WHY DOES WISDOMTREE SELECT AND WEIGHT BY INCOME?

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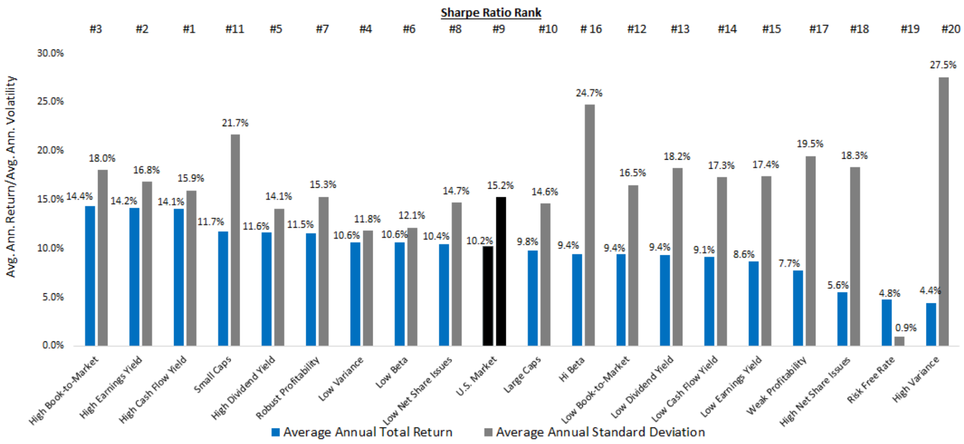
Over a decade ago, we challenged conventional investment philosophy by launching passive Indexes that selected and weighted companies by income rather than market capitalization. The approach held out the potential to generate passive alpha while maintaining broad exposure to major U.S. asset classes. WisdomTree largely succeeded in its mission, as shown by the 10-year performance of both its dividend-weighted Index suite and its earnings-weighted Index suite.

With so many factors available to be used, we are often asked how we had the foresight to use dividends or earnings as the cornerstone of our investment methodology. While there are many reasons, such as the intuitiveness of using income to measure a company's financial health, there is also an academic rationale for why earnings and dividends work so well.

The chart below shows various Eugene Fama and Kenneth French portfolios going back over 50 years. For example, the High Book-to-Market Portfolio represents a basket of stocks, chosen from a universe consisting of the NYSE, AMEX and NASDAQ, in which the top 20% (or top quintile) of companies ranked by high book-to-market are selected, rebalanced annually and weighted by their market value. If one just looked at the portfolios to the left of the U.S. market (in black) and then looked at the portfolios to the right, the efficacy of selecting companies by attractive fundamentals becomes apparent. The more attractive quintile of each fundamental beat the market over the last half century, while the less attractive quintile underperformed the market.

Fama and French Portfolios, 1963–2017



Sources: WisdomTree, Kenneth French Data Library, 6/30/1963–3/31/2017. Portfolios used represent the highest or lowest 20% of stocks based on the chosen fundamental. Risk Free Rate represents the 1-Month Treasury Bill.

The High Earnings Yield Portfolio, also known as a low Price-to-Earnings Portfolio, outperformed the broad U.S. Market by 4% per year since 1963. The High Dividend Yield Portfolio, while outperforming the market by a smaller (but still impressive) 1.4%, did so with over 1% less annualized volatility than the market.

Breaking Down Factor Exposures Over Time

Ultimately, one of the best ways to gauge risk-adjusted returns is the Sharpe Ratio. For this reason, we chose the top five portfolios by their Sharpe Ratio over this period, and we ran regressions against the Fama and French five-factor model to help answer the question: "How did they do it?"

	Five Factor Model Regressions, 1963–2017				
Fama and French Portfolios	Mkt-RF (Beta)	SMB (Size)	HML (Value)	RMW (Quality)	CMA (Investment)
High Cash Flow Yield	0.98	0.15	0.60	0.16	-0.13
High Earnings Yield	1.03	0.18	0.71	0.20	-0.28
High Book-to-Market	1.07	0.26	0.83	-0.13	-0.17
Low Variance	0.80	-0.13	0.13	0.27	0.21
High Dividend Yield	0.85	-0.03	0.60	0.13	0.11

Sources: WisdomTree, Kenneth French Data Library, for the period 6/30/1963–3/31/2017. Portfolios used represent the highest or lowest 20% of stocks based on the chosen characteristic. Mkt-Rf: Represents the market equity risk premium SMB: Premium representing Small companies Minus Big companies HML: Premium representing High book-to-market companies Minus Low book-to-market companies RMW: Premium representing Robust operating profitability companies Minus Weak operating profitability companies CMA: Premium representing Conservative investing companies Minus Aggressively investing companies

The High Book-to-Market Portfolio posted the highest returns but also the highest volatility of these five portfolios (measured by both its beta in the table and its standard deviation in the first chart). This can be partially explained by its .26 loading to the size factor, or smaller capitalization companies over time. It also loads highest to the value factor, which should be expected, because the value premium used in the regression is also formed by measures of book-to-market. Interestingly, we noticed that the High Book-To-Market Portfolio, while potent, lacked a positive loading to the quality factor. The four remaining portfolios, however, all shared a common theme: positive loadings to both value and quality.

Given this likeness, there are also some interesting reciprocities among the remaining four portfolios:

- The High Earnings Yield Portfolio and Low Variance (Low Volatility) Portfolio both had high positive loadings to the quality factor, but the High Earnings Yield Portfolio loaded meaningfully higher to value, and the Low Variance Portfolio loaded lower to beta.
- The High Dividend Yield Portfolio managed to have a value loading approaching the High Earnings Yield Portfolio, maintained a low beta exposure like that of the Low Variance Portfolio, and still loaded positively to the quality factor, though to a lesser extent.

Conclusion

One reason this post did not focus specifically on our Indexes and how they are built is because their methodologies can be described in one sentence: we select virtually all companies by either dividends or earnings, and weight them by their share of aggregate dividends or earnings. This provides broad diversified exposure that moves very much in line with the market but does it while tapping into proven sources of excess return and providing the potential for better risk-adjusted returns.

Using Fama and French portfolios, we observed how earnings tapped into value and quality, and how dividends, with similar but different exposures, also tapped into value and quality, while also reducing volatility, as measured by a lower beta. WisdomTree also takes it another step further, limiting the market-cap size of certain Index offerings, thus introducing the size factor into the equation. All of WisdomTree's core dividend-weighted and earnings-weighted Indexes have been tracked by an investable exchange-traded fund for more than a decade, generating a historical track record of what multifactor exposure looks like in real-time over a full decade.

We are aware that dividends and earnings do not capture every factor, such as momentum, but we continue to believe they can act as the bedrock of a strategic multifactor approach in the core of one's portfolio.

[1]We'd like to note that High Earnings Yield and High Cash Flow Yield are very similar both on a return and volatility basis, and based on their factor loadings over time. They are also philosophically similar in the fundamental used to select stocks. For the purposes of this post, we will be focusing on the High Earnings Yield Portfolio.

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DEFINITIONS

Passive : Indexes that take a rules-based approach with regular rebalancing schedules that are not changed due to market conditions.

Market Capitalization : Market cap = share prices x number of shares outstanding. Firms with the highest values receive the highest weights in approaches designed to weight firms by market cap.

Alpha : Can be discussed as both risk-adjusted excess return relative to a specific benchmark, or absolute excess return relative to a benchmark. It is sometimes more generally referred to as excess returns in general.

Dividend : A portion of corporate profits paid out to shareholders.

Earnings-weighted : Earnings for all constituents in an index are added together, and individual constituents are subsequently weighted by their proportional contribution to that total.

Book-to-Market Value Ratios : a ratio used to find the value of a company by comparing the book value of a firm to its market valu.

Rebalance : An index is created by applying a certain set of selection and weighting rules at a certain frequency. WisdomTree rebalances, or re-applies its rules based selection and weighting process on an annual basis.

Earnings yield : The earnings per share for the most recent 12-month period divided by the current market price per share. The earnings yield (which is the inverse of the P/E ratio) shows the percentage of each dollar invested in the stock that was earned by the company.

Price-to-earnings (P/E) ratio : Share price divided by earnings per share. Lower numbers indicate an ability to access greater amounts of earnings per dollar invested.

Dividend yield : A financial ratio that shows how much a company pays out in dividends each year relative to its share price.

Volatility : A measure of the dispersion of actual returns around a particular average level. .

Risk-adjusted returns : Returns measured in relation to their own variability. High returns with a high level of risk indicate a lower probability that actual returns were close to average returns. High returns with a low level of risk would be more desirable, as they indicate a higher probability that actual returns were close to average returns.

Sharpe ratio : Measure of risk-adjusted return. Higher values indicate greater return per unit of risk, specifically standard deviation, which is viewed as being desirable.

Regression analysis : statistical process for estimating the relationships among variables. It helps one understand how the typical value of the dependent variable (Y- variable) changes when any one of the independent variables is varied, while the other independent variables are held fixed.

Beta : A measure of the volatility of a security or a portfolio in comparison to a benchmark. In general, a beta less than 1 indicates that the investment is less volatile than the benchmark, while a beta more than 1 indicates that the investment is more volatile than the benchmark.

Standard deviation : measure of how widely an investment or investment strategy’s returns move relative to its average returns for an observed period. A higher value implies more “risk”, in that there is more of a chance the actual return observed is farther away from the average return.