developing, communicating or implementing new and higher value strategies – and there will be a natural variability in short-term TSR depending on where they are in that particular cycle. Consequently, an LTI outcome can be affected by where a particular company sits in its strategy development and implementation cycle relative to other companies in the basket – potentially leading to over payment of LTI in some cases and underpayment in others. The problem can be mitigated to some degree by making the measurement period longer, but this can come up against the constraint of the three-year norm for LTI plans as well as average CEO tenure.

As a consequence, many executives and non-executive directors feel the use of Relative TSR as a vesting criterion turns an LTI plan into something of a lottery – the outcome of which is outside the control of the executive team. In response, some Boards have tried to offset shortcomings of Relative TSR by having 50 percent of performance rights vest based on

Relative TSR outcomes, and the remainder on an internal metric such as earnings per share (EPS) or earnings per share growth (EPS Growth).

Unfortunately, while EPS and EPS Growth may be free of the shortcomings unique to Relative TSR, they bring with them their own weaknesses. Both are accounting measures rather than economic ones. Neither takes account of the cost of the capital employed in the business to generate a particular level of EPS, or the additional capital required in order to fund a particular rate of growth in EPS. At the same time, linking an LTI plan to EPS will tend to reward the quantity of earnings rather than the quality of earnings – despite the fact that there is likely to be greater value (and therefore a higher price to earnings (PE) ratio) associated with higher quality earnings flowing from either a higher expected return on capital, or greater long-term growth potential (or both).

To take a simple example, consider a company with a CEO who has an LTI linked to EPS or EPS Growth. If that company was confronted with an opportunity to acquire another company that was a truly excellent strategic fit but had a much higher PE ratio due to higher embedded future return and growth expectations, then what would the CEO do? While the acquisition would almost certainly be value creating for his company, it would dilute earnings per share and could reduce his LTI payout significantly. It would be far better if LTI plans did not lead to this type of conflict in the minds of senior executives.

One way to move forward, making use of the understanding that we have presented, would be to replace Relative TSR with TSR Alpha™ in executive reward plans. TSR Alpha™ is a more robust and meaningful vesting criterion than Relative TSR. Another way to proceed would be to replace Relative TSR with TSR Alpha™, and use Economic Profit Growth as the internal metric instead of EPS or EPS Growth. Because of the symmetry we identified earlier, these two approaches could be aligned or tuned to so as create an essentially identical LTI plan outcome – something that simply cannot be done when using Relative TSR and EPS (or EPS Growth). This potential for alignment is demonstrated in the following example.

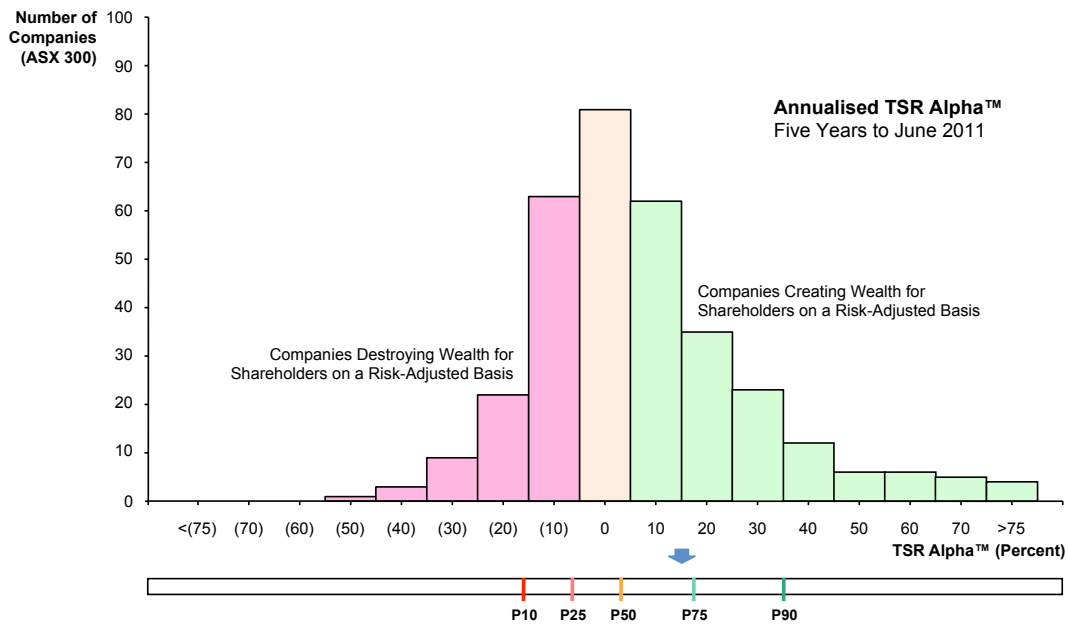
Let's assume a company with a market capitalisation of \$1,000m puts in place an LTI plan under which its CEO gets full vesting of his performance rights if he achieves an annualised TSR Alpha™ over the next three years equal to 15%. As illustrated in Figure 10, this would mean achieving TSR Alpha™ performance equivalent to the 70th percentile of the distribution of the ASX 300 over the past five years.

Earning an annualised TSR Alpha™ of 15% on an opening market capitalisation of \$1,000m over three years represents outstanding performance. It means the company would have created wealth for shareholders amounting to \$521m over three years.⁴

Because of the symmetry we have described, we can also consider \$521m a target for intrinsic value uplift over a period of three years. As is suggested by the family of curves in Figure 4, there are many combinations of incremental economic profitability and growth that can deliver such an outcome. Modelling these and deciding on an appropriate incremental economic profit target for each year of the LTI plan is straightforward. If desired, achieving

these targets could be used as a vesting criterion for some of the performance rights made available under an LTI.

Figure 10. Distribution of TSR Alpha™ Outcomes



A Path Forward

By taking a fresh look at how best to measure the economic performance of a listed company both internally and externally, we have been able to uncover a useful and powerful symmetry. That symmetry centres on: the use of economic profit as the primary single period internal performance metric; the use of intrinsic value uplift arising from a change in expected economic profits over time as the primary multiple period internal performance metric; and the use of TSR Alpha™ as the primary external performance metric.

By definition, TSR Alpha™ outcomes will always be distributed around a mean that is theoretically zero and in practice very close to zero. This means that Boards can choose to set LTI performance targets and vesting criteria in terms of a specific TSR Alpha™ percentile outcome, and then determine the actual TSR Alpha™ delivered retrospectively at the end of the measurement period.

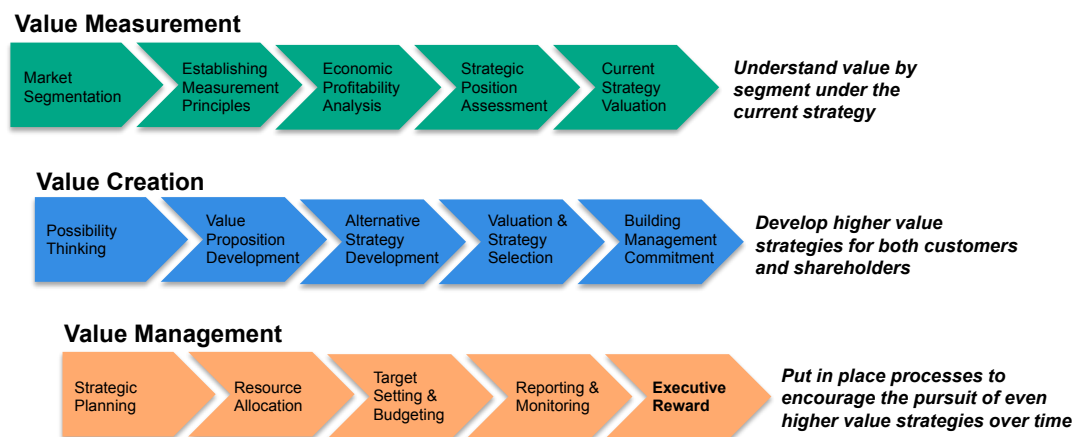
A potentially even more powerful approach though would be to set a TSR Alpha™ target at a specific level or percentage. By setting a target in this way, it can be driven down into the organisation in a systematic way by making use of the symmetry that exists between the implied intrinsic value uplift calculated externally and the change in economic profitability and growth required of management internally in order to achieve it.

In the process, Boards will be able to put in place executive reward plans under which executives can be encouraged and rewarded for enhancing the intrinsic value of their business, while using inputs and metrics derived entirely from market outcomes.

Once these are in place, the executive team can set about the ongoing pursuit of intrinsic value uplift so as to continue to deliver a positive TSR Alpha™ for shareholders. Our experience is that this is best done through the systematic establishment of the three core capabilities illustrated in Figure 11. Adoption of the four integrated business processes illustrated in Figure 12 is a natural consequence of this.

The three capabilities illustrated in Figure 11 are centred on the idea that the key to ongoing intrinsic value uplift is to understand both economic profitability and intrinsic value at a disaggregated level – as was done with the wine company illustrated in Figure 5. This understanding itself almost always leads to opportunities for intrinsic value uplift. But more importantly, with the right approach to segmentation, each segment itself can become a platform for ongoing value uplift. If segments are defined as “groups of customers whose needs are so similar that we can serve them in a way that is value creating for them and cost effective for us” then with the right approach to pricing, it is usually possible to ensure that enhancing value for (or delivering greater benefits to) customers will also lead to enhanced economic profits. This in turn leads to an uplift in intrinsic value.

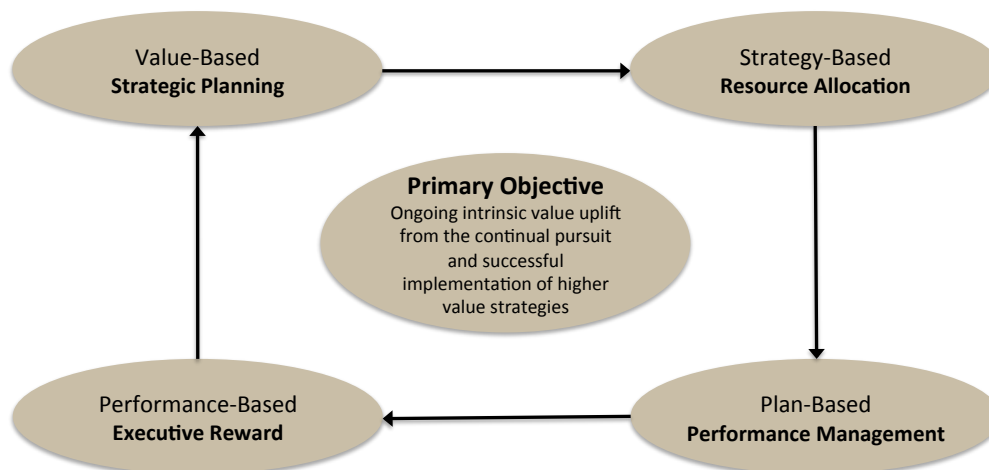
Figure 11. Three Core Capabilities



The third capability illustrated in Figure 11 is Value Management. Having a Value Management capability in place means institutionalising the Value Measurement and Value Creation capabilities by establishing the business processes and systems required to encourage and reward the ongoing pursuit of intrinsic value uplift. The more meaningful approach to performance measurement we have outlined in this paper and the clarity that it brings are important, but equally important is having sound business processes. The four processes illustrated in Figure 12 provide an effective approach to institutionalisation.

The first element is a strategic planning process that starts with an understanding of value at a segment level under the current strategy, and then seeks to develop and evaluate alternative strategies before choosing between them based on their intrinsic value. The second element is a resource allocation mechanism that funds strategies presented by business units in the form of a prospectus quality business plan. Each business unit seeks funding for its strategic plan in return for the value that its strategy will create. The third element is a performance management system that seeks to ensure delivery of the performance promised in a plan built around the value-maximising strategy, while at the same time encouraging the pursuit of even higher value strategies over time. The fourth element is an executive reward plan that encourages and rewards ongoing intrinsic value uplift – or TSR Alpha™ applied to opening market capitalisation using the symmetry we identified earlier.

Figure 12. Four Integrated Business Processes



Building an organisation that can create wealth for shareholders on an ongoing basis is possible – but only if there is a meaningful approach to performance measurement combined with a balanced approach to executive reward that properly encourages the ongoing pursuit of intrinsic value uplift.

- 1 The total capital approach requires that the return on capital be the ratio of the after tax operating profit available to the providers of debt and equity capital, to the debt and equity capital that they provide. The associated cash flow is that which is available to both debt and equity providers. The discount rate is the weighted average cost of capital. The numerator in the return on capital calculation must be after depreciation and the capital in the denominator must be the opening “as depreciated” capital base.
- 2 Market Risk Adjusted Wealth Creation = $\$700.4\text{m} \times (1.107^3 - 1) = \250.1m
- 3 After taking new share issues and capital returns into account.
- 4 Market Risk Adjusted Wealth Creation = $\$1,000\text{m} \times (1.15^3 - 1) = \521m