



# Measuring **long-term** performance

*Earnings per share and share prices aren't the whole story—particularly in the medium and long term.*

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and Timothy Koller**

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**It's natural for companies and their investors to be happy,** even complacent, when their earnings per share (EPS) and share prices rise. A falling share price may not be a sign of poor performance, however: The Home Depot's fell from 1999 to 2003, yet the company created more value than every North American retailer except Wal-Mart Stores by continuing to grow and improve its return on capital.

After the extreme ups and downs of financial markets during the past decade, boards of directors, senior managers, and investors are rethinking the way they define and assess corporate performance. There's nothing wrong with good accounting results and rising share prices, but they don't necessarily indicate whether a company is fundamentally healthy, in the sense of being able to sustain its current performance and to build profitable businesses in the future.

Nonetheless, a company can construct a comprehensive performance assessment that measures the value it has created and estimates its ability to create more. As a way of judging how well a company is doing, such an assessment is far superior to any single performance metric. It can also help management to balance the short- and long-term creation of value and board members and investors to determine whether management's policies and the company's share price are on target.

## Testing for fitness

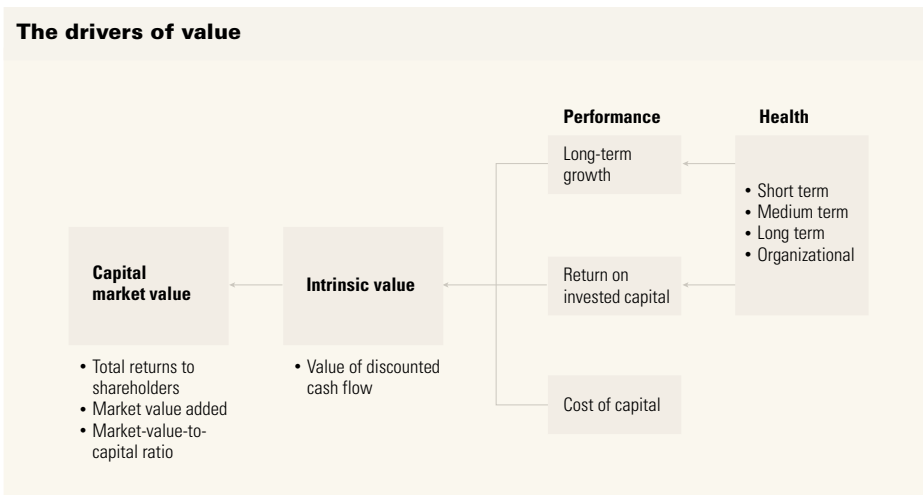
Since only a company's historical growth and returns on capital—not its future performance—can be measured directly, the potential for future growth and returns must be inferred. To do so, it is necessary to devise metrics that gauge the longer-term health of companies and that complement the metrics for their short-term performance. A patient visiting a doctor may feel fine, for example, but high cholesterol could make it necessary to act now to prevent heart disease. Similarly, a company may show strong growth and returns on capital, but health metrics are needed to determine if that performance is sustainable.

A company's cash flow and, ultimately, its market value stem from its long-term growth in revenues and profits and from its returns on invested capital (ROIC) relative to its cost of capital. A discounted-cash-flow (DCF) analysis, based on projected performance, can be linked to key performance and health indicators in order to demonstrate the links between shareholder value, as measured by stock markets, and the drivers of value (Exhibit 1).

With these links in mind, it is possible to organize performance measurement according to three different perspectives. The economic value that a company has created historically can be explored through its financial statements. This set of metrics gauges what we call a company's performance. Metrics can also gauge a company's ability to create economic value in the future and the risks that might prevent it from doing so. These metrics assess what we call the company's health.

The third set of metrics assesses the capital market performance of the company, including the expectations factored into its share price and the

### EXHIBIT 1



way they have changed, as well as a comparison between a company's market valuation and its valuation on the basis of its business plans. An understanding of its performance and health provides the context for developing this accurate assessment of its share price performance.

In using all these metrics, it is important to understand the impact of factors outside management's control: consider, for example, the case of an oil company whose improving profitability comes from rising oil prices rather than better exploration techniques or of a bank whose stock price rises because of changing rates, not increased efficiencies. To use any metric that assesses how a company is doing, you must strip out the impact of such factors.

### **Performance: Value delivered**

Assessing a company's historical financial performance would appear to be straightforward, but even these metrics are subjective. Accountants and managers decide when to record revenues and costs, and personal motives can color this judgment—a boss may want the current quarter to look good, for example.

Some ways of measuring a company's financial performance are better than others. Metrics, such as ROIC, economic profit,<sup>1</sup> and growth, that can be linked directly to value creation are more meaningful than traditional accounting metrics like EPS. Although growing companies that earn an ROIC greater than their cost of capital generate attractive EPS growth, the inverse isn't true: EPS growth can come from heavy investment or changes in financial structure that don't create value. In fact, companies can easily manipulate EPS—by repurchasing shares or undertaking acquisitions, for example (see “Merger valuation: Time to jettison EPS,” in the current issue).

The true drivers of value—growth and ROIC—are a better place to start measuring the performance of a company. Specifically, how does its ROIC compare with its cost of capital and with the ROIC of its peers? Has its ROIC been increasing or decreasing? How fast has the company grown, absolutely and relative to its peers? Is its growth accelerating or slowing?

Home Depot's average ROIC from 1999 to 2003 was 15.6 percent—higher than its 9.2 percent cost of capital during that period and the highest among large US retailers. From 1999 to 2003, its revenue rose by an average of 16.5 percent annually, at the high end of the range for such companies. This performance was exceptional for what was already one of the largest US retailers.

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<sup>1</sup> Economic profit = invested capital × (return on invested capital – weighted average cost of capital).



One disadvantage of ROIC and growth, however, is that neither incorporates the magnitude of the value created, so a small company or business unit with a 30 percent ROIC seems more successful than an enormous company with a 20 percent return. We use economic profit to convert ROIC into a dollar metric so that we can incorporate the size of the value created into comparisons with other companies.

By adjusting for size, economic profit provides a better assessment of value creation than do metrics based on ROIC and growth. Exhibit 2 shows the economic profit of large retailers. Home Depot—second only to Wal-Mart—generated

\$7.1 billion in economic profit over the five years through 2003. Viewed from this angle, it and Wal-Mart constitute a class of their own. Although other highfliers, such as Best Buy, also have superior ROIC and growth, they are much smaller.

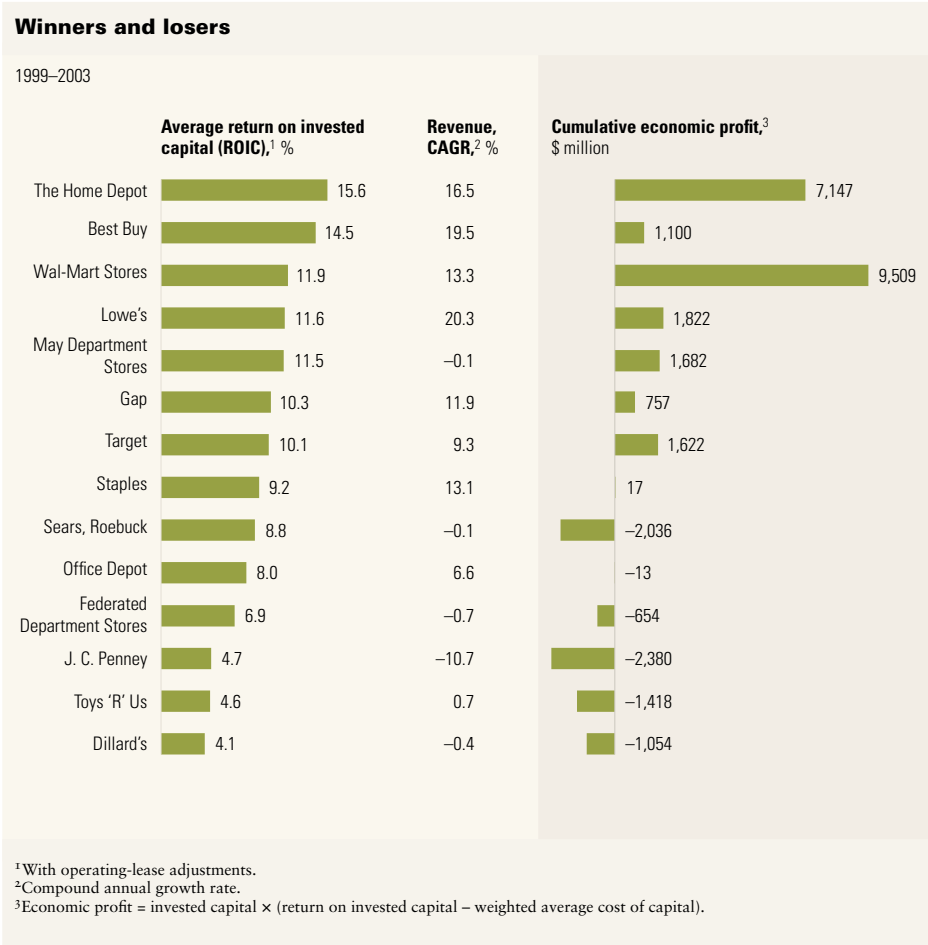
### **Health: Scope to create additional value**

Health metrics supplement those for historical performance by providing a glimpse into the future. It's important, for instance, to know whether a company has the products, the people, and the processes to continue creating value. Assessing the risks a company faces and the procedures in place to mitigate them is an important dimension of all efforts to measure health.

To identify a company's key health metrics, we start with a value creation tree illustrating the connections between a company's intrinsic value and the generic categories of health metrics: the short-, medium-, and long-term factors that determine a company's long-term growth and ROIC (Exhibit 3, on the next spread). This approach shares some elements with the "balanced scorecard"—popularized in a 1992 *Harvard Business Review* article<sup>2</sup> by Robert Kaplan and David Norton—whose premise was that financial performance is only one aspect of total performance. Kaplan and Norton pointed to three equally important perspectives: customer satisfaction, internal business processes, and learning and growth.

<sup>2</sup>Robert S. Kaplan and David P. Norton, "The balanced scorecard: Measures that drive performance," *Harvard Business Review*, January 1992, Volume 80, Number 1, pp. 71–9.

EXHIBIT 2



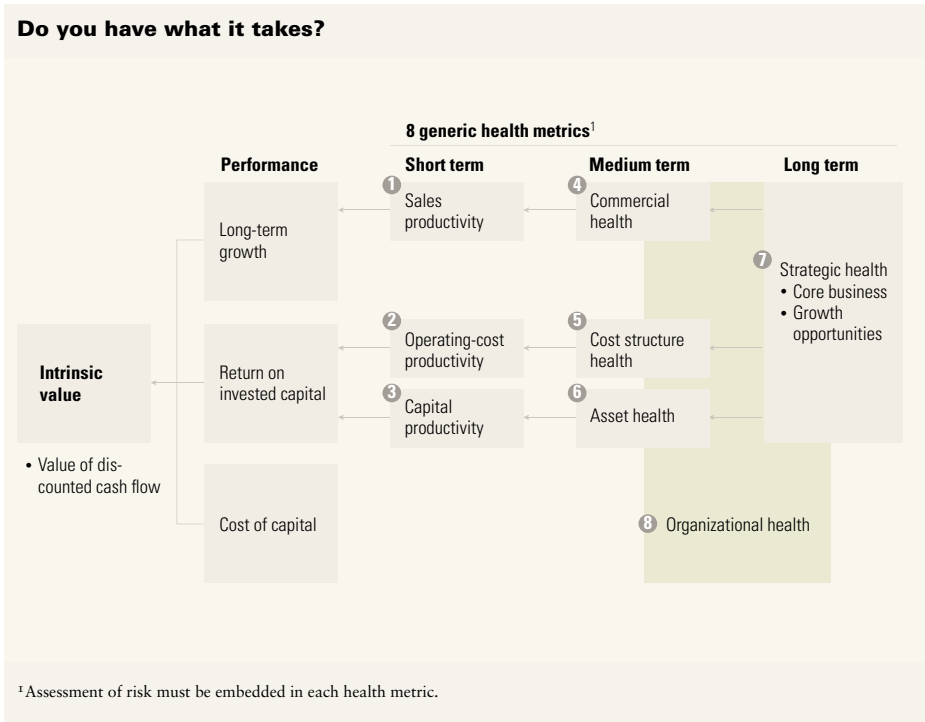
Our concept of health metrics resembles Kaplan and Norton’s “nonfinancial measures,” but we differ in believing that companies should develop their own metrics tailored to their particular industries and strategies. These metrics should be based on rigorous analytics and linked, as explicitly as possible, to the creation of intrinsic value: product innovation is important in some industries, for instance, while in others government relations, tight cost controls, and customer service matter more.

Every company will have its own health metrics, but the eight generic categories in Exhibit 3 can ensure that it systematically explores all the important ones.

Short-term metrics

Short-term metrics explore the factors that underlie historical performance and help indicate whether growth and ROIC can be sustained at a given

EXHIBIT 3



level or will probably rise or fall. These metrics might include costs per unit (for a manufacturing company) or same-store sales growth (for a retailer). They fall into three categories:

- *Sales productivity metrics* explore the factors underlying recent sales growth. For retailers, these metrics include market share, a retailer’s ability to charge higher prices than its peers, the pace of store openings, and same-store sales increases.
- *Operating-cost productivity metrics* explore the factors underlying unit costs, such as the cost of building a car or delivering a package. UPS, for example, is well known for charting out the optimal delivery paths of its drivers to enhance their productivity and for developing well-defined standards on how to deliver packages.
- *Capital productivity metrics* show how well a company uses its working capital (inventories, receivables, and payables) and its property, plant, and equipment. Dell revolutionized the personal-computer business by building products to order and thus minimizing inventories. Because the company keeps them so low and has few receivables to boot, it can operate with negative working capital.

Home Depot's short-term health was strong across a number of fronts. It increased its store count by 13.4 percent a year from 1999 through 2003 while simultaneously increasing its same-store sales by 3.5 percent a year. Its ROIC increased to 18.2 percent, from 14.9 percent, during the same period thanks to improved margins, largely resulting from improved purchasing and from the development (with manufacturers) of exclusive product lines.

#### Medium-term metrics

Medium-term metrics go beyond short-term performance by looking forward to indicate whether a company can maintain and improve its growth and ROIC over the next one to five years (or longer for companies with extended product cycles, as in pharmaceuticals). These metrics fall into three categories:

- *Commercial-health metrics*, indicating whether a company can sustain or improve its current revenue growth, include the metrics for its product pipeline (the talent and technology to market new products over the medium term), brand strength (investments in brand building), regulatory risk, and customer satisfaction. Metrics for medium-term commercial health vary widely by industry. For a pharmaceutical company, the obvious priority is its product pipeline and its relationship with governments—a major customer and regulator. For an online retailer, customer satisfaction and brand strength may be the most important considerations.
- *Cost structure health metrics* gauge a company's ability, as compared with that of its competitors, to manage its costs over three to five years. These metrics might include assessments of programs like Six Sigma, which companies such as General Electric use to reduce their costs continually and to maintain a cost advantage relative to their competitors across most of their businesses.
- *Asset health metrics* show how well a company maintains and develops its assets. For a hotel or restaurant chain, to give one example, the average time between remodelings may be an important driver of health.

In the quest for growth during the 1990s, Home Depot temporarily lost sight of its medium-term health, as measured by its customer service and the quality of its stores. Recognizing the problem, in 2001 the company began to reinvest in its existing locations, with the intention of making them more appealing to customers, and to refocus on customer service—for example, by raising its incentives for employees. It also offered installation



services and do-it-yourself clinics and set up sales desks specifically for professional customers. Continued success will depend on Home Depot's ability to go on satisfying its customers by carefully measuring and monitoring its customer service, its customer traffic, and the age and condition of its stores.

#### Long-term strategic health

Metrics of long-term strategic health show the ability of an enterprise to sustain its current operating activities and to identify and exploit new areas of growth. A company must periodically assess and measure the threats—including new technologies, changes in public opinion and in the preferences of customers, and new ways of serving them—that could make its current business less attractive. In assessing a company's long-term strategic health, specific metrics are sometimes hard to identify, so more qualitative milestones, such as progress in selecting partners for mergers or for entering a market, are needed.

While Home Depot's leading position in the home-improvement business appears to be solid in the medium term, a longer-term threat comes from Wal-Mart, which sells many of the same fast-moving items, such as lightbulbs. The cost base of Wal-Mart is lower because it provides less in-store help than does Home Depot, which must therefore ensure that store associates focus on higher-margin areas where support is critical (such as plumbing) rather than on products whose price doesn't incorporate assistance to customers.

Besides guarding against threats, companies must continually watch for new growth opportunities in new geographies or in related industries; many Western companies, for example, have begun preparing to serve

*In assessing a company's long-term strategic health, **specific metrics** can be hard to identify, so more qualitative milestones are needed*

China's enormous, fast-growing markets. Adding new services helped Home Depot to squeeze more profits from its existing stores, but it has been less successful at expanding abroad and at developing new store formats. By

2003, only 7 percent of its revenues came from outside North America, and though it has experimented with new formats, such as its Expo Design Center, only 4 percent of its stores used them as of 2003.

#### Organizational health

Metrics are also needed to determine whether a company has the people, the skills, and the culture to sustain and improve its performance.

Diagnostics of organizational health typically measure the skills and capabilities of a company, its ability to retain its employees and keep them satisfied, its culture and values, and the depth of its management talent. Again, what's important varies by industry. Pharmaceutical companies need deep scientific-innovation capabilities but relatively few managers. Companies expanding overseas need people who can work in new countries and negotiate with the governments there.

Given the rapid growth and substantial size of Home Depot, one of its core challenges continues to be attracting and retaining skilled employees at a competitive cost. When it took on lower-cost part-time workers who often knew much less than its traditional store associates did, customers began to wonder what made the company special. Even holding on to its store managers became a problem, since the drive for efficiency through centralization had stifled its original entrepreneurial spirit. To address the long-term challenges, the company began offering incentive programs for managers and added more full-time staff in stores—moves that have been credited with helping to improve same-store sales.<sup>3</sup>

### **Stock market performance**

The final step in assessing a company's performance is examining its stock price performance. In an ideal world, we would need only to examine a company's stock market performance to see how well it was doing. But its performance there is anything but easy to interpret.

The most common approach to measuring the stock market performance of a company is to calculate its total returns to shareholders (TRS), defined as share price appreciation plus dividend yield, over time. This approach has severe limitations, however, because over short periods TRS embodies changes in *expectations* about the future performance of a company more than its actual underlying performance and health. Companies that consistently meet high performance standards can thus find it hard to deliver high TRS: the market may think that management is doing an outstanding job, but this belief has already been factored into share prices.

One way to understand the problem is by way of analogy with a treadmill whose speed represents the expectations of future performance implicit in a company's share price. If managers beat them, the market not only raises the share price but also accelerates the treadmill. As the company's performance improves, the expectations treadmill turns more quickly. The

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<sup>3</sup>Justin Lahart, "Housing just keeps going up," *Fortune*, June 16, 2003; and Betty Schiffman, "Home Depot remodels its growth plans," *Forbes*, November 30, 2001.

better these managers perform, the more the market expects from them; they must run ever faster just to keep up. This effect explains why extraordinary managers may deliver ordinary short-term TRS; conversely, managers of companies with low performance expectations might find it easy to earn high TRS. This predicament illustrates the old saying about the difference between a good company and a good investment: in the short term, good companies may not be good investments, and vice versa.

One way of overcoming the limitations of TRS is to employ complementary measures of stock market performance. One of them is market value added (MVA): the difference between the market value of a company's debt and equity and the amount of capital invested. A related metric, expressed as a ratio, is the market-value-to-capital ratio—the ratio of a company's debt and equity to the amount of capital invested.

Market-value-to-capital ratios and MVA complement TRS by measuring different aspects of a company's performance. TRS measures it against the financial markets' expectations and changes in them. Market-value-to-capital ratios and MVA, by contrast, measure the financial markets' view of the future performance of a company relative to the capital invested in it, so they assess expectations about its absolute level of performance.<sup>4</sup>

Let's examine Home Depot and the other large retailers in terms of their stock market performance. The market value of Home Depot's debt and equity (including capitalized operating leases) was \$88 billion at the end of 2003, when it had invested \$29 billion in operating capital (working capital, the capitalized value of operating leases, and property in plant and equipment). Home Depot's MVA was therefore \$59 billion and its market-value-to-capital ratio was 3.1.

The MVA of Home Depot was the industry's second highest, behind only Wal-Mart and far ahead of the rest. Home Depot's market-value-to-capital ratio was in the middle of the pack among large retailers, since the company isn't expected to generate as much value per dollar of capital as did other highfliers (such as Best Buy) but made up for that with size.

What about TRS? Over the five years ended 2003, Home Depot's— at -2.3 percent annually—was near the bottom of the group. So the company delivered a strong economic profit, the second-highest MVA, and a strong market-value-to-capital ratio but also had very low TRS. Evidently, Home Depot's performance over recent years wasn't up to what the market expected at the start of the measurement period (1999).

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<sup>4</sup>For a more detailed explanation, see Richard F. C. Dobbs and Timothy M. Koller, "The expectations treadmill," *The McKinsey Quarterly*, 1998 Number 3, pp. 32–43 ([www.mckinseyquarterly.com/links/16469](http://www.mckinseyquarterly.com/links/16469)).

By reverse-engineering the current and past share prices of Home Depot, we can develop a perspective on why its TRS was so low. An investor using a DCF model might infer that at the end of 2003 the stock market expected the revenue growth of Home Depot to decline gradually, to 5 percent annually, from 12 percent, over the next decade while it maintained its current margins and ROIC. Given the share price of Home Depot at the end of 1998, an investor would have had to believe that it could grow by 26 percent a year for at least ten years. Such high growth expectations would have required the company to triple its store count over that period—far beyond the estimated saturation level for its markets. It is tempting to conclude that Home Depot’s poor TRS since 1999 resulted more from an overly optimistic market value at the start of that year than from ineffective management.

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Measuring the historical performance of a company is difficult though doable. But coming to grips with its historical performance isn’t enough; the assessment must also address the company’s health—its ability to sustain and improve its performance in the future—and its share price performance. **Q**

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