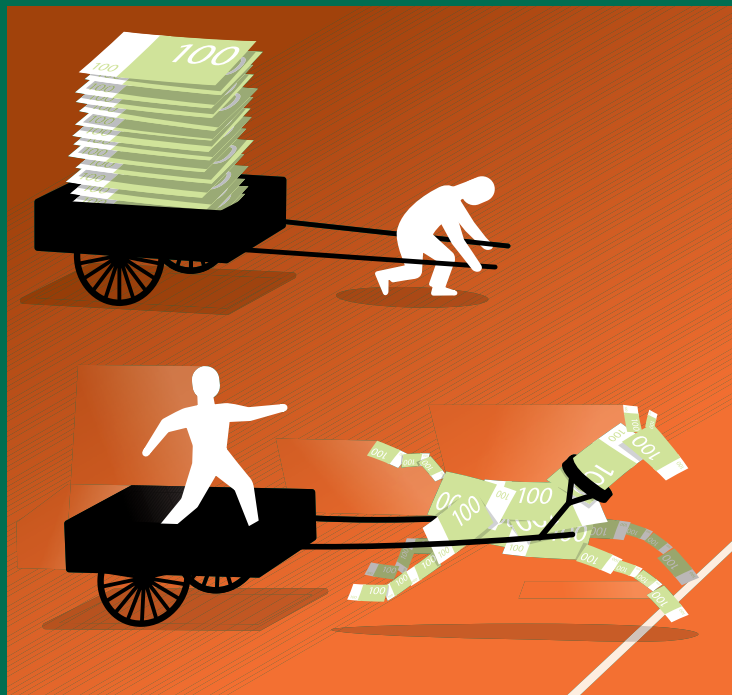


REPORT

THE 2007 VALUE CREATORS REPORT

Avoiding the Cash Trap

The Challenge of Value Creation When Profits Are High



THE BOSTON CONSULTING GROUP

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September 2007

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The financial analyses in this report are based on public data and forecasts that have not been verified by BCG and on assumptions that are subject to uncertainty and change. The analyses are intended only for general comparisons across companies and industries and should not be used to support any individual investment decision.

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Note to the Reader

Avoiding the Cash Trap is the ninth annual report in the Value Creators series published by The Boston Consulting Group. Each year, we publish detailed empirical rankings of the stock market performance of the world's top value creators and distill managerial lessons from their success. We also highlight key trends in the global economy and world capital markets and describe how these trends are likely to shape future priorities for value creation. Finally, we share our latest analytical tools and client experience to help companies better manage value creation.

This year's report addresses a challenge that many global companies currently face: making effective use of record levels of cash flow to optimize near-term and long-term value creation. In the spirit of recent Value Creators reports, we examine this issue in the context of an integrated approach to value creation. And we describe four specific cash traps and how companies can avoid them.

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Executive Summary

Recent trends in global capital markets confront companies with a seeming paradox. Companies are enjoying record profits. And yet, most market forecasters are predicting lower shareholder returns than in the past.

Many industries are generating far more cash than they can profitably invest. Few companies have succeeded in fully deploying the cash they are accumulating on their balance sheets. These cash reserves, often combined with unused debt capacity, have become a drag on near-term total shareholder return (TSR) and are exposing companies to additional risks. We call this situation the *cash trap*.

New players in global capital markets are exacerbating the cash trap. In a quest for higher returns, private equity firms and activist investors are aggressively pressuring companies to improve shareholder value in the near term. As a result, companies' room to maneuver is narrowing. Increasingly, large cash reserves, excess free cash flow, or untapped debt capacity not only depress a company's near-term TSR but also make public companies vulnerable to predatory attack.

Companies face an unavoidable imperative: to create more value in the short term in order to earn the right to create value in the long term. There are times when a company has to focus on the short term in order to maintain control of its destiny. That is the situation today. And yet, at the

same time, executives must not become so focused on the near term that they neglect their company's long-term prospects. The solution is to strike a delicate balance—to invest sufficiently in growth for the long term but in a way that also wins favor from investors today.

No company is immune to the cash trap. The 2007 Value Creators report focuses on how companies can achieve superior value creation in an era of excess cash:

- We start by reviewing in detail the key trends shaping today's capital markets and how they make companies vulnerable to the cash trap
- Next, we describe the role of cash in value creation and, in particular, explain the indirect impacts of decisions about cash on a company's valuation multiple, the most important driver of near-term TSR
- We then examine four specific cash traps and how companies can avoid them
- We also describe how companies can strike a balance between short- and long-term value creation and pursue their long-term plans without being penalized by investors
- Finally, we conclude with extensive rankings of the top value creators worldwide for the five-year period from 2002 through 2006



Plentiful Cash, Modest Value Creation

It's the best of times and the worst of times in global capital markets. Companies enjoy record-high profitability. But forecasted growth in TSR is substantially below that of the recent past. If companies don't figure out how to resolve this paradox, new players will do it for them. Welcome to the cash trap.

The Paradox of “Too Much” Cash

In today's capital markets, many global companies face a seeming paradox. Years of restructuring, offshoring, outsourcing, and low interest rates have strengthened company balance sheets and improved cash flow return on investment (CFROI)—so much so that many companies are producing record levels of cash. In the United States, for example, real earnings per share, adjusted for stock market cycles, have increased by around 25 percent since 2000, while corporate profits as a share of GDP have soared to a record 10.3 percent, the highest level since the early 1960s.

And yet, despite this robust economic health, most market forecasters are predicting modest shareholder returns—with estimated market averages running as low as 6 percent and generally no higher than the long-term historical average of 10 percent. For example, in a recent Morgan Stanley survey of 100 CFOs at Fortune 1000 companies, participants

reported that they expect equities to deliver an average annual return of only 6.6 percent over the next five years.¹

What explains this discrepancy between robust profits and modest expectations for shareholder returns? Many companies are finding it difficult to deploy their growing cash reserves in order to create shareholder value. In last year's Value Creators report, we pointed out that the sustainable growth rate in many industries (that is, the amount of growth that companies could fund with the cash they are currently generating) is considerably higher than the forecasted revenue growth for these industries.² (See Exhibit 1, page 8.) Put simply, in many industries there is too much cash chasing too few organic opportunities. As a result, competition for those opportunities is likely to put pressure on margins, making it even more difficult to create long-term value from organic growth.

Given the constraints on organic growth, more and more companies are turning to mergers and acquisitions (M&A)—witness the heating up of the M&A market in recent years.³ But while acquisitive

1. See “CFO Survey 2006: Sometimes the Little Details Do Matter,” Morgan Stanley, September 28, 2006.

2. See *Spotlight on Growth: The Role of Growth in Achieving Superior Value Creation*, the 2006 Value Creators report, September 2006.

3. For a detailed discussion of current trends in M&A, including the numbers cited in this section, see *The Brave New World of M&A: How to Create Value from Mergers and Acquisitions*, BCG report, July 2007.

growth can be an effective way to create value, increased competition for a limited supply of targets is making growth through acquisition more difficult and more uncertain. Competition for deals today is unusually intense owing to many cash-rich corporate buyers chasing too few targets—a problem that has been exacerbated by a strong trend toward industry consolidation, which has reduced the pool of potential targets. (Consolidation deals as a share of the total value of transactions leaped from 48.7 percent, on average, in 1999 and 2000 to 71.4 percent in 2006.) And while the largest deals (those with a valuation greater than \$1 billion) are growing the fastest, they are also the least likely to create value, especially in the near term.

In response to this situation, many companies have increased dividends and instituted programs to buy back shares in order to give some of their excess cash back to investors. But while such moves are boosting shareholder returns, they haven't really solved the problem. For example, in the U.S. S&P 500, dividends as a percentage of earnings before interest, taxes, depreciation, and amortization (EBITDA) have grown from about 8 percent to just above 10 percent since 2000. But that is still considerably below the long-term historical range of between 15 and 20 percent.

The fact is that relatively few companies have succeeded in fully deploying the cash that they are generating and have been accumulating on their balance sheets. These cash reserves (which, given current low interest rates, typically generate after-tax returns in the neighborhood of around 3 percent) are proving to be a drag on near-term TSR. This drag is exacerbated by the fact that because companies aren't paying out this cash and because growth options, both organic and acquisitive,

are uncertain, investors find it difficult to value the future impact of the cash. Indeed, many worry that it will be used in ways that destroy value rather than create it. We call this situation the cash trap.

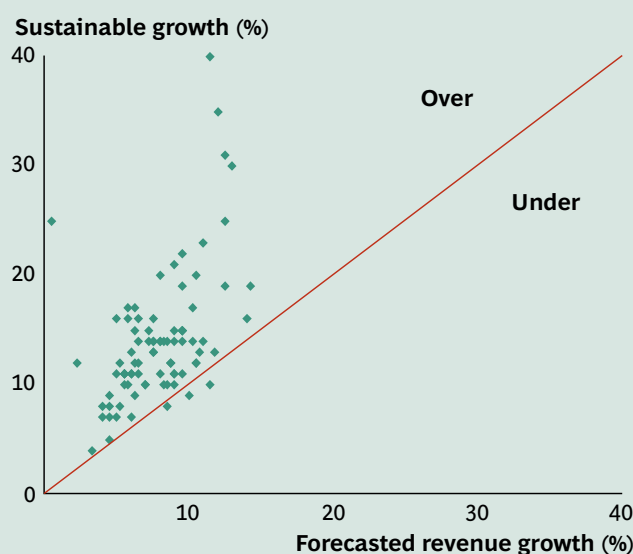
New Players in the Capital Markets

There was a time when the existence of so much cash on company balance sheets wouldn't have been much of a problem. Companies could safely hold their cash in reserve and use it to bankroll future growth. Not anymore. The cash trap is exacerbated by a series of other recent trends in the capital markets.

The relatively low expectations for future market-average TSR are pushing investors to embrace new financial vehicles in search of higher returns. This search has led to the rise of new players in global capital markets. For example, private equity funds are taking advantage of cheap debt and high liquidity to raise money for investment and compete with traditional corporate buyers for acquisitions—in particular, to target major public companies that are not optimally deploying their cash or their debt capacity. Indeed, in some cases, these private equity players are even using the target's cash to pay back the debt they have taken on to acquire the target in the first place. Since 1996, private equity's share of the total volume of M&A deals has jumped from 6 percent to 14 percent, while its share of the total value of transactions has increased even more dramatically, tripling from 8 percent to 24 percent. The total value of private equity deals has soared from \$160 billion

Exhibit 1. The Vast Majority of U.S. Industries Can Fund More Growth Than Markets Can Sustain

Sustainable growth rates versus forecasted revenue growth rates in 85 U.S. industry sectors, 2006



Sources: Compustat; Valueline; BCG analysis.

in 2000, when M&A values and volumes hit record highs, to \$650 billion in 2006. This rapid rise of private equity makes acquisitions more expensive and, therefore, more difficult. And in some cases, it even transforms cash-rich would-be acquirers into attractive targets of private equity firms.

Companies' investors are also becoming increasingly aggressive. So-called activist shareholders are pushing corporate managements to boost their near-term value creation. They are pressuring companies to change their competitive strategies, winning seats on company boards, forcing senior executives to abandon planned acquisitions, pressuring CEOs to resign—and, in some cases, even putting companies into play.⁴

Put simply, in today's capital markets, having large reserves of cash, excess free cash flow, or untapped debt capacity not only depresses a company's near-term TSR but, in some cases, also paints a big target on a company's back, putting it at risk of predatory attack.

Narrow Room to Maneuver

The chief consequence of the cash trap is that a public company's room to maneuver is narrowing. At BCG, we believe in creating value over the long term. And, as we pointed out in last year's Value Creators report, the key to long-term value creation is profitable growth (that is, growth that generates returns above a company's cost of capital).⁵

But sometimes, a company has to emphasize value creation in the short term in order to maintain control of its destiny. Given the realities of today's capital markets, it's no longer good enough simply to decry the short-term focus of investors. Nor is it prudent always to maximize future flexibility for investment in growth. Rather, companies must increasingly use their capital to ensure near-term value creation—in order to earn the right to create value over the long term.

Doing so is a complex challenge. The mismatch between accumulating cash and the relative paucity of growth opportunities creates a structural prob-

lem that can trap companies in an undesirable tradeoff. The recent success of many companies in raising CFROI has led to a situation in which investors expect these high returns to continue. If they don't, many investors would prefer that companies pay out more cash rather than invest in growth.

Because today's investors are skeptical that a company's growth plans will pay off, they tend not to give companies full credit today for investments that management believes will deliver above-average growth in the future. And they react quickly—and negatively—to any signs that reinvestment in growth will erode margins and cause current levels of profitability to decline. Put another way, it's not just unprofitable growth that quickly attracts investor displeasure but growth that is “not profitable enough” (in the sense that it is lower than the company's current level of profitability).

This dynamic confronts companies with a tough dilemma. They can pursue all growth opportunities that deliver returns above the cost of capital, even if those returns erode current profitability—but at the price of being penalized in the short term by investors. Or they can preserve their current profitability by refusing to invest in growth opportunities that, while profitable, will erode current margins—but at the price of systematically underinvesting in long-term growth.

The best way out of this dilemma is for senior management to differentiate their company in the eyes of investors. Executives need to demonstrate that their company has the capabilities, strategic advantage, financial discipline, and realistic opportunities to deliver above-average profitable growth at levels that will create long-term value. Those companies that can successfully make this case to investors in the near term will have earned the right to grow in the long term.

4. See “American Corporate Governance: Hail, Shareholder!” *The Economist*, May 31, 2007; and “Shareholder Activism: Dial L for Locust,” *The Economist*, June 14, 2007.

5. See *Spotlight on Growth: The Role of Growth in Achieving Superior Value Creation*, the 2006 Value Creators report, September 2006.



The Role of Cash in Value Creation

In an environment in which more and more investors are favoring near-term value creation, companies need to understand what drives TSR in the short term. Only by understanding value creation as a dynamic system can they fully grasp the impact of their decisions about how to use cash.

The Impact of Cash on TSR

In recent Value Creators reports, BCG made the case for taking an *integrated* approach to value creation.⁶ We argued that when senior executives define their company's value-creation strategy, it is critical that they understand the linkages and manage the tradeoffs across three dimensions of an integrated value-creation system:

- *Fundamental value*, defined as the discounted value of the future cash flows of a business (based on future growth in margins and sales)
- *Investor expectations*, defined as the differences between stock price and fundamental value and reflected in a company's valuation multiple
- *Free cash flow* that is returned directly to investors in the form of debt repayment, share buybacks, or dividends

These three dimensions are integral parts of a dynamic value-creation system. Changes in any

one can affect the others. The basic challenge of value creation is to understand the linkages among them, anticipate their complex impact on one another, and manage the tradeoffs among them to ensure that management actions are mutually reinforcing rather than contradictory. (For a graphic illustration of the value creation system, see Exhibit 2.)

Within this system, there are three basic options for the use of cash. A company can accumulate cash on its balance sheet. It can reinvest that cash in the hopes of generating additional profitable growth (either through organic growth in its existing businesses or through acquisition). Or it can return the cash to debt holders and stockholders by paying down debt, repurchasing shares, or paying dividends.

Each of these options has a direct impact on a company's TSR. But they also have an indirect impact through their effect on the company's valuation multiple. Take the example of dividends. Investors have expectations not only for a company's capital gains but also for how much free cash flow it ought to distribute. Whether or not a company pays dividends, and at what level, can help determine its valuation multiple. For example, increasing divi-

6. See, for example, *The Next Frontier: Building an Integrated Strategy for Value Creation*, the 2004 Value Creators report, December 2004; and *Balancing Act: Implementing an Integrated Strategy for Value Creation*, the 2005 Value Creators report, November 2005.

dend payout can raise a company's multiple by reducing perceived risk, adding credibility to the quality or sustainability of the company's earnings, and signaling management's commitment to shareholder value. These indirect impacts are especially important in today's environment because, as BCG research shows, improvements in a company's valuation multiple are the largest contributor to near-term TSR.

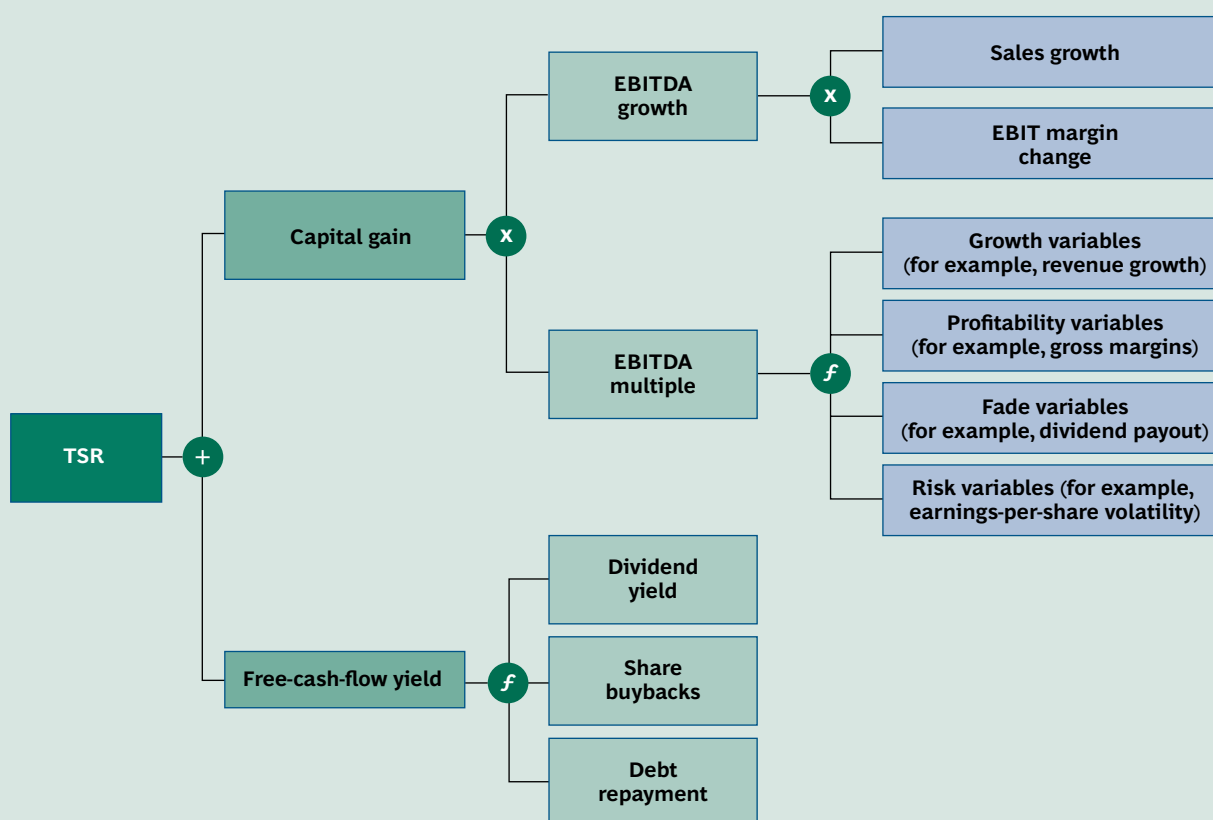
The Drivers of Near-Term TSR

To quantify the relative impact of the various drivers of TSR, BCG developed a model for identifying the contribution of each driver to a company's TSR. (See Exhibit 3, page 12.) This TSR decomposition model uses the combination of sales growth

and change in margins (resulting in growth in EBITDA) as an indicator of a company's improvement in fundamental value. (See box 1 in Exhibit 3.) It then uses the change in the EBITDA multiple—the ratio of enterprise value (the market value of equity plus the market value of debt) to EBITDA—as a measure of how changes in investor expectations affect TSR.⁷ (See box 2 in Exhibit 3.) Finally, it tracks the distribution of free cash flow to capital owners—dividend yield, change in shares outstanding, and net debt change—in order

7. There are many ways to measure a company's valuation multiple, and different metrics are appropriate for different industries and different company situations. In this study, we have chosen the EBITDA multiple in order to have a single measure with which to compare performance across our global sample. (See "Appendix: The 2007 Value Creators Rankings," beginning on page 30.)

Exhibit 2. Companies Must Understand the Linkages and Manage the Tradeoffs Among the Drivers of TSR



Source: BCG analysis.

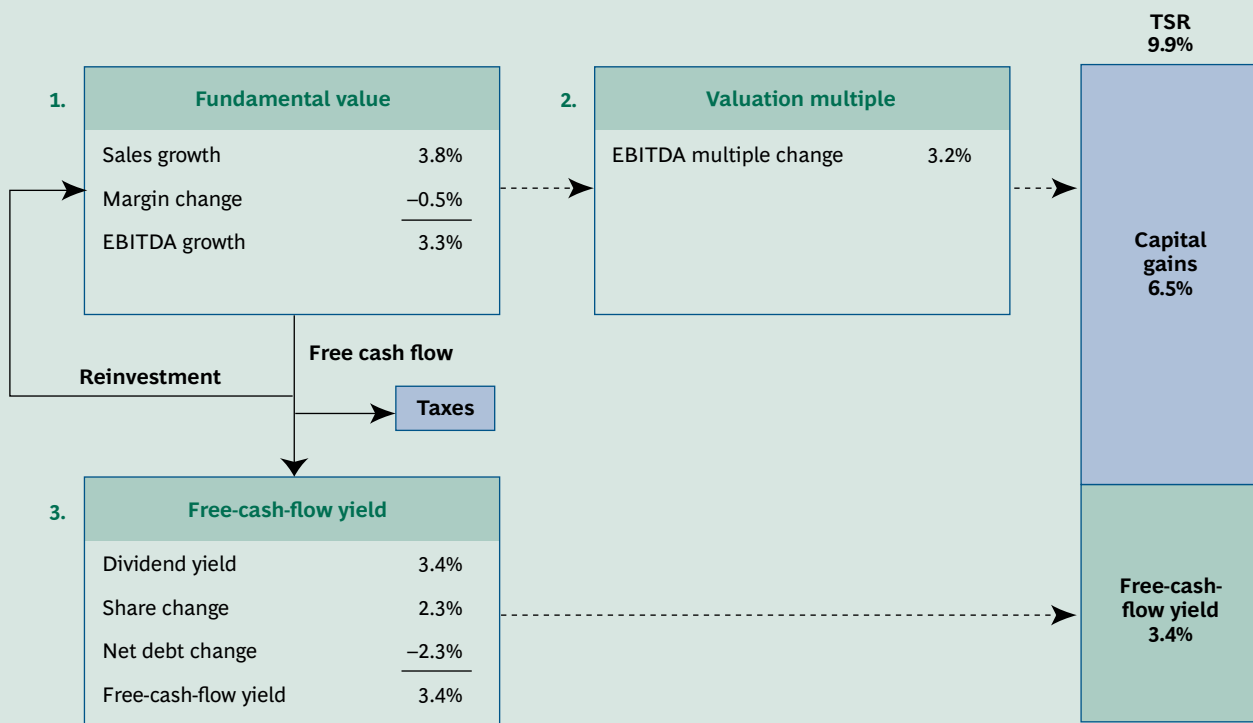
to track the impact on TSR of paying out cash or raising new capital. (See box 3 in Exhibit 3.) Using this model, we can analyze the sources of TSR for an individual company, a peer group of companies, an industry, or an entire market index over a given period.

We used this decomposition model to analyze the TSR performance of top-quartile companies in the U.S. S&P 500 over rolling periods of one, three, five, and ten years from 1988 through 2006. (See Exhibit 4.) The results show that revenue growth is the key source of TSR in the long term for the top performers (accounting for about 60 percent of top-quartile average TSR over ten years). But in the short term, other factors—improvements in margins, increases in free-cash-flow yield, and, especially, improvements in valu-

ation multiples—are far more important. Taken together, these factors account for 72 percent of one-year TSR. And increases in multiples alone account for 39 percent. (The inverse is also true for bottom-quartile performers: massive declines in valuation multiples in the near term wipe out any gains in TSR owing to other factors such as revenue growth and dividend yield.)

This finding makes intuitive sense. It is often difficult to increase profitable revenue growth rapidly. New investments in organic growth, for example, can take as long as three to five years to pay off. And whatever the long-term impact of a company's M&A moves, they are unlikely to create significant value immediately. As a result, top-quartile TSR performers gain far more of their near-term value creation from the other drivers.

Exhibit 3. BCG's Decomposition Model Allows a Company to Identify the Sources of Its TSR



Sources: Thomson Financial Datastream; Thomson Financial Worldscope; Bloomberg; BCG analysis.

Note: This calculation is based on an actual company example; the contribution of each factor is shown in percentage points of annual TSR.

Not surprisingly, these are precisely the drivers that private equity firms and activist investors are focusing on when targeting companies in which to invest. In essence, these new players are looking for opportunities to free up trapped value—for example, by cutting costs to improve margins, returning more cash directly to investors, or making other moves that will improve the company’s valuation multiple in the near term.

Put simply, the clearest sign that a company may have a near-term TSR problem is a valuation multiple that is below that of its industry peers. Indeed, even when a company has what appears to be a relatively strong valuation multiple, it may find that investors believe the multiple could be even higher if management did things differently. Whatever the cause, a weak multiple in the eyes of investors can be a red flag because it signals that a company’s cash deployment, portfolio mix, financial policies, or investor strategy need to change. A weak multiple can even increase the risk of takeover by signaling to competitors that a company looks cheap to buy.

Therefore, it’s essential for company executives to understand how investors see their multiple. Does the current level of the multiple signal a problem that management needs to address? If so, what is the precise nature of the problem and how can the company fix it? Once senior executives understand why their TSR strategy is inadvertently trapping value, they will be in a position to exploit this trapped value themselves.

Understanding Valuation Multiples

Of course, many executives worry about their company’s valuation multiple. In particular, they often believe that their multiple doesn’t accurately reflect the true value of their business plans. But many also assume that there is nothing much they can do to move their multiple. Or even if they do think they can influence it, they assume there is a simple one-to-one correlation between, say, growth

in earnings per share (EPS) and the level of the multiple. Both these assumptions are mistaken. We believe that executives can anticipate the likely impact of their business plans on their company’s multiple, relative to peers. But doing so requires a far more sophisticated and granular understanding of what drives differences in multiples within their industry.

In recent Value Creators reports, BCG described a research technique that we call *comparative multiple analysis*.⁸ (See the sidebar “Tools for Analyzing Investor Expectations,” page 14.) The methodology identifies the drivers of differences in valuation multiples in a specific industry or peer group by analyzing the statistical correlations between observed multiples

8. For a detailed description of this approach, see *The Next Frontier: Building an Integrated Strategy for Value Creation*, the 2004 Value Creators report, December 2004, pp. 29–32; and *Balancing Act: Implementing an Integrated Strategy for Value Creation*, the 2005 Value Creators report, November 2005, pp. 15–18.

Exhibit 4. Change in the Valuation Multiple Is the Chief Contributor to Near-Term Value Creation

Sources of TSR for top-quartile performers, U.S. S&P 500, 1988–2006



Sources: Compustat; BCG analysis.

Note: The sample excludes financial companies. The rolling analysis covers one-, three-, five-, and ten-year periods from 1988 through 2006.

Tools for Analyzing Investor Expectations

There are two steps to assessing the impact of investor expectations on a company's valuation. The first is to quantify those expectations relative to fundamental value. The second is to explain the differences in expectations among the company's peer set. There are techniques for performing these two tasks: one is to calculate a company's *expectation premium*; another is to conduct a *comparative multiple analysis*.

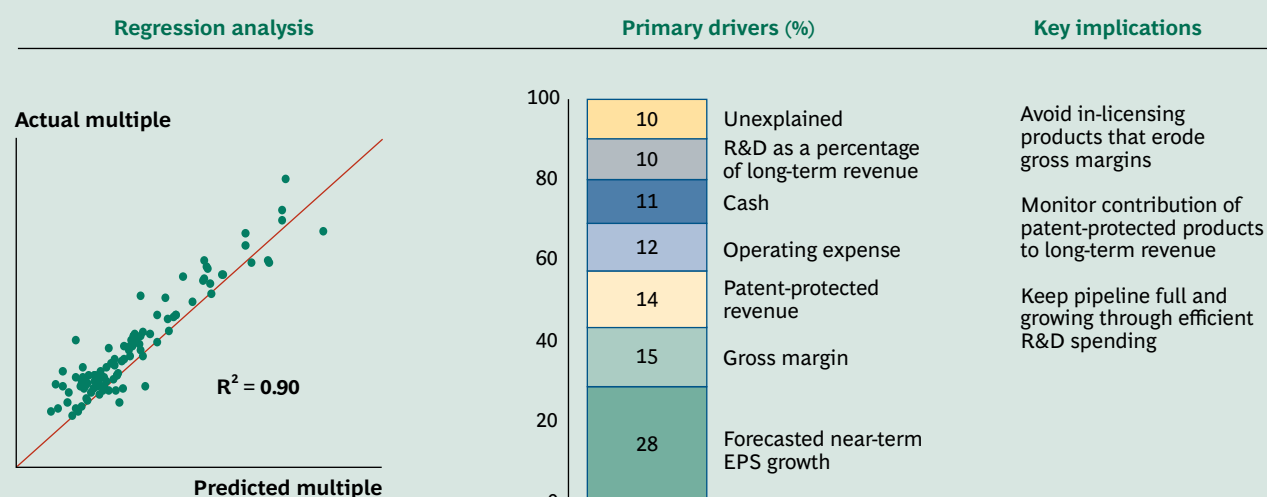
To arrive at a company's expectation premium, we calculate the current value of its businesses (on the basis of margins, asset productivity, and risk) and the future value likely to be generated from those businesses over a given period through profitable investment growth. The difference between the company's actual market value and the value derived from the analysis of its underlying fundamentals is its expectation premium. Expectation premiums quantify the size of the gap between a company's fundamental value and its current market valuation. Quantifying the absolute value of a company's expectation premium can be extreme-

ly useful in helping a company assess whether its current plans will fulfill the expectations that investors have for its future performance. (For the expectation premiums of this year's top performers, see "Appendix: The 2007 Value Creators Rankings," beginning on page 30.)

But the question remains why one company in a given industry has a strong or weak expectation premium relative to its peers. To answer this question, BCG developed comparative multiple analysis, which compares observed multiples within an industry with a broad range of financial and performance data and uses statistical regressions to identify what differentiates multiples among the companies in the industry.

For an illustration of this analysis, consider the drivers that differentiate multiples in the pharmaceutical and biotech industry. (See the exhibit below.) The scatter plot on the left shows that the correlation between the multiple predicted by the statistical analysis and actual observed multiples in the

Relatively Few Drivers Explain Most of the Differences in Multiples in Pharmaceuticals and Biotech



Sources: Compustat; BCG analysis.

Note: The scatter plot charts actual multiples for 16 pharmaceutical and biotech companies over a six-year period (2001–2006) against the predicted multiples derived from the regression analysis. R^2 stands for multiple regression correlation coefficient.

industry is a strong 0.90 percent. In other words, the model explains a full 90 percent of observed differences among multiples. The bar chart in the center of the exhibit shows the various weighting of the primary drivers of industry multiples. Among the most important: a company's forecasted near-term EPS growth and its gross margin. But others are important as well—for example, the percentage of revenue

coming from patent-protected products. The column on the right of the exhibit lists the key implications for pharmaceutical and biotech companies that follow from this analysis. By identifying the precise drivers of multiples in a specific industry or peer group, this approach enables managers to understand their company's multiple relative to peers and to anticipate the impact of their actions on it.

and a broad range of financial and other performance data. In recent years, we have done hundreds of these analyses for clients in many different industries and sectors. This work suggests that a relatively small number of factors can explain anywhere from 80 percent to 90 percent of the differences in multiples among peers and over time.

Although the specific factors that are most important vary substantially by industry, they tend to cluster into four broad categories: growth, profitability, fade, and risk. The first three represent how investors assess the likely stream of cash flow that a company can generate for the foreseeable future. The fourth determines the rate at which investors think this future stream of cash flow should be discounted to arrive at a present value today. Let's look at each of these categories in turn.

Growth. Many executives assume that revenue growth (and its resulting improvement in EPS) always has a positive impact on a company's valuation multiple. In fact, it depends on the industry. In some high-growth industries such as software, for instance, revenue growth is indeed a key differentiator among company multiples. But in pharmaceuticals and biotech, where patent expirations and new-drug launches can make revenue growth volatile, the amount of R&D spending as a percentage of revenue is a much better indicator of a company's long-term prospects for value creation. In highly capital-intensive industries such as pulp and paper, by contrast, asset growth is far more important (primarily because revenue growth varies with the business cycle). Finally, in industries in which strong brands matter, such as consumer goods, the

strength of a company's gross margins is far more important than any type of growth, including revenue growth.

Profitability. The reason a profitability driver such as gross margins is so important in consumer goods is that success in this industry depends on a company's pricing power—whether derived from strong brands, intellectual property, or other drivers of market-share strength. Strong gross margins indicate that every dollar reinvested will carry a high expected return on investment (ROI) that will distinguish a company from those that may have equivalent growth but at considerably lower margins. Another key profitability metric in many industries is operating expense as a percentage of revenue. A low operating expense represents how efficient a company's marketing and distribution activities are. Investors view it as a signal that a company is likely to maintain a higher return on new investments in the future.

Fade. Fade represents the confidence investors have that current levels of growth or profitability can be maintained in the future. For example, in consumer goods, gross margins are not only a measure of high profitability but also a sign that underlying brand strength makes erosion of that profitability less likely over time. In industries like pulp and paper, in which scale is a key component of competitive advantage, company size relative to peers can be a strong indicator of a low propensity to fade. In pharmaceuticals, by contrast, the key defense against fade is the percentage of revenue coming from drugs with more than five years remaining in their patent life.

Risk. The relative riskiness of a company's future cash flows also affects valuation multiples. The greater the risk, the more likely that investors will discount a company's valuation. But here too, the specific metrics that signal risk vary from industry to industry. In some sectors such as pulp and paper, a relatively high debt-to-capital ratio is a sign of riskiness because debt exacerbates the cyclical-ity of revenues, which can lead to significant losses during downturns. In high-growth sectors such as software and biotech, by contrast, debt-to-capital ratios do not show up as a key risk differentiator because companies in these sectors are financed primarily by equity. What matters most from a risk perspective in these industries is having enough cash on the balance sheet to ensure funding R&D for the next generation of products. And in many industries, higher dividend payouts reduce risk because having a guaranteed portion of TSR coming from dividend yield reduces the volatility of returns to investors.

But while the specific factors driving valuation multiples are different in every industry, there are some broad trends that are having an impact today across all industries. In particular, concerns that companies will use their accumulated cash to invest in growth that does not create value have made investors particularly sensitive to any signs of fade in a company's current profitability or of increased risk as a result of pursuing growth. Today's investors tend to discount the valuation multiples of companies that, in their view, are likely to re-invest too much cash relative to the opportunities they have or that lack the internal disciplines necessary to ensure that invested cash is spent wisely.



Four Cash Traps— and How to Avoid Them

A valuation discount represented by an inappropriately low multiple is a strong sign that a company may be suffering from a cash trap. But even companies that enjoy a relatively high valuation multiple need to take extra care not to fall into a cash trap that will erode their multiple in the future. The precise causes of a cash trap can vary, so companies must dig deeper. In this section, we examine four situations in which the misuse of cash can have a major negative impact on a company's near-term TSR.

The Lazy Balance-Sheet Trap

Many senior executives remember a time in the 1980s and 1990s when having a strong balance sheet and a high credit rating were signs of financial strength. They reduced risk, increased flexibility, and were looked on favorably by investors. Often, a premium valuation multiple was the result.

More recently, however, the perceptions of investors have changed. In today's far more modest TSR environment, investors are putting greater emphasis on how companies can boost their near-term value by optimizing the generation and use of free cash flow and other capital resources. Seen from this perspective, what previously looked like a strong balance sheet is increasingly viewed as a *lazy* balance sheet—that is, one that underexploits a company's assets, either by holding too much

cash that is earning low rates of return or by having too little debt.

For many investors today, a lazy balance sheet is a signal that a management team is maximizing flexibility to a fault, avoiding commitment to a clear course of action, and not focusing on a strategy to deliver maximum TSR. These investors are urging companies to monetize balance sheet strength, either by taking on more debt and paying the cash out to investors (so-called leveraged payouts) or by using ongoing free cash flow to fund more cash payout today—in lieu of preserving the flexibility to fund growth plans that may well exceed the underlying growth rates of the markets that companies serve.

This approach may seem dangerously shortsighted. And yet, in the current environment of high profitability and relatively few growth opportunities, it has a compelling logic. There are high opportunity costs to hoarding cash or reserving debt capacity on the balance sheet in order to maximize future flexibility. The math is quite simple: it is not uncommon today for a company to carry cash and excess debt capacity equivalent to as much as 20 to 30 percent of its market capitalization. Assuming after-tax returns on cash or cost of debt in the neighborhood of 3 to 4 percent and market-average returns of 10 percent (that is, what an investor could get in an index fund if he or she had access to the cash), the opportunity cost of that excess cash and low debt is in the range of 6 to 7 percent. That

opportunity cost has a negative impact on annual TSR of one to two percentage points, on average, which over ten years is equivalent to the difference between top-quartile and average performance.

This lost value explains why investors are pushing companies to give back more cash and take on more debt. Their view is that a company can always get access to funds, whether debt or equity, to fund organic growth or acquisitions, so there is no sound reason to carry a lot of cash on the balance sheet. And often, they worry that companies that build up unused funding capacity will at some point feel self-imposed pressure to use it for acquisitions that are higher risk or lower return than other ways of using the cash.

In effect, investors want companies to operate much closer to the edge of preserving balance sheet quality than in the past. Today, strong balance sheets, high credit ratings, and excess cash-flow generation are viewed more as near-term opportunities to exploit rather than as long-term strengths that may add value sometime down the road (but not today). Unless a company responds to these concerns, it is likely to pay a price—in the form of a weak valuation multiple, lower stock price, and perhaps even takeover pressures.

It is precisely their use of debt to leverage returns to equity owners and to discipline the operations of their acquisitions that accounts for a large part of the returns that private equity players have been able to achieve. It's unlikely that public companies will be able to leverage up as much as private companies do and still retain a risk profile that traditional institutional investors will tolerate. But many companies can increase their leverage to a degree that is still consistent with their investors' priorities and then use that cash to repurchase shares or pay a special dividend.

This is not to say that a cash cushion is never appropriate. There are some practical reasons why a company would want to preserve some excess cash or debt capacity as part of its overall TSR optimization strategy. For instance, paying for an acquisition with cash allows a company to act quickly on a potential deal. Using equity to buy a company

generally involves a much longer approval process than using cash does.

Avoiding the lazy balance-sheet trap will require executives to manage a new and unfamiliar trade-off: maximizing cash payout in the near term while preserving enough flexibility to take advantage of long-term growth opportunities. It's important to assess carefully how much flexibility a company genuinely needs and take into account that investors' opportunity cost of capital is the same, whether that capital takes the form of equity, debt, or cash. There is no simple recipe applicable to all companies. Each one needs to decide the right balance, on the basis of its TSR aspiration, its particular set of growth opportunities, the level of its valuation multiple, and the priorities of its investors.

The Reinvestment Trap

Another potential source of a cash trap is how companies reinvest in their current businesses. Investors are increasingly concerned about a company's reinvestment efficiency. They worry that in an environment characterized by too much cash chasing too little growth, companies will not be disciplined enough in ensuring that their capital investments create more value than alternative uses of the cash. This uneasiness is exacerbated by the fact that investors often lack clear insight into where and how companies intend to use their investment dollars.

There are many ways in which a company's reinvestment plans can make it vulnerable to a cash trap. For example, it may get the balance wrong between the amount of cash it reinvests in its current businesses and the amount it returns to investors. Such an imbalance happens when a company invests too much relative to its realistic growth prospects, when high profitability or excess cash leads to too-high spending on corporate functions such as IT, or when a company lacks the internal planning disciplines that allow corporate managers to say "no" when powerful business-unit heads ask for more cash than they can profitably employ.

But even when a company gets the balance between reinvestment and cash paid back roughly

right, its TSR can suffer if it misallocates reinvestment across the businesses in its portfolio. Many companies, for example, allocate investment capital far too “democratically,” by spreading it more or less equally across their portfolio of businesses—despite each business unit’s varying growth prospects or differing contributions to TSR. In other cases, they may give some businesses (often those with the biggest problems) more capital than others—but with little direct linkage to their actual value-creation potential.

Finally, companies can suffer from a reinvestment cash trap even when they invest in opportunities that do generate profitable growth if there is a misalignment between the kind of growth they pursue and the priorities of their investor base.⁹ Different types of investors have different priorities for TSR, different appetites for risk, and therefore different expectations for growth. Depending on which investor types dominate a company’s investor mix, there can be a disconnect between a company’s growth plans and the priorities and expectations of investors. If so, the company is unlikely to realize the value from these plans that executives expect. Investor misalignment is especially common for companies that have a so-called bimodal portfolio that combines high-growth businesses and value businesses, which attract fundamentally different types of investors with conflicting performance goals. Often, a company’s stock suffers a systematic discount as a result.

Inefficient reinvestment strategies are an invitation for increased pressure from outsiders. Traditionally, many management teams have championed long-term investments in businesses to turn them around or increase their growth potential. Senior executives are often loathe to cut off funding in order to boost near-term cash flow. Instead of optimizing value today, they focus on building the best future for each business owned by the company.

But activist investors and private equity acquirers are pushing companies to take a more objective and disciplined approach to reinvestment. They are less concerned with long-term results when short-term value creation can be enhanced. And, unlike

a company’s senior executives, they have no ties to legacy thinking inside the company, no personal preferences for specific businesses in the portfolio, and no personal relationships with managers of those businesses. Outsiders believe (rightly or wrongly) that they can quickly adjust reinvestment priorities to create near-term value.

Avoiding a reinvestment trap requires executives to think more like outsiders in evaluating a company’s reinvestment plan. And yet, at the same time, they must make sure that they do not go as far as undermining the company’s long-term capacity for growth. A key step is to define a clear role for each business in the company’s overall TSR strategy. And executives must make sure that resource allocation is aligned with an overall TSR goal and the priorities of investors that currently own the company’s stock.

The M&A Trap

Given the constraints on growing organically, many executives have turned to M&A to find alternative sources of growth. They tend to cite two reasons why acquisitions are a good way to increase near-term TSR. First, as long as the acquisition provides an ROI greater than the return on marketable securities (currently around 3 percent), it is a more productive use of cash or debt capacity. What’s more, when acquisitions are *EPS accretive*—that is, when they add to a company’s EPS—they raise a company’s stock price (assuming, of course, that the valuation multiple does not fall as a result of the deal).

Unfortunately, this logic is misleading, and if a company isn’t careful, it can be yet another pathway into a cash trap. Just because an acquisition provides returns better than the after-tax interest rate that the acquirer was earning on the cash used to fund the deal does not necessarily mean that the returns wouldn’t be even better from some alter-

9. For a more detailed discussion of this subject, see “How Investors Value Company Growth Initiatives” in *Spotlight on Growth: The Role of Growth in Achieving Superior Value Creation*, the 2006 Value Creators report, September 2006, pp. 17–18.

native use of that capital. Assume for the sake of argument that a proposed acquisition would generate an ROI of, say, 6 percent—double the return of keeping the cash in marketable securities. But that return is still considerably below investors' cost of capital (currently in the neighborhood of 10 percent), which a company could deliver—and at significantly less risk—by using the excess cash to increase payout instead of funding an acquisition.

Finally, the fact that a particular deal may be EPS accretive does not necessarily mean that it will improve a company's TSR. Here, the key consideration is the impact of the deal on the acquirer's valuation multiple. There are situations in which a deal can increase EPS, but because it causes the acquirer's multiple to decline, it ends up *eroding* TSR. By the same token, deals that dilute EPS in the near term but increase the acquirer's multiple can turn out to improve TSR over the long term. Only when executives start evaluating potential acquisitions not only in terms of earnings but also in terms of their comprehensive impact on the entire value-creation system will they be able to assess whether a particular deal really makes sense or not.

Take the example of a CEO of many years at a consumer goods company who had pursued an acquisitions strategy of buying up a collection of low-tier brands. The brands were growing slowly and had relatively poor margins. But the CEO bought them because they were cheap and added to EPS in the first year of their acquisition.

However, there were large hidden costs to the CEO's acquisitions strategy. Because the company was trading at a relatively high multiple, investors were expecting both high revenue growth from current products and improved gross margins. Although the new brands did increase revenue at the time of the deals, they actually diluted the company's average organic growth rate and average margins, causing investors to punish the stock and drive the valuation multiple down. As a result, there was no improvement in the company's TSR.

Eventually, the board replaced the CEO responsible for the failed TSR strategy. The new CEO also pursued acquisitions, but of a very different kind.

He focused on high-margin and high-growth companies. Although these deals diluted EPS initially, they improved the gross margins of the company and increased profitable growth. Investors rewarded the moves and the company's valuation multiple rose to record levels—which more than offset the effect on TSR of the near-term EPS dilution.

A company can avoid an M&A cash trap by comprehensively assessing the TSR impact of potential acquisitions—that is, their effect not only on earnings or profitability but also on the valuation multiple and free-cash-flow yield. Will the valuation multiple rise or fall as a result of this deal? Is the company's cash or debt capacity better used for this deal or for paying out cash to investors?

The way to develop informed answers to these questions is, first, to develop a base-case financial forecast of the future TSR that a company's current plans will deliver—before any deals are considered and, for the sake of argument, assuming that any excess cash is paid out to investors. Once this base case is fleshed out, the next step is to quantify the TSR impact of using cash, debt, or shares to fund a particular acquisition—given the expected financial performance of the target, the likely synergies, and the estimated price required to win the deal. If the resulting TSR is above that of the base case, then the deal makes economic sense.

This approach has two important benefits. First, it ensures that all drivers of future TSR are taken into account—not just EPS—and assesses a deal against alternative uses of capital. Second, it puts the TSR impact of the proposed transaction into a useful risk-reward context. If the base-case TSR for the acquirer is already high, then deals that don't improve it much but carry a lot of uncertainty or risk of execution become less attractive. Conversely, if the base-case TSR is low, then more risk may be warranted and acquisitions become a higher priority.

The Share Buyback Trap

Most of the discussion so far has focused on the choice of accumulating or reinvesting cash versus

paying it out to investors. But even when a company decides to take the latter route, it can face a cash trap because of the way it returns that cash. The usual debate at most companies is whether to use excess cash flow to increase dividends or to repurchase shares. Indeed, many companies have done both—but without understanding fully their differing impact on TSR.

It's important, first, to make a distinction between one-time distributions of cash flow and ongoing annual programs. When a company has accumulated cash on the balance sheet and wants to make a one-time payment to investors, the only reason to choose one form of payment over another is if it has a tax advantage. One-time distributions, whether in the form of a special dividend or share buyback, increase TSR in the short term. But they have a relatively minor impact on a company's valuation multiple. Ongoing distributions funded out of annual excess cash flow, by contrast, can affect a company's multiple substantially because they have the potential to signal to investors that a company is confident about the long-term health and quality of its earnings. But when it comes to these ongoing distributions, whether a company chooses dividends or share buybacks can make an enormous difference in terms of the precise impact.

In our experience, many executives prefer share buybacks because, unlike dividends, buybacks boost EPS above the level that underlying organic growth in net income would on its own. Executives believe that boosting EPS growth raises the valuation multiple and increases TSR. What's more, their incentives are often tied directly to EPS growth, and the value of their stock options depends on appreciations in stock price, not on increases in dividend yield. Finally, an additional perceived benefit of share buybacks is that, unlike dividends, ongoing share-repurchase programs can be reduced or halted at any time the cash is needed for opportunistic growth investments.

But as our analysis of the drivers of valuation multiples makes clear, EPS growth is not necessarily a differentiator of multiples. And even when it is, investors are extremely sensitive to *how* the EPS is delivered. Increased EPS from share repurchases,

which may end up being discontinued the moment a company wants to use the cash for some other purpose, is unlikely to change investors' estimates of long-term EPS growth for a company or induce them to award the company with a bigger multiple. BCG research demonstrates that dividends have a far more positive impact on a company's valuation multiple than share repurchases do. Indeed, in many cases, buybacks can actually *reduce* a company's multiple in the near term.

We conducted an extensive event study comparing the impact of increases in dividend payout (as a percentage of net income) with that of annual share-repurchase programs. The study consisted of two samples drawn from the U.S. S&P 500 and S&P MidCap 400. The first sample contained 107 companies that had announced an increase in their dividend payout ratio. To qualify for the sample, a company had to have an existing dividend payout ratio of at least 10 percent of net income preceding the announcement and then had raised that ratio by at least 25 percent. The second sample consisted of 100 companies that had announced an increase in their share repurchases. To qualify for this sample, a company had to have a share repurchase ratio of 10 percent of net income in the 12 months preceding the announcement and then had increased its share repurchases by a minimum of 25 percent in the subsequent four quarters.

Exhibit 5 on page 22 portrays the average impact of these moves on valuation multiples for the bottom quartile, median, and top quartile of the two samples. As the exhibit illustrates, dividend increases improved company valuation multiples across the full range of companies in the dividend sample—by 28 percent on average and by a full 46 percent for top-quartile companies. By contrast, share buybacks actually eroded multiples on average, giving the average company in the dividend sample an overall advantage over the average company in the share repurchase sample of 33 percent. And even the top-quartile companies in the buyback sample improved their multiples by only 16 percent—about one-third the improvement in valuation multiples enjoyed by top-quartile companies in the dividend sample. The evidence is overwhelming that increased dividend payout raises a compa-

ny's valuation multiple, and therefore its near-term TSR, whereas annual share-repurchase programs often result in a decline in multiples that dilutes their impact on TSR relative to dividends.

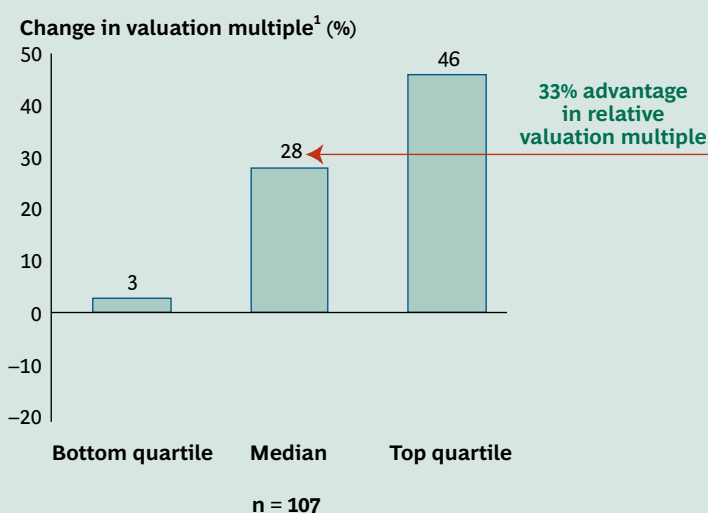
These research results have been confirmed by interviews with hundreds of major institutional investors. The consistent message during these interviews was that investors have a strong preference for dividends over share repurchases. While executives like the flexibility of share buybacks, scaling them back whenever they see alternative uses for the cash (for example, M&A), investors like the certainty of dividends. It's the rare situation when a company raises its dividend only to decrease it in subsequent years. Because dividends are certain and share repurchases are not, investors value dividends more.

The fact that investors favor dividends also means that dividends provide companies with another ad-

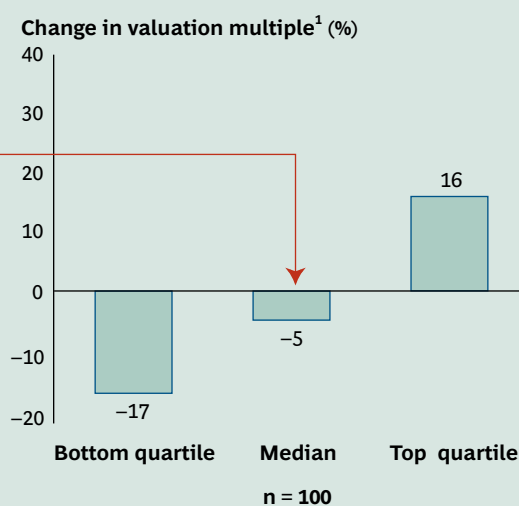
vantage over share buybacks. Buybacks reward current investors—and, specifically, those who want to get out of the stock. Dividends, by contrast, not only reward current investors but can also attract new investors to a company's stock. Many investment funds set dividend-yield targets as a key part of their portfolio strategy. For example, one large family of U.S. funds has a rule that every portfolio must deliver an average dividend yield that is at least equal to that of the U.S. S&P 500. For every company in the portfolio providing dividend yields below that average, the fund manager must compensate with other companies that provide dividend yields above it. What's more, a company's dividend yield is highly visible when investment funds are doing screens and evaluating stocks. Dividend yield is a metric that financial markets track daily, and it is an obvious trigger for identifying new companies for investment. Put simply, dividends tend to attract more new investors than share repurchases do.

Exhibit 5. Dividend Increases Improve Valuation Multiples More Than Share Buybacks

Impact of dividend increases on relative valuation multiples, U.S. S&P 500 and S&P MidCap 400, 2001–2005



Impact of share buybacks on relative valuation multiples, U.S. S&P 500 and S&P MidCap 400, 2001–2005



Sources: Compustat; BCG analysis.

Note: The dividend sample includes all U.S. S&P 500 and S&P MidCap 400 companies that had a dividend-payout ratio of at least 10 percent of net income and that raised their dividend-payout ratio by at least 25 percent. The share buyback sample includes all companies from the two indexes that had a buyback-payout ratio of at least 10 percent of net income in the 12 months preceding a share-buyback announcement and that increased share repurchases by at least 25 percent in the subsequent four quarters. Both samples exclude companies with price-to-earnings ratios (P/Es) greater than 150 percent of the U.S. S&P 500 average or at which EPS growth was less than zero (in order to exclude companies with P/E increases caused by lower earnings).

¹This is the change in P/E ratio relative to the U.S. S&P 500 average over the two quarters following the dividend or buyback announcement.

For many executives, the high value put on dividends takes some getting used to. In the high-growth capital markets of the 1980s and 1990s, investors and executives alike tended to view high dividend yield as a failure of management to identify and invest in profitable growth opportunities. But times and priorities have changed. Institutional investors today have lower expectations for how much growth companies can deliver. They are—often, quite reasonably—skeptical of companies that embrace double-digit growth agendas at a time when industry average growth rates are significantly lower. What’s more, they recognize that senior executives and boards do not increase dividend payout without high confidence that it can be maintained and that only management with a full commitment to shareholder value and savvy about the drivers of TSR will do so. Those attributes define the management teams that investors want to bet on today.





Balancing the Short Term and the Long Term

In this report, we have argued that recent trends in the capital markets have caused investors to focus on near-term value creation and that companies have to respond or risk disappointing investors—and perhaps even losing control of their destiny.

But that doesn't mean that companies can neglect the long term. BCG believes strongly in the imperative of long-term value creation. And as our analysis in Exhibit 4 illustrates, the key to creating value over the long term is profitable growth. If a company focuses on immediate pressures to the neglect of developing future growth platforms, it risks undermining its ability to create value in the future. In such a situation, the ultimate result of the cash trap is to damage a company's future ability to generate cash. The solution is to achieve a delicate balance—to invest sufficiently in growth for the long term but in a way that also wins favor from investors today.

Aligning Growth with Investor Expectations

The first step is to make sure that a company's plans for growth are well aligned with the priorities and expectations of its investors. Remember: these expectations will drive a company's valuation multiple, relative to peers, which is the key driver of short-term TSR and an important enabler of—or

constraint on—a company's long-term value-creation strategy.

One source of misalignment is the difference in how executives and investors assess future growth opportunities. Most managers evaluate the potential of a growth initiative incrementally—that is, whether it adds to EPS today or has a positive net present value (NPV), given reasonable assumptions about future cash flows and likely risks. But investors tend to focus not just on EPS or on standalone NPV but on how a company's growth initiatives fit in with their view of its overall TSR profile. In other words, a specific initiative may deliver returns above a company's cost of capital, but if the return is less than the average return being earned by existing investment, it will erode that average and, therefore, may disappoint investors, who will punish the company's multiple as a result. This is especially the case in today's environment in which investors are sensitive to any indication that current high levels of profitability are being undermined by companies that are over-investing in order to compete for limited growth opportunities.

Another source of misalignment is that different types of investors have different expectations for growth. For example, value investors tend to reward increasing the payout of free cash flow over growth. Growth-at-reasonable-price (GARP) investors, by contrast, favor stable, low-risk EPS growth. And growth investors target revenue growth great-

er than 15 percent. Unless a company's growth strategy corresponds to the priorities of the specific groups that dominate its investor mix, it will not realize the value from its strategy that executives expect.

To address such misalignments, a company must develop a comprehensive understanding of exactly who owns its shares and engage its dominant investors in a give-and-take dialogue. It is important, first, to quantify the mix of investor styles in the company's stock-ownership portfolio in order to determine which groups are overweighted compared with market, industry, or peer-group averages.

Once the dominant investors have been identified, management should take the time to develop an in-depth understanding of these investors' perspectives on and requirements for the company. Fair disclosure rules may limit the depth of information that management can share with these investors. But there is no law against asking investors good questions and listening carefully to their answers. Do current or desired investors find the company's growth plans credible? Are those plans in sync with their priorities? Savvy investors have strong—and often extremely well informed—views on such questions.

The purpose of this exercise is not to let investors dictate the company's strategy. Rather, the goal is to be responsive to their perspectives and priorities, as well as to educate them about the strategic logic underlying the company's long-term business plans.

For an example of how a company can recover from a misalignment with investors, consider the recent experience of a U.S. consumer-goods company. From 2000 to 2005, the company's valuation multiple was consistently at the bottom of its peer group—even though the company was one of the largest and most profitable in its industry. The company's executives assumed that the problem was a perceived lack of growth, so they began to communicate aggressive growth targets and to accumulate cash on the balance sheet in order to fund that growth.

But the sources of the company's valuation discount were different from what its senior executives thought they were. Interviews with the company's investors showed that the dominant category was value investors who did not reward aggressive growth and who worried that the company would spend too much on risky or unprofitable growth instead of using its strong balance sheet to increase payouts to investors. A quantitative analysis of peer-group multiples confirmed these findings. The analysis showed that while high profitability was critical, dividend payout was also an important driver of the differences in valuation multiples among companies. By contrast, revenue growth was not that important.

Company executives didn't abandon their long-term plans for growth. But in light of these findings, they realized that their near-term growth targets needed to be scaled back. They started emphasizing profitability and the generation of free cash flow in the company's communications with investors—and at the same time substantially increased dividend payout to return more cash directly to investors. And in a dramatic move, they also announced the divestiture of a core business with low returns and low growth that they had struggled unsuccessfully for years to turn around and that had become a serious drag on the company's overall portfolio.

The impact of these moves on the company's stock price has been extraordinary. Since December 2005, the company's price-to-earnings ratio has grown by 50 percent. Its TSR has outperformed that of its peer group by more than 20 percent and the U.S. S&P 500 by roughly 35 percent. And its market capitalization has nearly doubled, despite the divestiture of a major business unit.

Even more important, the company's improved performance has attracted a new segment of GARP investors, largely replacing its traditional base of value investors. This migration of its investor base has better positioned the company to be rewarded for its long-term growth strategy. Recently, the company has embarked on an acquisition plan to add some new high-growth businesses to its portfolio.

Demonstrating Cash Discipline Through Efficient Capital Allocation

Even if a company's growth plans are well aligned with its investors' priorities, those investors will punish the company's TSR in the short term if its growth investments are not well managed. Investors need to trust that a company's management will be good stewards of their capital. An executive team can win that trust by addressing three key areas that are often the focus of intense investor concern.

First, company executives need to ensure strict and efficient capital allocation, in which resources are appropriately matched against the most value-creating opportunities. At the least indication investors pick up that a company is allocating capital among its businesses too democratically or without any correlation with the potential of businesses to create value, they will punish the company for a lack of cash discipline.

To avoid this outcome, it's important to define a clear role for each business in the company's overall TSR strategy. Which businesses will function as the company's growth engines and, therefore, will receive the lion's share of investment? Which businesses will be steady cash generators and receive a fair share of reinvestment to maintain their current level of operations, but not aggressively expand? And which are candidates for milking or exit and receive the bare minimum of capital to preserve the existing value? Many companies know the answers to these questions. Relatively few, however, let the answers actively drive their resource allocation.

Second, a company must actively manage its portfolio of businesses. In today's more difficult TSR environment, no company can be successful when it has the albatross of low-CFROI businesses hanging around its neck. Executives need to be hard-nosed about either turning around such businesses or getting them out of the portfolio fast. And those businesses that remain need to be managed for

long-term strength in a manner that protects and builds competitive advantage.¹⁰

Finally, the company must incorporate the principle of strict cash discipline into its management processes such as planning, budgeting, target setting, and incentives. For example, incentives for business unit managers should be designed to capture the impact of reinvestments on their business unit, not just on the company as a whole. And at the corporate level, all requests for additional capital coming from business units need to be justified on the basis of their contribution to TSR, not simply on their impact on EPS—or even on stand-alone NPV.

Expanding Growth Opportunities

Given the constraints on growth in their core markets, many companies will also need to look for new ways to create growth. Identifying new opportunities for growth has the advantage not only of creating more profitable outlets for deploying excess capital but also of establishing more rigorous internal competition for company resources (thus contributing to increased discipline around capital allocation). There are at least three places a company can look for new growth opportunities.

Innovation. One essential way to expand a company's opportunities is to improve its capacity for innovation. Given the current mismatch between cash available to fund growth and most companies' growth opportunities, it should be no surprise that more and more companies are focusing on innovation. For example, in a BCG survey of senior executives at global companies, the vast majority of respondents (more than 90 percent) considered organic growth through innovation necessary for success in their industry, a full 72 percent ranked it

10. BCG has a long history of insight into portfolio management. For a broad introduction to BCG's strategy concepts, see Carl W. Stern and Michael S. Deimler, eds., *The Boston Consulting Group on Strategy: Classic Concepts and New Perspectives* (Hoboken: John Wiley & Sons, Inc., 2006).

as one of their top three strategic priorities, and 40 percent said it was their top priority.¹¹

They are right to make it so. Innovation translates into superior long-term value creation. The 25 most innovative companies (as defined by our survey respondents) had a median annualized return of 14.3 percent from 1996 through 2005—a full 300 basis points better than the S&P Global 1200 median.¹²

Megatrends. Another important way for a company to expand its growth horizons is to understand the impact of what we call *megatrends* on the current—and future—portfolio. Megatrends are very long-term social, economic, or demographic changes that are likely to have a transformational effect on business across a wide range of industries. Examples might include the rise of China as a major industrial power, rapid urbanization, global warming, increasing energy scarcity, or the revolution in the life sciences. Many executives, of course, are familiar with these trends. But relatively few have thought through the specific second-order implications for their business.

Such megatrends will decisively redraw the map of opportunity in many industries. Those companies that are able to figure out how to exploit them are likely to be the winners—and value creators—of the future. When companies carefully examine the implications of these megatrends for their capabilities and core business positions, they are often able to define evolutionary pathways for those businesses, as well as identify entirely new areas of opportunity that will be important sources of future growth.

Acquisitions. Finally, for many companies, building long-term growth platforms will almost certainly involve a plan for more actively creating value through M&A. Experienced acquirers consistently outperform companies that limit themselves to organic growth strategies or that pursue acquisitions only occasionally.¹³ In our experience, successful acquirers manage M&A like they do any other business process. Among the key components are a compelling strategic logic, rooted in a detailed understanding of the competitive dynamics of a company's industry and the company's value-creation

opportunities and challenges; a rigorous process for valuing potential targets; clear structures for M&A process management; and systematic postmerger integration.¹⁴

Only when a company has this full set of capabilities in place will it be likely to create enduring value through acquisition. If M&A needs to become a critical part of a company's long-term value-creation strategy, it is imperative to start building these capabilities now.

Increasing Transparency to the Capital Markets

Finally, as a company pursues all these actions, it must be communicating them aggressively to investors. Increasingly, today's capital markets expect transparency and accountability. If a company provides it, its valuation multiple is more likely to be on the premium side of a fair-value multiple than on the discount side.

Four kinds of transparency are especially important. The first is transparency of goals. Instead of vague commitments to improving shareholder value in general, consider doing what some of the leading public companies are doing today—making public an explicit long-term relative TSR goal. But don't stop at the goal itself. Few investors will take it seriously unless a company also provides a clear strategy for how to get there, including specific milestones and commitments. Transparency on capital allocation is also important: where is the

11. See *Innovation 2006*, BCG Senior Management Survey, July 2006.

12. For a detailed description of BCG's approach to innovation, see James P. Andrew and Harold L. Sirkin, "Innovating for Cash," *Harvard Business Review*, September 2003; and James P. Andrew and Harold L. Sirkin, *Payback: Reaping the Rewards of Innovation* (Boston: Harvard Business School Press, 2007).

13. See *Growing Through Acquisitions: The Successful Value Creation Record of Acquisitive Growth Strategies*, BCG report, May 2004.

14. For a detailed description of BCG's thinking on M&A, see *The Brave New World of M&A: How to Create Value from Mergers and Acquisitions*, BCG report, July 2007; and *Powering Up for PMI: Making the Right Strategic Choices*, BCG Focus, June 2007.

company planning to spend its capital and what are the characteristics of those businesses in terms of profitability? Finally, investors are increasingly asking for transparency of company management incentives. They want to learn how incentive plans work inside companies and make sure that those incentives are aligned with their priorities and goals. The more a company's incentives are tied to improving TSR at the level of the individual business unit, the more credible the company's long-term plans for growth will appear.

To be sure, the circumstances of today's capital markets have made it more difficult and more challenging to create superior shareholder value. Companies have less room to maneuver and less flexibility than in the past. But if they have a clear view of the future and are disciplined and focused in the near term, they will win consistent investor support. In the end, that is the best way to avoid the cash trap.

Ten Questions That Every CEO Should Know How to Answer

In conclusion, we offer ten questions about value creation in an era of excess cash that every CEO should know how to answer. The questions synthesize the basic arguments and recommendations made in this year's report in a concise format.

1. *What is your long-term TSR aspiration?* Is that aspiration appropriate given the expectations embedded in your stock price and the ability of your business plans to deliver improved performance?
2. *How much growth do you need?* How close can the nongrowth drivers of TSR get you to your goal? What is the remaining gap that growth must fill?
3. *Do you have a clear long-term growth strategy?* Are your management team, board, and investors aligned around the optimal role for growth in achieving your TSR objectives? If not, do you have a plan for creating such an alignment?
4. *Are you looking beyond traditional sources of growth?* How robust is your innovation process? How will broad social and economic trends affect the evolution of your core markets? What is the potential of M&A to contribute to long-term growth?
5. *How "efficient" is your capital investment?* Is capital being allocated appropriately across your internal businesses and your opportunities for profitable investment? Or do internal practices result in resource allocation that erodes your value-creation potential?
6. *Do you know the opportunity cost of capital to your investors?* Does your corporate strategy recognize that the same hurdle must be cleared whether you use debt, cash, or shares to fund growth?
7. *What drives the differences in valuation multiples in your industry?* Are investors discounting your multiple? If so, do you understand why and what to do about it?
8. *Are you vulnerable to a cash trap?* Is your desire to maintain flexibility in your uses of cash or debt for the long term exposing you to possible pressure from activist investors or private equity firms?
9. *Do investors think you have a lazy balance sheet?* What is the appropriate balance of equity and debt for your company, given your industry and your current debt-to-capital ratio?
10. *Do you know how much cash you can realistically return to investors?* What is the right balance of reinvestment and payout in order to optimize near-term and long-term value creation? What will the impact of increasing cash payout be on your valuation multiple?



Appendix:

The 2007 Value Creators Rankings

The 2007 Value Creators rankings are based on an analysis of total shareholder return at 610 global companies for the five-year period from 2002 through 2006.

To arrive at this sample, we began with TSR data for nearly 5,000 companies from 44 countries provided by Thomson Financial Worldscope. We eliminated all companies that were not listed on some world stock exchange for the full five years of our study or did not have at least 25 percent of their shares available on public capital markets. We also eliminated certain industries from our sample—for example, financial services.¹ We further refined the sample by organizing the remaining companies into 14 industry groups and establishing an appropriate market-valuation hurdle to eliminate the smallest companies in each industry. (The size of the market-valuation hurdle for each individual industry can be found in the tables in the “Industry Rankings,” beginning on page 38.) In addition to our 610-company sample, we also separated out those companies with market valuations of more than \$50 billion. We have included rankings for these large-cap companies in the “Global Rankings,” on page 36.

The global and industry rankings are based on five-year TSR performance from 2002 through 2006.² We also show TSR performance for 2007, through June 30. In addition, we break down TSR performance into key operational and financial metrics.

First, for every company, we calculate the growth (or decline) in fundamental value and in expectation premiums (the difference between a company’s actual stock price and the price derived from a discounted-cash-flow analysis of its underlying fundamentals) for the five-year period from 2002 through 2006. Second, we break down TSR performance into the six investor-oriented financial metrics used in the BCG decomposition model described on pages 11 and 12.

The average annual return for the 610 companies in our sample was 8 percent. This return is relatively modest, especially compared with the high returns of the late 1990s. It is entirely consistent, however, with the range of TSR that many market observers anticipate for the future (generally in the neighborhood of 6 to 10 percent).

What kind of improvement in TSR was necessary to achieve top-quartile status, given the sample av-

1. We chose to exclude financial services because measuring value creation in the sector poses unique analytical problems that make it difficult to compare the performance of financial services companies with companies in other sectors. For BCG’s view of value creation in financial services, see *Bigger, Better Banking: Emerging Titans, Soaring Profitability, and Continued Growth*, the 2007 Creating Value in Banking report, March 2007.

2. TSR is a dynamic ratio that includes price gains and dividend payments for a specific stock during a given period. To measure performance from 2002 through 2006, 2001 end-of-year data must be used as a starting point in order to capture the change from 2001 to 2002, which drives 2002 TSR. For this reason, all exhibits in the report showing 2002–2006 performance begin with a 2001 data point.

erage? The exhibit “Average Annual Total Shareholder Return by Quartile, 2002–2006” on page 34 arrays the 610 companies in our global sample according to their five-year TSR performance. In order to achieve top-quartile status, companies needed to post an average annual TSR of at least 23.5 percent. The very best performers had returns of 60 percent and higher.

What differentiates the sample’s top performers from the rest? Exhibit 1 compares the TSR profile of the top decile of our 610-company sample with that of the sample as a whole. The top decile generated an average annual TSR of 50 percent during the period under study, in contrast to an average annual return of 8 percent for the total sample. Five findings in particular stand out:

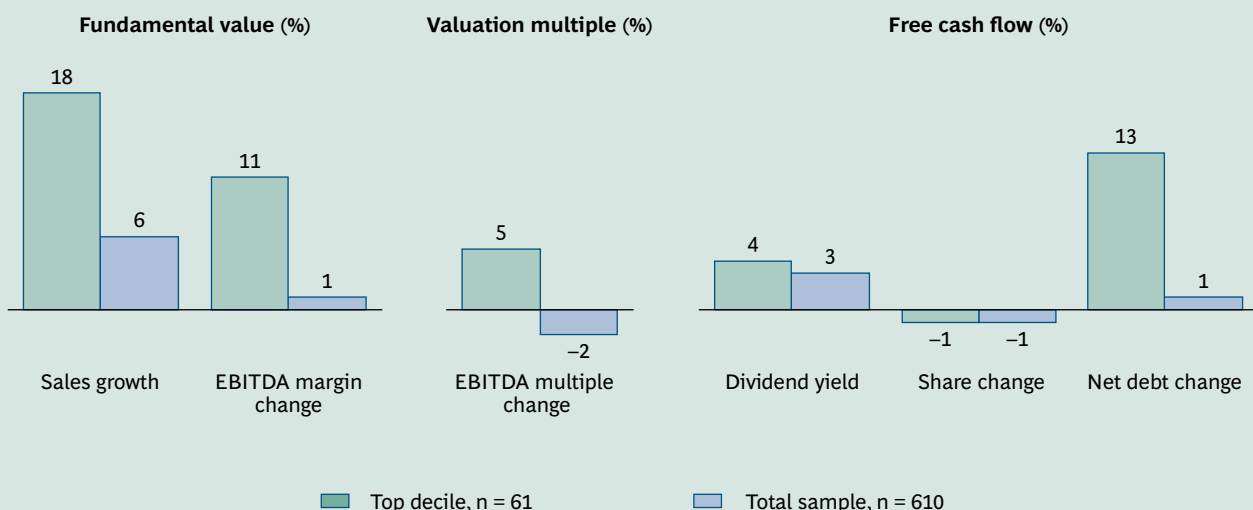
- The most successful companies have a balanced approach to value creation. Specifically, their TSR comes from each of the three major dimensions

of the value creation system described in this report: improvements in fundamental value, increases in valuation multiples, and distributions of free cash flow. In contrast, the sample as a whole saw some of its TSR gains undermined by an average decline in valuation multiples. These companies also created far less TSR through distributions of free cash flow to investors and debt holders than the top performers did.

- The key to the top decile’s balanced performance was to combine substantial sales growth (responsible for 18 percentage points of TSR) with significant improvement in margins (responsible for an additional 11 percentage points of TSR). In other words, more than half the average annual TSR of these companies (29 percent out of 50 percent) was due to improvements in fundamental value.
- This highly profitable growth allowed the top performers to substantially increase their payout

Exhibit 1. The Top Performers Improved on All Three Dimensions of Value Creation

TSR decomposition profile, global sample, 2002–2006



Sources: Thomson Financial Datastream; Thomson Financial Worldscope; Bloomberg; annual reports; BCG analysis.
 Note: The bars show the contribution of each factor in percentage points of five-year average annual TSR.

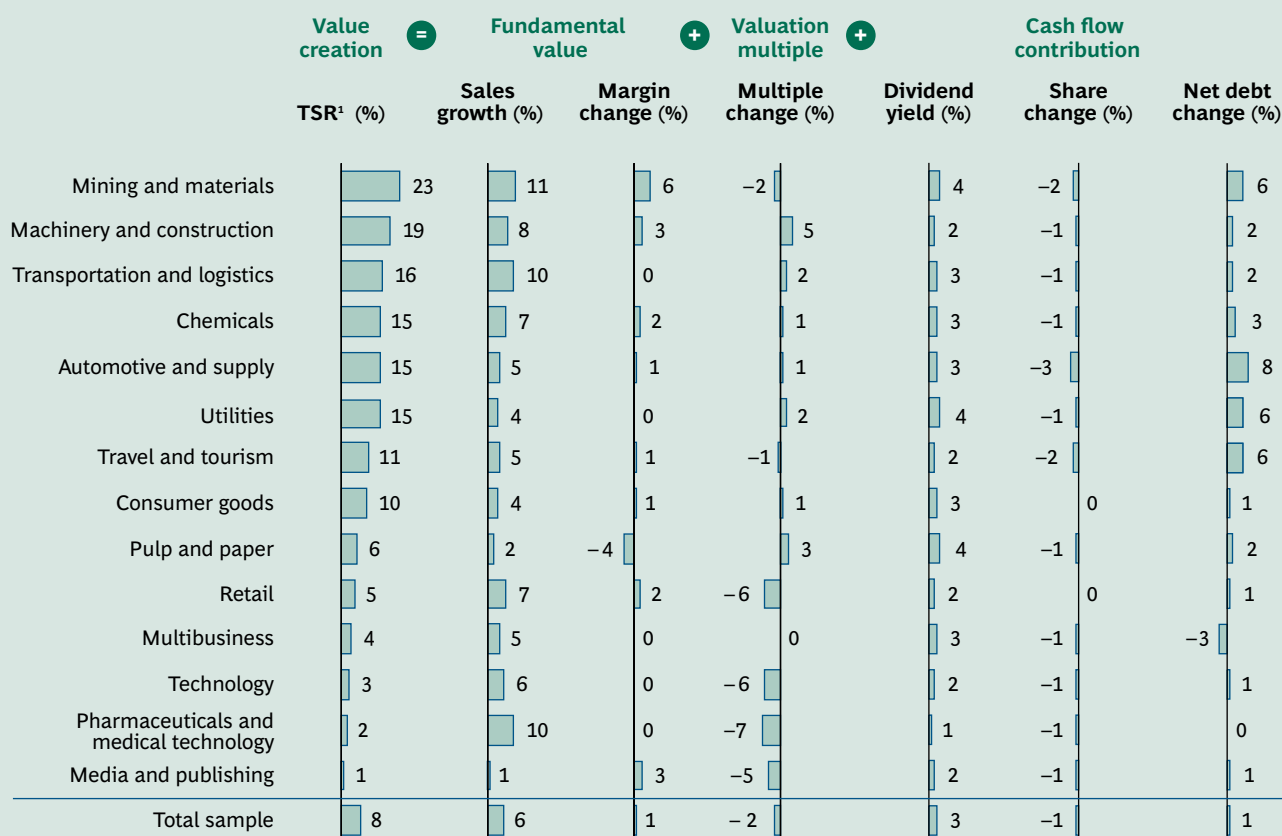
of cash to investors and debt holders. The top decile's average dividend yield was above the sample average, accounting for 4 percentage points of TSR. What's more, these companies generated a full 13 percentage points of TSR by paying down debt (a function of the systematic cleaning up of company balance sheets that took place during the period from 2002 to 2006).

- Profitable growth combined with significant payouts of cash flow led to improvements in valuation multiples for the top performers equivalent to an additional 5 percentage points of TSR.
- By contrast, the sample as a whole had reasonable, if modest, revenue growth (responsible

for 6 percentage points of TSR, on average). But this growth came at the price of relatively stagnant margins (responsible for only 1 percentage point of TSR). That combination of modest growth and stagnant margins, along with relatively low cash payouts (responsible for only 3 percentage points of TSR), led to a decline in valuation multiples (responsible for negative 2 percentage points of TSR).

Exhibit 2 and Exhibit 3 show the decomposition of TSR performance by industry for the sample as a whole and for the top ten companies in each industry, respectively. While results, of course, vary from industry to industry, there are at least two additional trends of interest:

Exhibit 2. Industries Suffering from the Cash Trap Have the Lowest Average TSR



Sources: Thomson Financial Worldscope; Thomson Financial Datastream; Bloomberg; annual reports; BCG analysis.

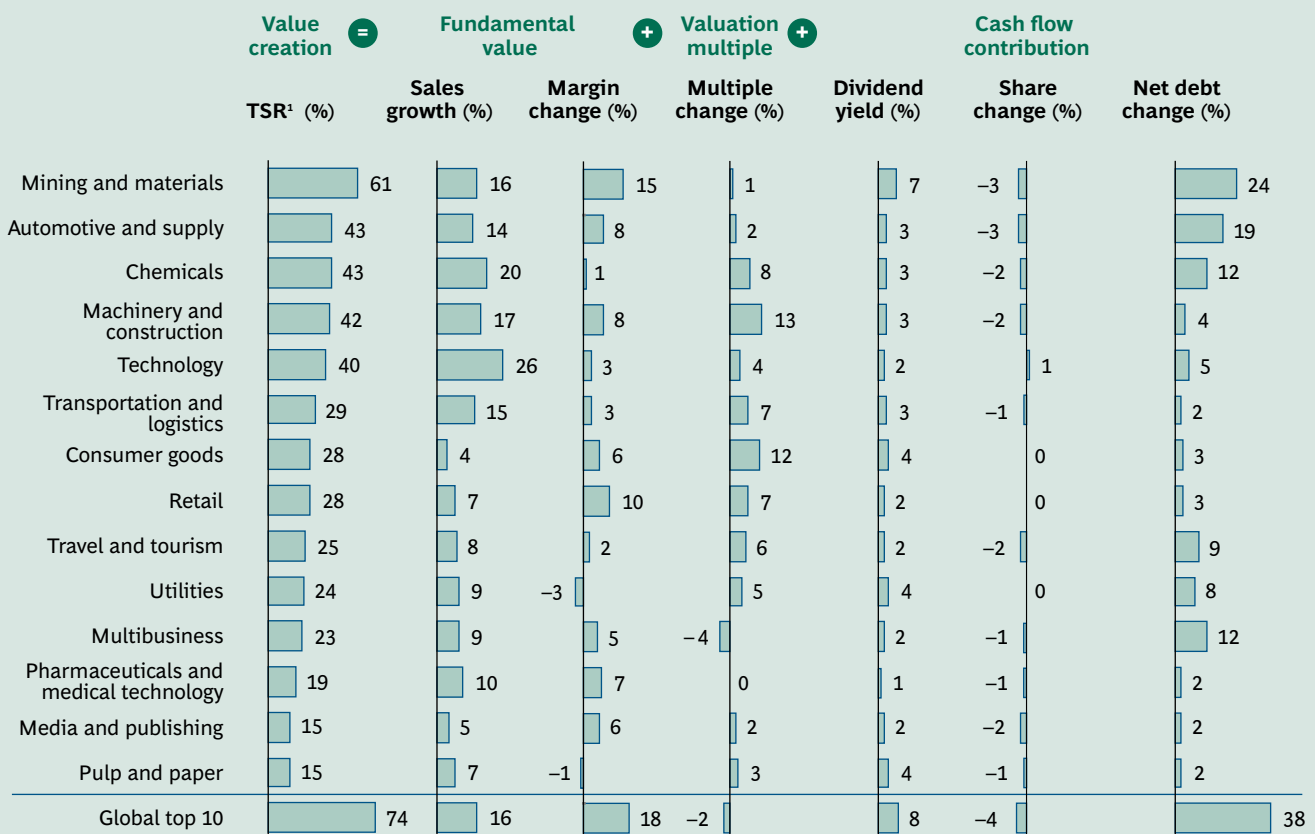
Note: Decomposition is shown in percentage points of five-year average annual TSR. Apparent discrepancies with TSR total are due to rounding.

¹Five-year average annual TSR (2002–2006) for weighted average of respective sample.

- Companies in a number of industries are clearly suffering from the cash trap. Take for example the retail, multibusiness, technology, and pharmaceuticals and medical technology sectors. These sectors combine reasonably healthy sales growth with stagnating margins and low (and, in some cases no) net cash payouts to capital owners. The result is a major decline in multiples that undermines overall TSR performance in these industries. As a consequence, these companies cluster at the bottom of the industry TSR rankings.
- Despite all of the recent preoccupation with share repurchases, reductions in shares outstanding are not a significant source of TSR in any industry that we studied. Indeed, in every industry,

share changes actually *reduce* TSR on average. And among the top ten industry performers, there is only one industry (technology) in which share changes increase TSR—and only by a paltry 1 percentage point. This finding demonstrates that the amount of shares companies buy back is more than equaled by the new shares they are issuing for executive stock options or using as equity for acquisitions. In other words, share buy-backs not only can cause a company’s multiple to decline (as discussed in the main body of the report) but also, on average, do not contribute directly to TSR.

Exhibit 3. Even the Top Industry Performers Rarely Generate TSR from Share Repurchases



Sources: Thomson Financial Worldscope; Thomson Financial Datastream; Bloomberg; annual reports; BCG analysis.

Note: Decomposition is shown in percentage points of five-year average annual TSR. Apparent discrepancies with TSR total are due to rounding.

¹Five-year average annual TSR (2002–2006) for weighted average of top ten companies.

Global Rankings

Total Global Sample

The Global Top Ten, 2002–2006

#	Company	Country	Industry	TSR ² (%)	Market value ³ (\$billions)	Expect. premium ⁴ (%)	TSR Decomposition ¹						2007 TSR ⁶ (%)
							Sales growth (%)	Margin change (%)	Multiple change ⁵ (%)	Dividend yield (%)	Share change (%)	Net debt change (%)	
1	Vallourec	France	Mining and Materials	90.2	15.402	24	22	21	25	6	-1	17	8.1
2	Mahindra & Mahindra	India	Automotive and Supply	88.4	5.004	44	36	22	12	6	-1	14	-19.5
3	Larsen & Toubro	India	Machinery and Construction	76.9	9.140	73	21	-3	31	4	-2	25	53.3
4	Bharat Heavy Electricals	India	Machinery and Construction	76.8	12.709	74	21	51	-3	2	0	6	34.6
5	Usinas Sider Minas	Brazil	Mining and Materials	76.0	9.303	-4	21	2	-6	13	0	46	40.4
6	Grupo México	Mexico	Mining and Materials	73.6	9.464	-35	17	34	-23	4	-4	46	70.9
7	Sumitomo Metal Industries	Japan	Mining and Materials	68.0	20.867	15	1	10	1	4	-5	58	41.5
8	Southern Copper	United States	Mining and Materials	66.5	15.869	14	52	19	-7	11	-12	3	82.8
9	Siderúrgica Nacional	Brazil	Mining and Materials	66.2	8.215	10	19	7	2	22	2	14	59.5
10	Salzgitter	Germany	Mining and Materials	64.6	8.317	7	15	13	-4	5	2	35	44.6

Sources: Thomson Financial Datastream; Thomson Financial Worldscope; Bloomberg; annual reports; BCG analysis.

Note: n = 610 global companies.

¹Contribution of each factor is shown in percentage points of five-year average annual TSR; apparent discrepancies with TSR total due to rounding.

²Average annual total shareholder return, 2002–2006.

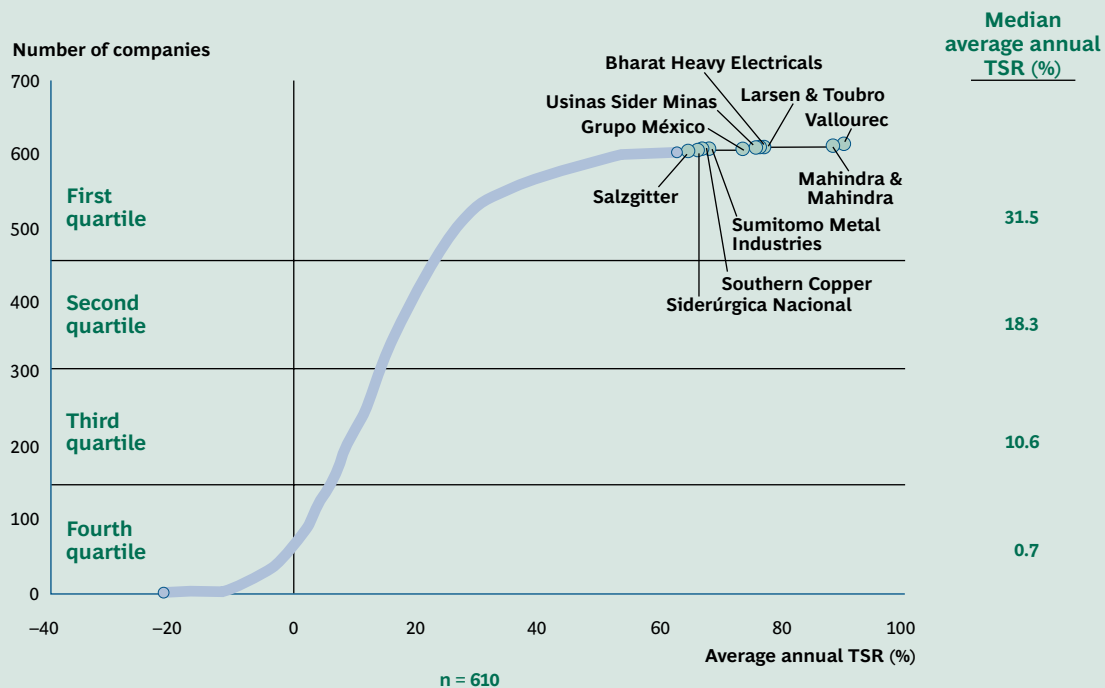
³As of December 31, 2006.

⁴Expectation premium as percentage of total 2006 market value.

⁵Change in EBITDA multiple.

⁶As of June 30, 2007.

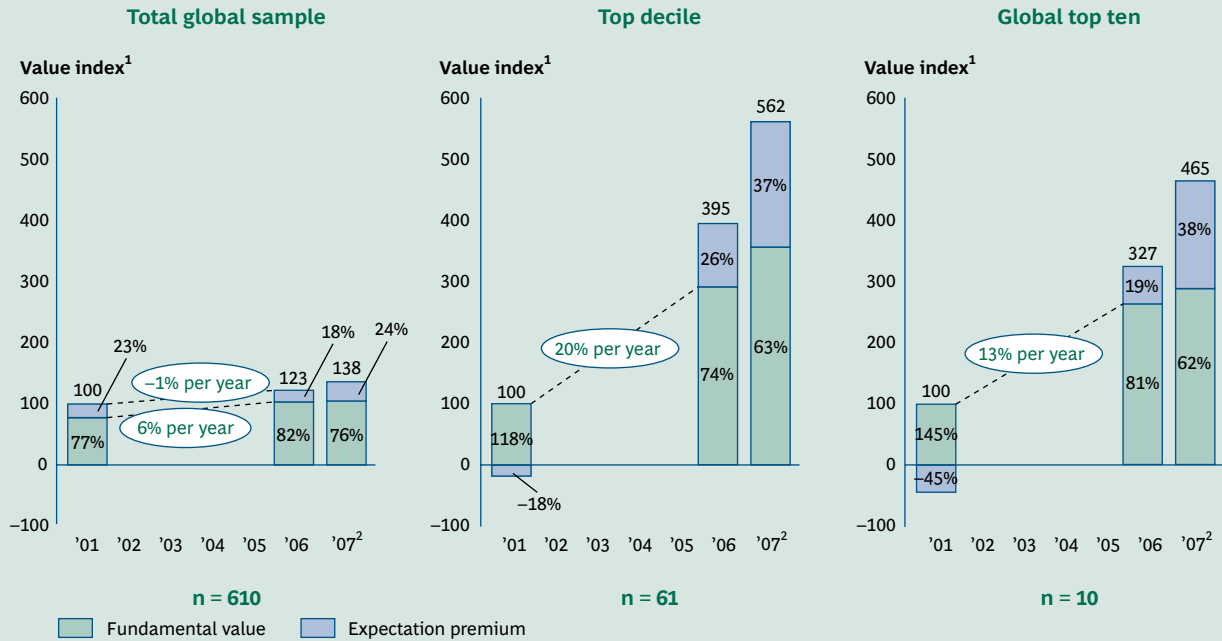
Average Annual Total Shareholder Return by Quartile, 2002–2006



Sources: Thomson Financial Datastream; BCG analysis.

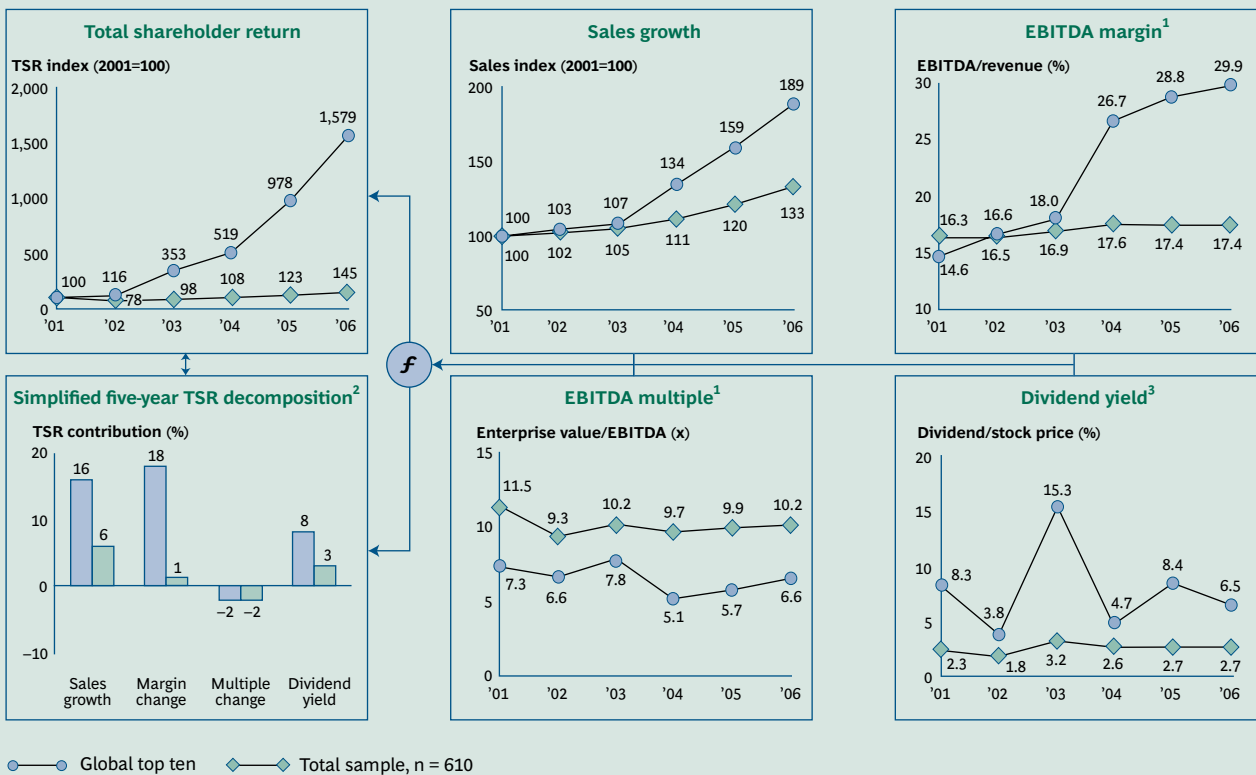
Note: TSR derived from calendar-year data; values shown for top ten companies only.

Change in Fundamental Value and Expectation Premiums, 2002–2006



Sources: Thomson Financial Datastream; Thomson Financial Worldscope; Bloomberg; annual reports; BCG analysis.
¹Market capitalization plus net debt, 2001 = 100.
²Market value as of June 30, 2007; fundamental value estimated using trailing 12-month average data.

Value Creation at the Top Ten Versus Global Sample, 2002–2006



Sources: Thomson Financial Datastream; Thomson Financial Worldscope; Bloomberg; annual reports; BCG analysis.
¹Total-sample calculation based on aggregate of entire sample.
²Share change and net debt change not shown.
³Total-sample calculation based on sample average.

Large-Cap Companies

The Large-Cap Top Ten, 2002–2006

#	Company	Country	Industry	TSR ² (%)	Market value ³ (\$billions)	Expect. premium ⁴ (%)	TSR Decomposition ¹						2007 TSR ⁶ (%)
							Sales growth (%)	Margin change (%)	Multiple change ⁵ (%)	Dividend yield (%)	Share change (%)	Net debt change (%)	
1	Vale do Rio Doce	Brazil	Mining and Materials	54.6	69.031	28	37	6	7	6	-1	1	36.4
2	América Móvil	Mexico	Technology	53.3	80.961	54	39	8	3	1	2	1	37.4
3	Apple	United States	Technology	50.6	72.901	35	26	59	-32	0	-4	2	43.9
4	British American Tobacco	United Kingdom	Consumer Goods	25.8	58.156	29	-3	4	13	6	1	4	21.9
5	Genentech	United States	Pharmaceuticals and MedTech	24.5	85.511	32	33	3	-10	0	0	-1	-6.7
6	Anglo American	United Kingdom	Mining and Materials	23.2	72.926	27	17	6	-4	4	-1	1	20.2
7	BHP Billiton	Australia	Mining and Materials	23.2	69.719	25	23	1	-7	3	1	2	39.6
8	Endesa	Spain	Utilities	20.8	50.033	12	5	2	-1	6	0	9	13.5
9	Toyota	Japan	Automotive and Supply	20.7	241.323	8	10	4	2	2	5	-2	-1.1
10	Boeing	United States	Machinery and Construction	20.1	70.249	34	1	-5	14	2	2	5	9.1

Sources: Thomson Financial Datastream; Thomson Financial Worldscope; Bloomberg; annual reports; BCG analysis.

Note: n = 81 global companies with a market valuation greater than \$50 billion.

¹Contribution of each factor is shown in percentage points of five-year average annual TSR; apparent discrepancies with TSR total due to rounding.

²Average annual total shareholder return, 2002–2006.

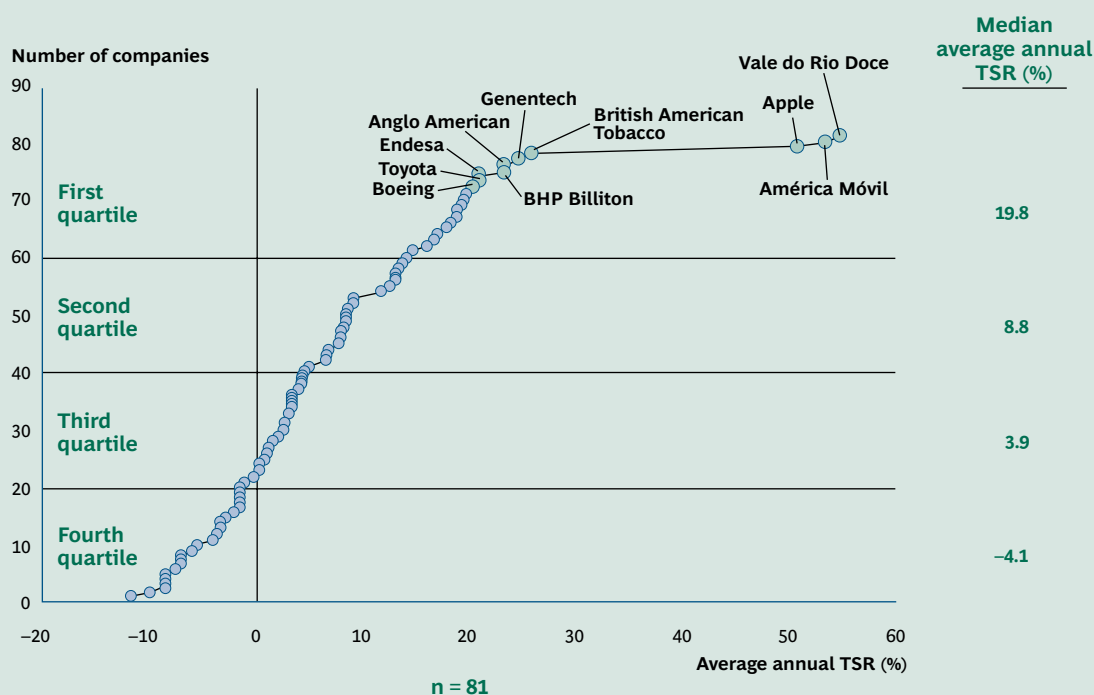
³As of December 31, 2006.

⁴Expectation premium as percentage of total 2006 market value.

⁵Change in EBITDA multiple.

⁶As of June 30, 2007.

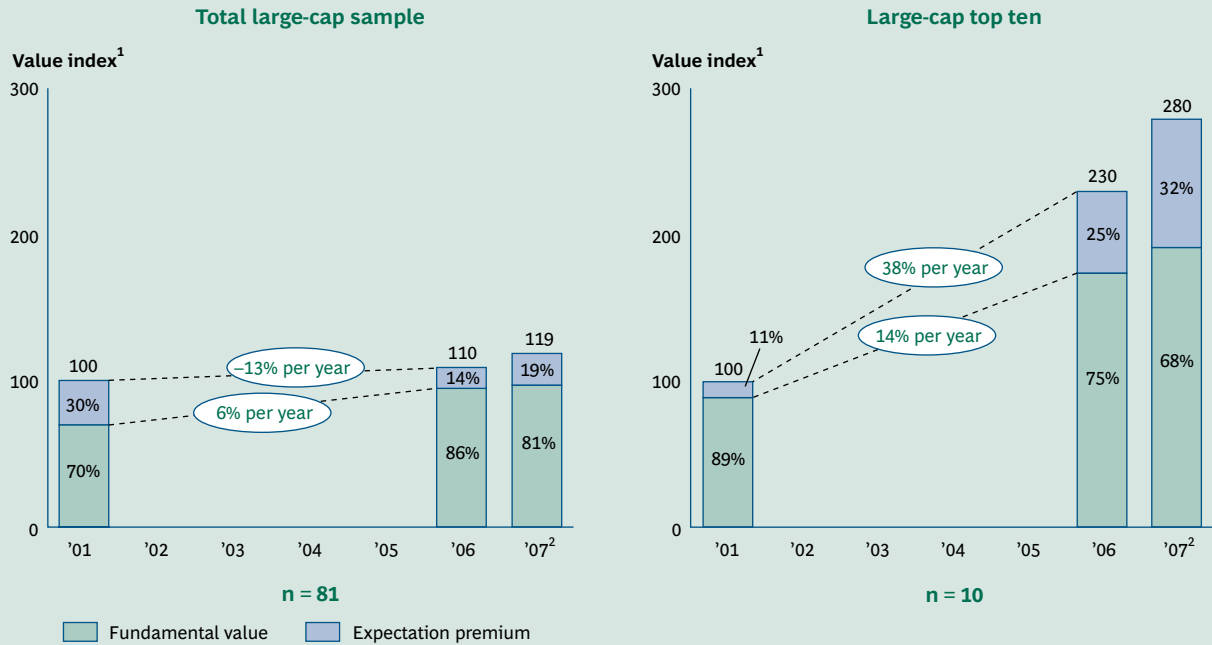
Average Annual Total Shareholder Return by Quartile, 2002–2006



Sources: Thomson Financial Datastream; BCG analysis.

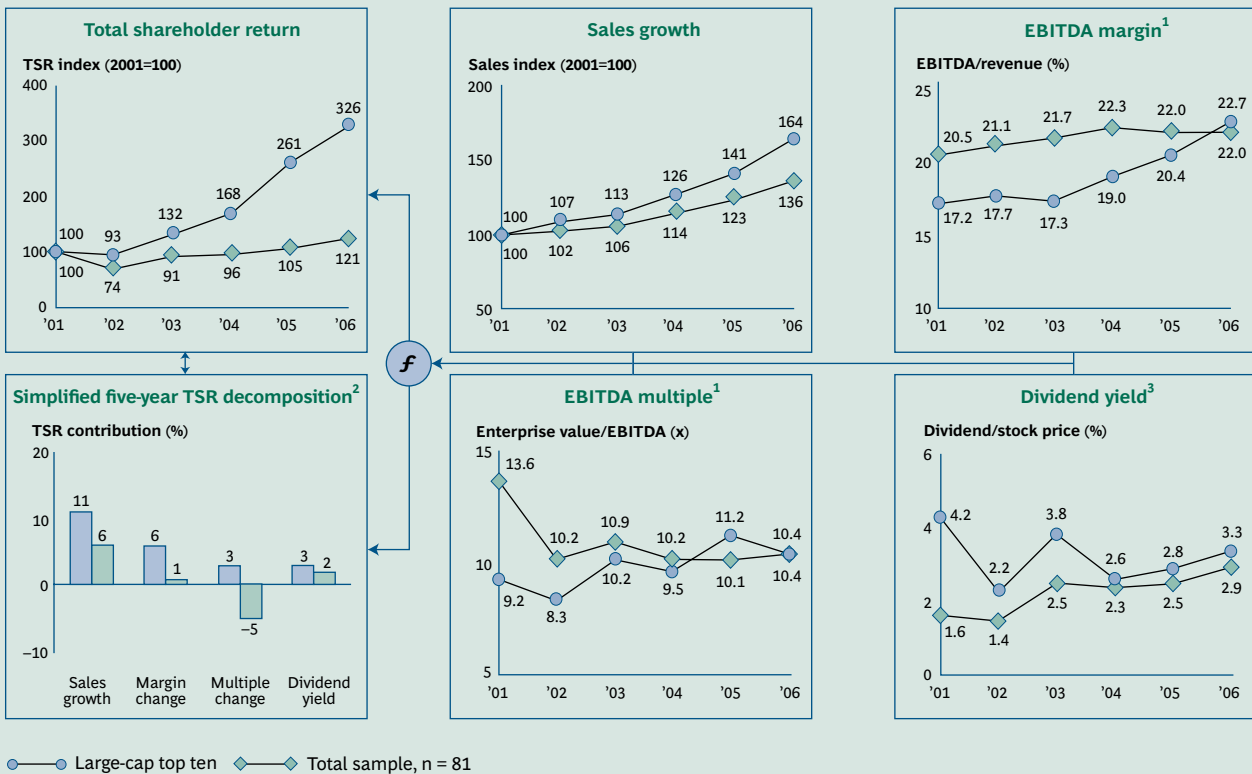
Note: TSR derived from calendar-year data.

Change in Fundamental Value and Expectation Premiums, 2002–2006



Sources: Thomson Financial Datastream; Thomson Financial Worldscope; Bloomberg; annual reports; BCG analysis.
¹Market capitalization plus net debt, 2001 = 100.
²Market value as of June 30, 2007; fundamental value estimated using trailing 12-month average data.

Value Creation at the Top Ten Versus Large-Cap Sample, 2002–2006



Sources: Thomson Financial Datastream; Thomson Financial Worldscope; Bloomberg; annual reports; BCG analysis.
¹Total-sample calculation based on aggregate of entire sample.
²Share change and net debt change not shown.
³Total-sample calculation based on sample average.

Industry Rankings

Automotive and Supply

The Automotive Top Ten, 2002–2006

#	Company	Country	TSR ² (%)	Market value ³ (\$billions)	Expect. premium ⁴ (%)	TSR Decomposition ¹						2007 TSR ⁶ (%)
						Sales growth (%)	Margin change (%)	Multiple change ⁵ (%)	Dividend yield (%)	Share change (%)	Net debt change (%)	
1	Mahindra & Mahindra	India	88.4	5.004	44	36	22	12	6	-1	14	-19.5
2	Astra International	Indonesia	64.0	7.033	13	16	2	19	4	-4	28	9.5
3	Tata Motors	India	57.3	7.836	58	26	62	-38	3	-9	13	-24.1
4	Isuzu Motors	Japan	51.0	7.727	-7	0	8	-10	0	2	50	20.3
5	Bajaj Auto	India	50.1	5.987	9	22	21	2	4	0	2	-17.2
6	Continental	Germany	45.0	17.048	18	6	9	7	2	-3	23	20.2
7	JTEKT	Japan	41.6	6.781	23	14	5	11	1	-9	20	-11.3
8	Hyundai Mobis	South Korea	38.2	7.929	5	30	-8	6	3	-2	10	2.2
9	Yamaha Motor	Japan	37.8	8.991	26	13	8	2	2	-4	17	-3.7
10	Paccar	United States	32.0	16.116	19	22	7	-6	5	1	3	34.9

Sources: Thomson Financial Datastream; Thomson Financial Worldscope; Bloomberg; annual reports; BCG analysis.

Note: n = 39 global companies with a market valuation greater than \$5 billion.

¹Contribution of each factor is shown in percentage points of five-year average annual TSR; apparent discrepancies with TSR total due to rounding.

²Average annual total shareholder return, 2002–2006.

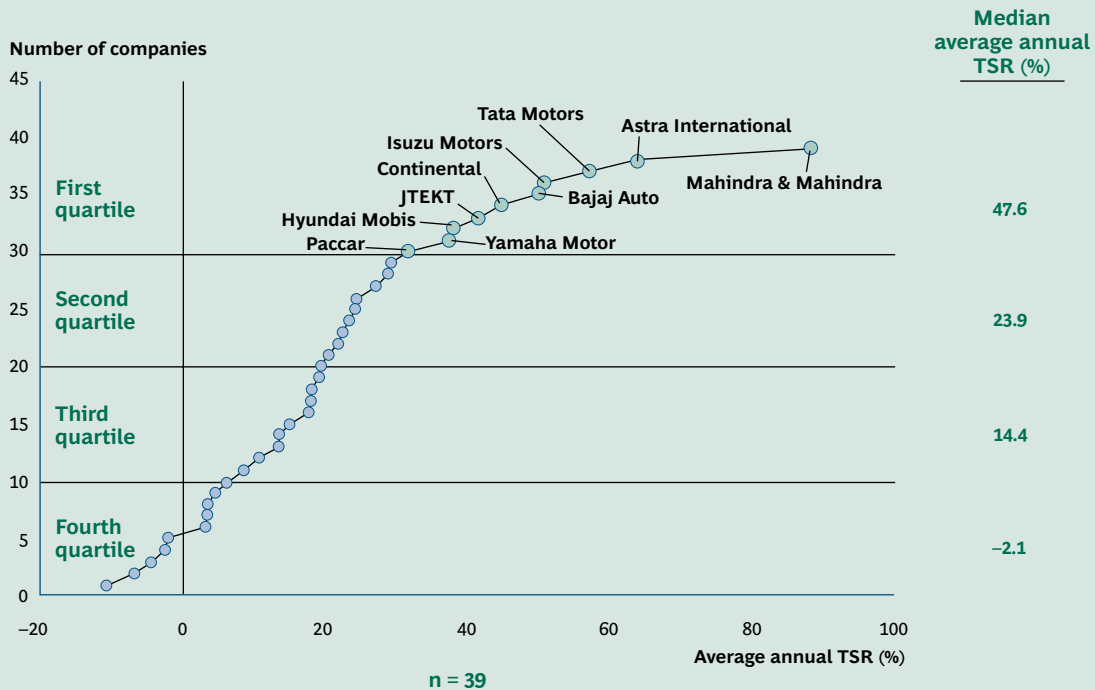
³As of December 31, 2006.

⁴Expectation premium as percentage of total 2006 market value.

⁵Change in EBITDA multiple.

⁶As of June 30, 2007.

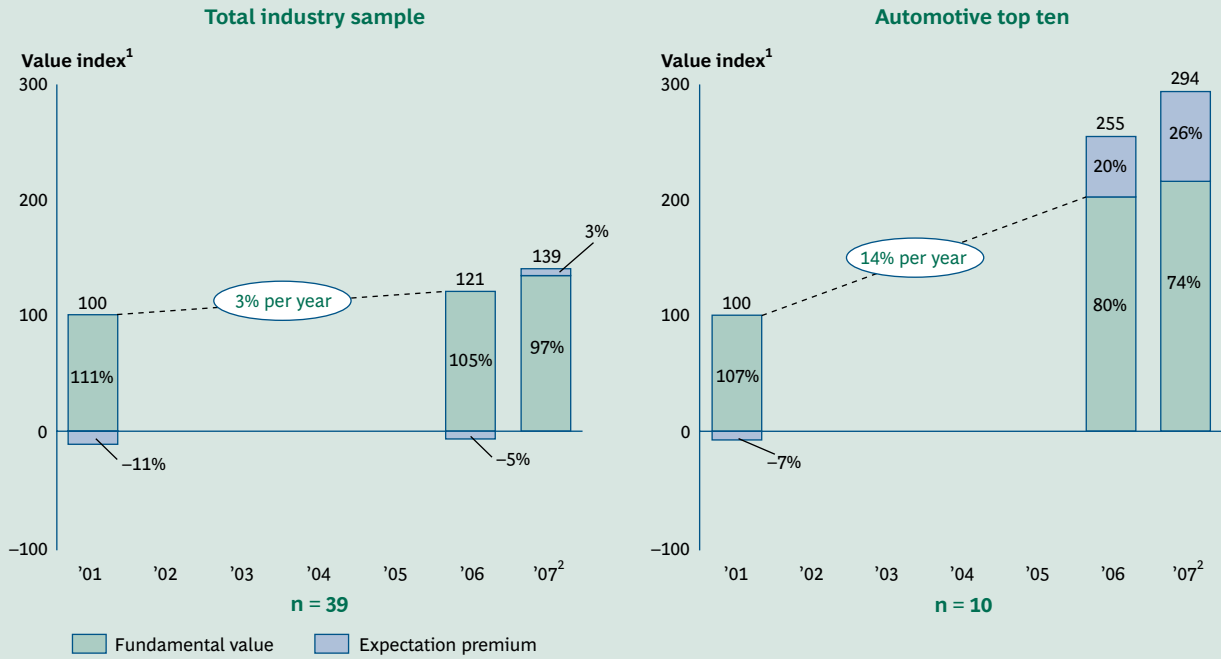
Average Annual Total Shareholder Return by Quartile, 2002–2006



Sources: Thomson Financial Datastream; BCG analysis.

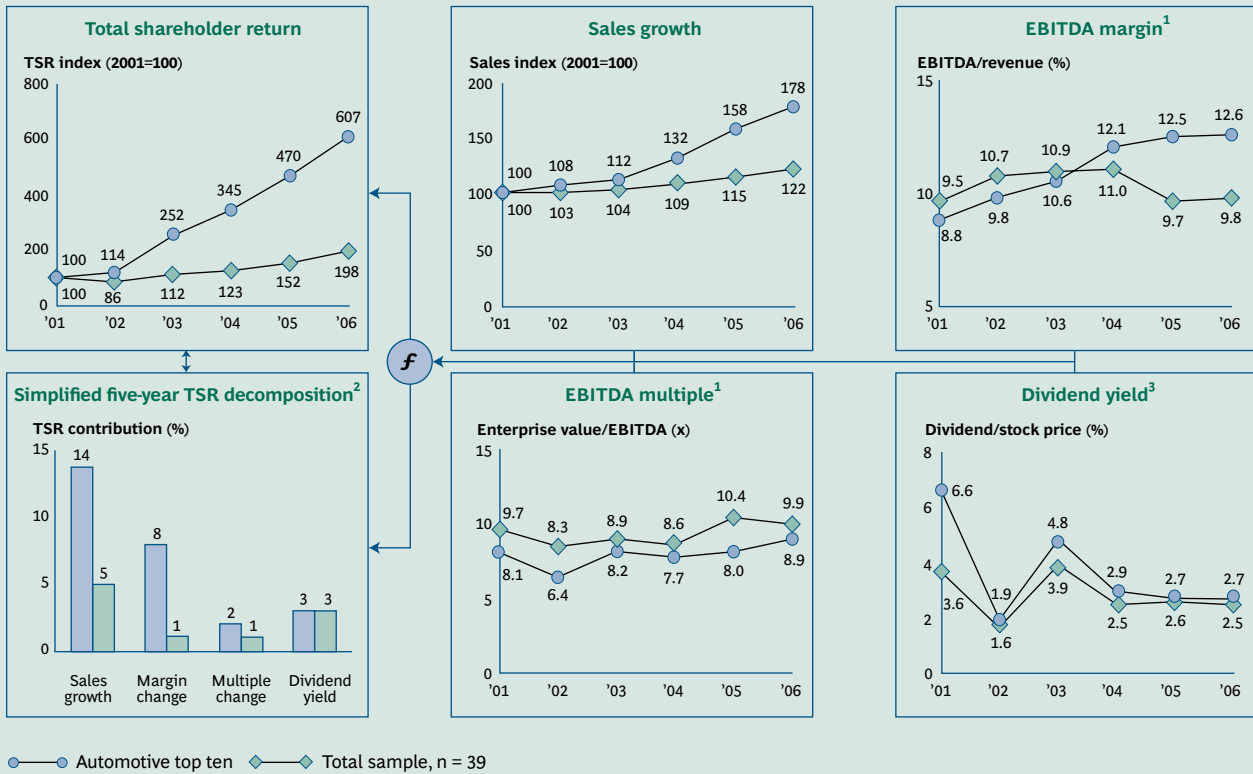
Note: TSR derived from calendar-year data.

Change in Fundamental Value and Expectation Premiums, 2002–2006



Sources: Thomson Financial Datastream; Thomson Financial Worldscope; Bloomberg; annual reports; BCG analysis.
¹Market capitalization plus net debt, 2001 = 100.
²Market value as of June 30, 2007; fundamental value estimated using trailing 12-month average data.

Value Creation at the Top Ten Versus Industry Sample, 2002–2006



Sources: Thomson Financial Datastream; Thomson Financial Worldscope; Bloomberg; annual reports; BCG analysis.
¹Industry calculation based on aggregate of entire sample.
²Share change and net debt change not shown.
³Industry calculation based on sample average.

Chemicals

The Chemical Top Ten, 2002–2006

#	Company	Country	TSR ² (%)	Market value ³ (\$billions)	Expect. premium ⁴ (%)	TSR Decomposition ¹						2007 TSR ⁶ (%)
						Sales growth (%)	Margin change (%)	Multiple change ⁵ (%)	Dividend yield (%)	Share change (%)	Net debt change (%)	
1	Reliance Industries	India	50.1	39.996	29	33	-2	15	2	-5	7	34.9
2	Mitsubishi Gas Chemical	Japan	48.5	5.055	37	7	6	9	2	2	22	-8.9
3	Israel Chemicals	Israel	45.8	8.065	41	13	4	8	5	-1	16	32.6
4	Química y Minera de Chile	Chile	39.2	3.517	46	16	3	9	3	0	8	30.3
5	Tokuyama	Japan	38.8	4.195	40	2	2	18	1	-1	18	-11.2
6	IRPC	Thailand	36.6	3.297	10	22	-9	-12	0	-4	40	-0.1
7	K+S	Germany	35.4	4.468	37	7	4	20	5	1	-2	41.2
8	Formosa Chemicals & Fibre	Taiwan	34.1	9.239	19	25	-2	-5	7	0	9	47.6
9	Orica	Australia	32.8	5.952	29	3	16	3	5	-1	7	24.3
10	Umicore	Belgium	30.2	4.425	29	20	-8	16	3	-4	4	26.4

Sources: Thomson Financial Datastream; Thomson Financial Worldscope; Bloomberg; annual reports; BCG analysis.

Note: n = 60 global companies with a market valuation greater than \$3 billion.

¹Contribution of each factor is shown in percentage points of five-year average annual TSR; apparent discrepancies with TSR total due to rounding.

²Average annual total shareholder return, 2002–2006.

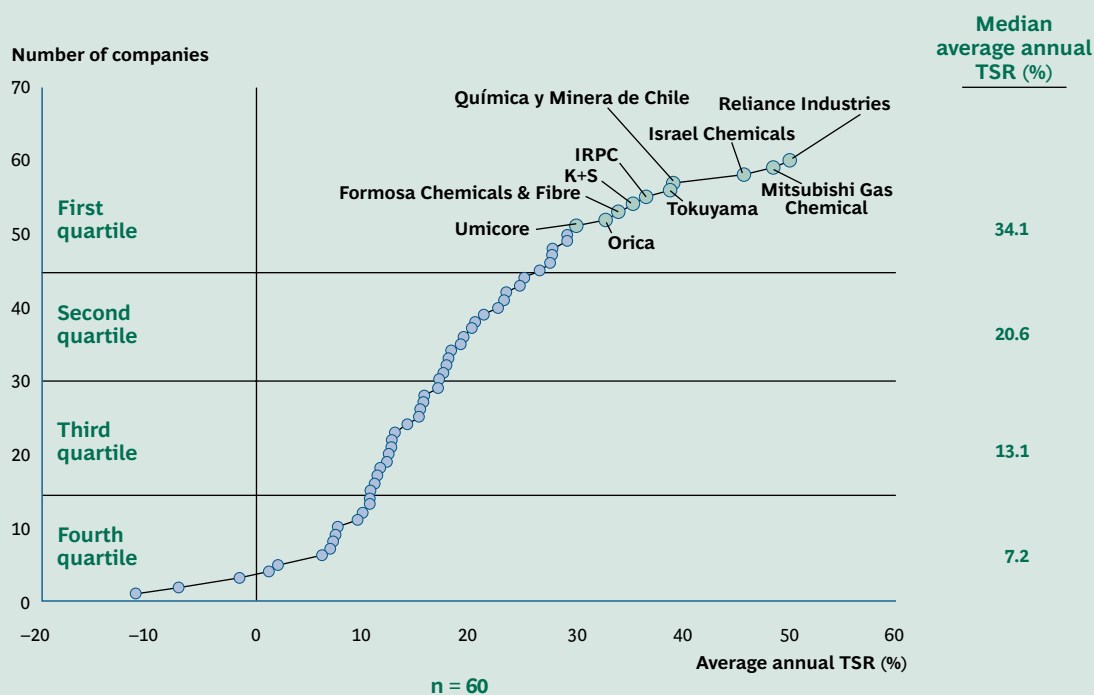
³As of December 31, 2006.

⁴Expectation premium as percentage of total 2006 market value.

⁵Change in EBITDA multiple.

⁶As of June 30, 2007.

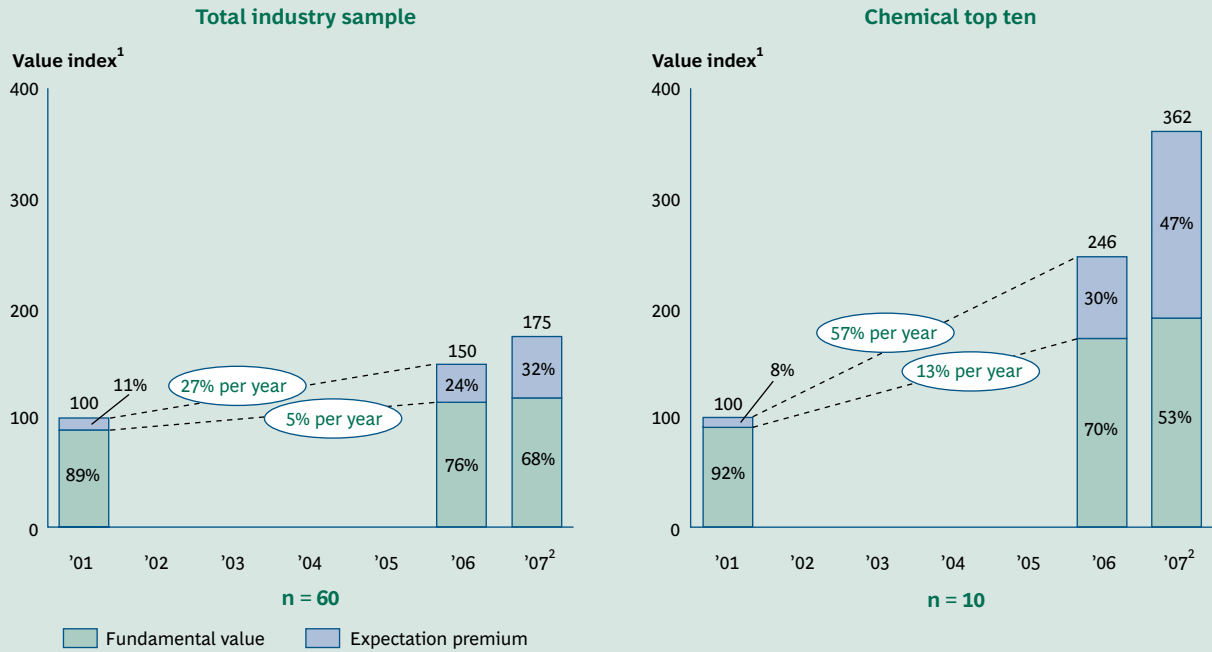
Average Annual Total Shareholder Return by Quartile, 2002–2006



Sources: Thomson Financial Datastream; BCG analysis.

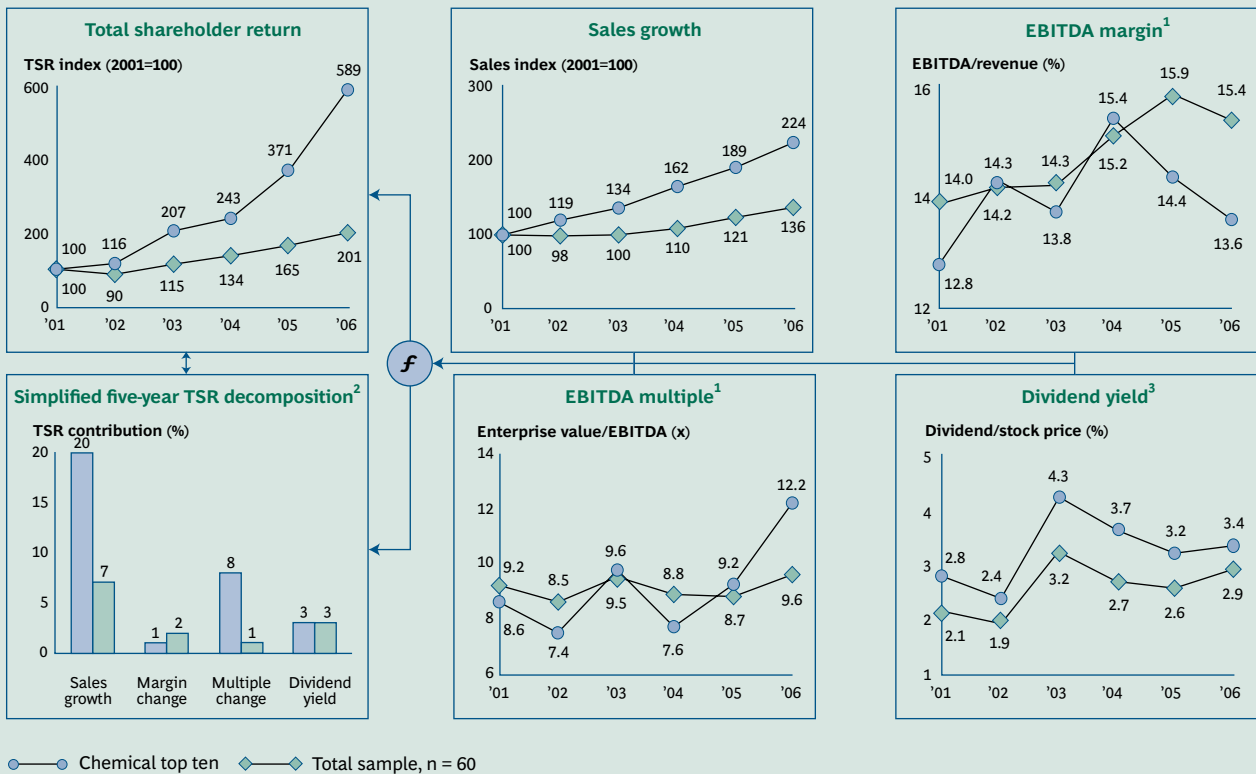
Note: TSR derived from calendar-year data.

Change in Fundamental Value and Expectation Premiums, 2002–2006



Sources: Thomson Financial Datastream; Thomson Financial Worldscope; Bloomberg; annual reports; BCG analysis.
¹Market capitalization plus net debt, 2001 = 100.
²Market value as of June 30, 2007; fundamental value estimated using trailing 12-month average data.

Value Creation at the Top Ten Versus Industry Sample, 2002–2006



Sources: Thomson Financial Datastream; Thomson Financial Worldscope; Bloomberg; annual reports; BCG analysis.
¹Industry calculation based on aggregate of entire sample.
²Share change and net debt change not shown.
³Industry calculation based on sample average.

Consumer Goods

The Consumer Goods Top Ten, 2002–2006

#	Company	Country	TSR ² (%)	Market value ³ (\$billions)	Expect. premium ⁴ (%)	TSR Decomposition ¹						2007 TSR ⁶ (%)
						Sales growth (%)	Margin change (%)	Multiple change ⁵ (%)	Dividend yield (%)	Share change (%)	Net debt change (%)	
1	Coach	United States	54.5	15.787	11	32	14	8	0	-1	1	10.3
2	Garmin	United States	40.2	12.013	33	37	-3	6	1	0	-1	32.9
3	ITC	India	33.3	14.938	53	20	-4	13	2	0	2	-12.1
4	Japan Tobacco	Japan	29.8	48.289	8	1	7	14	1	2	5	6.2
5	Grupo Modelo	Mexico	27.1	18.047	41	8	1	13	3	0	1	1.5
6	Imperial Tobacco	United Kingdom	26.4	26.648	33	17	1	6	5	-3	1	17.2
7	AmBev	Brazil	26.3	30.010	10	21	9	1	5	-10	0	30.2
8	Reynolds American	United States	26.1	19.353	26	6	3	22	8	-9	-3	2.1
9	British American Tobacco	United Kingdom	25.8	58.156	29	-3	4	13	6	1	4	21.9
10	Orkla	Norway	25.0	11.774	-13	3	0	6	7	0	7	62.1

Sources: Thomson Financial Datastream; Thomson Financial Worldscope; Bloomberg; annual reports; BCG analysis.

Note: n = 64 global companies with a market valuation greater than \$10 billion.

¹Contribution of each factor is shown in percentage points of five-year average annual TSR; apparent discrepancies with TSR total due to rounding.

²Average annual total shareholder return, 2002–2006.

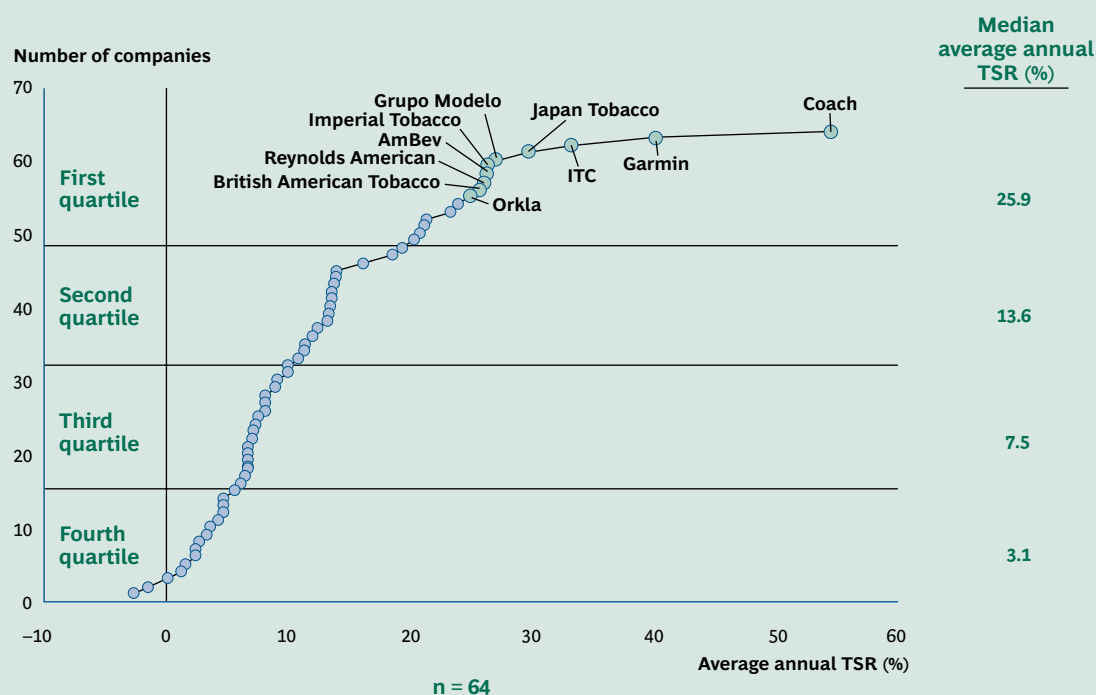
³As of December 31, 2006.

⁴Expectation premium as percentage of total 2006 market value.

⁵Change in EBITDA multiple.

⁶As of June 30, 2007.

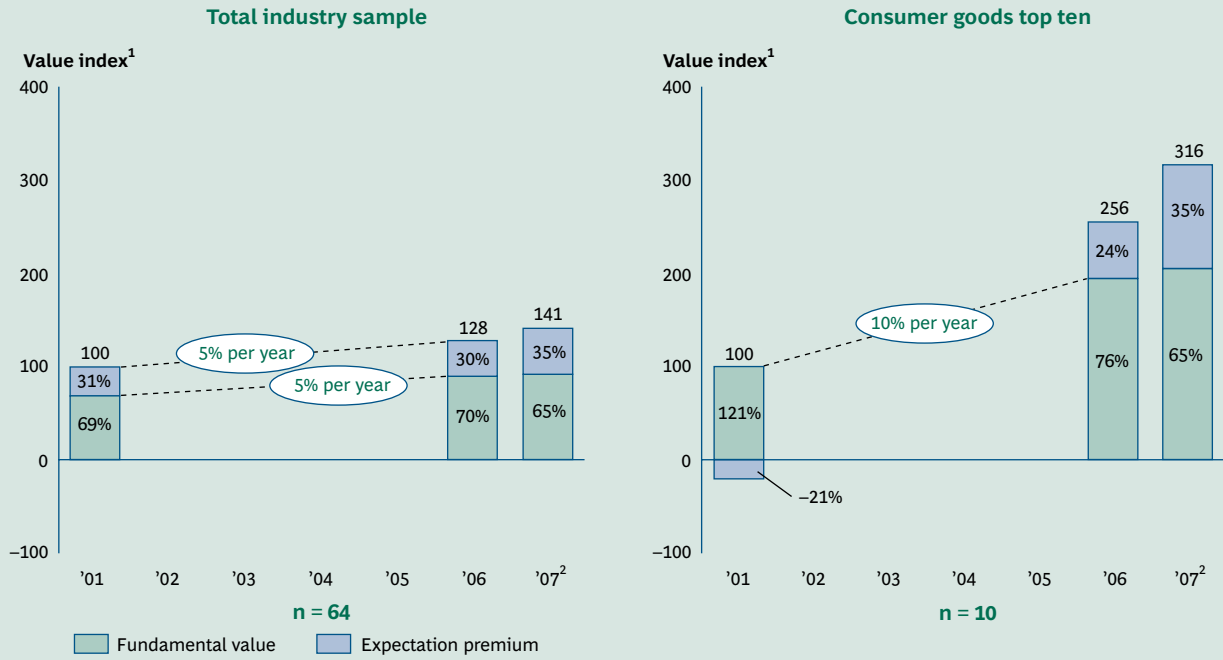
Average Annual Total Shareholder Return by Quartile, 2002–2006



Sources: Thomson Financial Datastream; BCG analysis.

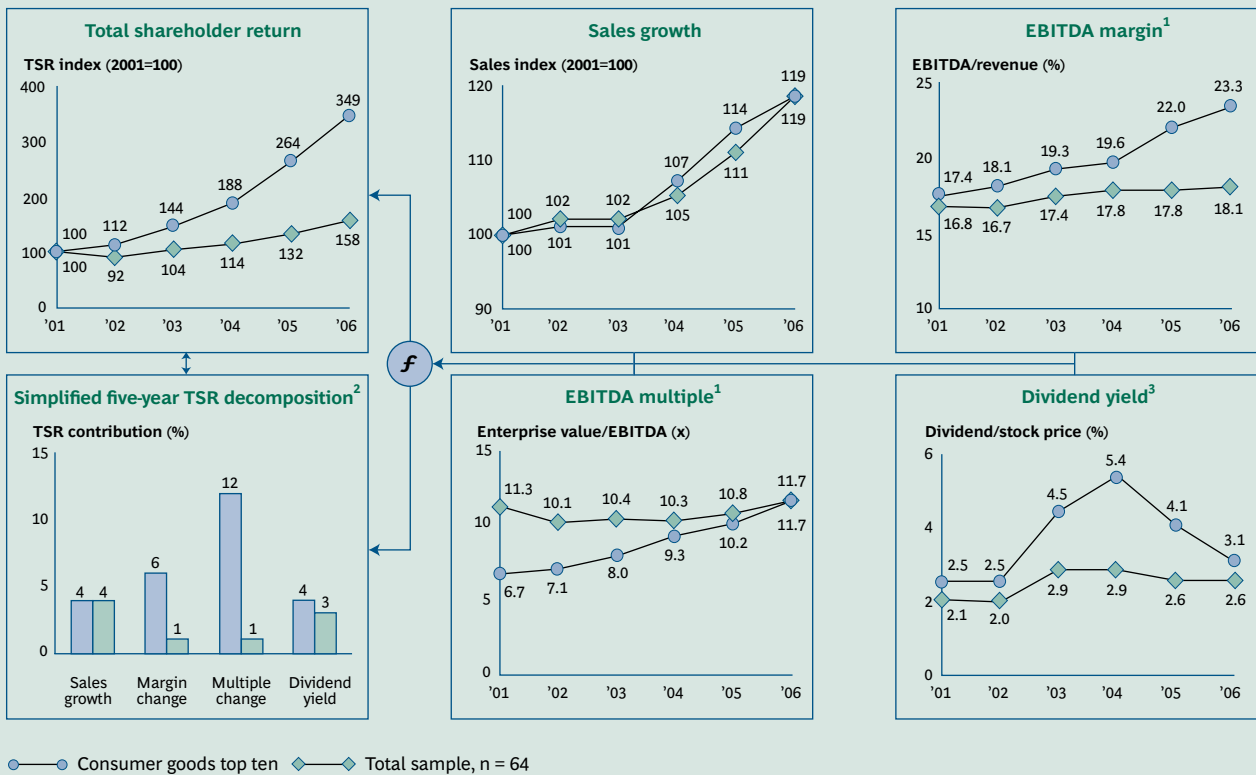
Note: TSR derived from calendar-year data.

Change in Fundamental Value and Expectation Premiums, 2002–2006



Sources: Thomson Financial Datastream; Thomson Financial Worldscope; Bloomberg; annual reports; BCG analysis.
¹Market capitalization plus net debt, 2001 = 100.
²Market value as of June 30, 2007; fundamental value estimated using trailing 12-month average data.

Value Creation at the Top Ten Versus Industry Sample, 2002–2006



Sources: Thomson Financial Datastream; Thomson Financial Worldscope; Bloomberg; annual reports; BCG analysis.
¹Industry calculation based on aggregate of entire sample.
²Share change and net debt change not shown.
³Industry calculation based on sample average.

Machinery and Construction

The Machinery and Construction Top Ten, 2002–2006

#	Company	Country	TSR ² (%)	Market value ³ (\$billions)	Expect. premium ⁴ (%)	TSR Decomposition ¹						2007 TSR ⁶ (%)
						Sales growth (%)	Margin change (%)	Multiple change ⁵ (%)	Dividend yield (%)	Share change (%)	Net debt change (%)	
1	Larsen & Toubro	India	76.9	9.140	73	21	-3	31	4	-2	25	53.3
2	Bharat Heavy Electricals	India	76.8	12.709	74	21	51	-3	2	0	6	34.6
3	Eiffage	France	48.6	8.853	2	11	27	27	4	-1	-19	48.5
4	Precision Castparts	United States	41.3	10.623	59	9	1	24	0	-5	11	55.1
5	Hyundai Heavy Industries	South Korea	41.1	10.301	-30	16	-2	-10	4	-13	46	173.8
6	Komatsu	Japan	40.6	20.256	49	10	13	1	2	-1	15	49.3
7	Halliburton	United States	38.9	31.221	22	13	9	13	2	-2	5	11.7
8	Grupo ACS	Spain	38.4	19.877	-7	28	0	29	2	-12	-10	11.7
9	Persimmon	United Kingdom	36.4	8.923	23	18	7	3	5	-1	5	-22.3
10	Grupo Ferrovial	Spain	32.4	13.680	-8	24	9	7	2	-1	-9	-0.5

Sources: Thomson Financial Datastream; Thomson Financial Worldscope; Bloomberg; annual reports; BCG analysis.

Note: n = 58 global companies with a market valuation greater than \$8 billion.

¹Contribution of each factor is shown in percentage points of five-year average annual TSR; apparent discrepancies with TSR total due to rounding.

²Average annual total shareholder return, 2002–2006.

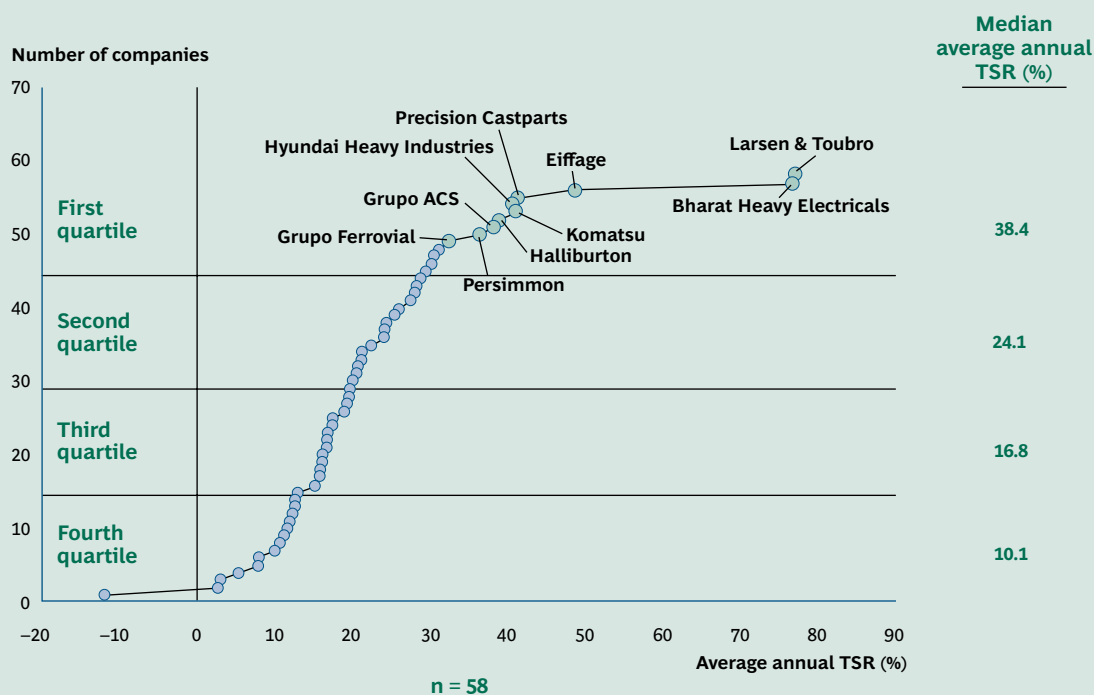
³As of December 31, 2006.

⁴Expectation premium as percentage of total 2006 market value.

⁵Change in EBITDA multiple.

⁶As of June 30, 2007.

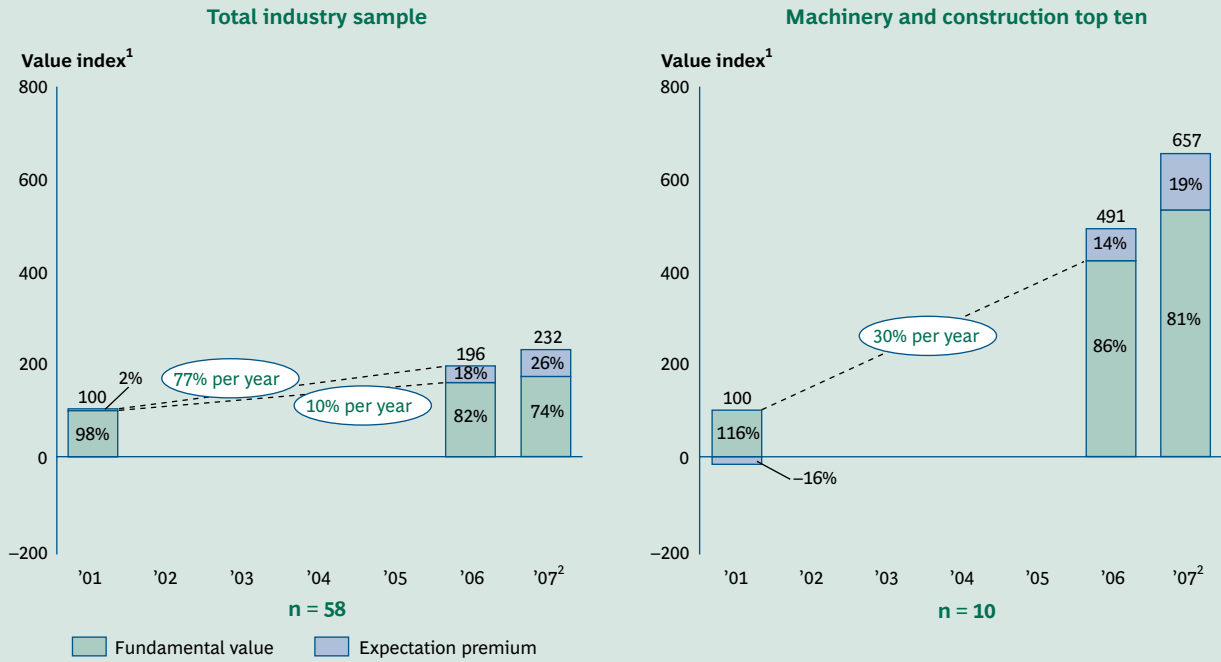
Average Annual Total Shareholder Return by Quartile, 2002–2006



Sources: Thomson Financial Datastream; BCG analysis.

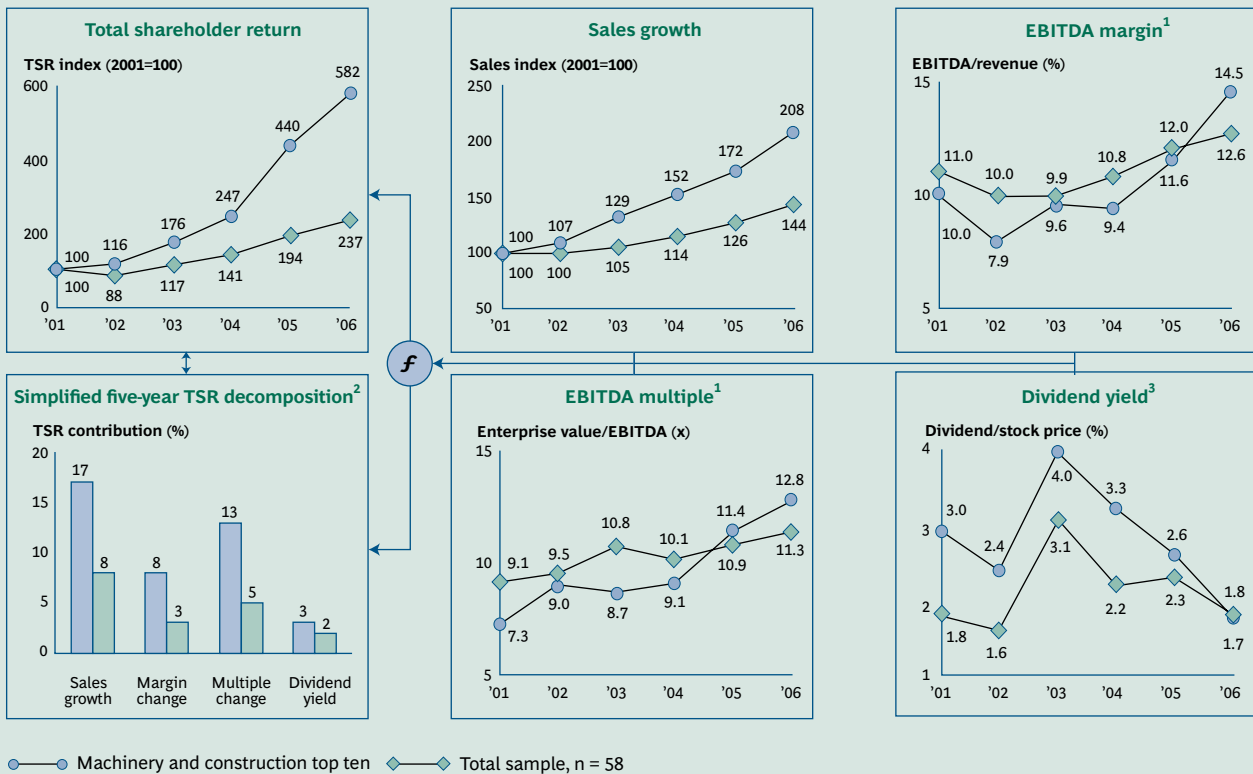
Note: TSR derived from calendar-year data.

Change in Fundamental Value and Expectation Premiums, 2002–2006



Sources: Thomson Financial Datastream; Thomson Financial Worldscope; Bloomberg; annual reports; BCG analysis.
¹Market capitalization plus net debt, 2001 = 100.
²Market value as of June 30, 2007; fundamental value estimated using trailing 12-month average data.

Value Creation at the Top Ten Versus Industry Sample, 2002–2006



Sources: Thomson Financial Datastream; Thomson Financial Worldscope; Bloomberg; annual reports; BCG analysis.
¹Industry calculation based on aggregate of entire sample.
²Share change and net debt change not shown.
³Industry calculation based on sample average.

Media and Publishing

The Media and Publishing Top Ten, 2002–2006

#	Company	Country	TSR ² (%)	Market value ³ (\$billions)	Expect. premium ⁴ (%)	TSR Decomposition ¹						2007 TSR ⁶ (%)
						Sales growth (%)	Margin change (%)	Multiple change ⁵ (%)	Dividend yield (%)	Share change (%)	Net debt change (%)	
1	Naspers	South Africa	54.8	7.627	31	14	34	-13	2	-14	32	9.6
2	ProSiebenSat.1 Media	Germany	37.3	6.955	53	1	15	7	2	-2	13	20.5
3	Grupo Televisa	Mexico	27.1	13.688	34	10	10	3	3	-3	4	4.3
4	Publishing and Broadcasting	Australia	20.0	11.422	21	8	5	2	3	0	3	-6.8
5	McGraw-Hill	United States	19.2	24.106	41	7	5	2	2	2	2	0.7
6	Tokyo Broadcasting System	Japan	15.6	6.341	17	1	-8	24	1	-2	0	-4.9
7	Walt Disney	United States	11.7	70.886	29	6	2	2	1	-1	1	1.5
8	E.W. Scripps	United States	9.5	8.159	33	12	5	-9	1	-1	1	-8.0
9	Lamar Advertising	United States	9.1	6.632	54	9	-1	-1	0	0	2	1.0
10	Lagardère	France	8.7	11.466	-16	1	5	0	4	0	-2	7.9

Sources: Thomson Financial Datastream; Thomson Financial Worldscope; Bloomberg; annual reports; BCG analysis.

Note: n = 34 global companies with a market valuation greater than \$6 billion.

¹Contribution of each factor is shown in percentage points of five-year average annual TSR; apparent discrepancies with TSR total due to rounding.

²Average annual total shareholder return, 2002–2006.

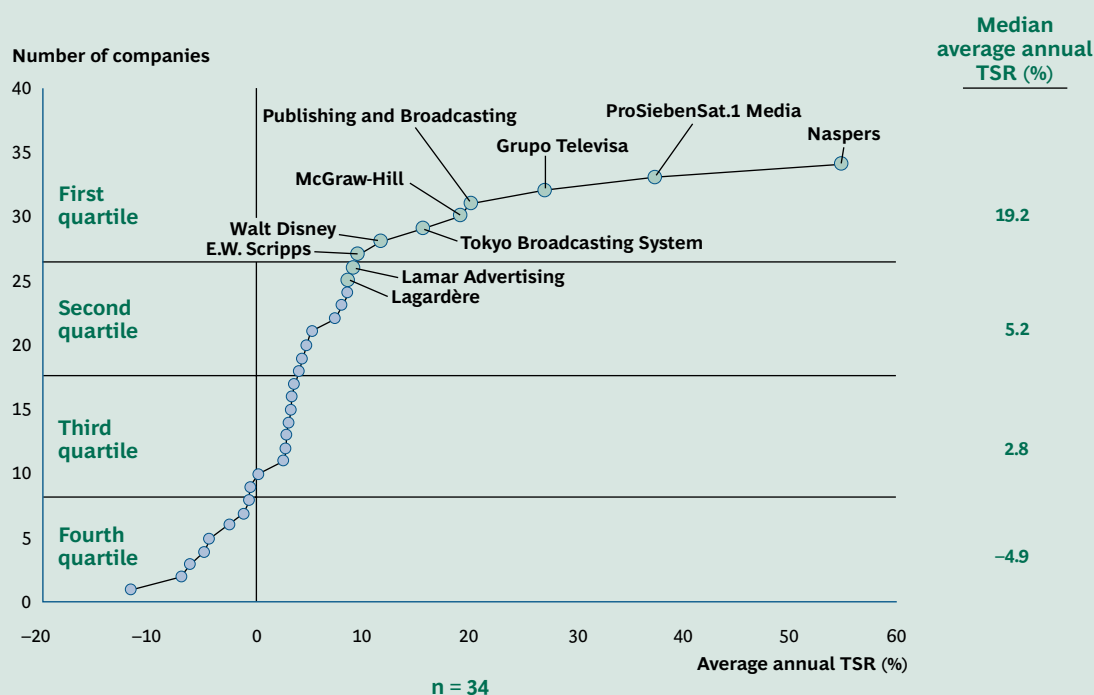
³As of December 31, 2006.

⁴Expectation premium as percentage of total 2006 market value.

⁵Change in EBITDA multiple.

⁶As of June 30, 2007.

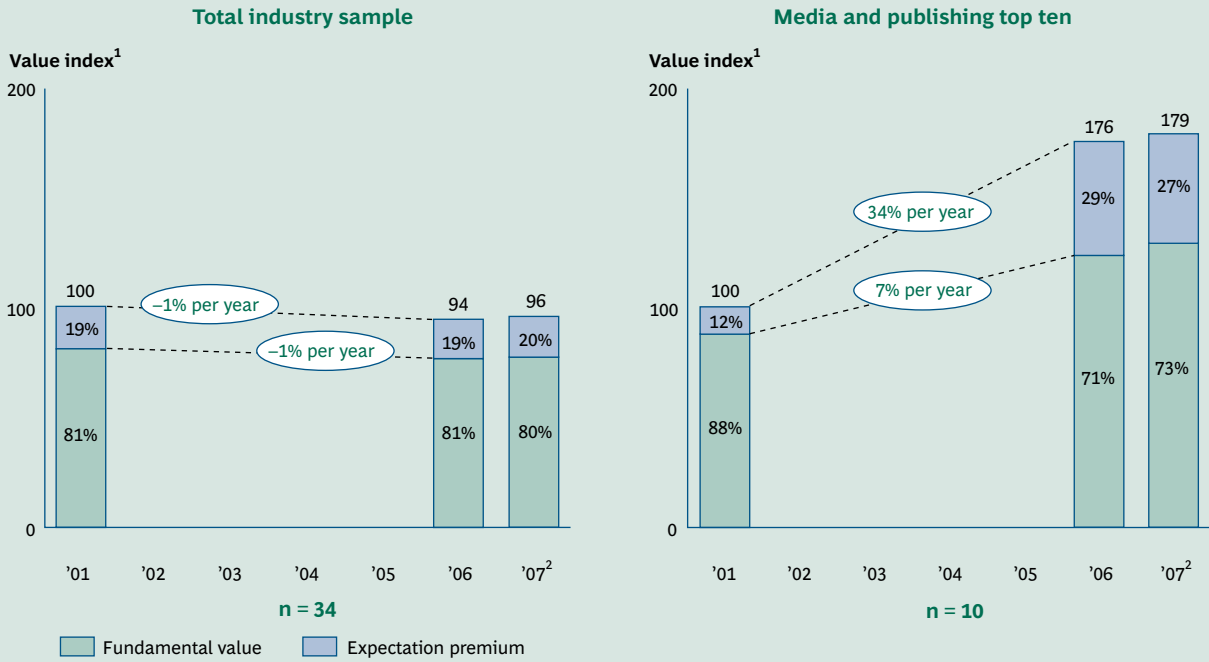
Average Annual Total Shareholder Return by Quartile, 2002–2006



Sources: Thomson Financial Datastream; BCG analysis.

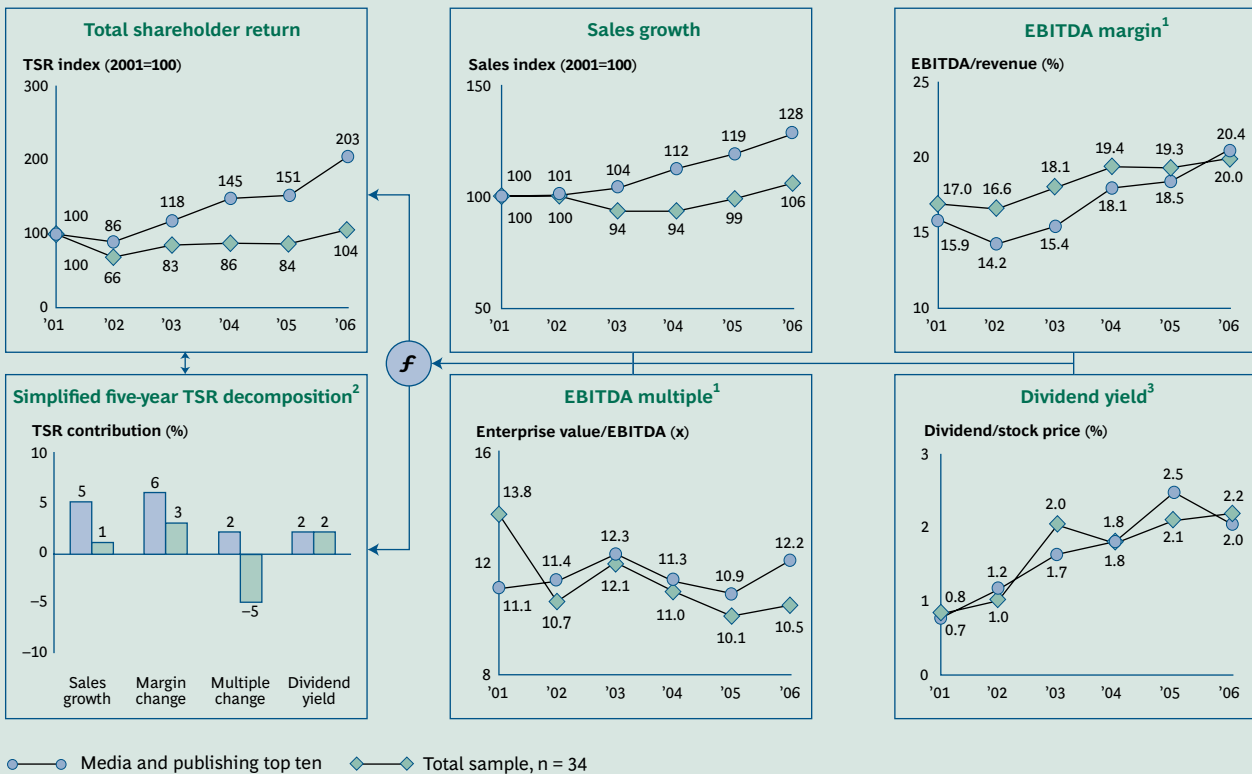
Note: TSR derived from calendar-year data.

Change in Fundamental Value and Expectation Premiums, 2002–2006



Sources: Thomson Financial Datastream; Thomson Financial Worldscope; Bloomberg; annual reports; BCG analysis.
¹Market capitalization plus net debt, 2001 = 100.
²Market value as of June 30, 2007; fundamental value estimated using trailing 12-month average data.

Value Creation at the Top Ten Versus Industry Sample, 2002–2006



Sources: Thomson Financial Datastream; Thomson Financial Worldscope; Bloomberg; annual reports; BCG analysis.
¹Industry calculation based on aggregate of entire sample.
²Share change and net debt change not shown.
³Industry calculation based on sample average.

Mining and Materials

The Mining and Materials Top Ten, 2002–2006

#	Company	Country	TSR ² (%)	Market value ³ (\$billions)	Expect. premium ⁴ (%)	TSR Decomposition ¹						2007 TSR ⁶ (%)
						Sales growth (%)	Margin change (%)	Multiple change ⁵ (%)	Dividend yield (%)	Share change (%)	Net debt change (%)	
1	Vallourec	France	90.2	15.402	24	22	21	25	6	-1	17	8.1
2	Usinas Sider Minas	Brazil	76.0	9.303	-4	21	2	-6	13	0	46	40.4
3	Grupo México	Mexico	73.6	9.464	-35	17	34	-23	4	-4	46	70.9
4	Sumitomo Metal Industries	Japan	68.0	20.867	15	1	10	1	4	-5	58	41.5
5	Southern Copper	United States	66.5	15.869	14	52	19	-7	11	-12	3	82.8
6	Siderúrgica Nacional	Brazil	66.2	8.215	10	19	7	2	22	2	14	59.5
7	Salzgitter	Germany	64.6	8.317	7	15	13	-4	5	2	35	44.6
8	Vale do Rio Doce	Brazil	54.6	69.031	28	37	6	7	6	-1	1	36.4
9	Kobe Steel	Japan	53.0	10.673	-1	4	3	2	1	-2	44	15.6
10	Cameco	Canada	49.7	14.262	68	23	-3	25	1	-1	4	14.6

Sources: Thomson Financial Datastream; Thomson Financial Worldscope; Bloomberg; annual reports; BCG analysis.

Note: n = 47 global companies with a market valuation greater than \$8 billion.

¹Contribution of each factor is shown in percentage points of five-year average annual TSR; apparent discrepancies with TSR total due to rounding.

²Average annual total shareholder return, 2002–2006.

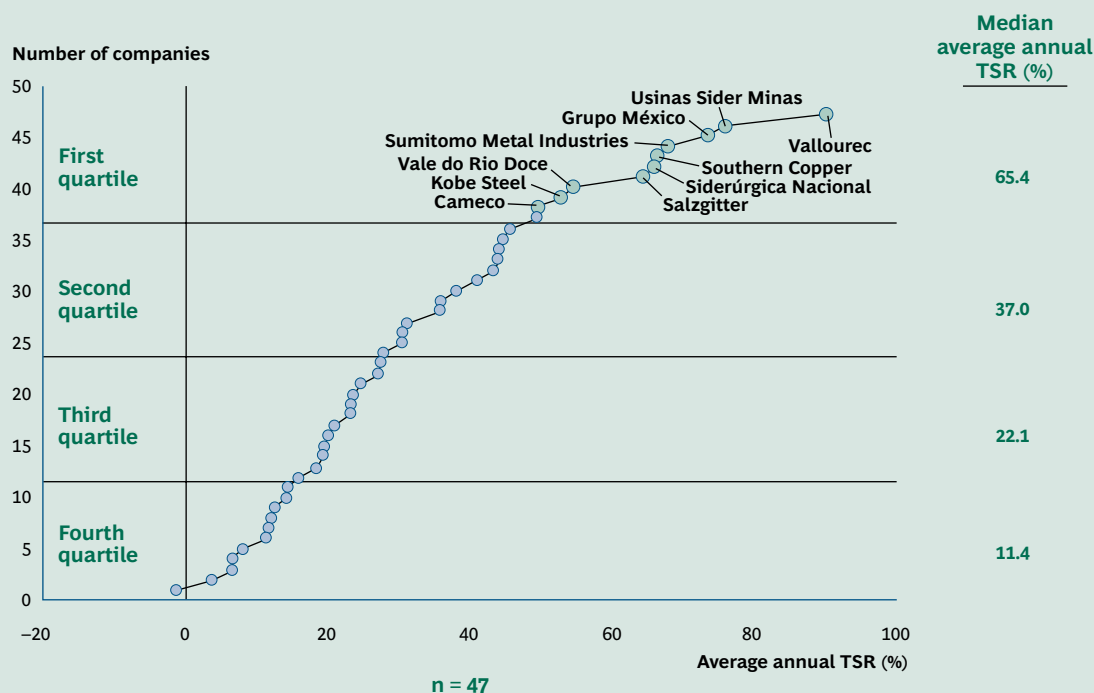
³As of December 31, 2006.

⁴Expectation premium as percentage of total 2006 market value.

⁵Change in EBITDA multiple.

⁶As of June 30, 2007.

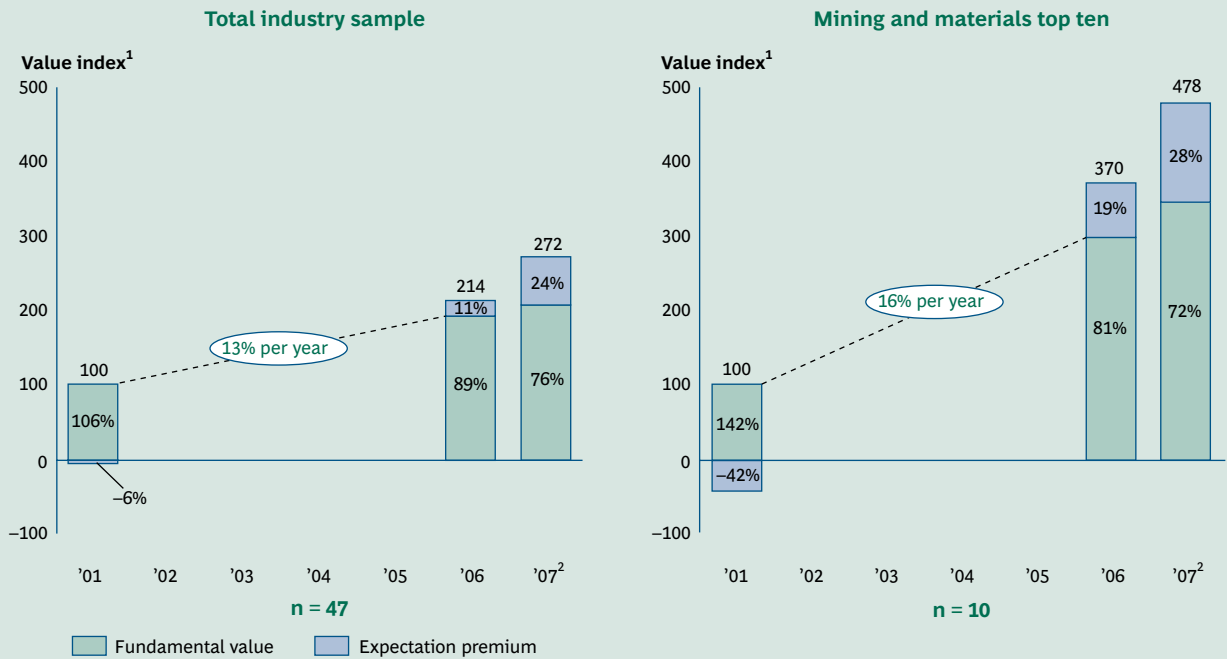
Average Annual Total Shareholder Return by Quartile, 2002–2006



Sources: Thomson Financial Datastream; BCG analysis.

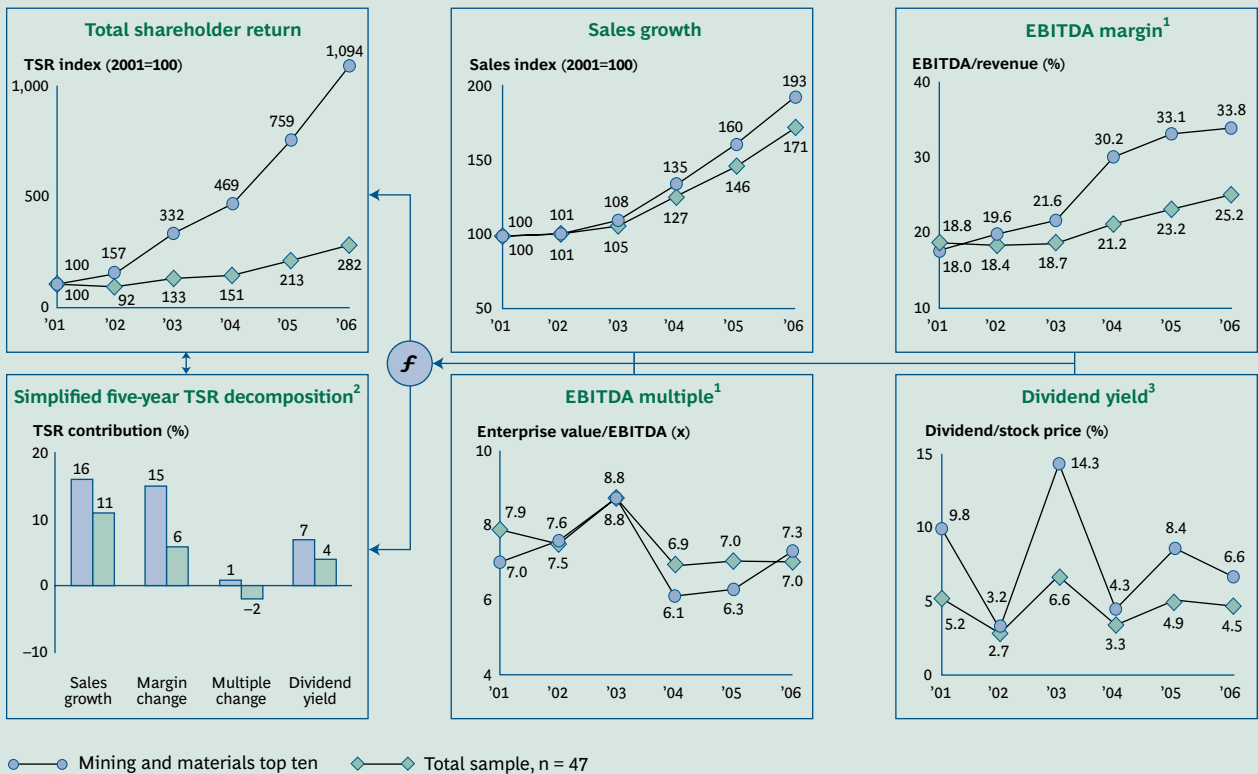
Note: TSR derived from calendar-year data.

Change in Fundamental Value and Expectation Premiums, 2002–2006



Sources: Thomson Financial Datastream; Thomson Financial Worldscope; Bloomberg; annual reports; BCG analysis.
¹Market capitalization plus net debt, 2001 = 100.
²Market value as of June 30, 2007; fundamental value estimated using trailing 12-month average data.

Value Creation at the Top Ten Versus Industry Sample, 2002–2006



Sources: Thomson Financial Datastream; Thomson Financial Worldscope; Bloomberg; annual reports; BCG analysis.
¹Industry calculation based on aggregate of entire sample.
²Share change and net debt change not shown.
³Industry calculation based on sample average.

Multibusiness

The Multibusiness Top Ten, 2002–2006

#	Company	Country	TSR ² (%)	Market value ³ (\$billions)	Expect. premium ⁴ (%)	TSR Decomposition ¹						2007 TSR ⁶ (%)
						Sales growth (%)	Margin change (%)	Multiple change ⁵ (%)	Dividend yield (%)	Share change (%)	Net debt change (%)	
1	Jardine Matheson	Singapore	33.9	13.192	-15	12	21	-5	5	0	1	13.4
2	Rockwell Automation	United States	30.7	10.394	39	6	13	2	3	2	5	14.7
3	Itochu	Japan	28.3	13.004	-10	4	6	-8	1	-2	26	47.3
4	Sumitomo Corporation	Japan	26.0	18.705	-4	14	-1	0	2	-3	16	27.4
5	Mitsui & Co.	Japan	24.1	25.788	-10	12	11	-11	2	-2	13	39.0
6	Mitsubishi Corporation	Japan	22.9	31.771	-3	10	11	-13	2	-1	15	45.7
7	Textron	United States	20.6	11.763	26	-1	-1	12	3	2	6	18.4
8	ITT	United States	18.7	10.495	34	11	-2	6	1	-1	3	20.7
9	Swire Pacific	Hong Kong	17.9	16.124	24	5	-2	8	4	0	4	6.6
10	Eaton	United States	17.5	11.196	36	11	2	0	2	-1	3	25.0

Sources: Thomson Financial Datastream; Thomson Financial Worldscope; Bloomberg; annual reports; BCG analysis.

Note: n = 24 global companies with a market valuation greater than \$10 billion.

¹Contribution of each factor is shown in percentage points of five-year average annual TSR; apparent discrepancies with TSR total due to rounding.

²Average annual total shareholder return, 2002–2006.

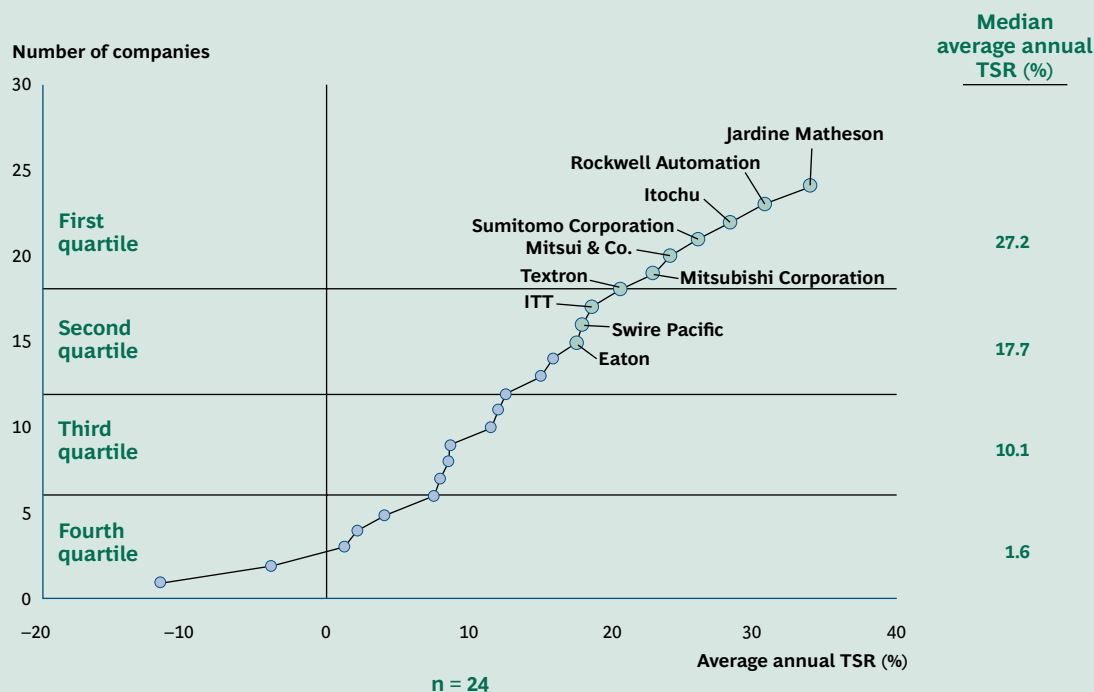
³As of December 31, 2006.

⁴Expectation premium as percentage of total 2006 market value.

⁵Change in EBITDA multiple.

⁶As of June 30, 2007.

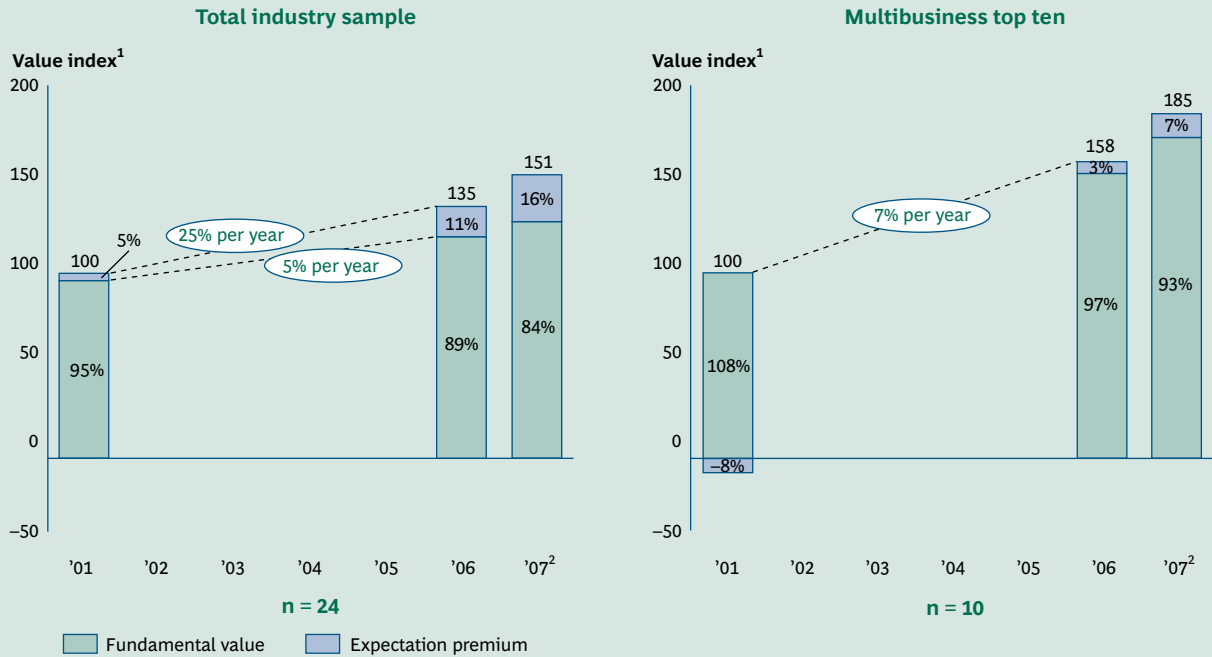
Average Annual Total Shareholder Return by Quartile, 2002–2006



Sources: Thomson Financial Datastream; BCG analysis.

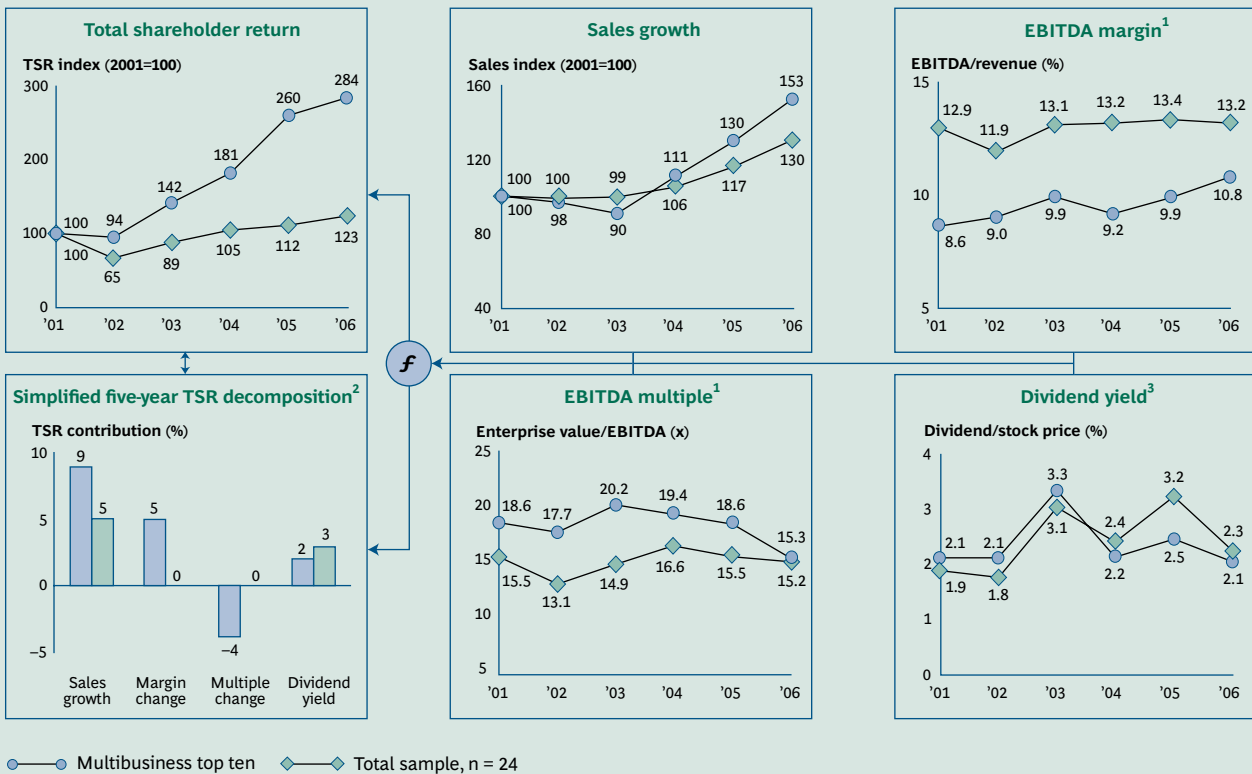
Note: TSR derived from calendar-year data.

Change in Fundamental Value and Expectation Premiums, 2002–2006



Sources: Thomson Financial Datastream; Thomson Financial Worldscope; Bloomberg; annual reports; BCG analysis.
¹Market capitalization plus net debt, 2001 = 100.
²Market value as of June 30, 2007; fundamental value estimated using trailing 12-month average data.

Value Creation at the Top Ten Versus Industry Sample, 2002–2006



Sources: Thomson Financial Datastream; Thomson Financial Worldscope; Bloomberg; annual reports; BCG analysis.
¹Industry calculation based on aggregate of entire sample.
²Share change and net debt change not shown.
³Industry calculation based on sample average.

Pharmaceuticals and Medical Technology

The Pharmaceuticals and Medical Technology Top Ten, 2002–2006

#	Company	Country	TSR ² (%)	Market value ³ (\$billions)	Expect. premium ⁴ (%)	TSR Decomposition ¹						2007 TSR ⁶ (%)
						Sales growth (%)	Margin change (%)	Multiple change ⁵ (%)	Dividend yield (%)	Share change (%)	Net debt change (%)	
1	Celgene	United States	48.4	21.427	69	40	70	-55	0	-5	-1	-0.4
2	Gilead Sciences	United States	31.6	29.857	18	57	7	-27	0	-4	-2	19.5
3	Genentech	United States	24.5	85.511	32	33	3	-10	0	0	-1	-6.7
4	Zimmer	United States	20.7	18.705	31	23	11	-11	0	-4	1	8.3
5	Becton Dickinson	United States	17.6	17.302	28	10	0	3	1	1	3	6.9
6	Merck KGaA	Germany	16.7	19.825	14	-4	7	6	3	-1	5	32.2
7	Eisai	Japan	16.7	16.288	14	11	0	2	2	2	0	-16.8
8	Fresenius	Germany	16.0	10.562	17	8	5	3	2	-12	9	13.8
9	Roche	Switzerland	14.6	158.293	7	8	5	-1	2	0	2	1.1
10	Stryker	United States	13.8	22.439	16	15	2	-5	0	-1	2	14.5

Sources: Thomson Financial Datastream; Thomson Financial Worldscope; Bloomberg; annual reports; BCG analysis.

Note: n = 46 global companies with a market valuation greater than \$10 billion.

¹Contribution of each factor is shown in percentage points of five-year average annual TSR; apparent discrepancies with TSR total due to rounding.

²Average annual total shareholder return, 2002–2006.

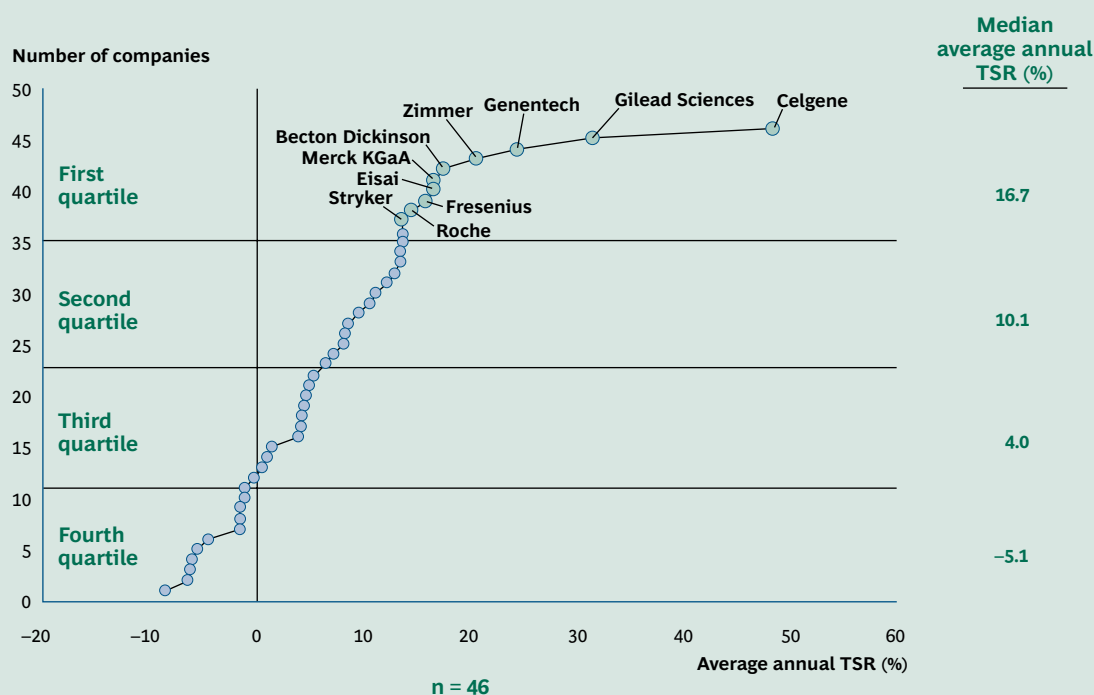
³As of December 31, 2006.

⁴Expectation premium as percentage of total 2006 market value.

⁵Change in EBITDA multiple.

⁶As of June 30, 2007.

Average Annual Total Shareholder Return by Quartile, 2002–2006

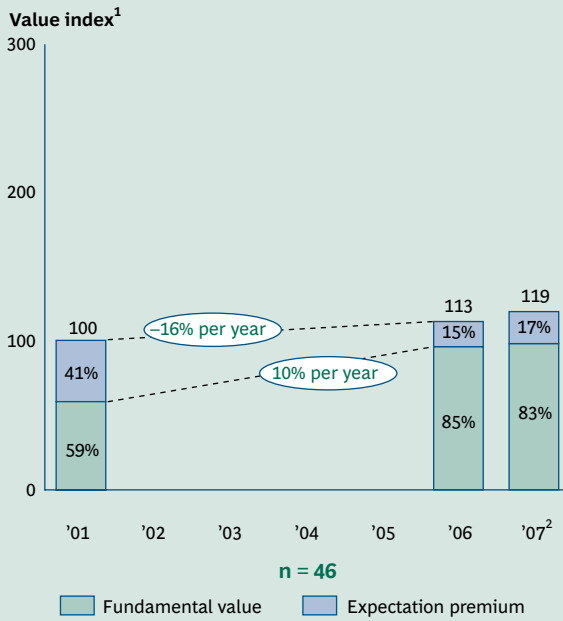


Sources: Thomson Financial Datastream; BCG analysis.

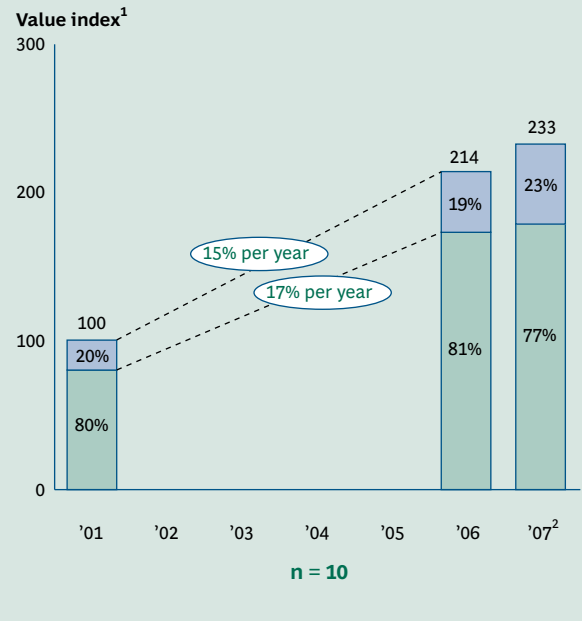
Note: TSR derived from calendar-year data.

Change in Fundamental Value and Expectation Premiums, 2002–2006

Total industry sample

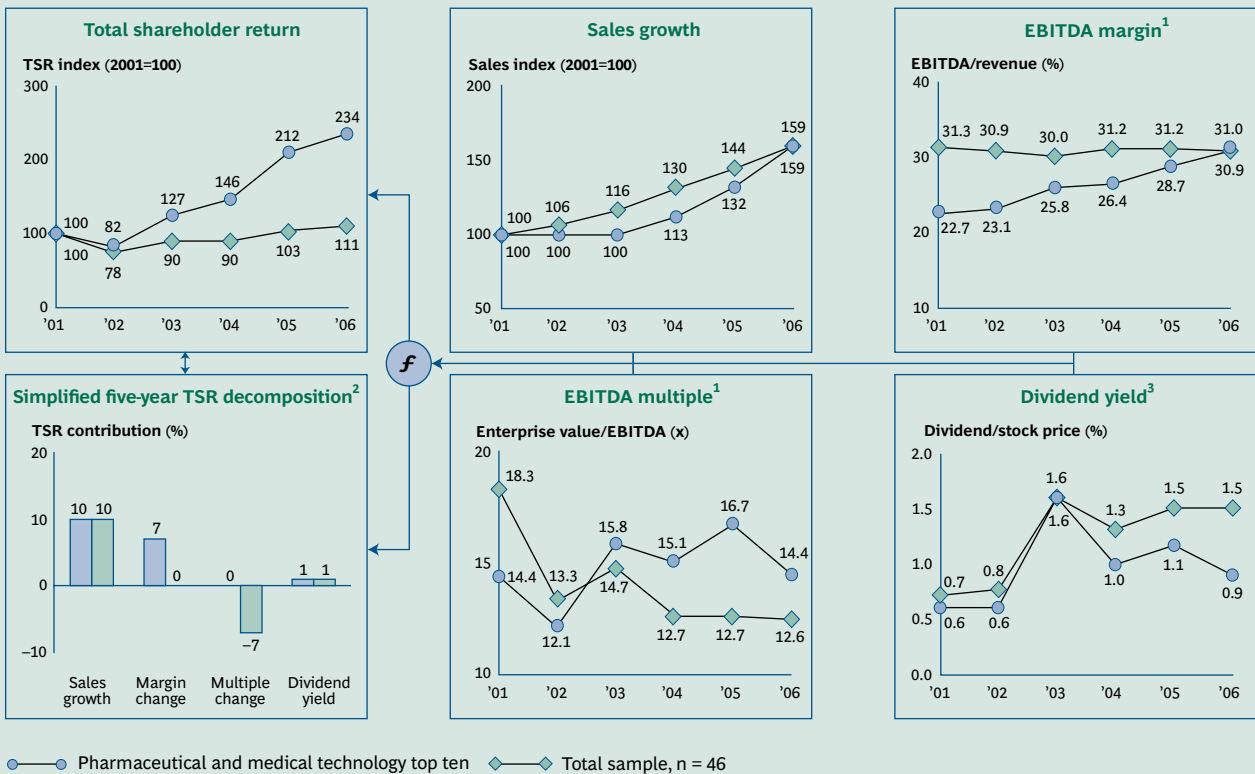


Pharmaceutical and medical technology top ten



Sources: Thomson Financial Datastream; Thomson Financial Worldscope; Bloomberg; annual reports; BCG analysis.
¹Market capitalization plus net debt, 2001 = 100.
²Market value as of June 30, 2007; fundamental value estimated using trailing 12-month average data.

Value Creation at the Top Ten Versus Industry Sample, 2002–2006



Sources: Thomson Financial Datastream; Thomson Financial Worldscope; Bloomberg; annual reports; BCG analysis.
¹Industry calculation based on aggregate of entire sample.
²Share change and net debt change not shown.
³Industry calculation based on sample average.

Pulp and Paper

The Pulp and Paper Top Ten, 2002–2006

#	Company	Country	TSR ² (%)	Market value ³ (\$billions)	Expect. premium ⁴ (%)	TSR Decomposition ¹						2007 TSR ⁶ (%)
						Sales growth (%)	Margin change (%)	Multiple change ⁵ (%)	Dividend yield (%)	Share change (%)	Net debt change (%)	
1	Suzano Papel e Celulose	Brazil	42.1	2.869	-5	31	-7	16	6	-11	7	23.2
2	Aracruz Celulose	Brazil	34.0	6.325	35	24	-1	2	6	0	2	0.8
3	Empresas CMPC	Chile	26.8	6.712	9	8	-3	17	3	0	3	9.8
4	Votorantim Celulose e Papel	Brazil	26.6	3.973	3	20	-2	0	5	-1	4	5.1
5	Mayr-Melnhof Karton	Austria	24.6	2.061	-3	6	-2	13	3	2	2	20.4
6	Portucel	Portugal	18.0	2.429	-10	1	-3	6	3	0	11	28.7
7	Temple-Inland	United States	13.3	4.924	-29	6	8	-8	3	-1	5	34.9
8	Holmen	Sweden	12.0	3.701	-15	2	-5	10	7	-1	0	1.5
9	Weyerhaeuser	United States	8.7	16.856	-5	8	2	-3	3	-2	0	13.5
10	Svenska Cellulosa	Sweden	8.1	12.319	-4	4	-6	7	4	0	-1	-0.4

Sources: Thomson Financial Datastream; Thomson Financial Worldscope; Bloomberg; annual reports; BCG analysis.

Note: n = 20 global companies with a market valuation greater than \$2 billion.

¹Contribution of each factor is shown in percentage points of five-year average annual TSR; apparent discrepancies with TSR total due to rounding.

²Average annual total shareholder return, 2002–2006.

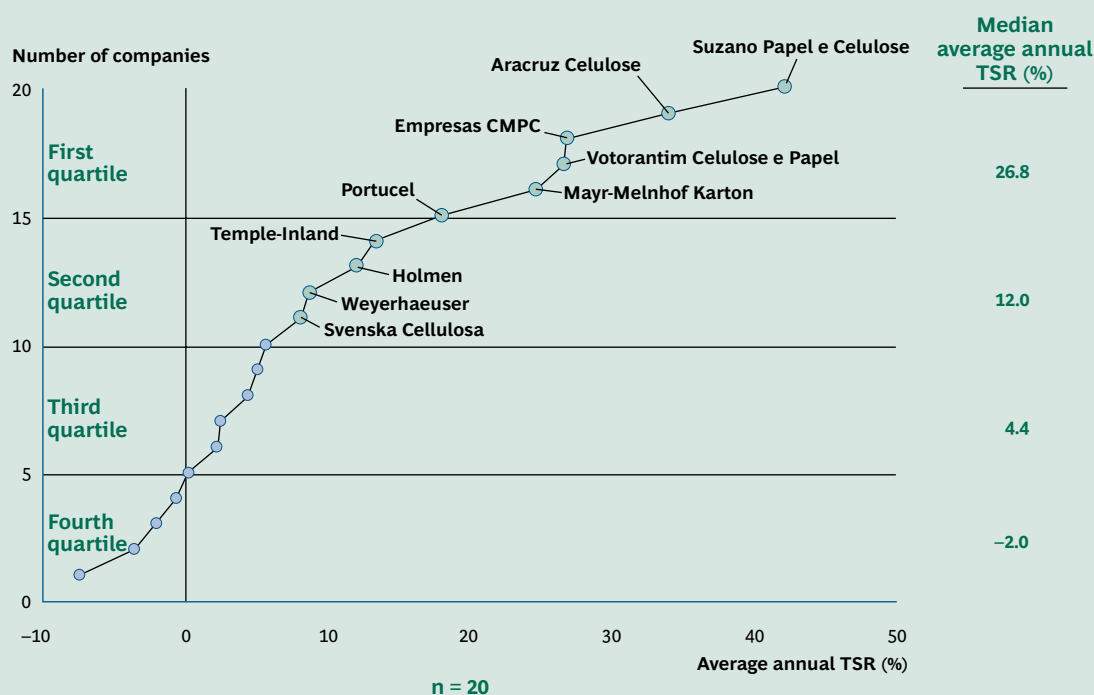
³As of December 31, 2006.

⁴Expectation premium as percentage of total 2006 market value.

⁵Change in EBITDA multiple.

⁶As of June 30, 2007.

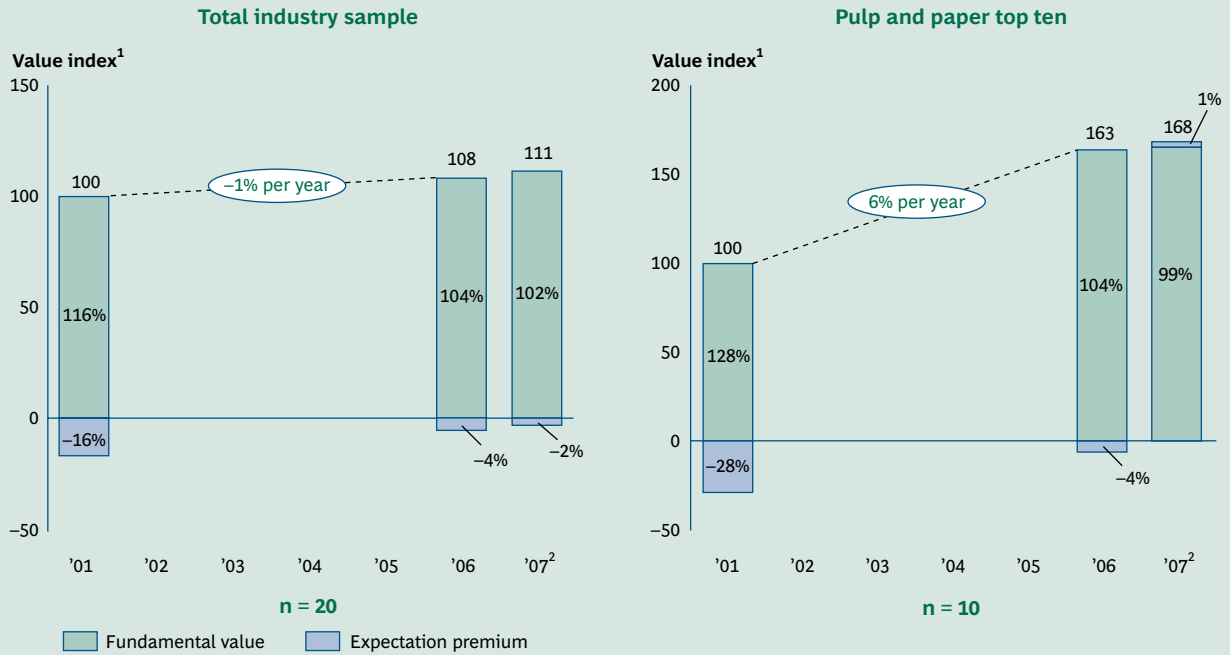
Average Annual Total Shareholder Return by Quartile, 2002–2006



Sources: Thomson Financial Datastream; BCG analysis.

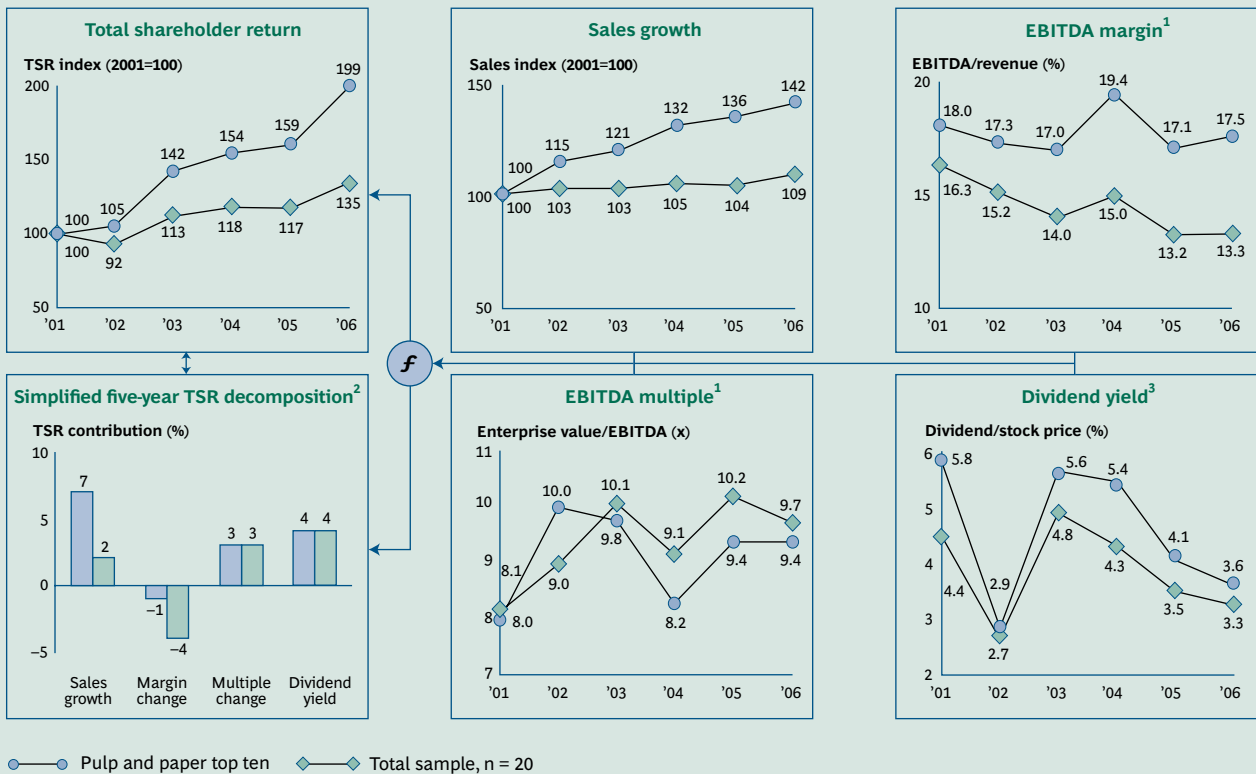
Note: TSR derived from calendar-year data.

Change in Fundamental Value and Expectation Premiums, 2002–2006



Sources: Thomson Financial Datastream; Thomson Financial Worldscope; Bloomberg; annual reports; BCG analysis.
¹Market capitalization plus net debt, 2001 = 100.
²Market value as of June 30, 2007; fundamental value estimated using trailing 12-month average data.

Value Creation at the Top Ten Versus Industry Sample, 2002–2006



Sources: Thomson Financial Datastream; Thomson Financial Worldscope; Bloomberg; annual reports; BCG analysis.
¹Industry calculation based on aggregate of entire sample.
²Share change and net debt change not shown.
³Industry calculation based on sample average.

Retail

The Retail Top Ten, 2002–2006

#	Company	Country	TSR ² (%)	Market value ³ (\$billions)	Expect. premium ⁴ (%)	TSR Decomposition ¹						2007 TSR ⁶ (%)
						Sales growth (%)	Margin change (%)	Multiple change ⁵ (%)	Dividend yield (%)	Share change (%)	Net debt change (%)	
1	Esprit Holdings	Hong Kong	62.8	13.724	33	27	7	26	5	-1	0	15.1
2	Nordstrom	United States	39.2	12.682	38	8	18	3	2	0	9	4.1
3	Shinsegae	South Korea	33.6	11.767	36	13	5	16	0	-4	4	3.8
4	Walmex	Mexico	32.2	37.726	41	14	5	12	2	1	-1	-13.4
5	Starbucks	United States	30.0	26.737	51	25	-1	6	0	0	-1	-25.9
6	Amazon.com	United States	29.5	16.254	72	26	26	-26	0	-2	6	73.4
7	J.C. Penney	United States	25.7	17.405	-2	-11	32	-11	2	2	10	-6.0
8	Woolworths	Australia	20.0	22.681	36	13	3	4	4	-2	-1	14.4
9	Yum! Brands	United States	19.6	15.586	40	7	1	6	1	2	3	12.2
10	Limited Brands	United States	18.4	11.510	28	1	2	11	4	2	-1	-4.1

Sources: Thomson Financial Datastream; Thomson Financial Worldscope; Bloomberg; annual reports; BCG analysis.

Note: n = 45 global companies with a market valuation greater than \$10 billion.

¹Contribution of each factor is shown in percentage points of five-year average annual TSR; apparent discrepancies with TSR total due to rounding.

²Average annual total shareholder return, 2002–2006.

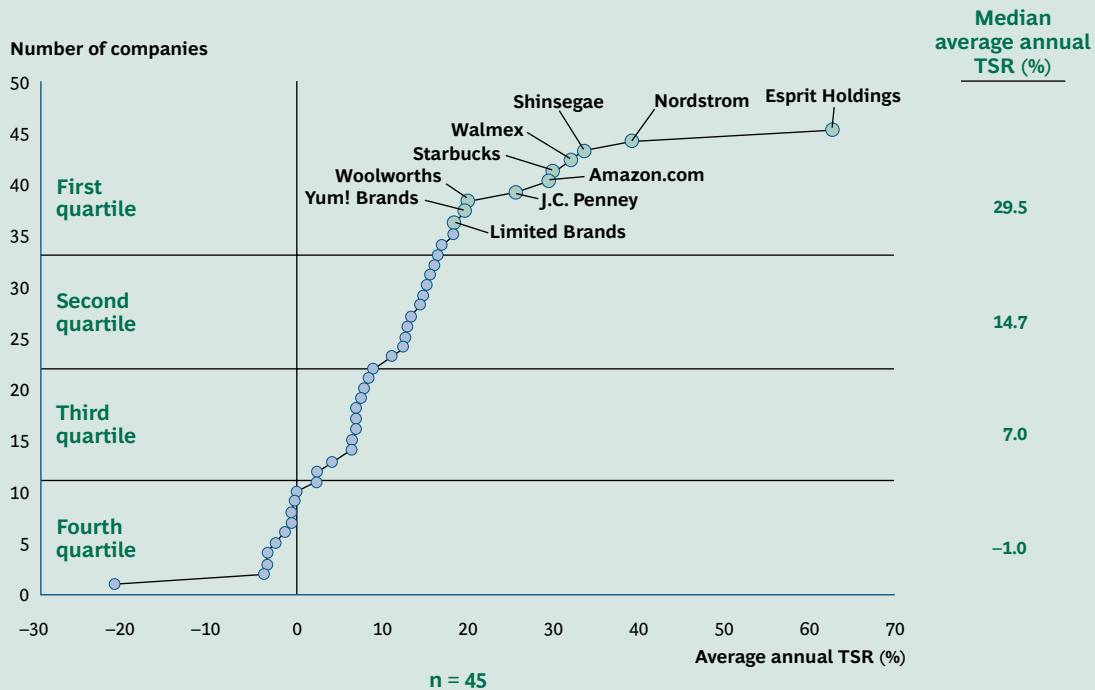
³As of December 31, 2006.

⁴Expectation premium as percentage of total 2006 market value.

⁵Change in EBITDA multiple.

⁶As of June 30, 2007.

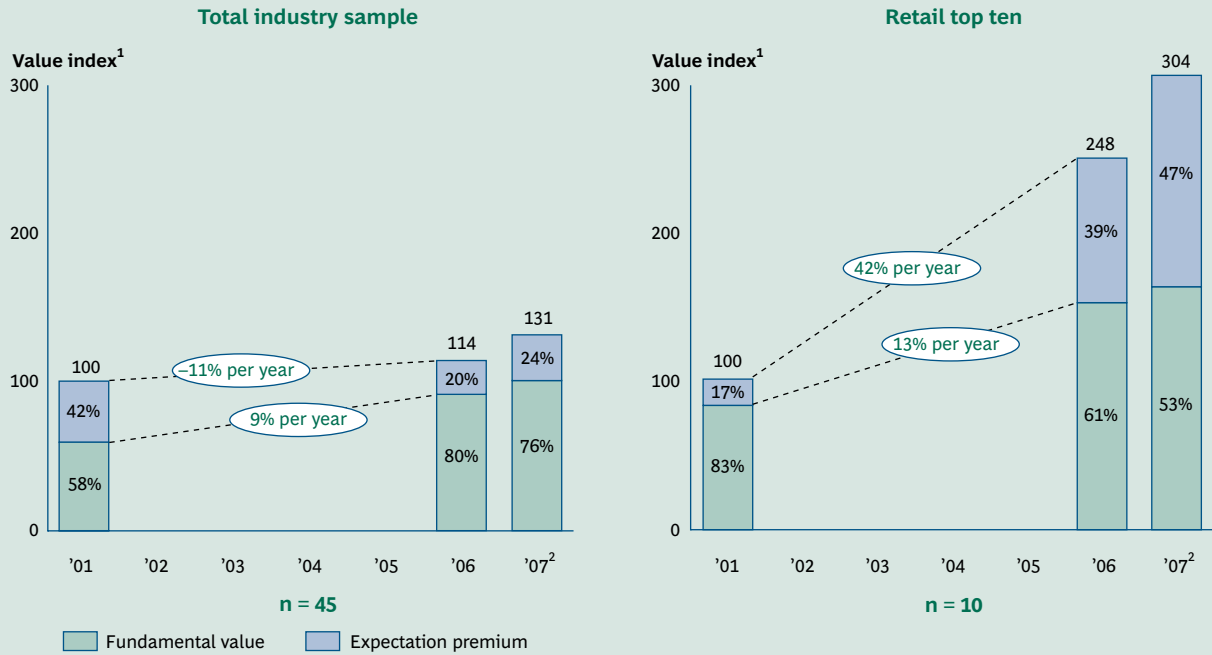
Average Annual Total Shareholder Return by Quartile, 2002–2006



Sources: Thomson Financial Datastream; BCG analysis.

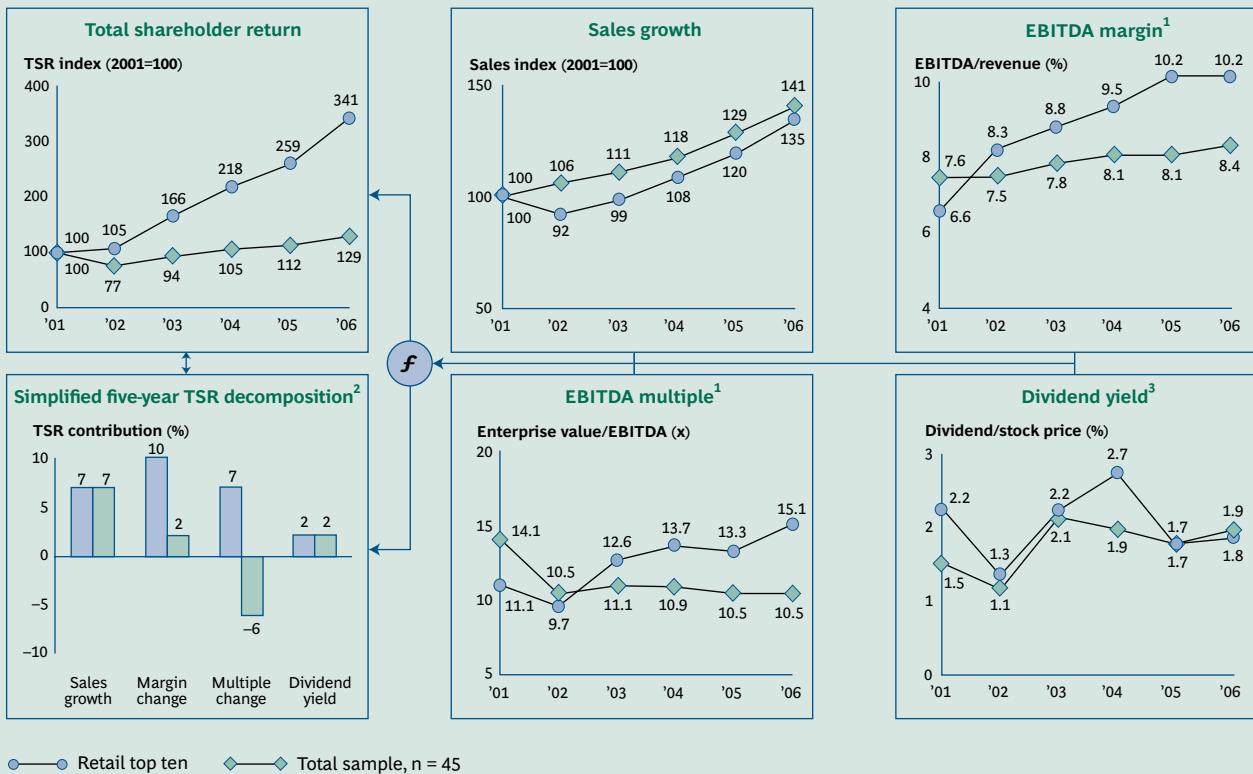
Note: TSR derived from calendar-year data.

Change in Fundamental Value and Expectation Premiums, 2002–2006



Sources: Thomson Financial Datastream; Thomson Financial Worldscope; Bloomberg; annual reports; BCG analysis.
¹Market capitalization plus net debt, 2001 = 100.
²Market value as of June 30, 2007; fundamental value estimated using trailing 12-month average data.

Value Creation at the Top Ten Versus Industry Sample, 2002–2006



Sources: Thomson Financial Datastream; Thomson Financial Worldscope; Bloomberg; annual reports; BCG analysis.
¹Industry calculation based on aggregate of entire sample.
²Share change and net debt change not shown.
³Industry calculation based on sample average.

Technology

The Technology Top Ten, 2002–2006

#	Company	Country	TSR ² (%)	Market value ³ (\$billions)	Expect. premium ⁴ (%)	TSR Decomposition ¹						2007 TSR ⁶ (%)
						Sales growth (%)	Margin change (%)	Multiple change ⁵ (%)	Dividend yield (%)	Share change (%)	Net debt change (%)	
1	América Móvil	Mexico	53.3	80.961	54	39	8	3	1	2	1	37.4
2	PT Telekomunikasi Indonesia	Indonesia	51.4	22.530	47	27	1	12	7	0	4	-2.5
3	Research In Motion	Canada	51.1	23.732	55	46	63	-47	0	-4	-7	43.9
4	Apple	United States	50.6	72.901	35	26	59	-32	0	-4	2	43.9
5	MTN	South Africa	46.4	22.708	47	44	-1	1	1	-2	3	14.0
6	Infosys Technologies	India	36.0	28.135	63	37	-4	2	2	-1	0	-13.6
7	Hon Hai Precision Industry	Taiwan	28.6	35.598	46	47	-18	2	2	-5	0	22.2
8	KDDI	Japan	28.1	30.005	22	6	2	-1	1	0	20	13.8
9	Telenor	Norway	27.5	32.042	43	15	7	2	3	1	0	-1.3
10	SoftBank	Japan	27.1	20.521	60	22	15	-13	0	-1	3	15.0

Sources: Thomson Financial Datastream; Thomson Financial Worldscope; Bloomberg; annual reports; BCG analysis.

Note: n = 53 global companies with a market valuation greater than \$20 billion.

¹Contribution of each factor is shown in percentage points of five-year average annual TSR; apparent discrepancies with TSR total due to rounding.

²Average annual total shareholder return, 2002–2006.

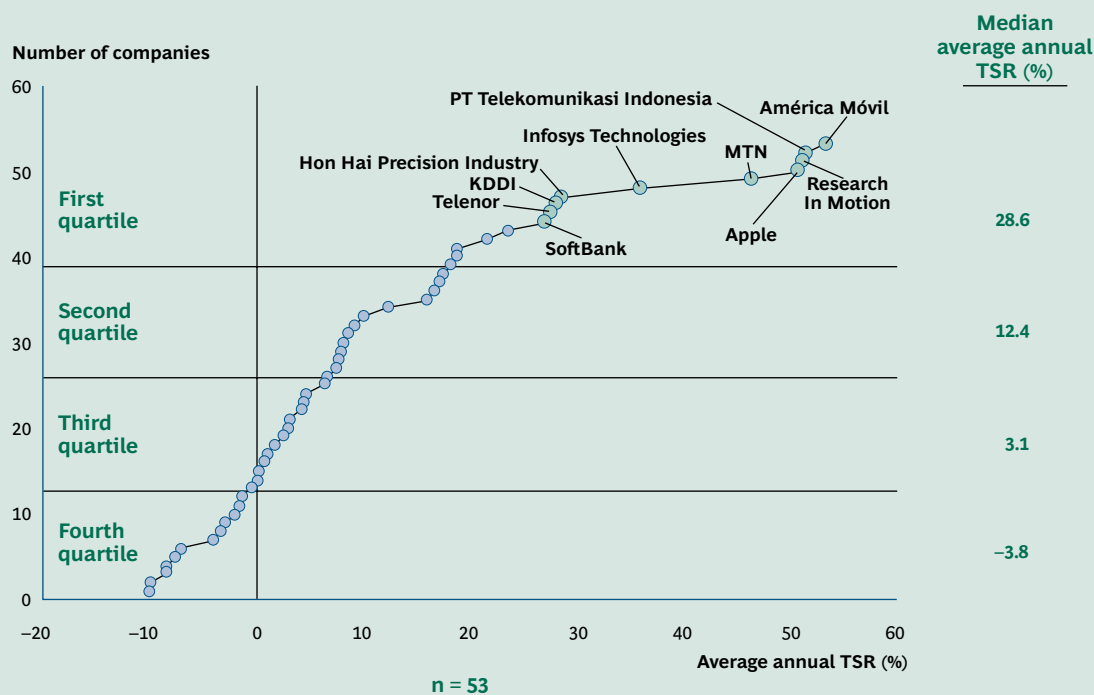
³As of December 31, 2006.

⁴Expectation premium as percentage of total 2006 market value.

⁵Change in EBITDA multiple.

⁶As of June 30, 2007.

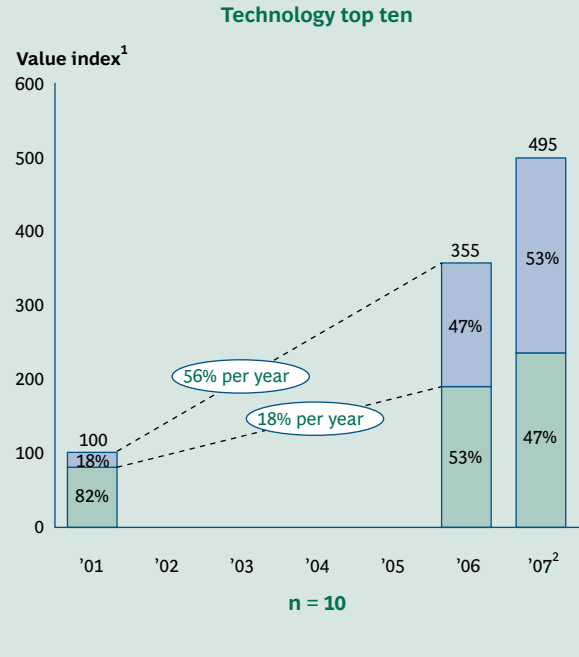
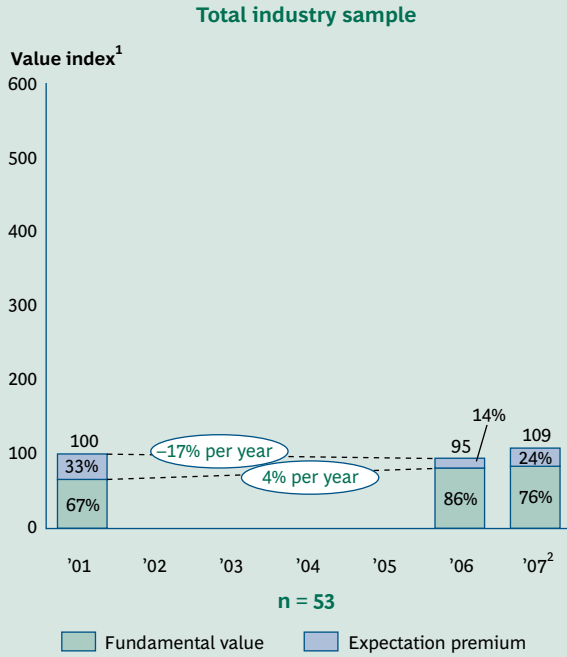
Average Annual Total Shareholder Return by Quartile, 2002–2006



Sources: Thomson Financial Datastream; BCG analysis.

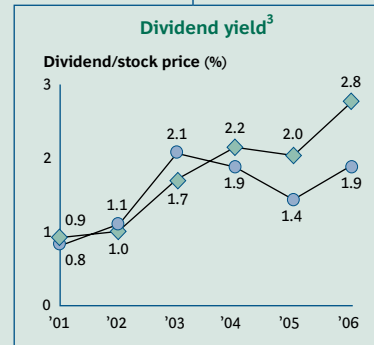
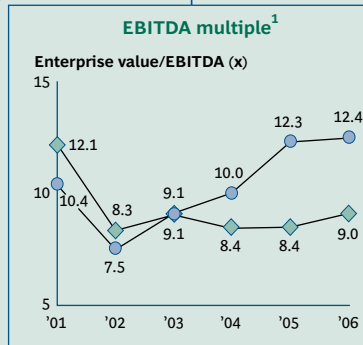
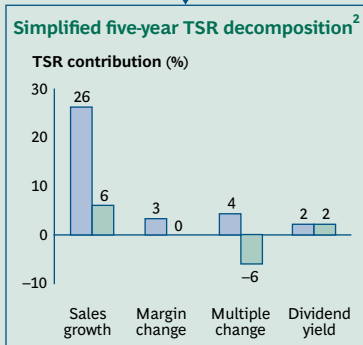
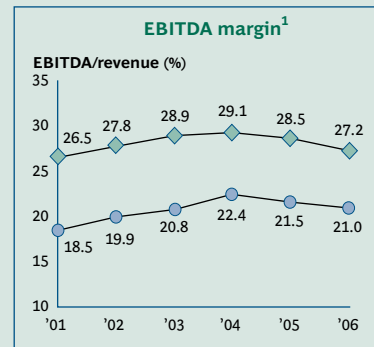
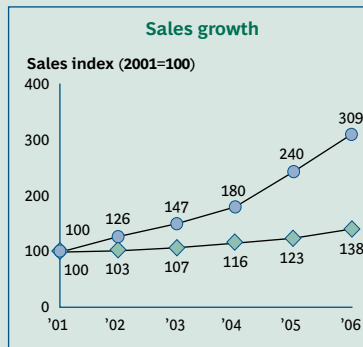
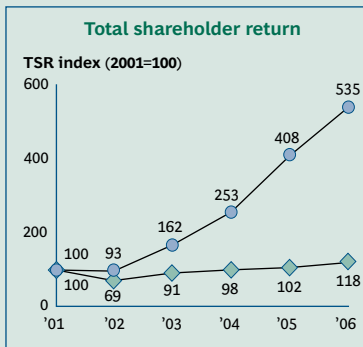
Note: TSR derived from calendar-year data.

Change in Fundamental Value and Expectation Premiums, 2002–2006



Sources: Thomson Financial Datastream; Thomson Financial Worldscope; Bloomberg; annual reports; BCG analysis.
¹Market capitalization plus net debt, 2001 = 100.
²Market value as of June 30, 2007; fundamental value estimated using trailing 12-month average data.

Value Creation at the Top Ten Versus Industry Sample, 2002–2006



Legend: ● Technology top ten, ◆ Total sample, n = 53

Sources: Thomson Financial Datastream; Thomson Financial Worldscope; Bloomberg; annual reports; BCG analysis.
¹Industry calculation based on aggregate of entire sample.
²Share change and net debt change not shown.
³Industry calculation based on sample average.

Transportation and Logistics

The Transportation and Logistics Top Ten, 2002–2006

#	Company	Country	TSR ² (%)	Market value ³ (\$billions)	Expect. premium ⁴ (%)	TSR Decomposition ¹						2007 TSR ⁶ (%)
						Sales growth (%)	Margin change (%)	Multiple change ⁵ (%)	Dividend yield (%)	Share change (%)	Net debt change (%)	
1	China Merchants	Hong Kong	49.6	9.511	49	29	-11	33	5	-3	-4	19.8
2	Kuehne + Nagel	Switzerland	42.5	8.720	26	19	4	17	3	-1	0	28.9
3	Cosco Pacific	Hong Kong	40.7	5.218	40	3	-1	31	5	-1	3	14.1
4	Mitsui OSK Lines	Japan	37.8	11.885	-14	10	1	4	3	0	19	43.8
5	Imperial	South Africa	28.9	5.453	-4	20	0	4	5	1	-1	-9.5
6	Autostrade ⁷	Italy	26.1	16.430	6	4	9	17	3	0	-7	14.6
7	C.H. Robinson Worldwide	United States	24.4	7.121	44	17	7	0	1	0	0	29.4
8	Abertis Infraestructuras	Spain	24.0	17.977	17	34	1	2	3	-9	-7	3.3
9	Norfolk Southern	United States	24.0	19.960	-8	9	7	-4	2	-1	11	5.4
10	Expeditors Int'l of Washington	United States	23.8	8.633	53	20	0	4	1	-1	0	2.3

Sources: Thomson Financial Datastream; Thomson Financial Worldscope; Bloomberg; annual reports; BCG analysis.

Note: n = 28 global companies with a market valuation greater than \$5 billion.

¹Contribution of each factor is shown in percentage points of five-year average annual TSR; apparent discrepancies with TSR total due to rounding.

²Average annual total shareholder return, 2002–2006.

³As of December 31, 2006.

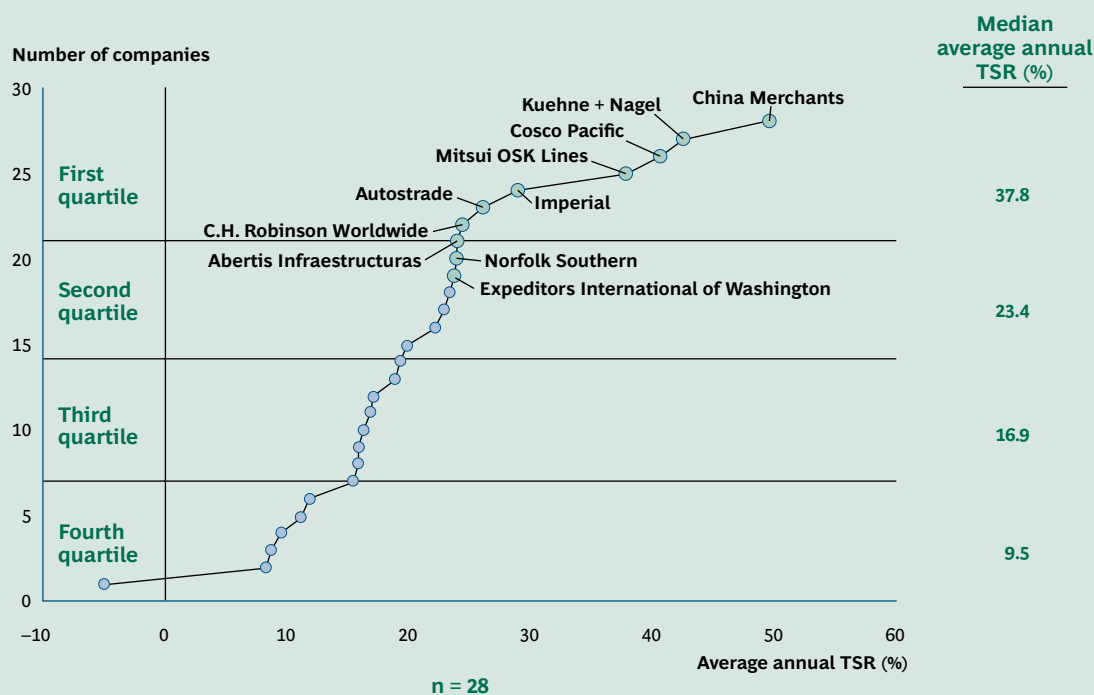
⁴Expectation premium as percentage of total 2006 market value.

⁵Change in EBITDA multiple.

⁶As of June 30, 2007.

⁷On May 4, 2007, Autostrade changed its name to Atlantia.

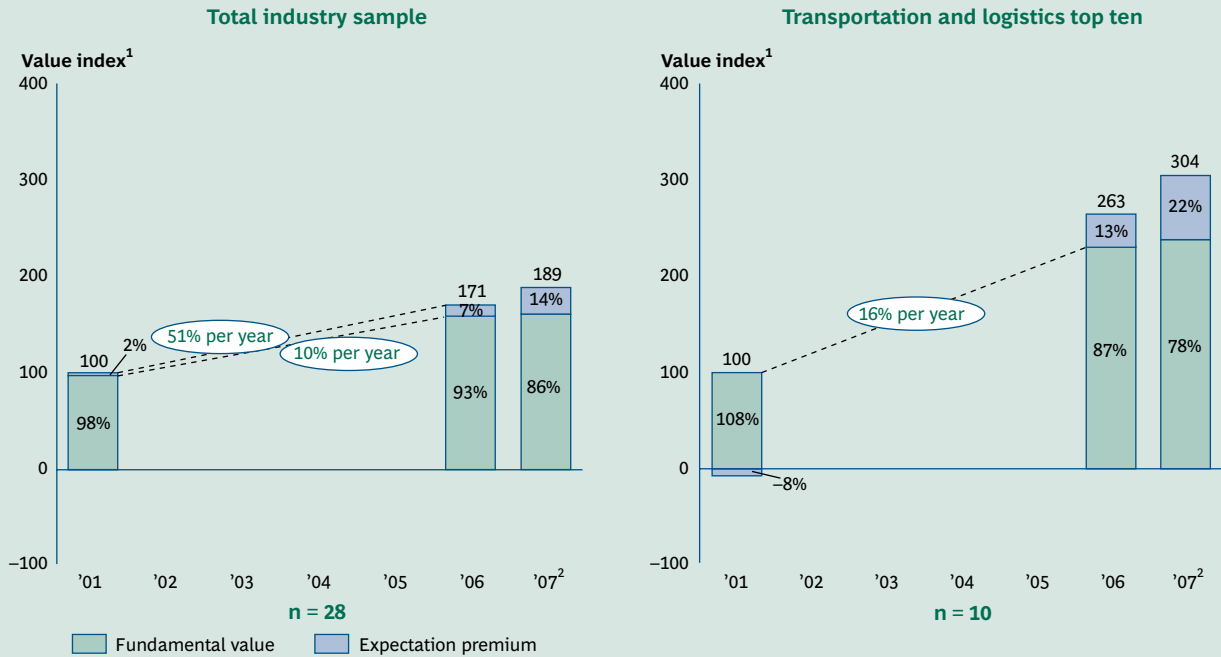
Average Annual Total Shareholder Return by Quartile, 2002–2006



Sources: Thomson Financial Datastream; BCG analysis.

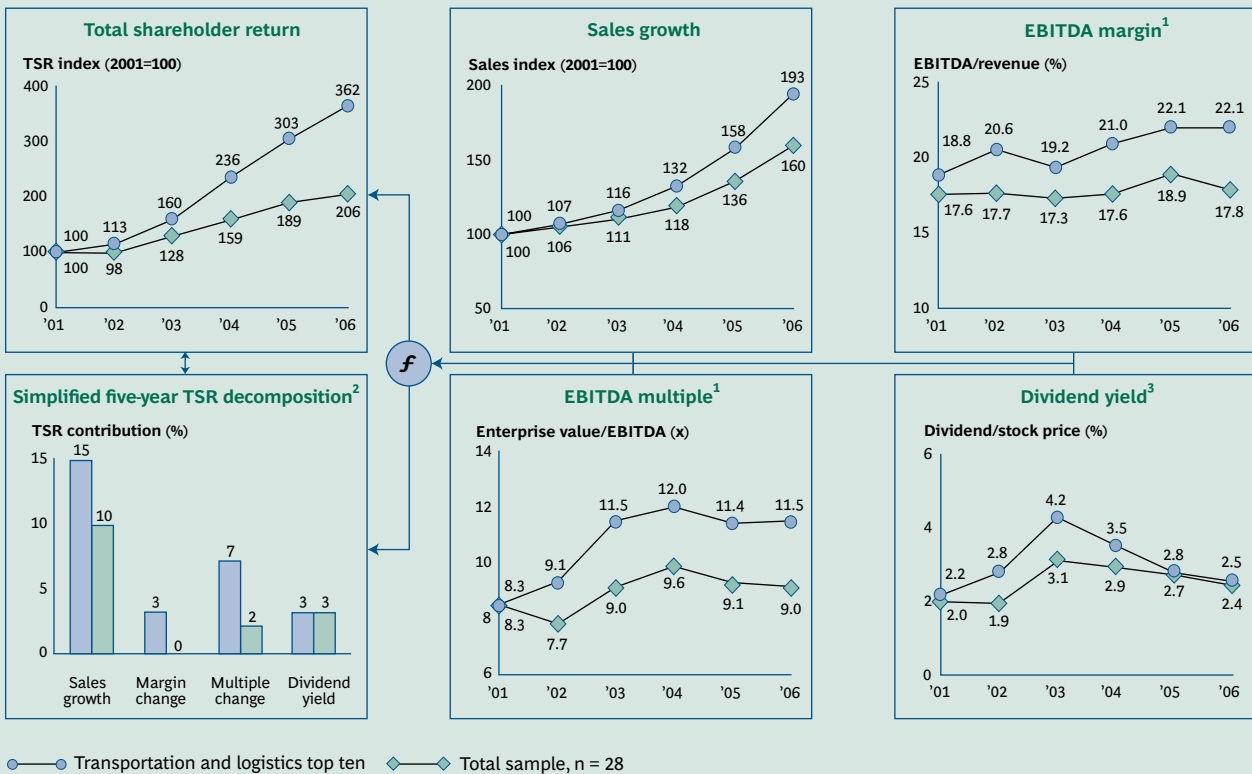
Note: TSR derived from calendar-year data.

Change in Fundamental Value and Expectation Premiums, 2002–2006



Sources: Thomson Financial Datastream; Thomson Financial Worldscope; Bloomberg; annual reports; BCG analysis.
¹Market capitalization plus net debt, 2001 = 100.
²Market value as of June 30, 2007; fundamental value estimated using trailing 12-month average data.

Value Creation at the Top Ten Versus Industry Sample, 2002–2006



Sources: Thomson Financial Datastream; Thomson Financial Worldscope; Bloomberg; annual reports; BCG analysis.
¹Industry calculation based on aggregate of entire sample.
²Share change and net debt change not shown.
³Industry calculation based on sample average.

Travel and Tourism

The Travel and Tourism Top Ten, 2002–2006

#	Company	Country	TSR ² (%)	Market value ³ (\$billions)	Expect. premium ⁴ (%)	TSR Decomposition ¹						2007 TSR ⁶ (%)
						Sales growth (%)	Margin change (%)	Multiple change ⁵ (%)	Dividend yield (%)	Share change (%)	Net debt change (%)	
1	Station Casinos	United States	50.4	4.672	46	11	7	18	2	0	12	7.0
2	Guangshen Railway	China	39.7	6.188	37	10	-3	35	7	-5	-5	18.9
3	MGM Mirage	United States	31.8	16.125	24	14	2	9	0	2	4	43.8
4	Shangri-La Asia	Hong Kong	29.1	6.556	32	12	2	8	2	-3	8	-5.3
5	Hilton Hotels	United States	26.9	13.493	28	22	-9	6	1	-1	8	-3.9
6	Starwood Hotels & Resorts	United States	23.4	13.250	29	9	-8	9	2	-2	13	7.3
7	Royal Caribbean Cruises	United States	22.8	8.775	4	11	0	1	2	-2	10	4.6
8	British Airways	United Kingdom	22.0	11.724	-19	-2	7	-3	0	-1	20	-20.7
9	Resorts World	Malaysia	21.2	4.528	19	10	2	3	2	0	4	19.5
10	Marriott International	United States	19.4	18.868	40	10	0	2	1	5	2	-9.1

Sources: Thomson Financial Datastream; Thomson Financial Worldscope; Bloomberg; annual reports; BCG analysis.

Note: n = 36 global companies with a market valuation greater than \$4 billion.

¹Contribution of each factor is shown in percentage points of five-year average annual TSR; apparent discrepancies with TSR total due to rounding.

²Average annual total shareholder return, 2002–2006.

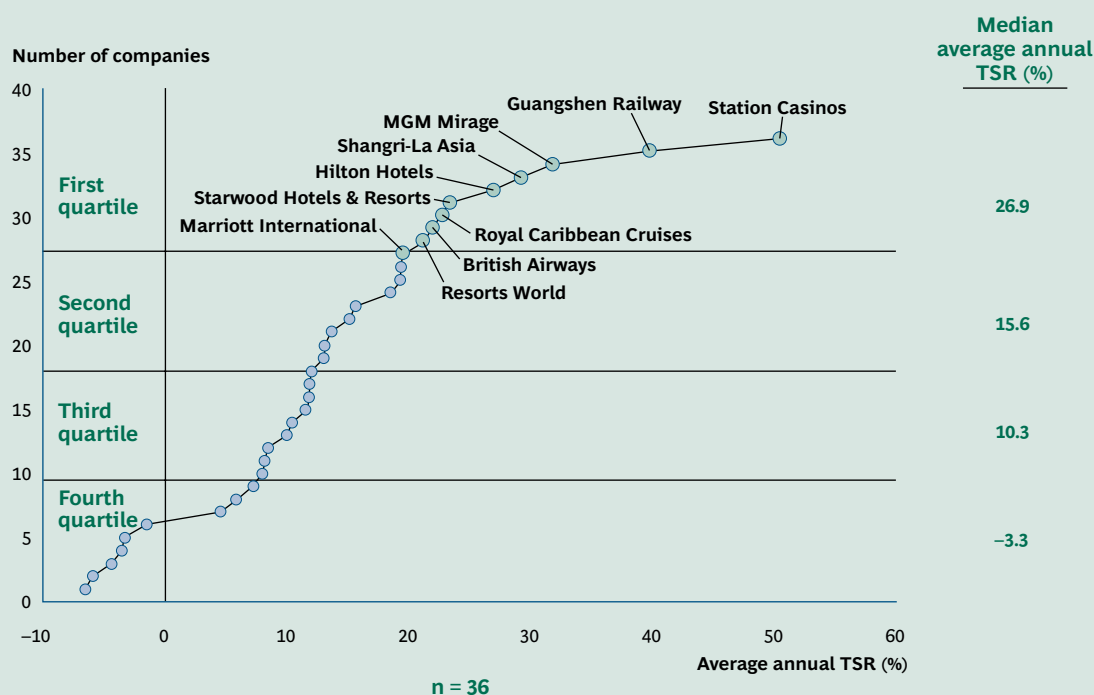
³As of December 31, 2006.

⁴Expectation premium as percentage of total 2006 market value.

⁵Change in EBITDA multiple.

⁶As of June 30, 2007.

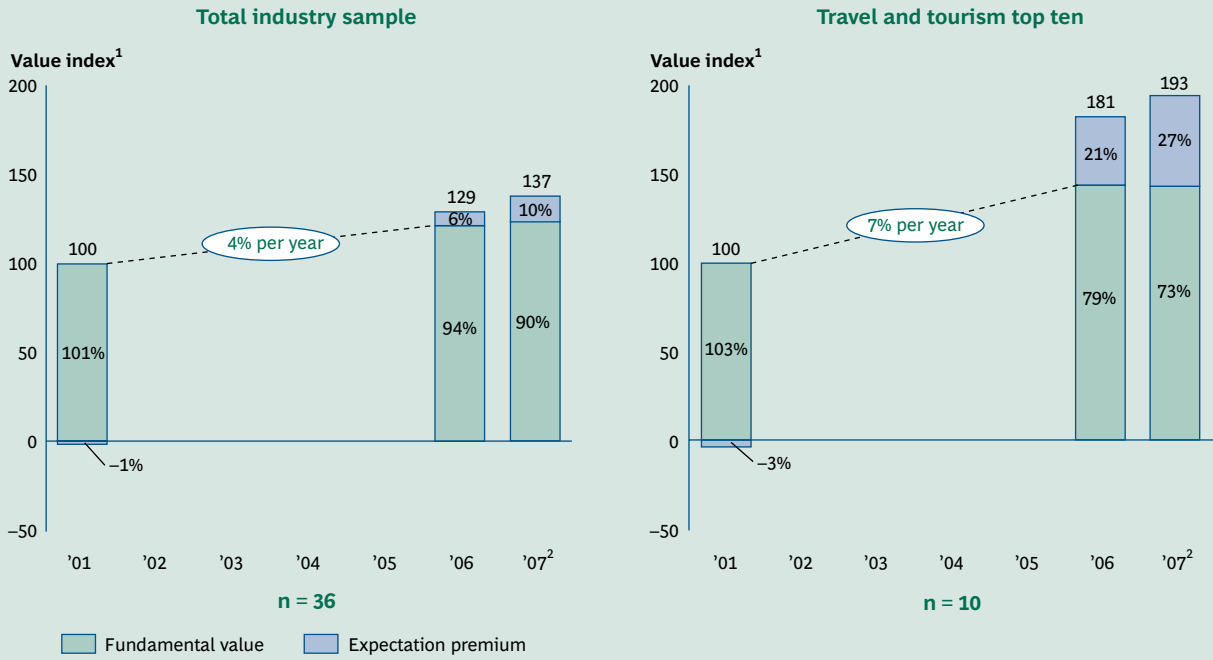
Average Annual Total Shareholder Return by Quartile, 2002–2006



Sources: Thomson Financial Datastream; BCG analysis.

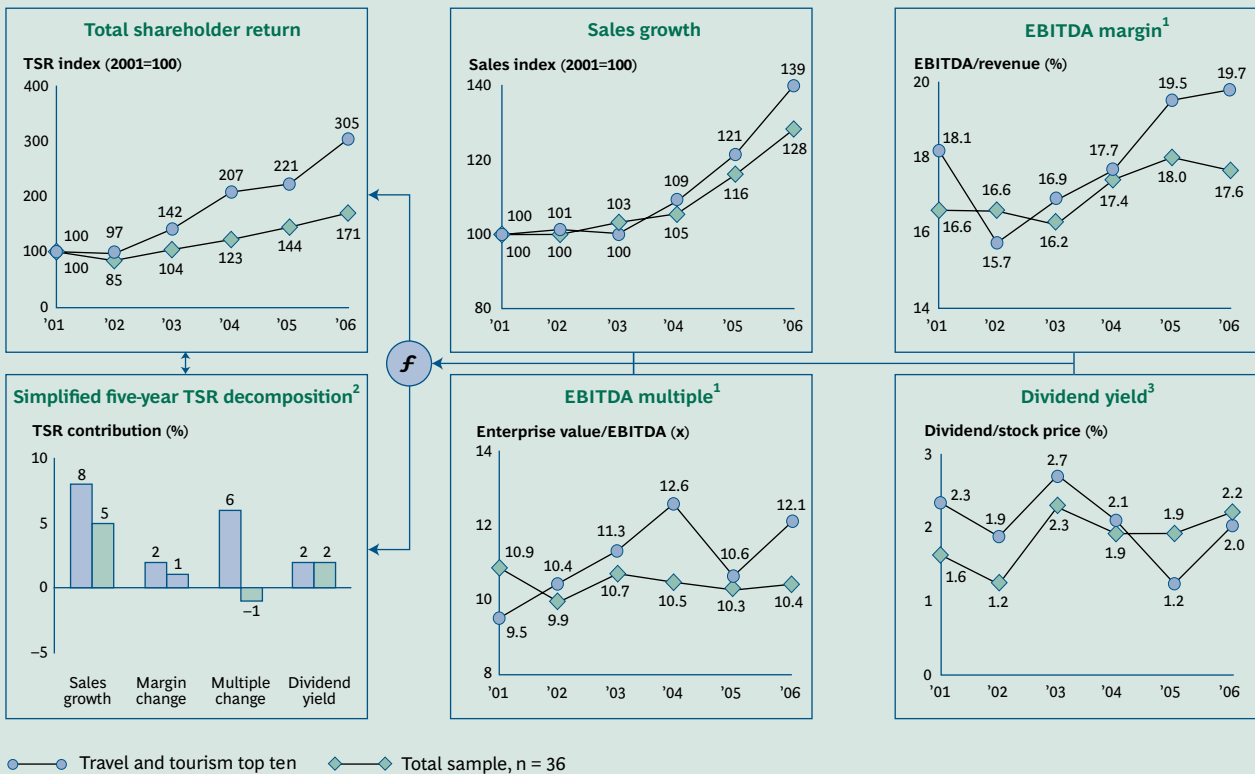
Note: TSR derived from calendar-year data.

Change in Fundamental Value and Expectation Premiums, 2002–2006



Sources: Thomson Financial Datastream; Thomson Financial Worldscope; Bloomberg; annual reports; BCG analysis.
¹Market capitalization plus net debt, 2001 = 100.
²Market value as of June 30, 2007; fundamental value estimated using trailing 12-month average data.

Value Creation at the Top Ten Versus Industry Sample, 2002–2006



Sources: Thomson Financial Datastream; Thomson Financial Worldscope; Bloomberg; annual reports; BCG analysis.
¹Industry calculation based on aggregate of entire sample.
²Share change and net debt change not shown.
³Industry calculation based on sample average.

Utilities

The Utilities Top Ten, 2002–2006

#	Company	Country	TSR ² (%)	Market value ³ (\$billions)	Expect. premium ⁴ (%)	TSR Decomposition ¹						2007 TSR ⁶ (%)
						Sales growth (%)	Margin change (%)	Multiple change ⁵ (%)	Dividend yield (%)	Share change (%)	Net debt change (%)	
1	Huaneng Power International	China	29.6	10.165	16	22	-8	16	6	0	-6	32.5
2	Edison International	United States	27.0	14.818	-21	3	2	0	2	0	20	24.8
3	Scottish and Southern Energy	United Kingdom	26.9	26.163	25	22	-13	10	6	0	1	-5.8
4	Exelon	United States	25.0	41.525	14	1	4	8	4	-1	9	18.8
5	Endesa Chile	Chile	24.8	10.043	14	6	0	0	1	0	18	32.9
6	Constellation Energy	United States	24.5	12.397	-6	34	-24	3	4	-2	11	27.9
7	Entergy	United States	22.4	19.097	14	3	2	6	4	2	6	17.5
8	Scottish Power ⁷	United Kingdom	22.2	21.781	-16	0	-2	2	7	0	15	7.2
9	Sempra Energy	United States	21.8	14.692	9	9	1	6	4	-5	7	6.8
10	Iberdrola ⁷	Spain	21.8	39.381	18	7	4	3	4	0	5	26.8

Sources: Thomson Financial Datastream; Thomson Financial Worldscope; Bloomberg; annual reports; BCG analysis.

Note: n = 56 global companies with a market valuation greater than \$10 billion.

¹Contribution of each factor is shown in percentage points of five-year average annual TSR; apparent discrepancies with TSR total due to rounding.

²Average annual total shareholder return, 2002–2006.

³As of December 31, 2006.

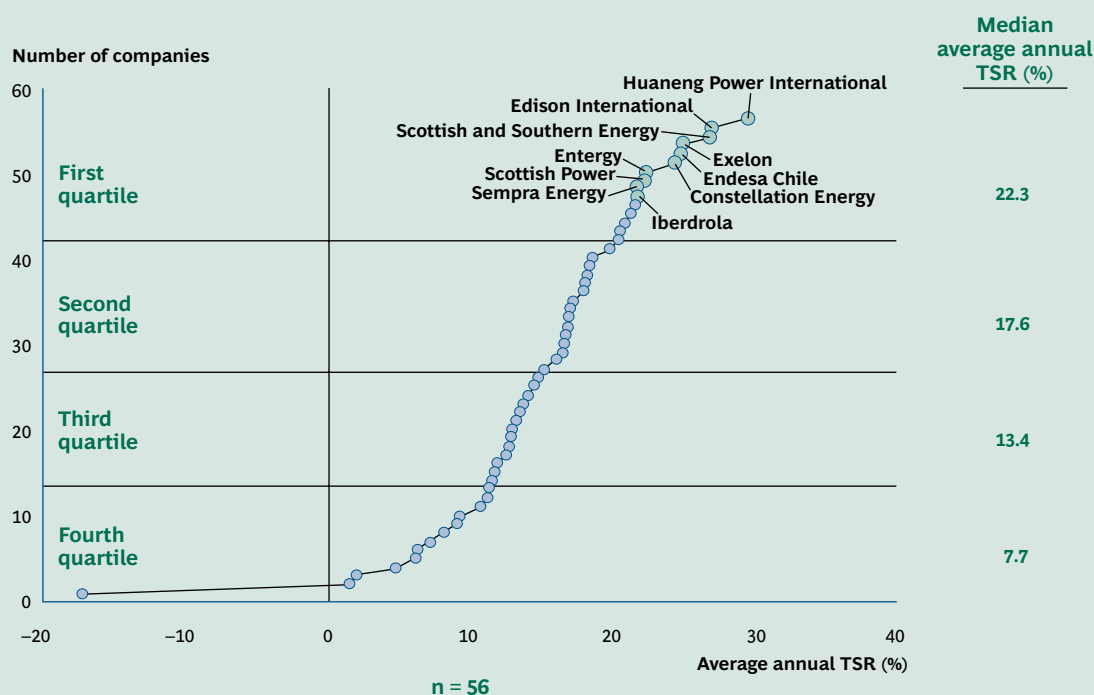
⁴Expectation premium as percentage of total 2006 market value.

⁵Change in EBITDA multiple.

⁶As of June 30, 2007.

⁷On April 23, 2007, Iberdrola successfully completed its acquisition of Scottish Power. Scottish Power's 2007 TSR is for the period from January 1, 2007 to April 20, 2007.

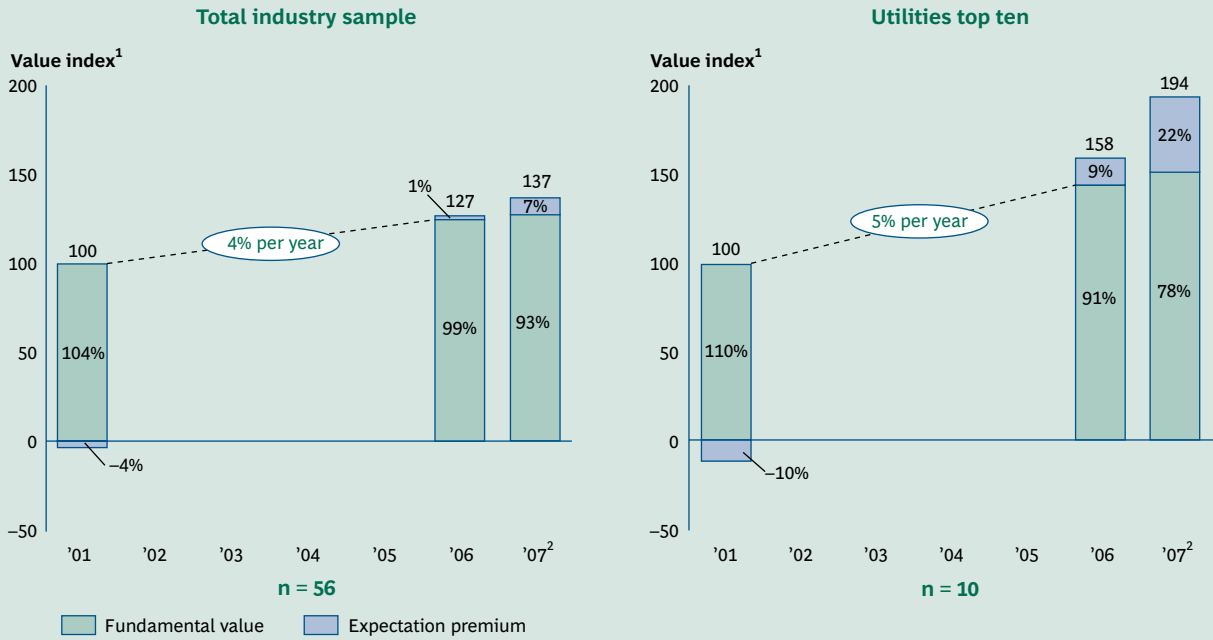
Average Annual Total Shareholder Return by Quartile, 2002–2006



Sources: Thomson Financial Datastream; BCG analysis.

Note: TSR derived from calendar-year data.

Change in Fundamental Value and Expectation Premiums, 2002–2006

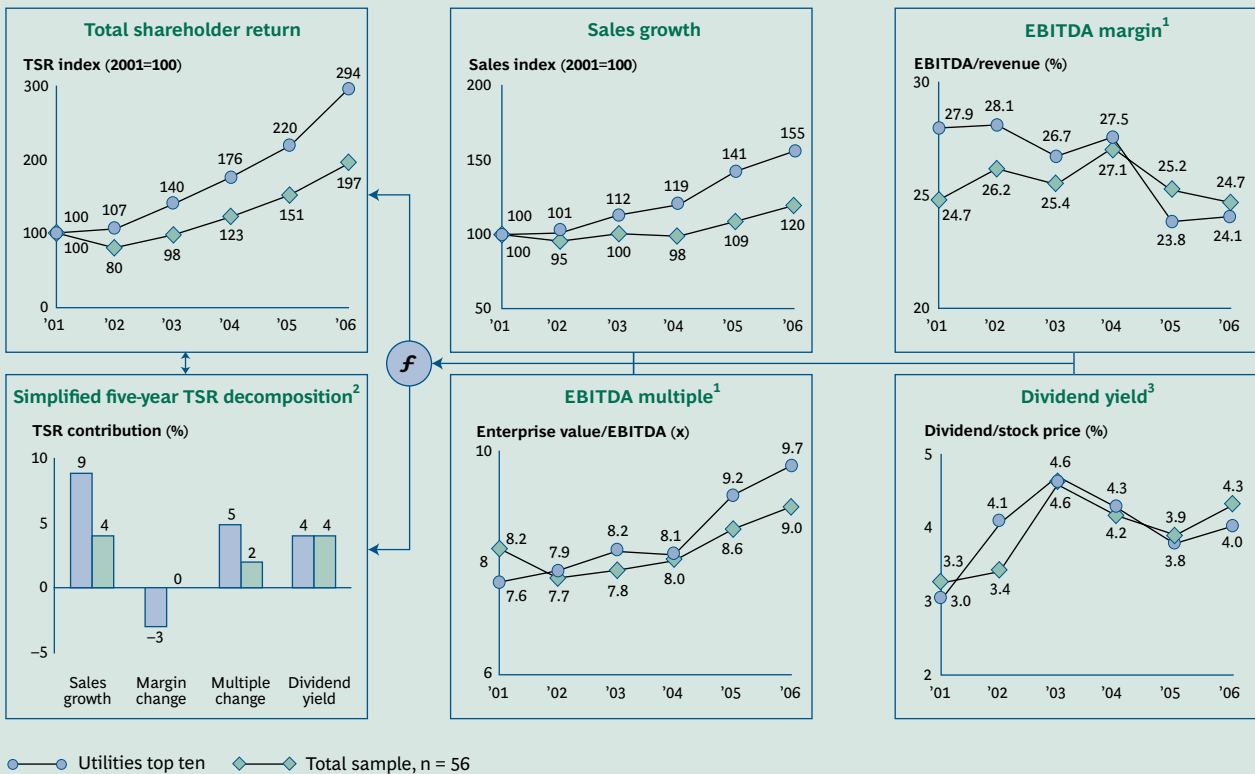


Sources: Thomson Financial Datastream; Thomson Financial Worldscope; Bloomberg; annual reports; BCG analysis.

¹Market capitalization plus net debt, 2001 = 100.

²Market value as of June 30, 2007; fundamental value estimated using trailing 12-month average data. (Market value for Scottish Power calculated as of April 20, 2007, due to its acquisition by Iberdrola.)

Value Creation at the Top Ten Versus Industry Sample, 2002–2006



Sources: Thomson Financial Datastream; Thomson Financial Worldscope; Bloomberg; annual reports; BCG analysis.

¹Industry calculation based on aggregate of entire sample.

²Share change and net debt change not shown.

³Industry calculation based on sample average.



For Further Reading

The Boston Consulting Group publishes many reports and articles on corporate development and value management that may be of interest to senior executives. Recent examples include:

The Brave New World of M&A: How to Create Value from Mergers and Acquisitions

A report by The Boston Consulting Group, July 2007

Powering Up for PMI: Making the Right Strategic Choices

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“Managing Divestitures for Maximum Value”

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Spotlight on Growth: The Role of Growth in Achieving Superior Value Creation

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Opportunities for Action in Corporate Development, June 2006

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“Advantage, Returns, and Growth—in That Order”

BCG Perspectives, November 2005

Balancing Act: Implementing an Integrated Strategy for Value Creation

The 2005 Value Creators report, November 2005

The Role of Alliances in Corporate Strategy

A report by The Boston Consulting Group, November 2005

“Integrating Value and Risk in Portfolio Strategy”

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The Next Frontier: Building an Integrated Strategy for Value Creation

The 2004 Value Creators report, December 2004

“The Right Way to Divest”

Opportunities for Action in Corporate Development, November 2004

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