



**VALUATION DIVIDEND**  
12/31/2018



**APPLIED FINANCE**  
CAPITAL MANAGEMENT

Too often advisors and consultants evaluate equity managers based on their 1, 3, 5 year performance. Research shows making decisions on short term return data more often than not leads to consistent under-performance\*. Since stock returns are very volatile, it may take strategies more than 5 years to fully play out and exploit sustainable excess returns. The most reliable manner to outperform for your clients in the long run is to identify investment managers that consistently employ a sustainable and repeatable process grounded in sound economic theory that has successfully outperformed its benchmark over the long term.

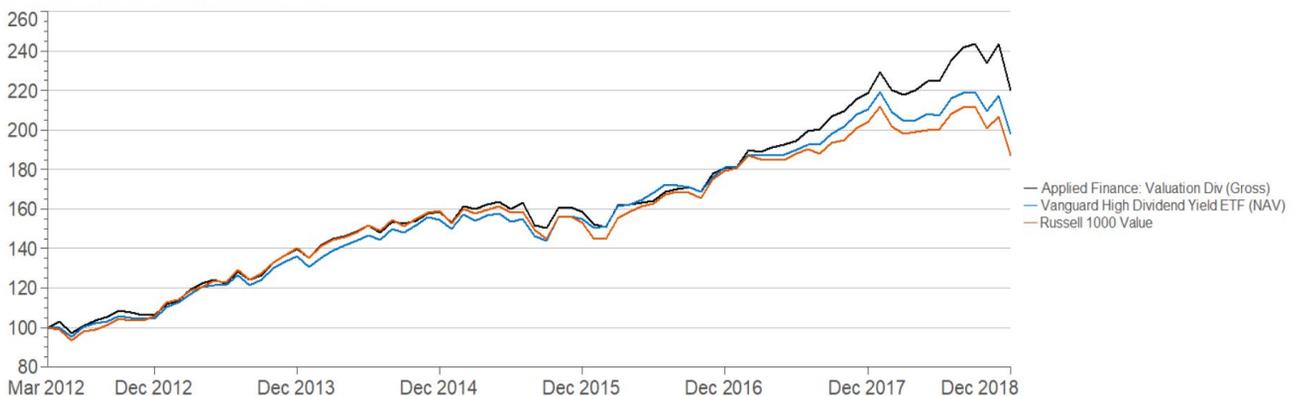
### Valuation Dividend Strategy

- ▲ Objectives
  - Alpha
  - Risk Mitigation
  - Tax Efficiency
- ▲ Selection Universe: Russell 1000
- ▲ Diversified 25-35 Holdings
- ▲ Average Yield: 3.09%
- ▲ Stocks Equal Weighted
- ▲ Quarterly Rebalanced
- ▲ Low Annual Turnover
  - Since Inception: 14%

Since 1995, Applied Finance has been a global thought leader on equity valuation and portfolio construction grounded in utilizing a valuation approach rather than common price multiple value metrics. Having performed over 20,000,000 company specific valuations, Applied Finance understands the necessary properties and process to invest with a long-term perspective to allow markets to uncover the “valuation gap” over time. In 2012 Applied Finance constructed its Valuation Dividend portfolio with the primary goals to outperform the Russell 1000 Value index with a more competitive dividend yield and annual turnovers of less than 20%. While we do not believe in selling performance, we are proud of having met our goals during the past 8 years.

### Applied Finance Valuation HD vs Russell 1000 Value Performance

April 2012 - December 2018 (Single Computation)



Sources: Morningstar and Zephyr

Our best clients have always been informed clients. The reason is simple, over any given time period, anything can happen performance wise, however they know the Valuation HD construction process is unique, rigorous, repeatable, and sustainable. Built on a time-tested framework, the Valuation HD should deliver outstanding results over the long-term and provide you the tools to have meaningful and successful client meetings.

\*The Folly of Hiring Winners and Firing Losers: Rob Arnott Vitali Kalesnik Lillian Wu September 2017

## “Value” is not Valuation

A ratio such as P/E, P/B, or any other multiple does not begin to capture the richness required to understand intrinsic value, which necessitates understanding:

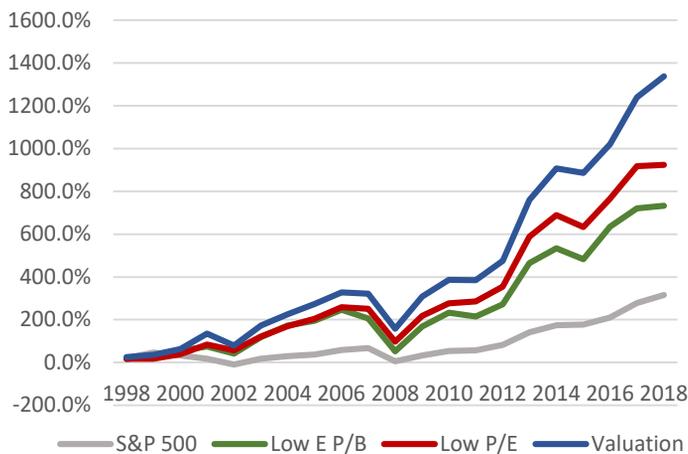
- Risk
- Growth
- Competition
- Economic Profitability

Applied Finance has completed over 20,000,000 valuations, consistently identifying securities trading above or below their intrinsic value.

In 1995, the partners of Applied Finance created the Economic Margin Framework, which fundamentally changed equity analysis and valuation. Instead of relying on distorted, noisy as-reported accounting data, Applied Finance systematically reconstructs income statements and balance sheets for over 20,000 companies globally to address issues such as: Inflation, R&D, Asset Intensity, Asset Age, Off Balance Sheet Assets and Liabilities, among many others. Similarly, Applied Finance redesigned the process to value equities globally.

Furthermore, by not using unrealistic perpetuity value calculations, or simple ratios to determine intrinsic value, Applied Finance pioneered the use of incorporating established economic theory of competing away excess returns to properly estimate a firm's intrinsic value.

### Applied Finance Valuation vs P/E and P/B



Source: Applied Finance Research Database

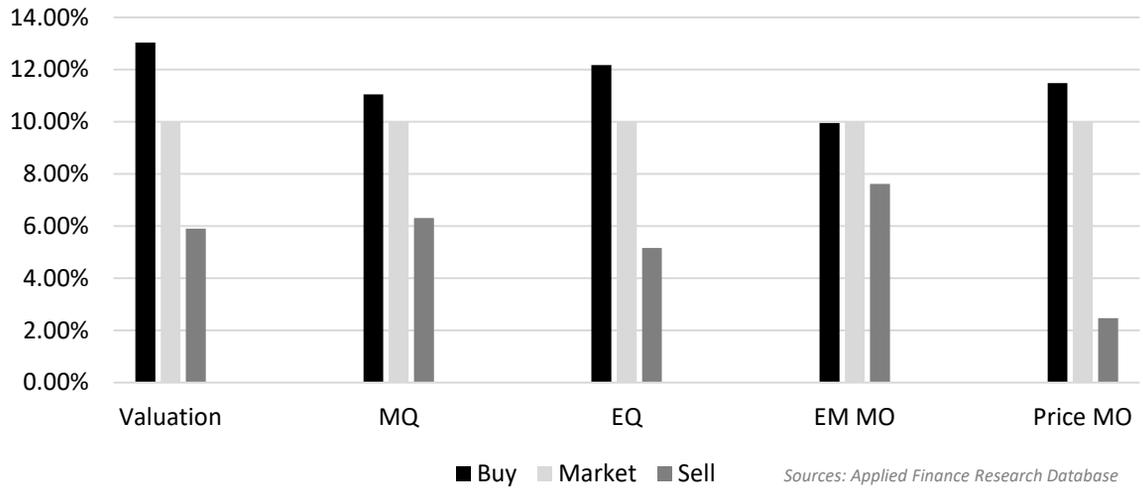
Figure 2. Ratio based estimates of value, tend to outperform the market as documented by Fama/French and many other academics. However, such approaches are poor proxies for understanding a firm's true intrinsic value and identifying the best market opportunities based on deviations from such a metric. Applied Finance's extensive live database allows our research team to thoroughly test and understand the performance of our intrinsic value estimates compared to the common "value" estimators such as P/E and P/B used by most investment managers. From a performance standpoint, there is no comparison, as Applied Finance's intrinsic value estimates dominate traditional ratio based "value" approaches. Even proprietary ratios will likely fall short, as valuation is not a simple division, but a complex model incorporating risk, growth, competition, and economic return.

What ultimately sets the Applied Finance approach apart from any other is how it explicitly links a firm's corporate performance to its estimated intrinsic value. Making valuation useful is a key competitive advantage Applied Finance has over all other investment managers. Since 1995, our team has performed over 20,000,000 valuations and that experience shows as we compare the performance of our intrinsic value estimators versus other common approaches, such as P/E and P/B ratios.

# VALUATION DRIVEN INVESTING

Applied Finance created a process to construct portfolios called Valuation Driven Investing. Valuation Driven Investing begins and ends with calculating the intrinsic value of every stock in a benchmark against which a portfolio is constructed, and comparing those values against traded prices. The undervalued securities identified from this process are then evaluated on the basis of additional proprietary Applied Finance metrics and/or an analyst team to determine the securities most likely to outperform the benchmark. In addition to valuation, Applied Finance has identified Management Quality, Earnings Quality, Operating Momentum, and Price Momentum as additional important factors to explain future stock returns.

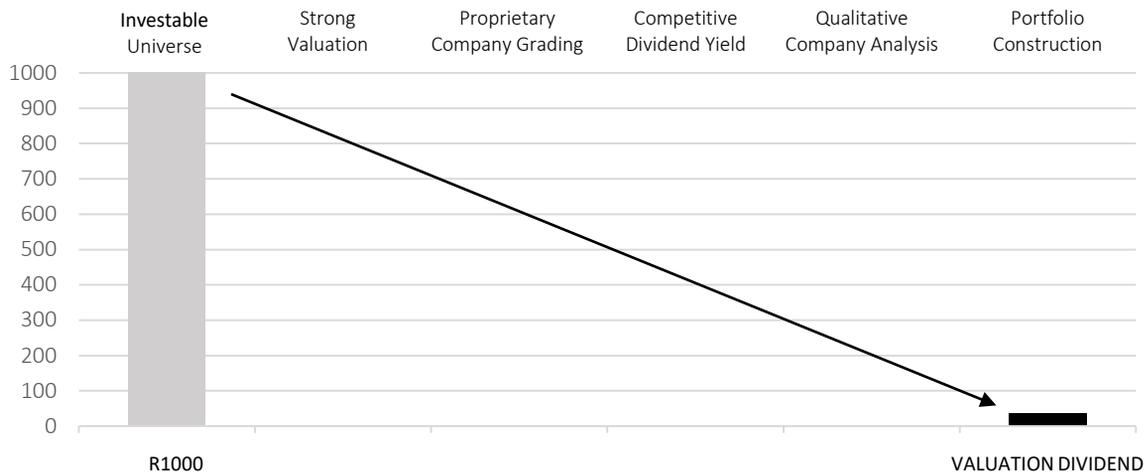
Applied Finance Variable Analysis R1000 1998-2018



\*Annualized Returns 9/30/98 - 11/30/18 Market Column reflects Equal Weighted S&P 500 Returns

The Valuation HD is an equal weighted portfolio consisting of undervalued, high quality companies with competitive dividend yield and low annual turnover rates.

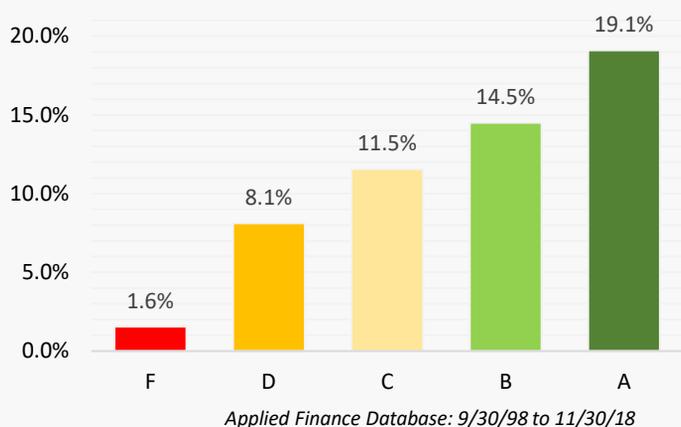
Applied Finance Valuation HD Selection Process



## Applied Finance Company Grade

Applied Finance uses proprietary non-correlated factors that are weighted into a multi factor Company Grade Model which helps to avoid any analyst bias and eliminates the task of trying to find new ideas to include in the strategy.

## All CAP COMPANY GRADE ANNUALIZED RETURNS



**Economic Performance:** Applied Finance first step is to recast a company's financial information into an economic metric called Economic Margin. Economic Margin is a cash flow based measure that measures the return a company earns above or below its cost of capital and provides a more complete view of a company's underlying economic vitality.

**Intrinsic Valuation:** When buying a company, investors are paying for existing assets and the company's future expected performance. Traditional models that lock into perpetuity are making the assumption that a company's performance will stay constant forever without facing the effects of competition. However research shows perpetuity is not economic reality. Traditional models also do not take into account the concept of sustainable growth – the rate at which a company can grow based on its internally generated cash flow less investments required to maintain and replace its asset base. Applied Finance robust methodology combines all 3 factors, economic margin, fade and sustainable growth, to calculate its intrinsic value.

**Management Quality:** Absent a management team that understands how to create shareholder value, a "cheap stock" is likely to get cheaper. Applied Finance scores each company's management team on how its strategy links with its economic reality. Wealth creating firms should focus on growing, while firms that destroy wealth should divest and identify core competencies. This process is designed to flag firms that appear financially unstable well in advance of their bankruptcies.

**Earnings Quality:** Companies have an amazing degree of latitude in preparing their financial statements. As a result, a dollar of net income may not represent a dollar of cash flow. Applied Finance scores the quality of each company's earnings to determine which are or are not sustainable into the future.

**Momentum:** Applied Finance utilizes both Price and Profit Momentum to invest in companies that are not only undervalued based on intrinsic valuation but also have favorable economic earnings revisions and price movement. Applied Finance's Profit Momentum translates earnings revisions into economic earnings revisions. Applied Finance's Price Momentum is based on historical price movement in the company's stock.

A particularly important feature of the Valuation HD for tax-conscious investors is the low annual turnover the strategy has maintained since its inception, helping to defer and minimize taxable gains for the investors. In addition to tax efficiency, the portfolio's low turnover allows the Valuation HD to harness time arbitrage and close the valuation gap between intrinsic value and traded prices. But just as important to note, is the high degree of conviction Applied Finance has in the securities it selects for the Valuation HD portfolio, so the low turnover outcome can be achieved. This again is attributable to the rigorous process Applied Finance employs to identify and select the securities which make up the Valuation HD.

- 30 trades since inception.
- 7 trades are net additions (2013).
- 2 trades are due to holdings being acquired.
- Average of 3 trades a year or less than 10% annual turnover in the last 3 years.

## Valuation Dividend Selection Process

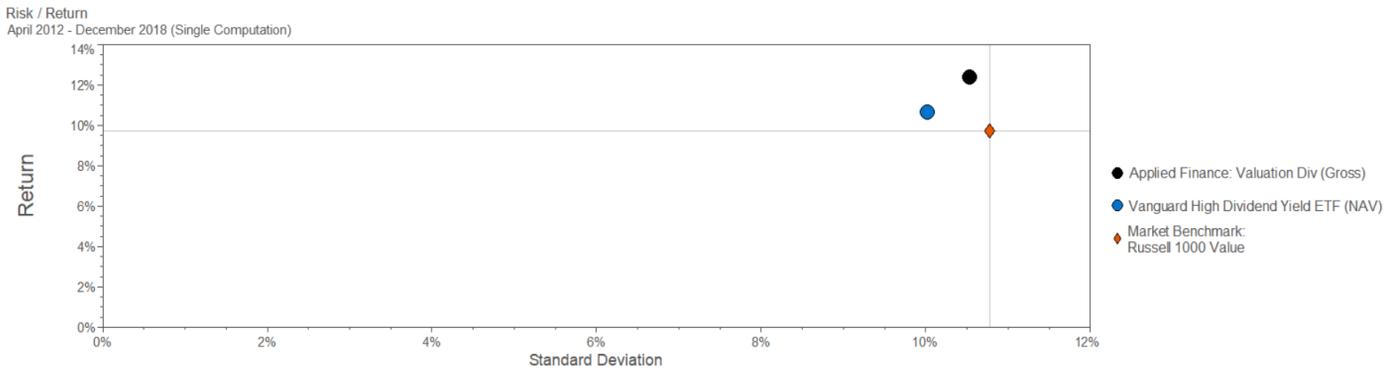


With a dedicated process for buying and selling companies that are part of the Valuation HD portfolio, our analysts are able to spend their time understanding the drivers steering the long-term valuation of a holding and less time looking for the next “hot stock” to get their investors excited.

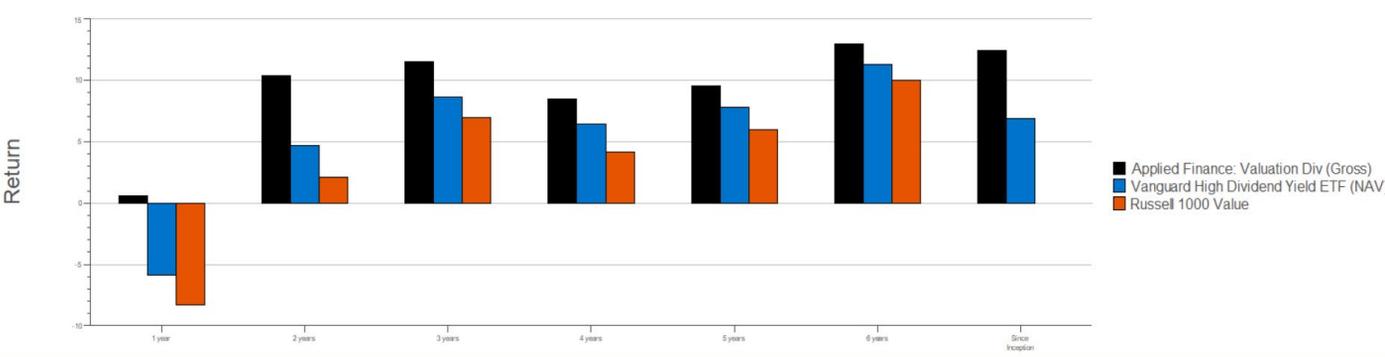
# VALUATION HD CHARACTERISITICS

Feature	Benefit
25-35 Holdings	Sufficient number of stocks for effective diversification
Across All Sectors	No excessive sector concentration
Equal Weigh Each Stock	Focus on owning diversified exposure to attractive valuation and yield
Quarterly Rebalancing	Stay close to weighting discipline, risk mitigation
Discretionary Turnover <= 20%	Save transaction cost, maximize tax efficiency, harness time arbitrage

## Comparing the Valuation HD Risk / Returns Characteristics



## Valuation Dividend Performance



Manager vs Benchmark Return  
April 2012 - December 2018 (not annualized if less than 1 year)

	1 year	2 years	3 years	4 years	5 years	6 years	Since Inception
Applied Finance: Valuation Div (Gross)	0.61%	10.41%	11.50%	8.51%	9.52%	12.95%	12.39%
Vanguard High Dividend Yield ETF (NAV)	-5.87%	4.68%	8.60%	6.47%	7.83%	11.28%	6.89%
Russell 1000 Value	-8.27%	2.11%	6.95%	4.15%	5.95%	9.98%	N/A

Sources: Morningstar and Zephyr

*Disclaimers:*

*Applied Finance refers to Applied Finance Capital Management and its Affiliated Companies.*

*The Valuation Dividend is a model portfolio designed to track the performance of a basket of stocks selected by Applied Finance. The Valuation Dividend is a copyrighted product of Applied Finance, and may not be reproduced or used in any manner whatsoever without the prior express, written consent of Applied Finance.*

*Performance numbers represent past performance and may not be indicative of future returns. Performance assumes reinvestment of all dividends and capital gains.*

*References to stocks held in the Valuation Dividend are for informational purposes only and do not constitute and offer to buy or sell any security.*

*The information and data contained in this presentation were obtained from sources deemed to be reliable, but Applied Finance makes no guarantee as to the accuracy or completeness of any such information or data.*