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Weighted Average Cost of Capital (WACC) Update

As part of our rigorous commitment to providing the best valuation models and investment research, we are constantly reviewing and updating our processes, methodologies and analytics. We recently discovered an opportunity to improve upon our cost of capital (<u>WACC</u>) calculations for the 5,000+ models we manage for clients.

This report explains the update and details the impact it has on our models and investment ratings as we aim to continue to be as <u>transparent as possible</u> about our methodologies and models.

What Is WACC?

WACC represents the weighted average of the costs of all external funding sources for a company. These costs either come from interest payments on debt or the return that shareholders expect in order to be compensated for the risk they take.

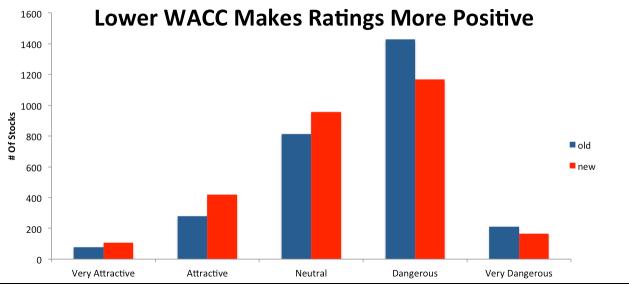
WACC is a vital metric because it serves as the hurdle rate for Return on Invested Capital (ROIC). A company must earn an ROIC greater than its WACC in order to generate positive economics earnings for investors.

WACC also serves as the denominator in our calculation of Economic Book Value (<u>EBV</u>). When WACC goes down, EBV goes up, and vice versa.

The Impact on our Models

Figure 1 shows how our change in our WACC calculation impacts our ratings. The change to the methodology, which will be discussed more below, lowers WACC by ~1.25% on average for companies we cover. As a result, economic earnings and EBV for these companies improves, and our ratings become more positive as a whole.

Figure 1: Ratings Distribution: Old WACC Vs. Updated WACC



Sources: New Constructs, LLC and company filings.

What's Changed?

We have identified a better, more market-based source for the company credit ratings we use to calculate a company's debt spread. The debt spread is the excess interest burden a company faces to take on debt versus the risk-free rate. Our updated calculation of the debt spread matches a company's credit rating to the yield on an index of similarly rated corporate bonds.



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This change in credit ratings helps our debt spread calculation to better reflect the real market environment for borrowing in a number of ways:

- We get market-driven updates for credit ratings monthly instead of quarterly.
- The new credit ratings provide more granularity for more precise tracking of the cost of borrowing for companies with different ratings.
- More transparency in the market rates for the debt of non-investment grade companies means more accurate borrowing costs for our models.

To align it with the new credit rates and, we've also changed our benchmark for the risk-free rate. Before, we used the yield on the 30-year Treasury Bond. Now, we will use the yield on 5-year zero-coupon Treasury STRIPS, which tends to be significantly lower.

How The Changes Impact Your Portfolio

Most customers should expect to see a slight ratings improvement for their stocks. For instance, anyone who has Johnson & Johnson (JNJ) in their portfolio will see it upgraded from Attractive to Very Attractive. The 1.25% decrease in JNJ's WACC has increased its EBV and made the valuation more appealing.

On the other hand, there are a few stocks that have been downgraded due to their updated WACCs. For instance, Taubman Centers (TCO) sees its rating bumped down from Neutral to Dangerous. Our new credit rating data increased TCO's WACC from 6.91% to 7.55%, making the stock slightly more expensive and its economic earnings lower.

Any stock whose rating is impacted by the WACC update will have an Upgraded/Downgraded notification with "Cause: Updated WACC" in the Analyst Notes column of the Stock Screener and My Portfolio page.

When You Will See the Change: Friday, December 16

The changes described above will appear on our site the morning of Friday, December 16. Affected companies will be marked with the Analyst Note "Updated WACC." For more information on this Analyst Note, along with all other Analyst Notes, click here.

This article originally published here on December 16, 2016.

Disclosure: David Trainer, Lindsay Bohannon, and Sam McBride receive no compensation to write about any specific stock, sector, style, or theme.



New Constructs® - Profile

How New Constructs Creates Value for Clients

We find it. You benefit. Cutting-edge technology enables us to scale our <u>forensic accounting</u> <u>expertise</u> across 3000+ stocks. We shine a light in the dark corners of SEC filings so our clients can make safer, more informed decisions.

Our <u>stock rating methodology</u> instantly informs you of the quality of the business and the fairness of the stock's valuation. We do the diligence on earnings quality and valuation so you don't have to.

In-depth risk/reward analysis underpins our ratings. Our rating methodology grades every stock, ETF, and mutual fund according to what we believe are the 5 most important criteria for assessing the quality of an equity. Each grade reflects the balance of potential risk and reward of buying that equity. Our analysis results in the 5 ratings described below. Very Attractive and Attractive correspond to a "Buy" rating, Very Dangerous and Dangerous correspond to a "Sell" rating, while Neutral corresponds to a "Hold" rating.

QUESTION: Why shouldn't fund research be as good as stock research? Why should fund investors rely on backward-looking price trends?

ANSWER: They should not.

Don't judge a fund by its cover. Take a look inside at its holdings and understand the quality of earnings and valuation of the stocks it holds. We enable you to choose the best fund based on its stock-picking merits so you do not have to rely solely on backward-looking technical metrics.

The drivers of our <u>forward-looking fund ratings</u> are Portfolio Management (i.e. the aggregated ratings of its holdings) and Total Annual Costs. The Total Annual Costs Rating (<u>details here</u>) captures the all-in cost of being in a fund over a 3-year holding period, the average period for all fund investors.

Our Philosophy About Research

Accounting data is not designed for equity investors, but for debt investors. Accounting data must be translated into economic earnings to understand the profitability and valuation relevant to equity investors. Respected investors (e.g. Adam Smith, Warren Buffett and Ben Graham) have repeatedly emphasized that accounting results should not be used to value stocks. Economic earnings are what matter because they are:

- 1. Based on the complete set of financial information available.
- 2. Standard for all companies.
- 3. A more accurate representation of the true underlying cash flows of the business.

Additional Information

Incorporated in July 2002, New Constructs is an independent publisher of investment research that provides clients with consulting and research services. We specialize in quality-of-earnings, forensic accounting and discounted cash flow valuation analyses for all U.S. public companies. We translate accounting data from 10Ks into economic financial statements, i.e. NOPAT, Invested Capital, and WACC, to create economic earnings models, which are necessary to understand the true profitability and valuation of companies. Visit the Free Archive to download samples of our research. New Constructs is a BBB accredited business and a member of the Investorside Research Association.



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