



Careful How Much Weight You Give Option Value

May 12, 2021

Key Takeaways

- ▶ Recently, value's strong relative returns were skewed toward a relatively small number of stocks that performed exceptionally well, not always for sound, fundamental reasons.
- ▶ High volatility and a low cost of capital have helped low-quality stocks with high embedded real option value outperform, but much of their value is in options that by definition could end up completely worthless.
- ▶ There are still a lot of investments with current cash flows and asset values at attractive prices, though some of these may be less available in a broad index, which takes significant risk on stocks whose value is inflated by high option valuations.

Value Rotation Doesn't Reflect True Potential

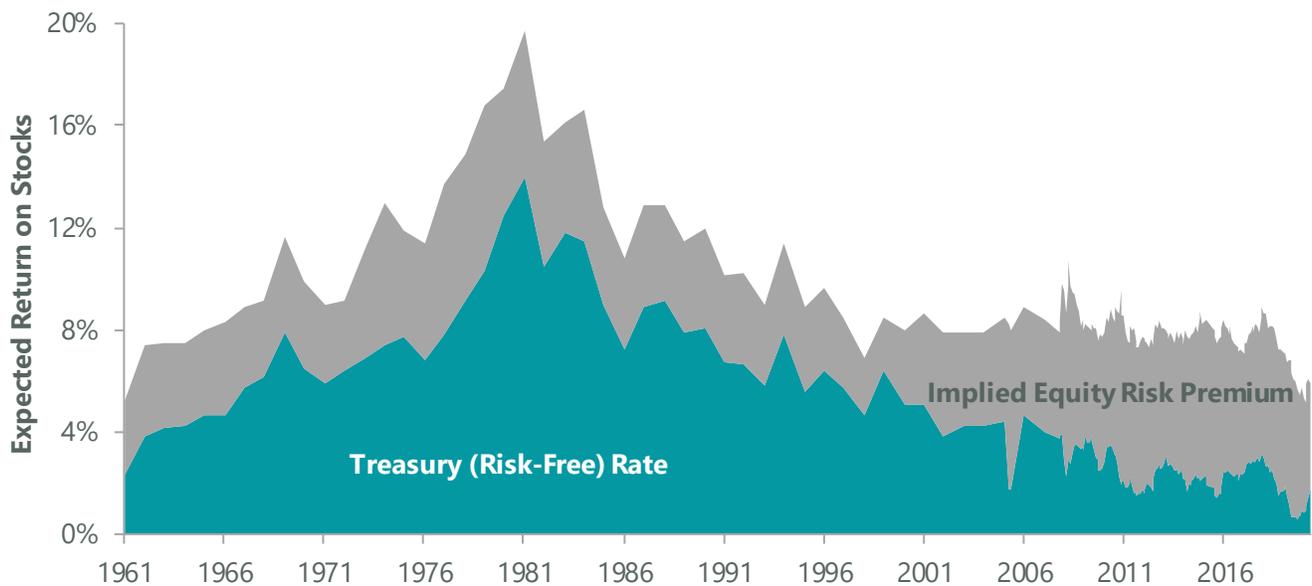
Underlying the strong performance of small caps in the first quarter was a more than 16 percentage point outperformance of the Russell 2000 Value Index over the Russell 2000 Growth Index. While this was a nice reversal for value, we believe the long-awaited rotation from growth to value is still not in full swing for two reasons. First, value's bounce barely makes a dent in the long period of outperformance by growth as the value index still trails growth by 14 percentage points since 2019 and 55 percentage points since 2016, cumulatively. Second, value's returns were skewed toward a relatively small number of stocks that performed exceptionally well, not always for sound, fundamental reasons.

The most infamous example is GameStop, which rose over 900% in the quarter and contributed about 4% of the value index's outperformance. Novavax, which is in the value index despite having no book value prior to an equity raise in 2020 and never having earned a dollar in operating income in more than 20 years, was the second-biggest contributor to the index's performance, as it advanced its COVID-19 vaccine toward approval. Fellow value index component MicroStrategy rose sharply because it bought bitcoin. These are not Benjamin Graham value stocks.

The growth-stock boom in 2020 is understandable in retrospect. Michael Mauboussin of Counterpoint Global wrote a very interesting report in December that described the situation well. In classical valuation frameworks, a stock's price represents a combination of the value of current earnings power plus the present value of future value creation. The latter is composed of further value creation in the existing business, as well as what is known as real option value. A real option is the right but not the obligation to invest in something — an acquisition, capital project, R&D in a new product, etc. For example, the market may value a casino company by assessing the value of its existing casinos and their potential to expand profitability, plus it may also include the value of future casinos it may build. The value of new casinos would be based on the time and effort it would take to get a license and build them, the cost of the projects and the potential future cash flows. This real option is very similar to a stock option, whose value is derived according to the Black-Scholes model. The value of both kinds of options rises when the stock price (or project value) rises, the cost falls, the life extends, volatility increases, and/or the risk-free rate falls.

The past year has been a remarkable period, during which every one of the factors involved in option valuation has been favorable. First, the risk-free rate (the 10-year U.S. Treasury note) fell to its lowest level in history. Second, corporate bond spreads fell and the equity risk premium (ERP, the excess return investors require to own stocks instead of a risk-free bond) has declined. Under normal circumstances, when the risk-free rate declines sharply, corporate debt spreads and ERP rise, because downside risks have increased. In 2020, however, ERP didn't change much when the risk-free rate fell. NYU's Stern Business School Professor Aswath Damodaran has data going back 60 years, and the last year stands out as having the lowest cost of equity (the risk-free rate plus ERP) on record (Exhibit 1). The low cost of capital in 2020 increased the value of long-duration assets, including real options.

Exhibit 1: Cost of Equity since 1961



Data as of April 1, 2021. Source: Aswath Damodaran; Bloomberg. N.B.: For ERP, we use the estimate that Aswath Damodaran, NYU Stern School of Business professor and premier authority on equity valuation, posts on his website monthly.

Volatility also increases the value of a real option, just as it does for a stock option. However, the impact on a real option is asymmetric as higher upside risk means bigger profits, while higher downside risk means simply foregoing the option at little or no cost. Of course, the past year has seen a marked increase in volatility (Exhibit 2). Average volatility of the Russell 2000 Index has run roughly 2x its five-year average since February 2020.

Exhibit 2: Russell 2000 Index Volatility



Data as of March 31, 2021. Source: ClearBridge Investments, Bloomberg Finance.

Normally, volatility spikes at times of uncertainty and such spikes are accompanied by an increase in the cost of capital. But that’s not what happened in 2020. As volatility increased, the cost of capital fell, creating ripe conditions for valuing real options at very high prices. The market took its cue and 2020 saw the biggest spread since the dot-com bubble in 1999-2000 between the valuation of low-quality stocks with low/negative returns on assets (stocks with high embedded real option value), compared with high-quality stocks with high returns on assets (stocks with low embedded real option value).

Although it’s understandable why stocks with real option value outperformed last year, it’s difficult to feel good investing in them today when the real option value as a percentage of market value is much higher. In general, we want to pay as little as possible for real options. By definition, they could end up completely worthless. If 25% of the stock’s current valuation is explained by real options, that’s a potential permanent capital impairment from which it could take years to recover. If real options constitute 80% or more of the valuation, as they may for, say, GameStop, that loss may never be recouped.

The good news is that there are still a lot of investments with current cash flows and asset value at attractive prices in the market. Some of these may be less available in a broad index, investing in which has meant more and more taking significant risk on stocks whose value is inflated by high option valuations. An active approach, however, should be more capable of identifying these investments whose relative value is not apparent at the moment, but will show through in the long run.

About the Authors



Albert Grosman

Managing Director, Portfolio Manager

- 28 years of investment industry experience
- Joined a predecessor organization in 2007
- MBA from Columbia Business School
- BBA in Business Administration from Emory University



Brian Lund, CFA

Managing Director, Portfolio Manager

- 21 years of investment industry experience
- Joined a predecessor organization in 2004
- MA in Latin from the University of North Carolina at Chapel Hill
- BA in Greek and Latin from the University of Minnesota



Erich Frey, CFA

Director, Portfolio Analyst

- 16 years of investment industry experience
- Joined a predecessor organization in 2005
- BS in Business Administration and Psychology from Washington and Lee University

ClearBridge Investments

620 Eighth Avenue, New York, NY 10018 | 800 691 6960 | ClearBridge.com