

Equity Research—Americas

Industry: Value-Based Strategy
September 29, 1998
NI

Michael J. Mauboussin 212/325-3108 michael.mauboussin@csfb.com
Bob Hiler 212/325-4341 bob.hiler@csfb.com



Why Strategy Matters

**Exploring the link between
strategy, competitive advantage
and the stock market**

Volume 1

Introduction

“Anybody who says that they have a wonderful business that’s earning a lousy return on invested capital has got a different yardstick than we do.”

Warren Buffett, *Annual Shareholder Meeting, 1993.*

It is widely accepted in finance theory that the prime goal of management is to maximize shareholder value. But the path to delivering superior returns is not always clear, for a few reasons.

To start, there is the issue of *metrics*. Corporate managers often perceive that managing to achieve competitive advantage is hard to balance with the demands of the stock market. Which financial metrics effectively straddle the desires of product markets with those of the capital markets? How are those metrics linked to executive compensation? Here it is necessary to have a firm grasp of what competitive advantage is and how the market reflects it.

Next, there is the topic of *method*. Assuming that financial value drivers are properly identified, it is still critical to figure out how to position the business to gain a competitive advantage. Which market segments should be addressed? What customer characteristics are required to generate profitable sales? How are products or services delivered optimally? Addressing these questions is the essence of strategy.

Finally, there is the issue of the *market*. Managers and investors are not always clear how prices are set in the stock market. Is value determined by earnings growth? Sales gains? Cash flow improvement? These questions require a clear understanding of how capital markets work.

This report explores how competitive advantage, strategy and capital market valuation are intertwined. It is broken into three parts. First, we define key terms. Second, we explore the empirical return on invested capital data. Finally, we link the financial metrics to the workings of the stock market.

Our central findings are as follows:

- The spread between return on invested capital and the cost of capital (ROIC–WACC) is a reasonable starting point for estimating economic value creation.¹ Importantly, the stock market efficiently reflects this spread in stock prices. Correlation analysis shows that high ROIC–WACC-spread businesses are rewarded with the high market values for a given growth rate.² This suggests that companies should seek attractive returns first and growth second.
- ROIC–WACC spreads have a self-similar, or fractal, distribution pattern on multiple levels.³ More specifically, ROIC–WACC rankings on any tier—by country, index, sector, or company—consistently form a cascade pattern ranging from value creators to value destroyers. This spells opportunity, because it shows that satisfactory returns are often achievable irrespective of where a company is domiciled or what industry it is in.
- The key to a company’s ability to generate excess returns is the strategy it pursues. Companies must understand where and how they create value. Notably, it is often the company that understands where it does *not* have an advantage that does well. More directly, strategy matters.

Key Definitions

Before proceeding it is important to define two key terms: competitive advantage and strategy. We view strategy (including formulation and execution) as the stepping stone to capturing a competitive advantage. Sustainability of competitive advantage requires constant evolution and prudent capital allocation.

Competitive advantage. Competitive advantage exists when a company's sales are greater than its total costs, including the opportunity cost of capital. One measure of such returns is a positive ROIC–WACC spread.⁴ It should be stressed that competitive advantage is not a qualitative, but rather a quantitative, issue (as the Buffett quotation above suggests). By definition, a business with a competitive advantage either earns, or promises to earn, returns on capital in excess of the cost of capital.

Further, competitive advantage must be viewed in absolute, not relative terms. A business that earns higher returns than its peers do, but that does not earn its cost of capital, can be said to have a comparative advantage, not a competitive advantage.

A company can gain competitive advantage in a number of ways. For example, it can offer a product or service that customers perceive to have superior value, hence garnering a premium price. Alternatively, a company can achieve a lower cost position than its competition, allowing it to glean excess returns.

The ability to generate positive ROIC–WACC spreads also relates to the structure of the industry in which a company competes. External factors—such as the buying power of customers or the leverage of suppliers—combine with internal factors—including the intensity of rivalry—to define industry structure. The five-force framework laid out by Michael Porter is especially useful in this assessment.⁵

While some management teams lament that they participate in an industry that is structurally poor, the evidence shows that industry structure is *not* the defining factor in value creation. Ultimately, a company's ability to generate excess returns comes from the activities a company pursues and how those activities fit together and reinforce one another.⁶

Strategy. A successful strategy is one that allows a company to capture a competitive advantage. Porter defines strategy as “the creation of a unique and valuable position, involving a different set of activities”.⁷ He stresses that operational effectiveness represents excellence in individual activities while strategy is the appropriate combination of activities.

Strategic positions come in a number of forms. A variety-based position is when a company produces a subset of an industry's products or services. When a company serves the needs of a particular group of customers, it is pursuing a needs-based position. Finally, an access-based position relies on segmentation of customers by access channel.

Porter argues that strategic positions are not sustainable unless clear trade-offs are made with other positions. Trade-offs are necessary because of potential inconsistencies in image, the difficulty of executing within multiple positions and limits on management resources.

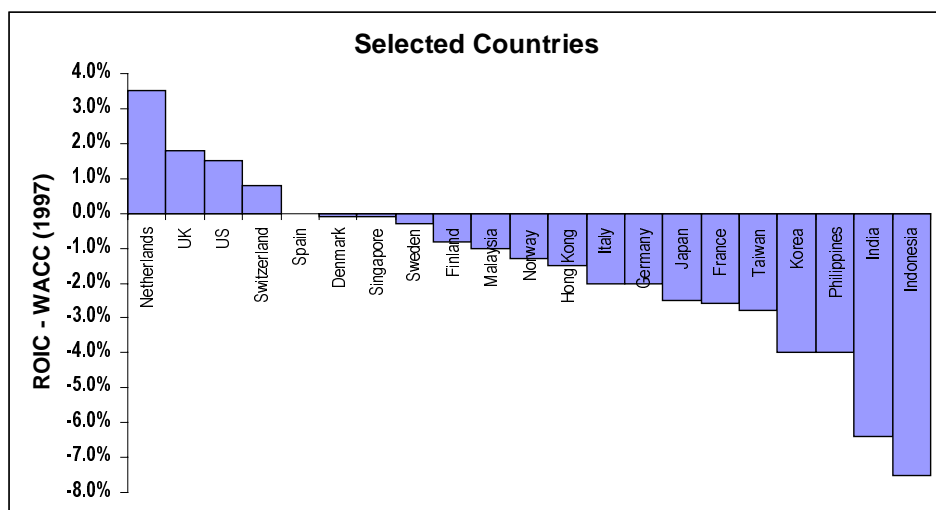
Strategic failure often comes from an inability to choose the correct strategic position. Managers may be lured to expand their positions in the name of growth.

Empirical Evidence

But the dilution in economic value that ensues translates into poor share price performance.

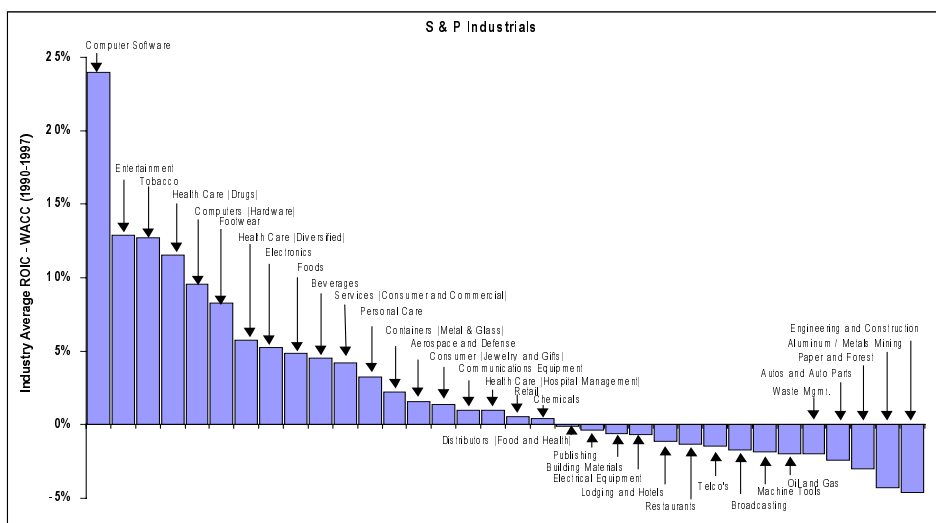
Having defined key concepts, we now turn to the empirical data. Charts 1-4 show the breakdown for ROIC–WACC spreads on four levels: by country; by index (S&P Industrials); by sector (computer hardware); and by company (Hewlett-Packard). Zooming in at various levels offers a couple of useful insights. First, studying the charts in “ascending” order (from the company level up) shows how each level serves as the building block for the next level. Second, each chart shows that returns on capital are distributed broadly—value creation is possible on every level.

Chart 1
ROIC – WACC Spreads for Selected Countries



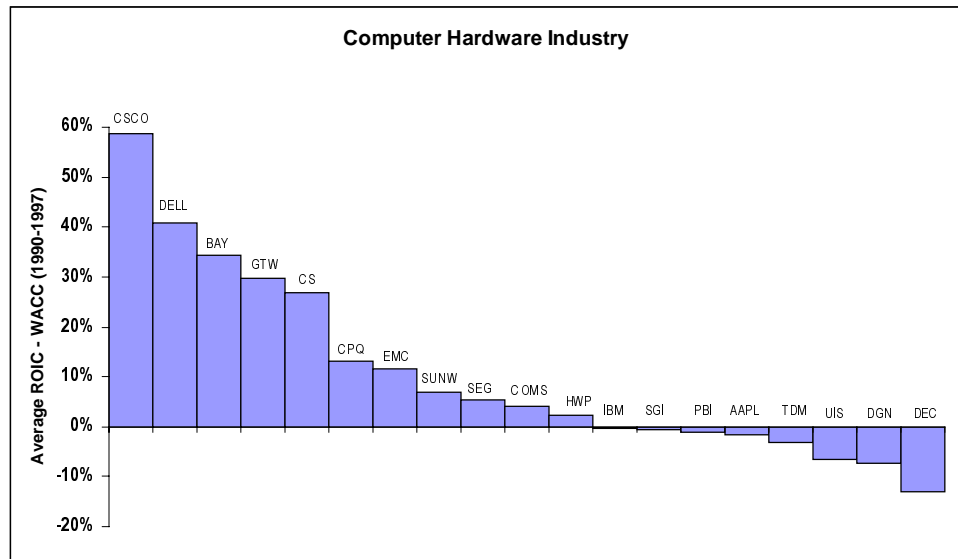
Source: Credit Suisse First Boston estimates.

Chart 2
ROIC – WACC Spreads for Major U.S. Industries



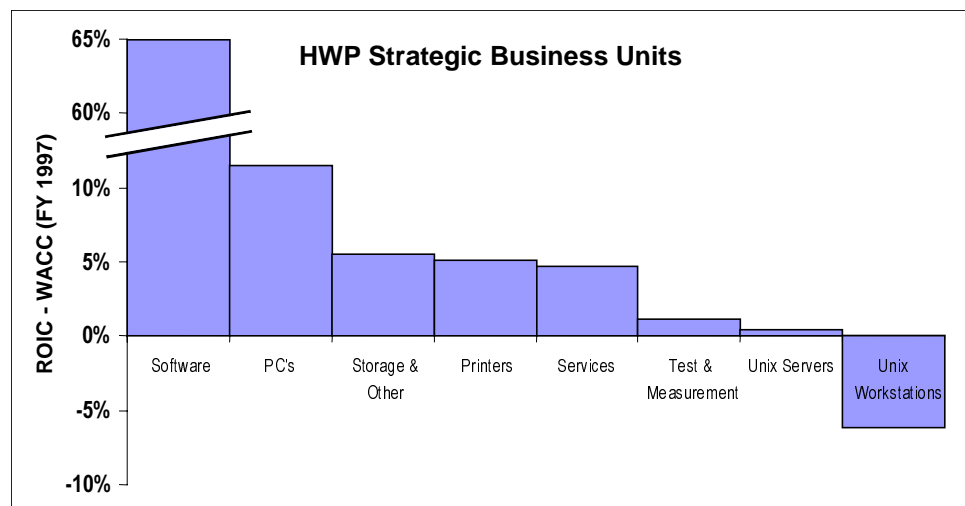
Source: Company published data, Credit Suisse First Boston estimates.

Chart 3
ROIC – WACC Spreads for the U.S. Computer Hardware Industry



Source: Company published data, Credit Suisse First Boston estimates.

Chart 4
ROIC – WACC Spreads By Strategic Business Unit for Hewlett-Packard



Source: Company published data, Credit Suisse First Boston estimates.

One striking feature of these charts is the self-similarity across all levels. More formally, these are called fractal patterns. Specifically, there are value-creating and value-destroying entities in each chart. For example, there are value-destroying companies within the most attractive industry and value-creating businesses in the least attractive segment. Likewise, within a company’s portfolio of businesses (or segments, or geographies) there is a mix of attractive and unattractive operations.

This has profound implications. It explicitly shows that value creation is not contingent on being in an attractive “category”—be it a country, industry or company. Accordingly management can always work to improve returns within company (through asset purchases/sales, improved positioning); help improve

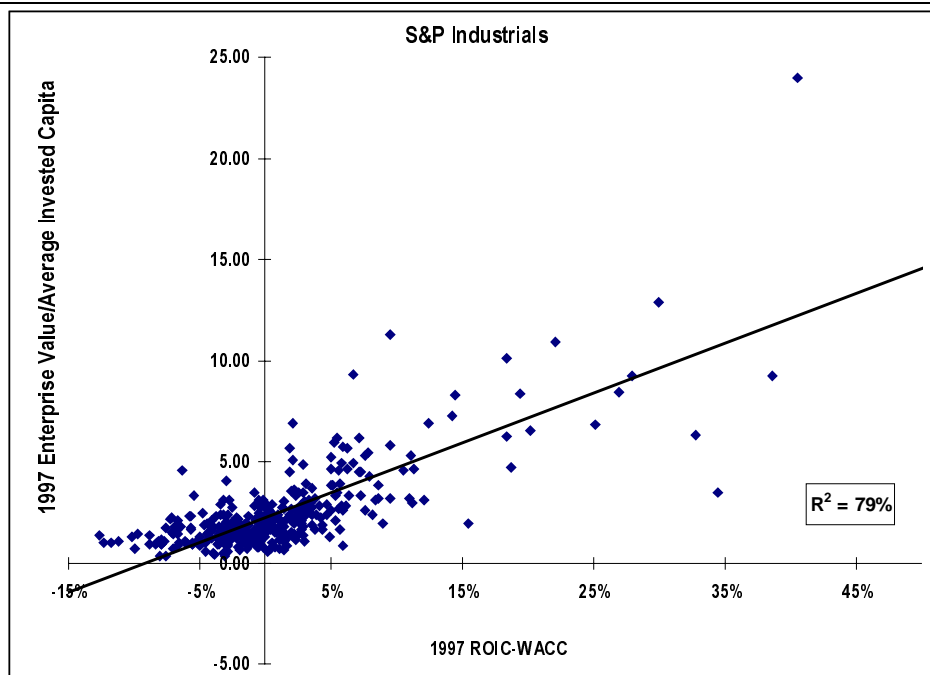
Does the Market Care?

industry returns (through intelligent use of game theory and signaling); and, hence, improve the overall economy.

While surveying ROIC–WACC spreads may be interesting, the more pressing issue is whether or not these spreads are reflected in stock price valuation. In order to test this relationship, we can perform regression analysis. Our independent variable is the ROIC–WACC spread and our dependent variable is firm value (market value of equity and debt) divided by invested capital. Economic theory suggests that businesses earning above-cost-of-capital returns trade at a firm value to invested capital ratio in excess of one. Further, the higher ROIC–WACC spread—holding growth constant—the higher the warranted firm value/invested capital multiple.

The data support the economic theory. For 1997, the S&P Industrials had an R^2 of 79% (Chart 5). Further, statistical stress tests show that there is a near-zero probability that the regression results are a fluke. In addition, CSFB analysts have confirmed this relationship in one sector after another—including leading international markets.⁸ The key is that the market recognizes and rewards positive economic rents.

Chart 5
Correlation between Excess Returns and Enterprise Value-to-Invested Capital



Source: Company published data, Credit Suisse First Boston estimates.

Conclusion

The link between the stock market, competitive advantage and the strategy is now complete. Strategy is the process that allows a company to achieve a competitive advantage. Competitive advantage is the ability to generate returns on capital in excess of the cost of capital. The stock market efficiently reflects excess returns. Accordingly, this report has a few central messages for corporate managers and the investors that evaluate them:

- Economic value creation should always be the guiding light for management decisions. In free markets, above-average gains in shareholder value are generally

a sign that collective corporate resources—both financial and non-financial—are being allocated effectively. The further fact that the stock market efficiently capitalizes value creation lends further credence to the importance of managing for value.

- Growth should always be a second order consideration behind value creation. Managers often assume that earnings growth is synonymous with value growth. However, this perspective is not supported by the empirical data—there are projects that add to accounting earnings while detracting from shareholder value. Correct prioritization of value creation/growth objectives allows managers to avoid capital allocation mistakes. This task is further complicated by the reality that many compensation schemes disproportionately reward growth versus value creation.
- A company can create shareholder value if it invests below the average ROIC but above WACC as long as such investments meet or exceed market expectations. But managers must be aware that the stock market is forward-looking. As a result, some projects may be value creating (net present value positive) but may disappoint the market, leading to a lower stock price.
- ROIC–WACC spreads should be used with some caution. This metric does offer a reasonable snapshot of the past performance and can serve as a good proxy for expectations. However, the calculation is based on accumulated sunk costs (invested capital) and can be affected by the timing of capital expenditures and chosen the depreciation method. For this reason, we prefer the NPV positive rule to the use of ROIC–WACC spreads.
- In stock market valuation, both excess returns and duration of excess returns are important. The latter notion is often called “sustainable competitive advantage.” The CSFB framework has an explicit method for dealing with sustainability of excess returns, called “competitive advantage period”.⁹ We find that competitive advantage period can be pinpointed by considering a company’s current returns, the rate of industry change and barriers to entry. Consistently generating excess returns is management’s greatest challenge.
- Strategy is key. The data show that excess returns can be earned even in the worst industry groups. What separates the winners from the losers is how they organize their activities. Managers of businesses that generate sub-par returns should constantly rethink the activities they pursue.

N.B.: CREDIT SUISSE FIRST BOSTON CORPORATION may have, within the last three years, served as a manager or co-manager of a public offering of securities for or makes a primary market in issues of any or all of the companies mentioned. Closing prices are as of September 28, 1998:

3COM (COMS, 32 1/4, Strong Buy)
 Apple Computer (AAPL, 39 1/16, Hold)
 Cabletron (CS, 10 1/8, Hold)
 Cisco Systems (CSCO, 66 1/4, Strong Buy)
 Compaq Computer (CPQ, 32 13/16, Buy)
 Data General (DGN, 11 5/16, Hold)
 Dell Computer (DELL, 68 1/16, Strong Buy)
 EMC Corp (EMC, 60 1/8, Buy)
 Gateway 2000 (GTW, 53 1/2, Buy)
 Hewlett-Packard (HWP, 54 15/16, Buy)
 International Business Machines (IBM, 133 5/8, Buy)
 Pitney Bowes (PBI, 56 15/16, Buy)
 Seagate Technology (SEG, 24 5/16, Not Rated)
 Silicon Graphics (SGI, 10, Not Rated)
 Sun Microsystems (SUNW, 51 7/16, Hold)

Unisys (UIS, 25, Not Rated)
Bay Networks (BAY, Not Rated) was acquired by Northern Telecom
Digital Equipment (DEC, Not Rated) was acquired by Compaq Computer
Tandem (TAN, Not Rated) was acquired by Compaq Computer

¹ Better yet, managers should allocate capital based on net present values (NPV). The rule is to fund only NPV positive projects, which means the current cash outlay is *less* than the present value of the future cash flows from the project in question.

² In fact, this correlation is higher than many standard benchmarks, like EPS growth, cash flow growth, sales growth and dividends.

³ A fractal is an object in which the parts are related to the whole. Further, the individual components are self-similar, or self-referential.

⁴ EVA[®], a registered trademark of Stern Stewart & Co., is another.

⁵ *Competitive Strategy*, Michael E. Porter, (Free Press, New York, 1980).

⁶ “What is Strategy?” Michael E. Porter, *Harvard Business Review*, November-December 1996.

⁷ Porter.

⁸ *Value Dynamics Framework: The Global Investment Standard*, Credit Suisse First Boston Equity Research, September 1998.

⁹ *Competitive Advantage Period (CAP)—The Neglected Value Driver*, Mauboussin and Johnson, Credit Suisse First Boston Equity Research, January 14, 1997.