

## Morningstar's Approach to Rating Stocks

### Our Key Investing Concepts:

- ▶ Economic Moat
- ▶ Discounted Cash Flow
- ▶ Discount Rate
- ▶ Fair Value
- ▶ Business Risk
- ▶ Margin of Safety
- ▶ Consider Buying/Consider Selling

At Morningstar, we evaluate stocks as pieces of a business, not as pieces of paper. We think that purchasing shares of superior businesses at discounts to their intrinsic values, and allowing those businesses to compound value over long periods of time, is the surest way to create wealth in the stock market.

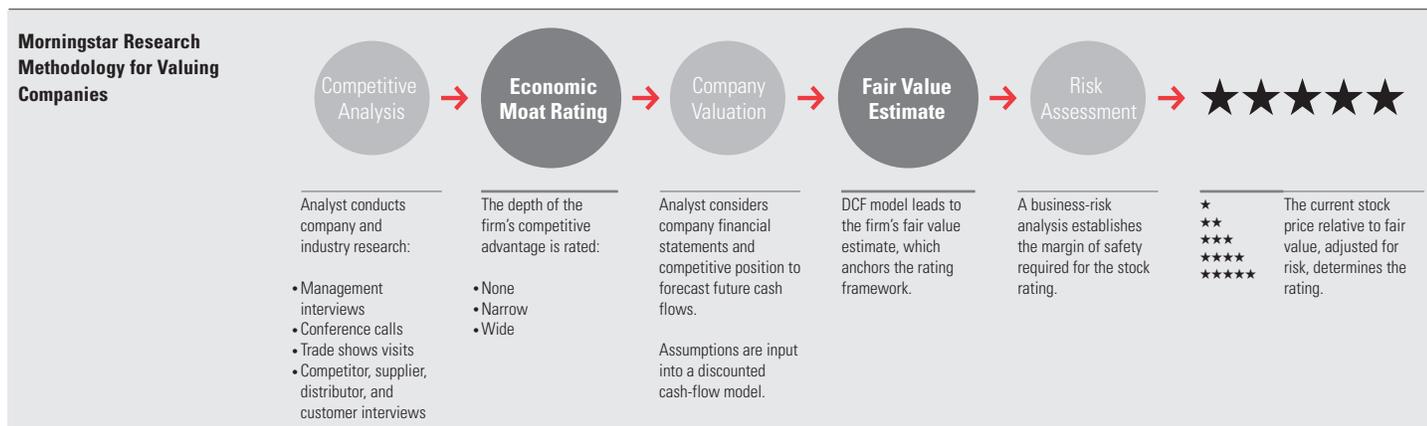
Because we focus on the long-term value of businesses, rather than short-term movements in stock prices, we'll often appear to be out of step with the stock market. When stocks are high, relatively few will receive our highest rating of 5 stars. (We rate stocks 1 through 5 stars, with 5 being the best and 1 the worst.) But when the market tumbles, there will likely be many more 5-star stocks. Although you might expect to see more 5-star stocks when the market is rising, we think assets are more attractive when they're cheap than when they're dear. We wait to buy clothes and DVD players when they're on sale, so why not do the same for stocks?

Our star rating is anchored on each analyst's estimate of a company's "fair value," which is what the analyst thinks the business is worth on a per-share basis. Our analysts arrive at this value by forecasting how much excess cash – or "free cash flow" – the firm will generate in the future, and then adjusting that total for both timing and risk. Cash generated next year is worth more than cash generated several years down the road, and cash from a stable business is worth more than cash from a cyclical or uncertain business.

Stocks trading at meaningful discounts to our fair value estimates will receive high star ratings. For high-quality businesses, we require a smaller discount than we do for mediocre ones, for a simple reason: We have more confidence in our cash-flow forecasts for strong companies, and thus in our value estimates. The future is inherently uncertain, and that uncertainty is greater for some companies than it is for others. If a stock's market price is significantly above our fair value estimate, it will receive a low star rating, no matter how wonderful we think the business is. Even the best company is a poor investment if an investor overpays for its shares.

Our fair value estimates don't change very often, but market prices do. So, a stock may gain or lose stars based just on movement in the share price. If we think a stock's fair value is \$50, and the shares decline to \$40 without much change in the value of the business, the star rating will go up. Our estimate of what the business is worth hasn't changed, but the shares are more attractive as an investment at \$40 than they were at \$50.

We calculate our star ratings each night after the markets close, which is why the rating date on our reports will always be the previous business day. However, we update the text of the reports as market events warrant—usually about once or twice per quarter—which is why you'll see two dates on every Morningstar report. Of course, we monitor all of our stocks every day, so our ratings are always current.



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### **Economic Moat**

This is our assessment of a firm's ability to earn returns above its cost of capital in the future. Competition tends to drive down excess profits, but companies can earn excess profits for an extended time by creating a competitive advantage (or economic moat)—and these companies are likely to be superior investments.

We're big fans of companies that are low-cost producers, create high switching costs for their customers, or have strong brands or long-lasting patents, because all of these characteristics allow companies to protect their competitive position. For example, Tiffany is far more profitable than a run-of-the-mill jewelry chain because it has a strong brand that creates a moat around its business, allowing it to charge more than competitors.

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### **Discounted Cash Flow**

This is a method for valuing companies that involves projecting the amount of cash a business will generate in the future, subtracting the amount of cash that the company will need to reinvest in its business, and using the result to calculate the worth of the firm. We use this technique to value nearly all of the companies we cover.

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### **Discount Rate**

We use this number to adjust our forecasted cash flows for the risk that those cash flows may not actually come to pass. For a very steady, stable company, we'll use a low discount rate, since we can have a lot of confidence that the firm will generate the amount of cash that we're forecasting. For a firm with a cyclical business and fierce competition, we'll use a much higher discount rate, since there's much uncertainty surrounding the firm's future. The discount rate may also be referred to as the "cost of capital."

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### **Fair Value**

This is the output of our discounted cash-flow valuation models, and is our per-share estimate of a company's economic worth. We adjust our fair values for any hidden

liabilities or assets that a firm might have—for example, we deduct from a company's fair value if it issues a lot of stock options or has an underfunded pension plan. Our fair value estimate differs from a "target price" in two ways. One, it's an estimate of what the business is worth, whereas a target price is typically an estimate of what other investors will pay for the stock. Two, it's a long-term estimate, whereas target prices generally focus on the next six to 12 months.

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### **Business Risk**

Based on fundamental factors such as cyclicity, leverage, competitive strength, and profitability, we divide our coverage universe into four broad risk categories: Below Average, Average, Above Average, and Speculative. Unlike some risk ratings, ours is not based on the volatility of the firm's shares, but rather the predictability and strength of the underlying business.

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### **Margin of Safety**

This is the discount to fair value we would require before recommending a stock. We think it's prudent to always buy stocks for less than they're worth—the margin of safety is like an insurance policy that protects investors from bad news or overly optimistic fair value estimates. We require larger margins of safety for riskier stocks, and smaller margins of safety for low-risk stocks.

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### **Consider Buying/Consider Selling**

The consider buying price is the price at which a stock would be rated 5 stars, and thus the point at which we would consider the stock an extremely attractive purchase. Conversely, consider selling is the price at which a stock would have a 1 star rating, at which point we'd consider the stock overvalued, with low expected returns relative to its risk. ■■