

# CRYSTAL ROCK

CAPITAL MANAGEMENT, LLC

## Expectations-Based Investing

*Leveraging a Market-Based DCF*

Fundamental investing is predicated on the belief that stock prices reflect, and respond to changes in, a company's long-term cash flow prospects. The ultimate goal of fundamental investors is to research and know companies well enough to develop an edge, or differentiated point of view. This is best accomplished, in our opinion, through a disciplined two step process:

- Step one involves defining market expectations -- understanding what current investors think, or what is currently "embedded" in a company's stock price.
- The second, and far more valuable, step is employing fundamental analysis to identify and value a differentiated point of view relative to the current stock price.

While simply stated, each step is inherently difficult.

### Leveraging Fundamental Analysis

Market expectations incorporate investor prospects regarding several variables. These encompass multiple potential outcomes (probability distributions) surrounding each of these variables. Accordingly, experience, analytic sophistication, and a degree of art are needed to legitimately capture the spirit of investor expectations.

We find quantifying these expectations germane and incredibly helpful in framing our investment thesis and decision making process. It ensures that we focus on critical drivers of future value creation, and it helps us define and value our "investment insight," or differentiated point of view. **However, our framework is but a starting point in determining where we might make an investment. It does not pick stocks for us.**

**The true value-added comes from leveraging fundamental analysis.** We seek opportunities where we have identified expectations of future performance that differ materially from those reflected in the current stock price. We then calculate the value of our differential perspectives, determine our degree of confidence, and estimate the potential downside if our expectations do not prove correct. In other words, what will the stock price likely be if investors come to recognize our variant perception, and what might the stock price be if our analysis proves directionally faulty.

We also believe that our risk control is enhanced. In our opinion, risk is best characterized by our fundamental knowledge of the company and its industry, the confidence in our differential point of view, and our estimated upside versus downside analysis. Preservation of capital remains a critical element in each of our investment decisions.

## **Expectations-Based Investing (*using a Market-Based DCF*)**

Crystal Rock believes, as most investors do, that stock prices discount expectations of a company's future cash flows. Furthermore, we hold the current market price in high regard – aware that it typically reflects a clearing price for investors with reasoned expectations of a company's future performance.

Investors generally recognize that discounted cash flow (DCF) has the *potential* to be a superior approach to valuation and its use has become ubiquitous. Yet *traditional* DCF approaches, which start with estimates of beta, cost of capital, terminal multiples, and the like, are seriously flawed, in our opinion. If estimates of these critical inputs are inconsistent with those operative in the equity marketplace, then the resulting calculation will prove inaccurate. **Frequently, with this approach to valuation, what appears to be a mispriced stock is merely a faulty calculation.**

A superior approach, in our opinion, uses a *market-based* DCF. We believe it is more insightful to “reverse engineer” a company's stock price, a process that helps us better understand what the market (or the marginal investor) is paying for. This approach enables us to marry fundamental analysis with valuation, and allows us to:

- 1) Define and value our differential point of view,
- 2) Insure that we are focused analytically on key value drivers,
- 3) Eliminate the inherent valuation bias that favors value stocks over growth stocks,
- 4) Upgrade the quality of our fundamental analysis and engage managements in a more strategic dialogue.

We find quantifying these expectations extremely helpful in framing our investment thesis and decision making process. It insures that we target our analysis on critical drivers of future value creation, and it helps us define and value our “investment insight,” or differentiated point of view. **Accordingly, our market-based DCF framework uniquely facilitates our investment decision making process. While fundamental analysis defines our differential point of view and drives the potential value-add.**

## Defining Market Expectations with CVA

Our proprietary market-based DCF valuation and analytic tool, Crystal Rock Value-Added (CVA) is used to “reverse engineer” a company’s current stock price. We have found no other tool as robust and effective at identifying and quantifying both investor expectations for a company’s future cash flows and critical drivers of future value creation.

CVA was developed in the mid-1990’s by one of Crystal Rock Capital’s founders. It has been successfully applied to stocks in virtually every industry, companies in various stages of maturity, and in extraordinarily diverse market environments. The framework has been the center point of value creation discussions in more than 100 different corporate boardrooms.

Measuring investor expectations also levels the playing field on valuing stocks traditionally considered value and/or growth. Importantly, the outputs from our framework are consistent with those typically utilized and discussed by both corporate management teams and investors. When employed effectively, we translate a company’s stock price into its key value creation components:

- 1) A company’s economic business model, including:
  - a. Earnings. Base year earnings,
  - b. Growth. Normalized operating profit growth,
  - c. Capital efficiency. A forward-looking measure of the capital investors expect to be invested relative to future growth expectations.
- 2) A discount mechanism. A discount rate (cost of capital) and duration of value creation. We find this variable to be sector or “neighborhood” specific.

**Importantly, measuring expectations embedded in a current stock price is an indispensable, yet only preliminary, input for making an informed investment decision.**

### Summary Example of Market-Based DCF (CVA) Analysis\*

	<b>Current Market Fit</b>	Downside Case	Upside Case	Base Investment Case	<b>Base Investment Case</b>
<b>"Normal" Business Model</b>					
Operating Profit, <i>base year</i>	\$175.0	\$160.0	\$195.0	\$185.0	\$185.0
Tax rate	34.5%	34.5%	34.5%	34.5%	34.5%
Operating Profit Growth Rate	6.5%	5.5%	8.0%	7.5%	7.5%
Capital Efficiency, <i>ROIIC</i>	75%	70%	85%	75%	75%
<b>Discount Mechanism</b>					
Required Rate of Return	11.00%	11.00%	11.00%	11.00%	11.00%
Duration of Value Creation	Dec. 2025	Dec. 2025	Dec. 2025	Dec. 2025	Dec. 2025
CVA Estimated Stock Price	<b>\$25.45</b>	<b>\$21.75</b>	<b>\$32.00</b>	<b>\$30.00</b>	<b>\$34.20</b>
Current Stock Price	\$25.50	\$25.50	\$25.50	\$25.50	\$25.50
Date	1/15/2009	1/15/2009	1/15/2009	1/15/2009	<b>1/15/2010</b>
<b>% chg</b>	<b>0%</b>	<b>-15%</b>	<b>25%</b>	<b>18%</b>	<b>34%</b> <b>1-yr target</b>

\* Summary example makes several simplifying assumptions and does not show balance sheet calculations.

## Background on Market-Based Discounted Cash Flow Analysis

Most investors, Crystal Rock included, believe that stock prices discount expectations of a company's future cash flows. Accordingly, the use of discounted cash flow (DCF) techniques has become pervasive since it facilitates an investor's desire for a valuation approach that captures all elements of a company's future value creation. This is not true of valuation "shortcuts" such as P/E ratios and EBITDA multiples, which are merely descriptive. They carry no explanatory power. In most cases, however, DCF-based approaches prove unsatisfactory. The complexity of DCF analysis, too many variables and assumptions which are essential to valuing a company's future cash flows, is best characterized by the adage "garbage in, garbage out."

As discussed above, we strive to "reverse engineer" a company's stock price to best understand the level of profits, growth, and future capital needs that investors have priced in. To do so, we employ our unique and proprietary market-based DCF valuation and analytic tool. This approach also points out the critical levers of a company's future value creation.

Our CVA framework differs from traditional DCF approaches in four ways:

- 1) CVA is empirically based. We start with the premise that the market is economically rational and solve for embedded expectations incorporated into actual stock prices. Typical DCF approaches claim to calculate a true "intrinsic value" and argue that the market price is unreasonable.
- 2) Discounting mechanism is specific to a company's "investment neighborhood." In other words, there is not a company specific cost of capital (required rate of return).
- 3) Capital efficiency is measured on a forward-looking basis. After all, stock prices discount expectations of *future* cash flows. Accordingly, ROIC, which is a backward-looking, accounting-based, metric, is *not* a relevant valuation input. ROIIC, or the incremental return on invested capital, is the critical measure of capital efficiency.
- 4) CVA captures all future value creation in an explicit forecast period. This eliminates the use of terminal multiples or perpetuity growth rates, which render DCF calculations ineffective. These methods of dealing with long-term value creation typically dominate a DCF's calculation of value and eliminate the ability to model stock price change.