

**WisdomTree  
RESEARCH**

# **THE DIVIDENDS OF A DIVIDEND APPROACH**

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In the past two decades, exchange-traded funds (ETFs) have exploded onto the investment scene. New exchange traded products are coming to the market all the time—there were more than 250 listed during the 2016 calendar year.<sup>1</sup> And although ETFs currently represent a much smaller piece of the investment pie than mutual funds, they are growing rapidly. And they are growing at the expense of mutual funds.

Today, the over 1900 ETFs that trade in the U.S. marketplace target a wide array of regions, sectors, commodities, bonds, futures and other asset classes.<sup>2</sup> Their numerous benefits—including easy diversification, low fees, tax efficiency and daily transparency of holdings<sup>3</sup>—have helped this newer investment vehicle to flourish.

As the ETF market grows, even more variety in product structures will likely follow. What all this could mean is that "passive versus active" may no longer be as meaningful an argument as it once was. The more critical debate for index investors may be: What is the best way to index?

### THE EFFICIENT MARKET?

The very first ETF—and the majority of those that have followed—was based on market capitalization-weighted indexes. These indexes weight their individual components by their stock market capitalization (price per share times shares outstanding). While many academics and investment experts agree that price is not always the best estimate of a company's value, these indexes assume it is.

While the evidence certainly shows that indexing is a smart approach to investing, the question remains: Is cap-weighted indexing the best indexing method?

### The First Indexes

The Dow Jones Industrial Average was created in 1896. It featured 12 stocks and was price weighted<sup>4</sup>, for ease of calculation. In 1957, the S&P 500 Index was developed; it was the first market cap-weighted index. The innovation from price weighting to market cap weighting was achieved by multiplying the price by the shares outstanding. This was done to represent the average return of all stocks in the index and was supported by the "Efficient Market Hypothesis."

An important feature to note in both price-weighted indexes such as the Dow Jones Industrial Average and market cap-weighted indexes such as the S&P 500 is that they are specifically designed to have stocks ebb and flow in weight as their prices change. That is, stocks get more or less weight in the indexes as their prices go up or down—but there are no adjustment mechanisms to account for changes in relative value.

<sup>1</sup> Sources: Bloomberg, WisdomTree.

<sup>2</sup> Source: Bloomberg, WisdomTree, as of 12/31/16.

<sup>3</sup> Ordinary brokerage fees apply; diversification does not eliminate the risk of experiencing investment losses; daily holdings for WisdomTree ETFs are available at [wisdomtree.com](http://wisdomtree.com).

<sup>4</sup> An index in which component stocks are weighted by price. Higher-priced stocks therefore have a greater percentage impact on the index than lower-priced stocks.

The Efficient Market Hypothesis claims that the market price of any security is always the best unbiased estimate of its true underlying value (i.e., its "fundamental value") and that no other information that can be easily obtained will give a better estimate of the stock's fundamental value.

Taken a step further, this implies that capitalization-weighted indexes deliver the highest expected returns given any level of risk and the lowest possible risk for any given return—making them "mean-variance efficient."

In theory, mean-variance efficient portfolios offer the optimal risk/return ratio regardless of an investor's risk tolerance. So, if the Efficient Market Hypothesis holds, any portfolio that does not weight individual stocks by market capitalization will not be mean-variance efficient and will not have these desirable risk/return characteristics. But what if markets are not always efficient?

### THE NOISY MARKET HYPOTHESIS

While the Efficient Market Hypothesis has had tremendous influence in the finance profession, it is just one of several theories that seek to explain broad movements in stock prices. As with all theories, it is subject to challenge. There is persuasive evidence that markets are not always efficient and that stock prices can deviate from their fundamental values for many reasons. WisdomTree believes that stock price movements are better explained by a different hypothesis—the "Noisy Market Hypothesis."

Conventional wisdom has long recognized that prices of speculative assets experience periods of irrational bubbles and frenzies that cause their prices to deviate widely from their fair value. Consider that if traders, such as momentum traders, speculate on the basis of past price movements or are motivated by rumors or incomplete or inaccurate information, then the prices of individual stocks will not always be efficient. Furthermore, investors and institutions often buy or sell shares for reasons unrelated to the valuation of the respective firms, sometimes for liquidity, fiduciary, tax or even emotional reasons. Consequently, the prices realized on these trades are often not representative of the best, unbiased estimate of the fundamental value of the shares.

## MARKETS ARE SUSCEPTIBLE TO PRICING BUBBLES

Consider that it is all too easy for even the most prudent investors to become swept up in the emotions and excitement around certain market events—and these euphoric periods can easily create irrational bubbles in the market.

### Warren Buffet on Market Inefficiency

Warren Buffett made his case for stock market mispricing when he wrote in 1984:

*"I'm convinced that there is much inefficiency in the market...When the price of a stock can be influenced by a "herd" on Wall Street with prices set at the margin by the most emotional person, or the greediest person, or the most depressed person, it is hard to argue that the market always prices rationally. In fact, market prices are frequently nonsensical"*<sup>5</sup>

### Jeremy Siegel and the Tech Bubble

During the bubble of the late 1990s, technology stocks soared and their market values and weights in market capitalization-weighted indexes ballooned. In an op-ed piece published in *The Wall Street Journal* in March of 2000, Jeremy Siegel analyzed nine large-capitalization stocks with price-to-earnings ratios (P/E ratios) over 100<sup>6</sup>. At that time, the market capitalization of these stocks (Cisco, AOL, Oracle, Nortel Networks, Sun Microsystems, EMC, JDS Uniphase, Qualcomm and Yahoo!) totaled \$1.621 trillion and represented 14% of the S&P 500.<sup>7</sup>

Based on the prices paid for these stocks in early 2000, investors were projecting that they would totally dominate the market over the following decade and would be valued at two to three times the historical valuation of the S&P 500. Despite these overvaluations, investors in a market capitalization index fund tracking the S&P 500 had no choice but to hold these stocks in proportion to their market value.

<sup>5</sup> Warren E. Buffet. "The Superinvestors of Graham-and-Doddsville." *Hermes*, The Columbia Business School Magazine. May 1984.

<sup>6</sup> P/E ratio equals the price of a stock divided by earnings per share. P/E ratios, are intended to help give an investor an idea of how much they are paying for a company's growth; the higher the P/E ratio, the more investors are paying to own the stock.

<sup>7</sup> Jeremy Siegel. "Big Cap Tech Stocks Are a Sucker's Bet." *The Wall Street Journal*. March 14, 2000. Only one of these stocks was not in the S&P 500 at the time, JDS Uniphase, but JDSU was added to the S&P 500 four months later, on July 26, when its price was over 30% higher than it was in March 2000. Its closing price on July 26, 2000, was \$135.94. By July 2005, the price had fallen to \$1.69.

## WEIGHTING FUNDAMENTALS MAY HELP WITH BUBBLES

So, if market prices for stocks are not always efficient, then capitalization-weighted indexes will not necessarily be mean-variance efficient. Therefore, we believe it is possible that alternative weightings could give investors a higher return for the same level of risk, or a lower level of risk for any given return.

Consider that whereas capitalization-weighted indexes typically assign index weights based on the market value of each company, fundamentally-weighted indexes anchor initial weights to a measure of fundamental value, such as dividends. We believe a fundamental approach to weighting may make the most sense, as it can tilt weights to securities that are considered undervalued (and may outperform), while putting less weight on, or altogether avoiding, those that are considered overvalued (and may underperform.)

Consider the technology bubble example on page 4. Investors in funds that track indexes weighted by dividends, for example, would have been shielded from the bubble in the nine large-cap technology stocks that came to represent such a large piece of the S&P 500 because, with the exception of Nortel Networks, none of these technology companies paid dividends at that time. This example demonstrates how dividend-weighted indexes could have softened the severity of a bear market that devastated investor returns.

### WisdomTree Weights by Dividends

In our opinion, the evidence in favor of weighting by a fundamental other than market price is overwhelming. But we do believe that passive strategies have historically delivered good results. We subsequently developed our equity Indexes with the objective of improving the passive approach by anchoring companies to a less volatile measure, such as company fundamentals. The fundamental we believe to be the strongest indicator of underlying value is the dividend.

There are many compelling economic and theoretical reasons for assigning index weights based on the aggregate value of cash dividends paid by component companies. Consider that:

- + **Dividends have theoretical and empirical importance in determining stock values**
- + **Historically, dividends have provided the majority of the stock market's real return over time<sup>8</sup>**
- + **Dividends provide an objective measure independent of accounting schemes and management judgment**
- + **Paying dividends indicates that management is focused on increasing shareholder value**
- + **Investors, particularly baby boomers in the developed world, have an increasing long-term demand for income from a new phase of their life: retirement**

We, therefore, believe that dividend-oriented indexes are important new benchmarks to gauge the performance of dividend stocks.

<sup>8</sup> Source: Siegel, Future for Investors. 2005.

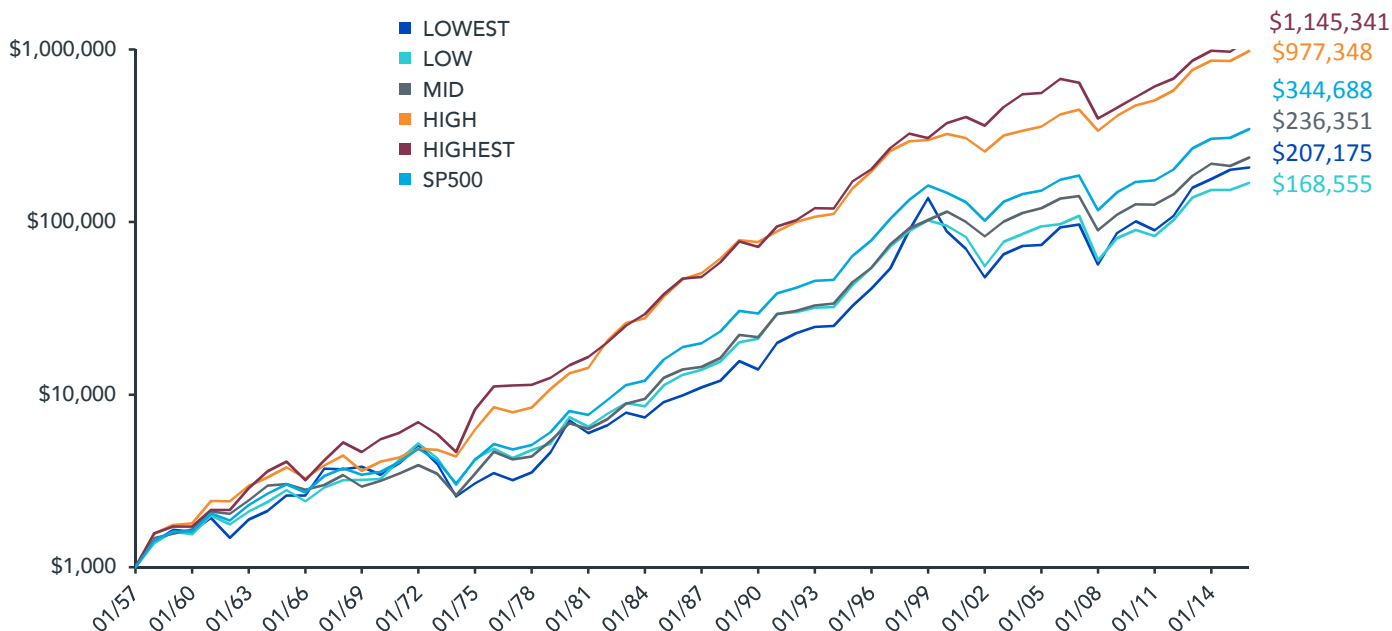
### The Power of Dividends

To demonstrate the power of dividends and their impact on performance, consider some research done by Wharton Professor Jeremy Siegel in his 2005 book *Future for Investors*. Professor Siegel broke down the performance of the S&P 500 dividend-paying stocks into quintiles, illustrating that focusing on only those stocks that provided the highest levels of dividends had a dramatic impact on performance—and risk.

As you can see in figure 1, the highest quintile outperformed the broad S&P 500 Index by over 2% per year—which turned into more than 230% outperformance over time. And it did this with a lower beta.<sup>9</sup> Even the second quintile outperformed the S&P 500 by about 2.00% per year for a total of more than 180% outperformance over time, with less risk.

**FIGURE 1: DIVIDEND YIELD AND RELATIVE PERFORMANCE**

[ Quintile Charts from Jeremy Siegel's Research, period 12/31/1957-12/31/2016 ]



Dividend Yield	Highest	High	Mid	Low	Lowest	S&P 500
Return	12.7%	12.4%	9.7%	9.1%	9.5%	10.4%
Beta	0.93	0.83	0.92	1.07	1.24	1.00

Source: Siegel, *Future for Investors*. 2005, with updates to 2017. Past performance does not guarantee future results. Does not represent the performance of any investment vehicle; provided for educational/illustrative purposes only. This information should not be considered investment advice.

<sup>9</sup> Beta is a measurement of a fund's/index's trailing returns in relation to the overall market (or appropriate market index). Beta of 1: Share price will typically move with the market; beta of more than 1: Share price will typically be more volatile than the market; beta of less than 1: Share price will typically be less volatile than the market. In the above example the market is defined as the S&P 500 Index.

**WISDOMTREE DIVIDEND EQUITY SELECTION CRITERIA**

To be eligible for inclusion in a WisdomTree Dividend Equity Index, a stock must be a regular cash dividend payer and meet daily trading volume criteria. To be eligible for our Dividend Indexes, companies must meet the following criteria as of the annual Index measurement date:

**FIGURE 2**

U.S.	Developed International
Pay a regular cash dividend	Paid minimum of \$5 million in regular cash dividend in the 12 months prior to screening date
Be ordinary common shares or shares of a REIT	Be ordinary common shares or shares of a REIT
Have a minimum market cap of \$100 million	Have a minimum market cap of \$100 million
Have average daily dollar trading volume of at least \$100,000 over the three months prior to screening	Have average daily dollar trading volume of at least \$100,000 over the three months prior to screening
The calculated volume factor (the average daily dollar volume for three months preceding the Screening Date/weight of security in each index) shall be greater than \$200 million to be eligible for each index	The calculated volume factor (the average daily dollar volume for three months preceding the Screening Date/weight of security in each index) shall be greater than \$200 million to be eligible for each index
Be incorporated in the U.S. and traded on a major exchange	Have traded minimum of 250,000 shares for each of the six months prior to screening

The complete WisdomTree Index Methodologies are available at [wisdomtree.com](http://wisdomtree.com).

**What about Apple?**

Unlike many dividend indexes, WisdomTree does not screen for backward-looking historical growth. Consider that indexes that do screen for this type of dividend growth may limit their ability to capitalize on opportunities in younger dividend-paying industries such as Information Technology.

For example, Apple, one of the largest companies in the world when ranked by market capitalization, recently reinstated its dividend—making it one of the largest, as of 11/30/16, dividend-payers in the United States. When will it be eligible for inclusion in dividend indexes that screen for growth? It's worth noting that Apple will not be eligible for inclusion:

- + In the Dow Jones U.S. Select Dividend Index until 2017
- + In the NASDAQ U.S. Dividend Achievers Select Index until 2023
- + In the S&P High Yield Dividend Aristocrats Index until 2033—17 years from now

In contrast, at the 2012 rebalance in December, Apple was included in the WisdomTree Dividend Indexes for the first time.

To learn more about how the WisdomTree methodology and how it related to the November 30, 2016 Index Screening and subsequent rebalance, click to read "Dividends: Fifth Consecutive Year of Double-Digit Growth."

**HOW WISDOMTREE WEIGHTS INDEXES BY DIVIDENDS**

Weighting eligible companies in our Indexes by dividends, rather than by market cap, enables us to magnify the effect dividends have on performance. Each stock eligible for inclusion in an Index is weighted by its share of the dividend stream (which is the sum of regular cash dividends paid by all the companies in the Index).

In addition, WisdomTree believes that weighting by dividends can potentially raise a portfolio's trailing 12-month dividend yield and provide increased income to investors. In figure 3, below, for example, the dividend-weighted three-stock portfolio generates approximately 30% more dividend income and almost 1% of additional trailing 12-month dividend yield than the market cap-weighted option. What's more: It did this using the same three stocks and the same initial investment.

**FIGURE 3: THE DIFFERENCE DIVIDEND WEIGHTING MAKES**

Company	Market Cap (Billions)	Dividend Stream (Billions)	Dividend Yield	Market Cap Weight	Investment	Dividend Income	Dividend Weight	Investment	Dividend Income
A	\$400.0	\$10.00	2.5%	50.00%	\$50,000	\$1,250	40.00%	\$40,000	\$1,000
B	\$200.0	\$3.00	1.5%	25.00%	\$25,000	\$375	12.00%	\$12,000	\$180
C	\$200.0	\$12.00	6.0%	25.00%	\$25,000	\$1,500	48.00%	\$48,000	\$2,880
TOTALS	\$800.0	\$25.00			\$100,000	\$3,125		\$100,000	\$4,060

Hypothetical illustration.

**Income Is More Important Than Ever**

As a greater number of investors than ever before plan for and transition into retirement, investments that generate income are increasingly critical to their success. But retirees are not the only clients who can benefit from income. These investments can also be used to help protect and even increase wealth.

But which investments can generate the highest levels of income? As demonstrated in figure 3, dividend weighting can dramatically increase dividend income and can also boost trailing 12-month dividend yield.<sup>10</sup> In a low-yielding, low-return environment characterized by volatility and uncertainty, investments based on dividend-weighted indexes may help create much needed income for investors.

<sup>10</sup> Trailing 12-month dividend yield can be defined as the dividends over the past year added up and then divided by the current share price.



## WisdomTree's dividend-weighted Indexes allocate weights to stocks and countries by treating all dividends equally.

### REBALANCING AND DIVIDEND GROWTH

In addition to the initial weighting mechanism, WisdomTree employs a rules-based rebalancing mechanism that adjusts relative weights based on the concept of relative value. We shift the weight away from stocks exhibiting lower rates of dividend growth (relative to their price performance) in order to focus on those companies that have achieved higher rates of dividend growth (relative to the same criteria). This weighting and rebalancing process is one way in which WisdomTree manages the valuation risk of its Indexes and consistently shifts weight toward firms exhibiting greater rates of dividend growth. Figure 4, below, outlines various scenarios for how weights change at the rebalance based on each stock's relative price appreciation compared to its relative dividend growth. In general:

- + Companies whose stock prices increased relative to their peers while their dividend growth rates were lower than their peers' would typically see reduced weight in WisdomTree Indexes. In a market cap-weighted index, however, the primary driver of weight is the relative price change
- + Companies whose relative stock prices fell while their dividends were flat or grew would typically see increased weight in WisdomTree Indexes. In a market cap-weighted index, however, the lower price would result in a lower weight

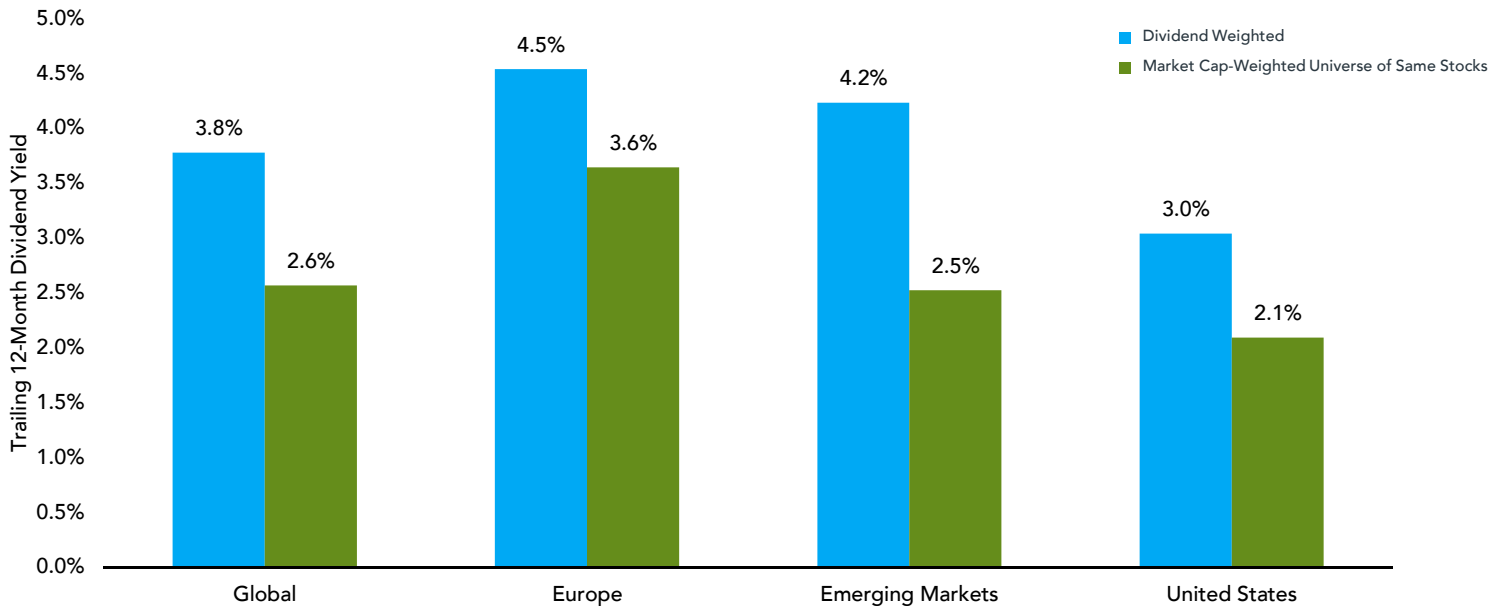
**FIGURE 4: WISDOMTREE REBALANCING METHODOLOGY**

Stock Price during Year	Dividend Change	Weight Change at Rebalance
Up	Up	Depends on which rose more
	Flat	Decrease
	Down	Decrease
Unchanged	Up	Increase
	Flat	Unchanged
	Down	Decrease
Fell	Up	Increase
	Flat	Increase
	Down	Depends on which fell more

Conventional investment wisdom suggests that stocks with below-average dividend yields are reinvesting their earnings into their businesses and that this reinvestment will spur higher dividend growth over time. WisdomTree's historical research casts suspicion over this premise.

A dividend stream-weighted index that tilts weight to higher-dividend-yielding stocks naturally should have a higher dividend yield than a cap-weighted index. What did WisdomTree's research show? As figure 5, below, shows, shifting from market cap weighting to dividend weighting for the same basket of stocks increased the trailing 12-month dividend yields in each primary region of the world.

**FIGURE 5: IMPACT OF WEIGHTING METHODOLOGY ON DIVIDEND YIELD [ 9/30/2016 ]**



Sources: WisdomTree, Bloomberg. Data as of annual screening date, September 30, 2016. Past performance does not guarantee future results.

Now let us review the impact an actual rebalance had on one of the WisdomTree Indexes. As figure 6, below, illustrates, as of the 2016 annual rebalance, the top 20 dividend payers in the WisdomTree Dividend Index:

- + Had grown their dividends by an average of 5.67% over the previous year
- + Had an average dividend yield of 3.38%

**FIGURE 6: 20 LARGEST DIVIDEND PAYERS IN THE WISDOMTREE DIVIDEND INDEX**

[ as of Annual Screening Date, November 30, 2016 ]

Ticker	Company	2015 Indicated Dividend per Share	2016 Indicated Dividend per Share	Shares Outstanding (Billions)	Dividend Stream (Billions)	Percentage of Dividend Stream	Dividend Yield	Dividend Action	Dividend Growth Rate	Dividend Coverage Ratio	
1	XOM	Exxon Mobil Corp	2.92	3.00	4.15	\$12.44	2.73%	3.44%	Raised	2.74%	0.7x
2	AAPL	Apple Inc	2.08	2.28	5.33	\$12.16	2.66%	2.06%	Raised	9.62%	3.9x
3	MSFT	Microsoft Corp	1.44	1.56	7.78	\$12.13	2.66%	2.59%	Raised	8.33%	1.9x
4	T	AT&T Inc	1.88	1.96	6.14	\$12.04	2.64%	5.07%	Raised	4.26%	1.5x
5	VZ	Verizon Communications Inc	2.26	2.31	4.08	\$9.42	2.06%	4.63%	Raised	2.21%	1.7x
6	JNJ	Johnson & Johnson	3.00	3.20	2.72	\$8.71	1.91%	2.88%	Raised	6.67%	2.1x
7	CVX	Chevron Corp	4.28	4.32	1.89	\$8.16	1.79%	3.87%	Raised	0.93%	0.3x
8	GE	General Electric Co	0.92	0.92	8.85	\$8.14	1.78%	2.99%	Stable	0.00%	1.6x
9	WFC	Wells Fargo & Co	1.50	1.52	5.02	\$7.63	1.67%	2.87%	Raised	1.33%	2.6x
10	PFE	Pfizer Inc	1.12	1.20	6.07	\$7.28	1.60%	3.73%	Raised	7.14%	2.0x
11	PG	Procter & Gamble Co/The	2.65	2.68	2.68	\$7.17	1.57%	3.25%	Raised	1.00%	1.4x
12	JPM	Jpmorgan Chase & Co	1.76	1.92	3.58	\$6.87	1.51%	2.39%	Raised	9.09%	3.1x
13	PM	Philip Morris International	4.08	4.16	1.55	\$6.45	1.41%	4.71%	Raised	1.96%	1.1x
14	WMT	Wal-Mart Stores Inc	1.96	2.00	3.09	\$6.18	1.35%	2.84%	Raised	2.04%	2.2x
15	KO	Coca-Cola Co/The	1.32	1.40	4.31	\$6.04	1.32%	3.47%	Raised	6.06%	1.4x
16	IBM	IBM	5.20	5.60	0.95	\$5.32	1.17%	3.45%	Raised	7.69%	2.4x
17	CSCO	Cisco Systems Inc	0.84	1.04	5.02	\$5.22	1.14%	3.49%	Raised	23.81%	2.3x
18	MRK	Merck & Co. Inc	1.84	1.88	2.76	\$5.18	1.14%	3.07%	Raised	2.17%	2.0x
19	INTC	Intel Corp	0.96	1.04	4.74	\$4.93	1.08%	3.00%	Raised	8.33%	2.5x
20	MO	Altria Group Inc	2.26	2.44	1.95	\$4.76	1.04%	3.82%	Raised	7.96%	1.2x
<b>Sum/Average Values for Top 20 Stocks</b>					<b>\$156.22</b>	<b>34.24%</b>	<b>3.38%</b>		<b>5.67%</b>	<b>1.9x</b>	
<b>WisdomTree Dividend Index: Total Dividend Stream</b>					<b>\$456.26</b>	<b>100%</b>					

Sources: WisdomTree, Bloomberg. Past performance does not guarantee future results. No representation is being made that any investment will achieve performance similar to those shown. All information is provided strictly for educational and illustrative purpose only. The information provided is not intended for trading purposes and should not be considered investment advice. Indicated dividend per share is most recently announced regular dividend policy over the next 12 months. Dividend growth rate is the year-over-year growth of dividends. Dividend coverage ratio can be defined as the amount of earnings generated in excess of \$1 of dividends paid

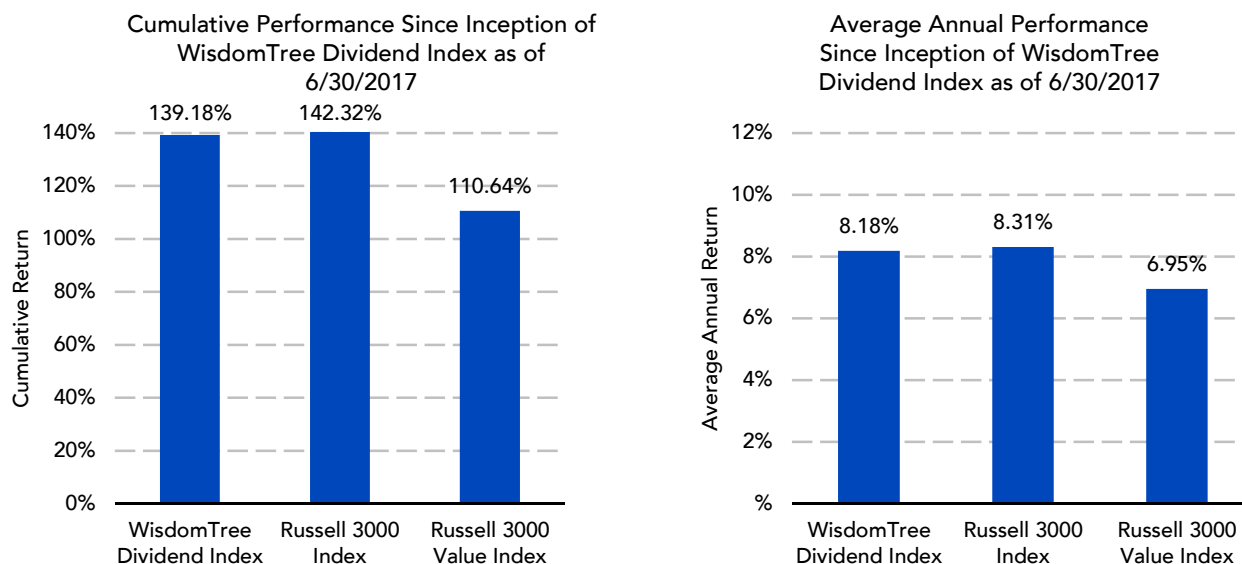
In our experience, annually reconstituting an Index did not only change the constituents and their weights but also has tended to benefit the Index characteristics in three notable ways:

- + The Index yield increased as weight shifted to companies with higher dividends and greater dividend yields
- + The Index experienced dividend growth at the rebalance for the same reason
- + Rebalancing took "money off the table" by reducing weight in the more speculative, more volatile names, where prices appreciated more than fundamentals over the prior year

### WisdomTree Indexes in Real Time

At WisdomTree, we believe that research and theories are valuable, but we also know the importance of measuring live performance. Since the inception 6/1/2006 through 6/30/2017 the WisdomTree Dividend Index outperformed both the core and value cuts of its comparable cap-weighted benchmark. Broadly inclusive dividend-focused strategies that weight constituents by cash dividends do tend to tilt toward the value style. This is especially so in the United States where constituents that are more apt to be considered "growth" companies are typically non-dividend payers and therefore may not be included. These firms would, however be included in broadly-focused market capitalization-weighted indexes, like the Russell 3000 Index, which could do much to explain differences in performance over this particular period. Figure 7 details this performance:

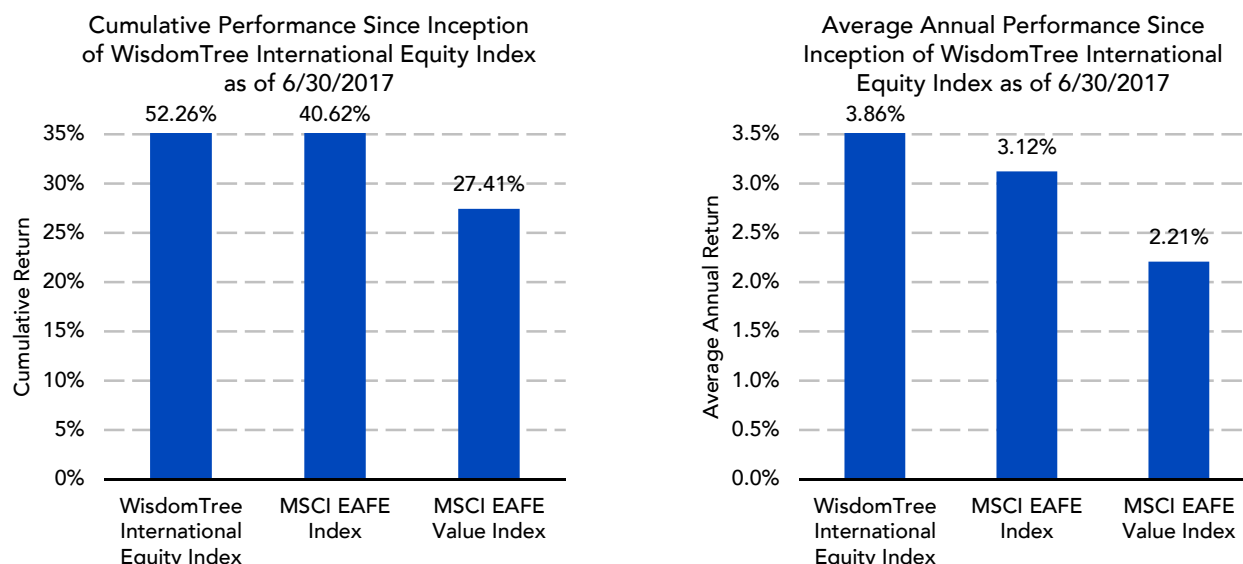
FIGURE 7



Source: WisdomTree. Past performance does not guarantee future results. You cannot invest in an index. The Russell 3000 Index is the market capitalization-weighted benchmark for the WisdomTree Dividend Index and is meant to provide a broad indication of equity performance in the United States.

WisdomTree's dividend approach has created a similar performance advantage in the international markets. Since the inception of our broadest developed international Index, the WisdomTree International Equity Index, on 6/1/2006 (through 6/30/2017), it outperformed the MSCI EAFE Index—the de facto cap-weighted benchmark for the developed world outside the U.S.—over 0.70% per year and over 11% cumulatively. In international markets, as opposed to the United States, a broader array of companies are likely to be dividend payers. This allows strategies that solely consider dividend payers to be naturally more inclusive relative to a broad, market capitalization-weighted benchmark like the MSCI EAFE Index. Figure 8 details this performance:

**FIGURE 8**



Source: WisdomTree. Past performance does not guarantee future results. You cannot invest in an index.

**The Credit Crisis**

We would be remiss in reviewing the past nine years without discussing the financial crisis of 2007–2009. This credit crisis was fundamentally different from others discussed in this paper—and was truly an unprecedented event. In other crises, there was no fundamental support for the prices that led to market bubbles. In this crisis, many prices were supported by dividends that were quite real. These dividends were simply unsustainable in this type of unparalleled crisis environment. Through the rebalancing of weight away from companies that reduced or discontinued their dividends, our WisdomTree Indexes performed as expected.

**WHAT'S BEHIND THE PERFORMANCE DIFFERENTIAL?**

Dividends were a significant component of total returns in both U.S. and developed international markets:

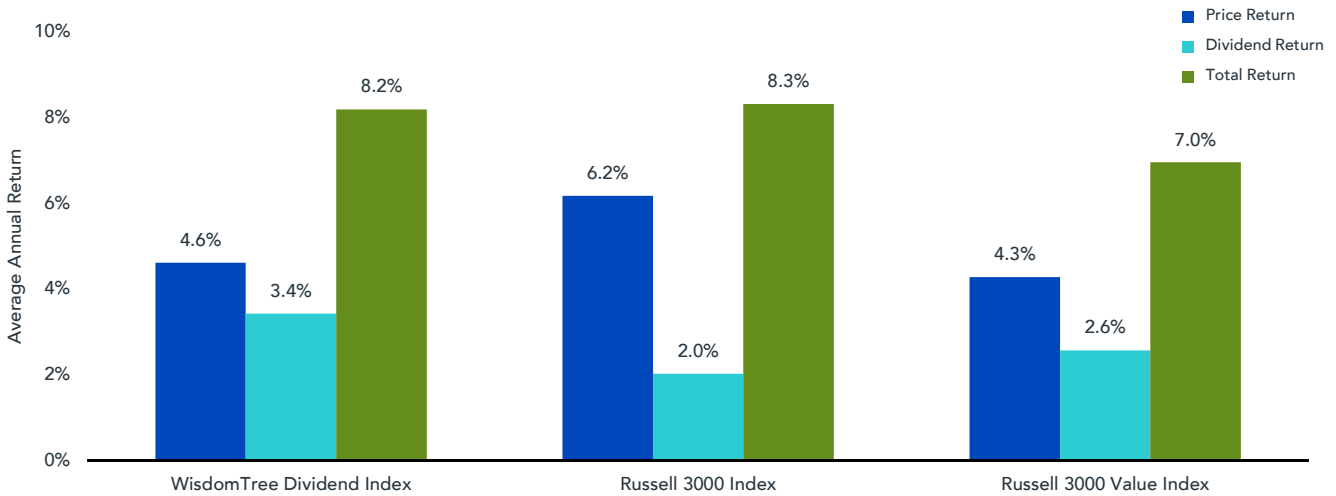
- + Since inception, the dividend return has made up the majority of the total return differential between the WisdomTree International Equity Index and the MSCI EAFE Index<sup>11</sup> (the price returns were fairly similar over the period)
- + Although the dividend return of the MSCI EAFE Value Index was closer to that of the WisdomTree International Equity Index, its lower price return dragged down the total return

Since inception, the WisdomTree Dividend Index has delivered total returns similar to the Russell 3000 Index—the components of those returns, however, were very different:

- + Dividends made up a larger percentage of the WisdomTree Dividend Index's total return as its average annual dividend return was 1.4% higher per year
- + The price return of the Russell 3000 Index, however, offsets its deficit in dividend returns over the period

**FIGURE 9**

WisdomTree Index since Inception Return Deconstruction, as of 6/30/2017

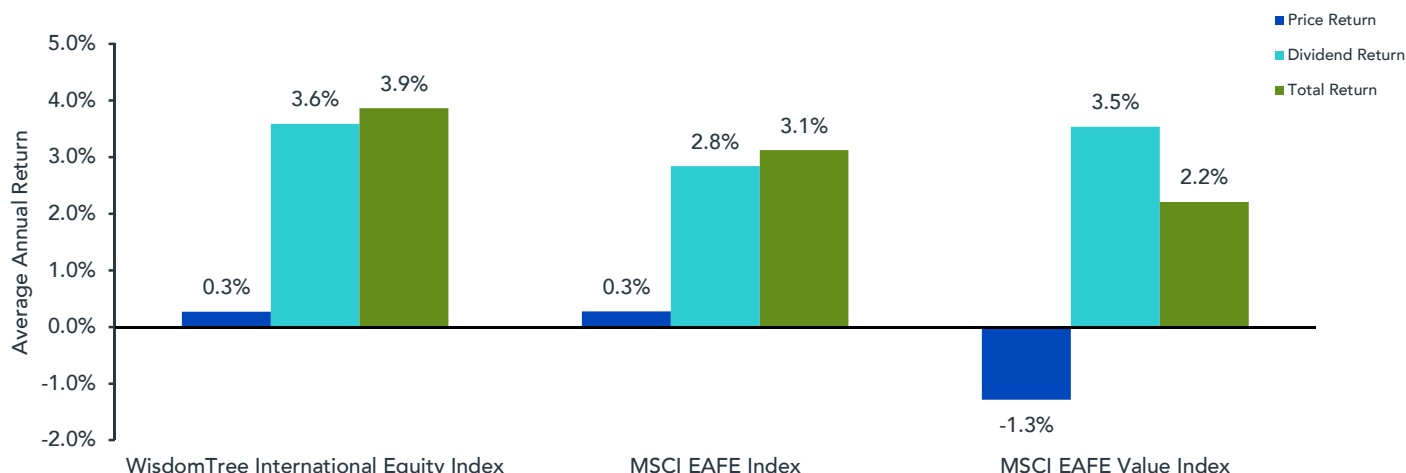


Source: WisdomTree. Past performance does not guarantee future results. You cannot invest in an index.

<sup>11</sup> The MSCI EAFE Index is the market capitalization-weighted benchmark for the WisdomTree International Equity Index and is meant to measure a broad indication of equity performance in developed international markets outside the United States.

FIGURE 10

WisdomTree Index since Inception Return Deconstruction, as of 6/30/2017



Source: WisdomTree. Past performance does not guarantee future results. You cannot invest in an index.

**RISK DIFFERENTIAL**

We believe our dividend-weighted index methodology should lead to enhanced risk profiles compared to market capitalization-weighted indexes. In fact, since inception:

- + The WisdomTree Dividend Index has delivered lower beta and standard deviation than the Russell 3000 Index—as well as the value variant of that index
- + Within the international markets, the beta and standard deviation<sup>12</sup> of the WisdomTree International Equity Index were lower than that of the MSCI EAFE Value Index

FIGURE 11: RISK STATISTICS [ 6/1/2006–6/30/2017 ]

	Standard Deviation (%)	Beta
WisdomTree Dividend Index	14.41%	0.96
Russell 3000 Index	15.10%	1.03
Russell 3000 Value Index	15.63%	1.05
S&P 500 Index	14.60%	1.00

Note: Beta defined relative to the S&P 500 Index.

FIGURE 12: RISK STATISTICS [ 6/1/2006–6/30/2017 ]

	Standard Deviation (%)	Beta
WisdomTree International Equity Index	18.02%	1.00
MSCI EAFE Value Index	18.97%	1.05
MSCI EAFE Index	17.84%	1.00

Note: Beta defined relative to the MSCI EAFE Index. Source: WisdomTree. Past performance does not guarantee future results. You cannot invest in an index.

<sup>12</sup> Standard deviation is the degree to which (an index's/a fund's) returns have fluctuated above or below the mean. A higher number indicates higher volatility.

**PERFORMANCE VERSUS ACTIVE MANAGERS**

As discussed previously, there is an inherent value bias involved when weighting an index according to the dividend stream, especially in the United States. While we believe our Indexes can serve as benchmarks for core parts of a portfolio allocation, in that we look to include all regular dividend payers within particular equity markets, there are a number of analysts, including Morningstar, who classify the Indexes as in the "value" category.

When comparing the WisdomTree Dividend Indexes to the universe of active managers<sup>13</sup> in the value category, their performance is particularly strong:

- + Since inception (through 6/30/2017), the WisdomTree Dividend Index has beaten approximately 90% of the 650 active managers it competes against
- + The index outperformed 93% of the active managers on a 5-year basis
- + The WisdomTree International Equity Index has outperformed 93% of the active managers in its category since its inception

**FIGURE 13**

**MORNINGSTAR UNIVERSE: LARGE CAP VALUE PERCENTAGE OF PEER GROUP BEATEN**

	6/1/2006-6/30/2017				
	YTD	1-Year	3-Year	5-Year	Entire Analysis Period
Number of Managers	1273	1273	1094	940	650
WisdomTree Dividend Index	27%	95%	74%	93%	91%
Russell 3000 Index	70%	95%	91%	95%	92%
Russell 3000 Value Index	47%	71%	83%	59%	61%

**MORNINGSTAR UNIVERSE: FOREIGN LARGE CAP VALUE PERCENTAGE OF PEER GROUP BEATEN**

	6/1/2006-6/30/2017				
	YTD	1-Year	3-Year	5-Year	Entire Analysis Period
Number of Managers	337	337	273	224	125
WisdomTree International Equity Index	50%	75%	80%	83%	93%
MSCI EAFE Index	46%	78%	79%	76%	79%
MSCI EAFE Value Index	87%	37%	68%	44%	49%

Source: Morningstar. Past performance does not guarantee future results. You cannot invest in an index.

<sup>13</sup> Refers to portfolio managers who actively make investment decisions in an effort to maximize return.



## CONCLUSION

Investment managers and investors alike are always looking for better ways to invest. We believe indexing is highly efficient and ETFs have a number of benefits that make them a wise investment vehicle. But as history has shown us time and again, price is not always the best indicator of value.

So why do so many indexes—and the ETFs based on them—take a market capitalization-weighted approach?

If you can accept the simple truth that markets are not always efficient, you can appreciate the value of the WisdomTree indexing methodology. Our dividend approach has proven itself for more than 11 years—which included an unprecedented market event—outperforming most comparable cap-weighted benchmarks and active managers, and with less risk. We believe our approach offers investors the potential to:

- + Protect their portfolios during market bubbles
- + Benefit from higher dividend growth
- + Reduce portfolio risk
- + Better generate income during retirement
- + Take a wise approach to equity investing

At WisdomTree, we do things differently. We are committed to providing innovative solutions that provide investors with truly unique value. Although we have, throughout this paper, been talking about WisdomTree Dividend Indexes, it is not possible to invest in an Index. If you are interested in seeing how the WisdomTree Dividend family of ETFs performed, or are interested in investing in them, please visit [wisdomtree.com](http://wisdomtree.com).

Investors should carefully consider the investment objectives, risks, charges and expenses of the Fund before investing. To obtain a prospectus containing this and other important information, please call 866.909.WISE (9473), or visit [wisdomtree.com](http://wisdomtree.com) to view or download a prospectus. Investors should read the prospectus carefully before investing.

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You cannot invest directly in an Index. Index performance does not represent actual Fund or portfolio performance. A Fund or portfolio may differ significantly from the securities included in the Index. Index performance assumes reinvestment of dividends but does not reflect any management fees, transaction costs or other expenses that would be incurred by a portfolio or Fund, or brokerage commissions on transactions in Fund shares. Such fees, expenses and commissions could reduce returns. WisdomTree, its affiliates and their independent providers are not liable for any informational errors, incompleteness or delays or for any actions taken in reliance on information contained herein.

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The WisdomTree Dividend Index measures the performance of the dividend-paying segment of the U.S. stock market. The WisdomTree International Equity Index measures the performance of the dividend-paying segment of the developed world outside the U.S. and Canada and represents equity markets in 21 countries. The S&P 500 Index is a capitalization-weighted index of 500 stocks selected by the Standard & Poor's Index Committee designed to represent the performance of the leading industries in the United States economy. The Russell 3000 Index measures the performance of the 3,000 largest U.S. companies based on total market capitalization. The Russell 3000 Value Index measures the performance of value stocks in the Russell 3000 Index. The MSCI EAFE Index is a market cap-weighted index composed of companies representative of the developed market structure of developed countries in Europe, Australasia and Japan. The MSCI EAFE Value Index measures the performance of value stocks in the MSCI EAFE Index.

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