Dealing with investors' expectations

A global study of company valuations and their strategic implications
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Introduction

When we started writing this report in the first week of September 2001, following months of analysis, we had a disconcerting story to tell, at least by the standards of that time. Our annual study of more than 4,000 listed companies worldwide revealed that the gap between market and fundamental values – which we call the expectation premium – was significantly above the level that preceded the 1929 crash and all other major recessions. This finding paled into insignificance on Tuesday, 11 September 2001.

The scale of the tragedy the US suffered that day, which continues to be borne with extraordinary fortitude and dignity, defies belief and BCG’s heartfelt sympathy goes out to all of its victims worldwide.

The event also, of course, provided a salutary reminder that it is human, not financial, values that ultimately count. But, as the US has so powerfully and pragmatically demonstrated in the past, economic prosperity is often a pre-requisite for preserving and nurturing these values. Understandably, this thought is not uppermost in most people’s minds. Nevertheless, it is important not to lose sight of it, nor of the reality that companies across the globe, on whom millions of lives depend, are now operating in a much more challenging economic environment.

In the wake of these developments, we revised our report in an effort to help businesses emerge successfully from this situation. Originally, at the beginning of September, our goal was to show corporations the scale of the expectation premiums in their respective industries and map out strategies for dealing constructively with them. At the time, these premiums accounted for around 40% of the S&P 400’s total value and affected all industries, rising to over 50%, on average, in several sectors. This was hard to sustain and was fuelled by a variety of factors, from increased market liquidity to an apparent rise in speculative trading.

Although these premiums had deflated by the time we went to press in November, they could be larger than BCG has calculated. The premiums in this report were based on publicly available data on fundamentals for 2000. This year there are indications that profit margins and other fundamental measures have deteriorated, which could leave a bigger premium than we have discovered.

Regardless of the scale of today’s premiums, our analysis sheds important new light on the impact these short-term premiums can have on a company’s ability to sustain long-term value creation. More specifically, we show that it is the relative, not absolute, size of your premium in your industry that counts and that illuminates previously hidden risks and opportunities. How you deal with these is critical. And as it is relative premiums that matter, these possibilities exist in all stock market conditions, good and bad.

In the long run, however, expectation premiums for the stock market tend to zero, on average, enabling fundamentals to shine through and drive total shareholder returns (TSR). Unfortunately, the possibility of an economic downturn, heightened by the recent fall in the world’s stock markets (an event that was exacerbated by high premiums, as shown in the report) threatens to place pressure on companies’ abilities to deliver strong fundamental performances. To help businesses address this possibility and emerge fitter from it, we outline a recession contingency plan. This exercise will strengthen your fundamentals and competitive standing, regardless of the economic climate.
The good news is that an above-average fundamental performance – and consequently above-average TSR – is possible in all industries, one of many findings from BCG’s study. Equally encouragingly, stock markets have consistently shown their ability to bounce back swiftly from major shocks over the last 75 years. We hope today’s problems will not prove the exception to the rule. And that, by stepping up the focus on fundamental value, companies will be able to achieve a softer landing and a rapid rebound from the recent shocks.
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It is not just fundamentals that determine total shareholder returns (TSR). Expectation premiums – the difference between market and fundamental values – can also have a significant, but generally misunderstood, impact both on stock prices and on a company’s fundamental performance, the ultimate driver of long-term value creation. To deal effectively with the risks and opportunities these premiums present, businesses need to incorporate them into their value creation agendas.

Echoing BCG’s previous two annual Value Creators’ reports, our latest study confirms that companies in all industries can generate above-average TSR, the ‘gold standard’ of value creation. In the long run, this is fuelled by three key fundamental metrics – margins, asset productivity and investment growth. However, expectation premiums, which are an inherent short-term feature of capital markets, can also play an important role, enhancing or undermining long-term value creation, depending upon how they are handled.

A comparatively high premium, for instance, can be used as an ‘acquisition currency’ to purchase fundamentally stronger businesses. Unaddressed, it could, amongst other difficulties, lead to a company’s stock price being disproportionately penalised in a market correction. This would leave the firm vulnerable to a take over and limit its ability to raise additional capital. Conversely, businesses with relatively low premiums will already face these problems.

As this gap between market and fundamental values is always evident in the short term, these risks and opportunities are always there, regardless of market conditions. Sometimes a company’s expectation premium will be justified and sustainable in the long term, but often it will not. Although the capital markets will eradicate unrealistic premiums in the long run, on average, all companies will have premiums at some point and will face the relative risks and opportunities.

It is therefore essential to take expectation premiums – the ‘missing link’ in the value creation agenda – into account and manage them. Many companies fail to do this and this is precisely why only a handful of corporations have achieved above-average TSR for more than 10 years.

It is the relative, not the absolute, scale of your premium that matters. As BCG’s study has shown, there have always been short-term differences in premiums, positive and negative, between industries and companies, stretching back to 1926.

Since 1926, there have been pronounced cycles of high and low premiums in the market, positive and negative, averaging to zero in the long term, according to an analysis of the S&P 400 index. The lowest negative premium was in 1932 (-49% as a proportion of market value) and the largest positive figure in 2000 (168%) for our sample. By the end of September 2001, they remained positive, based on last year’s fundamental values.

Moreover, premiums affect all industries. In 2000, for example, 12 of 13 industries had positive premiums and the other a negative premium. Furthermore, there were wide divergences in premiums both between industries and within them. Over this period, the average industry premiums, for example, ranged from 72% for the pharmaceutical sector to 48% for media and minus 2% for automotive. These industry premiums were closely correlated with market performances. The higher the industry’s TSR, on average, the higher its premium as a proportion of TSR.

A deeper analysis revealed the importance of relative, as opposed to absolute, premiums. During a market correction, industries and companies with the largest premiums experienced disproportionately large drops in TSR. In the first half of 2001, for instance, the average TSR was minus 7% for our sample, but companies with a positive premium of 83%, on average, at the beginning of this period recorded
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minus 21% TSR, on average. More significantly, relative differences in premiums highlight strategic opportunities and risks, as explained later.

To turn premiums to your competitive advantage, it is essential to understand their key drivers. Some of these you can use to influence the scale of your premium. Others, notably macro-economic forces, are beyond your control but can provide valuable indicators of possible market corrections, thus enabling you to prepare accordingly.

There are several levers that businesses can pull to try to influence the size of their premiums: for instance, they can reduce a positive premium in order to limit their vulnerability to a market correction. Fundamental improvements – and especially profitable investment growth – are particularly strongly correlated with positive premiums. This explains why some industries, such as media and technology, have relatively high premiums: they are starting from low investment bases and are able to grow them more rapidly than mature sectors, such as utilities. Other ‘corporate’ factors positively correlated with premiums include market leadership, which tends to attract the top premium in an industry; branding; intellectual property rights; management credibility; and transparency.

A variety of complexly interwoven macro-economic factors also shapes premiums, often for the market as a whole. These range from GDP growth and liquidity to socio-demographic factors. Understanding these ‘big picture’ drivers could provide useful warning signals about future market corrections. Sustained positive market premiums, for instance, have never been tolerated for longer than 12 years.

The scale of your premium relative to your industry average indicates the strategic options that are open to you in the short term.

Establish whether the size of your premium, based on your strategic plans, is justified and compare this to your industry average using a matrix that plots premiums against fundamental performances. This will unveil the strategic options available to you. For example, if your business has an above-average premium and fundamental performance, you could use the ‘surplus value’ of your premium to acquire an under-valued business with strong fundamentals and a negative premium. This assumes it is a strategic fit and that the synergies you reap could help you reduce your premiums and compensate for any premium you have paid to acquire the business. At the other end of the spectrum, businesses with below-average negative fundamentals and premiums can take steps to close these gaps and minimise the possible threat of a take-over. As well as improving fundamentals, they may be able to pull the corporate levers that influence premiums to reduce or eliminate their negative gap – for example, via greater transparency and the removal of multiple or ‘non-voting’ stocks.

The jury is still out on whether there will be a deep and sustained economic downturn. BCG hopes this does not happen but, as Louis Pasteur once said: “Chance favours only the prepared mind”. Putting together a recession contingency plan will strengthen your position, regardless of whether there is an economic downturn.

A recession would be a new event for most managers. A contingency plan to deal with this
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Possibility is essential, not just to minimise the threats to cash flow but to seize the opportunities that these events offer. The first step is to appoint a task force made up of a broad cross-section of senior managers with different personal attributes. The next step is to ask the task force to conduct a three-stage analysis to evaluate the relative cash flow vulnerabilities of your markets, individual business units and your company as a whole to an economic shock. This will highlight relative risks and opportunities, and will also suggest appropriate action. A similar analysis should be carried out for your competitors. Use an economic downturn, if it occurs, to enhance your competitive position, for example through mergers and acquisitions (M&As) and investing ‘against the tide’ in strategic areas that will consolidate your position. This approach will be advantageous regardless of whether a recession occurs. It will help you to identify relative cash flow strengths and weaknesses in your portfolio, instil risk awareness in the business and catalyse managers to think more creatively under pressure, amongst many other benefits.

Never lose sight of the importance of your fundamental performance. Ensure you have an integrated value-based management system that aligns all aspects of your business, down to incentives, enhanced fundamental performance and, by definition, above-average TSR.

At the same time, establish a system to monitor expectation premiums, both for your company and for your industry: it is the relative premium that counts. In effect, take into account both your fundamentals and the capital market perspective of your business, especially the expectation premium. This is the key to sustained value creation.
The importance of expectation premiums in value creation

Fundamentals drive TSR in the long run, but in the short term expectation premiums play an integral part. Ignored, they can undermine a business’s ability to sustain long-term improvements in TSR. Properly understood and used, they can become an important strategic asset. This holds true in all markets, good and bad, including today’s. Here we describe BCG’s view on expectation premiums, their key characteristics and our approach to managing premiums strategically.

A reminder of the importance of TSR

Companies often refer to the concept of value creation in public statements but few actively manage it. This is a missed opportunity because superior value creation – and in particular above-average TSR – is essential for a company’s long-term success. It:

- Helps attract and retain key staff, especially as share options become more common in remuneration packages: High TSR is also a public measure of success, often an important factor in attracting and retaining high-calibre employees.

- Makes it easier to raise capital, enabling companies to finance investment growth – a prime driver of value creation: Moreover, there is evidence that high, sustained TSR is correlated with higher credit ratings, thus reducing funding costs.

- Lowers the risk of a take-over and facilitates acquisitions: The higher your relative market value, the lower your vulnerability to acquisitive companies. This also enables you to become the predator and improve your fundamentals via M&As.

- Frees CEOs to take long-term strategic decisions: Strong value creation removes the short-term distractions of dealing with unsatisfied investors.

- Assists companies in fulfilling their social responsibilities: Higher TSR tends to lead to higher employment, tax revenue and economic income via the multiplier effect. This social ‘dividend’ is becoming increasingly important as businesses come under greater pressure to demonstrate their social value and sense of responsibility.

Fundamentals ultimately determine value creation

As previous BCG studies have shown, improvements in profitability and investment growth above the cost of capital (‘profitable growth’) are the principal drivers of value creation, measured by TSR. This powerful correlation is shown in Figure 1. The product of these two key fundamental drivers is free cash flow.

Fig. 1 Correlation between annual market performance (TSR) and annual fundamental performance (TBR)
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The importance of expectation premiums in value creation

In the short term, expectation premiums play an important part in TSR. Our approach sheds new light on this.

In the short term, there is often a difference between a company’s stock market and fundamental values, a gap BCG calls the ‘expectation premium’. This can be positive or negative, reflecting investor optimism or pessimism. Sometimes investors are justifiably optimistic or pessimistic, sometimes they are not. This short-term difference is inevitable, as investors rarely have access to a company’s plans and need time to evaluate its true growth potential and, in some cases, a new management team’s ability to deliver. Premiums can also, of course, be zero.

In fact, in the long run they are zero for the market as a whole, on average, demonstrating that capital markets are efficient and that unrealistic premiums are corrected. However, it is possible for a company to have a justifiable and sustainable premium in the medium- to long-term. For example, if a business has a particular strength that protects its cash flow growth against competitive pressures, such as a powerful brand (see ‘What drives expectation premiums?’), it would probably warrant a sustained positive premium.

As we will show, both justifiable and unrealistic premiums can have a significant effect on a business, both in the short term and long. Unfortunately, until recently, companies and investors have not had a suitable set of tools to both quantify and understand the significance of these premiums, or the opportunities they can create (See box: ‘Premiums versus P/E ratios’). BCG’s expectation premium methodology fills the void. There are two main elements to this approach; together, they provide valuable insights:

- **Quantifies investor confidence:** We quantify the proportion of a company’s share price or TSR that is due to investor confidence and to fundamentals. We call the confidence element an expectation premium, as institutional investors usually factor in expectations when calculating fundamental values using cash flow projection techniques. There is nothing revolutionary about making this calculation. The tools to do this, notably cash flow models, have existed for a long time, although how you apply them is important (see Fig. 2 ‘How expectation premiums are calculated’). Nor do we claim that the calculated premiums we derive are exact measures of investor confidence.

<table>
<thead>
<tr>
<th>Premiums versus P/E ratios</th>
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<td>A key analytical advantage of the expectation premium is that it allows you to disaggregate the proportion of a company’s market value that is justified by its fundamental performance and the proportion that is determined by investor confidence or pessimism, depending on whether the premium is positive or negative. In itself, a premium does not tell you whether a company is over- or under-valued. But, as we discuss below, it enables you to establish whether this is the case, based on the business’s future plans. This has important strategic implications, a point we address in detail in ‘How to turn premiums to competitive advantage’.</td>
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<td>Price-earning ratios (P/Es) do not provide these insights. Traditionally, P/E ratios have been used to gauge whether a business is fairly valued, relative to the market or an industry average. But in reality they paint an inconclusive and potentially misleading picture. Is a company with a P/E ratio of 12 over-valued compared to one with a ratio of 8? You cannot tell. A P/E ratio – which is determined by equity risk, earnings growth outlook and dividends – does not distinguish between fundamental performance and market expectations. A high ratio could be due to high growth potential or low risk. Furthermore, each company’s P/E ratio is determined by factors that are unique to that business, such as its earnings versus cash flow rates. This makes inter-company comparisons invalid; you have to compare like with like.</td>
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The importance of expectation premiums in value creation

- Illuminates the importance of the relative scale of premiums: BCG’s methodology highlights the significance of the relative size of premiums, both within industries and in the market as a whole. Although different assumptions for calculating projected cash flows will produce different premiums, it is not the absolute scale of the premium that counts for companies. It is its relative size that defines the opportunities, as we explain in ‘What drives expectation premiums?’ It can reveal, for example, competitive weaknesses and potential takeover candidates, plus relative vulnerabilities to economic shocks. And because there are always relative differences in the short term, regardless of whether premiums are high or low, positive or negative, there are always opportunities and threats.

How we calculate premiums

An expectation premium is the difference between a company’s market value and fundamental value (Fig. 2).

- The market value of a company is its market capitalisation plus debt.
- BCG calculates the fundamental value using a discounted future free cash flow technique, based on current profitability and historic investment growth. Unlike traditional approaches, we do not forecast cash flow growth for a finite near-term period, such as five years, and assume this growth rate will continue forever. We assume that it will reduce or ‘fade’ in the long run. In particular, we assume that competitive pressures will fade profitability by a set rate to a weighted average cost of capital for the market or industry. Investment growth, in turn, is assumed to fade to an average economic growth rate over time (Fig. 3).

- We use this method to calculate fundamental value as we do not have access to individual companies’ plans. If we did, we would apply standard cash flow techniques, together with P/E ratios and other tools. This approach, which companies should use to assess their individual premiums, enables you to establish whether any gap between market and fundamentals is justified or not, as we discuss in the next section (‘How to interpret premiums’).

A fuller description of our methodology and the assumptions used for the analyses in this report can be found in the Appendix, along with
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evidence that the model is statistically robust.

How to interpret premiums

- A positive premium indicates that the market expects the company to beat the assumed fade rate but this does not imply that the business is over-valued relative to its competitors. This will largely depend on the company’s plans. These may be sufficient to generate the future free cash flow required to close the gap between current market and fundamental values. Other factors, such as management credibility or the protection of brands can also make this gap justifiable, as explained in ‘What drives premiums?’

- Similarly, a negative premium does not necessarily mean a corporation is under-valued. Investors might have sound reasons to believe that a company's or an industry's cash flow growth will decline more rapidly than the average forecast rate.

Key characteristics of premiums

In last year's study, New Perspectives on Value Creation, published in October 2000, BCG highlighted the fact that expectation premiums were not only high but had been rising rapidly since 1994. Although market corrections in the first half of 2001 took some of the steam out of them, they remained significant over this period, accounting for 35% of the value of the S&P 400 index, based on the assumption that this year's fundamental values are 10% lower than those in 2000 (data for 2001 are not yet publicly available). A long-term analysis of this index, stretching back to 1926, and an in-depth study of premiums for the world's top listed performers over the last decade, enabled us to pinpoint the main characteristics of premiums. These not only demonstrate that premiums differ substantially between companies and industries (as well as across time for the market as a whole), but that these relative differences have different impacts on companies and the market, for example during economic shocks. Here we provide a snapshot of these characteristics. We explain in the next section why they exist and what drives premiums.

An inherent part of market life

Cycles of high and low premiums, positive and negative, have always been a part of markets, as Figure 4 illustrates. Historically, the lowest negative premium was recorded in 1932 (-49%) and highest positive figure in 2000 (168%). The longest time that sustained positive premiums...
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have existed is 12 years (1955-1967), compared to 24 years for sustained negative premiums (1931-1955) – twice as long. Generally, the stock market has tended to rebound fairly swiftly after exogenous shocks, such as the 1973 oil crisis and the Cuban missile crisis in 1962 – shocks that occurred when premiums, on average, were close to zero.

Industry differences

Premiums vary substantially between industries (Fig. 5). In 2000, for example, the pharmaceuticals industry had the highest average premium (72%), followed by insurance (69%), consumer goods (53%), retail (51%) and banks (48%). At the other end of the spectrum only one sector had a negative average premium – automotive (-2%). Within sectors, there is also a significant divergence between companies’ premiums. In the travel and transport industry, for instance – a sector that has been heavily affected by the recent terrorist attacks – premiums ranged from 53% for the top quintile down to -35% for the bottom quintile.

As a proportion of market value, premiums tend to be larger in top TSR companies.

The higher a company’s TSR the larger its expectation premium, on average. Premiums for the top 100 TSR companies, for example, averaged 49% between 1 January – 30 September 2001, compared to a market average of 35% (Fig. 6).

Large premiums are highly sensitive to market downturns

Businesses with the highest expectation premiums tend to suffer disproportionately large drops in TSR in a market downturn. This is illustrated in Fig. 7. During the first eight months of 2001, the average TSR was -7% for our total sample, but companies that had an annual average premium of 83% at the beginning of this period had -21% TSR over the following eight months.

![Fig. 6 Premium of top 100 TSR companies compared with S&P 400 premium](image)

![Fig. 7 Relationship between size of expectation premium and TSR development](image)
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The importance of expectation premiums in value creation

Was a major market correction inevitable?
Over the last three years expectation premiums had soared to record heights, significantly above the levels that preceded the ‘Great Crash’. In 2000, for example, premiums were more than twice the level reached in 1929. Moreover, positive premiums had persisted and moved fairly steadily upwards for nearly 11 years, one year less than the previous record for sustained positive premiums (1967-1995).

Was a major correction inevitable, regardless of the events of 11 September? Had premiums reached unjustifiably high levels? Or perhaps, as some people claimed, things were ‘different this time’ and that we were in a new era of progressively higher market and fundamental value, possibly fuelled by productivity gains from technological advances and other factors?

True, fundamental performances have been rising steadily over the last decade but our analysis suggests that they were not high enough or rising fast enough, on average, to merit the overall market value. Simply to justify its year 2000 value, the S&P 400 index would have had to increase its earnings before interest and tax (EBIT) by 10% a year for the next five years.

But this would only sustain its year 2000 value. Unfortunately, investors expect above-average TSR year on year. To achieve, an annual 12% rise in TSR – the long-term market average – a Herculean increase in EBIT would be required. This leads to the assumption that the market was in general over-valued, although there were doubtless businesses that merited their high premiums.
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What drives expectation premiums?

To address the risks and opportunities that premiums present, it is necessary to understand what determines investor confidence. Some of these drivers are specific corporate actions, and may be strategically useful for reducing or increasing premiums. Others are macro-economic. While these macro forces are beyond the businesses’ sphere of influence, a deeper understanding of them could help companies spot early warning signs of a possible correction in the future and make appropriate contingency plans.

Factors companies may be able to influence to reduce or increase their premiums

**Fundamentals:** Premiums are strongly correlated with fundamental performances and, in particular, investment growth (Fig. 9). Improvements in profitability have little discernible impact as these tend to be competed away. This explains why mature industries, such as industrial goods, have low or even negative premiums. They already have large, established capital bases, leaving little room for additional growth. Conversely, relatively young and dynamic industries, such as technology, have small investment bases, enabling them to continue to grow, boosting their premiums. However, in the long term they will not be able to sustain these growth rates. As their capital bases increase, their investment growth will fade to an industry average, typically around 2-3%.

**Market leadership:** Market leaders are often rewarded with the highest premiums in their industries, as Fig. 10 shows. Dell, for example, had a 49% premium in 2000 compared with Compaq’s 23%.

**Branding:** Strong brands enhance customer loyalty, allowing companies to cross-sell products and value-added services. This helps to protect cash flow growth against competitive pressures in the medium to long term, enabling businesses to beat the fade. Although vulnerable to reputational risks that could damage their value, brands are central to the consumer goods and retail industries and are becoming

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**Fig. 9** Relationship between expectation premiums and profitability & growth

**Fig. 10** Market leadership and expectation premiums

<table>
<thead>
<tr>
<th>&quot;Market leader&quot;</th>
<th>Expectation Premium 2000</th>
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<tr>
<td>Coca Cola</td>
<td>84%</td>
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<tr>
<td>SAP</td>
<td>80%</td>
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<tr>
<td>Sony</td>
<td>27%</td>
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<tr>
<td>L’Oréal</td>
<td>82%</td>
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<td>Pfizer</td>
<td>95%</td>
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<tr>
<td>Dell</td>
<td>49%</td>
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<tr>
<td>Intel</td>
<td>35%</td>
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<tr>
<td>Nike</td>
<td>35%</td>
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<tr>
<th>&quot;Peer&quot;</th>
<th>Expectation Premium 2000</th>
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<td>Pepsi Cola</td>
<td>78%</td>
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<td>Peoplesoft</td>
<td>78%</td>
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<td>Philips</td>
<td>-17%</td>
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<tr>
<td>Wells</td>
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<tr>
<td>Mork</td>
<td>73%</td>
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<tr>
<td>Compaq</td>
<td>23%</td>
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<tr>
<td>Motorola</td>
<td>25%</td>
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<tr>
<td>Adidas</td>
<td>18%</td>
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Note: Industry averages for all the parameters are weighted using gross investment (2000)

Source: T.F. Datastream; annual reports; BCG analysis
increasingly important in service sectors, such as banking and insurance. All of these industries have above-average premiums. More generally, businesses with powerful brands also offer investors a safe haven if the economy falters.

The significance of strong brands is demonstrated by Coke, arguably the best-known brand in the world. In 2000, Coca-Cola had an 84% premium, compared to Pepsi Cola’s 70%, a finding that also underlines the value that investors ascribe to market leadership.

**Intellectual property rights:** Like brands, patents and other intellectual property rights can also reduce competitive pressures on future cash flow. This partly explains why the pharmaceutical sector has one of the highest average premiums (other factors, such as the increasing use of biotechnology to accelerate drug discovery, also enter the equation).

**R&D pipeline:** Investors may be aware of new products or services in the pipeline that will enable the business to beat the forecast cash flow fade rate for the industry, leading to an expectation premium mark-up. This would explain why some companies exceed the average premiums for their industries where there is already an in-built additional premium for patents and intellectual property rights, for example. The media and pharmaceutical sectors are two cases in point.

**Management credibility:** Investors will give a business a premium – ‘a vote of confidence’ – if the management team has a track record of delivering results and taking tough operational and strategic decisions that lead to long-term improvements in fundamentals. It also helps if the team is consistent in its strategic vision and aligns its incentives to shareholder value. The significance of management credibility is reflected in the change in share price often witnessed when a new team or CEO enters the picture. This can be either a positive or negative movement, depending on the team’s known capabilities.

**Transparency:** The more investors know about a business, including its plans, the less likely they are to ascribe an unjustified positive or negative premium to it. This is both an information and communication issue, ranging from how a business communicates growth initiatives and the strategic milestones it hits, to market understanding of the management team’s proven potential.

**Governance:** The nature and ownership of stocks can affect a company’s premiums. For example, institutional investors tend to avoid multiple stock issues that do not entitle them to voting rights as these deny them the opportunity to influence the company’s direction. This leads to lower demand for these stocks, depressing their market value and, by definition, their premiums. Major shareholders with voting rights, for example in previously family-run businesses, can have the same effect. Their disproportionate influence can effectively turn other investors into ‘muzzled’ non-voters, with all of the consequences just described.

**Target investors’ preference:** If a company’s approach does not appeal to target investors’ risk appetites and other preferences, demand for the stock will consequently be lower, as will, of course, the premium. Concentrating on asset productivity, rather than growth, for example will not attract ‘growth’ investors. And vice-versa for ‘value’ investors. Similarly, do debt-to-capital ratios or the mix of business units’ risk profiles satisfy the risk appetite of investors?

**Macro-economic forces that shape premiums**

Numerous socio-economic macro factors influence premiums for the market as whole. Many of these are quantifiable and relatively easy to track and correlate with premiums. Others, notably psychological forces, such as the herd
instinct, are harder to pin down. Here we present some of the major drivers. This review is by no means comprehensive but it gives a flavour of the factors that shape overall investor confidence.

**Economic growth:** Market values and premiums tend to mirror economic cycles. The problem between 1996 and 2000 was that market values had been growing more rapidly than GDP. Over the last 45 years this had only happened once before, in 1968, during the so-called ‘tronics boom’.

**Geo-political stability:** Investor confidence and premiums predictably rise in periods of geo-political stability and fall when it is undermined, as Fig. 11 shows. In 1989, the Berlin Wall came down, heralding the end of the Cold War and ushering in a new air of market optimism, uninterrupted by any major external shocks. Until the 11 September 2001. Historically, as we have shown, the market has quickly recovered from shocks like this, for example after the Korean War and the Cuban missile crisis.

**Demographic and socio-economic trends:** The forthcoming retirement of the ‘baby boomers’, born in the 1950s, is one of the most important demographic issues on the expectation premium horizon. To fund the pensions and retirement needs of this large group, significant volumes of stocks could be sold, potentially reducing absolute premiums substantially. At a sectoral level, demographics can also have an impact. The trend towards older populations in industrialised nations could partly explain the pharmaceutical industry’s above-average premium. Similarly, the socio-economic shift from an industrial- to a service-based economy has prompted investors to award higher premiums to service sectors as these are expected to achieve faster growth and profitability fade rates than industries, such as utilities.

**Fiscal measures:** Lower tax rates release more funds for investment, pushing up stock prices and absolute premiums, as well as possibly relative premiums given the relationship between these and higher TSR. This was evident in the 1960s and 1990s, periods of low taxes and high premiums. Fiscal measures that lower inflation, enhancing real investment power, have a comparable impact, as they did once again in the 1960s and 1990s. These relationships between premiums and tax and inflation rates are underscored by the experience of the 1970s, when there was a combination of high tax rates and stagflation. This resulted in negative premiums.

**Increased liquidity:** Upward pressure on stock prices is intensified by the growth in the money supply: more money chasing roughly the same number of stocks.

**Regulatory environments:** Regulated businesses are shielded from the full force of competition, enabling them to operate as oligopolies and sometimes monopolies. Consequently, if returns on assets are not capped by regulators, they can achieve better than normally expected cash flow growth.

**High-tech hopes:** Premiums reached their peak in 2000 at the height of dot.com mania. Technology-driven booms like these are not new.
Dealing with investors’ expectations

What drives expectation premiums?

They accompanied the advent of electricity, the radio, automobiles and the ‘tronics boom’ of the 1960s. However, the efficiencies that these technologies generate rarely feed through into the economy as swiftly or broadly as investors initially expect. Furthermore, major new inventions tend to be rapidly adopted by most businesses once their capabilities are proven, eliminating their competitive cash flow advantage.

**M&A activity:** M&As are not only fuelled by the investor confidence that accompanies rising market values, they drive these values further forward. More specifically, companies often use their higher premiums to acquire other businesses, enhancing fundamentals – if the M&A is the right ‘fit’ – and sometimes leading to a further premium that can be employed for further M&As. This was particularly apparent over the last decade. During this period, M&A activity increased substantially and firms increasingly funded these transactions using their stocks as currency (Fig. 12).

**Speculative investment:** This artificially inflates market values, a problem that appeared to exist over the last decade. During this period, the volume of shares traded increased dramatically. At the same time the number of shares traded per transaction declined. Together, these two developments indicate a rise in short-term investment during this period. This effect was magnified by a rise in private investment.

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**Fig. 12** Relationship of M&A-waves and expectation premiums

![Graph showing relationship between M&A waves and expectation premiums](image)

**How to turn premiums to competitive advantage**

Although you cannot fully control your market value, you can use your premium to assess the relative risks and opportunities that it presents. This comparative insight is key. It is the relative, not absolute, size of your premium in your industry that illuminates the strategic and operational options available to you either to defend or to improve your position. However, premiums do not just provide strategic insights. They can have intrinsic value in themselves in the short term. Businesses can use their current excess value to acquire other companies if the fit is right, thereby enhancing long-term fundamental performance and TSR.

**Quantify your premium and assess whether it is justified by your internal plans**

- Take your current market value.
- Quantify your fundamental value, based on your business plans.
- The difference between these two values is your expectation premium.
- Whether the premium is positive or negative, is this justified, taking into account any additional premium that you would expect either for your company or industry? For example, additional premiums attached to patents, management credibility and other factors discussed in “What drives expectation premiums?”
- There are three reasons why your premium may not be justified. First, your fundamentals, based on your plans, are not sufficient to merit the difference in market and fundamental values once you have factored in any additional premiums you would rationally expect for your business or industry. Secondly, there may be forces, such as macro-economic or socio-demographic drivers, that are inflating premiums for all companies or for your industry as a whole. Thirdly, it could be a combination of both of these. All three possibilities have important strategic implications and these potential impacts are all related to the size of your premium relative to your industry average.

**Assess the relative scale of your premium compared with your industry average. This will highlight the strategic options**

As Fig. 13 illustrates, it is the relationship between your fundamental performance (the reality of today) and your expectation premium (how investors forecast you will perform in the future), relative to your industry average, that determines the strategic options available to you. Identify which quadrant your business occupies, defined by the cross-section of your industry’s average premium and fundamental performance.

**Fig. 13  Expectation premium matrix**
Dealing with investors’ expectations
How to turn premiums to competitive advantage

Quadrant 1: Below-average premiums and fundamentals (‘Underperformer’)

Companies in this quadrant have problems. They not only have relatively weak fundamental performances, but investors expect the situation to deteriorate.

- The top priority is to improve your fundamentals. Unless this is done, your TSR, which is ultimately driven by fundamentals, will be pushed down. This will make it increasingly difficult to raise capital for investment growth or attract high-calibre staff, amongst other problems associated with low TSR.

- If possible, focus on profitable investment growth – a driver correlated with positive premiums. But first check that target investors want growth, rather than asset productivity or ‘value’.

- Clearly communicate to investors any initiatives to boost your fundamental performance. This will instil greater confidence and enhance ‘transparency’.

- Remove ‘value blockers’ that might be compounding your negative premium. For example, non-voting shares and majority shareholdings.

Quadrant 2: Relatively weak fundamentals but above-average premiums (‘Optimist’)

Investors are optimistic about your long-term performance. Your past fundamental growth does not justify this optimism.

Reduce your company’s excess premium or your share price could be disproportionately penalised by the markets, relative to your competitors who have lower premiums. This could lead to negative long-term consequences. There are two ways to address this challenge:

- Improve fundamentals, for example by building a ‘stretch’ agenda.

- Consider using the premium’s additional value to acquire a company with a lower premium but stronger fundamentals. Prospective targets will normally be found in Quadrant 4. Ensure target acquisitions make strategic sense and that the synergies, including cost savings, will more than offset any expectation premium paid for the target. These synergies will have to exceed this premium to reduce yours. You should also analyse your investor base and establish whether your strategy – for example, growth or productivity-driven value – is in line with the aims of the target company’s investors. If so, communicate this effectively to them.

- Historically, most M&As fail, with a claimed 80% strike-out rate from a long-term TSR or ‘value creation’ perspective. This appears to be primarily due to culture clashes and mismanaged integration. But it could also be due, in part, to the failure of the acquirors to take into account the need to recover the cost of the target’s expectation premium, reflected in its stand-alone stock price.

Quadrant 3: Strong fundamentals and comparatively high premiums (‘Consolidator’)

In the short term, you have the best of both worlds, a good fundamental performance and a premium for your efforts. However, your comparatively high premium makes you relatively more likely to disappoint investors.

- Your premium gives you the opportunity to consolidate your position via M&As and to justifiably maintain your premium (see above for the considerations when assessing targets). This strategy could propel you into market leadership, a position that typically attracts a superior premium. Properly
Dealing with investors’ expectations
How to turn premiums to competitive advantage

handled, this could be used to fund further acquisitions, leading to a virtual upward spiral.

The AOL-Time Warner ‘merger’ was a classic example of a company, namely AOL, using its paper surplus to enhance its fundamentals (Fig. 14).

Quadrant 4: Good fundamentals but below-average premiums (‘Hidden Champion’)

A prime take-over target. Premiums should be raised to avoid this risk.

- Conduct an investor analysis to understand the reasons behind the market’s lack of confidence.
- If possible, remove structures and obstacles that lead investors to discount your market value. For example, multiple stocks, lack of transparency and low management credibility.
- Build a stretch agenda to underline your ability to drive fundamentals forward. This could include unbundling non-core activities in order to unlock higher TSR.
- Seek opportunities for investment growth, which, as we have said, is positively correlated with positive premiums.
- Communicate your strengths more effectively to investors, demonstrating the robustness of your internal plans and your management’s credibility.
- It might even be worth going private. There is life outside the stock market.

Core advantages of this approach

- Highlights the importance of premiums in the value-creation agenda – the ‘missing link’ for sustaining above-average TSR.
- Identifies the relative risks and opportunities within your industry that your expectation premium raises. These are relative and so they apply to all market circumstances, whether premiums are high or low, positive or negative. In effect, this approach is valuable in every period.
- Enables businesses to identify relatively under-valued prospective targets for M&As. Conversely, it highlights companies’ relative vulnerabilities to potential acquirers.
- Implicitly indicates the strategic options companies need to consider in order to optimise their market positions.

Putting this approach into practice

Between 1994 and 2000, L’Oréal’s fundamental performance was solid but it barely altered over this period. Despite this, its market value increased dramatically. Or, more accurately, its expectation premium rocketed, accounting for 83% of the company’s value in 2000. Whether this surplus was justified or not, based on the company’s plans, it has been used to acquire a number of businesses within the sector with strong fundamentals but low premiums (Fig. 15). Is there still room for further acquisitions? This will depend on the current relative fundamental performances of the companies in this industry.
Dealing with investors’ expectations

How to turn premiums to competitive advantage

These will dictate their relative premiums. The data presented here are based upon last year’s fundamentals.

A long-term strategy for dealing with premiums

Deliberately cultivating and harvesting premiums

Properly managed, it is possible for businesses to deliberately ‘press the buttons’ that lead to higher premiums and use this additional value to enhance their fundamental performance, for example through M&As. As we discussed in ‘What drives expectation premiums?’, key corporate drivers of positive premiums include:

- Fundamentals, especially investment growth
- Market leadership
- Branding
- Intellectual property rights
- Management credibility
- Transparency
- Governance, for example the use of non-voting stocks
- Target investors’ preferences

However, it is important to bear in mind that although altering these ‘levers’ may influence premiums there is no guarantee this will happen. Moreover, companies should avoid artificially inflating premiums to an unjustifiably high level. This deceit would be rapidly unearthed by the markets and probably penalised. As Abraham Lincoln famously said: “You may fool all the people some of the time; you can even fool some of the people all the time; but you can’t fool all of the people all the time.”

The need for corporate systems to monitor relative industry premiums

BCG’s study has demonstrated the impact that a short-term divergence between market and fundamental values can have, both on the market as a whole and on individual companies’ ability to sustain long-term improvements in fundamental performance and TSR. Crucially, we have shown that companies can use these premiums constructively. In view of these findings, management teams should introduce systems to regularly monitor their premiums relative to their industry average and use this information to help define their long-term value-creation agendas.

Could a deeper understanding of premiums hold the key to more stable markets?

Theoretically, premiums (positive or negative) could be substantially reduced if investors monitored and used them more constructively, based on a deeper understanding of their drivers and implications. This could possibly lead to lower market volatility and less severe corrections: lower premiums respond less acutely to economic downturns and exogenous shocks than higher ones. To work towards this goal, we are currently developing standardised benchmarks to gauge whether premiums are fair.
Dealing with investors’ expectations

Integrate premiums into the value-creation agenda

Successful, long-term value creation – measured by above-average TSR – demands that the right levers are pulled at the right time. Unfortunately, only a handful of companies have achieved superior TSR for longer than 10 years. Why? BCG’s study indicates that one of the main problems is that businesses have tended to focus on the internal strategic and operational issues but overlooked the importance of the capital market perspective, notably expectation premiums. This perspective is the missing link in most companies’ value creation agendas.

The good news: above-average TSR is possible in all industries

Businesses in all sectors can produce above-average TSR, according to an analysis of over 800 listed companies worldwide. During 2000, for example, each industry contained at least one company that exceeded the five-year average TSR (16%) for our sample by over 50% and often by substantially more. In the industrial goods sector, for instance, one business generated a TSR of 79% – nearly five times the market average.

But few companies sustain superior value creation year on year

In last year’s report, BCG showed that only two of the 2,500 companies analysed worldwide managed to outperform their local market averages for 10 years in a row.

So why has superior long-term value creation proven so elusive?

Few companies systematically manage value creation. There are proven, systematic linkages between TSR and two key fundamentals: improved profitability and profitable investment growth (see ‘The importance of expectation premiums in value creation’). Using established methodologies, described below, these interconnections can be broken down into a family tree of quantifiable and practical financial levers that managers throughout a company can pull to achieve superior TSR. Unless a business understands this system and manages it, long-term value creation cannot be sustained.

Most value-based management (VBM) programmes fail in their implementation. This was confirmed by a recent study published in the Harvard Business Review, supported by BCG. Common stumbling blocks include a failure to link incentives to value creation and the use of multiple targets. Focusing on a single over-arching TSR goal, the study discovered, doubles the likelihood that a VBM programme will succeed.

Companies have generally overlooked the importance of the capital market perspective. In particular, they need to factor into their value creation agenda the impact that investor perceptions, measured by expectation premiums, can have on their long-term fundamental performances. This is discussed below.

The missing link: expectation premiums and the capital market perspective

Typically, companies implementing VBM programmes concentrate exclusively on the internal strategic levers they need to pull in order to improve free cash flow and assume this will translate into higher TSR. However, as explained in ‘What drives these expectation premiums?’, different internal actions can have different impacts on expectation premiums, therefore creating different risks and opportunities, depending on a company’s investor base. For example, an aggressive growth strategy could be rewarded with a disappointingly low TSR – and, by implication, a low expectation premium – if value-oriented investors expect short-term cash flow generation. A low TSR and expectation premium, in turn, could leave the business vulnerable to a take-over and limit its ability to raise additional capital, amongst other problems.
Dealing with investors’ expectations

Integrate premiums into the value-creation agenda

To deal effectively with these interactions between internal strategic initiatives and capital market expectations, companies need to factor both elements into their value-creation agendas. Together, these strategic and capital market perspectives define the short- and long-term actions required to enhance and sustain above-average TSR (Fig. 16).

Crucially, the tools exist to quantify and systematically analyse both perspectives, revealing the strategic options and trade-offs required to hit a company’s target TSR:

- **Analysing the internal, strategic requirements:** Everything stems from the company’s relative TSR goal. Once this has been agreed, it can be converted into a financially meaningful internal target, using the total business return (TBR) methodology. The cash value-added (CVA) methodology can then be employed to translate this overall financial goal into a family tree of practical goals for each business unit.

- **Evaluating the external capital market demands:** The expectation premium methodology can not only reveal a company’s relative capital market risks and opportunities but also quantifies the gap between its market and fundamental performances, enabling the business to grasp the true scale of the challenge it faces. Is this gap inevitable? Using empirical P/E ratio analyses, in conjunction with the company’s plans, it is possible to answer this question and pinpoint the drivers behind the premium (see box: ‘Fruitfully applying the capital market perspective’).

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**Fruitfully applying the capital market perspective**

The number two player in a mature industry was concerned that its EBITDA multiple, which is equivalent to the expectation premium, had consistently lagged behind the market leader’s for the last 10 years. The CEO thought the answer was greater growth and acquired several businesses, but its relative multiple barely changed. The ‘capital market perspective’ told a different story: the multiple was being constrained by cash-flow volatility and a high debt-to-capital ratio. The solution was to divest low-return cyclical businesses and use the proceeds to reduce the debt. After this was done, the company’s share price leapt by 25%.

1 EBITDA - Earnings before interest, tax, depreciation and amortisation
Recent market corrections could trigger an economic downturn. Although everyone hopes this will not happen, managers should still prepare for this eventuality and, in particular, incorporate a contingency plan into their short-term value-creation agenda. Without one there is a strong risk that the intense time pressures of an economic shock will leave errors unquestioned, exacerbating the business’s problems.

The contingency plan will reveal important strategic options, enabling businesses to protect their cash flow against falls in prices and volumes that usually accompany a recession, and to improve their long-term value-creation potential. A contingency plan will strengthen a company’s competitive position, whether a recession occurs or not. It helps to quantify the relative cash flow strengths and weaknesses of a corporation’s business units, plus their dependencies; increases risk awareness; and focuses managers’ minds on operating in extreme conditions, often unlocking creative ideas, among other benefits.

Create a dedicated task force

This should be composed of senior managers from all parts of the company with an equally broad cross-section of personal, intellectual and business skills.

Conduct a three-stage recession check (Fig. 17)

- Establish the vulnerability of revenues in key markets to a recession. What are their respective price-volume elasticities?

How would these market sensitivities affect the sales and cash flows of your individual business units during a recession? Assess the potential impact of different volumes, prices and costs on their respective cash flows, based on the price-volume elasticities for the business units’ markets. You should also evaluate your competitors’ relative vulnerability. This will highlight strategic opportunities.

Analyze the impact on the company’s overall cash flow. Single out the relative cash flow contributions made by three key areas: operational businesses, financing, and investments. This will pinpoint cash flow weaknesses and indicate remedial actions.

Action to take prior to an economic downturn

- Correct cash flow weaknesses identified in the recession check. If a business unit cannot be turned around in time, consider exiting this market. This will be advantageous in the long run, regardless of how the economy develops.
Dealing with investors’ expectations
Prepare for a possible economic downturn

At a corporate level, create a more flexible organisational and cost structure in order to make it more responsive to the time pressures during a recession.

If a recession occurs, manage business units as a ‘recession portfolio’

Place your business units in a matrix of four quadrants based on their relative vulnerability to a crisis and strategic importance, as shown in Figure 18. Each of these quadrants indicates the strategic and operational options available for these units.

- **Quadrant 1**: Primarily ‘cash cows’ but there might be openings for strategic advances.

- **Quadrant 2**: These businesses are least susceptible to a crisis and have the highest strategic importance. They are the company’s ‘anchors’. Plan to exploit strategic opportunities that will enhance these units’ competitive positions. Options might include M&As or using your competitively superior cash flow to ‘invest against the tide’ in new technology, R&D and other areas.

- **Quadrant 3**: Vulnerable but strategically important. Stabilise these units and search for strategic opportunities. Use funds from actions taken in the other quadrants to underpin their development.

- **Quadrant 4**: High risk, low strategic priority. Consider exiting from this business field.
Remain focused on the fundamental drivers of long-term value creation: improved profitability and investment growth above the cost of capital. These fundamentals, not expectation premiums, will drive long-term TSR, the ultimate barometer of value creation.

Establish the scale of your company’s expectation premium relative to your industry average. Is this justified, based on your plans? The higher your premium, the greater the challenge for future value creation.

If the premium is positive, take steps to close the gap. Improve efficiency, pursue growth openings and consider using the excess value to acquire enterprises with strong fundamentals and low premiums. Ensure any target is a sound strategic fit and that any M&A synergies will reduce your premium, not inflate it.

If the premium is negative, understand and tackle the causes. For example, increase basic performance more than expected, enhance transparency and remove value blockers, such as multiple stocks. Also, communicate more effectively with investors, highlighting your management capability and the credibility of your plans.

Given current market and economic conditions, prepare a recession contingency plan. This will benefit your business whether an economic downturn transpires or not. Appoint a dedicated, cross-divisional task force to drive and co-ordinate this project, concentrating on protecting and strengthening cash flow. An external perspective may be appropriate.

Use any economic shock to seize opportunities that will boost your long-term value-creation potential, particularly in business units with a high strategic priority. Employ your competitively superior cash flow to ‘invest against the tide’, in M&As, more cost-efficient technology and other foundations that will enhance your position.

Ensure you have a consistently applied value management system in place that aligns all components of your company, from operational targets for business units to incentives, towards a realistic, yet challenging, relative TSR goal.

Accept expectation premiums as a cyclical inevitability of corporate life, but do not expect them to sustain long-term value creation. This can only come from fundamental improvements. It’s time to return to fundamentals.
Appendix

Dealing with investors' expectations

Background to the study

The study is based on the annual returns of more than 4,000 companies in Datastream’s global market indices for the period 1996-2000. Collectively, they represent around 70% of the world’s total market capitalisation.

Businesses were selected from Datastream’s database using three main criteria.

- **Listed for at least five years**
- **Satisfied minimum market capitalisation hurdles:** Different capitalisation hurdles were set for each sector and region to reflect their relative economic weight (Figs A1 & A2).
- **Could be classified into one of 13 industrial sectors**

Several companies that met these criteria were excluded from the final sample as they had been involved in major mergers or acquisitions over the study period (1996-2000) and it was believed this would distort the findings.

All financial figures were converted into dollars, using the exchange rates of 31 December 2000.
## Market performance ranking

### Average expectation premium top 10 companies

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<tbody>
<tr>
<td>1.</td>
<td>Veritas</td>
<td>US</td>
<td>35,782</td>
<td>104%</td>
<td>156%</td>
<td>74%</td>
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<td>71%</td>
<td>85%</td>
<td>107</td>
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<td>74%</td>
<td>67%</td>
<td>49%</td>
<td>1,049</td>
<td>2,677</td>
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<td>61,512</td>
<td>74%</td>
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<td>419</td>
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<td>43%</td>
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<td>114</td>
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CVA = Cash Value Added  
TBR = Total Business Return (fundamental performance)  
EP = Expectation Premium  
TSR = Total Shareholder Return (market performance)  
MV = Market Value (equity)

(1) Minimum market value 2000: US$15bn, 287 companies  
(2) Market value of equity plus debt, 1995 = 100  
(3) Estimated fundamental value and market value as of 30 Sept 2001  
(4) The "implied CVA" is the required CVA 2000 level to justify the market value only by the fundamental performance

Source: T.F. Datastream; BCG analysis
## Average expectation premium top 10 companies

<table>
<thead>
<tr>
<th>Place</th>
<th>Company</th>
<th>Country</th>
<th>MV 2000 M$</th>
<th>TBR '96 –'00</th>
<th>TSR '96 –'00</th>
<th>EP 2000</th>
<th>CVA 2000 M$</th>
<th>Implied CVA 2000 M$</th>
<th>2001 year to date</th>
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<tr>
<td>1.</td>
<td>Veritas</td>
<td>US</td>
<td>35,782</td>
<td>156%</td>
<td>104%</td>
<td>74%</td>
<td>2,122</td>
<td>2,122</td>
<td>-70%</td>
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<tr>
<td>2.</td>
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<td>99%</td>
<td>74%</td>
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<td>6.</td>
<td>Comverse Tech.</td>
<td>US</td>
<td>18,031</td>
<td>71%</td>
<td>75%</td>
<td>85%</td>
<td>1,370</td>
<td>1,370</td>
<td>-81%</td>
</tr>
<tr>
<td>7.</td>
<td>Amvescap</td>
<td>UK</td>
<td>15,800</td>
<td>70%</td>
<td>44%</td>
<td>62%</td>
<td>1,367</td>
<td>1,367</td>
<td>-46%</td>
</tr>
<tr>
<td>8.</td>
<td>Washington Mutual</td>
<td>US</td>
<td>28,594</td>
<td>67%</td>
<td>26%</td>
<td>39%</td>
<td>2,166</td>
<td>2,166</td>
<td>11%</td>
</tr>
<tr>
<td>9.</td>
<td>Dell Computer</td>
<td>US</td>
<td>45,793</td>
<td>67%</td>
<td>74%</td>
<td>49%</td>
<td>2,677</td>
<td>2,677</td>
<td>6%</td>
</tr>
<tr>
<td>10.</td>
<td>AES</td>
<td>US</td>
<td>25,348</td>
<td>67%</td>
<td>56%</td>
<td>48%</td>
<td>2,988</td>
<td>2,988</td>
<td>-77%</td>
</tr>
</tbody>
</table>

**Notes:**

1. Total sample, minimum market value 2000: US$15bn, 287 companies
2. Market value of equity plus debt, 1995 = 100
3. Estimated fundamental value and market value as of 30 Sept 2001
4. The "implied CVA" is the required CVA 2000 level to justify the market value only by the fundamental performance

**Source:** T.F. Datastream; BCG analysis
Average expectation premium top 10 companies

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
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<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Infosys Technologies</td>
<td>IN</td>
<td>7,831</td>
<td>158%</td>
<td>67%</td>
<td>96%</td>
<td>28</td>
<td>2,055</td>
<td>-58%</td>
</tr>
<tr>
<td>2</td>
<td>Wipro</td>
<td>IN</td>
<td>11,813</td>
<td>144%</td>
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<td>97%</td>
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<td>3,127</td>
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<tr>
<td>3</td>
<td>Hon Hai Prec. Inds</td>
<td>TA</td>
<td>7,378</td>
<td>66%</td>
<td>36%</td>
<td>56%</td>
<td>143</td>
<td>448</td>
<td>-22%</td>
</tr>
<tr>
<td>4</td>
<td>Konami</td>
<td>JP</td>
<td>8,535</td>
<td>56%</td>
<td>38%</td>
<td>72%</td>
<td>179</td>
<td>942</td>
<td>-66%</td>
</tr>
<tr>
<td>5</td>
<td>Matsushita Comms.</td>
<td>JP</td>
<td>23,642</td>
<td>43%</td>
<td>27%</td>
<td>73%</td>
<td>224</td>
<td>2,749</td>
<td>-77%</td>
</tr>
<tr>
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<td>TA</td>
<td>28,091</td>
<td>42%</td>
<td>20%</td>
<td>46%</td>
<td>530</td>
<td>1,554</td>
<td>-18%</td>
</tr>
<tr>
<td>7</td>
<td>SK Telecom</td>
<td>KO</td>
<td>17,831</td>
<td>39%</td>
<td>11%</td>
<td>59%</td>
<td>-9</td>
<td>1,648</td>
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<tr>
<td>8</td>
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<td>JP</td>
<td>11,427</td>
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<td>36%</td>
<td>161</td>
<td>1,001</td>
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</tr>
<tr>
<td>9</td>
<td>Takeda Chemical</td>
<td>JP</td>
<td>52,640</td>
<td>33%</td>
<td>18%</td>
<td>67%</td>
<td>598</td>
<td>6,257</td>
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<td>Fujisawa Pharm.</td>
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<td>10,683</td>
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<td>12%</td>
<td>60%</td>
<td>71</td>
<td>1,230</td>
<td>-28%</td>
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</tbody>
</table>

CVA = Cash Value Added  TBR = Total Business Return (fundamental performance)
EP = Expectation Premium  TSR = Total Shareholder Return (market performance)
MV = Market Value (equity)

(1) Minimum market value 2000: US$5bn, 146 companies
(2) Market value of equity plus debt, 1995 = 100
(3) Estimated fundamental value and market value as of 30 Sept 2001
(4) The “implied CVA” is the required CVA 2000 level to justify the market value only by the fundamental performance

Source: T.F. Datastream; BCG analysis
### Average expectation premium top 10 companies

![Graph showing company values and expectation premiums](image)

<table>
<thead>
<tr>
<th>Place</th>
<th>Company</th>
<th>Country</th>
<th>MV 2000 M$</th>
<th>TBR '96 –'00</th>
<th>TSR '96 –'00</th>
<th>EP 2000</th>
<th>CVA 2000 M$</th>
<th>Implied CVA$2000 M$</th>
<th>2001 year to date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Infosys Technologies</td>
<td>IN</td>
<td>7,831</td>
<td>67%</td>
<td>158%</td>
<td>96%</td>
<td>28</td>
<td>2,055</td>
<td>-58%</td>
</tr>
<tr>
<td>2.</td>
<td>DDI</td>
<td>JP</td>
<td>18,060</td>
<td>44%</td>
<td>-7%</td>
<td>-7%</td>
<td>903</td>
<td>709</td>
<td>-41%</td>
</tr>
<tr>
<td>3.</td>
<td>Konami</td>
<td>JP</td>
<td>8,535</td>
<td>38%</td>
<td>56%</td>
<td>72%</td>
<td>179</td>
<td>942</td>
<td>-66%</td>
</tr>
<tr>
<td>4.</td>
<td>Advantest</td>
<td>JP</td>
<td>9,344</td>
<td>38%</td>
<td>22%</td>
<td>60%</td>
<td>119</td>
<td>838</td>
<td>-53%</td>
</tr>
<tr>
<td>5.</td>
<td>Hon Hai Prec. Inds</td>
<td>TA</td>
<td>7,378</td>
<td>36%</td>
<td>66%</td>
<td>56%</td>
<td>143</td>
<td>448</td>
<td>-22%</td>
</tr>
<tr>
<td>6.</td>
<td>Hutchison Whampoa</td>
<td>HK</td>
<td>53,156</td>
<td>31%</td>
<td>21%</td>
<td>33%</td>
<td>-1,786</td>
<td>1,287</td>
<td>-40%</td>
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<tr>
<td>7.</td>
<td>Nippon Tel. Network</td>
<td>JP</td>
<td>8,596</td>
<td>29%</td>
<td>23%</td>
<td>47%</td>
<td>207</td>
<td>776</td>
<td>-29%</td>
</tr>
<tr>
<td>8.</td>
<td>Rohm</td>
<td>JP</td>
<td>22,549</td>
<td>28%</td>
<td>31%</td>
<td>51%</td>
<td>581</td>
<td>2,222</td>
<td>-45%</td>
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<tr>
<td>9.</td>
<td>Matsushita Comms.</td>
<td>JP</td>
<td>23,642</td>
<td>27%</td>
<td>43%</td>
<td>73%</td>
<td>224</td>
<td>2,749</td>
<td>-77%</td>
</tr>
<tr>
<td>10.</td>
<td>Crmnl Bank of Aust.</td>
<td>AU</td>
<td>21,757</td>
<td>26%</td>
<td>31%</td>
<td>43%</td>
<td>383</td>
<td>1,940</td>
<td>-12%</td>
</tr>
</tbody>
</table>

CVA = Cash Value Added  
TBR = Total Business Return (fundamental performance)  
EP = Expectation Premium  
TSR = Total Shareholder Return (market performance)  
MV = Market Value (equity)

(1) Total sample, minimum market value 2000: US$5bn, 287 companies  
(2) Market value of equity plus debt, 1995 = 100  
(3) Estimated fundamental value and market value as of 30 Sept 2001  
(4) The "implied CVA" is the required CVA 2000 level to justify the market value only by the fundamental performance

Source: T.F. Datastream; BCG analysis
Average expectation premium top 10 companies

--- | --- | --- | --- | --- | --- | --- | --- | --- | ---
1. | Nokia | FN | 209,346 | 95% | 47% | 83% | 3,505 | 29,309 | -62% | 68%
2. | CMG | UK | 8,197 | 86% | 45% | 83% | -69 | 393 | -73% | 60%
3. | Logica | UK | 11,582 | 84% | 47% | 87% | 71 | 982 | -61% | 76%
4. | Bipop Carire | I | 11,286 | 78% | 56% | 79% | -28 | 1,905 | -67% | 47%
5. | Banca Fideuram | I | 12,549 | 75% | 33% | 88% | 130 | 2,207 | -55% | 75%
6. | ASM Lithography | NL | 9,514 | 64% | 48% | 44% | 210 | 507 | -50% | 32%
7. | STMicroelectronics | NL | 38,705 | 58% | 8% | 80% | 706 | 7,206 | -49% | 72%
8. | Skandia | SWE | 16,651 | 55% | 37% | 84% | 63 | 2,298 | -62% | 56%
9. | Cap Gemini | F | 20,047 | 54% | 29% | 74% | 190 | 2,555 | -66% | 44%
10. | TF 1 | F | 11,401 | 53% | 22% | 78% | 283 | 1,786 | -63% | 45%

CVA = Cash Value Added  
TBR = Total Business Return (fundamental performance)  
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MV = Market Value (equity)

(1) Minimum market value 2000: US$7.5bn, 148 companies  
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(4) The "implied CVA" is the required CVA 2000 level to justify the market value only by the fundamental performance

Source: T.F. Datastream; BCG analysis
### Average expectation premium top 10 companies

<table>
<thead>
<tr>
<th>Place</th>
<th>Company</th>
<th>Country</th>
<th>MV 2000 M$</th>
<th>TBR '96 –’00</th>
<th>TSR '96 –’00</th>
<th>EP 2000</th>
<th>CVA 2000 M$</th>
<th>Implied CVA 2000 M$</th>
<th>2001 year to date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Banca Intesa</td>
<td>I</td>
<td>24,144</td>
<td>85%</td>
<td>43%</td>
<td>37%</td>
<td>719</td>
<td>1,809</td>
<td>-46%</td>
</tr>
<tr>
<td>2.</td>
<td>Ergo</td>
<td>GER</td>
<td>12,616</td>
<td>72%</td>
<td>27%</td>
<td>36%</td>
<td>207</td>
<td>738</td>
<td>-13%</td>
</tr>
<tr>
<td>3.</td>
<td>Amvescap</td>
<td>UK</td>
<td>15,800</td>
<td>70%</td>
<td>44%</td>
<td>62%</td>
<td>141</td>
<td>1,967</td>
<td>-46%</td>
</tr>
<tr>
<td>4.</td>
<td>Bipop Carire</td>
<td>I</td>
<td>11,286</td>
<td>59%</td>
<td>78%</td>
<td>7%</td>
<td>-28</td>
<td>1,905</td>
<td>-67%</td>
</tr>
<tr>
<td>5.</td>
<td>Unicredito Italiano</td>
<td>I</td>
<td>26,160</td>
<td>58%</td>
<td>45%</td>
<td>56%</td>
<td>1,031</td>
<td>3,339</td>
<td>-23%</td>
</tr>
<tr>
<td>6.</td>
<td>Munich Re</td>
<td>GER</td>
<td>63,118</td>
<td>57%</td>
<td>37%</td>
<td>17%</td>
<td>-269</td>
<td>971</td>
<td>-25%</td>
</tr>
<tr>
<td>7.</td>
<td>ING</td>
<td>NL</td>
<td>78,078</td>
<td>55%</td>
<td>38%</td>
<td>-3%</td>
<td>8,522</td>
<td>8,183</td>
<td>-29%</td>
</tr>
<tr>
<td>8.</td>
<td>Royal Bank of Scotland</td>
<td>UK</td>
<td>63,274</td>
<td>51%</td>
<td>27%</td>
<td>51%</td>
<td>-875</td>
<td>3,075</td>
<td>-3%</td>
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<tr>
<td>9.</td>
<td>ASM Lithography</td>
<td>NL</td>
<td>9,514</td>
<td>48%</td>
<td>64%</td>
<td>44%</td>
<td>210</td>
<td>507</td>
<td>-50%</td>
</tr>
<tr>
<td>10.</td>
<td>Nokia</td>
<td>FIN</td>
<td>209,346</td>
<td>47%</td>
<td>95%</td>
<td>83%</td>
<td>3,505</td>
<td>29,309</td>
<td>-62%</td>
</tr>
</tbody>
</table>

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(1) Total sample, minimum market value 2000: US$7.5bn, 148 companies  
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Source: T.F. Datastream; BCG analysis
### Average expectation premium top 10 companies

<table>
<thead>
<tr>
<th>Place</th>
<th>Company</th>
<th>Country</th>
<th>MV 2000 M$</th>
<th>TSR '96~'00</th>
<th>TBR '96~'00</th>
<th>EP 2000</th>
<th>CVA 2000 M$</th>
<th>Implied CVA 2000 M$</th>
<th>2001 year to date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Veritas</td>
<td>US</td>
<td>35,782</td>
<td>104%</td>
<td>156%</td>
<td>74%</td>
<td>299</td>
<td>2,122</td>
<td>-79%</td>
</tr>
<tr>
<td>2.</td>
<td>EMC</td>
<td>US</td>
<td>144,995</td>
<td>103%</td>
<td>51%</td>
<td>82%</td>
<td>1,107</td>
<td>10,163</td>
<td>-82%</td>
</tr>
<tr>
<td>3.</td>
<td>Comverse Tech.</td>
<td>US</td>
<td>18,031</td>
<td>75%</td>
<td>71%</td>
<td>85%</td>
<td>107</td>
<td>1,370</td>
<td>-81%</td>
</tr>
<tr>
<td>4.</td>
<td>Dell Computer</td>
<td>US</td>
<td>45,793</td>
<td>74%</td>
<td>67%</td>
<td>49%</td>
<td>1,049</td>
<td>2,677</td>
<td>6%</td>
</tr>
<tr>
<td>5.</td>
<td>Qualcomm</td>
<td>US</td>
<td>61,512</td>
<td>74%</td>
<td>99%</td>
<td>78%</td>
<td>419</td>
<td>3,980</td>
<td>-42%</td>
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<tr>
<td>6.</td>
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<td>71%</td>
<td>1,464</td>
<td>8,165</td>
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<td>7.</td>
<td>Charles Schwab</td>
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<td>83%</td>
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<td>Kohls</td>
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<td>82%</td>
<td>114</td>
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<td>AES</td>
<td>US</td>
<td>25,348</td>
<td>56%</td>
<td>67%</td>
<td>48%</td>
<td>-732</td>
<td>2,988</td>
<td>-77%</td>
</tr>
<tr>
<td>10.</td>
<td>Oracle</td>
<td>US</td>
<td>162,676</td>
<td>56%</td>
<td>41%</td>
<td>84%</td>
<td>1,515</td>
<td>13,977</td>
<td>-57%</td>
</tr>
</tbody>
</table>

CVA = Cash Value Added  
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Source: T.F. Datastream; BCG analysis
Average expectation premium top 10 companies

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<tr>
<th>Place</th>
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<th>TSR '96 –'00</th>
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<td>2,122</td>
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<tr>
<td>2.</td>
<td>Qualcomm</td>
<td>US</td>
<td>61,512</td>
<td>99%</td>
<td>74%</td>
<td>78%</td>
<td>419</td>
<td>3,980</td>
<td>-42%</td>
</tr>
<tr>
<td>3.</td>
<td>Waste Management</td>
<td>US</td>
<td>17,249</td>
<td>97%</td>
<td>8%</td>
<td>15%</td>
<td>-155</td>
<td>342</td>
<td>-4%</td>
</tr>
<tr>
<td>4.</td>
<td>Tyco</td>
<td>US</td>
<td>97,050</td>
<td>81%</td>
<td>48%</td>
<td>43%</td>
<td>2,780</td>
<td>8,435</td>
<td>-18%</td>
</tr>
<tr>
<td>5.</td>
<td>Comverse Tech.</td>
<td>US</td>
<td>15,031</td>
<td>71%</td>
<td>75%</td>
<td>85%</td>
<td>107</td>
<td>1,570</td>
<td>-81%</td>
</tr>
<tr>
<td>6.</td>
<td>Washington Mutual</td>
<td>US</td>
<td>28,594</td>
<td>67%</td>
<td>26%</td>
<td>39%</td>
<td>770</td>
<td>2,166</td>
<td>11%</td>
</tr>
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<td>Dell Computer</td>
<td>US</td>
<td>45,793</td>
<td>67%</td>
<td>74%</td>
<td>49%</td>
<td>1,049</td>
<td>2,677</td>
<td>6%</td>
</tr>
<tr>
<td>8.</td>
<td>AES</td>
<td>US</td>
<td>25,348</td>
<td>67%</td>
<td>56%</td>
<td>48%</td>
<td>-732</td>
<td>2,988</td>
<td>-77%</td>
</tr>
<tr>
<td>9.</td>
<td>Cardinal Health</td>
<td>US</td>
<td>27,807</td>
<td>60%</td>
<td>33%</td>
<td>54%</td>
<td>260</td>
<td>1,352</td>
<td>12%</td>
</tr>
<tr>
<td>10.</td>
<td>El Pato</td>
<td>US</td>
<td>16,758</td>
<td>57%</td>
<td>41%</td>
<td>33%</td>
<td>-1,016</td>
<td>625</td>
<td>-41%</td>
</tr>
</tbody>
</table>

CVA = Cash Value Added
TBR = Total Business Return (fundamental performance)
EP = Expectation Premium
TSR = Total Shareholder Return (market performance)
MV = Market Value (equity)

(1) Total sample, minimum market value 2000: US$15bn, 156 companies
(2) Market value of equity plus debt, 1995 = 100
(3) Estimated fundamental value and market value as of 30 Sept 2001
(4) The "implied CVA" is the required CVA 2000 level to justify the market value only by the fundamental performance

Source: T.F. Datastream; BCG analysis
Dealing with investors’ expectations

Expectation premium matrix

Average expectation premium top 10 companies

<table>
<thead>
<tr>
<th>Place</th>
<th>Company</th>
<th>Country</th>
<th>MV 2000 M$</th>
<th>TSR ’96 –’00</th>
<th>TBR ’96 –’00</th>
<th>EP 2000</th>
<th>CVA 2000 M$</th>
<th>Implied CVA® 2000 M$</th>
<th>2001 year to date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Porsche</td>
<td>GER</td>
<td>5,701</td>
<td>56%</td>
<td>29%</td>
<td>39%</td>
<td>178</td>
<td>618</td>
<td>-19%</td>
</tr>
<tr>
<td>2.</td>
<td>Harley-Davidson</td>
<td>US</td>
<td>12,046</td>
<td>41%</td>
<td>34%</td>
<td>68%</td>
<td>215</td>
<td>1,671</td>
<td>2%</td>
</tr>
<tr>
<td>3.</td>
<td>Pirelli</td>
<td>IT</td>
<td>6,765</td>
<td>32%</td>
<td>11%</td>
<td>12%</td>
<td>-464</td>
<td>-252</td>
<td>-56%</td>
</tr>
<tr>
<td>4.</td>
<td>BMW</td>
<td>GER</td>
<td>21,202</td>
<td>26%</td>
<td>10%</td>
<td>7%</td>
<td>1,343</td>
<td>1,966</td>
<td>-19%</td>
</tr>
<tr>
<td>5.</td>
<td>Paccar</td>
<td>US</td>
<td>3,788</td>
<td>24%</td>
<td>24%</td>
<td>6%</td>
<td>0</td>
<td>86</td>
<td>1%</td>
</tr>
<tr>
<td>6.</td>
<td>Renault</td>
<td>F</td>
<td>12,495</td>
<td>23%</td>
<td>9%</td>
<td>10%</td>
<td>-117</td>
<td>600</td>
<td>-41%</td>
</tr>
<tr>
<td>7.</td>
<td>Ford Motor</td>
<td>US</td>
<td>42,782</td>
<td>22%</td>
<td>12%</td>
<td>14%</td>
<td>-369</td>
<td>6,329</td>
<td>-24%</td>
</tr>
<tr>
<td>8.</td>
<td>Peugeot</td>
<td>F</td>
<td>10,353</td>
<td>21%</td>
<td>7%</td>
<td>-15%</td>
<td>270</td>
<td>-617</td>
<td>4%</td>
</tr>
<tr>
<td>9.</td>
<td>Volkswagen</td>
<td>GER</td>
<td>19,737</td>
<td>20%</td>
<td>12%</td>
<td>-10%</td>
<td>3,407</td>
<td>1,712</td>
<td>-31%</td>
</tr>
<tr>
<td>10.</td>
<td>Honda Motor</td>
<td>JP</td>
<td>36,349</td>
<td>15%</td>
<td>16%</td>
<td>1%</td>
<td>1,516</td>
<td>1,601</td>
<td>-9%</td>
</tr>
</tbody>
</table>

CVA = Cash Value Added      TBR = Total Business Return (fundamental performance)
EP = Expectation Premium    TSR = Total Shareholder Return (market performance)
MV = Market Value (equity)

(1) Weighted average of the total sample, minimum market value 2000: US$3bn, 29 companies
(2) Market value of equity plus debt, 1995 = 100
(3) Estimated fundamental value and market value as of 30 Sept 2001
(4) The “implied CVA” is the required CVA 2000 level to justify the market value only by the fundamental performance

Source: T.F. Datastream; BCG analysis
Fundamental performance ranking
Automobiles & Supply

Expectation premium matrix

<table>
<thead>
<tr>
<th>Place</th>
<th>Company</th>
<th>Country</th>
<th>MV 2000 M$</th>
<th>TBR '96–'00</th>
<th>TSR '96–'00</th>
<th>EP 2000</th>
<th>CVA 2000 M$</th>
<th>Implied CVA 2000 M$</th>
<th>2001 year to date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Magna</td>
<td>CN</td>
<td>3,242</td>
<td>36%</td>
<td>3%</td>
<td>-104%</td>
<td>355</td>
<td>-411</td>
<td>36%</td>
</tr>
<tr>
<td>2.</td>
<td>Harley-Davidson</td>
<td>US</td>
<td>12,046</td>
<td>34%</td>
<td>41%</td>
<td>68%</td>
<td>215</td>
<td>1,671</td>
<td>2%</td>
</tr>
<tr>
<td>3.</td>
<td>Porsche</td>
<td>GER</td>
<td>5,701</td>
<td>29%</td>
<td>56%</td>
<td>39%</td>
<td>178</td>
<td>618</td>
<td>-19%</td>
</tr>
<tr>
<td>4.</td>
<td>Paccar</td>
<td>US</td>
<td>3,768</td>
<td>24%</td>
<td>24%</td>
<td>6%</td>
<td>0</td>
<td>86</td>
<td>1%</td>
</tr>
<tr>
<td>5.</td>
<td>Daihatsu Motor</td>
<td>JP</td>
<td>3,213</td>
<td>22%</td>
<td>10%</td>
<td>-40%</td>
<td>64</td>
<td>-254</td>
<td>-43%</td>
</tr>
<tr>
<td>6.</td>
<td>Toyota Motor</td>
<td>JP</td>
<td>119,663</td>
<td>22%</td>
<td>12%</td>
<td>1%</td>
<td>1,181</td>
<td>1,514</td>
<td>-16%</td>
</tr>
<tr>
<td>7.</td>
<td>Johnson Controls</td>
<td>US</td>
<td>4,474</td>
<td>21%</td>
<td>11%</td>
<td>-34%</td>
<td>373</td>
<td>-34</td>
<td>27%</td>
</tr>
<tr>
<td>8.</td>
<td>Valeo</td>
<td>F</td>
<td>3,703</td>
<td>18%</td>
<td>10%</td>
<td>-53%</td>
<td>188</td>
<td>-246</td>
<td>-24%</td>
</tr>
<tr>
<td>9.</td>
<td>GKN</td>
<td>UK</td>
<td>7,615</td>
<td>17%</td>
<td>15%</td>
<td>21%</td>
<td>283</td>
<td>635</td>
<td>-7%</td>
</tr>
<tr>
<td>10.</td>
<td>Genuine Parts</td>
<td>US</td>
<td>4,532</td>
<td>17%</td>
<td>3%</td>
<td>13%</td>
<td>178</td>
<td>297</td>
<td>25%</td>
</tr>
</tbody>
</table>

CVA = Cash Value Added  
TBR = Total Business Return (fundamental performance)  
EP = Expectation Premium  
TSR = Total Shareholder Return (market performance)  
MV = Market Value (equity)

(1) Weighted average of the total sample, minimum market value 2000: US$3bn, 29 companies  
(2) Market value of equity plus debt, 1995 = 100  
(3) Estimated fundamental value and market value as of 30 Sept 2001  
(4) The "implied CVA" is the required CVA 2000 level to justify the market value only by the fundamental performance

Source: T.F. Datastream; BCG analysis
### Expectation premium matrix

**Annual fundamental performance (TBR) 1996–2000**

<table>
<thead>
<tr>
<th>Place</th>
<th>Company</th>
<th>Country</th>
<th>MV 2000 $M</th>
<th>TSR '96 –’00</th>
<th>TBR '96 –’00</th>
<th>EP 2000</th>
<th>CVA 2000 $M</th>
<th>Implied CVA 2000 $M</th>
<th>2001 year to date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Bipop Carire</td>
<td>I</td>
<td>11,296</td>
<td>78%</td>
<td>50%</td>
<td>79%</td>
<td>1,905</td>
<td>-28</td>
<td>-67%</td>
</tr>
<tr>
<td>2.</td>
<td>Banca Fideuram</td>
<td>I</td>
<td>12,549</td>
<td>75%</td>
<td>33%</td>
<td>88%</td>
<td>2,207</td>
<td>130</td>
<td>-55%</td>
</tr>
<tr>
<td>3.</td>
<td>Charles Schwab</td>
<td>US</td>
<td>39,259</td>
<td>58%</td>
<td>45%</td>
<td>83%</td>
<td>4,366</td>
<td>248</td>
<td>-59%</td>
</tr>
<tr>
<td>4.</td>
<td>MSDW</td>
<td>US</td>
<td>89,697</td>
<td>48%</td>
<td>54%</td>
<td>46%</td>
<td>8,537</td>
<td>3,267</td>
<td>-41%</td>
</tr>
<tr>
<td>5.</td>
<td>Lehman Brothers</td>
<td>US</td>
<td>16,419</td>
<td>46%</td>
<td>51%</td>
<td>6%</td>
<td>1,025</td>
<td>872</td>
<td>-16%</td>
</tr>
<tr>
<td>6.</td>
<td>Unicredito Italiano</td>
<td>I</td>
<td>26,160</td>
<td>45%</td>
<td>58%</td>
<td>56%</td>
<td>3,339</td>
<td>1,031</td>
<td>-23%</td>
</tr>
<tr>
<td>7.</td>
<td>Northern Trust</td>
<td>US</td>
<td>18,089</td>
<td>44%</td>
<td>25%</td>
<td>79%</td>
<td>2,686</td>
<td>2,12</td>
<td>-35%</td>
</tr>
<tr>
<td>8.</td>
<td>Banca Intesa</td>
<td>I</td>
<td>24,144</td>
<td>43%</td>
<td>85%</td>
<td>37%</td>
<td>1,809</td>
<td>719</td>
<td>-46%</td>
</tr>
<tr>
<td>9.</td>
<td>BBV Argentaria</td>
<td>E</td>
<td>46,946</td>
<td>43%</td>
<td>41%</td>
<td>55%</td>
<td>3,637</td>
<td>311</td>
<td>-28%</td>
</tr>
<tr>
<td>10.</td>
<td>State Street</td>
<td>US</td>
<td>20,027</td>
<td>42%</td>
<td>28%</td>
<td>75%</td>
<td>2,593</td>
<td>233</td>
<td>-26%</td>
</tr>
</tbody>
</table>

**CVA** = Cash Value Added  
**TBR** = Total Business Return (fundamental performance)  
**EP** = Expectation Premium  
**TSR** = Total Shareholder Return (market performance)  
**MV** = Market Value (equity)

1. Weighted average of the total sample, minimum market value 2000: US$10bn, 73 companies
2. Market value of equity plus debt, 1995 = 100
3. Estimated fundamental value and market value as of 30 Sept 2001
4. The "implied CVA" is the required CVA 2000 level to justify the market value only by the fundamental performance

**Source:** T.F. Datastream; BCG analysis

---

### Average expectation premium top 10 companies

<table>
<thead>
<tr>
<th>Company</th>
<th>2000 Expectation Premium</th>
<th>2001 Expectation Premium</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bipop Carire</td>
<td>67%</td>
<td>66%</td>
</tr>
<tr>
<td>Banca Fideuram</td>
<td>54%</td>
<td>46%</td>
</tr>
<tr>
<td>Charles Schwab</td>
<td>52%</td>
<td>56%</td>
</tr>
<tr>
<td>MSDW</td>
<td>57%</td>
<td>43%</td>
</tr>
<tr>
<td>Lehman Brothers</td>
<td>44%</td>
<td>46%</td>
</tr>
<tr>
<td>Unicredito Italiano</td>
<td>43%</td>
<td>43%</td>
</tr>
<tr>
<td>Northern Trust</td>
<td>44%</td>
<td>43%</td>
</tr>
<tr>
<td>Banca Intesa</td>
<td>48%</td>
<td>43%</td>
</tr>
<tr>
<td>BBV Argentaria</td>
<td>48%</td>
<td>43%</td>
</tr>
<tr>
<td>State Street</td>
<td>57%</td>
<td>64%</td>
</tr>
</tbody>
</table>

** expectation premium matrix**

**Market performance ranking**

**Banks**
Expectation premium matrix

Fundamental performance ranking

Banks

Expectation premium matrix

Average expectation premium top 10 companies

<table>
<thead>
<tr>
<th>Place</th>
<th>Company</th>
<th>Country</th>
<th>MV 2000 M$</th>
<th>TBR '96 –'00</th>
<th>TSR '96 –'00</th>
<th>EP 2000</th>
<th>CVA 2000 M$</th>
<th>Implied CVA® 2000 M$</th>
<th>2001 year to date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Banca Intesa</td>
<td>I</td>
<td>24,144</td>
<td>85%</td>
<td>43%</td>
<td>37%</td>
<td>719</td>
<td>1,809</td>
<td>-46%</td>
</tr>
<tr>
<td>2</td>
<td>Bipop Carire</td>
<td>I</td>
<td>11,286</td>
<td>59%</td>
<td>78%</td>
<td>79%</td>
<td>-28</td>
<td>1,905</td>
<td>-67%</td>
</tr>
<tr>
<td>3</td>
<td>Unicredito Italiano</td>
<td>I</td>
<td>26,160</td>
<td>58%</td>
<td>45%</td>
<td>56%</td>
<td>1,031</td>
<td>3,339</td>
<td>-23%</td>
</tr>
<tr>
<td>4</td>
<td>Firstar</td>
<td>US</td>
<td>22,090</td>
<td>57%</td>
<td>31%</td>
<td>62%</td>
<td>174</td>
<td>1,885</td>
<td>-2%</td>
</tr>
<tr>
<td>5</td>
<td>MSDW</td>
<td>US</td>
<td>89,697</td>
<td>54%</td>
<td>48%</td>
<td>46%</td>
<td>3,267</td>
<td>8,537</td>
<td>-41%</td>
</tr>
<tr>
<td>6</td>
<td>Royal Bank of Scotland</td>
<td>UK</td>
<td>63,274</td>
<td>51%</td>
<td>27%</td>
<td>51%</td>
<td>-875</td>
<td>3,075</td>
<td>-3%</td>
</tr>
<tr>
<td>7</td>
<td>Lehman Brothers</td>
<td>US</td>
<td>16,419</td>
<td>51%</td>
<td>46%</td>
<td>6%</td>
<td>872</td>
<td>1,025</td>
<td>-16%</td>
</tr>
<tr>
<td>8</td>
<td>Fleetboston Finl.</td>
<td>US</td>
<td>33,897</td>
<td>47%</td>
<td>17%</td>
<td>13%</td>
<td>1,624</td>
<td>2,252</td>
<td>0,3%</td>
</tr>
<tr>
<td>9</td>
<td>BSCH</td>
<td>E</td>
<td>48,329</td>
<td>46%</td>
<td>34%</td>
<td>54%</td>
<td>5</td>
<td>3,268</td>
<td>-25%</td>
</tr>
<tr>
<td>10</td>
<td>Charles Schwab</td>
<td>US</td>
<td>39,259</td>
<td>45%</td>
<td>58%</td>
<td>83%</td>
<td>248</td>
<td>4,366</td>
<td>-59%</td>
</tr>
</tbody>
</table>

CVA = Cash Value Added  
TBR = Total Business Return (fundamental performance)  
EP = Expectation Premium  
TSR = Total Shareholder Return (market performance)  
MV = Market Value (equity)

(1) Weighted average of the total sample, minimum market value 2000: US$10bn, 73 companies  
(2) Market value of equity plus debt, 1995 = 100  
(3) Estimated fundamental value and market value as of 30 Sept 2001  
(4) The "implied CVA" is the required CVA 2000 level to justify the market value only by the fundamental performance

Source: T.F. Datastream; BCG analysis
### Market performance ranking

#### Chemicals

#### Expectation premium matrix

<table>
<thead>
<tr>
<th>Place</th>
<th>Company</th>
<th>Country</th>
<th>MV 2000 M$</th>
<th>TSR '96–'00</th>
<th>TBR '96–'00</th>
<th>EP 2000</th>
<th>CVA 2000 M$</th>
<th>Implied CVA at 2000 M$</th>
<th>2001 year to date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>BASF</td>
<td>GER</td>
<td>28,247</td>
<td>28%</td>
<td>5%</td>
<td>-8%</td>
<td>74</td>
<td>-617</td>
<td>-17% -14%</td>
</tr>
<tr>
<td>2.</td>
<td>Bayer</td>
<td>GER</td>
<td>38,467</td>
<td>27%</td>
<td>5%</td>
<td>19%</td>
<td>-91</td>
<td>1,013</td>
<td>-43% -11%</td>
</tr>
<tr>
<td>3.</td>
<td>Clariant</td>
<td>CH</td>
<td>5,248</td>
<td>27%</td>
<td>56%</td>
<td>-17%</td>
<td>84</td>
<td>-130</td>
<td>-57% -60%</td>
</tr>
<tr>
<td>4.</td>
<td>Akzo Nobel</td>
<td>NL</td>
<td>15,354</td>
<td>25%</td>
<td>9%</td>
<td>35%</td>
<td>597</td>
<td>2,259</td>
<td>-20% 29%</td>
</tr>
<tr>
<td>5.</td>
<td>Ecolab</td>
<td>US</td>
<td>5,495</td>
<td>25%</td>
<td>22%</td>
<td>51%</td>
<td>193</td>
<td>711</td>
<td>-15% -37%</td>
</tr>
<tr>
<td>6.</td>
<td>Hitachi Chemical</td>
<td>JP</td>
<td>4,744</td>
<td>21%</td>
<td>17%</td>
<td>5%</td>
<td>101</td>
<td>156</td>
<td>-66% -76%</td>
</tr>
<tr>
<td>7.</td>
<td>Johnson Matthey</td>
<td>UK</td>
<td>3,495</td>
<td>19%</td>
<td>21%</td>
<td>40%</td>
<td>90</td>
<td>339</td>
<td>-12% 37%</td>
</tr>
<tr>
<td>8.</td>
<td>Shin-Etsu Chemical</td>
<td>JP</td>
<td>16,280</td>
<td>17%</td>
<td>24%</td>
<td>23%</td>
<td>275</td>
<td>885</td>
<td>-24% 10%</td>
</tr>
<tr>
<td>9.</td>
<td>Air Liquide</td>
<td>F</td>
<td>13,639</td>
<td>14%</td>
<td>11%</td>
<td>11%</td>
<td>-40</td>
<td>-145</td>
<td>-1% 15%</td>
</tr>
<tr>
<td>10.</td>
<td>Rohm &amp; Haas</td>
<td>US</td>
<td>7,978</td>
<td>14%</td>
<td>25%</td>
<td>12%</td>
<td>-145</td>
<td>142</td>
<td>-8% 16%</td>
</tr>
</tbody>
</table>

CVA = Cash Value Added  
TBR = Total Business Return (fundamental performance)  
EP = Expectation Premium  
TSR = Total Shareholder Return (market performance)  
MV = Market Value (equity)

(1) Weighted average of the total sample, minimum market value 2000: US$3bn, 34 companies  
(2) Market value of equity plus debt, 1995 = 100  
(3) Estimated fundamental value and market value as of 30 Sept 2001  
(4) The “implied CVA” is the required CVA 2000 level to justify the market value only by the fundamental performance  
(5) Clariant is a good example that the premium is not necessarily an indicator for over- or undervaluation. Since two years there is a negative trend in fundamental value which seems to continue until today, justifying investors’ scepticism.

Source: T.F. Datastream; BCG analysis
### Fundamental performance ranking

#### Chemicals

#### Expectation premium matrix

![Expectation premium matrix](image)

#### Average expectation premium top 10 companies

![Average expectation premium top 10 companies](image)

<table>
<thead>
<tr>
<th>Place</th>
<th>Company</th>
<th>Country</th>
<th>MV 2000 M$</th>
<th>TBR ’96–’00</th>
<th>TSR ’96–’00</th>
<th>EP 2000</th>
<th>CVA 2000 M$</th>
<th>Implied CVA* 2000 M$</th>
<th>2001 year to date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Clariant</td>
<td>CH</td>
<td>5,248</td>
<td>56%</td>
<td>27%</td>
<td>-17%</td>
<td>84</td>
<td>-130</td>
<td>-57%</td>
</tr>
<tr>
<td>2.</td>
<td>Mitsui Chemicals</td>
<td>JP</td>
<td>3,821</td>
<td>33%</td>
<td>-7%</td>
<td>-26%</td>
<td>-171</td>
<td>-511</td>
<td>-36%</td>
</tr>
<tr>
<td>3.</td>
<td>Rohm &amp; Haas</td>
<td>US</td>
<td>7,978</td>
<td>25%</td>
<td>14%</td>
<td>12%</td>
<td>-145</td>
<td>-86%</td>
<td>-8%</td>
</tr>
<tr>
<td>4.</td>
<td>Shin-Etsu Chemical</td>
<td>JP</td>
<td>16,280</td>
<td>24%</td>
<td>17%</td>
<td>23%</td>
<td>275</td>
<td>885</td>
<td>-24%</td>
</tr>
<tr>
<td>5.</td>
<td>Nan Ya Plastics</td>
<td>TA</td>
<td>5,868</td>
<td>24%</td>
<td>12%</td>
<td>-37%</td>
<td>221</td>
<td>-265</td>
<td>-48%</td>
</tr>
<tr>
<td>6.</td>
<td>Ecolab</td>
<td>US</td>
<td>5,485</td>
<td>22%</td>
<td>25%</td>
<td>51%</td>
<td>133</td>
<td>711</td>
<td>-15%</td>
</tr>
<tr>
<td>7.</td>
<td>Union Carbide</td>
<td>US</td>
<td>7,275</td>
<td>21%</td>
<td>9%</td>
<td>20%</td>
<td>-605</td>
<td>-272</td>
<td>-3%</td>
</tr>
<tr>
<td>8.</td>
<td>Johnson Matthey</td>
<td>UK</td>
<td>3,495</td>
<td>21%</td>
<td>19%</td>
<td>40%</td>
<td>90</td>
<td>339</td>
<td>-12%</td>
</tr>
<tr>
<td>9.</td>
<td>Potash Sask</td>
<td>CN</td>
<td>4,093</td>
<td>18%</td>
<td>6%</td>
<td>24%</td>
<td>-10</td>
<td>212</td>
<td>-24%</td>
</tr>
<tr>
<td>10.</td>
<td>Hitachi Chemical</td>
<td>JP</td>
<td>4,744</td>
<td>17%</td>
<td>21%</td>
<td>5%</td>
<td>101</td>
<td>156</td>
<td>-66%</td>
</tr>
</tbody>
</table>

CVA = Cash Value Added  
TBR = Total Business Return (fundamental performance)  
EP = Expectation Premium  
TSR = Total Shareholder Return (market performance)  
MV = Market Value (equity)

(1) Weighted average of the total sample, minimum market value 2000: US$3bn, 34 companies  
(2) Market value of equity plus debt, 1995 = 100  
(3) Estimated fundamental value and market value as of 30 Sept 2001  
(4) The "implied CVA" is the required CVA 2000 level to justify the market value only by the fundamental performance  
(5) Clariant is a good example that the premium is not necessarily an indicator for over- or undervaluation. Since two years there is a negative trend in fundamental value which seems to continue until today, justifying investors’ scepticism.

Source: T.F. Datastream; BCG analysis
Dealing with investors' expectations

### Expectation premium matrix

#### Annual fundamental performance (TBR) 1996–2000

<table>
<thead>
<tr>
<th>Place</th>
<th>Company</th>
<th>Country</th>
<th>MV 2000 M$</th>
<th>TSR '96–’00</th>
<th>TBR '96–’00</th>
<th>EP 2000</th>
<th>CVA 2000 M$</th>
<th>Implied CVA 2000 M$</th>
<th>2001 year to date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Bouygues</td>
<td>F</td>
<td>15,037</td>
<td>50%</td>
<td>30%</td>
<td>23%</td>
<td>395</td>
<td>1,063</td>
<td>-41%</td>
</tr>
<tr>
<td>2.</td>
<td>Tyco</td>
<td>US</td>
<td>97,050</td>
<td>48%</td>
<td>81%</td>
<td>43%</td>
<td>2,789</td>
<td>8,435</td>
<td>-18%</td>
</tr>
<tr>
<td>3.</td>
<td>Industrivarden</td>
<td>SWE</td>
<td>3,673</td>
<td>36%</td>
<td>-1%</td>
<td>72%</td>
<td>-162</td>
<td>406</td>
<td>-32%</td>
</tr>
<tr>
<td>4.</td>
<td>Siemens</td>
<td>GER</td>
<td>77,767</td>
<td>30%</td>
<td>16%</td>
<td>16%</td>
<td>3,528</td>
<td>6,689</td>
<td>-55%</td>
</tr>
<tr>
<td>5.</td>
<td>United Technologies</td>
<td>US</td>
<td>36,825</td>
<td>29%</td>
<td>15%</td>
<td>42%</td>
<td>733</td>
<td>4,107</td>
<td>-40%</td>
</tr>
<tr>
<td>6.</td>
<td>Hutchinson Whampoa</td>
<td>HK</td>
<td>53,156</td>
<td>21%</td>
<td>31%</td>
<td>33%</td>
<td>-1,786</td>
<td>1,287</td>
<td>-40%</td>
</tr>
<tr>
<td>7.</td>
<td>Saint Gobain</td>
<td>F</td>
<td>13,483</td>
<td>19%</td>
<td>14%</td>
<td>-23%</td>
<td>164</td>
<td>-909</td>
<td>-6%</td>
</tr>
<tr>
<td>8.</td>
<td>Dover</td>
<td>US</td>
<td>8,238</td>
<td>18%</td>
<td>22%</td>
<td>33%</td>
<td>325</td>
<td>821</td>
<td>-25%</td>
</tr>
<tr>
<td>9.</td>
<td>Montedison</td>
<td>I</td>
<td>3,786</td>
<td>18%</td>
<td>0%</td>
<td>-4%</td>
<td>-41</td>
<td>-179</td>
<td>11%</td>
</tr>
<tr>
<td>10.</td>
<td>3M</td>
<td>US</td>
<td>47,529</td>
<td>16%</td>
<td>11%</td>
<td>54%</td>
<td>1,153</td>
<td>7,004</td>
<td>-12%</td>
</tr>
</tbody>
</table>

CVA = Cash Value Added  
TBR = Total Business Return (fundamental performance)  
EP = Expectation Premium  
TSR = Total Shareholder Return (market performance)  
MV = Market Value (equity)

(1) Weighted average of the total sample, minimum market value 2000: US$1bn, 23 companies
(2) Market value of equity plus debt, 1995 = 100
(3) Estimated fundamental value and market value as of 30 Sept 2001
(4) The "implied CVA" is the required CVA 2000 level to justify the market value only by the fundamental performance

Source: T.F. Datastream; BCG analysis
### Expectation premium matrix

#### Annual fundamental performance (TBR) 1996-2000

<table>
<thead>
<tr>
<th>Place</th>
<th>Company</th>
<th>Country</th>
<th>MV 2000 M$</th>
<th>TBR '96 –'00</th>
<th>TSR '96 –'00</th>
<th>EP 2000</th>
<th>CVA 2000 M$</th>
<th>Implied CVA 2000 M$</th>
<th>2001 year to date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Tyco</td>
<td>US</td>
<td>97,050</td>
<td>81%</td>
<td>48%</td>
<td>43%</td>
<td>2,780</td>
<td>8,435</td>
<td>-18%</td>
</tr>
<tr>
<td>2.</td>
<td>Hutchison Whampoa</td>
<td>HK</td>
<td>53,156</td>
<td>31%</td>
<td>21%</td>
<td>33%</td>
<td>-1,786</td>
<td>1,287</td>
<td>-40%</td>
</tr>
<tr>
<td>3.</td>
<td>Bouygues</td>
<td>F</td>
<td>15,037</td>
<td>30%</td>
<td>50%</td>
<td>23%</td>
<td>396</td>
<td>1,053</td>
<td>-41%</td>
</tr>
<tr>
<td>4.</td>
<td>Dover</td>
<td>US</td>
<td>8,238</td>
<td>22%</td>
<td>18%</td>
<td>33%</td>
<td>325</td>
<td>821</td>
<td>-25%</td>
</tr>
<tr>
<td>5.</td>
<td>Honeywell</td>
<td>US</td>
<td>38,084</td>
<td>22%</td>
<td>16%</td>
<td>40%</td>
<td>256</td>
<td>3,359</td>
<td>-43%</td>
</tr>
<tr>
<td>6.</td>
<td>Raytheon</td>
<td>US</td>
<td>7,427</td>
<td>17%</td>
<td>-6%</td>
<td>-9%</td>
<td>-748</td>
<td>-968</td>
<td>13%</td>
</tr>
<tr>
<td>7.</td>
<td>Siemens</td>
<td>GER</td>
<td>77,767</td>
<td>16%</td>
<td>30%</td>
<td>16%</td>
<td>3,526</td>
<td>6,689</td>
<td>-55%</td>
</tr>
<tr>
<td>8.</td>
<td>United Technologies</td>
<td>US</td>
<td>36,825</td>
<td>15%</td>
<td>29%</td>
<td>42%</td>
<td>733</td>
<td>4,107</td>
<td>-40%</td>
</tr>
<tr>
<td>9.</td>
<td>NGK Insulators</td>
<td>JP</td>
<td>4,089</td>
<td>15%</td>
<td>9%</td>
<td>27%</td>
<td>21</td>
<td>298</td>
<td>-39%</td>
</tr>
<tr>
<td>10.</td>
<td>Saint Gobain</td>
<td>F</td>
<td>13,483</td>
<td>14%</td>
<td>19%</td>
<td>-23%</td>
<td>164</td>
<td>-909</td>
<td>-6%</td>
</tr>
</tbody>
</table>

CVA = Cash Value Added  
TBR = Total Business Return (fundamental performance)  
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Source: T.F. Datastream; BCG analysis
### Expectation premium matrix

#### Annual fundamental performance

<table>
<thead>
<tr>
<th>Place</th>
<th>Company</th>
<th>Country</th>
<th>MV 2000 M$</th>
<th>TSR '96~'00</th>
<th>TBR '96~'00</th>
<th>EP 2000</th>
<th>CVA 2000 M$</th>
<th>Implied CVA 2000 M$</th>
<th>2001 year to date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Weston George</td>
<td>CN</td>
<td>7,360</td>
<td>40%</td>
<td>21%</td>
<td>24%</td>
<td>150</td>
<td>527</td>
<td>24%</td>
</tr>
<tr>
<td>2.</td>
<td>L’Oréal</td>
<td>F</td>
<td>57,050</td>
<td>39%</td>
<td>8%</td>
<td>82%</td>
<td>356</td>
<td>10,703</td>
<td>-16%</td>
</tr>
<tr>
<td>3.</td>
<td>Numico</td>
<td>NL</td>
<td>8,023</td>
<td>37%</td>
<td>46%</td>
<td>50%</td>
<td>-53</td>
<td>609</td>
<td>-35%</td>
</tr>
<tr>
<td>4.</td>
<td>Beiersdorf</td>
<td>GER</td>
<td>8,714</td>
<td>35%</td>
<td>5%</td>
<td>66%</td>
<td>75</td>
<td>1,352</td>
<td>10%</td>
</tr>
<tr>
<td>5.</td>
<td>Colgate-Palmolive</td>
<td>US</td>
<td>37,076</td>
<td>32%</td>
<td>16%</td>
<td>75%</td>
<td>786</td>
<td>7,528</td>
<td>-9%</td>
</tr>
<tr>
<td>6.</td>
<td>Sysco</td>
<td>US</td>
<td>20,028</td>
<td>32%</td>
<td>17%</td>
<td>72%</td>
<td>257</td>
<td>2,039</td>
<td>-14%</td>
</tr>
<tr>
<td>7.</td>
<td>Cintas</td>
<td>US</td>
<td>8,050</td>
<td>30%</td>
<td>34%</td>
<td>68%</td>
<td>140</td>
<td>944</td>
<td>-24%</td>
</tr>
<tr>
<td>8.</td>
<td>Hermes</td>
<td>F</td>
<td>5,216</td>
<td>28%</td>
<td>20%</td>
<td>66%</td>
<td>112</td>
<td>675</td>
<td>-14%</td>
</tr>
<tr>
<td>9.</td>
<td>Heineken</td>
<td>NL</td>
<td>25,511</td>
<td>27%</td>
<td>12%</td>
<td>64%</td>
<td>237</td>
<td>3,766</td>
<td>-19%</td>
</tr>
<tr>
<td>10.</td>
<td>Unilever</td>
<td>NL</td>
<td>37,269</td>
<td>26%</td>
<td>12%</td>
<td>45%</td>
<td>552</td>
<td>6,300</td>
<td>-11%</td>
</tr>
</tbody>
</table>

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Source: T.F. Datastream; BCG analysis
Expectation premium matrix

Average expectation premium top 10 companies

<table>
<thead>
<tr>
<th>Place</th>
<th>Company</th>
<th>Country</th>
<th>MV 2000 M$</th>
<th>TBR '96~'00</th>
<th>TSR '96~'00</th>
<th>EP 2000</th>
<th>CVA 2000 M$</th>
<th>Implied CVA 2000 M$</th>
<th>2001 year to date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Numico</td>
<td>NL</td>
<td>8,023</td>
<td>46%</td>
<td>37%</td>
<td>50%</td>
<td>-53</td>
<td>609</td>
<td>-36%</td>
</tr>
<tr>
<td>2.</td>
<td>Cintas</td>
<td>US</td>
<td>8,950</td>
<td>34%</td>
<td>30%</td>
<td>68%</td>
<td>140</td>
<td>944</td>
<td>-24%</td>
</tr>
<tr>
<td>3.</td>
<td>Albertsons</td>
<td>US</td>
<td>10,846</td>
<td>30%</td>
<td>-3%</td>
<td>-6%</td>
<td>-48</td>
<td>-166</td>
<td>23%</td>
</tr>
<tr>
<td>4.</td>
<td>Newell Rubbermaid</td>
<td>US</td>
<td>6,065</td>
<td>26%</td>
<td>0%</td>
<td>4%</td>
<td>94</td>
<td>136</td>
<td>2%</td>
</tr>
<tr>
<td>5.</td>
<td>Sony</td>
<td>JP</td>
<td>63,374</td>
<td>23%</td>
<td>21%</td>
<td>27%</td>
<td>725</td>
<td>4,061</td>
<td>-44%</td>
</tr>
<tr>
<td>6.</td>
<td>Carnival</td>
<td>US</td>
<td>18,009</td>
<td>23%</td>
<td>22%</td>
<td>52%</td>
<td>-71</td>
<td>1,401</td>
<td>-28%</td>
</tr>
<tr>
<td>7.</td>
<td>Clorox</td>
<td>US</td>
<td>8,363</td>
<td>23%</td>
<td>17%</td>
<td>43%</td>
<td>272</td>
<td>917</td>
<td>6%</td>
</tr>
<tr>
<td>8.</td>
<td>Kimberly-Clark</td>
<td>US</td>
<td>38,042</td>
<td>21%</td>
<td>14%</td>
<td>55%</td>
<td>842</td>
<td>5,463</td>
<td>-11%</td>
</tr>
<tr>
<td>9.</td>
<td>Weston George</td>
<td>CN</td>
<td>7,360</td>
<td>21%</td>
<td>40%</td>
<td>24%</td>
<td>150</td>
<td>527</td>
<td>24%</td>
</tr>
<tr>
<td>10.</td>
<td>Hermes</td>
<td>F</td>
<td>5,216</td>
<td>20%</td>
<td>28%</td>
<td>66%</td>
<td>112</td>
<td>675</td>
<td>-14%</td>
</tr>
</tbody>
</table>

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### Expectation premium matrix

<table>
<thead>
<tr>
<th>Place</th>
<th>Company</th>
<th>Country</th>
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<th>TSR '96–’00</th>
<th>TBR ’96–’00</th>
<th>EP 2000</th>
<th>CVA 2000 M$</th>
<th>Implied CVA 2000 M$</th>
<th>2001 year to date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Waters</td>
<td>US</td>
<td>10,675</td>
<td>79%</td>
<td>37%</td>
<td>89%</td>
<td>107</td>
<td>1,705</td>
<td>-57%</td>
</tr>
<tr>
<td>2.</td>
<td>Anglo Am. Platinum</td>
<td>SA</td>
<td>10,113</td>
<td>48%</td>
<td>62%</td>
<td>60%</td>
<td>461</td>
<td>1,993</td>
<td>-8%</td>
</tr>
<tr>
<td>3.</td>
<td>Bombardier</td>
<td>CN</td>
<td>21,231</td>
<td>40%</td>
<td>29%</td>
<td>69%</td>
<td>104</td>
<td>2,967</td>
<td>-50%</td>
</tr>
<tr>
<td>4.</td>
<td>Danaher</td>
<td>US</td>
<td>9,700</td>
<td>34%</td>
<td>32%</td>
<td>68%</td>
<td>129</td>
<td>1,183</td>
<td>-31%</td>
</tr>
<tr>
<td>5.</td>
<td>Finmeccanica</td>
<td>I</td>
<td>9,584</td>
<td>33%</td>
<td>-1%</td>
<td>51%</td>
<td>-73</td>
<td>1,710</td>
<td>-41%</td>
</tr>
<tr>
<td>6.</td>
<td>Thales</td>
<td>F</td>
<td>8,039</td>
<td>28%</td>
<td>0%</td>
<td>48%</td>
<td>9</td>
<td>1,065</td>
<td>-20%</td>
</tr>
<tr>
<td>7.</td>
<td>Schneider Elte.</td>
<td>F</td>
<td>11,340</td>
<td>28%</td>
<td>9%</td>
<td>33%</td>
<td>169</td>
<td>1,148</td>
<td>-47%</td>
</tr>
<tr>
<td>8.</td>
<td>Nippon Sheet Glass</td>
<td>JP</td>
<td>5,367</td>
<td>26%</td>
<td>19%</td>
<td>33%</td>
<td>94</td>
<td>409</td>
<td>-88%</td>
</tr>
<tr>
<td>9.</td>
<td>General Dynamics</td>
<td>US</td>
<td>15,380</td>
<td>24%</td>
<td>33%</td>
<td>46%</td>
<td>419</td>
<td>1,727</td>
<td>15%</td>
</tr>
<tr>
<td>10.</td>
<td>Alcoa</td>
<td>US</td>
<td>28,976</td>
<td>23%</td>
<td>19%</td>
<td>20%</td>
<td>-88</td>
<td>1,318</td>
<td>-6%</td>
</tr>
</tbody>
</table>

CVA = Cash Value Added  
TBR = Total Business Return (fundamental performance)  
EP = Expectation Premium  
TSR = Total Shareholder Return (market performance)  
MV = Market Value (equity)

(1) Weighted average of the total sample, minimum market value 2000: US$5bn, 33 companies  
(2) Market value of equity plus debt, 1995 = 100  
(3) Estimated fundamental value and market value as of 30 Sept 2001  
(4) The "implied CVA" is the required CVA 2000 level to justify the market value only by the fundamental performance

Source: T.F. Datastream; BCG analysis
### Expectation premium matrix

#### Expectation premium 2000

- **Avg. 29%(1)**
- **Avg. 14%(1)**

#### Annual fundamental performance (TBR) 1996-2000

![Diagram showing annual fundamental performance (TBR) 1996-2000]

### Average expectation premium top 10 companies

#### Company value(2)

- **'95**
- **'96**
- **'97**
- **'98**
- **'99**
- **'00**
- **'01**

- **Company value(2)**
- **Expectation premium**
- **Fundamental value**

<table>
<thead>
<tr>
<th>Place</th>
<th>Company</th>
<th>Country</th>
<th>MV 2000</th>
<th>TBR '96 –'00</th>
<th>TSR '96 –'00</th>
<th>EP 2000</th>
<th>CVA 2000</th>
<th>Implied CVA 2000 M$</th>
<th>2001 year to date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Anglo American Platinum</td>
<td>SA</td>
<td>10,113</td>
<td>62%</td>
<td>48%</td>
<td>60%</td>
<td>461</td>
<td>1,993</td>
<td>-8%</td>
</tr>
<tr>
<td>2.</td>
<td>Waters</td>
<td>US</td>
<td>10,675</td>
<td>37%</td>
<td>79%</td>
<td>89%</td>
<td>107</td>
<td>1,705</td>
<td>-57%</td>
</tr>
<tr>
<td>3.</td>
<td>General Dynamics</td>
<td>US</td>
<td>15,380</td>
<td>33%</td>
<td>24%</td>
<td>46%</td>
<td>419</td>
<td>1,727</td>
<td>15%</td>
</tr>
<tr>
<td>4.</td>
<td>Danaher</td>
<td>US</td>
<td>9,700</td>
<td>32%</td>
<td>34%</td>
<td>58%</td>
<td>129</td>
<td>1,183</td>
<td>-31%</td>
</tr>
<tr>
<td>5.</td>
<td>Illinois Tool Works</td>
<td>US</td>
<td>17,797</td>
<td>29%</td>
<td>16%</td>
<td>38%</td>
<td>402</td>
<td>1,681</td>
<td>-8%</td>
</tr>
<tr>
<td>6.</td>
<td>Bombardier</td>
<td>CN</td>
<td>21,231</td>
<td>29%</td>
<td>40%</td>
<td>69%</td>
<td>104</td>
<td>2,967</td>
<td>-50%</td>
</tr>
<tr>
<td>7.</td>
<td>Fuji Heavy Inds.</td>
<td>JP</td>
<td>4,537</td>
<td>26%</td>
<td>13%</td>
<td>-25%</td>
<td>420</td>
<td>68</td>
<td>-20%</td>
</tr>
<tr>
<td>8.</td>
<td>Masco</td>
<td>US</td>
<td>11,716</td>
<td>26%</td>
<td>13%</td>
<td>42%</td>
<td>130</td>
<td>1,213</td>
<td>-19%</td>
</tr>
<tr>
<td>9.</td>
<td>BAE Systems</td>
<td>UK</td>
<td>17,141</td>
<td>23%</td>
<td>16%</td>
<td>43%</td>
<td>-868</td>
<td>853</td>
<td>-12%</td>
</tr>
<tr>
<td>10.</td>
<td>Boeing</td>
<td>US</td>
<td>58,638</td>
<td>22%</td>
<td>12%</td>
<td>48%</td>
<td>-13</td>
<td>5,881</td>
<td>-49%</td>
</tr>
</tbody>
</table>

**CVA** = Cash Value Added  
**TBR** = Total Business Return (fundamental performance)  
**EP** = Expectation Premium  
**TSR** = Total Shareholder Return (market performance)  
**MV** = Market Value (equity)

(1) Weighted average of the total sample, minimum market value 2000: US$5bn, 33 companies
(2) Market value of equity plus debt, 1995 = 100
(3) Estimated fundamental value and market value as of 30 Sept 2001
(4) The "implied CVA" is the required CVA 2000 level to justify the market value only by the fundamental performance

**Source:** T.F. Datastream; BCG analysis
Market performance ranking
Insurance & assurance

Expectation premium matrix

Average expectation premium top 10 companies

<table>
<thead>
<tr>
<th>Place</th>
<th>Company</th>
<th>Country</th>
<th>MV 2000 M$</th>
<th>TSR '96–’00</th>
<th>TBR '96–’00</th>
<th>EP 2000</th>
<th>CVA 2000 M$</th>
<th>Implied CVA 2000 M$</th>
<th>2001 year to date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Skandia</td>
<td>SWE</td>
<td>16,651</td>
<td>55%</td>
<td>36%</td>
<td>83%</td>
<td>72</td>
<td>2,303</td>
<td>-62%</td>
</tr>
<tr>
<td>2.</td>
<td>Aegon</td>
<td>NL</td>
<td>55,850</td>
<td>43%</td>
<td>34%</td>
<td>68%</td>
<td>674</td>
<td>6,002</td>
<td>-33%</td>
</tr>
<tr>
<td>3.</td>
<td>Great West Lifeco</td>
<td>CN</td>
<td>9,242</td>
<td>42%</td>
<td>30%</td>
<td>52%</td>
<td>190</td>
<td>800</td>
<td>-14%</td>
</tr>
<tr>
<td>4.</td>
<td>Aflac</td>
<td>US</td>
<td>19,147</td>
<td>39%</td>
<td>24%</td>
<td>71%</td>
<td>329</td>
<td>2,533</td>
<td>-25%</td>
</tr>
<tr>
<td>5.</td>
<td>ING</td>
<td>NL</td>
<td>78,078</td>
<td>38%</td>
<td>56%</td>
<td>-3%</td>
<td>8,522</td>
<td>8,183</td>
<td>-29%</td>
</tr>
<tr>
<td>6.</td>
<td>Munich Re</td>
<td>GER</td>
<td>63,118</td>
<td>37%</td>
<td>57%</td>
<td>17%</td>
<td>-269</td>
<td>971</td>
<td>-25%</td>
</tr>
<tr>
<td>7.</td>
<td>Baloise</td>
<td>CH</td>
<td>6,228</td>
<td>37%</td>
<td>25%</td>
<td>22%</td>
<td>11</td>
<td>208</td>
<td>-34%</td>
</tr>
<tr>
<td>8.</td>
<td>Power Financial</td>
<td>CN</td>
<td>8,041</td>
<td>36%</td>
<td>28%</td>
<td>43%</td>
<td>186</td>
<td>751</td>
<td>2%</td>
</tr>
<tr>
<td>9.</td>
<td>AIG</td>
<td>US</td>
<td>228,227</td>
<td>35%</td>
<td>27%</td>
<td>77%</td>
<td>1,505</td>
<td>29,827</td>
<td>-21%</td>
</tr>
<tr>
<td>10.</td>
<td>Marsh &amp; McLennan</td>
<td>US</td>
<td>31,746</td>
<td>35%</td>
<td>34%</td>
<td>66%</td>
<td>621</td>
<td>3,272</td>
<td>-16%</td>
</tr>
</tbody>
</table>

CVA = Cash Value Added  TBR = Total Business Return (fundamental performance)
EP = Expectation Premium  TSR = Total Shareholder Return (market performance)
MV = Market Value (equity)

(1) Weighted average of the total sample, minimum market value 2000: US$5bn, 40 companies
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(4) The "implied CVA" is the required CVA 2000 level to justify the market value only by the fundamental performance

Source: T.F. Datastream; BCG analysis
## Expectation premium matrix

![Expectation premium matrix](image)

### Average expectation premium top 10 companies

![Average expectation premium top 10 companies](image)

<table>
<thead>
<tr>
<th>Place</th>
<th>Company</th>
<th>Country</th>
<th>MV 2000 M$</th>
<th>TBR '96–'00</th>
<th>TSR '96–'00</th>
<th>EP 2000</th>
<th>CVA 2000 M$</th>
<th>Implied CVA 2000 M$</th>
<th>2001 year to date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Ergo</td>
<td>GER</td>
<td>12,616</td>
<td>72%</td>
<td>27%</td>
<td>36%</td>
<td>207</td>
<td>738</td>
<td>-13%</td>
</tr>
<tr>
<td>2.</td>
<td>Washington Mutual</td>
<td>US</td>
<td>28,594</td>
<td>67%</td>
<td>26%</td>
<td>39%</td>
<td>770</td>
<td>2,166</td>
<td>11%</td>
</tr>
<tr>
<td>3.</td>
<td>Munich Re</td>
<td>GER</td>
<td>63,118</td>
<td>57%</td>
<td>37%</td>
<td>17%</td>
<td>-269</td>
<td>971</td>
<td>-25%</td>
</tr>
<tr>
<td>4.</td>
<td>ING</td>
<td>NL</td>
<td>78,078</td>
<td>55%</td>
<td>38%</td>
<td>-3%</td>
<td>8,522</td>
<td>8,183</td>
<td>-20%</td>
</tr>
<tr>
<td>5.</td>
<td>AXA</td>
<td>F</td>
<td>59,641</td>
<td>40%</td>
<td>29%</td>
<td>60%</td>
<td>1,857</td>
<td>6,268</td>
<td>-42%</td>
</tr>
<tr>
<td>6.</td>
<td>Fortis</td>
<td>B</td>
<td>23,866</td>
<td>36%</td>
<td>31%</td>
<td>38%</td>
<td>923</td>
<td>2,048</td>
<td>-21%</td>
</tr>
<tr>
<td>7.</td>
<td>Skandia</td>
<td>SWE</td>
<td>16,651</td>
<td>36%</td>
<td>55%</td>
<td>83%</td>
<td>72</td>
<td>2,303</td>
<td>-62%</td>
</tr>
<tr>
<td>8.</td>
<td>AXA</td>
<td>I</td>
<td>11,387</td>
<td>36%</td>
<td>23%</td>
<td>78%</td>
<td>133</td>
<td>1,630</td>
<td>-36%</td>
</tr>
<tr>
<td>9.</td>
<td>Marsh &amp; McLennan</td>
<td>US</td>
<td>31,746</td>
<td>34%</td>
<td>35%</td>
<td>66%</td>
<td>621</td>
<td>3,272</td>
<td>-16%</td>
</tr>
<tr>
<td>10.</td>
<td>Aegon</td>
<td>NL</td>
<td>55,850</td>
<td>34%</td>
<td>43%</td>
<td>68%</td>
<td>674</td>
<td>6,002</td>
<td>-33%</td>
</tr>
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Source: T.F. Datastream; BCG analysis
Market performance ranking

Media & entertainment

Expectation premium matrix

Average expectation premium top 10 companies

<table>
<thead>
<tr>
<th>Place</th>
<th>Company</th>
<th>Country</th>
<th>MV 2000</th>
<th>TSR '96–'00</th>
<th>TBR '96–'00</th>
<th>EP 2000</th>
<th>CVA 2000</th>
<th>Implied CVA® 2000</th>
<th>2001 year to date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>M$</td>
<td></td>
<td></td>
<td></td>
<td>M$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>TF1</td>
<td>F</td>
<td>11,401</td>
<td>53%</td>
<td>22%</td>
<td>78%</td>
<td>283</td>
<td>1,786</td>
<td>-63%</td>
</tr>
<tr>
<td>2.</td>
<td>VNU</td>
<td>NL</td>
<td>11,571</td>
<td>41%</td>
<td>28%</td>
<td>59%</td>
<td>-177</td>
<td>507</td>
<td>-40%</td>
</tr>
<tr>
<td>3.</td>
<td>WPP Group</td>
<td>UK</td>
<td>15,581</td>
<td>41%</td>
<td>34%</td>
<td>62%</td>
<td>-180</td>
<td>1,096</td>
<td>-43%</td>
</tr>
<tr>
<td>4.</td>
<td>Omnicom</td>
<td>US</td>
<td>14,674</td>
<td>36%</td>
<td>35%</td>
<td>51%</td>
<td>462</td>
<td>1,442</td>
<td>-21%</td>
</tr>
<tr>
<td>5.</td>
<td>Thomson</td>
<td>CN</td>
<td>23,220</td>
<td>28%</td>
<td>11%</td>
<td>50%</td>
<td>-112</td>
<td>2,329</td>
<td>-20%</td>
</tr>
<tr>
<td>6.</td>
<td>Pearson</td>
<td>UK</td>
<td>18,996</td>
<td>26%</td>
<td>16%</td>
<td>63%</td>
<td>-461</td>
<td>977</td>
<td>-53%</td>
</tr>
<tr>
<td>7.</td>
<td>Interpublic Group</td>
<td>US</td>
<td>13,098</td>
<td>25%</td>
<td>31%</td>
<td>54%</td>
<td>261</td>
<td>1,304</td>
<td>-52%</td>
</tr>
<tr>
<td>8.</td>
<td>McGraw-Hill</td>
<td>US</td>
<td>11,414</td>
<td>25%</td>
<td>19%</td>
<td>48%</td>
<td>498</td>
<td>1,602</td>
<td>0%</td>
</tr>
<tr>
<td>9.</td>
<td>Tribune</td>
<td>US</td>
<td>13,021</td>
<td>24%</td>
<td>29%</td>
<td>42%</td>
<td>-507</td>
<td>345</td>
<td>-25%</td>
</tr>
<tr>
<td>10.</td>
<td>B Sky B</td>
<td>UK</td>
<td>30,946</td>
<td>24%</td>
<td>-5%</td>
<td>94%</td>
<td>-194</td>
<td>1,833</td>
<td>-47%</td>
</tr>
</tbody>
</table>

CVA = Cash Value Added  
TBR = Total Business Return (fundamental performance)
EP = Expectation Premium  
TSR = Total Shareholder Return (market performance)
MV = Market Value (equity)

(1) Weighted average of the total sample, minimum market value 2000: US$5bn, 27 companies
(2) Market value of equity plus debt, 1995 = 100
(3) Estimated fundamental value and market value as of 30 Sept 2001
(4) The "implied CVA" is the required CVA 2000 level to justify the market value only by the fundamental performance

Source: T.F. Datastream; BCG analysis

Dealing with investors’ expectations  www.bcg.com
Expectation premium matrix

Fundamental performance ranking

Company value

Average expectation premium top 10 companies

Place | Company | Country | MV 2000 M$ | TBR '96 –'00 | TSR '96 –'00 | EP 2000 | CVA 2000 M$ | Implied CVA 2000 M$ | 2001 year to date

1. | Omnicom | US | 14,674 | 35% | 36% | 51% | 462 | 1,442 | 100
2. | WPP Group | UK | 15,581 | 34% | 41% | 62% | -180 | 1,096 | 146
3. | Interpublic Gp. | US | 13,098 | 31% | 25% | 54% | 261 | 1,304 | 194
4. | Nippon Tel.Network | JP | 8,596 | 29% | 25% | 47% | 207 | 776 | 321
5. | Tribune | US | 15,021 | 29% | 24% | 42% | -507 | 345 | 207
6. | VNU | NL | 11,571 | 28% | 41% | 59% | -177 | 507 | 293
7. | Walt Disney | US | 60,323 | 24% | 9% | 9% | 2,303 | 3,104 | 287
8. | Walser Kluser | NL | 7,638 | 23% | 12% | 34% | 58 | 303 | 273
9. | Gannett | US | 16,625 | 22% | 17% | 34% | 166 | 1,398 | 21%
10. | TF1 | F | 11,401 | 22% | 55% | 78% | 283 | 1,786 | 79%

CVA = Cash Value Added | TBR = Total Business Return (fundamental performance)
EP = Expectation Premium | TSR = Total Shareholder Return (market performance)
MV = Market Value (equity)

(1) Weighted average of the total sample, minimum market value 2000: US$5bn, 27 companies
(2) Market value of equity plus debt, 1995 = 100
(3) Estimated fundamental value and market value as of 30 Sept 2001
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Source: T.F. Datastream; BCG analysis
Dealing with investors’ expectations

CVA = Cash Value Added  
TBR = Total Business Return (fundamental performance)  
EP = Expectation Premium  
TSR = Total Shareholder Return (market performance)  
MV = Market Value (equity)

(1) Weighted average of the total sample, minimum market value 2000: US$5bn, 44 companies  
(2) Market value of equity plus debt, 1995 = 100  
(3) Estimated fundamental value and market value as of 30 Sept 2001  
(4) The “implied CVA” is the required CVA 2000 level to justify the market value only by the fundamental performance

Source:  T.F. Datastream; BCG analysis

---

### Table: Company Performance

<table>
<thead>
<tr>
<th>Place</th>
<th>Company</th>
<th>Country</th>
<th>MV 2000</th>
<th>TSR '96-'00</th>
<th>TBR '96-'00</th>
<th>EP 2000</th>
<th>CVA 2000</th>
<th>Implied CVA 2000</th>
<th>2001 year to date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Serono</td>
<td>CH</td>
<td>11,223</td>
<td>51%</td>
<td>25%</td>
<td>70%</td>
<td>123</td>
<td>1,305</td>
<td>-22% 62%</td>
</tr>
<tr>
<td>2</td>
<td>Allergan</td>
<td>US</td>
<td>12,545</td>
<td>45%</td>
<td>20%</td>
<td>81%</td>
<td>108</td>
<td>1,969</td>
<td>-31% 74%</td>
</tr>
<tr>
<td>3</td>
<td>Forest Labs</td>
<td>US</td>
<td>11,646</td>
<td>42%</td>
<td>10%</td>
<td>90%</td>
<td>48</td>
<td>2,031</td>
<td>9% 91%</td>
</tr>
<tr>
<td>4</td>
<td>Guidant Corp.</td>
<td>US</td>
<td>16,552</td>
<td>39%</td>
<td>30%</td>
<td>74%</td>
<td>324</td>
<td>2,153</td>
<td>-29% 63%</td>
</tr>
<tr>
<td>5</td>
<td>Pfizer</td>
<td>US</td>
<td>290,216</td>
<td>36%</td>
<td>28%</td>
<td>84%</td>
<td>2,261</td>
<td>34,100</td>
<td>-12% 82%</td>
</tr>
<tr>
<td>6</td>
<td>Schering-Plough</td>
<td>US</td>
<td>82,971</td>
<td>35%</td>
<td>26%</td>
<td>76%</td>
<td>1,454</td>
<td>9,796</td>
<td>-34% 63%</td>
</tr>
<tr>
<td>7</td>
<td>Medtronic</td>
<td>US</td>
<td>72,425</td>
<td>35%</td>
<td>35%</td>
<td>84%</td>
<td>732</td>
<td>8,221</td>
<td>-28% 77%</td>
</tr>
<tr>
<td>8</td>
<td>Amgen</td>
<td>US</td>
<td>65,722</td>
<td>34%</td>
<td>24%</td>
<td>82%</td>
<td>738</td>
<td>7,887</td>
<td>-8% 81%</td>
</tr>
<tr>
<td>9</td>
<td>Altana</td>
<td>GER</td>
<td>6,155</td>
<td>33%</td>
<td>0%</td>
<td>71%</td>
<td>49</td>
<td>1,036</td>
<td>15% 74%</td>
</tr>
<tr>
<td>10</td>
<td>UCB</td>
<td>B</td>
<td>5,409</td>
<td>33%</td>
<td>16%</td>
<td>37%</td>
<td>274</td>
<td>674</td>
<td>14% 42%</td>
</tr>
</tbody>
</table>

---

### Charts:

- **Expectation premium matrix**
- **Average expectation premium top 10 companies**
Expectation premium matrix

Average expectation premium top 10 companies

<table>
<thead>
<tr>
<th>Place</th>
<th>Company</th>
<th>Country</th>
<th>MV 2000 M$</th>
<th>TBR '96–'00</th>
<th>TSR '96–'00</th>
<th>EP 2000</th>
<th>CVA 2000 M$</th>
<th>Implied CVA 2000 M$</th>
<th>2001 year to date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Biogen</td>
<td>US</td>
<td>9,052</td>
<td>77%</td>
<td>31%</td>
<td>64%</td>
<td>212</td>
<td>927</td>
<td>-8%</td>
</tr>
<tr>
<td>2</td>
<td>Watson Pharma</td>
<td>US</td>
<td>5,260</td>
<td>63%</td>
<td>16%</td>
<td>31%</td>
<td>73</td>
<td>202</td>
<td>7%</td>
</tr>
<tr>
<td>3</td>
<td>Cardinal Health</td>
<td>US</td>
<td>27,807</td>
<td>60%</td>
<td>54%</td>
<td>33%</td>
<td>260</td>
<td>1,352</td>
<td>12%</td>
</tr>
<tr>
<td>4</td>
<td>Boston Scientific</td>
<td>US</td>
<td>5,583</td>
<td>47%</td>
<td>-11%</td>
<td>12%</td>
<td>266</td>
<td>351</td>
<td>50%</td>
</tr>
<tr>
<td>5</td>
<td>Nycomed Amersham</td>
<td>UK</td>
<td>5,284</td>
<td>38%</td>
<td>28%</td>
<td>49%</td>
<td>126</td>
<td>457</td>
<td>5%</td>
</tr>
<tr>
<td>6</td>
<td>Astrazeneca</td>
<td>UK</td>
<td>89,033</td>
<td>35%</td>
<td>25%</td>
<td>68%</td>
<td>2,054</td>
<td>10,940</td>
<td>-5%</td>
</tr>
<tr>
<td>7</td>
<td>Medronic</td>
<td>US</td>
<td>72,425</td>
<td>36%</td>
<td>35%</td>
<td>84%</td>
<td>732</td>
<td>8,221</td>
<td>-28%</td>
</tr>
<tr>
<td>8</td>
<td>Stryker</td>
<td>US</td>
<td>9,874</td>
<td>33%</td>
<td>31%</td>
<td>63%</td>
<td>238</td>
<td>1,140</td>
<td>5%</td>
</tr>
<tr>
<td>9</td>
<td>GlaxoSmithKline</td>
<td>UK</td>
<td>177,627</td>
<td>33%</td>
<td>19%</td>
<td>68%</td>
<td>5,416</td>
<td>26,136</td>
<td>3%</td>
</tr>
<tr>
<td>10</td>
<td>Guidant Corp.</td>
<td>US</td>
<td>16,552</td>
<td>30%</td>
<td>39%</td>
<td>74%</td>
<td>324</td>
<td>2,153</td>
<td>-29%</td>
</tr>
</tbody>
</table>

CVA = Cash Value Added  
TBR = Total Business Return (fundamental performance)  
EP = Expectation Premium  
TSR = Total Shareholder Return (market performance)  
MV = Market Value (equity)

(1) Weighted average of the total sample, minimum market value 2000: US$5bn, 44 companies  
(2) Market value of equity plus debt, 1995 = 100  
(3) Estimated fundamental value and market value as of 30 Sept 2001  
(4) The "implied CVA" is the required CVA 2000 level to justify the market value only by the fundamental performance

Source: T.F. Datastream; BCG analysis
Dealing with investors’ expectations

Market performance ranking

Retail

Expectation premium matrix

Average expectation premium top 10 companies

<table>
<thead>
<tr>
<th>Place</th>
<th>Company</th>
<th>Country</th>
<th>MV 2000 M$</th>
<th>TSR '96–’00</th>
<th>TBR '96–’00</th>
<th>EP 2000</th>
<th>CVA 2000 M$</th>
<th>Implied CVA 2000 M$</th>
<th>2001 year to date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Kohls</td>
<td>US</td>
<td>20,234</td>
<td>56%</td>
<td>38%</td>
<td>82%</td>
<td>114</td>
<td>2,148</td>
<td>-21%</td>
</tr>
<tr>
<td>2.</td>
<td>Pinault Printemps</td>
<td>F</td>
<td>25,570</td>
<td>53%</td>
<td>25%</td>
<td>59%</td>
<td>-209</td>
<td>2,877</td>
<td>-46%</td>
</tr>
<tr>
<td>3.</td>
<td>Hennes &amp; Mauritz</td>
<td>SWE</td>
<td>11,301</td>
<td>53%</td>
<td>30%</td>
<td>72%</td>
<td>213</td>
<td>1,410</td>
<td>27%</td>
</tr>
<tr>
<td>4.</td>
<td>Best Buy</td>
<td>US</td>
<td>6,112</td>
<td>49%</td>
<td>35%</td>
<td>43%</td>
<td>306</td>
<td>749</td>
<td>54%</td>
</tr>
<tr>
<td>5.</td>
<td>T.J.X</td>
<td>US</td>
<td>7,758</td>
<td>44%</td>
<td>35%</td>
<td>35%</td>
<td>491</td>
<td>963</td>
<td>19%</td>
</tr>
<tr>
<td>6.</td>
<td>Walgreen</td>
<td>US</td>
<td>42,230</td>
<td>42%</td>
<td>25%</td>
<td>79%</td>
<td>441</td>
<td>5,352</td>
<td>-17%</td>
</tr>
<tr>
<td>7.</td>
<td>Casino Guichard</td>
<td>F</td>
<td>8,617</td>
<td>41%</td>
<td>19%</td>
<td>31%</td>
<td>33</td>
<td>654</td>
<td>-19%</td>
</tr>
<tr>
<td>8.</td>
<td>Target</td>
<td>US</td>
<td>28,887</td>
<td>40%</td>
<td>18%</td>
<td>42%</td>
<td>784</td>
<td>3,450</td>
<td>-1%</td>
</tr>
<tr>
<td>9.</td>
<td>Costco</td>
<td>US</td>
<td>17,896</td>
<td>39%</td>
<td>25%</td>
<td>53%</td>
<td>281</td>
<td>1,705</td>
<td>-11%</td>
</tr>
<tr>
<td>10.</td>
<td>Wal Mart Stores</td>
<td>US</td>
<td>237,274</td>
<td>38%</td>
<td>24%</td>
<td>69%</td>
<td>3,292</td>
<td>29,965</td>
<td>-6%</td>
</tr>
</tbody>
</table>

CVA = Cash Value Added  
TBR = Total Business Return (fundamental performance)  
EP = Expectation Premium  
TSR = Total Shareholder Return (market performance)  
MV = Market Value (equity)

(1) Weighted average of the total sample, minimum market value 2000: US$5bn, 46 companies
(2) Market value of equity plus debt, 1995 = 100
(3) Estimated fundamental value and market value as of 30 Sept 2001
(4) The "implied CVA" is the required CVA 2000 level to justify the market value only by the fundamental performance

Source: T.F. Datastream; BCG analysis
Expectation premium matrix

Annual fundamental performance (TBR) 1996-2000

Expectation premium 2000

Average 18%¹

Company value (2)

Expectation premium

Fundamental value

Average expectation premium top 10 companies

<table>
<thead>
<tr>
<th>Place</th>
<th>Company</th>
<th>Country</th>
<th>MV 2000 M$</th>
<th>TBR '96–'00</th>
<th>TSR '96–'00</th>
<th>EP 2000</th>
<th>CVA 2000 M$</th>
<th>Implied CVA 2000 M$</th>
<th>2001 year to date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Staples</td>
<td>US</td>
<td>5,351</td>
<td>51%</td>
<td>10%</td>
<td>14%</td>
<td>220</td>
<td>317</td>
<td>13% 19% 31%</td>
</tr>
<tr>
<td>2.</td>
<td>Walmex</td>
<td>MX</td>
<td>8,852</td>
<td>47%</td>
<td>26%</td>
<td>69%</td>
<td>-441</td>
<td>681</td>
<td>6% 74%</td>
</tr>
<tr>
<td>3.</td>
<td>Bed Bath &amp; Beyond</td>
<td>US</td>
<td>6,323</td>
<td>43%</td>
<td>39%</td>
<td>75%</td>
<td>98</td>
<td>662</td>
<td>14% 81%</td>
</tr>
<tr>
<td>4.</td>
<td>Ahold</td>
<td>NL</td>
<td>25,095</td>
<td>41%</td>
<td>30%</td>
<td>26%</td>
<td>782</td>
<td>1,877</td>
<td>-10% 33%</td>
</tr>
<tr>
<td>5.</td>
<td>Starbucks</td>
<td>US</td>
<td>8,210</td>
<td>41%</td>
<td>33%</td>
<td>71%</td>
<td>66</td>
<td>769</td>
<td>-33% 63%</td>
</tr>
<tr>
<td>6.</td>
<td>Kohls</td>
<td>US</td>
<td>20,234</td>
<td>38%</td>
<td>56%</td>
<td>82%</td>
<td>114</td>
<td>2,148</td>
<td>-21% 79%</td>
</tr>
<tr>
<td>7.</td>
<td>Home Depot</td>
<td>US</td>
<td>106,053</td>
<td>38%</td>
<td>34%</td>
<td>74%</td>
<td>1,353</td>
<td>107,33</td>
<td>-16% 72%</td>
</tr>
<tr>
<td>8.</td>
<td>Dixons Group</td>
<td>UK</td>
<td>6,458</td>
<td>36%</td>
<td>18%</td>
<td>22%</td>
<td>334</td>
<td>559</td>
<td>-16% 16%</td>
</tr>
<tr>
<td>9.</td>
<td>TJX</td>
<td>US</td>
<td>7,758</td>
<td>35%</td>
<td>44%</td>
<td>35%</td>
<td>491</td>
<td>953</td>
<td>19% 49%</td>
</tr>
<tr>
<td>10.</td>
<td>Best Buy</td>
<td>US</td>
<td>6,112</td>
<td>35%</td>
<td>49%</td>
<td>43%</td>
<td>306</td>
<td>749</td>
<td>54% 67%</td>
</tr>
</tbody>
</table>

CVA = Cash Value Added  TBR = Total Business Return (fundamental performance)
EP = Expectation Premium  TSR = Total Shareholder Return (market performance)
MV = Market Value (equity)

¹ Weighted average of the total sample, minimum market value 2000: US$5bn, 46 companies
² Market value of equity plus debt, 1995 = 100
³ Estimated fundamental value and market value as of 30 Sept 2001
⁴ The "implied CVA" is the required CVA 2000 level to justify the market value only by the fundamental performance

Source: T.F. Datastream; BCG analysis
### Market performance ranking

#### Technology

#### Expectation premium matrix

![Matrix diagram showing expectation premium for various companies.]

#### Average expectation premium top 10 companies

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Veritas</td>
<td>US</td>
<td>35,782</td>
<td>104%</td>
<td>156%</td>
<td>74%</td>
<td>299</td>
<td>2,122</td>
<td>-79%</td>
</tr>
<tr>
<td>2.</td>
<td>EMC</td>
<td>US</td>
<td>144,095</td>
<td>103%</td>
<td>51%</td>
<td>82%</td>
<td>1,107</td>
<td>10,163</td>
<td>-82%</td>
</tr>
<tr>
<td>3.</td>
<td>Nokia</td>
<td>FN</td>
<td>209,346</td>
<td>95%</td>
<td>47%</td>
<td>83%</td>
<td>3,505</td>
<td>29,309</td>
<td>-62%</td>
</tr>
<tr>
<td>4.</td>
<td>Comverse Tech.</td>
<td>US</td>
<td>18,031</td>
<td>75%</td>
<td>71%</td>
<td>85%</td>
<td>107</td>
<td>1,370</td>
<td>-81%</td>
</tr>
<tr>
<td>5.</td>
<td>Dell Computer</td>
<td>US</td>
<td>45,793</td>
<td>74%</td>
<td>67%</td>
<td>49%</td>
<td>1,049</td>
<td>2,677</td>
<td>-9%</td>
</tr>
<tr>
<td>6.</td>
<td>Qualcomm</td>
<td>US</td>
<td>61,512</td>
<td>74%</td>
<td>90%</td>
<td>79%</td>
<td>419</td>
<td>3,980</td>
<td>-42%</td>
</tr>
<tr>
<td>7.</td>
<td>Sun Microsystems</td>
<td>US</td>
<td>89,712</td>
<td>58%</td>
<td>43%</td>
<td>71%</td>
<td>1,464</td>
<td>8,165</td>
<td>-70%</td>
</tr>
<tr>
<td>8.</td>
<td>STMicroelectronics</td>
<td>NL</td>
<td>38,705</td>
<td>58%</td>
<td>8%</td>
<td>80%</td>
<td>705</td>
<td>7,206</td>
<td>-49%</td>
</tr>
<tr>
<td>9.</td>
<td>Oracle</td>
<td>US</td>
<td>162,676</td>
<td>56%</td>
<td>41%</td>
<td>84%</td>
<td>1,515</td>
<td>13,977</td>
<td>-57%</td>
</tr>
<tr>
<td>10.</td>
<td>Cisco Systems</td>
<td>US</td>
<td>288,662</td>
<td>56%</td>
<td>56%</td>
<td>82%</td>
<td>643</td>
<td>15,572</td>
<td>-68%</td>
</tr>
</tbody>
</table>

CVA = Cash Value Added  
TBR = Total Business Return (fundamental performance)  
EP = Expectation Premium  
TSR = Total Shareholder Return (market performance)  
MV = Market Value (equity)

(1) Weighted average of the total sample, minimum market value 2000: US$15bn, 66 companies  
(2) Market value of equity plus debt, 1995 = 100  
(3) Estimated fundamental value and market value as of 30 Sept 2001  
(4) The "implied CVA" is the required CVA 2000 level to justify the market value only by the fundamental performance

Source: T.F. Datastream; BCG analysis
### Expectation premium matrix

#### Annual fundamental performance (TBR) 1996-2000

![Annual fundamental performance (TBR) 1996-2000](image)

### Average expectation premium top 10 companies

#### Place  | Company          | Country | MV 2000 M$ | TBR '96–'00 (%) | TSR '96–'00 (%) | EP 2000 | CVA 2000 M$ | Implied CVA 2000 M$ | 2001 year to date |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Veritas</td>
<td>US</td>
<td>35,782</td>
<td>156%</td>
<td>104%</td>
<td>74%</td>
<td>290</td>
<td>2,122</td>
<td>-79%</td>
</tr>
<tr>
<td>2.</td>
<td>Qualcomm</td>
<td>US</td>
<td>61,512</td>
<td>99%</td>
<td>74%</td>
<td>78%</td>
<td>419</td>
<td>3,980</td>
<td>-42%</td>
</tr>
<tr>
<td>3.</td>
<td>Comverse Tech.</td>
<td>US</td>
<td>18,031</td>
<td>71%</td>
<td>75%</td>
<td>86%</td>
<td>107</td>
<td>1,370</td>
<td>-81%</td>
</tr>
<tr>
<td>4.</td>
<td>Dell Computer</td>
<td>US</td>
<td>45,793</td>
<td>67%</td>
<td>74%</td>
<td>49%</td>
<td>1,049</td>
<td>2,677</td>
<td>6%</td>
</tr>
<tr>
<td>5.</td>
<td>Cisco Systems</td>
<td>US</td>
<td>268,662</td>
<td>56%</td>
<td>56%</td>
<td>82%</td>
<td>643</td>
<td>15,572</td>
<td>-68%</td>
</tr>
<tr>
<td>6.</td>
<td>Telabs</td>
<td>US</td>
<td>23,171</td>
<td>54%</td>
<td>44%</td>
<td>57%</td>
<td>517</td>
<td>1,627</td>
<td>-83%</td>
</tr>
<tr>
<td>7.</td>
<td>Cox Communic.</td>
<td>US</td>
<td>26,636</td>
<td>52%</td>
<td>37%</td>
<td>6%</td>
<td>877</td>
<td>1,103</td>
<td>-10%</td>
</tr>
<tr>
<td>8.</td>
<td>EMC</td>
<td>US</td>
<td>144,995</td>
<td>51%</td>
<td>103%</td>
<td>82%</td>
<td>1,107</td>
<td>10,163</td>
<td>-82%</td>
</tr>
<tr>
<td>9.</td>
<td>Microsoft</td>
<td>US</td>
<td>231,290</td>
<td>51%</td>
<td>32%</td>
<td>44%</td>
<td>5,214</td>
<td>12,616</td>
<td>18%</td>
</tr>
<tr>
<td>10.</td>
<td>Verizon Comms.</td>
<td>US</td>
<td>135,292</td>
<td>48%</td>
<td>12%</td>
<td>-41%</td>
<td>2,896</td>
<td>-4,371</td>
<td>10%</td>
</tr>
</tbody>
</table>

CVA = Cash Value Added  
TBR = Total Business Return (fundamental performance)  
EP = Expectation Premium  
TSR = Total Shareholder Return (market performance)  
MV = Market Value (equity)

(1) Weighted average of the total sample, minimum market value 2000: US$15bn, 66 companies
(2) Market value of equity plus debt, 1995 = 100
(3) Estimated fundamental value and market value as of 30 Sept 2001
(4) The "implied CVA" is the required CVA 2000 level to justify the market value only by the fundamental performance

Source: T.F. Datastream; BCG analysis
Market performance ranking
Travel, transport & tourism

Expectation premium matrix

Average expectation premium top 10 companies

<table>
<thead>
<tr>
<th>Place</th>
<th>Company</th>
<th>Country</th>
<th>MV 2000 $</th>
<th>TSR '96–'00</th>
<th>TBR '96–'00</th>
<th>EP 2000</th>
<th>CVA 2000 $</th>
<th>Implied CVA 2000 $</th>
<th>2001 year to date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Southwest Airlines</td>
<td>US</td>
<td>16,827</td>
<td>38%</td>
<td>27%</td>
<td>50%</td>
<td>189</td>
<td>1,505</td>
<td>-34%</td>
</tr>
<tr>
<td>2.</td>
<td>CN Railways</td>
<td>CN</td>
<td>5,975</td>
<td>36%</td>
<td>53%</td>
<td>-1%</td>
<td>-267</td>
<td>-289</td>
<td>37%</td>
</tr>
<tr>
<td>3.</td>
<td>D/S 1912</td>
<td>DK</td>
<td>8,853</td>
<td>27%</td>
<td>36%</td>
<td>86%</td>
<td>103</td>
<td>1,245</td>
<td>-29%</td>
</tr>
<tr>
<td>4.</td>
<td>D/S Svendborg</td>
<td>DK</td>
<td>8,196</td>
<td>25%</td>
<td>32%</td>
<td>83%</td>
<td>99</td>
<td>1,198</td>
<td>-31%</td>
</tr>
<tr>
<td>5.</td>
<td>Lufthansa</td>
<td>GER</td>
<td>9,670</td>
<td>24%</td>
<td>6%</td>
<td>-12%</td>
<td>447</td>
<td>89</td>
<td>-60%</td>
</tr>
<tr>
<td>6.</td>
<td>Exel</td>
<td>UK</td>
<td>4,094</td>
<td>23%</td>
<td>36%</td>
<td>37%</td>
<td>27</td>
<td>240</td>
<td>-42%</td>
</tr>
<tr>
<td>7.</td>
<td>Accor</td>
<td>F</td>
<td>8,346</td>
<td>22%</td>
<td>8%</td>
<td>21%</td>
<td>113</td>
<td>649</td>
<td>-28%</td>
</tr>
<tr>
<td>8.</td>
<td>Carnival</td>
<td>US</td>
<td>18,009</td>
<td>22%</td>
<td>23%</td>
<td>52%</td>
<td>-71</td>
<td>1,401</td>
<td>-28%</td>
</tr>
<tr>
<td>9.</td>
<td>Singapore Airlines</td>
<td>SG</td>
<td>12,150</td>
<td>20%</td>
<td>12%</td>
<td>8%</td>
<td>-255</td>
<td>-71</td>
<td>-53%</td>
</tr>
<tr>
<td>10.</td>
<td>Fedex</td>
<td>US</td>
<td>11,393</td>
<td>17%</td>
<td>20%</td>
<td>-26%</td>
<td>302</td>
<td>-323</td>
<td>-8%</td>
</tr>
</tbody>
</table>

CVA = Cash Value Added  TBR = Total Business Return (fundamental performance)
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MV = Market Value (equity)

(1) Weighted average of the total sample, minimum market value 2000: US$3bn, 32 companies
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(4) The "implied CVA" is the required CVA 2000 level to justify the market value only by the fundamental performance

Source: T.F. Datastream; BCG analysis
### Expectation premium matrix

#### Annual fundamental performance (TBR) 1996-2000

<table>
<thead>
<tr>
<th>Place</th>
<th>Company</th>
<th>Country</th>
<th>MV 2000 M$</th>
<th>TBR '96–'00</th>
<th>TSR '96–'00</th>
<th>EP 2000</th>
<th>CVA 2000 M$</th>
<th>Implied CVA 2000 M$</th>
<th>2001 year to date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>CN Railways</td>
<td>CN</td>
<td>5,975</td>
<td>53%</td>
<td>36%</td>
<td>-1%</td>
<td>-267</td>
<td>-289</td>
<td>37% 28%</td>
</tr>
<tr>
<td>2.</td>
<td>Exel</td>
<td>UK</td>
<td>4,094</td>
<td>36%</td>
<td>23%</td>
<td>37%</td>
<td>27</td>
<td>240</td>
<td>-42% 22%</td>
</tr>
<tr>
<td>3.</td>
<td>D/S 1912</td>
<td>DK</td>
<td>8,853</td>
<td>35%</td>
<td>27%</td>
<td>86%</td>
<td>103</td>
<td>1,245</td>
<td>-29% 82%</td>
</tr>
<tr>
<td>4.</td>
<td>D/S Svedborg</td>
<td>DK</td>
<td>8,196</td>
<td>32%</td>
<td>25%</td>
<td>83%</td>
<td>90</td>
<td>1,198</td>
<td>-31% 80%</td>
</tr>
<tr>
<td>5.</td>
<td>Hilton Hotels</td>
<td>US</td>
<td>3,871</td>
<td>31%</td>
<td>3%</td>
<td>0%</td>
<td>20</td>
<td>20</td>
<td>-25% 12%</td>
</tr>
<tr>
<td>6.</td>
<td>Southwest Airlines</td>
<td>US</td>
<td>16,827</td>
<td>27%</td>
<td>38%</td>
<td>50%</td>
<td>199</td>
<td>1,595</td>
<td>-34% 44%</td>
</tr>
<tr>
<td>7.</td>
<td>Malaysia Intl. Shipp.</td>
<td>MAL</td>
<td>3,475</td>
<td>26%</td>
<td>5%</td>
<td>-33%</td>
<td>172</td>
<td>-6</td>
<td>-2% -10%</td>
</tr>
<tr>
<td>8.</td>
<td>Canadian Pacific</td>
<td>CN</td>
<td>9,286</td>
<td>25%</td>
<td>13%</td>
<td>-39%</td>
<td>313</td>
<td>-827</td>
<td>19% -6%</td>
</tr>
<tr>
<td>9.</td>
<td>Harrahs Entm.</td>
<td>US</td>
<td>3,079</td>
<td>23%</td>
<td>2%</td>
<td>17%</td>
<td>-80</td>
<td>54</td>
<td>2% 35%</td>
</tr>
<tr>
<td>10.</td>
<td>Carnival</td>
<td>US</td>
<td>18,009</td>
<td>23%</td>
<td>22%</td>
<td>52%</td>
<td>-71</td>
<td>1,401</td>
<td>-28% 48%</td>
</tr>
</tbody>
</table>

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TBR = Total Business Return (fundamental performance)  
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(4) The "implied CVA" is the required CVA 2000 level to justify the market value only by the fundamental performance

Source: T.F. Datastream; BCG analysis
Market performance ranking
Utilities

Expectation premium matrix

Average expectation premium top 10 companies

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>AES</td>
<td>US</td>
<td>25,348</td>
<td>56%</td>
<td>67%</td>
<td>48%</td>
<td>-732</td>
<td>2,988</td>
<td>-77%</td>
</tr>
<tr>
<td>2.</td>
<td>El Paso</td>
<td>US</td>
<td>16,758</td>
<td>41%</td>
<td>57%</td>
<td>33%</td>
<td>-1,016</td>
<td>625</td>
<td>-41%</td>
</tr>
<tr>
<td>3.</td>
<td>Union Fenosa</td>
<td>E</td>
<td>5,592</td>
<td>39%</td>
<td>11%</td>
<td>14%</td>
<td>-630</td>
<td>1,916</td>
<td>-15%</td>
</tr>
<tr>
<td>4.</td>
<td>Coastal</td>
<td>US</td>
<td>18,983</td>
<td>38%</td>
<td>10%</td>
<td>51%</td>
<td>-630</td>
<td>1,916</td>
<td>-15%</td>
</tr>
<tr>
<td>5.</td>
<td>Enron</td>
<td>US</td>
<td>61,422</td>
<td>37%</td>
<td>25%</td>
<td>63%</td>
<td>-1,547</td>
<td>7,543</td>
<td>-15%</td>
</tr>
<tr>
<td>6.</td>
<td>Dynegy</td>
<td>US</td>
<td>13,306</td>
<td>35%</td>
<td>65%</td>
<td>46%</td>
<td>-362</td>
<td>1,211</td>
<td>-35%</td>
</tr>
<tr>
<td>7.</td>
<td>National Grid</td>
<td>UK</td>
<td>13,495</td>
<td>31%</td>
<td>14%</td>
<td>40%</td>
<td>-590</td>
<td>1,075</td>
<td>-28%</td>
</tr>
<tr>
<td>8.</td>
<td>Edison</td>
<td>I</td>
<td>7,085</td>
<td>30%</td>
<td>24%</td>
<td>46%</td>
<td>-4</td>
<td>617</td>
<td>-15%</td>
</tr>
<tr>
<td>9.</td>
<td>Kinder Morgan</td>
<td>US</td>
<td>5,971</td>
<td>25%</td>
<td>40%</td>
<td>52%</td>
<td>-350</td>
<td>678</td>
<td>-5%</td>
</tr>
<tr>
<td>10.</td>
<td>Williams Cos.</td>
<td>US</td>
<td>17,573</td>
<td>25%</td>
<td>30%</td>
<td>30%</td>
<td>-638</td>
<td>1,256</td>
<td>-25%</td>
</tr>
</tbody>
</table>

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Source: T.F. Datastream; BCG analysis
### Expectation premium matrix

#### Annual fundamental performance (TBR) 1996-2000

<table>
<thead>
<tr>
<th>Year</th>
<th>Expectation Premium Matrix</th>
</tr>
</thead>
<tbody>
<tr>
<td>'95</td>
<td>'96</td>
</tr>
<tr>
<td>12%</td>
<td>5%</td>
</tr>
<tr>
<td>35%</td>
<td>37%</td>
</tr>
<tr>
<td>50%</td>
<td>25%</td>
</tr>
<tr>
<td>100%</td>
<td>139%</td>
</tr>
</tbody>
</table>

### Average expectation premium top 10 companies

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>AES</td>
<td>US</td>
<td>25,348</td>
<td>67%</td>
<td>56%</td>
<td>48%</td>
<td>-732</td>
<td>2,988</td>
<td>-77% 13%</td>
</tr>
<tr>
<td>2.</td>
<td>Dynegy</td>
<td>US</td>
<td>13,306</td>
<td>65%</td>
<td>35%</td>
<td>46%</td>
<td>-362</td>
<td>1,211</td>
<td>-38% 28%</td>
</tr>
<tr>
<td>3.</td>
<td>El Paso</td>
<td>US</td>
<td>16,758</td>
<td>57%</td>
<td>41%</td>
<td>33%</td>
<td>-1,016</td>
<td>625</td>
<td>-41% 42%</td>
</tr>
<tr>
<td>4.</td>
<td>Scottish Power</td>
<td>UK</td>
<td>14,626</td>
<td>47%</td>
<td>14%</td>
<td>8%</td>
<td>-46</td>
<td>240</td>
<td>-19% 9%</td>
</tr>
<tr>
<td>5.</td>
<td>Keyspan</td>
<td>US</td>
<td>5,703</td>
<td>42%</td>
<td>13%</td>
<td>21%</td>
<td>-257</td>
<td>87</td>
<td>-19% 14%</td>
</tr>
<tr>
<td>6.</td>
<td>Kinder Morgan</td>
<td>US</td>
<td>5,971</td>
<td>40%</td>
<td>25%</td>
<td>52%</td>
<td>-350</td>
<td>678</td>
<td>-5% 50%</td>
</tr>
<tr>
<td>7.</td>
<td>Williams Cos.</td>
<td>US</td>
<td>17,573</td>
<td>30%</td>
<td>25%</td>
<td>30%</td>
<td>-638</td>
<td>1,256</td>
<td>-25% 21%</td>
</tr>
<tr>
<td>8.</td>
<td>Endesa</td>
<td>E</td>
<td>18,041</td>
<td>29%</td>
<td>14%</td>
<td>21%</td>
<td>-545</td>
<td>-2,088</td>
<td>-3% -26%</td>
</tr>
<tr>
<td>9.</td>
<td>Xcel Energy</td>
<td>US</td>
<td>9,814</td>
<td>28%</td>
<td>10%</td>
<td>2%</td>
<td>-1,021</td>
<td>-937</td>
<td>1% 2%</td>
</tr>
<tr>
<td>10.</td>
<td>Nisource</td>
<td>US</td>
<td>6,288</td>
<td>27%</td>
<td>15%</td>
<td>24%</td>
<td>-1,274</td>
<td>563</td>
<td>-22% 17%</td>
</tr>
</tbody>
</table>

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Source: T.F. Datastream; BCG analysis
Dealing with investors’ expectations

Appendix

Technical notes

1. CALCULATING EXPECTATION PREMIUMS

A company’s expectation premium is the difference between its market value plus debt and its fundamental value. The scale of the premium depends on three main factors:

- **The market value of the company, measured by its market capitalisation plus debt**: BCG used calendar year data for this (Fig. A3).

- **Robustness of the valuation model**: Fig. A4 demonstrates that over the five-year period from 1996-2000 the difference between the annual market performance and the annual fundamental performance was less than +/-15% for almost two thirds of the companies in that sample.

- **The assumptions used to calculate the company’s fundamental value**: BCG used standard cash flow projections, based on the business's current profitability and historical growth. We assumed that profitability would fade by 10% per annum to the weighted average cost of capital over 40 years due to competitive pressures and other factors. In addition, it was assumed that growth would fade by 20% per annum to an average economic growth rate of 1.5% over the same period (Fig. A5).

2. DIFFERENT WAYS TO MEASURE VALUE CREATION

To manage value creation effectively, companies require multiple measures to be used in different applications and at different levels of the organisation. Fig. A6 depicts the range of measures our clients have found most useful to manage value creation at different levels in the organisation.

**Setting explicit external aspirations: TSR**

Beginning at the corporate level, executives must set an explicit value creation aspiration that will energise their organisations, drive stretch thinking or performance, and focus the agenda of programmes that must be implemented.

We believe the most appropriate measure for aspiration setting is total shareholder return (TSR) relative to a local market index or industry peer group. Achievement of this ‘external value
creation aspiration’ should be embedded in the incentive plans for corporate executives and key business unit leaders.

**Aligning internal aspirations and plans: TBR**

The next requirement is to cascade down the overall TSR value-creation aspiration into internal corporate and business unit goals and targets and assess the gap between plans and aspirations at all levels.

The Total Business Return (TBR) measure is an accurate and useful measure for this purpose (Fig. A7). The TBR measure is an internal mirror of actual external TSR. It represents the intrinsic capital gain and dividend yield from a business plan – either at the corporate or business unit level.

BCG has developed a range of methodologies to calculate the TBR that can be tailored depending on the very specific situation of our clients. The TBR can be measured with sophisticated proprietary valuation models or with relatively simple approaches employing EBITDA, EBIT, or cash flow multiples.

Many of our clients have found the TBR measure to be a powerful tool for converting TSR aspirations into performance goals at business unit level and to drive accordingly a portion of long-term incentives for business unit management. In that context, TBR can also be used as a rich planning tool to assess the value-creation

Fig. A5  Calculation of fundamental value

**Assumptions**

- Growth in GI (1994-1999) is taken as the base growth rate to be faded out
- Growth is faded to a long term value of 1.5%
- CFROI of appropriate year is taken as base for profitability fade to WACC
- Fade rate for Growth: 20%\(^{(1)}\)
- Fade rate for CFROI: 10%\(^{(1)}\)

\(^{(1)}\) BCG research

Fig. A6  Framework of value measures

- **Management applications**
  - Set company value creation aspirations
  - Link to senior management incentives
  - Assess gap between aspirations & plans
  - Cascade aspirations down to BUs
  - Use for long term BU incentives
  - Determine targets for other measures
  - Determine priority value drivers
  - Evaluate value driver + trade-offs
  - Directionally signal value creation improvement
  - Decompose aspirations into operating metrics
  - Use for annual incentives
  - Benchmark operating efficiency
  - Set departmental priorities
  - Use for departmental incentives

- **Relevant measures**
  - TSR  Market performance
  - TBR  Fundamental performance
  - \(\Delta CVA\)  Primary value drivers
  - Profitability of assets
  - Growth in assets
  - Cash margin  KPI’s
  - Asset turns  KPI’s

Measure against most relevant assets: capital, people, customers

---

Sources:

- [Fig. A7](URL)
- [Fig. A8](URL)
- [Fig. A9](URL)

**Notes:**

- [1] BCG research

---

**Fig. A7**  Calculation of fundamental value

**Assumptions**

- Growth in GI (1994-1999) is taken as the base growth rate to be faded out
- Growth is faded to a long term value of 1.5%
- CFROI of appropriate year is taken as base for profitability fade to WACC
- Fade rate for Growth: 20%\(^{(1)}\)
- Fade rate for CFROI: 10%\(^{(1)}\)

\(^{(1)}\) BCG research

**Fig. A8**  Framework of value measures

- **Management applications**
  - Set company value creation aspirations
  - Link to senior management incentives
  - Assess gap between aspirations & plans
  - Cascade aspirations down to BUs
  - Use for long term BU incentives
  - Determine targets for other measures
  - Determine priority value drivers
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Measure against most relevant assets: capital, people, customers

Sources:

- [Fig. A7](URL)
- [Fig. A8](URL)
- [Fig. A9](URL)

Notes:

- [1] BCG research
Dealing with investors’ expectations

TBR is an important high-level tool to assess the relative performance of a corporation or a business unit and to set future targets. It also provides a way to link other measures used for detailed value driver analysis or for setting operational targets back to the TSR aspiration.

Measuring and setting targets for the internal value creation drivers: CVA

Cash value added, CVA (or its financial services equivalent, AVE), is an absolute measure of operating performance contribution to value creation. It provides a strong directional indication of when and how value creation is being improved. The CVA measure reflects operating cash flow minus a cost of capital charge against gross operating assets employed (Figs A8 & A9). The CVA measure is a very powerful tool to help managers pull the appropriate levers to create value. It can indeed accurately assess the contribution of the economic assets that actually drive a business. As noted in the report, in some cases they are tangible assets, in others they are either people or customers.

The CVA measure is an accurate tool for determining priority value drivers and assessing value driver trade-offs. In particular, it is a useful strategic indicator that allows managers to balance the high-level trade-offs between improving profitability versus growing the business. Because its measurement is based on cash flow and original cash investment, it avoids the key accounting distortions that can cause measures such as EVA™ to give misleading trends in capital intensive businesses.
Many clients have also found CVA to be an effective measure for annual incentives at the business unit and operational levels. Moreover, CVA can be easily further broken down into the key performance indicators (KPIs) that are relevant to each management area. KPIs form the basis for internal or external performance benchmarking and for establishing annual incentive targets.

This brief description of value-creation measurement tools does not address the many nuances of applying them effectively. Further information on how to quantify aspirations, tailor the measure to fit your type of business, or identify the highest priority KPIs, can be provided upon request.
Dealing with investors’ expectations

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Dealing with investors’ expectations

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Dealing with investors’ expectations

Notes