

THE EVOLUTION OF VALUE INVESTING: FROM BUFFETT TO INTELLIGENT MACHINES

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[Warren Buffett epitomizes the notion of value investing.](#) With a net worth of approximately \$100 billion, he attributes much of his success to the foundational investment methods learned while studying under Benjamin Graham, the “father of value investing.” With methodologies proven to stand the test of time, [value](#) investing has sheltered the storm of the 1970s [inflation](#), the burst of the tech bubble of the early 2000s, the great financial crises a couple of years later and most recently, the coronavirus pandemic.

With so much historical success, why has value investing lagged growth over the last decade? Why has Buffett been so successful, yet the greater population of value investors struggled to outperform? The next evolution of value investing may hold the answer. By augmenting human intelligence with machine intelligence, a level of expertise like that of Buffett and Graham may be repeated or exceeded through the revolutionary technology of artificial intelligence (AI). AI toppled the chess grandmaster Garry Kasparov in 1997 and has come to surpass human capabilities in a plethora of tasks in the 20 years since. Time has come for AI to compete with the great financiers of our time.

Introducing the WisdomTree AI Enhanced Value Family

Through collaboration between Voya and WisdomTree, the next evolution of the value fund is now made accessible to the public markets.

The [WisdomTree U.S. AI Enhanced Value Fund \(ticker AIVL\)](#) and the [WisdomTree International AI Enhanced Value Fund \(ticker AIVI\)](#)¹ seek to offer uncorrelated returns streams from the value universe by leveraging the expertise of the Voya Equity Machine Intelligence (EMI) team and their fundamentally driven machine learning approach.

The EMI model approaches value investing dynamically to avoid narrow style biases that may be out of favor, while still providing value exposure across equities. The strategy seeks to capitalize on short- and long-term investment opportunities—in an effort to deliver the virtue of patience and agility, acting quickly and decisively when opportunities arise.

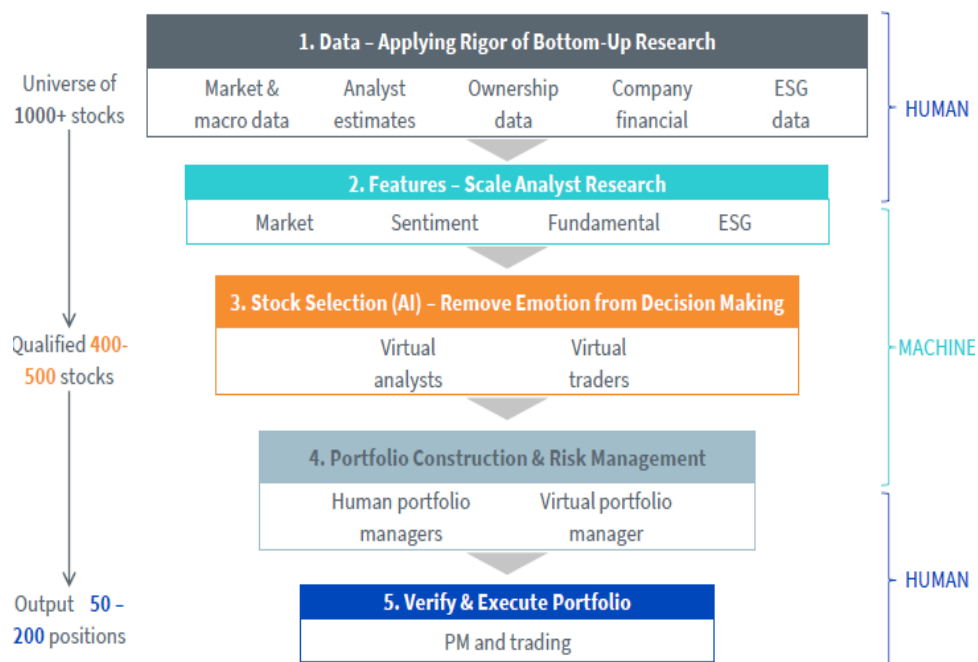
Collaborating across WisdomTree, Voya’s EMI team and the greater Voya Quantitative Equities group, the WisdomTree Enhanced Value Family has the support of a diverse team of individuals with the financial and technical expertise to offer a world class investment product.

The Strategy

Each Fund’s strategy consists of five stages with varying degrees of involvement between human and machine—something the EMI team calls ‘human in the loop’.

This concept emphasizes that the strategy not only is driven by AI, but also has the proper human intervention and oversight to seek to ensure robust security selection and risk management.

The Investment Process



Source: Voya Investment Management

The first step in the process consists of aggregating 10,000+ data points for each company over a 20-year history. Then, these data points are ‘feature engineered’ by human experts to provide a more insightful view of the company versus its peers, the entire stock universe or its own historical characteristics.

The result of this step is approximately 250 features spanning company financials, macro indicators and company sentiment. Trained on 20 years of these historical features, the virtual analysts (the true AI) identify companies for inclusion in the portfolio based on learned patterns.

But not all are automatically bought—these initial selections are passed on to virtual traders that focus on shorter-term indicators, identifying proper entry and exit timing, as well as any risk events that may necessitate a reduced weight. An example of this might be negative news sentiment prior to earnings, where virtual traders may de-risk prior to earnings announcements, then add back to the position after, if the virtual analyst still ‘likes’ the company medium to long term.

After being deemed a good and timely investment by both the virtual analyst and virtual traders, these proposed trades are passed on to the virtual and human portfolio managers for review before being executed by the human portfolio management and trading team at Voya.

The Strategy in Action

The virtual traders use machine learning to identify dynamic ‘rules’ and patterns for defining value at the company level, and use this information for security selection.

The hypothetical example below demonstrates the logic derived from the continuous learning of the model. The actual entry and exit points are determined by the virtual traders (with human oversight), but one can begin to understand how security selection is made based upon the subset of features listed below – industry group, return on invested capital, governance percentile, and value vs. peers, among others.

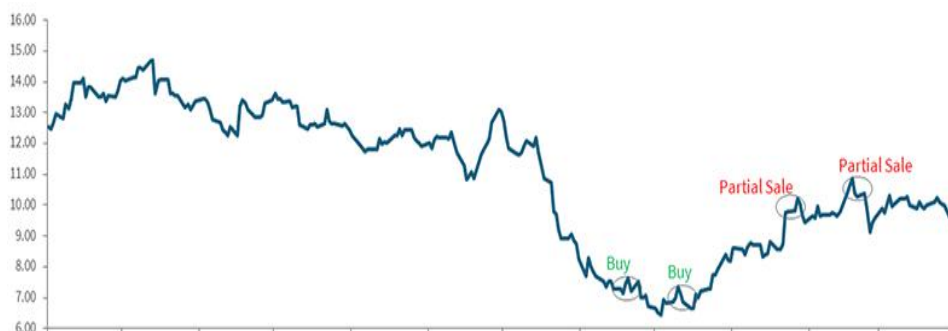
Stylized Security Selection Example



Source: Voya Investment Management. For illustrative purposes only. Hypothetical examples intended to illustrate the objective of the trading methodology. Not representative of a real investment or trading history and there is no guarantee the fund will be successful in identifying success trades.

When the model identifies positive characteristics indicating a buying opportunity: such as cheap financial valuation metrics relative to peers and history, market sentiment indicating rebound, and positive technical indicators, the model enters a position in the particular company. As the model continually ingests new information and tracks the features representing the changing market conditions and dynamics of the company, it determines the best time to begin taking profits. In doing so, the model seeks to capitalize on these asymmetric risk/reward patterns.

Asymmetric Risk/Reward Pattern



Example of Asymmetric Risk/Reward Pattern. Sources: Fact Set, Voya Investment Management. For illustrative purposes only.

Fitting AI Enhanced Value in a Portfolio

The WisdomTree AI Enhanced Value Family seeks to provide an actively managed value strategy with varying value characteristics designed to avoid [drawdowns](#) in single metrics. Its fundamentally driven machine learning approach allows for the EMI model to lean into more performant value metrics, dynamically adjusting as the model continues to learn from new data. We believe the strategy is a good fit for investors' allocations to mid- and large-capitalization value stocks. With the strategy focusing on companies in the tails of the distribution, it aims to deliver strong idiosyncratic alpha and may perform best in a market driven by fundamentals.

The WisdomTree AI Enhanced Value Family

To offer investors access to a more dynamic definition of value, WisdomTree and Voya created the WisdomTree AI Enhanced Value Family. With diversified exposure to what we believe to be the most value-centric equity investment opportunities, [AIVL](#) and [AIVI](#) can be an option within a portfolio's large and mid- cap value allocation.

¹ [WisdomTree U.S. AI Enhanced Value Fund \(AIVL\)](#) was formerly the WisdomTree U.S. Dividend ex-Financials Fund (DTN). WisdomTree International [AI Enhanced Value Fund \(AIVI\)](#) was formerly the WisdomTree International Dividend ex-Financials Fund (DOO).

Important Risks Related to this Article

AIVL: There are risks associated with investing, including possible loss of principal. Funds focusing their investments on certain sectors increase their vulnerability to any single economic or regulatory development. This may result in greater

share price volatility. While the Fund is actively managed, the Fund's investment process is expected to be heavily dependent on a quantitative model and the model may not perform as intended. Please read the Fund's prospectus for specific details regarding the Fund's risk profile.

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Value stocks, as a group, may be out of favor with the market and unperformed growth stocks or the overall equity market, in addition value stocks may not realize their perceived intrinsic value for extended periods of time or may never realize their perceived intrinsic value.

For standardized performance and the most recent month-end performance click [here](#) NOTE, this material is intended for electronic use only. Individuals who intend to print and physically deliver to an investor must print the monthly performance report to accompany this blog.

Related Funds

+ [WisdomTree International AI Enhanced Value Fund](#)

+ [WisdomTree U.S. AI Enhanced Value Fund](#)

View the online version of this article [here](#).

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U.S. investors only: Click [here](#) to obtain a WisdomTree ETF prospectus which contains investment objectives, risks, charges, expenses, and other information; read and consider carefully before investing.

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You cannot invest directly in an index.

DEFINITIONS

Value : Characterized by lower price levels relative to fundamentals, such as earnings or dividends. Prices are lower because investors are less certain of the performance of these fundamentals in the future. This term is also related to the Value Factor, which associates these stock characteristics with excess returns vs the market over time.

Inflation : Characterized by rising price levels.

Drawdowns : Periods of sustained negative trends of return.