

REPORT

THE 2011 VALUE CREATORS REPORT

Risky Business

Value Creation in a Volatile Economy



THE BOSTON CONSULTING GROUP

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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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Executive Summary

Risky Business: Value Creation in a Volatile Economy is the thirteenth 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 experiences to help companies better manage value creation.

This year's report addresses the challenges of value creation in a volatile economy, with a special focus on how companies can manage uncertainty and risk in their decisions about target-setting and capital deployment.

The further the world moves from the financial crisis of 2008, the clearer it becomes that the event marked a fundamental turning point in the global economy.

- ◇ Although the economy has improved somewhat, many of the problems associated with the crisis and subsequent Great Recession remain unresolved.
- ◇ Growth remains sluggish; there are even increasing signs that the recovery may be faltering in the developed world.
- ◇ Combined public and private debt as a percentage of GDP has reached unsustainable levels in a number of developed countries.
- ◇ Inflation is a significant medium-term risk.

This “new normal” has produced a corresponding sea change in investor sentiment and priorities.

- ◇ Given the volatility and uncertainty of the current economic environment, professional investors are becoming increasingly sensitive to risk.
- ◇ These investors are looking for companies that can deliver low risk and consistent returns at or slightly above the market average.
- ◇ Further, they are clamoring for companies to start deploying the trillions of dollars they have accumulated on their balance sheets by increasing cash payouts to investors.

Navigating this new environment will require companies to confront three basic challenges.

- ◇ First, they need to understand how the new environment is likely to affect their aspirations and ambitions for delivering shareholder value and reset their value-creation strategy appropriately.
- ◇ Second, they need to translate the company's revised value-creation strategy into a detailed plan for the company as a whole and for each of its individual operating units.
- ◇ Finally, and perhaps most important, they need to incorporate in-depth considerations of uncertainty and risk into strategy development and planning, as well as into their approach to setting value creation targets.

This year's Value Creators report explores how senior executives can meet these challenges.

- ◇ We describe the impact of recent trends in the economy and in the capital markets on the dynamics of value creation.
- ◇ We explain how senior executives can review their value-creation strategy in order to incorporate a consideration of the uncertainty of the current environment.
- ◇ We also set out a detailed process for translating that strategy into a corporate-wide value-creation plan.
- ◇ We conclude with our extensive annual rankings of the top value creators worldwide for the five-year period from 2006 through 2010.

The Changing Dynamics of Value Creation

The further the world moves from the financial crisis of 2008, the clearer it becomes that the event marked a fundamental turning point in the global economy. Although the economy has improved somewhat, many of the problems associated with the crisis and subsequent Great Recession—too much debt, sluggish growth, a fundamentally weakened financial sector—remain unresolved.

As a result, the evolution of the macroeconomic environment remains uncertain, equity markets are highly volatile, and the dynamics of value creation are shifting.

To navigate the turbulence, executives will need to unlearn many of the lessons of the past quarter century. Companies will need to revisit their strategies for value creation, rethink their targets for total shareholder return (TSR), and, perhaps most important, revise their strategy and planning process to incorporate mechanisms for managing uncertainty and risk. This year's Value Creators report is designed to help them get started on these three essential tasks.

The New Normal

From about 1982 until the downturn of 2008, the world economy enjoyed an unprecedented period of economic expansion with low and stable rates of inflation. Known as the Great Moderation, this period was characterized by a credit boom fueled by low interest rates and the easy availability of debt, high rates of economic growth in both the developed world and in emerging markets, and above-average TSR, largely in the form of capital appreciation.

Since the downturn, however, signs have been accumulating that the era of the Great Moderation is over. The new normal will be characterized by below-average economic growth, painful deleveraging, and potential stagflation. The impacts on *how* companies create value and *how much* value they create will be profound.

Below-Average Economic Growth. In last year's Value Creators report, we predicted that even with recovery from the Great Recession, the world is entering an extended period of below-average economic growth. (See *The 2010 Value Creators Report: Threading the Needle*, September 2010.) Nothing has happened in the time since to cause us to revise that prediction. True, according to the International Monetary Fund, global GDP grew by a healthy 5 percent in 2010 and is expected to increase by an additional 4 percent in 2011. But these averages disguise broad disparities between strong growth in emerging markets and weak growth in most developed economies.

What's more, danger signs that the recovery may be faltering have been multiplying. Second-quarter 2011 GDP growth in the U.S. and the euro zone was an anemic 1 percent and 1.7 percent, respectively. The J.P. Morgan Global Manufacturing Purchasing Manager Index, a key leading indicator of economic recovery, fell in July for the fourth consecutive month this year to its lowest level since July 2009. Economist Lawrence Summers, former chief economic adviser to U.S. President Barack Obama, has even warned that the U.S. was halfway through a "lost decade" similar to Japan's in the 1990s.¹ To the degree that companies are overexposed to developed mar-

1. See "Running Out of Road," *The Economist*, June 18, 2011, pp. 77–78; <http://www.economist.com/node/18834323>.

kets and underexposed to emerging markets, they will be facing a growth crisis.

Investors seem to share this perspective. In BCG's most recent annual investor survey, the majority of respondents estimated that GDP growth in Europe and the U.S. this year would be a relatively modest 2 to 3 percent, with earnings per share (EPS) growing only 3 to 4 percent. (See "All That Cash: The BCG 2011 Investor Survey," BCG article, May 2011.) So, too, their estimates for TSR: a plurality of respondents (46 percent) estimated that TSR would be in the neighborhood of 6 to 8 percent—well below the long-term historical average of 9.5 percent. Although nearly a third of respondents (31 percent) said that they thought that TSR would be higher, a significant portion (22 percent) thought that it would be even lower.

Unsustainable Debt. One of the side effects of the Great Moderation was an unprecedented build-up of private-sector debt, on the part of both households and companies. Now, that debt has been joined by the nearly \$6 trillion in fiscal stimulus spent worldwide by governments in response to the global financial crisis and subsequent recession. In many developed economies, the result has been a situation in which combined public and private debt as a percentage of GDP has reached unsustainable levels. (See *The Debt Monster*, BCG Focus, May 2011.) Clearly, these high levels of debt will need to be reduced, but that is much more easily said than done. If governments and central banks embrace austerity policies, as many are doing now in order to cut their debt-to-GDP ratios, they run the risk of stalling GDP growth still further, which could end up making things worse, not better.

Increased Risk of Inflation. The more likely option is that governments and central banks will keep interest rates low in order to further stimulate the economy and minimize their interest burden—but at the risk of setting off an inflationary spiral. To be sure, inflation in developed economies is currently low, but there are clear indications that inflation is a serious medium-term risk. On the one hand, rapid growth in emerging markets is pushing commodity prices higher, and inflationary pressures in emerging markets (which produced more than four-fifths of global real GDP growth over the past five

years) are beginning to push the cost of inputs upward for many companies in the developed world. Inflation in emerging markets averaged 6.7 percent in May 2011.² On the other hand, quantitative easing programs established by central banks around the world to boost growth have strongly inflated the monetary base, creating a perfect breeding ground for future inflation. The longer the developed economies suffer from slow growth, the more money the central banks will need to print to stimulate the economy and, therefore, the bigger the risk that inflation will get out of control.

Recent developments
have produced a
sea change in
investor priorities.

The Impact on Value Creation. All of these trends will have a major impact on value creation, and companies need to

start preparing for the consequences sooner rather than later.

- ◇ Lower GDP growth will put pressure on corporate revenues and profits. For many companies, maintaining historical levels of revenue growth will only come by winning market share. Competitive intensity will increase, and real winners (and losers) will emerge.
- ◇ After a period in which valuation multiples have been above the long-term historical average, lower growth is also likely to mean lower multiples as investors factor lower growth expectations into a company's stock price.
- ◇ Inflation also will have a negative impact on equity values. History shows that stocks underperform during inflationary periods. (See "Time to Get Ready for Inflation," BCG article, March 2011.) Companies with both high debt and significant capital-expenditure programs are hit especially hard.

The Retreat from Risk

These recent developments in the macroeconomic environment have produced a corresponding sea change in investor sentiment and priorities. Investors have become more conservative. Compared with the past two decades, there has been a wholesale retreat from risk.

2. See "Economics Focus: Some Like It Hot," *The Economist*, July 2, 2011, p. 65; <http://www.economist.com/node/18895150>.

Increased Sensitivity to Risk. Given the volatility and uncertainty of the current environment, professional investors are becoming increasingly sensitive to risk. In order to keep their assets under management (AuM) constant or growing (remember, fund managers make their money from the fees that their AuM generates), they are looking for companies that deliver low risk and consistent returns at or slightly above the market average. Of course, there will always be some investors with a greater appetite for risk. But even those who are prepared to invest in riskier opportunities in order to gain outsized returns will be on the lookout for companies that have a deep understanding of the risks involved and that know how to manage them.

Emphasis on Value. As investors become more conservative, there are fewer genuine “growth” funds in the market. To be sure, a fund may use the word growth in its name or list itself as a growth fund. But when one analyzes their investment criteria closely, such funds turn out to be not so different from traditional “growth at reasonable price” (GARP) funds or even “alpha value” funds. In effect, we are witnessing an overall shift to more of a value orientation.

Focus on “Stock Picking” over Broad Market Trends. A more “value-based” investment strategy requires picking individual stocks, sector by sector. This has created a strong focus on individual company performance, economic fundamentals, the nuts and bolts of competitive strategy and financial structure, and the quality of the management team. When we asked respondents to our investor survey to rate the criteria that would lead them to invest in a company, the top three choices were a company’s “management credibility,” its prospects for “three-to-five-year revenue growth,” and its “ROIC (return on invested capital) improvement potential.” In short, these investors were looking for companies with strong management teams, solid sources of competitive advantage, and good prospects for future growth.

Increased Importance of Dividends. Another major shift from trends during the era of the Great Moderation is that stock price appreciation is becoming relatively less important as a component of TSR, while dividends and other direct distributions to investors are becoming relatively more important. During the past 25 years, dividend

Investors will be on the lookout for companies that know how to manage risks.

yield at S&P 500 companies accounted for only 2.5 percentage points out of an average annual return of 9.9 percent. But a higher reliance on dividends happens to be a reversion to a longer-term historical trend. An analysis of the composition of TSR of the companies making up the S&P 500 from 1900 through 2010 shows that dividend yield accounted for nearly half of total TSR—4.6 percentage points out of an average annual return of 9.5 percent.

Direct distributions of cash to shareholders will become a bigger part of TSR, in part because capital appreciation will be down, a function of lower growth and lower valuation multiples. But they are also likely to rise for the simple reason that companies have accumulated so much cash on their balance sheets that investors are clamoring for a share of it. One beneficial effect of the Great Recession was to push companies to cut costs in order to improve profitability in an extremely difficult economic environment. As a result, companies worldwide are showing trillions of dollars of cash on their balance sheets. And despite improvements in the economy, many companies have yet to start deploying their cash to create shareholder value.

The Coming Impact of Baby-Boom Retirement. All these trends will be exacerbated by the investment decisions of millions of baby-boom retirees. The coming retirement of the baby-boom generation is usually discussed in terms of the eventual withdrawal of massive amounts of cash from the equity markets. But for the next five to ten years, the impact is likely to be rather different. The baby-boom generation has accumulated a great deal of wealth and, as it ages, it will be looking for places to invest that wealth in order to preserve capital. The priorities are likely to be as follows: income, preservation of capital, low risk, and tax avoidance (which means fewer bonds and more income-producing equities). These goals will reinforce the market for companies that deliver low risk and attractive capital gains or high dividends or both.

The High Costs of Being Wrong

In one respect, companies face the new normal from a position of strength. Cash on the balance sheet is at record highs. So is profitability. Margins and ROIC are strong

after all the downturn cost cutting. But without consciously planning for how to navigate the new environment, a company could easily squander these advantages—for example, by chasing unprofitable growth, by engaging in share wars that erode margins and profitability, or by agreeing to mergers and acquisitions that may improve EPS but do not increase TSR.

Navigating the new environment will require confronting three key challenges: resetting value creation strategy, translating the strategy into realistic TSR targets and plans, and managing uncertainty and minimizing risk.

Resetting Value Creation Strategy. The first challenge exists at the level of value creation strategy. Senior executives need to understand how the new environment is likely to affect their aspirations and ambitions for delivering shareholder value. Companies need to address questions such as: What level of TSR would constitute a “win” in today’s environment, given our starting point and our peer set? What TSR can we deliver with confidence over the next three to five years? How should we deploy our capital against the various drivers of value creation—investing in organic growth, improving margins, repaying debt, or returning cash to shareholders in the form of dividends or buybacks?

Translating Strategy into Realistic TSR Targets and Plans. The second challenge exists at the level of corporate and business-unit planning: to translate a company’s high-level aspirations for value creation into a detailed plan for the company as a whole and for each of its individual operating units, including clearly defined TSR targets. Companies need to answer questions such as: What will be the role of each of our operating units in meeting our TSR target? What are the capital requirements for each to fulfill that role? And what are the implications of those requirements for the company’s financial policies?

Managing Uncertainty and Minimizing Risk. The third challenge exists at the level of both strategy and planning: to incorporate in-depth considerations of uncertainty and risk into the target-setting process, while simultaneously taking a more agile and flexible approach to planning in order to adapt quickly to unanticipated circumstances. (See *The Art of Planning*, BCG Focus, April 2011.) The key questions include: What will be the impact of broad macroeconomic trends on our ability to deliver on our TSR target? Do we know how increased inflation, for instance, will affect our cash flows and enterprise value? In a volatile environment, how do we get our entire organization to maximize the predictability of our TSR and minimize the risks?



From Aspiration to Strategy

The senior executives running a public company face a challenge that is not so different from that of the fund manager of a major investment fund. They have an aspiration for the kind of shareholder returns that they hope to deliver. They have a certain amount of capital to “invest” (defined by the company’s cash flows, cash on hand, and access to debt) to generate those returns. They have a variety of business units, functions, or other operating units in which they can invest this capital in order to grow the economic value of the business. They also have to evaluate the returns on these internal investments against the value generated by other uses of that capital—for example, returning the cash to shareholders in the form of dividends or share buybacks or to debt holders in the form of paying down the company’s debt. In this respect, a company, like an investor, creates value by the judicious deployment of its capital.

Value Creation as an Investment Challenge

Decisions about how best to invest a company’s capital are always difficult. Uncertainty, however, makes them especially challenging. Will the company end up making more aggressive bets than it can afford? How can the organization preserve enough flexibility to take advantage of unforeseen opportunities that a volatile environment makes possible? How much capital will be necessary to preserve the core business in the face of intensified competition or unanticipated macroeconomic trends? How can senior management best respond to investors’ growing desire for safety, consistency, and higher payouts of cash? Developing a consensus about the best way to de-

ploy capital in the face of such uncertainties is a critical first step facing a company’s senior executive team and board.

In our experience, the way most senior teams approach this issue results in suboptimal compromises rather than a strategically sound consensus. Most companies are juggling multiple goals when it comes to deploying their capital, and the way senior executives prioritize these goals can differ depending on their position and role in the company. The CEO may be focused on allocating capital to deliver on the company’s long-term vision; members of the board may be pushing for higher cash payouts to investors; the CFO may be concentrating on delivering against the company’s target financial performance (defined in terms of quarterly targets for EPS growth or returns on invested capital); other members of the finance organization may be hoping to preserve the company’s financial flexibility in the face of an uncertain environment; and business unit leaders may be preoccupied with ensuring the competitive advantage of their business or funding aggressive growth opportunities. Often, the financial policies that are forged from these clashing perspectives end up being a poor compromise among conflicting tradeoffs and goals—an outcome that will only be exacerbated in today’s uncertain environment.

We believe that now is a good time for senior management to step back and reset its value-creation strategy by systematically reviewing its high-level priorities for capital deployment. The best approach for doing so is to ground the senior-management debate in an explicit consideration of how different choices will affect a company’s short- and long-term TSR. That’s not to say that TSR performance should be the only factor that drives a company’s capital-deployment choices. Nor is it an argument

necessarily for *maximizing* shareholder returns in the short term. (See “Why Shareholder Value Still Matters,” BCG article, March 2010.) Rather, using TSR as a framework to test the impact of various choices for capital deployment will ensure that the senior team considers the full range of options in an unbiased way and that alternative choices will be surfaced and available for discussion and debate.

What to Expect from “Business as Usual”

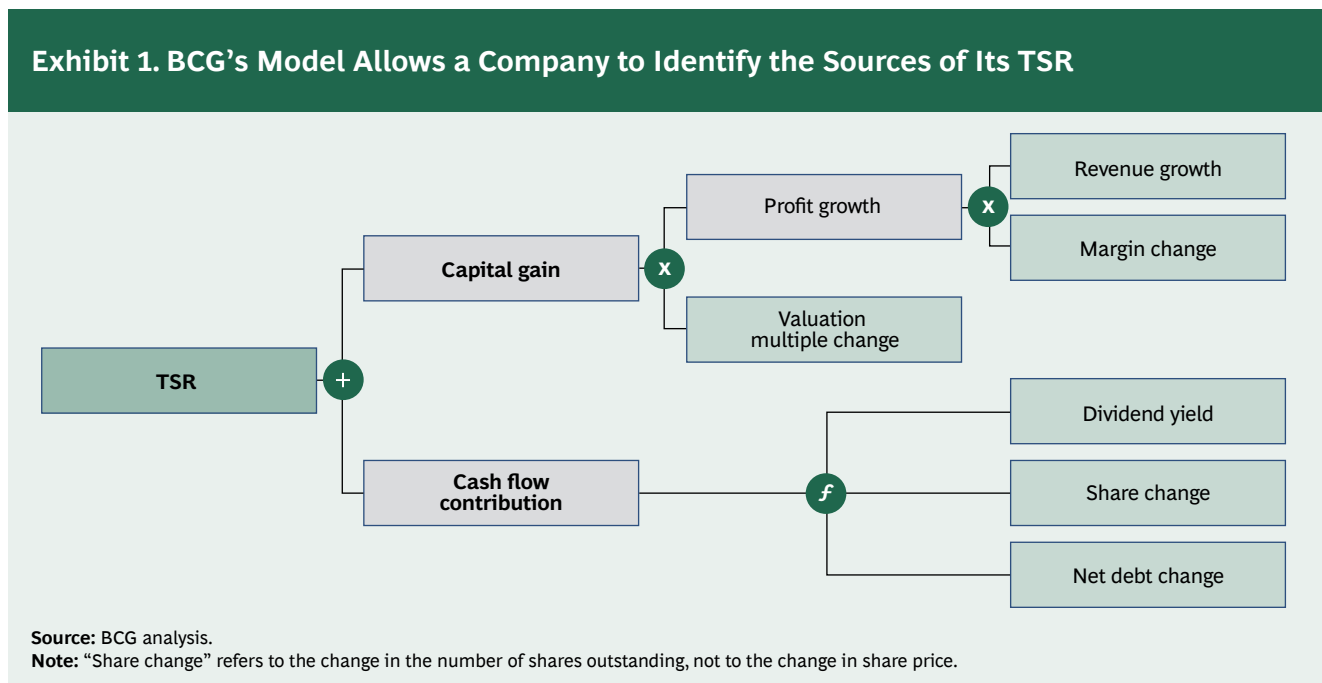
Regular readers of the Value Creators report should be familiar with BCG’s model for quantifying the relative contribution of the various sources of TSR. (See Exhibit 1.) The model uses the combination of revenue (that is, sales) growth and change in margins as an indicator of a company’s improvement in fundamental value. It then uses the change in the company’s valuation multiple to determine the impact of investor expectations on TSR.³ Together, these two factors determine the change in a company’s market capitalization. Finally, the model also tracks the distribution of free cash flow to investors and debt holders in the form of dividends, share repurchases, or repayments of debt in order to determine the contribution of free-cash-flow payouts to a company’s TSR. Using this model, executives can analyze the sources of TSR for

their company, its business units, a peer group of companies, an industry, or an entire market index over a given period.

Executives can also use this framework to develop an internal model of how their choices about capital deployment create value. Start by assuming “business as usual”—that the way the company has been creating value in the past will continue into the future. Later, the task will be to challenge those assumptions, but it is helpful to start with the company’s existing policies and plans.

Take, for example, the company’s financial policies for distributing cash to shareholders. Most companies have an existing dividend policy that pays out a certain percentage of income and, depending on the company’s valuation multiple, produces a certain dividend yield. Most likely, the company also has an existing share-repurchase program that delivers a certain percentage of TSR owing

3. There are many ways to measure a company’s valuation multiple, and different metrics are appropriate for different industries and different company situations. In the Value Creators rankings, we use the EBITDA multiple—the ratio of enterprise value (the market value of equity plus the market value of debt) to EBITDA—in order to have a single measure with which to compare performance across our global sample. (See “Appendix: The 2011 Value Creators Rankings.”)



to the fact that there are fewer shares outstanding. Setting these policies is completely under management’s direct control. Assume that they are sustainable into the future and will “lock in” a certain percentage of TSR.

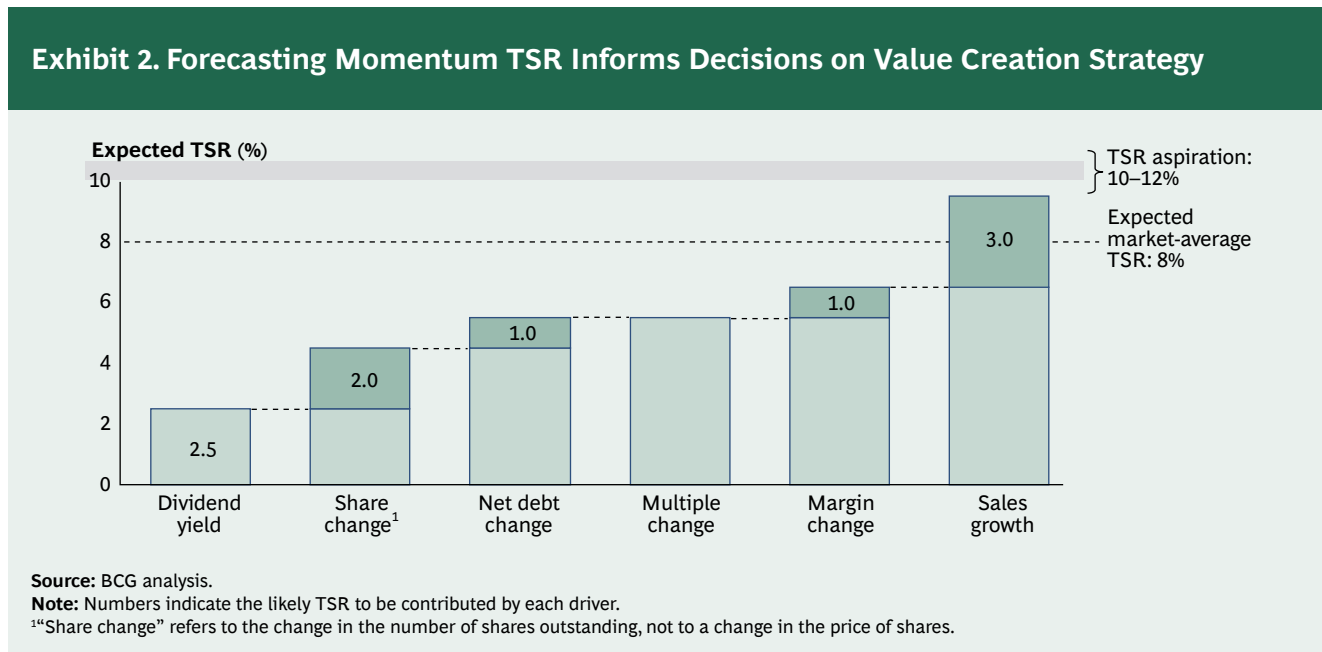
Obviously, other drivers of TSR—such as future revenue growth, changes in company margins (determined by the growth rate of net income), or changes in the company’s valuation multiple—are far more uncertain. For the time being, leave the valuation multiple aside by assuming it stays constant. Assume that revenue will grow at recent historical levels or at the projected growth of served markets. Based on these momentum assumptions, a company can calculate its expected TSR and compare it to the expected market average which, based on the responses to the BCG 2011 Investor Survey, we will assume will be in the neighborhood of 8 percent.

Exhibit 2 portrays how this preliminary forecast of momentum TSR can be developed. The company shown in the exhibit has traditionally had a dividend yield in the neighborhood of 2.5 percent, and through its share buy-back program has typically generated an additional 2 percentage points of TSR. Meanwhile, the senior team has estimated that by paying down debt with excess cash that is earning low returns, it can generate an additional percentage point of TSR. Thus, simply hitting these numbers will take the company more than halfway toward reaching the market-average TSR of 8 percent. The executives

also assume that sales in served markets will track the estimated average GDP growth of about 3 percent, delivering three additional percentage points of TSR, and that improvements in margins will deliver an additional percentage point. Assuming that its multiple remains unchanged, that means the company is on track to deliver a TSR of 9.5 percent, modestly above the market average (but below the company’s initial aspiration of 10 to 12 percent).

Although these numbers still need rigorous testing, even arriving at this initial view of the company’s prospects will be revealing. If the projected TSR adds up to less than the expected market average, the senior team will know that its chief challenge will be to become more aggressive either by investing in new opportunities for growth (by gaining share or moving into adjacent market segments) or by paying out more of its cash to investors. What will be the implications of such moves? Will share gains come at the expense of margins? Will bigger cash payouts constrain the company’s financial flexibility? And just what is the appetite of the team, the board, and the company’s main investors for taking on more risk?

Alternatively, if (as in the case of this company) this initial modeling exercise suggests that the company will beat the market average, the main task will be determining whether the company can stretch still further. Should the company be content with generating TSR that is a



modest 1 percent or 2 percent above average? Or should it be more ambitious, striving to attain, say, top-quartile performance?

Precisely how ambitious a target a company chooses will depend in large part on its specific situation. That said, we would offer two general “rules of thumb.” First, a company should always commit to ambitious stretch goals, but only if there is a realistic probability of achieving them. At the same time, executives should realize that consistently delivering modestly above-average TSR, year in and year out, is not necessarily a bad result. Indeed, over the long term, being consistently a bit above average eventually adds up to top-quartile performance for the simple reason that it is extremely difficult for any company to beat the market average year after year. We analyzed the ten-year TSR performance of 2,856 companies with market valuations of more than \$1 billion; only nine were able to beat their local-market average for all ten years (about 0.3 percent of all companies analyzed).

Second, because the risk of being wrong is so high, it makes more sense in today’s environment for companies to focus on the *minimum* spread above expected average TSR that they are sure they can deliver consistently rather than on the maximum they could achieve if everything goes right, particularly if that maximum goal entails a lot more risk. A company should make sure it knows where the floor is under its value-creation performance before it starts envisioning the upper stories.

Beyond “Business as Usual”: Determining Risk Exposure

So far, thinking about how to deploy capital across the main drivers of TSR has been assuming a “business as usual” environment. But as we have argued in the previous section, today’s macroeconomic and capital-markets environments are anything but usual. Rather, both represent a sharp transition from the recent past. What will be the impacts of these changes on how the company generates TSR?

This is the moment for the senior team to consider the company’s exposure to the full range of macroeconomic

and industry trends that will shape business performance. While there are many different kinds of risk that companies should consider (see Exhibit 3 for a comprehensive typology), three overarching themes are especially important today.

Macroeconomic Risk. Some risks have to do with the uncertainty of the current macroeconomic environment. What would happen if a major growth market—say, China—enters a period of extended inflation or even stagflation? What if a company’s local currency weakens (or strengthens) significantly relative to the currencies of served markets or key sourcing regions? What would be the impact on revenue growth and profitability if GDP growth over the next five years averages 50 to 150 basis points below forecasts? What would be the impact on the business and its ability to create value?

It will be critical to explore the implications of such scenarios not only for the company but also for its competitors and major customers. Which competitors are particularly vulnerable to or protected from an economic scenario of, say, increased inflation? How vulnerable is a major customer to margin erosion and what will be the impact on the company’s own margins? (For an example of one such scenario analysis, see the sidebar “Risk Management: Identifying Exposure to Macroeconomic Risk.”)

Capital-Market Risk. Other risks are associated with the current state of the capital markets. For example, many companies today are trading at high valuation multiples because, although their postdownturn profits remain abnormally low, investors have already priced economic recovery into their stock price. It is highly unlikely that those high multiples are sustainable. So now may be the time to challenge the assumption in the value creation model of an unchanging multiple. But remember: the event to worry about is not some marketwide trend that causes everyone’s multiples to change. If that happens, the only effect will be to change the level of market-average TSR. The truly damaging scenario to watch out for is one in which a company’s multiple relative to its peers starts to decline, because that will put it at a disadvantage vis-à-vis its competitors.

Regulatory Risk. Another feature of the postdownturn environment is the growing role of government in busi-

Being consistently a
bit above average can
add up to top-quartile
performance.

Exhibit 3. There Are Many Types of Risk for Companies to Consider

Commercial risk			Operational risk			
Market price	Credit default	Financial	Asset operations	Operational excellence	Health, safety, and environment	Compliance
Commodity price (liquid)	Customer default	Valuation multiple	Daily asset operations	Business continuity; management quality	Health	Ethics and governance
Commodity price (illiquid)	Counterparty default	Rating	Service and maintenance	IT	Safety	Confidentiality
Volume forecast		Cash flow	Singular failure	Security	Environment	Process discipline
Market elasticity/ placement		Liabilities and obligations		Facility		Internal fraud
Sales contracting		Interest rate		Safety		Disclosure
		Exchange rate		HR		Conflict of interest
		Tax		Supplier management		Transparency
				Customer relationships		Corruption; bribery
				Crisis management		
				Contractor		

Project risk			Business and strategic risk			
Planning	Viability and realization	Implementation	Market and technology	Intellectual property and reputation	Country and regulation	External singular events
Business plan	Design errors	Quality	Fundamental market figures	Patents and copyrights	Market amendments and regulation	Macroeconomic
Schedule feasibility	Permits; licenses	Delays and cost overruns	Long-term market forecast (price)	Espionage	Environmental regulation	Ecology/environment
Resources	Legal	Contractor	Technology development	Reputation and brand	Government intervention	Partner failure
	Transaction	Integration in current operation	Competitor reaction and structure	Communication	Regime change	Legal (e.g., lawsuit)
						Sociopolitical

Source: BCG analysis.

ness. So a third kind of risk to consider is regulatory risk. What is the possibility that new, more stringent government regulations will constrain the company’s ability to create value? Will new regulations or higher taxes seriously erode the company’s ability to fund growth or continue its current level of payouts to investors? If so, does the company have the cash reserves or debt capacity necessary to fill the gap?

There are a variety of tools that companies can use to address such questions—tracking leading indicators, doing sensitivity analyses on key value drivers, developing simple scenario plans, doing more complex modeling and simulation exercises, or even introducing highly sophisticated risk-management techniques and metrics. But whatever approach a senior team decides to take, it needs to explicitly quantify a wide range of uncertainties as it develops its internal TSR model.

Once a company has identified the relevant uncertainties and quantified the potential risks and their impact on the

various components of TSR, it will be able to refine its TSR model. Adding the likely impact of a “downside” scenario and an “upside” scenario allows the company to put boundaries on the range of its expected TSR performance. For the company described earlier, for instance, how the various risk factors play out will spell the difference between a below-average and a double-digit TSR performance. (See Exhibit 4.) The analysis also suggests that the company’s high-level TSR aspiration of 10 to 12 percent is unrealistic, because it depends on the upside scenario, in which all uncertainties break the company’s way. The senior team at this company will have to dig deeper for new ways to create value in order to feel genuinely confident that the company can reach this goal—or decide to moderate its preliminary TSR aspiration.

Implications for the Corporate Portfolio

One of the major tasks in capital deployment is deciding how to allocate the company’s investment capital among

Risk Management

Identifying Exposure to Macroeconomic Risk














Given the current volatility of the economy and the capital markets, it is imperative that any value-creation strategy incorporate a detailed consideration of the key macroeconomic risk factors facing a company. What would be the impact of a given macroeconomic scenario on a company's business, its market valuation, and its capacity to create value? What is the probability that a given scenario will actually come to pass?

Take the example of inflation. Whether or not inflation represents a serious problem for companies today, there is a good chance it will be a serious medium-term risk. (See *Why Companies Should Prepare for Inflation*, BCG Focus, November 2010.) What's more, depending on a company's circumstances, inflation can have a major negative impact on its market valuation. So, it is essential for companies to assess their exposure to inflation and to develop contingency plans for reducing that exposure that can be put into effect should the situation warrant.

BCG has developed a model that simulates the likely impact of inflation on a company's market capitalization. (For a more detailed discussion of this model, see *Making Your Company Inflation Ready*, BCG Focus, March 2011.) We have used this model to demonstrate the differential impact of inflation on a selection of companies in the pharmaceutical industry. (See the exhibit "Some Companies Are More Vulnerable to Inflation Than Others.")

The exhibit analyzes the impact of three levels of progressively more serious inflation (5 percent, 10 percent, and 20 percent) on some key drivers of industry cash flows: margins, net working capital, asset turns, and the average life of company assets (a measure of how much capital expenditure each company would require in the near future). These metrics were chosen because inflation erodes margins and increases the amount of cash necessary for working capital and capital expenditures. Therefore, those companies with low margins or with a lot of their financial

Some Companies Are More Vulnerable to Inflation Than Others

Performance ¹	Company 1	Company 2	Company 3	Company 4	Company 5	Company 6	Company 7	Company 8	Company 9	Company 10
EBITDA margin (%) 	35	43	39	44	34	41	25	32	31	25
Net working capital as a percentage of sales 	20	11	26	25	29	24	29	14	23	30
Asset turns 	2.5	1.8	1.3	1.7	2.0	1.3	1.8	2.0	1.8	1.5
Current asset life 	9 years	8 years	11 years	8 years	9 years	5 years	11 years	11 years	10 years	8 years
										
Effect on market cap ²										
Scenario I: 5% inflation	-8%	-4%	-12%	-8%	-9%	-14%	-15%	-7%	-8%	-26%
Scenario II: 10% inflation	-15%	-7%	-22%	-15%	-17%	-25%	-28%	-12%	-15%	-48%
Scenario III: 20% inflation	-26%	-12%	-38%	-25%	-31%	-43%	-50%	-21%	-26%	-83%

Sources: Bloomberg; BCG analysis.

Note: Top performers in each category are outlined in green; bottom performers are outlined in red.

¹Performance values represent five-year historical averages for selected companies, with the exception of EBITDA margin, which shows the most recent available data.

²Estimates are based on a model in which the selected inflation rates affect the cost of raw materials, other expenses, and capital investments; prices increase in line with inflation; and there is no reduction in costs or in net working capital.

Risk Management

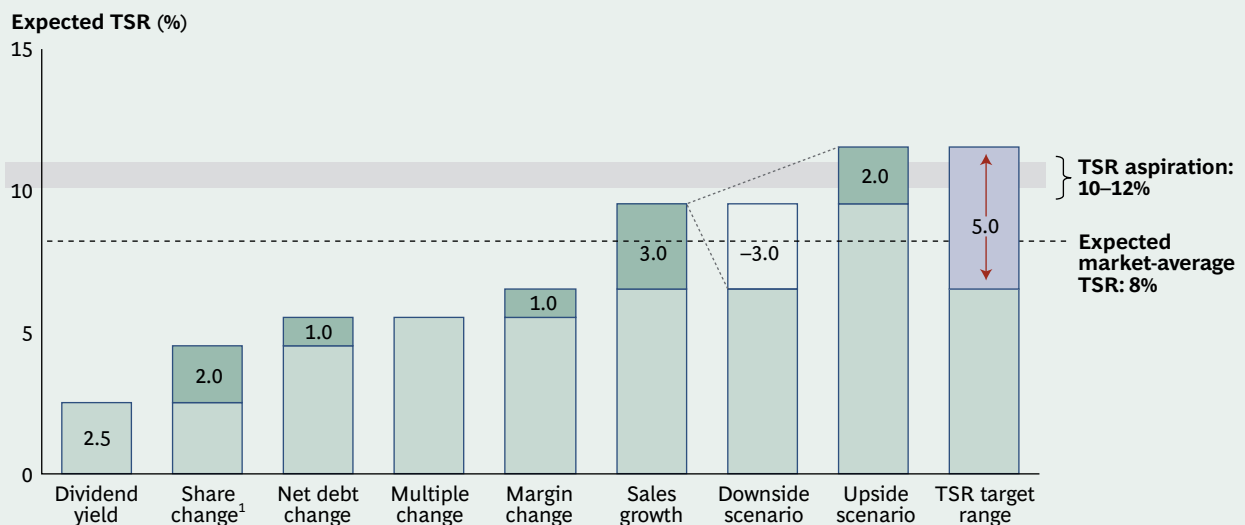
Identifying Exposure to Macroeconomic Risk (continued)

resources either already tied up in working capital or likely to be necessary for new capital expenditures are especially vulnerable to inflation.

The exhibit shows, for example, that Company 2 is relatively protected from the impact of inflation owing to its high margins and industry-low net working capital as a percentage of sales. By contrast, Company 10 is extremely

vulnerable to inflation because it has both the lowest margins and highest net working capital as a percentage of sales in its peer group. This toxic combination of factors means that, unless the company develops an inflation-protection plan, an inflation rate of as little as 5 percent would cause its market capitalization to fall by 26 percent. And should inflation run rampant and reach 20 percent, the company's market cap would decline by 83 percent.

Exhibit 4. “Downside” and “Upside” Scenarios Help Define the Likely Range of TSR



Source: BCG analysis.

¹“Share change” refers to the change in the number of shares outstanding, not to a change in the price of shares.

the businesses in its corporate portfolio. So, one final step in resetting value creation strategy is to think through the high-level implications of the company's TSR aspirations for its operating units. The company will need to explore these implications in more detail later in its planning process, when it will finalize its TSR targets. But before determining final targets for each business unit, the senior team needs to develop a preliminary sense of what role each unit plays in its TSR model, how much value it can deliver, and at what level of risk.

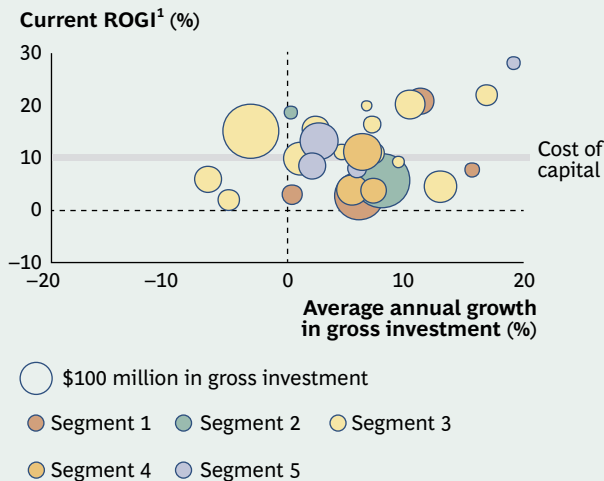
The first step to this exercise is to supplement the traditional view of the portfolio—typically framed in terms of market share, competitive advantage, and corporate fit—

with a detailed map of how the company is allocating capital among its businesses, whether each business is delivering returns above the cost of capital, and how much each business is contributing to overall corporate TSR.

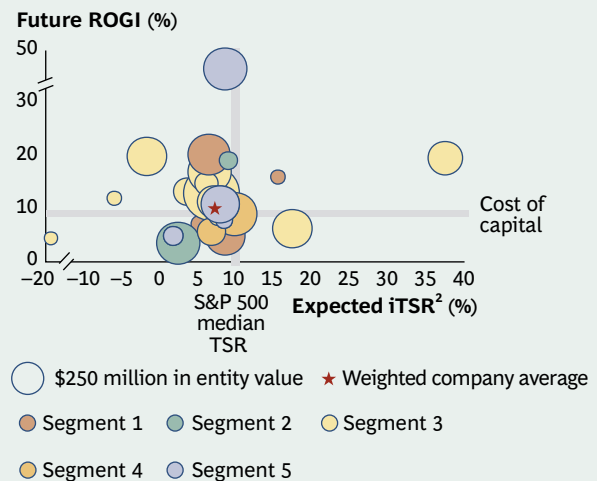
Exhibit 5 portrays such an analysis at a large industrial conglomerate with some 25 business units. The chart on the left plots the annual growth in gross investment for each unit—an indicator of company capital allocation—on the x-axis and each unit's current return on gross investment (ROGI)—a measure of business-unit financial health—on the y-axis. The chart on the right plots each unit's likely contribution to future TSR on the x-axis and its future ROGI on the y-axis. The analysis reveals that

Exhibit 5. Inefficient Capital Deployment Can Impede Value Creation

Too much investment in business units delivering returns below the cost of capital ...



... means that the entire portfolio's future TSR is well below the company's target



Source: BCG analysis.

¹ROGI is "return on gross investment."

²iTSR is "internal TSR," a metric for simulating each business unit's contribution to company TSR.

this company has a serious problem. Not only is a significant portion of the company's business portfolio delivering returns below the company's cost of capital, the majority of capital investment—60 percent—is going to those value-destroying businesses.

An analysis such as this one allows the senior management team to start defining its capital-allocation policy for the various business units in its portfolio. Units in the upper right quadrant of the right-hand chart in Exhibit 5 are the company's strong value creators. They should be receiving the lion's share of the company's investment capital. Those in the lower right quadrant are turn-arounds; their financial health is poor but they are improving and expected to deliver above-average value compared to their past performance. If they get their ROGI above the cost of capital, they should be rewarded with additional investment. Those in the upper left quadrant are financially healthy but poor value creators. Some may simply be coasting (that is, not trying to grow the business); others may be reinvesting too much cash (perhaps trying to grow too fast in a slow-growth market); still others may be experiencing margin erosion. These businesses need to come up with plans that drive improve-

ment in operating-income growth or free cash flow that add up, at a minimum, to an average TSR. Finally, those units in the lower left quadrant are in poor financial health and creating little or no value—raising the question of why the company is even in these businesses. Either their performance must be improved or they should be sold.

This exercise in defining the high-level goals of a company's value-creation strategy sets the stage for a more formal planning process involving the company's operating units. Going through the exercise puts the senior team in a position to deliver a preliminary TSR target reflecting the aspirations of senior management; a set of economic assumptions that the operating units should use in their planning; a list of key uncertainties and potential risks that may invalidate those assumptions and that the operating units should explore in greater depth in the planning process; a preliminary division of the operating units in terms of their roles in the company's overall TSR strategy; and a preliminary target for the amount of TSR that each unit is expected to deliver. These criteria will be the starting point of a company-wide target-setting process.

From Strategy to Plan

Once senior management has set the broad parameters of a company's value-creation strategy, the company is ready for a critical next step: translating that high-level strategy into realistic business plans and performance targets for operating managers. Precisely how a company goes about this will vary depending on its organization structure (whether it has standalone business units, a functional organization, or a matrix structure). But whatever the company's approach to planning, there will need to be an iterative process in which the company's organizational units define explicitly how they will contribute to the company's overall TSR goal and how they will manage any risks or uncertainties identified by senior management.

Base Case Plus Overlays

In our experience, the typical planning process at most companies leads to one-dimensional business plans that are extremely difficult for senior executives to assess. Regardless of the guidelines given to business units, what usually comes back is a "best estimate" plan with no transparency on how individual initiatives will contribute to plan results, little or no assessment of the risks inherent in the plan, and a weak linkage between operating targets and TSR. Such an approach is never ideal. It is especially misleading when a company finds itself in a volatile environment.

We recommend that companies take a different approach that we call *base case plus overlays*. The base case is the fi-

Business units
need to define their
contributions to the
company's TSR goal.

nancial projection of "business as usual" (based on a set of assumptions agreed to with corporate management), without any major new initiatives. In effect, the base case is the amount of value that business-unit leaders know with a high degree of confidence the unit will create, simply by maintaining its current trajectory. Overlays are a series of discrete initiatives that, if pursued by the company, have the potential to alter the trajectory of the business above and beyond the base case. Each overlay will be associated with a specific amount of TSR that it will contribute to the company and with a specific time frame in which that value will be delivered.⁴

Exhibit 6 shows the typical output of this base-case-plus-overlays planning approach for a pharmacy-distribution business. The momentum trajectory of this particular business unit would deliver an "internal" TSR (iTSR)—that is, a business unit's contribution to company TSR—of 6.9 percent during the four-year period from 2009 through 2012. However, a systematic exploration of possible strategic moves revealed a number of steps—eliminating a low-margin customer, improving the unit's working-capital productivity, consolidating its warehouses, increasing generics in its product mix, and acquiring a regional distributor—that would en-

4. For the sake of clarity, the discussion in this section assumes an organization consisting of standalone business units that control their own profit-and-loss (P&L) statements and balance sheets. In a functional or matrix organization, where there are no standalone business units, the process is somewhat different. In such cases, each operating unit uses the company's global P&L, balance sheet, and internal model for momentum TSR as the base case and then estimates the impacts of its various initiatives ("overlays") on the drivers of overall company TSR (revenue, costs, and so forth). The result is the operating unit's potential TSR contribution.

Exhibit 6. “Base Case Plus Overlays” Identifies Key Initiatives to Improve TSR

Business unit initiatives	Sales growth (%)	Gross margin change (%)	Operating expenditure margin change (%)	Inventory turn change (X)	Fundamental value change (%)	Free-cash-flow yield (%)	=	iTSR (%)
Base case plan	2.6	-0.2	0.3	0.1	2.7	4.2		6.9
Eliminate low-margin customer	↓	↑	—	—	↑	↓		+0.7
Improve working-capital productivity (new IT system)	—	↑	—	↑	↑	↑		+0.4
Consolidate warehouses	—	↑	—	↑	↑	↑		+0.4
Increase generics in product mix	↓	↑	↑	—	↑	↑		+0.3
Acquire regional distributor	↑	↑	↑	↓	↑	↓		+0.3
...
Combined impact on value	↓	↑	↑	↑	↑	↑		9%

Source: BCG analysis.

Note: Green arrows indicate a positive impact on specific TSR driver; red arrows indicate a negative impact. The size of the arrow corresponds to the relative size of the impact.

able the unit to deliver an iTSR in the neighborhood of 9 percent, nearly one-third higher than the value of the base case plan. Of course, all these initiatives have tradeoffs. For example, eliminating the low-margin customer will, by definition, lower the unit’s sales growth and free-cash-flow yield, but at the benefit of improving the unit’s gross margins and greatly increasing its net income. By using iTSR as a metric, the planning process will capture the cumulative effect of all these changes.

The advantages of the base-case-plus-overlays approach are many. First, it ensures that business-unit leaders think through how each initiative affects the P&L and balance sheet of both the unit itself and the company as a whole. Second, it makes transparent the relative contribution to TSR of each business unit’s plan as well as the individual initiatives within the plan. Third, it serves to focus subsequent target setting and performance tracking on those initiatives that are likely to have a fundamental impact

on the business. Finally, by segmenting the plan and the financial results in this fashion, it makes it easy to make changes to the plan before senior management and business-unit management finalize it.

But in one critical respect, the analysis in Exhibit 6 is incomplete. It portrays potential value created, but it says nothing about the degree of risk associated with the various overlays or the impact on the business plan if the economic environment turns out to be better or worse than senior management’s assumptions suggest. As each business unit puts together its list of strategic initiatives, it also should be exploring at this more granular level the potential impact of the key risk factors and uncertainties identified by senior management.

There are two steps to this process. First, every overlay initiative should be assessed in terms of its individual degree of risk. What is the probability that the strategic and

financial impacts of a given initiative will be achieved? How dependent is the success of the initiative on economic factors that, at the moment, are highly uncertain? At a minimum, some basic system should be used to categorize initiatives by their degree of risk—a numbers-rating system or “green,” “yellow,” and “red” traffic lights. For high-stakes initiatives, however, it may be useful to conduct Monte Carlo simulations (which quantify the expected range of outcomes given the range of potential uncertainties in key financial inputs) or other formal risk assessments in order to arrive at a high level of confidence that risks and probabilities are well understood. (See the sidebar “Risk Management: From Single Point Estimates to Probabilities.”)

In addition to coming up with a “risk-reward” profile for each initiative, a business unit should also be thinking through the potential impact of a very different economic environment from the one contained in senior management’s assumptions. Think of this as an “environmental overlay” to the plan. What will be the impact if those assumptions turn out to be too optimistic or too pessimistic? And how should the business unit respond if either of these situations occurs? In this way, the managers who develop the plan and who need to own its implementation will be forced to think through the potential downside and upside impacts *and* how they intend to respond to them—and, in doing so, begin to prepare for them.

The Reconciliation of Targets and Plans

Once a company’s business units have developed their initial plans in this fashion, they need to be combined into an integrated company plan. As senior management aggregates all of the various plans, it will discover whether they “add up” to the company’s overall TSR aspiration and identify the overall risk-return profile that they represent.

The combined sum of the business unit base cases will indicate how much operating TSR and cash flow will be generated by the momentum business. Meanwhile, the analysis of all the overlay initiatives will show senior management how much additional incremental value can be created and at how much investment cost per initiative. Finally, by segmenting the initiatives according to

their degree of risk, executives can also calculate their TSR at different levels of risk.

In the course of reviewing these data, senior management needs to ask questions such as the following: Does the combined base case take the company far enough to meet its TSR goal? If not, will the overlays add enough value to fill the gap—and at what risk? Do the plans generate enough free cash flow to fund investment in the new initiatives as well as the company’s cash payouts to investors? If not, what would be the impact of using excess cash on the balance sheet, raising new equity, or taking on more debt to come up with the required funding? Finally, what combination of initiatives best meets senior management’s

TSR aspirations, conforms to its appetite for risk, and attracts the category of investors that the company wants to target?

Depending on their answers to these questions, senior executives will then start finalizing their value-creation strategy. In order to narrow any gap between the overall company TSR target and the likely TSR forecasted by the business unit plans, for example, they can revisit the roles assigned to the businesses in the portfolio and consider moves to reshape the portfolio through acquisition or divestment. (See the sidebar “Risk Management: Integrating Value and Risk in Portfolio Strategy.”) Through dialogue with the business units, they may identify additional overlays that aren’t part of the working plans or lower the company’s overall risk-reward threshold in order to consider initiatives that had been ruled out because they represented too much risk. Alternatively, they might consider new corporate initiatives for increasing TSR—for example, by raising the dividend payout higher than they had initially considered. (See Exhibit 7.)

The end result of this process will be a company-wide value-creation plan with specific TSR targets for the business units and final decisions about capital allocation for each of the overlays. To return to the example of the pharmacy-distribution business discussed earlier, senior management decided that the amount of capital required to fund all of the initiatives proposed by the business unit was more than the company could afford, given its cash flow and other capital commitments. So, executives decided to take the following three steps: First, they would

Companies should identify the overall risk-return profile of business initiatives.

Exhibit 7. There Are Two Ways to Narrow the Gap Between TSR Aspirations and Plans

Revisit portfolio roles

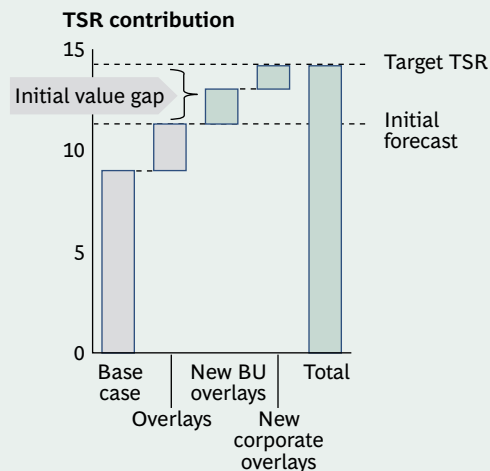
Role	Business unit
Growth engine	<ul style="list-style-type: none"> • BU 1 • BU 2 • BU 3 • BU 4
Balanced	<ul style="list-style-type: none"> • BU 5 • BU 6 • BU 7 • BU 8
Cash generator	<ul style="list-style-type: none"> • BU 9 • BU 10 • BU 11 • BU 12
Fix or divest	<ul style="list-style-type: none"> • BU 13 • BU 14 • BU 15 • BU 16

Revisit potential overlays

Lower the threshold for overlay approval

Overlays	TSR impact	Risk
1	0.7%	● Original cutoff
2	0.5%	● Original cutoff
3	0.4%	● New cutoff
4	0.3%	● New cutoff

Identify additional overlays



Source: BCG analysis.

Risk Management

From Single Point Estimates to Probabilities

Most companies set value creation targets as single point estimates—even when there are significant uncertainties associated with the underlying value drivers and cash flows. An alternative is to quantify the degree of uncertainty affecting value drivers and cash flows, and to set targets in terms of a range of outcomes and the likely probabilities of achieving different points in that range.

For example, we recently worked with a private industrial company in Europe that had been spun off by its corporate parent and was preparing for an initial public offering. In the course of developing its equity story for investors, the management team estimated the likely impact of a variety of macroeconomic factors on its strategic plan. BCG helped the team create a model of the key factors affecting the company's economic performance and how those factors influenced each other. Using Monte Carlo simulations (which quantify the expected range of outcomes given the range of potential uncertainties in key financial inputs), the model quantified the probability that the company would achieve its target for annual earnings before interest and taxes (EBIT) of €280 million.

The results of the analysis can be seen in the exhibit "Simulations Can Reveal the Probability of Meeting Value Targets." The analysis showed that the company was highly likely to achieve its EBIT target of €280 million. What's more, there was a 25 percent probability that the company would do even better and achieve its stretch target of €320 million. Meanwhile, there was a 10 percent probability that its EBIT could be substantially worse—only €190 million. The model was also able to quantify precisely what would have to happen in the external environment for it to achieve its stretch goal—either GDP growth that was 1.4 percent greater than the expectations embedded in the company's strategic plan, a dollar-to-euro exchange rate that was three cents below expectations, raw-materials prices that were 3.5 percent below expectations, or fixed costs 1 percent below expectations.

As a result of this detailed analysis, the company's management team won high marks from investors for its understanding of the uncertainties affecting the business and for its strong risk-management capability. The company received an investment-grade rating—despite the

Risk Management

From Single Point Estimates to Probabilities (continued)

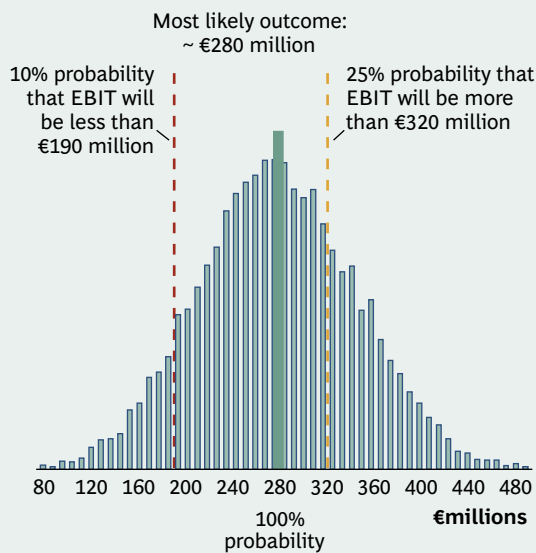
fact that it had been saddled with considerable debt by its parent company. The careful risk analysis was also the basis for the development of the company's future risk-mitigation and hedging strategy (for foreign exchange and key raw materials).

In the two years after going public, the company outperformed its former corporate parent. And over time, the company has developed a strong reputation in the capital markets for meeting expectations and delivering on its promises.

Simulations Can Reveal the Probability of Meeting Value Targets

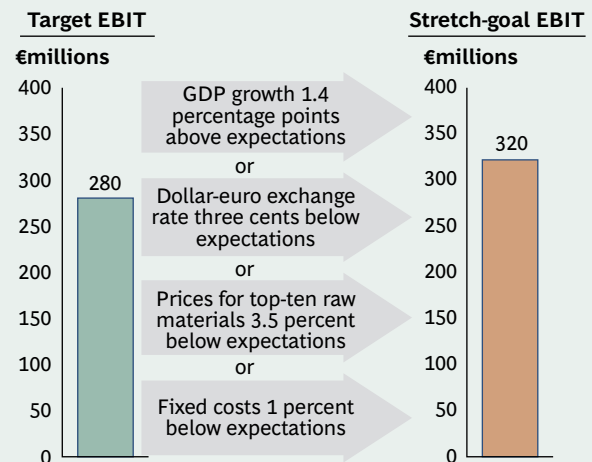
Sensitivity analysis on strategic plans ...

EBIT forecast for the next fiscal year



... quantified the impact of key risk drivers

How can the stretch-goal EBIT be attained?



pursue the two initiatives that were the least risky (and that required minimal new capital investment). Second, they would also approve one of the business unit's two moderately risky initiatives but send the second back to see if the business unit could significantly reduce the capital outlay and still attain most of the economic benefits. And third, they would defer the most expensive and riskiest initiative (acquiring a regional distributor) because the additional value it was anticipated to deliver was not worth the cost, given the increased risk. (See Exhibit 8.)

Plans That Shape Actions

One of the great advantages of the base-case-plus-overlays approach to creating a company's value-creation

strategy is that once the overall company plan is finalized, it provides clear guidance for business units in terms of budgets, key performance indicators (KPIs), and management incentives. In effect, the first year of the plan defines the next annual budget. The initiatives accepted in the plan define the KPIs that determine annual bonuses. And the TSR target of each business unit defines the key thresholds that need to be reached in order to trigger long-term incentive compensation.

What's more, the risk-management screens that senior management has put in place represent the infrastructure for ongoing monitoring of leading indicators and key industry trends. Depending on the evolution of the economy, adjustments can be made to the plan to reflect new conditions, and these adjustments can be incorporated

Exhibit 8. Decisions on Capital Allocation Drive TSR Targets

Business unit initiatives	Capital required (\$millions)	TSR impact (%)	Probability of success	Final decision
Eliminate low-margin customer	0	0.7		Fund
Improve working-capital productivity (new IT system)	40	0.4		Send back
Consolidate warehouses	30	0.4		Fund
Increase generics in product mix	10	0.3		Fund
Acquire regional distributor	120	0.3		Defer
...
Total new capital required	\$200 million		Total new capital allocated	\$40 million

Source: BCG analysis.

Risk Management

Integrating Value and Risk in Portfolio Strategy

In some situations, a company may want to go to the lengths of developing an integrated view of the entire portfolio in terms of both value and risk. (For more on this subject, see “Integrating Value and Risk in Portfolio Strategy,” BCG Opportunities for Action, July 2005, from which this sidebar is an excerpt.) Such a view allows a company to compare diverse assets and businesses on a consistent risk-reward basis and can be a powerful tool for driving decisions about capital and other resource allocation, growth initiatives, new product development, and mergers and acquisitions.

The exhibit “Integrated Risk-Return Profiles Map Both Value and Risk” portrays the integrated risk-return profile we developed for a major energy company. Each square represents an existing business unit of the company and each dot represents a future growth initiative. The solid triangle represents the risk-return profile of the existing portfolio; the three clear triangles (labeled A, B, and C) represent alternative combinations of existing business units and future investment opportunities.

As the exhibit suggests, the various growth options differ greatly, not only in their expected returns but also in the risks associated with achieving those returns. For exam-

ple, growth initiatives 1 and 2, considered alone, provide fundamentally more attractive risk-return tradeoffs than do initiatives 3 or 4. Further, initiative 4 has substantially higher relative risk than initiative 3, but without a commensurate increase in return potential. So, initiatives 3 or 4 will need to have other compelling rationales (related to the strategic or diversification goals of the portfolio) in order to be credible alternatives to initiatives 1 or 2. Similar observations can be made about the individual businesses and their relative risk-return profiles.

At the level of the entire portfolio, the exhibit shows that the company’s existing portfolio is at the conservative end of the risk spectrum in relation to alternate portfolio options such as B or C. Clearly, the company could increase its returns by taking on more risk. For example, portfolio option A has the potential to boost average annual returns significantly. However, the added risk of this portfolio is also substantial. Portfolio option B, by contrast, vastly increases the risk relative to A, but without a commensurate increase in returns. And portfolio option C adds even more risk, but with no greater contribution to value than option A. Again, absent other compelling strategic logic, a move to B or C would be difficult to justify, especially in today’s environment. But in the absence

Risk Management

Integrating Value and Risk in Portfolio Strategy (continued)

of an integrated perspective, executives might well have seen B as the most attractive portfolio option (since it has the greatest potential for returns).

Of course, such a view of the portfolio, by itself, cannot tell a senior management team what choices it should make. Executives will need to consider other factors too, such as the strategic fit among assets, the appetite for both risk and returns of the company's investors, and other issues relevant to the specific situation.

In our experience, however, following an integrated approach and simply being able to array a complex set of options on a consistent, quantified risk-return matrix serves as a powerful catalyst for the right senior management debates, addressing questions such as: Do the high risks of pursuing some growth initiatives outweigh the attrac-

tiveness of their apparent value-creation potential? Are initiatives that have compelling risk-return tradeoffs being given priority over those that don't? Based on knowledge of the specific value drivers, what can be done to reduce uncertainty and mitigate the risk of otherwise attractive options? Is the risk tolerance of the company's board of directors and shareholders consistent with their expectations for value creation and growth? What portfolio-shaping moves are necessary to hit the "sweet spot" of value creation and risk for the company?

Integrated Risk-Return Profiles Map Both Value and Risk



Source: BCG analysis.

¹Ten-year average annual total business return.

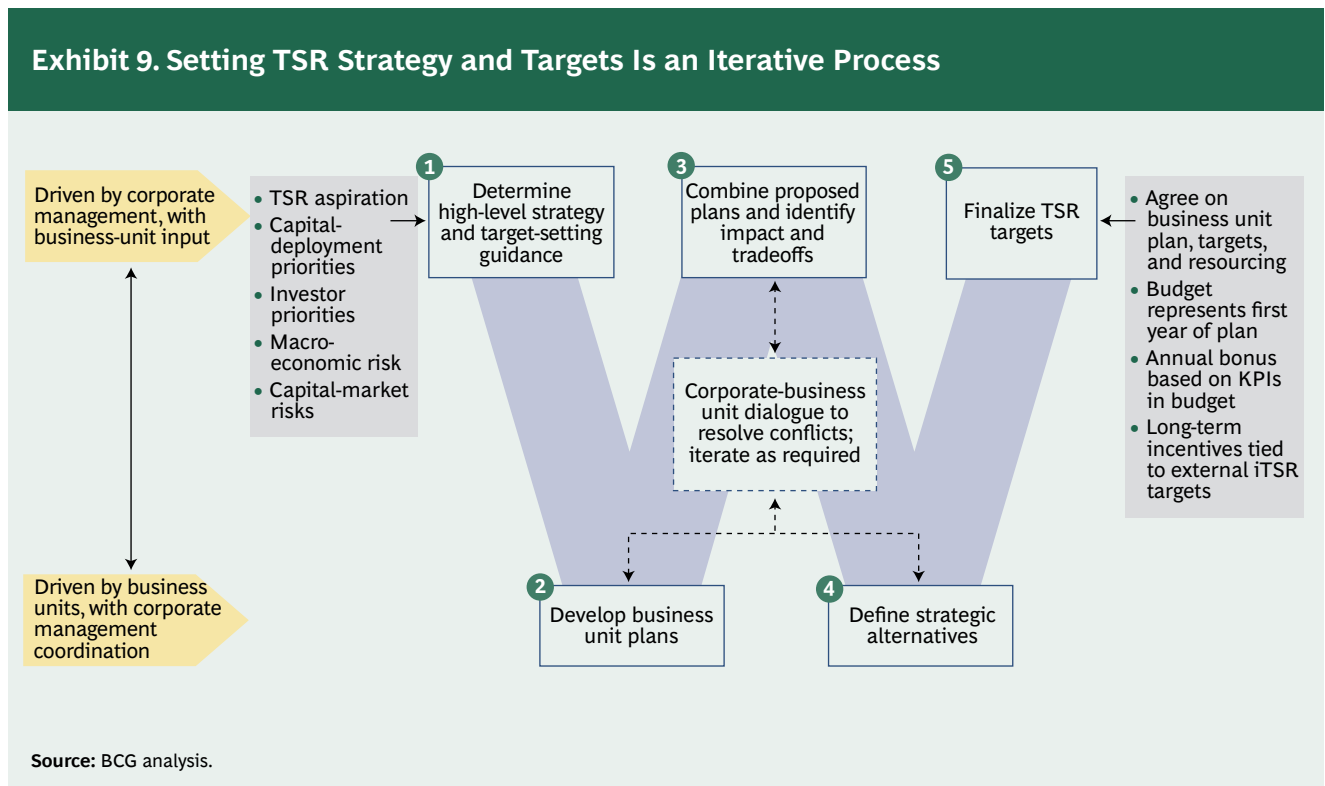
²Expressed as the ratio of value at risk (VAR) to net present value (NPV).

into budgets or the annual planning process in subsequent years simply by modifying the base case or specific overlays. This approach greatly enhances the flexibility and the agility of the planning process.

Exhibit 9 shows the strategy and planning process that we have described in these pages. We call it *the W process* to emphasize the importance of the frequent iteration between corporate management and a company's business units that eventually leads to a well-defined plan. In our experience, this process is the most effective way for a company both to focus its value-creation strategy and to

align its organization around that strategy, especially in today's environment in which the risks of getting it wrong are high.

Of course, no process can succeed in eliminating all uncertainty from a company's environment. But with smart strategies and detailed but flexible plans, a company can go a long way toward containing uncertainty, building organizational buy-in, and more effectively managing the inevitable risks of value creation in a volatile economy.





Appendix

The 2011 Value Creators Rankings

The 2011 Value Creators rankings are based on an analysis of total shareholder return at 941 global companies for the five-year period from 2006 through 2010.

To arrive at this sample, we began with TSR data for more than 9,000 companies provided by Thomson Reuters. We eliminated all companies that were not listed on a 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. 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 “Creating Value in Banking 2011: Settling into the New Postcrisis Equilibrium,” BCG Interactive, May 2011.)

We further refined the sample by organizing the remaining companies into 19 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.”) In addition to our 941-company comprehensive sample, we also separated out those companies with market valuations of more than \$35 billion. We have included rankings for these large-cap companies in the “Global Rankings.”

The global and industry rankings are based on five-year TSR performance from 2006 through 2010.¹ We also show TSR performance for 2011, through June 30. In addition, we break down TSR performance into the six investor-oriented financial metrics used in the BCG TSR model.

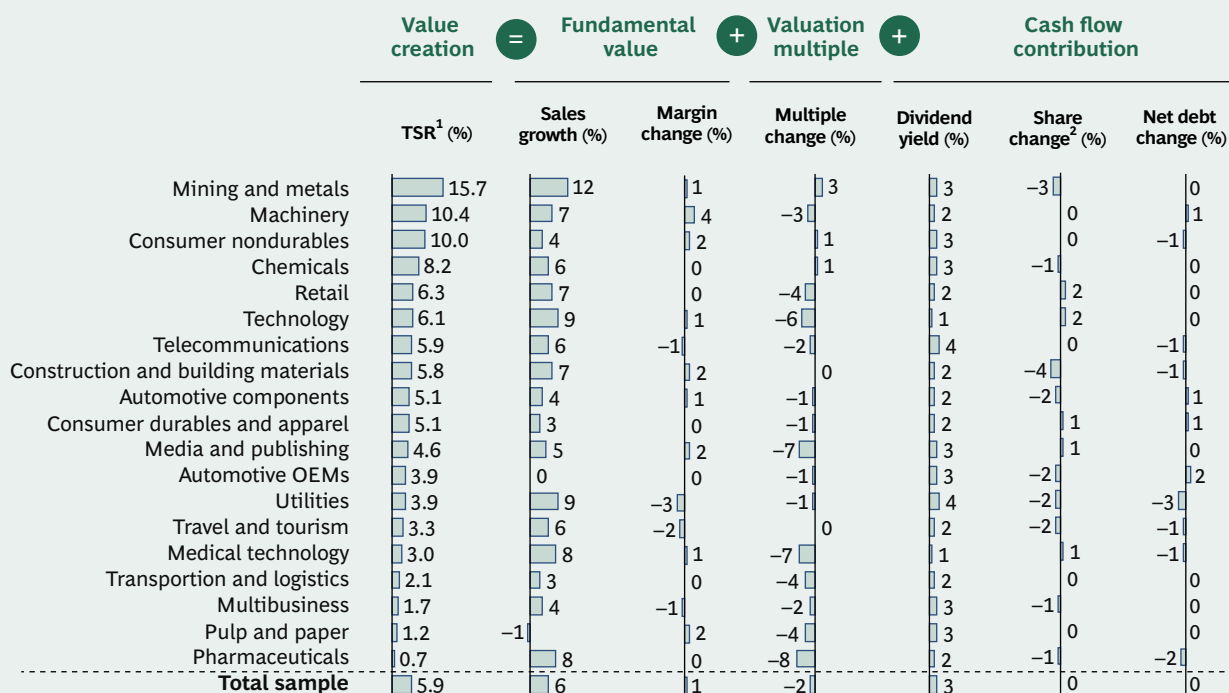
The weighted average annual return for the 941 companies in our sample was 5.9 percent, considerably below the long-term historical average of about 10 percent. Although all 19 industry sectors in our sample delivered positive TSR during the period studied, only 7 were able to meet or beat the sample average, a sign that while the recovery has spread to all sectors, its major impact has been on only a small number of them. (See Exhibit 1.)

As always, the leading companies in our sample substantially outpaced not only their own industry average but also the total sample average. For example, the average annual TSR of the global top ten (69.8 percent) was more than ten times greater than that of the sample as a whole. (See Exhibit 2.) The top ten companies in each industry outpaced their industry averages by between 11.4 percentage points (in telecommunications) and 33.3 percentage points (in chemicals). And in every industry we studied, the top ten companies also did substantially better than the overall sample average—by at least 8.2 percentage points of TSR. The lesson for executives is this: Coming from a sector with below-average market performance is no excuse. No matter how bad an industry’s average performance is relative to other sectors and to the market as a whole, it is still possible for companies in that industry to deliver superior shareholder returns.

What kind of improvement in TSR was necessary to achieve truly superior performance, given the sample

1. TSR is a dynamic ratio that includes price gains and dividend payments for a specific stock during a given period. To measure performance from 2006 through 2010, 2005 end-of-year data must be used as a starting point in order to capture the change from 2005 to 2006, which determines 2006 TSR. For this reason, all exhibits in the report showing 2006–2010 performance begin with a 2005 data point.

Exhibit 1. Only 1 of the 19 Industries Studied Achieved Double-Digit Sales Growth



Sources: Thomson Reuters Datastream; Thomson Reuters Worldscope; Bloomberg; company disclosures; BCG analysis.

Note: Decomposition is shown in percentage points of five-year average annual TSR; any apparent discrepancies in TSR totals are due to rounding.

¹Five-year average annual TSR (2006–2010) for weighted average of respective sample.

²“Share change” refers to the change in the number of shares outstanding, not to the change in share price.

average? A company had to deliver an average annual TSR of at least 16 percent per year to be in the top quartile of the global sample and at least 53.7 percent to make the top ten. And the most successful companies delivered TSR above 70 percent per year and as much as 93.2 percent.

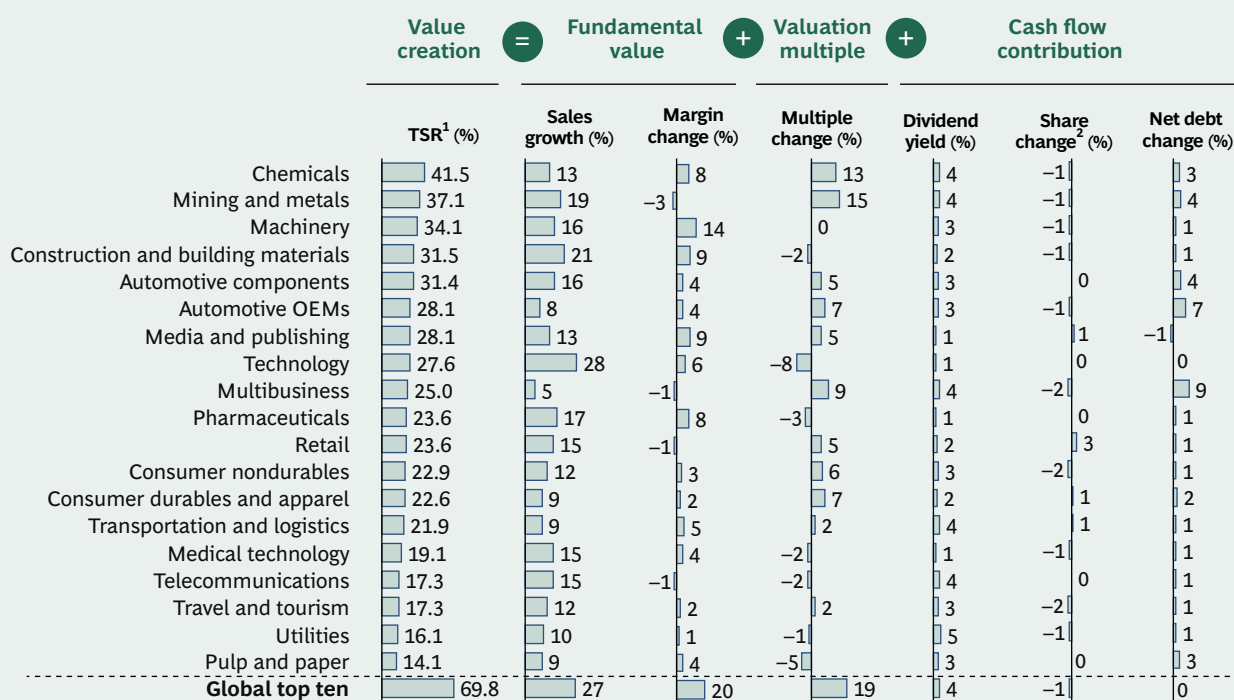
Exhibits 1 and 2 and the exhibits in the rankings themselves suggest six other broad trends of interest:

- ◆ Companies from emerging markets are well represented among our global top ten, with Chinese companies taking the top three places, followed immediately by companies from India, Mexico, and the Philippines. Although the U.S. is represented by three companies on the top ten list, Europe has none. (See the “Global Rankings.”)
- ◆ When it comes to the world’s largest companies, however, the balance shifts back toward the developed

world. Although this year’s number-one large-cap value creator is, for the second year in a row, the Chinese online media company Tencent, six of the top ten companies in this category are from developed-world economies—including familiar companies such as Apple (by far, the company with the biggest market valuation on our list) at number three, German automaker Volkswagen at number four, Danish pharmaceutical manufacturer Novo Nordisk at number seven, and U.S. online retailer Amazon.com at number eight. (See the “Global Rankings.”)

- ◆ There are some indications of a growing divergence between winners and losers in this year’s rankings. For example, the spread between the highest and lowest performers in a given industry ranges from 43 percentage points in pharmaceuticals to an extraordinary 114 percentage points in medical technology. And even among our global top ten, only the top three companies delivered returns that were above average for the

Exhibit 2. The Top Ten in Every Industry Easily Beat the Overall Sample Average



Sources: Thomson Reuters Datastream; Thomson Reuters Worldscope; Bloomberg; company disclosures; BCG analysis.

Note: Decomposition is shown in percentage points of five-year average annual TSR; any apparent discrepancies in TSR totals are due to rounding.

¹Five-year average annual TSR (2006–2010) for weighted average of respective sample.

²“Share change” refers to the change in the number of shares outstanding, not to the change in share price.

- top ten as a whole. And the TSR of the number one global top-ten company, China medical technology maker Shandong Weigao (93.2 percent), is nearly double that of the number ten company, Hong Kong-based automotive glass manufacturer Xinyi Glass (53.7 percent). Among large-cap companies, number one Tencent’s TSR (83.4 percent) is nearly four times that of number ten Deere & Company (21.9 percent).
- ◇ This year, just like last, the most value-generating industries are capital-intensive sectors (to be expected at the beginning of an economic recovery): mining and metals and machinery. However, these industries are followed by more consumer-oriented sectors such as consumer nondurables, retail, technology, and telecommunications, indicating that the recovery is finally penetrating the consumer sector of the economy.
 - ◇ Only 1 of the 19 industries in our sample—mining and metals—posted double-digit sales growth during the period studied, which suggests the impact of lower GDP growth. And only 7 of the 19 industries beat the overall sample sales-growth average of 6 percent.
 - ◇ In 14 of the 19 industries, declines in valuation multiples destroyed value—sometimes dramatically so. For example, declines in valuation multiples were responsible for lowering TSR by 6 percentage points, on average, in technology; 7 percentage points in media and publishing and medical technology; and 8 percentage points in pharmaceuticals. One effect of these across-the-board multiple declines is that dividend yields constitute the majority of average annual TSR—3 percentage points of the sample-average TSR of 5.9 percent.

Global Rankings

Total Global Sample

The Global Top Ten, 2006–2010

#	Company	Location	Industry	TSR ² (%)	Market value ³ (\$billions)	TSR Decomposition ¹						2011 TSR ⁶ (%)
						Sales growth (%)	Margin change (%)	Multiple change ⁴ (%)	Dividend yield (%)	Share change ⁵ (%)	Net debt change (%)	
1	Shandong Weigao	China	Medical technology	93.2	6.1	34	10	45	2	-2	4	2
2	Tencent	Hong Kong	Media and publishing	83.4	39.6	69	16	1	1	-1	-3	25
3	Baidu	China	Media and publishing	72.7	33.6	89	31	-46	0	-1	-1	45
4	Jindal Steel & Power	India	Mining and metals	68.9	14.7	38	9	21	1	0	1	-8
5	Industrias Peñoles	Mexico	Mining and metals	59.7	15.5	24	9	12	9	0	5	0
6	Aboitiz Equity Ventures	Philippines	Multibusiness	57.3	4.6	22	29	3	7	-5	1	18
7	CF Industries	United States	Chemicals	55.3	9.6	16	23	28	1	-5	-7	5
8	Deckers Outdoor	United States	Consumer durables and apparel	54.0	3.1	30	6	18	0	-1	0	11
9	Terra Nitrogen	United States	Chemicals	53.8	2.0	4	22	13	16	0	-1	34
10	Xinyi Glass	Hong Kong	Automotive components	53.7	2.9	36	11	3	6	-3	0	22

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

Note: n = 941 global companies.

¹Contribution of each factor shown in percentage points of five-year average annual TSR; any apparent discrepancies in TSR totals are due to rounding.

²Average annual TSR, 2006–2010.

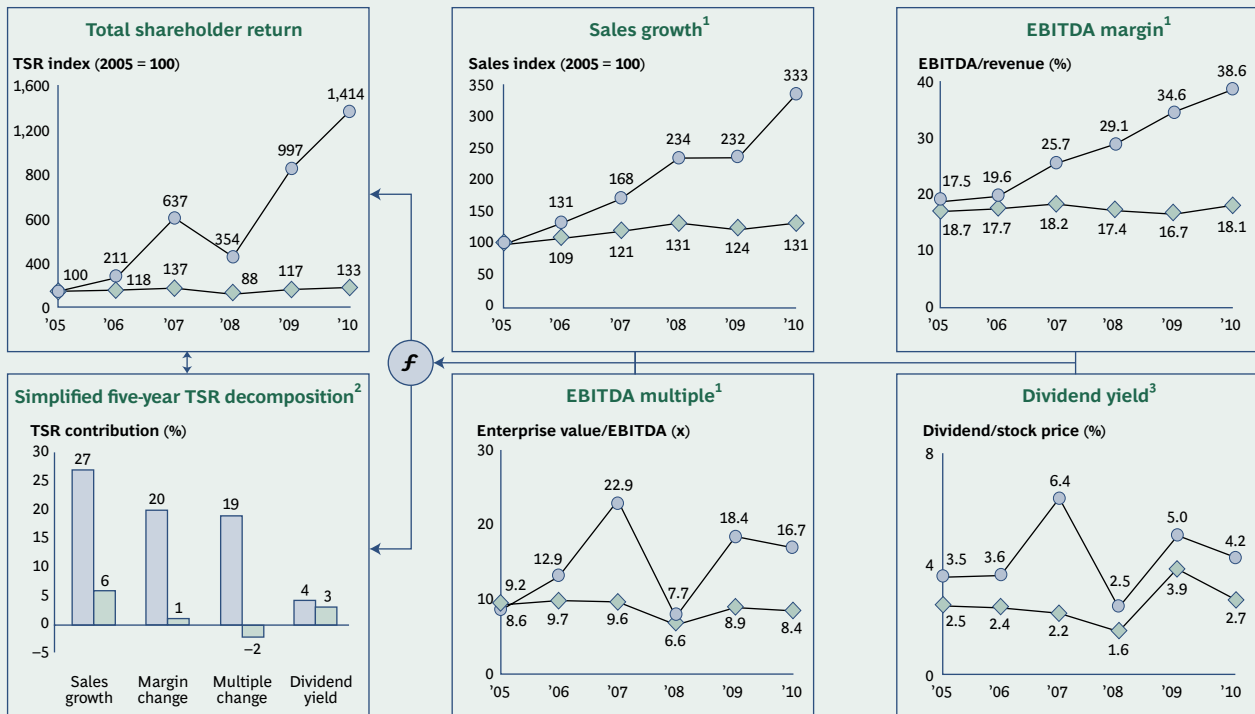
³As of December 31, 2010.

⁴Change in EBITDA multiple.

⁵“Share change” refers to the change in the number of shares outstanding, not to the change in share price.

⁶As of June 30, 2011.

Value Creation at the Global Top Ten Versus Total Global Sample, 2006–2010



● Global top ten ◆ Total global sample, n = 941

Sources: Thomson Reuters Datastream; Thomson Reuters 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, 2006–2010

#	Company	Location	Industry	TSR ² (%)	Market value ³ (\$billions)	TSR Decomposition ¹						2011 TSR ⁶ (%)
						Sales growth (%)	Margin change (%)	Multiple change ⁴ (%)	Dividend yield (%)	Share change ⁵ (%)	Net debt change (%)	
1	Tencent	Hong Kong	Media and publishing	83.4	39.6	69	16	1	1	-1	-3	25
2	PotashCorp	Canada	Chemicals	38.5	45.3	11	9	15	1	2	1	7
3	Apple	United States	Technology	35.0	295.5	36	24	-23	0	-2	-1	4
4	Volkswagen	Germany	Automotive OEMs	33.8	81.5	6	3	8	4	-2	14	19
5	China Shenhua Energy	China	Mining and metals	33.5	83.4	24	-6	8	4	-2	6	17
6	Reliance Industries	India	Chemicals	33.0	70.0	25	-6	14	1	-1	0	-14
7	Novo Nordisk	Denmark	Pharmaceuticals	31.0	66.9	12	4	8	2	3	0	4
8	Amazon.com	United States	Retail	30.7	81.2	32	-3	2	0	-2	2	14
9	AmBev	Brazil	Consumer nondurables	27.7	99.0	10	3	7	5	1	2	3
10	Deere & Company	United States	Machinery	21.9	35.1	4	2	7	3	2	4	0

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

Note: n = 143 global companies with a market valuation of at least \$35 billion.

¹Contribution of each factor shown in percentage points of five-year average annual TSR; any apparent discrepancies in TSR totals are due to rounding.

²Average annual TSR, 2006–2010.

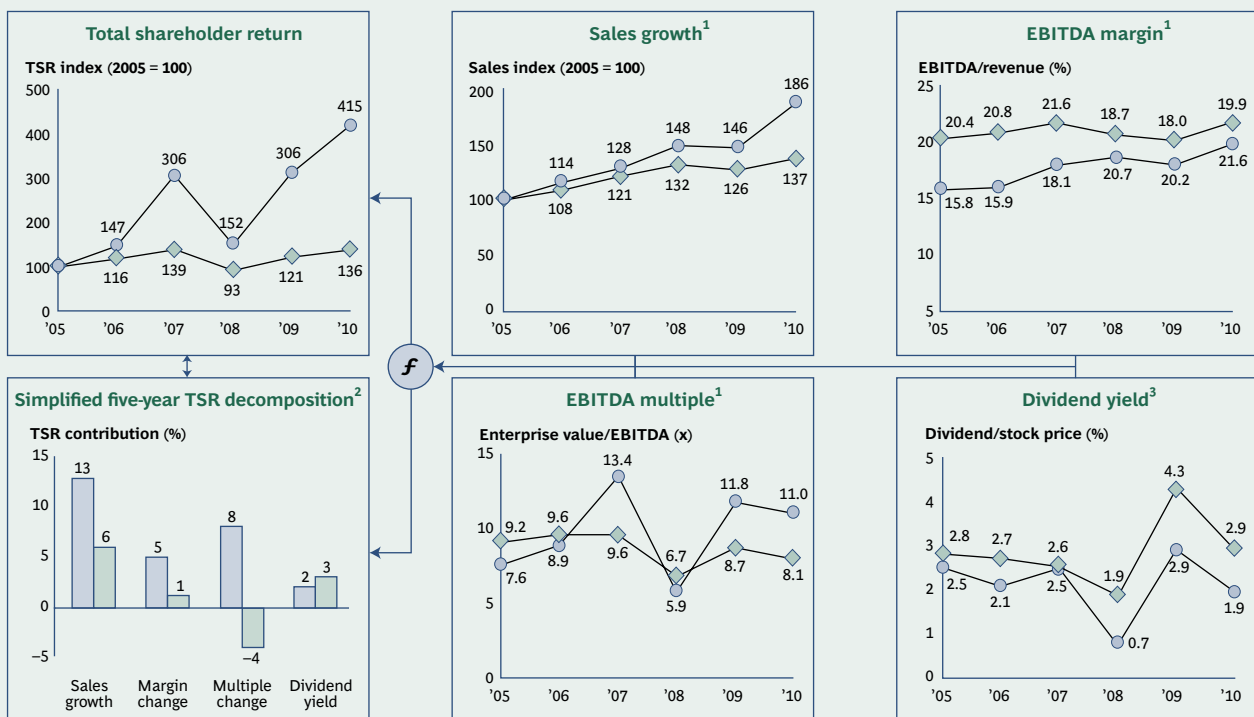
³As of December 31, 2010.

⁴Change in EBITDA multiple.

⁵"Share change" refers to the change in the number of shares outstanding, not to the change in share price.

⁶As of June 30, 2011.

Value Creation at the Large-Cap Top Ten Versus Total Large-Cap Sample, 2006–2010



Sources: Thomson Reuters Datastream; Thomson Reuters 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 Components

The Automotive Components Top Ten, 2006–2010

#	Company	Location	TSR ² (%)	Market value ³ (\$billions)	TSR Decomposition ¹						2011 TSR ⁶ (%)
					Sales growth (%)	Margin change (%)	Multiple change ⁴ (%)	Dividend yield (%)	Share change ⁵ (%)	Net debt change (%)	
1	Xinyi Glass	Hong Kong	53.7	2.9	36	11	3	6	-3	0	22
2	Exide Industries	India	47.3	3.1	26	14	4	2	-2	3	-3
3	Astra International	Indonesia	45.5	25.9	16	3	14	6	0	7	19
4	Cummins India	India	41.1	3.5	14	12	10	4	0	1	-13
5	Cheng Shin Rubber	Taiwan	35.1	4.7	22	5	-2	3	0	7	27
6	Hyundai Mobis	South Korea	26.7	25.2	19	6	0	1	-2	3	41
7	Nokian Renkaat	Finland	23.5	5.0	9	8	3	3	-1	2	29
8	LKQ	United States	21.3	3.3	35	6	-11	0	-7	-2	15
9	BorgWarner	United States	19.9	8.1	6	1	8	1	0	4	12
10	Hankook Tire	South Korea	18.9	4.3	15	-1	1	2	0	2	43

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

Note: n = 34 global companies with a market valuation of at least \$2.5 billion.

¹Contribution of each factor shown in percentage points of five-year average annual TSR; any apparent discrepancies in TSR totals are due to rounding.

²Average annual TSR, 2006–2010.

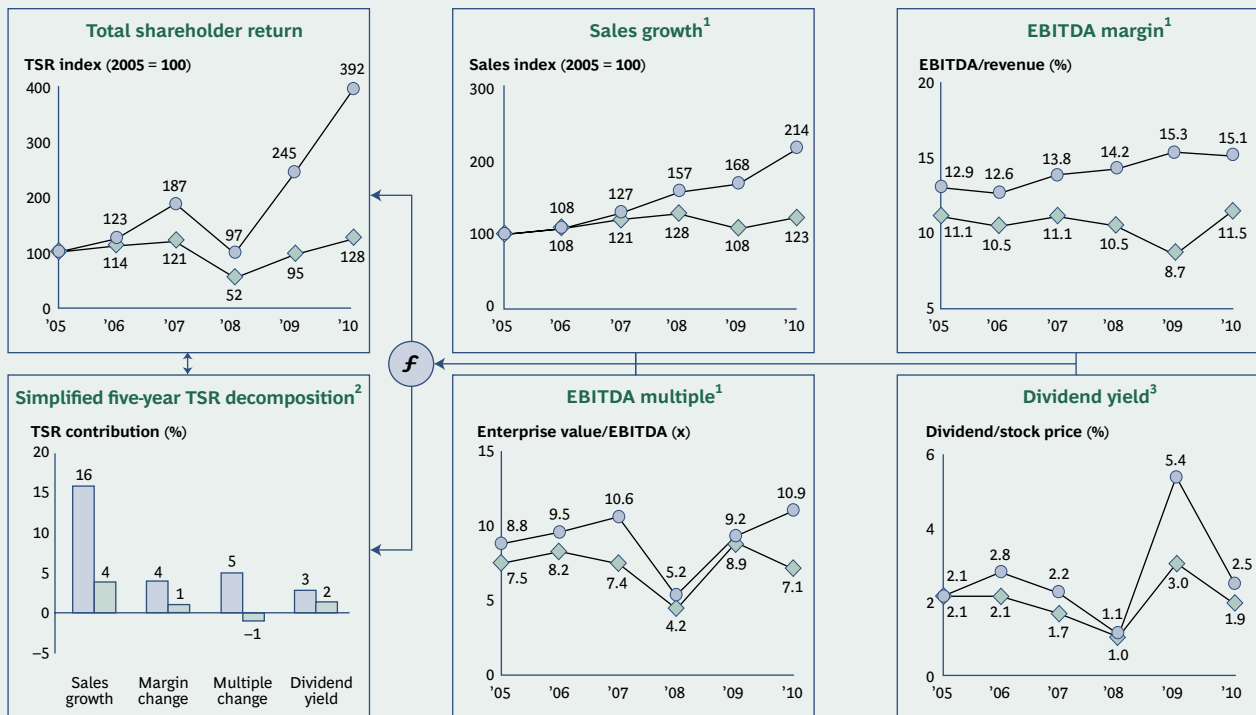
³As of December 31, 2010.

⁴Change in EBITDA multiple.

⁵“Share change” refers to the change in the number of shares outstanding, not to the change in share price.

⁶As of June 30, 2011.

Value Creation at the Automotive Components Top Ten Versus Industry Sample, 2006–2010



● Automotive components top ten ◆ Total sample, n = 34

Sources: Thomson Reuters Datastream; Thomson Reuters 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.

Automotive OEMs

The Automotive OEM Top Ten, 2006–2010

#	Company	Location	TSR ² (%)	Market value ³ (\$billions)	TSR Decomposition ¹						2011 TSR ⁶ (%)
					Sales growth (%)	Margin change (%)	Multiple change ⁴ (%)	Dividend yield (%)	Share change ⁵ (%)	Net debt change (%)	
1	Dongfeng Motor	China	48.3	14.8	24	12	0	1	0	11	11
2	Brilliance China Automotive	Hong Kong	38.8	3.8	10	48	-27	0	-6	14	48
3	Volkswagen	Germany	33.8	81.5	6	3	8	4	-2	14	19
4	Tofaş Türk Otomobil Fabrikası	Turkey	27.1	2.5	20	8	-1	6	0	-6	-2
5	Mahindra & Mahindra	India	27.0	9.8	25	12	-9	3	-4	0	-10
6	UMW	Malaysia	24.5	2.7	5	9	11	6	-3	-4	5
7	Scania	Sweden	22.7	20.0	4	11	2	4	0	2	-2
8	Hero Honda Motors	India	21.8	8.8	16	2	0	4	0	0	-2
9	Maruti Suzuki India	India	18.1	9.1	22	-3	-3	1	0	2	-18
10	MAN	Germany	17.9	19.0	5	0	9	3	0	0	5

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

Note: n = 33 global companies with a market valuation of at least \$2.5 billion.

¹Contribution of each factor shown in percentage points of five-year average annual TSR; any apparent discrepancies in TSR totals are due to rounding.

²Average annual TSR, 2006–2010.

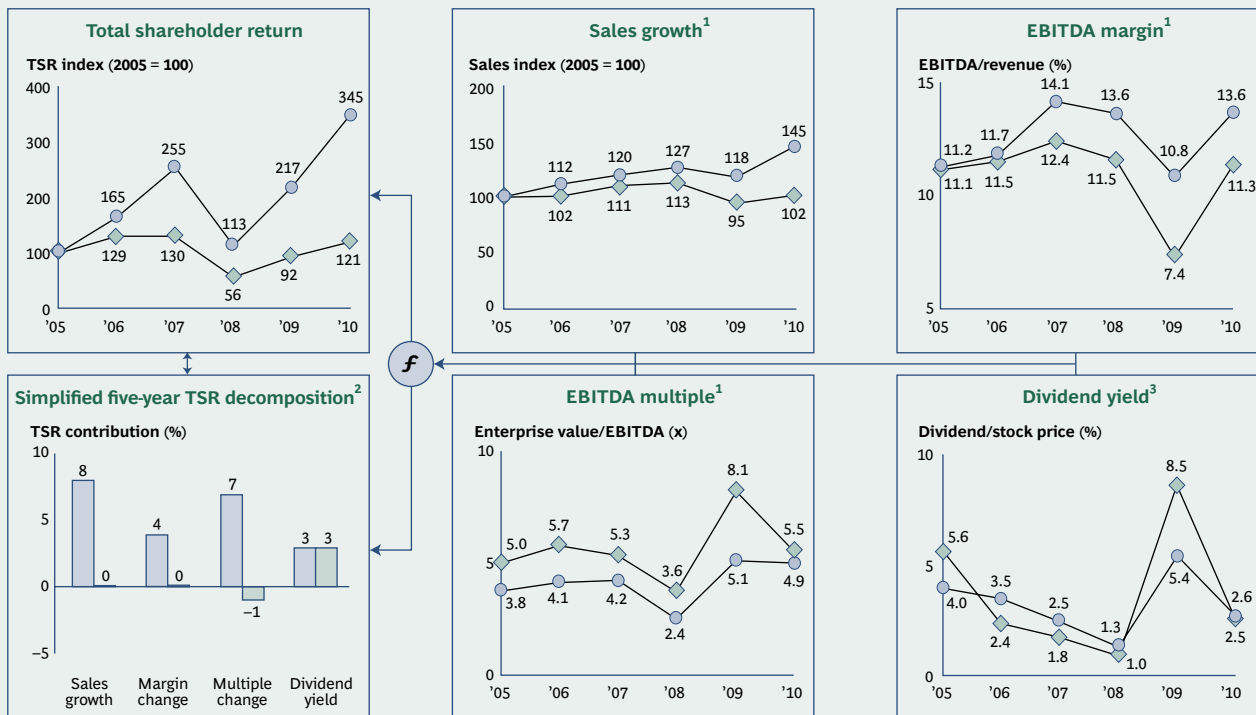
³As of December 31, 2010.

⁴Change in EBITDA multiple.

⁵“Share change” refers to the change in the number of shares outstanding, not to the change in share price.

⁶As of June 30, 2011.

Value Creation at the Automotive OEMs Top Ten Versus Industry Sample, 2006–2010



Sources: Thomson Reuters Datastream; Thomson Reuters 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 Chemicals Top Ten, 2006–2010

#	Company	Location	TSR ² (%)	Market value ³ (\$billions)	TSR Decomposition ¹						2011 TSR ⁶ (%)
					Sales growth (%)	Margin change (%)	Multiple change ⁴ (%)	Dividend yield (%)	Share change ⁵ (%)	Net debt change (%)	
1	CF Industries	United States	55.3	9.6	16	23	28	1	-5	-7	5
2	Terra Nitrogen	United States	53.8	2.0	4	22	13	16	0	-1	34
3	LG Chem	South Korea	49.7	23.9	13	6	17	3	-1	11	25
4	Incitec Pivot	Australia	43.8	6.9	22	23	0	5	-4	-3	-2
5	Castrol India	India	43.6	2.5	14	14	9	7	0	1	17
6	Honam Petrochemical	South Korea	41.3	8.0	18	-8	31	2	0	-1	47
7	Mosaic	United States	40.1	34.0	9	17	7	1	-3	9	-11
8	Química y Minera de Chile	Chile	39.9	15.0	15	6	14	4	0	1	15
9	K+S	Germany	39.2	15.6	12	12	13	3	-1	0	-4
10	PotashCorp	Canada	38.5	45.3	11	9	15	1	2	1	7

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

Note: n = 122 global companies with a market valuation of at least \$0.1 billion.

¹Contribution of each factor shown in percentage points of five-year average annual TSR; any apparent discrepancies in TSR totals are due to rounding.

²Average annual TSR, 2006–2010.

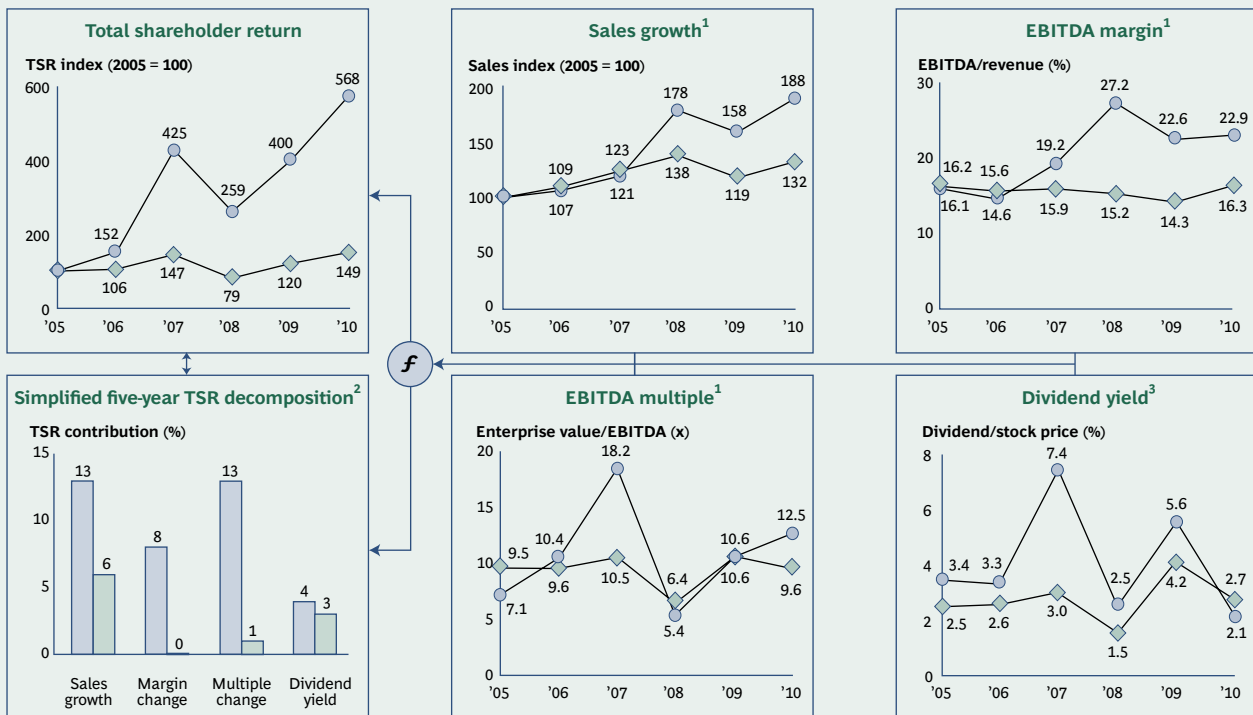
³As of December 31, 2010.

⁴Change in EBITDA multiple.

⁵“Share change” refers to the change in the number of shares outstanding, not to the change in share price.

⁶As of June 30, 2011.

Value Creation at the Chemicals Top Ten Versus Industry Sample, 2006–2010



Sources: Thomson Reuters Datastream; Thomson Reuters 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.

Construction and Building Materials

The Construction and Building Materials Top Ten, 2006–2010

#	Company	Location	TSR ² (%)	Market value ³ (\$billions)	TSR Decomposition ¹						2011 TSR ⁶ (%)
					Sales growth (%)	Margin change (%)	Multiple change ⁴ (%)	Dividend yield (%)	Share change ⁵ (%)	Net debt change (%)	
1	Anhui Conch Cement	China	50.9	16.6	26	12	7	1	-7	12	51
2	Samsung Engineering	South Korea	49.3	6.6	38	13	-4	3	1	-2	33
3	Petrofac	United Kingdom	49.0	8.8	24	18	3	3	0	1	-3
4	Semen Gresik	Indonesia	44.0	6.6	14	6	19	4	0	1	2
5	Larsen & Toubro	India	34.8	26.5	25	14	-3	1	-3	0	-8
6	FLSmidth & Co.	Denmark	25.3	5.4	15	19	-6	2	0	-4	-16
7	Saipem	Italy	23.8	23.2	20	7	-5	3	0	-1	-2
8	Orascom Construction	Egypt	23.1	9.9	19	1	-1	4	-2	1	-3
9	McDermott International	United States	21.9	4.8	5	8	6	0	-2	4	-4
10	UltraTech Cement	India	21.2	6.6	22	19	-11	1	-15	5	-14

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

Note: n = 46 global companies with a market valuation of at least \$4 billion.

¹Contribution of each factor shown in percentage points of five-year average annual TSR; any apparent discrepancies in TSR totals are due to rounding.

²Average annual TSR, 2006–2010.

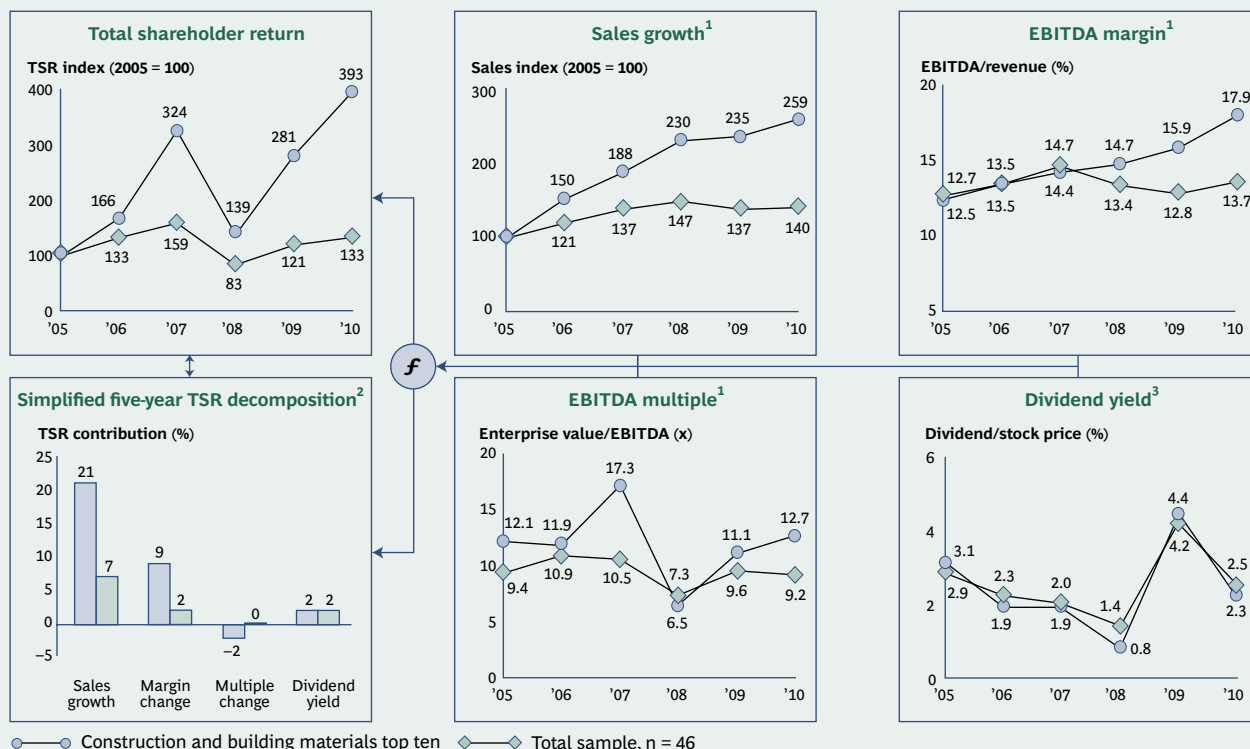
³As of December 31, 2010.

⁴Change in EBITDA multiple.

⁵“Share change” refers to the change in the number of shares outstanding, not to the change in share price.

⁶As of June 30, 2011.

Value Creation at the Construction and Building Materials Top Ten Versus Industry Sample, 2006–2010



Sources: Thomson Reuters Datastream; Thomson Reuters 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 Durables and Apparel

The Consumer Durables and Apparel Top Ten, 2006–2010

#	Company	Location	TSR ² (%)	Market value ³ (\$billions)	TSR Decomposition ¹						2011 TSR ⁶ (%)
					Sales growth (%)	Margin change (%)	Multiple change ⁴ (%)	Dividend yield (%)	Share change ⁵ (%)	Net debt change (%)	
1	Deckers Outdoor	United States	54.0	3.1	30	6	18	0	-1	0	11
2	Titan Industries	India	35.1	3.5	34	-7	6	1	-1	2	19
3	Fossil	United States	26.8	4.6	14	11	-1	0	1	1	67
4	Far Eastern New Century	Taiwan	25.7	8.2	8	-7	11	5	0	9	-9
5	Burberry	United Kingdom	24.1	8.0	11	-3	11	3	2	-1	29
6	Groupe SEB	France	23.5	5.4	8	4	4	3	0	4	-6
7	NCsoft	South Korea	23.0	3.8	14	8	0	1	0	-1	40
8	Hasbro	United States	21.4	6.5	5	3	9	3	5	-5	-6
9	Tupperware	United States	20.2	3.0	12	5	-6	4	-1	5	43
10	Richemont	Switzerland	19.4	35.7	7	7	2	2	0	1	0

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

Note: n = 50 global companies with a market valuation of at least \$3 billion.

¹Contribution of each factor shown in percentage points of five-year average annual TSR; any apparent discrepancies in TSR totals are due to rounding.

²Average annual TSR, 2006–2010.

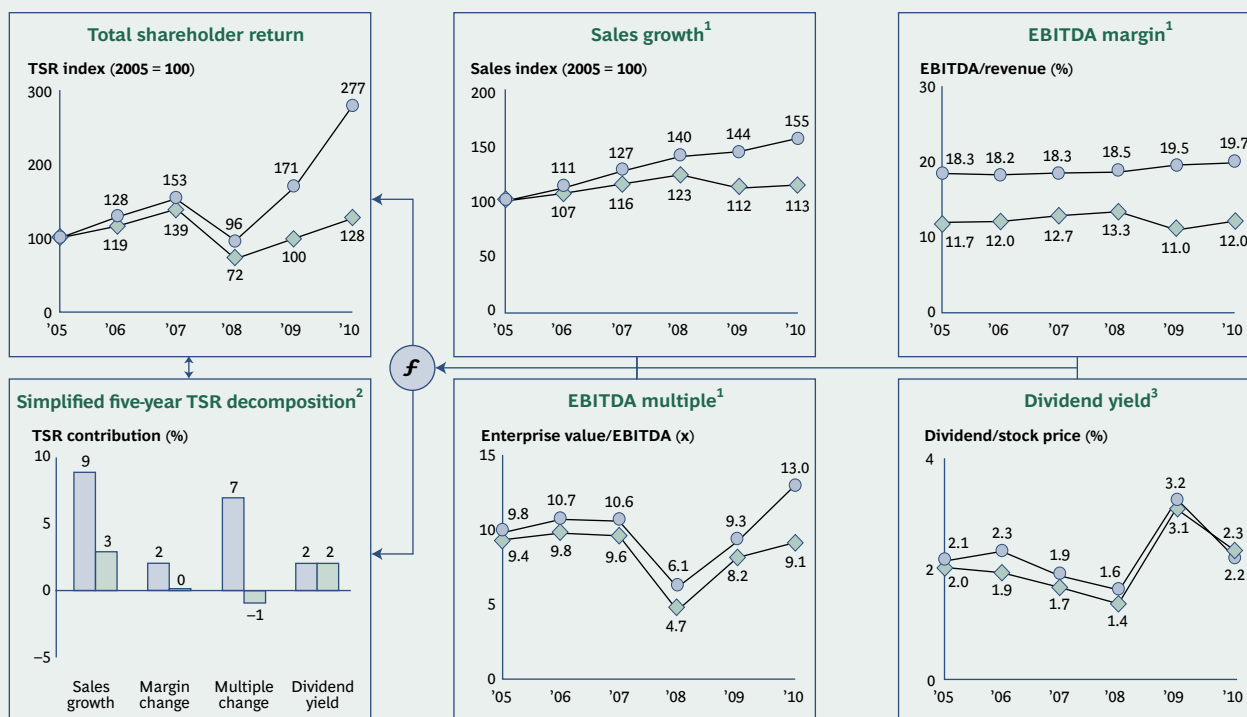
³As of December 31, 2010.

⁴Change in EBITDA multiple.

⁵“Share change” refers to the change in the number of shares outstanding, not to the change in share price.

⁶As of June 30, 2011.

Value Creation at the Consumer Durables and Apparel Top Ten Versus Industry Sample, 2006–2010



Sources: Thomson Reuters Datastream; Thomson Reuters 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 Nondurables

The Consumer Nondurables Top Ten, 2006–2010

#	Company	Location	TSR ² (%)	Market value ³ (\$billions)	TSR Decomposition ¹						2011 TSR ⁶ (%)
					Sales growth (%)	Margin change (%)	Multiple change ⁴ (%)	Dividend yield (%)	Share change ⁵ (%)	Net debt change (%)	
1	Hengan International	Hong Kong	53.4	10.6	35	1	16	4	-2	1	5
2	Tingyi	Hong Kong	42.2	14.3	29	-2	10	4	0	1	23
3	AmBev	Brazil	27.7	99.0	10	3	7	5	1	2	3
4	Grupo Bimbo	Mexico	24.2	10.7	15	1	9	1	0	-2	3
5	ITC Ltd.	India	22.3	29.6	19	-2	3	3	-1	0	19
6	Brasil Foods	Brazil	21.2	15.0	35	-5	9	2	-21	2	-2
7	Estée Lauder	United States	20.8	16.0	4	0	12	2	2	0	30
8	SABMiller	United Kingdom	19.1	61.4	6	7	12	3	-8	0	1
9	British American Tobacco	United Kingdom	18.4	80.9	10	5	-2	5	1	1	15
10	Carlsberg	Denmark	16.7	16.4	10	12	-4	2	-9	7	1

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

Note: n = 46 global companies with a market valuation of at least \$9 billion.

¹Contribution of each factor shown in percentage points of five-year average annual TSR; any apparent discrepancies in TSR totals are due to rounding.

²Average annual TSR, 2006–2010.

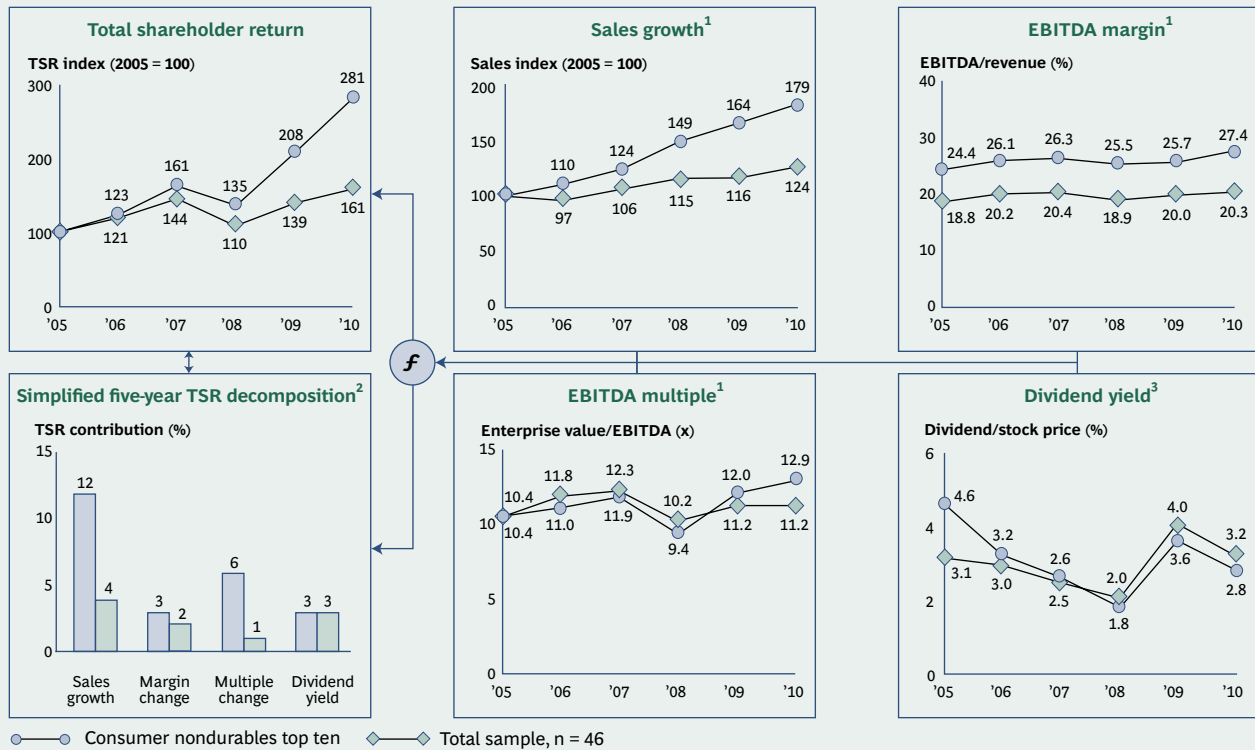
³As of December 31, 2010.

⁴Change in EBITDA multiple.

⁵“Share change” refers to the change in the number of shares outstanding, not to the change in share price.

⁶As of June 30, 2011.

Value Creation at the Consumer Nondurables Top Ten Versus Industry Sample, 2006–2010



Sources: Thomson Reuters Datastream; Thomson Reuters 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

The Machinery Top Ten, 2006–2010

#	Company	Location	TSR ² (%)	Market value ³ (\$billions)	TSR Decomposition ¹						2011 TSR ⁶ (%)
					Sales growth (%)	Margin change (%)	Multiple change ⁴ (%)	Dividend yield (%)	Share change ⁵ (%)	Net debt change (%)	
1	United Tractors	Indonesia	50.8	9.3	23	4	18	5	-2	3	10
2	Hyundai Heavy Industries	South Korea	44.7	24.9	27	28	-8	3	1	-6	0
3	Cummins	United States	39.3	21.5	6	2	24	2	-2	7	-5
4	Bucyrus International ⁷	United States	38.9	7.2	45	4	-4	1	-5	-1	3
5	FMC Technologies	United States	32.9	10.7	5	22	3	0	3	0	1
6	Alfa Laval	Sweden	29.9	9.7	9	13	1	3	1	3	-2
7	Wärtsilä	Finland	26.8	8.1	12	0	4	9	-1	3	-16
8	Sembcorp Marine	Singapore	26.7	9.0	17	27	-26	5	0	4	4
9	Flowserve	United States	25.8	6.6	8	13	-3	1	0	6	-7
10	Kone	Finland	23.8	15.3	9	17	-8	4	0	1	7

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

Note: n = 64 global companies with a market valuation of at least \$6 billion.

¹Contribution of each factor shown in percentage points of five-year average annual TSR; any apparent discrepancies in TSR totals are due to rounding.

²Average annual TSR, 2006–2010.

³As of December 31, 2010.

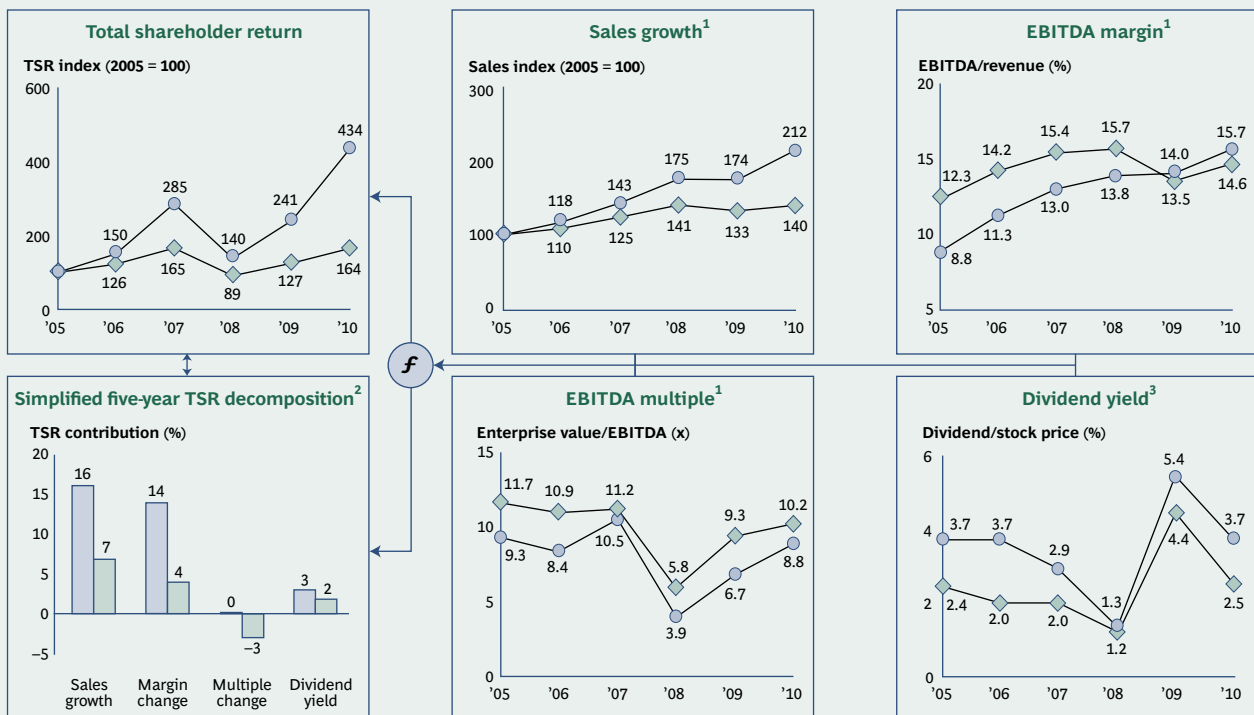
⁴Change in EBITDA multiple.

⁵“Share change” refers to the change in the number of shares outstanding, not to the change in share price.

⁶As of June 30, 2011.

⁷Bucyrus International was acquired by Caterpillar in July 2011.

Value Creation at the Machinery Top Ten Versus Industry Sample, 2006–2010



● Machinery top ten ◆ Total sample, n = 64

Sources: Thomson Reuters Datastream; Thomson Reuters 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, 2006–2010

#	Company	Location	TSR ² (%)	Market value ³ (\$billions)	TSR Decomposition ¹						2011 TSR ⁶ (%)
					Sales growth (%)	Margin change (%)	Multiple change ⁴ (%)	Dividend yield (%)	Share change ⁵ (%)	Net debt change (%)	
1	Tencent	Hong Kong	83.4	39.6	69	16	1	1	-1	-3	25
2	Baidu	China	72.7	33.6	89	31	-46	0	-1	-1	45
3	IHS	United States	31.4	5.2	18	7	12	0	-2	-3	4
4	Naspers	South Africa	29.3	21.3	16	-1	20	1	-5	-1	-2
5	Directv	United States	23.1	32.3	13	22	-17	0	11	-6	27
6	NHN	South Korea	20.3	9.4	34	4	-18	0	1	0	-17
7	Zee Entertainment Enterprises	India	14.6	3.0	11	-4	6	1	-1	2	-8
8	Pearson	United Kingdom	12.5	13.2	8	-4	0	5	0	3	19
9	ProSiebenSat.1 Media	Germany	12.1	6.9	9	6	3	3	1	-9	-13
10	British Sky Broadcasting	United Kingdom	11.5	21.2	9	-3	3	3	1	-1	16

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

Note: n = 46 global companies with a market valuation of at least \$3 billion.

¹Contribution of each factor shown in percentage points of five-year average annual TSR; any apparent discrepancies in TSR totals are due to rounding.

²Average annual TSR, 2006–2010.

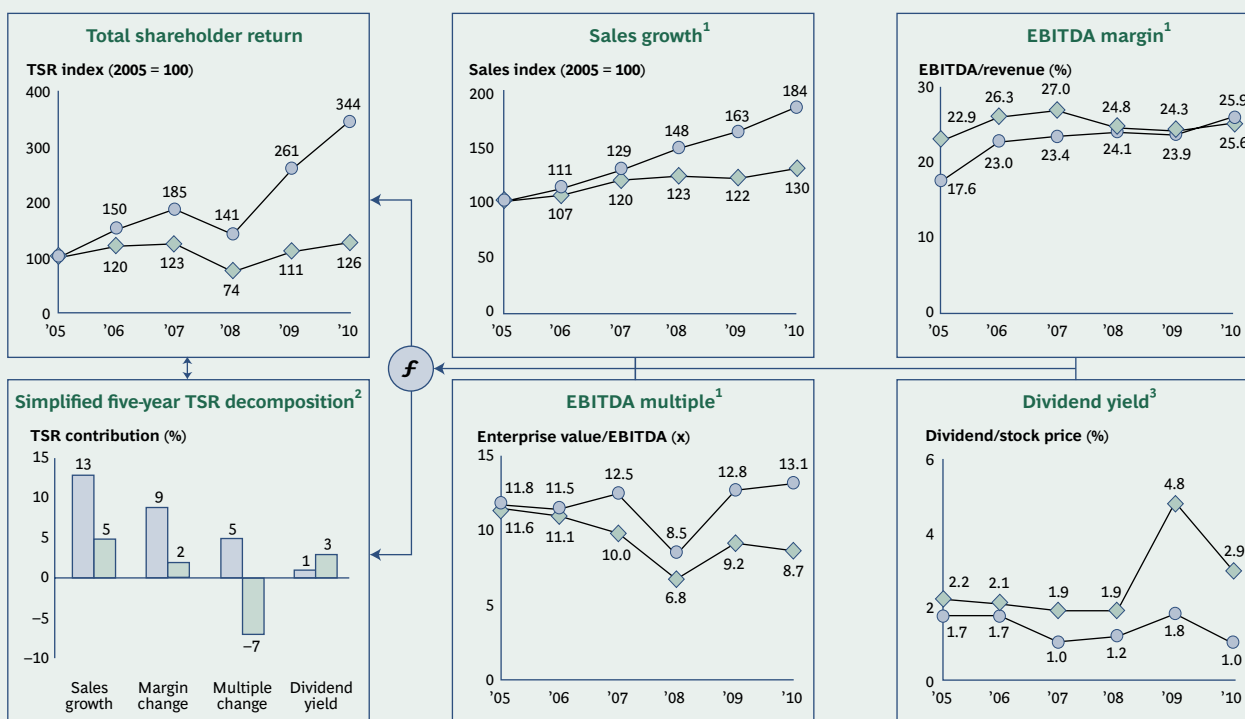
³As of December 31, 2010.

⁴Change in EBITDA multiple.

⁵“Share change” refers to the change in the number of shares outstanding, not to the change in share price.

⁶As of June 30, 2011.

Value Creation at the Media and Publishing Top Ten Versus Industry Sample, 2006–2010



Sources: Thomson Reuters Datastream; Thomson Reuters 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.

Medical Technology

The Medical Technology Top Ten, 2006–2010

#	Company	Location	TSR ² (%)	Market value ³ (\$billions)	TSR Decomposition ¹						2011 TSR ⁶ (%)
					Sales growth (%)	Margin change (%)	Multiple change ⁴ (%)	Dividend yield (%)	Share change ⁵ (%)	Net debt change (%)	
1	Shandong Weigao	China	93.2	6.1	34	10	45	2	-2	4	2
2	Edwards Lifesciences	United States	31.2	9.3	8	0	21	0	1	2	8
3	Bruker	United States	27.8	2.7	29	15	-2	0	-9	-4	23
4	Elekta	Sweden	18.4	3.9	19	8	-10	2	0	0	16
5	Sonova Holding	Switzerland	17.4	9.3	18	7	-8	1	0	-1	-34
6	Intuitive Surgical	United States	17.1	10.0	44	7	-34	0	-1	1	44
7	Coloplast	Denmark	15.8	6.6	9	5	-1	2	1	0	3
8	Waters	United States	15.5	7.1	7	2	1	0	3	2	23
9	Cochlear	Australia	14.6	4.8	15	1	-3	3	-1	0	-9
10	Fresenius	Germany	13.8	14.9	15	4	-4	2	-1	-1	15

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

Note: n = 51 global companies with a market valuation of at least \$1.2 billion.

¹Contribution of each factor shown in percentage points of five-year average annual TSR; any apparent discrepancies in TSR totals are due to rounding.

²Average annual TSR, 2006–2010.

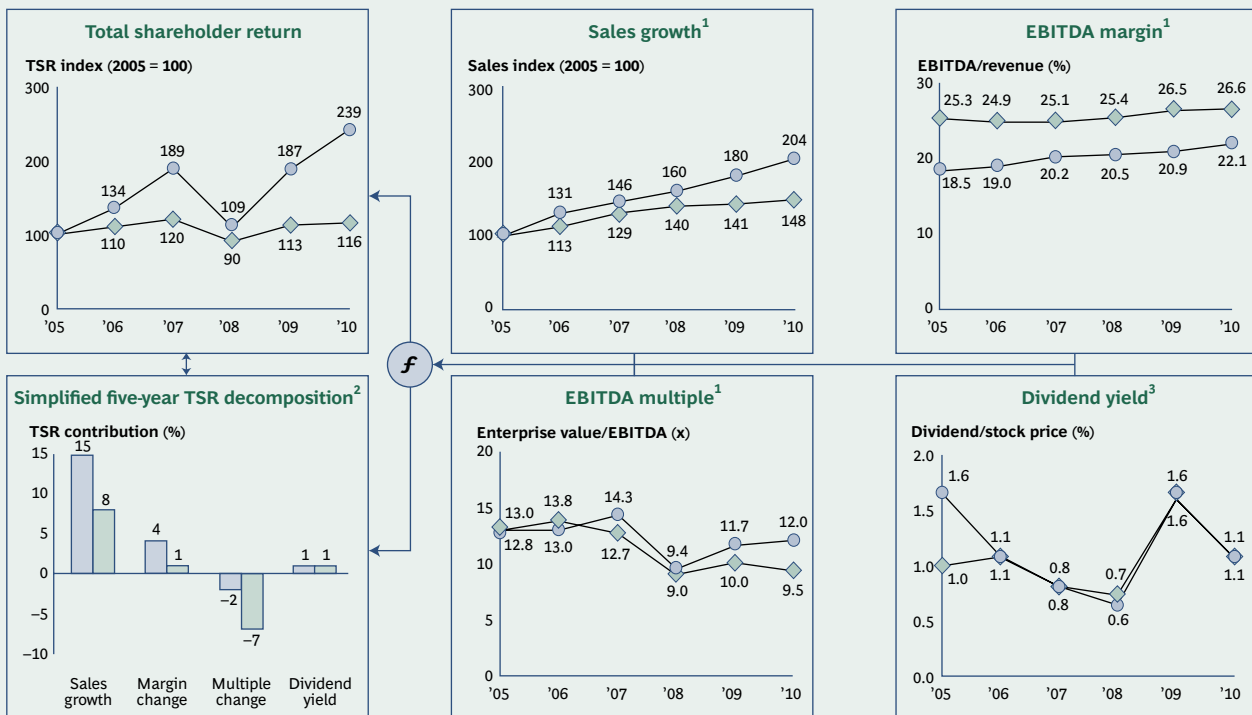
³As of December 31, 2010.

⁴Change in EBITDA multiple.

⁵“Share change” refers to the change in the number of shares outstanding, not to the change in share price.

⁶As of June 30, 2011.

Value Creation at the Medical Technology Top Ten Versus Industry Sample, 2006–2010



Legend: ● Medical technology top ten, ◆ Total sample, n = 51

Sources: Thomson Reuters Datastream; Thomson Reuters 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 Metals

The Mining and Metals Top Ten, 2006–2010

#	Company	Location	TSR ² (%)	Market value ³ (\$billions)	TSR Decomposition ¹						2011 TSR ⁶ (%)
					Sales growth (%)	Margin change (%)	Multiple change ⁴ (%)	Dividend yield (%)	Share change ⁵ (%)	Net debt change (%)	
1	Jindal Steel & Power	India	68.9	14.7	38	9	21	1	0	1	-8
2	Industrias Peñoles	Mexico	59.7	15.5	24	9	12	9	0	5	0
3	Grupo México	Mexico	50.9	34.0	12	-1	31	4	1	3	-22
4	Silver Wheaton	Canada	42.0	14.2	43	17	-4	0	-12	-1	-18
5	Antofagasta	United Kingdom	38.8	26.1	13	-2	22	6	0	0	-9
6	Siderúrgica Nacional	Brazil	34.0	24.5	8	-3	16	10	1	2	-25
7	China Shenhua Energy	China	33.5	83.4	24	-6	8	4	-2	6	17
8	Sterlite Industries	India	29.9	13.9	28	4	-4	1	-8	10	-10
9	Agnico-Eagle Mines	Canada	27.5	13.3	43	6	-10	0	-10	-1	-20
10	Buenaventura	Peru	24.3	12.5	26	4	-7	2	0	0	-24

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

Note: n = 39 global companies with a market valuation of at least \$12 billion.

¹Contribution of each factor shown in percentage points of five-year average annual TSR; any apparent discrepancies in TSR totals are due to rounding.

²Average annual TSR, 2006–2010.

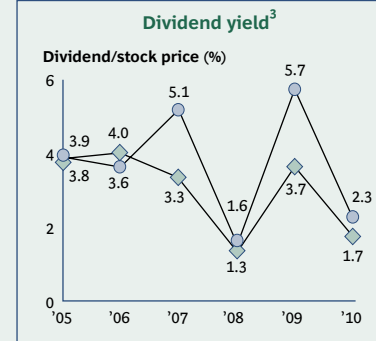
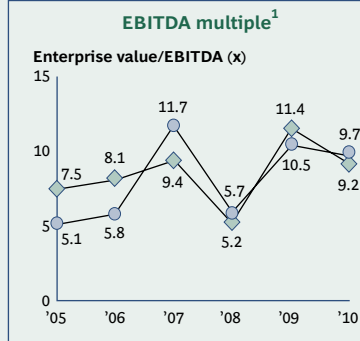
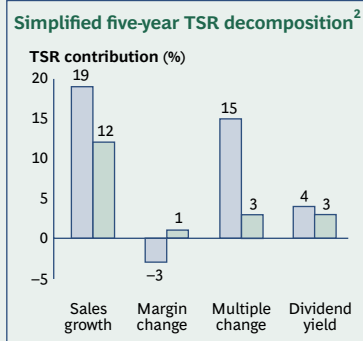
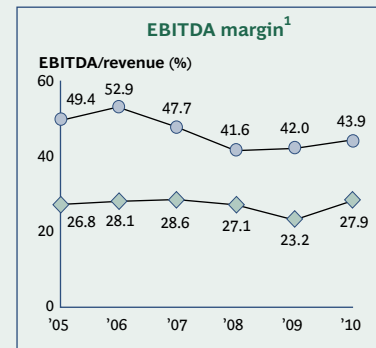
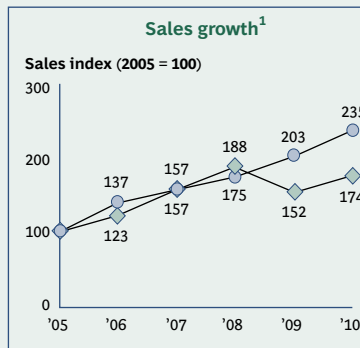
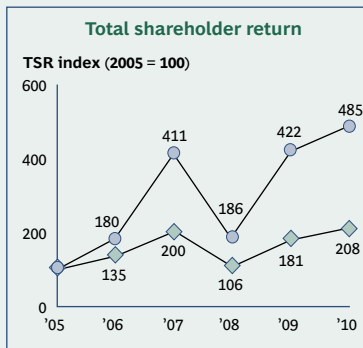
³As of December 31, 2010.

⁴Change in EBITDA multiple.

⁵“Share change” refers to the change in the number of shares outstanding, not to the change in share price.

⁶As of June 30, 2011.

Value Creation at the Mining and Metals Top Ten Versus Industry Sample, 2006–2010



● Mining and metals top ten ◆ Total sample, n = 39

Sources: Thomson Reuters Datastream; Thomson Reuters 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, 2006–2010

#	Company	Location	TSR ² (%)	Market value ³ (\$billions)	TSR Decomposition ¹						2011 TSR ⁶ (%)
					Sales growth (%)	Margin change (%)	Multiple change ⁴ (%)	Dividend yield (%)	Share change ⁵ (%)	Net debt change (%)	
1	Aboitiz Equity Ventures	Philippines	57.3	4.6	22	29	3	7	-5	1	18
2	Beijing Enterprises	Hong Kong	32.2	7.0	35	-11	11	2	-11	6	-15
3	Bekaert	Belgium	29.7	7.4	11	13	-2	4	2	2	-38
4	Noble Group	Singapore	28.7	10.6	37	0	-2	4	-6	-5	-8
5	WEG	Brazil	27.2	8.5	12	-1	12	4	0	0	-17
6	LG Corp	South Korea	24.3	13.9	-31	9	3	2	0	43	-8
7	Jardine Matheson	Singapore	24.1	16.1	20	16	-14	4	-5	2	33
8	China Resources	Hong Kong	21.9	9.8	10	2	4	5	-1	2	1
9	Keppel	Singapore	21.6	14.7	11	15	-13	5	0	3	10
10	Wharf Holdings	Hong Kong	20.8	21.2	9	-1	10	3	-2	1	-6

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

Note: n = 46 global companies with a market valuation of at least \$4 billion.

¹Contribution of each factor shown in percentage points of five-year average annual TSR; any apparent discrepancies in TSR totals are due to rounding.

²Average annual TSR, 2006–2010.

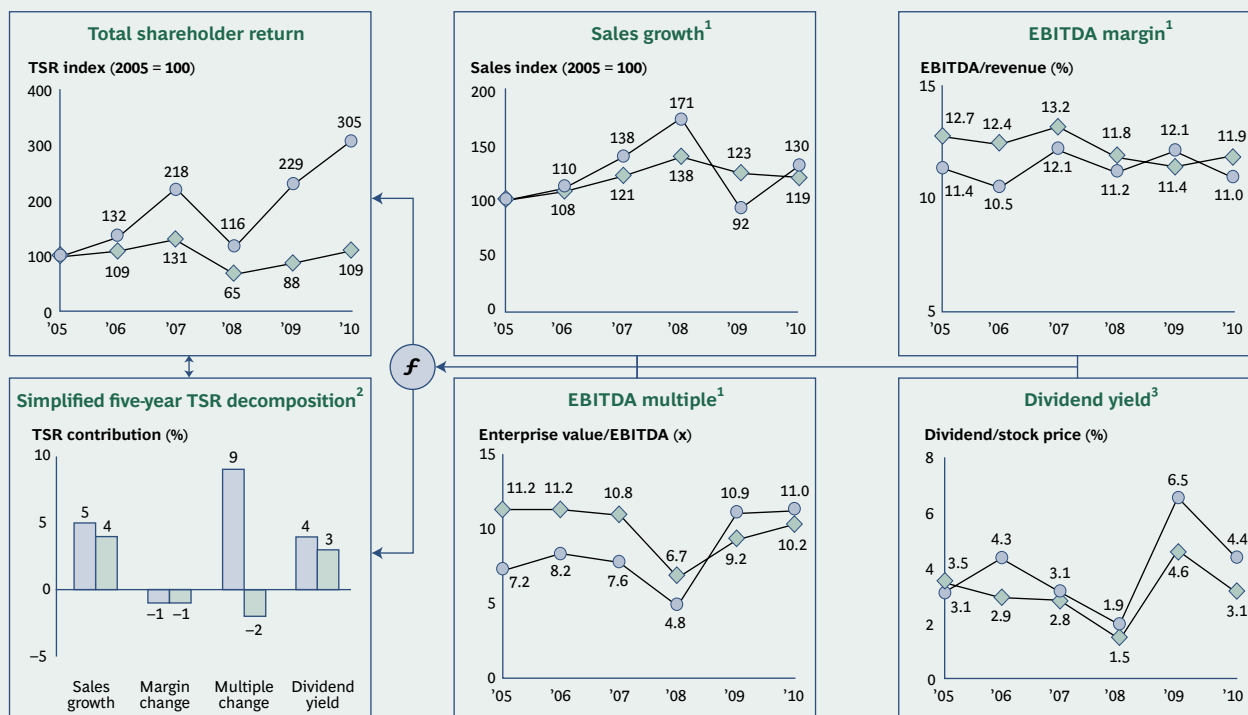
³As of December 31, 2010.

⁴Change in EBITDA multiple.

⁵“Share change” refers to the change in the number of shares outstanding, not to the change in share price.

⁶As of June 30, 2011.

Value Creation at the Multibusiness Top Ten Versus Industry Sample, 2006–2010



●—● Multibusiness top ten ◆—◆ Total sample, n = 46

Sources: Thomson Reuters Datastream; Thomson Reuters 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

The Pharmaceuticals Top Ten, 2006–2010

#	Company	Location	TSR ² (%)	Market value ³ (\$billions)	TSR Decomposition ¹						2011 TSR ⁶ (%)
					Sales growth (%)	Margin change (%)	Multiple change ⁴ (%)	Dividend yield (%)	Share change ⁵ (%)	Net debt change (%)	
1	Perrigo	United States	34.6	5.8	17	18	-6	1	0	4	39
2	Sun Pharmaceutical Industries	India	31.9	11.1	27	0	5	1	-2	1	3
3	Novo Nordisk	Denmark	31.0	66.9	12	4	8	2	3	0	4
4	Dr. Reddy's Laboratories	India	28.5	6.2	31	21	-21	1	-2	-2	-7
5	Aspen Pharmacare	South Africa	24.0	5.8	29	7	-10	1	-2	-1	-9
6	CSL	Australia	22.5	21.3	11	13	-6	2	1	1	-8
7	Actelion	Switzerland	18.7	7.2	23	2	-7	0	-1	2	-18
8	Cipla	India	16.6	6.6	20	0	13	1	-18	1	-10
9	Celgene	United States	12.8	27.8	47	17	-45	0	-6	0	2
10	Ranbaxy Laboratories	India	11.8	5.6	11	29	-29	1	-2	2	-9

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

Note: n = 43 global companies with a market valuation of at least \$5 billion.

¹Contribution of each factor shown in percentage points of five-year average annual TSR; any apparent discrepancies in TSR totals are due to rounding.

²Average annual TSR, 2006–2010.

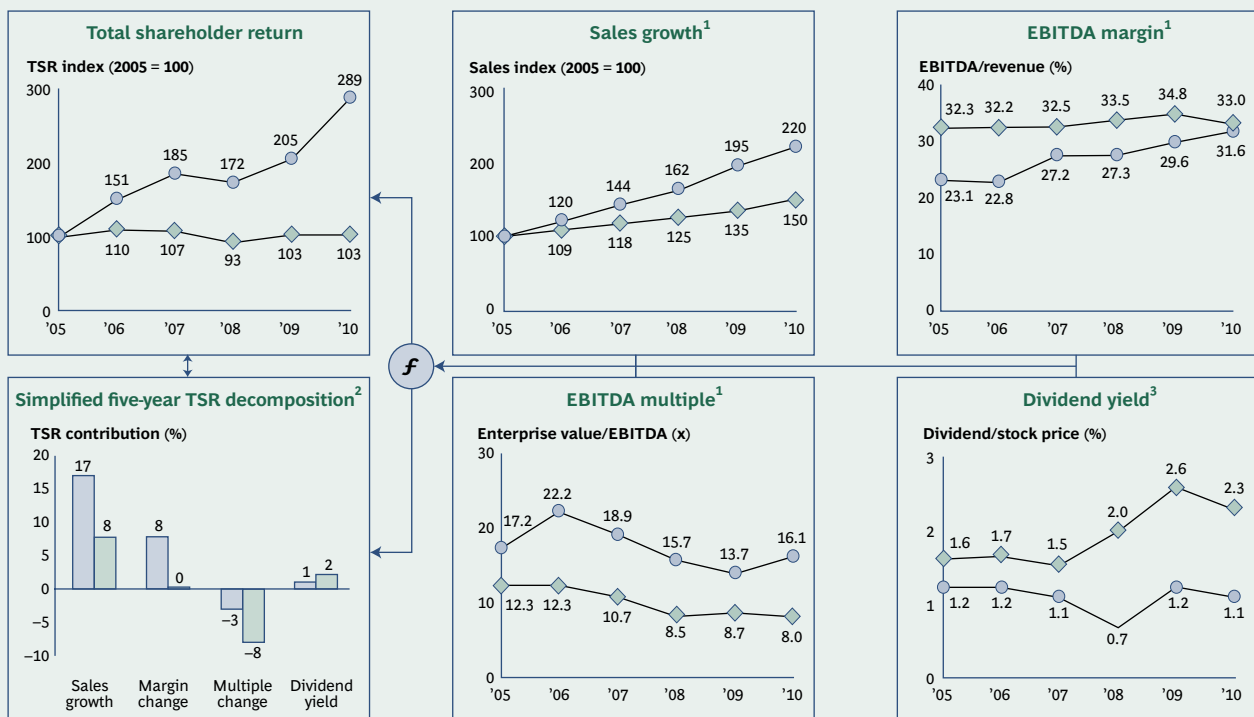
³As of December 31, 2010.

⁴Change in EBITDA multiple.

⁵“Share change” refers to the change in the number of shares outstanding, not to the change in share price.

⁶As of June 30, 2011.

Value Creation at the Pharmaceuticals Top Ten Versus Industry Sample, 2006–2010



Legend: ● Pharmaceuticals top ten, ◆ Total sample, n = 43

Sources: Thomson Reuters Datastream; Thomson Reuters 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, 2006–2010

#	Company	Location	TSR ² (%)	Market value ³ (\$billions)	TSR Decomposition ¹						2011 TSR ⁶ (%)
					Sales growth (%)	Margin change (%)	Multiple change ⁴ (%)	Dividend yield (%)	Share change ⁵ (%)	Net debt change (%)	
1	Rock-Tenn	United States	33.5	2.1	12	16	-7	2	-1	12	24
2	Lee & Man Paper	Hong Kong	24.8	3.4	32	7	-12	3	-3	-3	-20
3	Empresas CMPC	Chile	16.9	11.8	17	4	-5	2	-1	0	1
4	Portucel	Portugal	12.3	2.5	6	2	-5	7	0	3	1
5	Suzano Papel e Celulose	Brazil	12.1	3.7	10	3	-4	3	-2	2	-23
6	Mayr-Melnhof Karton	Austria	10.6	2.5	4	-3	3	3	2	1	-4
7	Yuen Foong Yu Paper	Taiwan	10.3	0.9	7	-2	2	3	0	1	-12
8	Indah Kiat Pulp & Paper	Indonesia	8.7	1.1	12	0	-9	0	0	5	-21
9	Semapa	Portugal	8.2	1.3	2	4	-7	4	0	5	-10
10	Packaging Corporation of America	United States	6.8	2.6	4	6	-8	4	0	0	10

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

Note: n = 29 global companies with a market valuation of at least \$0.5 billion.

¹Contribution of each factor shown in percentage points of five-year average annual TSR; any apparent discrepancies in TSR totals are due to rounding.

²Average annual TSR, 2006–2010.

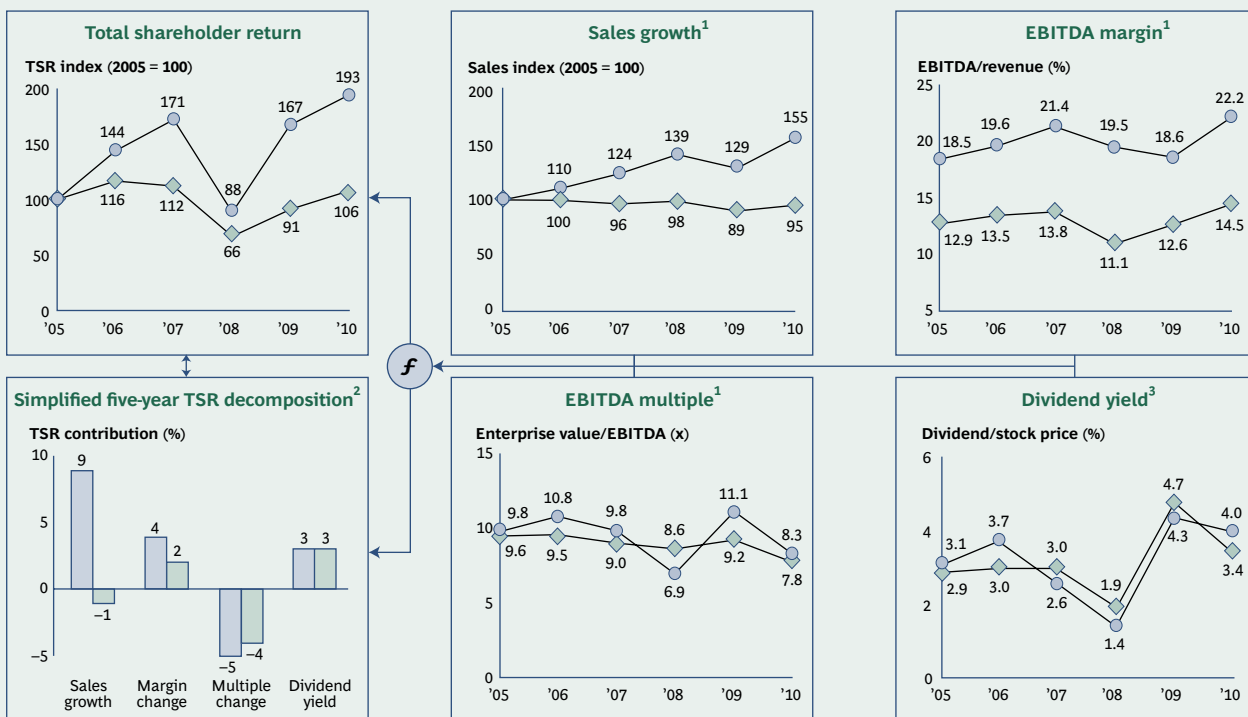
³As of December 31, 2010.

⁴Change in EBITDA multiple.

⁵“Share change” refers to the change in the number of shares outstanding, not to the change in share price.

⁶As of June 30, 2011.

Value Creation at the Pulp and Paper Top Ten Versus Industry Sample, 2006–2010



Legend: ● Pulp and paper top ten, ◆ Total sample, n = 29

Sources: Thomson Reuters Datastream; Thomson Reuters 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, 2006–2010

#	Company	Location	TSR ² (%)	Market value ³ (\$billions)	TSR Decomposition ¹						2011 TSR ⁶ (%)
					Sales growth (%)	Margin change (%)	Multiple change ⁴ (%)	Dividend yield (%)	Share change ⁵ (%)	Net debt change (%)	
1	Shoprite	South Africa	44.8	8.0	18	7	16	4	0	0	3
2	Jerónimo Martins	Portugal	37.9	10.3	18	-2	14	3	0	6	17
3	Cencosud	Chile	31.3	17.9	20	1	9	2	-3	2	-8
4	Amazon.com	United States	30.7	81.2	32	-3	2	0	-2	2	14
5	X5 Retail	Russian Federation	27.8	12.5	53	-14	18	0	-29	0	-15
6	AutoZone	United States	24.3	12.3	5	1	6	0	11	0	8
7	McDonald's	United States	21.3	80.9	3	8	3	3	4	0	12
8	Walmart de México	Mexico	20.7	54.4	14	2	5	2	-1	-1	-1
9	Yum! Brands	United States	18.1	23.0	4	5	3	2	3	1	14
10	Inditex	Spain	17.7	50.2	15	-1	1	2	0	1	13

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

Note: n = 52 global companies with a market valuation of at least \$8 billion.

¹Contribution of each factor shown in percentage points of five-year average annual TSR; any apparent discrepancies in TSR totals are due to rounding.

²Average annual TSR, 2006–2010.

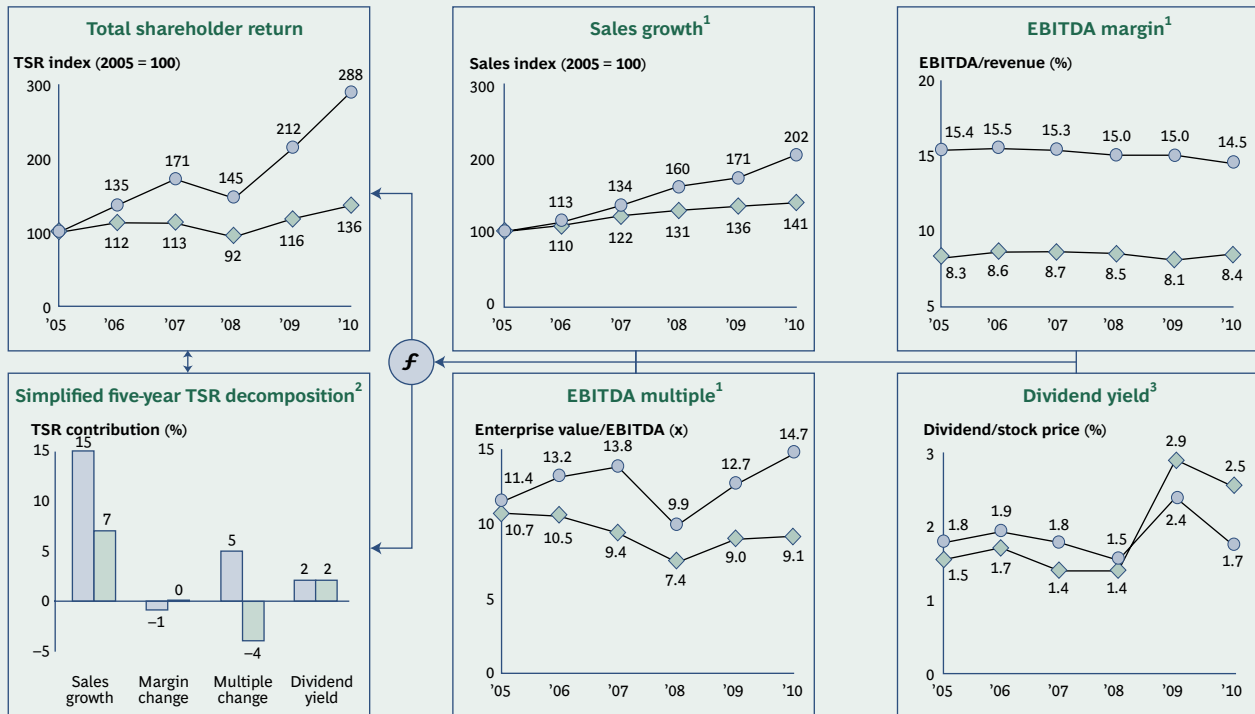
³As of December 31, 2010.

⁴Change in EBITDA multiple.

⁵"Share change" refers to the change in the number of shares outstanding, not to the change in share price.

⁶As of June 30, 2011.

Value Creation at the Retail Top Ten Versus Industry Sample, 2006–2010



Sources: Thomson Reuters Datastream; Thomson Reuters 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, 2006–2010

#	Company	Location	TSR ² (%)	Market value ³ (\$billions)	TSR Decomposition ¹						2011 TSR ⁶ (%)
					Sales growth (%)	Margin change (%)	Multiple change ⁴ (%)	Dividend yield (%)	Share change ⁵ (%)	Net debt change (%)	
1	FS Networks	United States	35.4	10.5	26	2	10	0	-1	-1	-15
2	Apple	United States	35.0	295.5	36	24	-23	0	-2	-1	4
3	Salesforce.com	United States	32.7	16.8	49	40	-53	0	-4	0	13
4	HTC	Taiwan	32.6	25.4	31	-2	-3	6	0	1	7
5	Delta Electronics	Taiwan	24.9	11.9	16	1	5	5	-3	0	-26
6	Cognizant	United States	23.9	22.3	39	-2	-13	0	-2	1	0
7	Oracle	United States	21.1	157.3	18	2	0	0	0	0	5
8	Infosys	India	19.9	43.9	26	1	-9	2	-1	1	-15
9	Citrix Systems	United States	18.9	12.8	16	-4	9	0	-1	-1	17
10	Check Point Software Technologies	United States	18.2	9.6	14	-2	7	0	3	-4	23

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

Note: n = 58 global companies with a market valuation of at least \$9 billion.

¹Contribution of each factor shown in percentage points of five-year average annual TSR; any apparent discrepancies in TSR totals are due to rounding.

²Average annual TSR, 2006–2010.

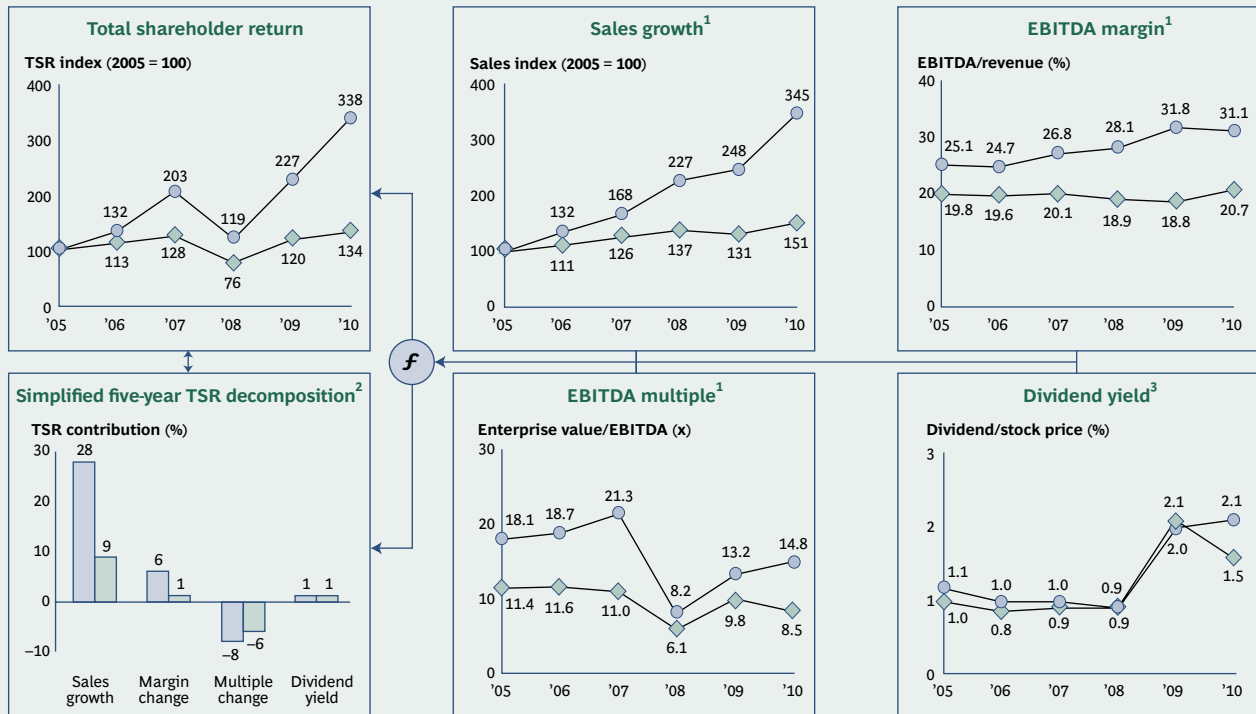
³As of December 31, 2010.

⁴Change in EBITDA multiple.

⁵“Share change” refers to the change in the number of shares outstanding, not to the change in share price.

⁶As of June 30, 2011.

Value Creation at the Technology Top Ten Versus Industry Sample, 2006–2010



● Technology top ten ◆ Total sample, n = 58

Sources: Thomson Reuters Datastream; Thomson Reuters 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.

Telecommunications

The Telecommunications Top Ten, 2006–2010

#	Company	Location	TSR ² (%)	Market value ³ (\$billions)	TSR Decomposition ¹						2011 TSR ⁶ (%)
					Sales growth (%)	Margin change (%)	Multiple change ⁴ (%)	Dividend yield (%)	Share change ⁵ (%)	Net debt change (%)	
1	Millicom International Cellular	Luxembourg	31.9	10.4	34	-5	4	3	-2	-2	10
2	China Mobile	Hong Kong	19.5	199.2	15	-3	2	4	0	2	-5
3	América Móvil	Mexico	19.2	123.1	26	7	-12	1	-2	-1	-10
4	MTN Group	South Africa	18.5	37.1	32	-6	-6	2	-3	0	10
5	Bharti Airtel	India	15.9	30.2	39	-3	-21	0	0	0	10
6	Chunghwa Telecom	Taiwan	14.8	25.1	2	-1	5	9	0	0	10
7	Philippine Long Distance Telephone	Philippines	14.5	11.0	3	-1	3	8	-1	3	-4
8	American Tower	United States	13.8	20.6	16	-1	-3	0	1	1	1
9	Portugal Telecom	Portugal	12.9	10.6	-10	-2	5	10	5	5	-4
10	TeliaSonera	Sweden	12.3	38.7	4	1	2	8	0	-2	-8

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

Note: n = 38 global companies with a market valuation of at least \$9 billion.

¹Contribution of each factor shown in percentage points of five-year average annual TSR; any apparent discrepancies in TSR totals are due to rounding.

²Average annual TSR, 2006–2010.

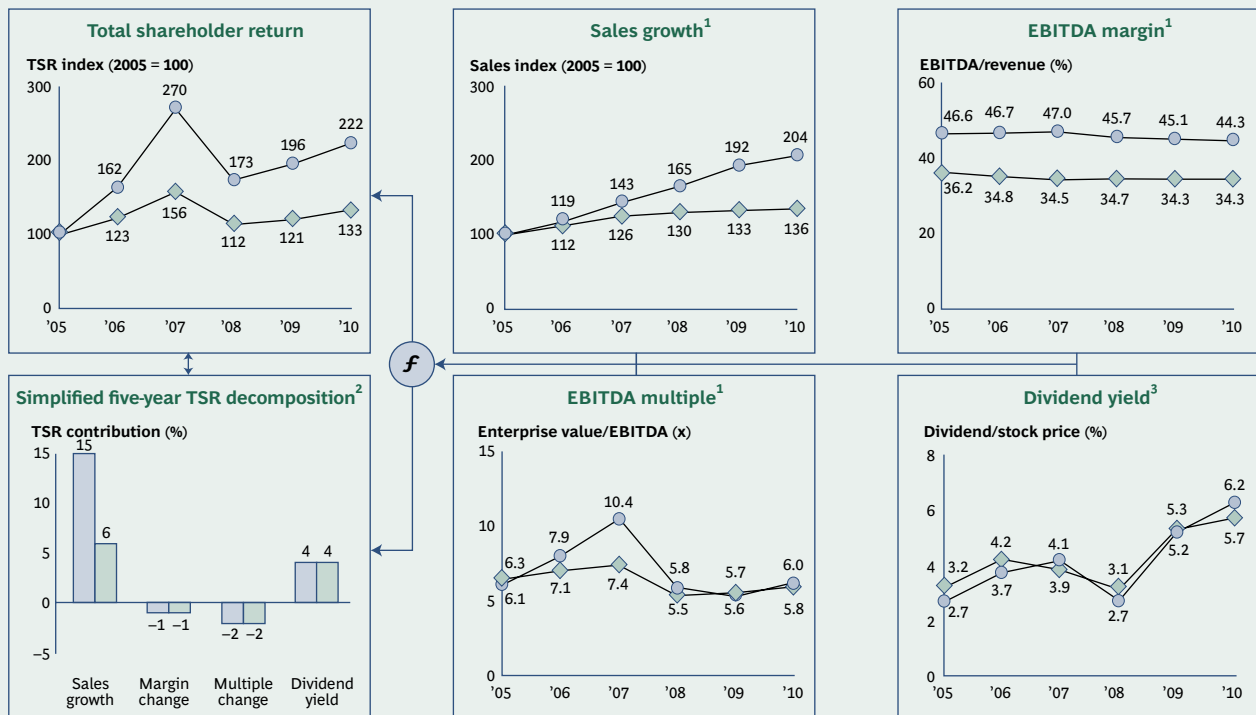
³As of December 31, 2010.

⁴Change in EBITDA multiple.

⁵“Share change” refers to the change in the number of shares outstanding, not to the change in share price.

⁶As of June 30, 2011.

Value Creation at the Telecommunications Top Ten Versus Industry Sample, 2006–2010



Sources: Thomson Reuters Datastream; Thomson Reuters 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, 2006–2010

#	Company	Location	TSR ² (%)	Market value ³ (\$billions)	TSR Decomposition ¹						2011 TSR ⁶ (%)
					Sales growth (%)	Margin change (%)	Multiple change ⁴ (%)	Dividend yield (%)	Share change ⁵ (%)	Net debt change (%)	
1	China International Marine Container	China	34.5	6.2	11	-3	30	4	0	-8	-27
2	Orient Overseas	Hong Kong	33.1	6.1	7	1	3	11	0	11	-15
3	Hyundai Merchant Marine	South Korea	27.0	5.1	10	-3	19	2	-6	5	-18
4	Grupo CCR	Brazil	26.3	13.1	19	-5	10	6	-2	-2	0
5	Vopak	Netherlands	25.3	6.5	10	8	4	3	0	0	-2
6	CSX	United States	22.6	23.9	4	7	3	2	3	3	23
7	Hyundai Glovis	South Korea	20.8	5.2	32	-1	-10	1	0	-1	15
8	Union Pacific	United States	20.1	45.5	5	12	-3	2	2	2	14
9	C.H. Robinson Worldwide	United States	18.6	13.3	10	3	3	2	1	0	-1
10	China Merchants	Hong Kong	15.3	9.5	14	19	-16	3	-2	-2	0

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

Note: n = 47 global companies with a market valuation of at least \$4.5 billion.

¹Contribution of each factor shown in percentage points of five-year average annual TSR; any apparent discrepancies in TSR totals are due to rounding.

²Average annual TSR, 2006–2010.

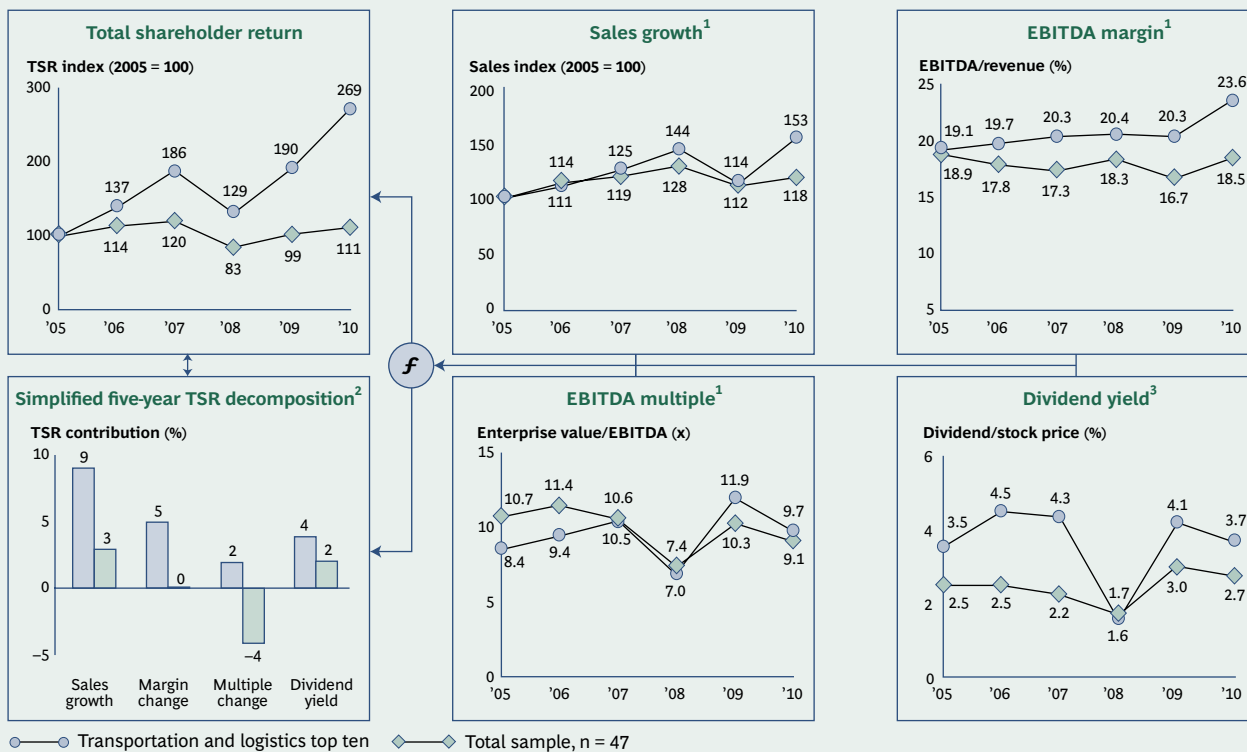
³As of December 31, 2010.

⁴Change in EBITDA multiple.

⁵“Share change” refers to the change in the number of shares outstanding, not to the change in share price.

⁶As of June 30, 2011.

Value Creation at the Transportation and Logistics Top Ten Versus Industry Sample, 2006–2010



Sources: Thomson Reuters Datastream; Thomson Reuters 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, 2006–2010

#	Company	Location	TSR ² (%)	Market value ³ (\$billions)	TSR Decomposition ¹						2011 TSR ⁶ (%)
					Sales growth (%)	Margin change (%)	Multiple change ⁴ (%)	Dividend yield (%)	Share change ⁵ (%)	Net debt change (%)	
1	Turkish Airlines	Turkey	31.3	3.4	23	8	-6	7	0	-1	-21
2	Air China	China	29.4	14.5	17	5	4	1	-6	9	-6
3	Flight Centre	Australia	23.7	2.6	15	-3	5	5	-1	3	-11
4	WMS Industries	United States	22.0	2.7	15	15	-6	0	-4	3	-32
5	Wynn Resorts	United States	19.4	12.9	42	19	-48	8	-4	2	39
6	Korean Air Lines	South Korea	17.5	4.4	9	2	8	1	0	-2	0
7	Aeroflot	Russian Federation	16.2	2.9	10	4	3	1	1	-3	-12
8	Cathay Pacific Airways	Hong Kong	12.8	10.8	12	3	-5	3	-3	2	-13
9	Shangri-La Asia	Hong Kong	11.7	7.8	13	-3	4	2	-3	-1	-9
10	Singapore Airlines	Singapore	11.4	14.8	1	-2	6	4	-1	3	-7

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

Note: n = 44 global companies with a market valuation of at least \$2.5 billion.

¹Contribution of each factor shown in percentage points of five-year average annual TSR; any apparent discrepancies in TSR totals are due to rounding.

²Average annual TSR, 2006–2010.

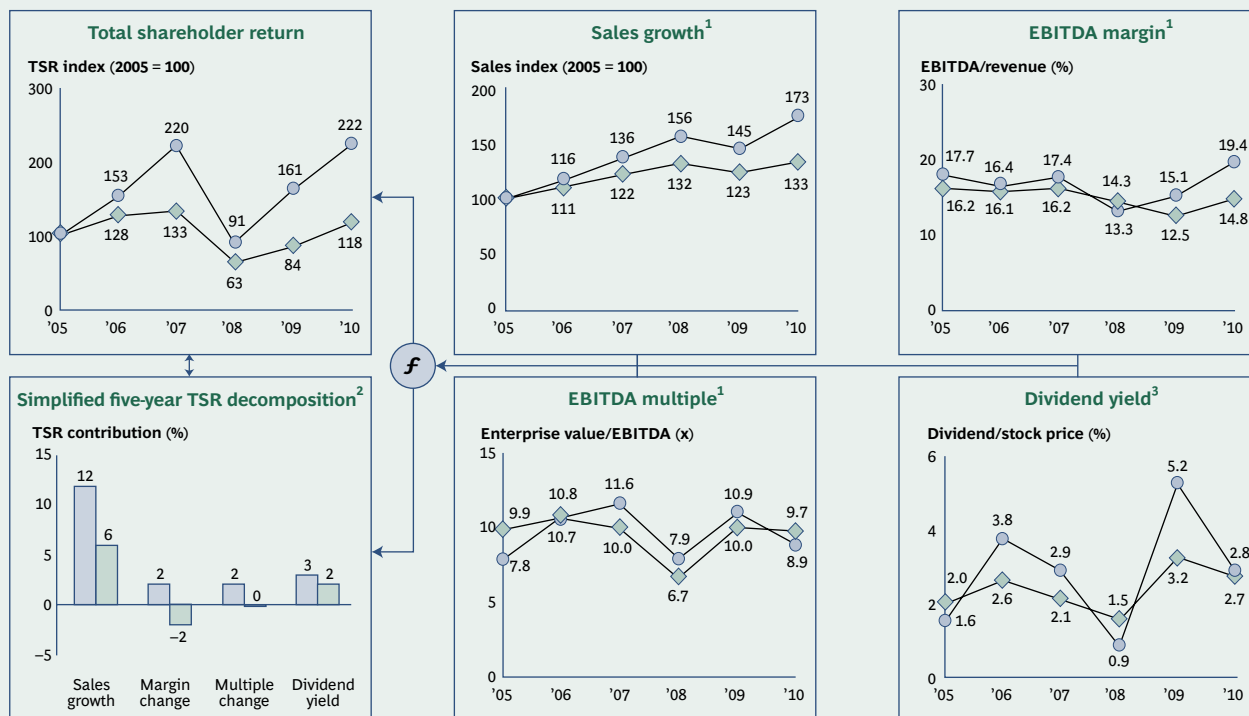
³As of December 31, 2010.

⁴Change in EBITDA multiple.

⁵“Share change” refers to the change in the number of shares outstanding, not to the change in share price.

⁶As of June 30, 2011.

Value Creation at the Travel and Tourism Top Ten Versus Industry Sample, 2006–2010



Sources: Thomson Reuters Datastream; Thomson Reuters 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, 2006–2010

#	Company	Location	TSR ² (%)	Market value ³ (\$billions)	TSR Decomposition ¹						2011 TSR ⁶ (%)
					Sales growth (%)	Margin change (%)	Multiple change ⁴ (%)	Dividend yield (%)	Share change ⁵ (%)	Net debt change (%)	
1	Perusahaan Gas Negara	Indonesia	28.7	12.6	29	9	-12	3	-2	1	-9
2	Origin Energy	Australia	20.2	15.7	12	-6	8	3	-2	5	-1
3	Tractebel Energia	Brazil	20.0	11.3	10	3	1	7	0	-1	2
4	CPFL Energia	Brazil	17.3	12.5	9	0	-1	9	0	-1	11
5	Enerjis	Chile	17.2	15.3	14	0	-8	3	0	9	3
6	Energy Transfer Partners	United States	16.6	10.0	-1	29	-6	8	-11	-2	-2
7	International Power	United Kingdom	16.3	11.0	12	-8	8	4	-1	1	-4
8	Electrobras	Brazil	13.9	15.9	6	-1	-1	8	0	1	-6
9	Fortum	Finland	13.6	28.8	10	-4	3	7	0	-2	-8
10	China Yangtze Power	China	12.9	19.3	25	-1	-2	3	-6	-6	-1

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

Note: n = 53 global companies with a market valuation of at least \$10 billion.

¹Contribution of each factor shown in percentage points of five-year average annual TSR; any apparent discrepancies in TSR totals are due to rounding.

²Average annual TSR, 2006–2010.

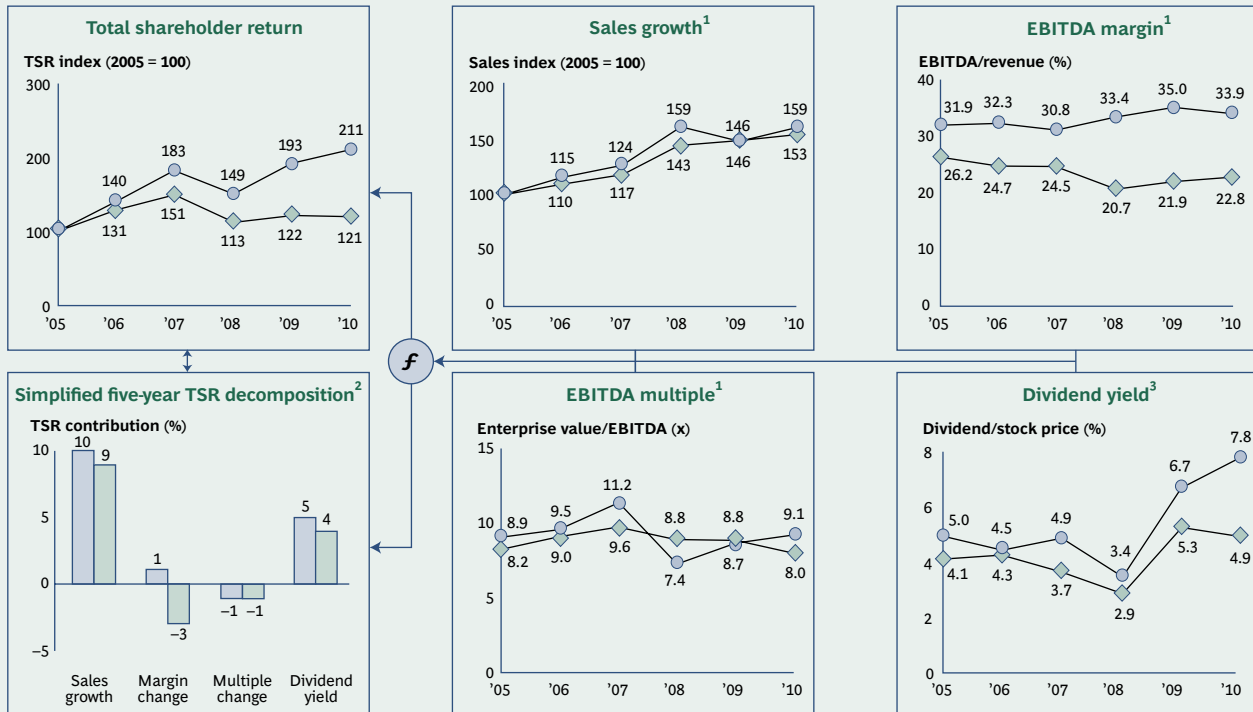
³As of December 31, 2010.

⁴Change in EBITDA multiple.

⁵"Share change" refers to the change in the number of shares outstanding, not to the change in share price.

⁶As of June 30, 2011.

Value Creation at the Utilities Top Ten Versus Industry Sample, 2006–2010



● Utilities top ten ◆ Total sample, n = 53

Sources: Thomson Reuters Datastream; Thomson Reuters 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 creation that may be of interest to senior executives. Examples include:

Riding the Next Wave in M&A: Where Are the Opportunities to Create Value?

A report by The Boston Consulting Group, June 2011

The Debt Monster

A Focus by The Boston Consulting Group, May 2011

The Art of Planning

A Focus by The Boston Consulting Group, April 2011

Does Practice Make Perfect? How the Top Serial Acquirers Create Value

A Focus by The Boston Consulting Group, April 2011

Making Your Company Inflation Ready

A Focus by The Boston Consulting Group, March 2011

Best of Times or Worst of Times?

A joint White Paper by The Boston Consulting Group and the Royal Bank of Scotland, January 2011

Why Companies Should Prepare for Inflation

A Focus by The Boston Consulting Group, November 2010

Threading the Needle: Value Creation in a Low-Growth Economy

The 2010 Value Creators Report, September 2010

Accelerating Out of the Great Recession: Seize the Opportunities in M&A

A report by The Boston Consulting Group, June 2010

Cross-Border PMI: Understanding and Overcoming the Challenges

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Megatrends: Tailwinds for Growth in a Low-Growth Environment

A Focus by The Boston Consulting Group, May 2010

After the Storm

The 2010 Creating Value in Banking Report, February 2010

Time to Engage—Or Fade Away: What All Owners Should Learn from the Shakeout in Private Equity

BCG White Paper, published with the IESE Business School of the University of Navarra, February 2010

M&A: Reading for Liftoff? A Survey of European Companies' Merger and Acquisition Plans for 2010

BCG White Paper, published with UBS Investment Bank, December 2009

Searching for Sustainability: Value Creation in an Era of Diminished Expectations

The 2009 Value Creators Report, October 2009

Be Daring When Others Are Fearful: Seizing M&A Opportunities While They Last

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BCG White Paper, published with the IESE Business School of the University of Navarra, December 2008

M&A: Down but Not Out; A Survey of European Companies' Merger and Acquisition Plans for 2009

BCG White Paper, December 2008

Missing Link: Focusing Corporate Strategy on Value Creation

The 2008 Value Creators Report, September 2008

Venturing Abroad: Chinese Banks and Cross-Border M&A

A report by The Boston Consulting Group, September 2008

The Return of the Strategist: Creating Value with M&A in Downturns

A report by The Boston Consulting Group, May 2008



Note to the Reader

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