

Dividend-Weighting Equity Markets: 2006–2016

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INTRODUCTION

A little more than a decade ago, WisdomTree launched its first 20 exchange-traded funds (ETFs) on the New York Stock Exchange (NYSE). The launch was historic because it represented, at that time, the largest listing by a single issuer in the 200-year history of the NYSE. WisdomTree's debut on June 16, 2006, included the industry's first international small-cap ETF, the first European small-cap ETF and the first Japanese small-cap ETF. But the listing was also historic because it gave investors, for the first time, a way to invest in dividend-weighted ETFs in most major equity markets around the world—a fundamental alternative to traditional market capitalization-weighted¹ investing.

The 2006 launch was based on WisdomTree's original vision that weighting equity markets by income, rather than by market capitalization, would represent a significant evolution in indexing. After testing the performance of dividend-paying securities spanning several decades, WisdomTree concluded that by using only dividend-paying stocks and weighting them once a year based on the dollar value of dividends companies pay—rather than their market value—that it was possible to generate higher returns, often with lower volatility, than traditional cap-weighted approaches. That simple idea was so powerful it attracted some of the brightest luminaries on Wall Street to back WisdomTree.

The scope of this commentary is the WisdomTree dividend-weighted Indexes that now have 10-year track records. The underlying Indexes for 12 of those originally listed Funds have a continuous history and are the subject of this paper.² Specifically, we will (i) explore how the strategies performed compared to benchmark indexes over the past 10 years; and (ii) evaluate WisdomTree's excess returns in light of the market environment in which they were achieved.

A brief note on why we focused on 12 of the original 19 strategies. The decision was not based on a poor performance track record for the other seven strategies with 10 years of history. To the contrary, four of those other seven Indexes outperformed their benchmarks. The reason they were excluded is because each of the seven Indexes listed in the appendix had a strategy shift that changed its investment thesis. A few examples of these strategy changes: an original Europe high dividend Index was broadened

¹ Market capitalization: Market cap = share price x number of shares outstanding. Firms with the highest values receive the highest weights.

² Additional information for the remaining seven Indexes whose strategies have materially changed over the years are included in Appendix A.

to become a global high dividend Index; a developed Pacific ex-Japan Index was broadened to include emerging markets; an Index that provided mostly Australian exposure was repositioned to focus exclusively on Australia; and two high dividend Indexes (U.S. and foreign) removed financials to differentiate themselves from all other dividend indexes in the marketplace. Although we include the standardized returns for those Indexes in the appendix, we have limited our in-depth review to the 12 Indexes that have 10 years of uninterrupted history.

WHY WEIGHT EQUITY MARKETS BY DIVIDENDS?

Dividends have theoretical and empirical importance in determining stock values. Historically, the reinvestment of dividends, compounded over time, has provided the majority of the stock market's real return.³ Dividends reflect the judgment of executives and directors about the cash-generating capacity of the enterprises they lead across the full business cycle, not just the latest quarter. Thus the most recently declared dividend per share⁴ may also reflect information about the company that management is aware of but that may not have been disseminated to the wider marketplace.

Based on WisdomTree's research, weighting by dividends also serves several practical tests. First, dividends are transparent. Unlike accounting data, dividends cannot be manipulated or restated. This makes cash dividends, converted into U.S. dollars, a great common denominator across different geographies, currencies and accounting standards. Independent studies have concluded that weighting by different fundamental metrics—sales, cash flow, book value or dividends—have all generated excess returns over time.⁵ But weighting by dividends also provided some unique benefits when measured against comparable cap-weighted indexes. Dividend-weighted indexes consistently raised the starting dividend yield⁶ on the market and lowered the beta⁷, or market risk, offering the potential for better protection in down markets. And because dividend weighting typically achieved higher returns while lowering volatility⁸, dividend-weighted indexes also produced consistently higher risk-adjusted returns over time.

WISDOMTREE U.S. DIVIDEND-WEIGHTED INDEX RETURNS, 2006–2016

So what was observed in real time, since the WisdomTree Indexes began to be calculated and disseminated on May 31, 2006?

Eleven of WisdomTree's 12 dividend-weighted Indexes beat their comparable broad-based cap-weighted index over the past 10 years in the U.S. and in the developed world. When measured against the value segments of the benchmarks, the comparisons tilt even more overwhelmingly in favor of WisdomTree's dividend-weighted Indexes. All 12 of the WisdomTree dividend-weighted Indexes beat their value benchmarks. This is important, as a dividend-weighted approach is most often classified in the value style when peer-group comparisons are being conducted and when regression analysis is conducted to examine what factor exposures are represented in the returns.

³ Source: Professor Jeremy Siegel, "The Future for Investors," 2005.

⁴ Dividends per share: The sum of declared dividends for every ordinary share issued. Dividends per share (DPS) are the total dividends paid out over an entire year (including interim dividends but not including special dividends) divided by the number of outstanding ordinary shares issued.

⁵ Source: Andrew Clare, et al, "An Evaluation of Alternative Weighted Equity Indices Part 2: Fundamental Weighting Schemes," Cass Business School, 3/13.

⁶ Dividend yield: A financial ratio that shows how much a company pays out in dividends each year relative to its share price.

⁷ Beta: Measure of the volatility of an index or investment relative to a benchmark. A reading of 1.00 indicates that the investment has moved in lockstep with the benchmark; a reading of -1.00 indicates that the investment has moved in the exact opposite direction of the benchmark.

⁸ Volatility: A measure of the dispersion of actual returns around a particular average level.

Figure 1 displays results for WisdomTree U.S. dividend-weighted indexes over the most recent one-year, three-year, five-year and 10-year periods against traditional indexes.

FIGURE 1: AVERAGE ANNUAL RETURNS, WISDOMTREE U.S. DIVIDEND-WEIGHTED INDEXES [5/31/06–5/31/16]

Index	WT Index Inception	Average Annual Total Returns as of 5/31/2016			
		1 year	3 years	5 years	10 years
WisdomTree Dividend Index	6/1/2006	3.62%	10.55%	11.86%	7.45%
Russell 3000 Value Index		-0.28%	8.98%	10.44%	6.03%
Russell 3000 Index		0.22%	10.57%	11.15%	7.39%
WisdomTree LargeCap Dividend Index	6/1/2006	3.06%	10.24%	11.71%	7.14%
Russell 1000 Value Index		-0.06%	9.23%	10.70%	6.11%
S&P 500 Index		1.72%	11.06%	11.67%	7.41%
WisdomTree High Dividend Index	6/1/2006	9.05%	11.28%	12.90%	6.74%
Russell 1000 Value Index		-0.06%	9.23%	10.70%	6.11%
WisdomTree MidCap Dividend Index	6/1/2006	6.96%	13.18%	13.03%	8.92%
Russell Midcap Value Index		-0.31%	10.22%	10.92%	7.76%
S&P MidCap 400 Index		-0.42%	9.69%	10.00%	8.51%
WisdomTree SmallCap Dividend Index	6/1/2006	2.36%	9.37%	11.08%	7.00%
Russell 2000 Value Index		-2.75%	6.10%	7.55%	5.25%
Russell 2000 Index		-5.97%	6.93%	7.86%	6.27%

Sources: WisdomTree, Zephyr StyleADVISOR, Bloomberg, as of 5/31/16. Past performance is not indicative of future results. You cannot invest directly in an index.

A couple of important takeaways:

- + Four of the five WisdomTree U.S. dividend-weighted Indexes outperformed their comparable broad-based cap-weighted indexes over the last 10 years. The sole exception occurred in the most efficient market—U.S. large caps—where the WisdomTree LargeCap Dividend Index lagged the S&P 500 by 27 basis points (bps) annualized over 10 years.
 - But notably, the WisdomTree LargeCap Dividend Index outperformed the Russell 1000 Value Index by 103 bps annualized over 10 years.
- + All five WisdomTree Indexes outperformed their comparable cap-weighted value indexes over the last 10 years. In fact, all five WisdomTree Indexes generated higher annualized returns over the last one-year, three-year, five-year and 10-year time frames compared to the value benchmark in that category.
- + WisdomTree generated greater excess returns in the mid- and small-cap segments, traditionally viewed as the less efficient part of the U.S. stock market. Both the WisdomTree MidCap Dividend Index and the WisdomTree SmallCap Dividend Index also outperformed the core and the value cuts of their cap-weighted peers over each of the periods displayed in the table.
- + Not only did the WisdomTree MidCap Dividend Index beat the S&P MidCap 400, it beat the S&P 500 Index by 151 bps per year over the past decade.

WISDOMTREE INTERNATIONAL INDEX RETURNS, 2006–2016

The last 10 years have been a period when developed world stocks have meaningfully underperformed the U.S. equity market. That underperformance reflects the impact of the 2008–2009 financial crisis, the 2010–2012 sovereign debt crisis in Europe and the rally in the U.S. dollar since the summer of 2011. Yet, even in this low-return environment, we observe that:

- + In each and every instance, WisdomTree’s international dividend-weighted Indexes beat their comparable cap-weighted peers over the past decade.
- + WisdomTree’s broadest Index, the WisdomTree International Equity Index, outperformed the MSCI EAFE Index by 79 bps on an annualized basis.
- + The WisdomTree International Equity Index, the WisdomTree International High Dividend Index and the WisdomTree Europe SmallCap Dividend Index beat their cap-weighted benchmarks in each and every period displayed.
- + Similar to what we saw in the U.S., the highest absolute performance for the 10-year period came in the smaller-size segment of the market. The Europe SmallCap Dividend Index averaged 6.1% on an annualized basis over the decade, while the WisdomTree International SmallCap Dividend Index averaged 5.3%.

FIGURE 2: AVERAGE ANNUAL RETURNS, WISDOMTREE INTERNATIONAL DIVIDEND-WEIGHTED INDEXES [2006–2016]

Index	WT Index Inception	Average Annual Total Returns as of 5/31/2016			
		1 year	3 years	5 years	10 years
WisdomTree International Equity Index	6/1/2006	-9.25%	2.59%	2.20%	2.71%
MSCI EAFE Index		-9.68%	2.00%	2.12%	1.92%
WisdomTree International LargeCap Dividend Index	6/1/2006	-10.91%	1.47%	1.42%	2.03%
MSCI EAFE Index		-9.68%	2.00%	2.12%	1.92%
WisdomTree International High Dividend Index	6/1/2006	-10.24%	1.43%	1.43%	1.95%
MSCI EAFE Value Index		-13.76%	0.25%	0.89%	0.70%
WisdomTree International MidCap Dividend Index	6/1/2006	-5.23%	5.59%	3.84%	4.26%
MSCI EAFE Mid Cap Index		-4.65%	5.43%	3.98%	2.98%
WisdomTree International SmallCap Dividend Index	6/1/2006	-0.90%	6.78%	6.41%	5.32%
MSCI EAFE Small Cap Index		0.41%	7.86%	5.63%	3.91%
WisdomTree Europe SmallCap Dividend Index	6/1/2006	1.44%	13.35%	9.20%	6.09%
MSCI Europe Small Cap Index		0.19%	9.73%	6.49%	5.45%
WisdomTree Japan SmallCap Dividend Index	6/1/2006	3.24%	8.78%	9.10%	2.97%
MSCI Japan Small Cap Index		5.33%	9.41%	8.87%	1.64%

Sources: WisdomTree, Zephyr StyleADVISOR, Bloomberg, as of 5/31/16. Past performance is not indicative of future results. You cannot invest directly in an index.

WISDOMTREE INDEX RISK-ADJUSTED RETURNS, 2006–2016

When evaluating investment strategies, it is also necessary to be mindful of how much “risk” an investment manager takes. For many investors, the best measure of this is the annualized volatility embedded in the strategy that will impact its risk-adjusted return. This is typically done through the use of a Sharpe ratio⁹. Sometimes, fund selectors and investment committees also try to quantify how much “active risk” is being assumed within the strategy, compared to an established benchmark. The concept of “tracking error¹⁰” measures this active risk. Figure 3 quantifies how, over the last 10 years, each of WisdomTree’s U.S. dividend Indexes generated risk-adjusted returns, based on the Sharpe ratio, which were equal to or greater than their cap-weighted benchmarks. In each and every case, the beta for the WisdomTree Index was lower than its market benchmark over the decade. In the broad market and in the large-cap size segments, both the WisdomTree Dividend Index and the WisdomTree LargeCap Dividend Index exhibited lower standard deviation¹¹ compared to their benchmark peers. In the mid- and small-cap categories, the WisdomTree MidCap Dividend Index and the WisdomTree SmallCap Dividend Index exhibited slightly higher volatility than their benchmarks but were nevertheless able to generate higher Sharpe ratios.

FIGURE 3: RISK-ADJUSTED RETURNS, WISDOMTREE U.S. DIVIDEND-WEIGHTED INDEXES [2006–2016]

Index	Summary Statistics 6/1/2006–5/31/2016						
	Std Dev (%)	Beta	Alpha (%)	Sharpe Ratio	Tracking Error (%)	Information Ratio	Correlation
WisdomTree Dividend Index	15.03	0.92	0.65	0.43	4.34	0.01	0.96
Russell 3000 Value Index	16.27	1.02	-1.31	0.31	2.97	-0.46	0.98
Russell 3000 Index	15.76	1.00	0.00	0.41	0.00	0.00	1.00
WisdomTree LargeCap Dividend Index	14.65	0.93	0.26	0.42	3.91	-0.07	0.97
Russell 1000 Value Index	16.08	1.04	-1.40	0.32	2.86	-0.46	0.98
S&P 500 Index	15.24	1.00	0.00	0.42	0.00	0.00	1.00
WisdomTree High Dividend Index	17.35	0.96	1.12	0.33	7.86	0.08	0.89
Russell 1000 Value Index	16.08	1.00	0.00	0.32	0.00	0.00	1.00
WisdomTree MidCap Dividend Index	18.11	0.95	0.92	0.44	6.20	0.07	0.94
Russell Midcap Value Index	18.11	0.99	-0.55	0.37	3.61	-0.21	0.98
S&P MidCap 400 Index	17.94	1.00	0.00	0.42	0.00	0.00	1.00
WisdomTree SmallCap Dividend Index	20.30	0.95	1.16	0.30	7.45	0.10	0.93
Russell 2000 Value Index	19.83	0.99	-0.85	0.21	3.40	-0.30	0.99
Russell 2000 Index	19.83	1.00	0.00	0.27	0.00	0.00	1.00

Sources: WisdomTree, Zephyr StyleADVISOR, as of 5/31/16. Std Dev = standard deviation. Past performance is not indicative of future results. You cannot invest directly in an index.

⁹ 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.

¹⁰ Tracking error: A divergence between the price behavior of a position or a portfolio and the price behavior of a benchmark.

¹¹ Standard deviation: A measure of how widely an investment or investment strategy’s returns move compared 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.

In the developed world, we observed a few key takeaways:

- + In each and every case, the WisdomTree dividend-weighted Index generated a higher risk-adjusted return than the comparable cap-weighted index, based on the Sharpe ratio.
- + All of the international WisdomTree Indexes exhibited correlations of at least 0.98 relative to their cap-weighted peers over the 10-year period.
- + The greatest reductions in the relative volatility occurred in the small-cap segments of the market.
- + The WisdomTree Japan SmallCap Dividend Index demonstrated the lowest volatility compared to any of the international—or U.S. benchmarks—over this 10-year period.
- + Tracking error was much tighter compared to the U.S., reflecting the fact that most companies in the developed world pay dividends.
- + The WisdomTree International Equity Index had a tracking error of 2% relative to the MSCI EAFE Index—tight enough to make it attractive for institutions looking for alternatives to MSCI EAFE in part of their developed world allocations.

FIGURE 4: RISK-ADJUSTED RETURNS, WISDOMTREE INTERNATIONAL DIVIDEND-WEIGHTED INDEXES [2006–2016]

Index	Summary Statistics 6/1/2006–5/31/2016						
	Std Dev (%)	Beta	Alpha (%)	Sharpe Ratio	Tracking Error (%)	Information Ratio	Correlation
WisdomTree International Equity Index	18.77	1.01	0.80	0.09	2.01	0.39	0.99
MSCI EAFE Index	18.56	1.00	0.00	0.05	0.00	0.00	1.00
WisdomTree International LargeCap Dividend Index	18.76	1.00	0.13	0.06	2.56	0.04	0.99
MSCI EAFE Index	18.56	1.00	0.00	0.05	0.00	0.00	1.00
WisdomTree International High Dividend Index	19.89	0.99	1.31	0.05	3.57	0.35	0.98
MSCI EAFE Value Index	19.75	1.00	0.00	-0.02	0.00	0.00	1.00
WisdomTree International MidCap Dividend Index	19.28	1.01	1.25	0.17	2.20	0.58	0.99
MSCI EAFE Mid Cap Index	19.06	1.00	0.00	0.10	0.00	0.00	1.00
WisdomTree International SmallCap Dividend Index	19.09	0.95	1.51	0.23	3.39	0.42	0.99
MSCI EAFE Small Cap Index	19.70	1.00	0.00	0.15	0.00	0.00	1.00
WisdomTree Europe SmallCap Dividend Index	22.97	0.97	0.75	0.22	3.61	0.18	0.99
MSCI Europe Small Cap Index	23.44	1.00	0.00	0.19	0.00	0.00	1.00
WisdomTree Japan SmallCap Dividend Index	13.97	0.92	1.40	0.14	2.99	0.44	0.98
MSCI Japan Small Cap Index	14.86	1.00	0.00	0.04	0.00	0.00	1.00

Sources: WisdomTree, Zephyr StyleADVISOR, as of 5/31/16. Std Dev = standard deviation. Past performance is not indicative of future results. You cannot invest directly in an index.

EVALUATING THE 10-YEAR TIME FRAME, 2006–2016

One of the important questions to ask when evaluating the merits of any investment strategy, whether the results were produced in real time or in simulated back tests, is this: Was there any particular macro trend that can help explain the excess performance that may not be repeated in the future? It's never possible to know what forces will shape returns over the next 10 years, but looking backward we can clearly identify three forces that stood as headwinds to these strategies: (i) the fact that value stocks underperformed growth stocks over the past decade in the U.S. and in the developed world;¹² (ii) the fact that this was one of the worst decades for high-yielding stocks going back to 1957;¹³ and (iii) that the WisdomTree dividend-weighted Indexes, particularly in the U.S., were uniformly over-weight the worst-performing and most volatile sector in the market during the financial crisis—financial stocks, which contributed to the worst contraction in the U.S. Dividend Stream® in 80 years.¹⁴ It's difficult to imagine three forces better suited to stress-test a dividend-weighted strategy.

Yet, in the U.S., three of WisdomTree's four size-segmented dividend-weighted Indexes beat their comparable cap-weighted index—and all four beat the value cut of a comparable cap-weighted index—despite growth's supremacy over value for that period. How do we account for that? At a granular level, WisdomTree was rewarded for its sector allocations and stock selection in the broad market Index, and in the mid-cap and small-cap dividend Indexes. But in a larger sense, if one is viewing returns through the prism of smart beta risk premiums, the simplest answer may be that WisdomTree's dividend-weighted Indexes tapped into multiple risk premiums¹⁵ more efficiently than did their comparable cap-weighted indexes.

The direction of interest rates can also play a role in the performance of dividend-weighted indexes. Interest rates seldom increase or decrease continuously in one direction over an entire decade. They tend to trend higher or lower, with many reversals each year, depending on expectations for economic growth, inflation and central bank policy. Dividend-weighted indexes generally have slightly higher exposure to the more capital-intensive sectors of the market and therefore may exhibit instances in which the aggregate leverage for the portfolio is higher than a comparable cap-weighted index. In periods when interest rates increase faster than the market anticipates, dividend-weighted indexes that tilt toward more interest-rate-sensitive sectors may underperform the broader market. Fortunately, WisdomTree's dividend-weighted Indexes do not introduce the same stock-selection risk that narrow dividend-based strategies do. This, combined with sector caps, helps WisdomTree to be more diversified than some other strategies. Because WisdomTree rebalances each year, its Indexes have the opportunity to benefit from stock tilts within a sector based on relative valuation, even when over-weight that sector relative to a comparable cap-weighted index.

CHANGING VALUATIONS: WISDOMTREE'S U.S. DIVIDEND INDEXES, 2006–2016

Today, there are more than 75 dividend-focused ETFs listed in the U.S., covering U.S. and developed world stocks, representing approximately \$100 billion in assets under management. As income investors have "reached" for yield, the flow of money into these funds can impact the price-to-earnings (P/E)¹⁶ ratios on some dividend-paying stocks and thus impact the P/E ratios of the higher-yielding portion of the market. This ultimately can impact the P/E ratios of dividend-based indexes.

¹² Source: Bloomberg as of 5/31/16.

¹³ Source: Professor Jeremy Siegel, "The Future for Investors," 2005.

¹⁴ Source: Robert Shiller online data: <http://www.econ.yale.edu/~shiller/>.

¹⁵ Risk premium: References the additional return generated by investing in securities with certain fundamental factors (or attributes) that have shown persistent outperformance over long periods.

¹⁶ 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.

If certain stocks become more expensive because of their popularity with investors, a case could be made that expected returns for such strategies may be lower going forward than they have been historically. That concern is starting to be voiced today with some “smart beta¹⁷” strategies that have seen large recent inflows. For example, in the past year, more than \$7 billion has flowed into an ETF tracking the MSCI USA Minimum Volatility Index. And over the past year, the P/E ratio on that Index soared to nearly 23 times earnings, which was a 17% premium to the S&P 500 Index at the time. New investors who pay a high multiple for the expected benefit of a “lower-volatility portfolio” may be disappointed with future returns, given the high starting multiple being charged to access the strategy.

This raises two important questions: Are valuations being raised to inflated levels on dividend-paying stocks? And if they have been, did the WisdomTree Indexes benefit disproportionately from expanding P/E multiples since the end of the financial crisis? We believe the answer to both questions is no, if the answer is based on the broadest barometers of dividend stocks in each of the size segments of the U.S.—an analysis that can only be done using WisdomTree dividend Indexes.

Expanding P/E multiples can result from a kind of “momentum bias” in the market, where investors buy stocks—or stock strategies—simply because they have risen in value in the recent past. WisdomTree tries to avoid this “valuation creep” by rebalancing annually back to measures of relative value. WisdomTree has the opportunity each December to lower the valuation on the dividend-paying part of the market by rebalancing. In Figure 5, we examine recent valuations on WisdomTree’s domestic dividend Indexes and how they compare to median valuations since 2006 and starting valuations in 2006—all measured compared to their comparable cap-weighted indexes.

FIGURE 5: P/E RATIOS OF WISDOMTREE U.S. DIVIDEND-WEIGHTED INDEXES VS. CAP-WEIGHTED INDEXES [2006–2016]

Index	WisdomTree Dividend Index	WisdomTree LargeCap Dividend Index	WisdomTree MidCap Dividend Index	WisdomTree SmallCap Dividend Index	Russell 3000 Index	S&P 500 Index	S&P MidCap 400 Index	S&P SmallCap 600 Index	Russell 2000 Index
June 2006	15.00	14.52	17.47	18.96	16.82	15.94	19.90	19.49	26.00
September 2011	12.59	12.10	15.98	17.37	13.58	12.65	15.97	17.70	28.29
Current	18.67	18.13	21.14	20.18	20.75	19.42	21.49	23.86	36.74
Median	15.51	15.13	19.31	21.07	17.98	16.64	20.17	22.91	36.66
P/E Expansion to Median	20.3%	19.9%	9.4%	-4.2%	15.4%	16.7%	6.6%	4.1%	0.2%
P/E Expansion since June 2006	24.5%	24.9%	21.0%	6.5%	23.4%	21.8%	8.0%	22.5%	41.3%
P/E Expansion since Sept 2011	48.3%	49.8%	32.3%	16.2%	52.8%	53.4%	34.6%	34.9%	29.9%

Sources: WisdomTree, Bloomberg, as of 5/31/16. Past performance is not indicative of future results. You cannot invest directly in an index.

¹⁷ Smart beta: A term for rules-based investment strategies that don’t use conventional market cap weightings.

In each and every instance, the WisdomTree Index had both a lower average P/E ratio and a lower median P/E ratio compared to its cap-weighted peer. This was also true as of the most recent quarter: Each and every WisdomTree Index exhibited a lower P/E ratio than its cap-weighted counterpart. When we compare the premium (or discount) of each WisdomTree Index to its own history, we note:

- + Both the WisdomTree Dividend Index and the WisdomTree LargeCap Dividend Index traded at roughly a 20% premium to their 10-year median P/E, a small premium above the 17% premium the S&P 500 was trading at relative to its own 10-year history. As of May 31, 2016, the Russell 3000 Index traded at a 15% premium to its 10-year median P/E.
- + The WisdomTree MidCap Dividend Index traded at just a 9% premium to its 10-year median P/E, slightly higher than the 7% premium exhibited by the S&P MidCap 400 Index.
- + The WisdomTree SmallCap Dividend Index, based on its most recent quarter-end P/E, was the only one of the four WisdomTree Indexes to be trading at a discount to its 10-year median P/E. Note, we show both the Russell 2000 Index and the S&P SmallCap 600 Index due to quite large median P/E ratios for the Russell 2000 Index, which typically has about 20% exposure to unprofitable companies that raises its P/E ratio.

Based on this data, we think it's fair to conclude that, like the broader market, the WisdomTree Indexes benefitted from the expansion in P/E multiples from the very low levels that existed as of September 2011. However, in each and every case we measure in the table above, the comparable cap-weighted index experienced greater percentage increases in its P/E multiple from September 2011 than did the WisdomTree Dividend Indexes. The Russell 3000 and the S&P 500 saw multiples expand by more than 52%, while the P/E ratio on the WisdomTree Dividend Index expanded by 48%, and the multiple on the WisdomTree LargeCap Index expanded by 50%. While the multiple expansions for the S&P MidCap 400 and the Russell 2000 Index were smaller in percentage terms than expansions in the large- and broad-market categories, the P/E ratios on both the WisdomTree MidCap Dividend and the WisdomTree SmallCap Dividend Indexes increased by a smaller percentage compared to their cap-weighted peers, from September 2011 lows. We do not believe dividend stocks are expensive compared to the broader market.

Tilting portfolios away from the higher-P/E portions of the market may also help reduce risk in the portfolio. Just as stock prices are impacted by a slowdown in earnings or dividend growth, stock prices can also fall if stock multiples decline. And when P/E multiples contract, volatility in the stock market can increase. If we zoom into the most recent five-year period, where multiples have expanded in the market, we can actually see some of the impact that rebalancing has had on the dividend-based indexes. When we run the same risk-adjusted return analysis over the last five years, we see significant reductions in beta, standard deviation and tracking error. When coupled with the higher returns that WisdomTree's U.S. Indexes generated over this period, in each and every instance we see higher Sharpe and information ratios compared to the comparable cap-weighted index.

FIGURE 6: RISK-ADJUSTED RETURNS, WISDOMTREE U.S. DIVIDEND-WEIGHTED INDEXES VS. CAP-WEIGHTED INDEXES
[2006–2016]

Index	Summary Statistics 6/1/2011–5/31/2016						
	Std Dev (%)	Beta	Alpha (%)	Sharpe Ratio	Tracking Error (%)	Information Ratio	Correlation
WisdomTree Dividend Index	10.73	0.82	2.52	1.10	3.69	0.19	0.96
Russell 3000 Value Index	12.80	1.00	-0.60	0.81	2.27	-0.31	0.98
Russell 3000 Index	12.61	1.00	0.00	0.88	0.00	0.00	1.00
WisdomTree LargeCap Dividend Index	10.60	0.84	1.74	1.10	3.33	0.01	0.97
Russell 1000 Value Index	12.64	1.02	-1.06	0.84	2.38	0.00	0.98
S&P 500 Index	12.16	1.00	0.00	0.95	0.00	0.00	1.00
WisdomTree High Dividend Index	9.77	0.66	5.51	1.31	6.62	0.33	0.86
Russell 1000 Value Index	12.64	1.00	0.00	0.84	0.00	0.00	1.00
WisdomTree MidCap Dividend Index	12.35	0.82	4.46	1.05	4.35	0.70	0.96
Russell Midcap Value Index	13.42	0.91	1.64	0.81	2.87	0.32	0.98
S&P MidCap 400 Index	14.44	1.00	0.00	0.69	0.00	0.00	1.00
WisdomTree SmallCap Dividend Index	14.58	0.84	4.12	0.76	4.77	0.67	0.96
Russell 2000 Value Index	15.91	0.94	0.09	0.47	2.67	-0.12	0.99
Russell 2000 Index	16.63	1.00	0.00	0.47	0.00	0.00	1.00

Sources: WisdomTree, Zephyr StyleADVISOR, Bloomberg, as of 5/31/16. Std Dev = standard deviation. Past performance is not indicative of future results. You cannot invest directly in an index.

CONCLUSION

Passive investing has undoubtedly served investors well over the past 30 years. Numerous studies confirm that, over time, the vast majority of actively managed mutual funds have failed to outperform comparable cap-weighted indexes, after accounting for fees, expenses and transaction costs. The question we posed more than a decade ago, and that many investors are asking today, is this: Despite great strengths compared to active managers, are cap-weighted indexes optimal from an investment perspective? Or can alternatively weighted indexes serve passive investors better than index funds based on traditional benchmarks?

For decades, academics and practitioners were guided by an organizing principle called the Efficient Market Hypothesis. The theory posits that all the information that can be known about a company is already reflected in the stock price and, therefore, that price is the best unbiased estimate of a firm’s underlying value. If stock prices are efficient, then capitalization-weighted indexes are “mean-variance efficient,” meaning the market portfolio delivers the highest expected return given any level of risk and the lowest possible risk for any level or return. But if one concedes that stock prices are not efficient or do not always represent underlying “fair values,” then cap-weighted indexes will not be mean-variance efficient. And if such pricing error persists for months or years, the market portfolio itself can be vulnerable to bubbles because pricing errors are magnified by capitalization weighting and integrated directly into index weights. This means a cap-weighted index is vulnerable to systematically over-weighting overvalued stocks and under-weighting undervalued stocks ... whenever and wherever they occur.

WisdomTree's Indexes were constructed to introduce a measure of valuation into index weights, so investors do not buy equity markets based solely on the prices paid by previous investors. Rather than weighting each component based on its market value, WisdomTree's broad-based dividend Indexes typically include all investable stocks that pay dividends and then weight them annually based on a measure of relative value: the cash dividends each company pays as a percentage of the total amount of cash dividends paid by all the companies in that market. We call this weighting by the *Dividend Stream*. Real-time results, going back 10 years, suggest this may be a better way to own equity markets, both in the U.S. and in the developed world, compared to comparable indexes that set weights based on a company's market value.

APPENDIX A: ADDITIONAL RETURN DATA ON WISDOMTREE INDEXES [2006–2016]

Index	WT Index Inception	Average Annual Total Returns as of 5/31/2016			
		1 year	3 years	5 years	10 years
WT Dividend Top 100/Dividend ex-Financials Spliced Index	6/1/2006	2.66%	9.94%	11.63%	8.27%
Dow Jones U.S. Select Dividend Index		9.88%	12.70%	13.09%	7.20%
WT Japan Dividend/Japan Hedged Spliced Index	6/1/2006	-21.04%	5.48%	9.90%	1.35%
MSCI Japan/Japan Local Currency Spliced Index		-17.99%	7.47%	11.78%	1.96%
WT Pacific ex-Japan Dividend/Asia Pacific ex-Japan Spliced Index	6/1/2006	-15.84%	-2.68%	-0.34%	5.98%
MSCI Pacific ex-Japan/MSCI AC Asia Pacific ex-Japan Spliced Index		-15.57%	-1.19%	-0.78%	4.82%
WT Pacific ex-Japan Equity Income/Australia Dividend Spliced Index	6/1/2006	-8.94%	-2.49%	-0.58%	5.36%
MSCI Pacific ex-Japan Value/MSCI Australia Spliced Index		-8.99%	-2.55%	-0.64%	4.36%
WT Japan Equity Income/Global ex-US Quality Dividend Growth Spliced Index	6/1/2006	-7.97%	0.17%	-0.80%	1.73%
MSCI Japan Value/MSCI AC World ex USA Growth Spliced Index		-8.28%	1.84%	1.25%	2.88%
WT Europe Equity Income/Global High Dividend Spliced Index	6/1/2006	-5.73%	1.86%	2.13%	2.28%
MSCI Europe Value/AC World Spliced Index		-5.42%	5.20%	5.17%	3.15%
WT Intl Dividend Top 100/Intl Dividend ex-Financials Spliced Index	6/1/2006	-11.02%	0.88%	-0.14%	1.78%
MSCI EAFE Value Index		-13.76%	0.25%	0.89%	0.70%

Source: WisdomTree, Bloomberg as of 5/31/2016. Past performance is not indicative of future results. You cannot invest directly in an index.

Dividends are not guaranteed, and a company's future ability to pay dividends may be limited. A company currently paying dividends may cease paying dividends at any time.

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. Investors should read the prospectus carefully before investing.

There are risks associated with investing, including possible loss of principal. Investments focusing on certain sectors and/or smaller companies may be more vulnerable to any single economic or regulatory development. This may result in greater share price volatility. As investments can have a high concentration in some issuers, they can be adversely impacted by changes affecting those issuers. Please read each Fund's prospectus for specific details regarding each Fund.

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.

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WisdomTree Dividend Index: Measures the performance of dividend-paying companies incorporated in the United States that pay regular cash dividends and meet WisdomTree's eligibility requirements; weighted by indicated cash dividends. Russell 3000 Value Index: Measures the performance of the broad value segment of the U.S. equity value universe. It includes those Russell 3000 Index companies with lower price-to-book ratios and lower forecasted growth values. Russell 3000 Index: Measures the performance of the 3,000 largest U.S. companies based on total market capitalization. WisdomTree LargeCap Dividend Index: A fundamentally weighted index that measures the performance of the large-capitalization segment of the U.S. dividend-paying market. The Index comprises the 300 largest companies ranked by market capitalization from the WisdomTree Dividend Index. Russell 1000 Value Index: A measure of the large-cap value segment of the U.S. equity universe, selecting from the Russell 1000 Index. S&P 500 Index: Market capitalization-weighted benchmark 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. WisdomTree High Dividend Index: Measures the performance of companies with high dividend yields selected from the WisdomTree Dividend Index. Securities ranking in the highest 30% by dividend yield are selected for inclusion. The Index is dividend weighted. WisdomTree MidCap Dividend Index: A fundamentally weighted index that measures the performance of the mid-capitalization segment of the U.S. dividend-paying market. The Index comprises the companies that constitute the top 75% of the market capitalization of the WisdomTree Dividend Index after the 300 largest companies have been removed. The Index is dividend weighted annually to reflect the proportionate share of the aggregate cash dividends each component company is projected to pay in the coming year, based on the most recently declared dividends per share. Russell MidCap Value Index: Measures the performance of the mid-cap value segment of the U.S. equity universe. It includes those Russell Midcap Index companies with lower price-to-book ratios and lower forecasted growth values. S&P MidCap 400 Index: Provides investors with a benchmark for mid-sized companies. The Index covers over 7% of the U.S. equity market and seeks to remain an accurate measure of mid-sized companies, reflecting the risk and return characteristics of the broader mid-cap universe on an ongoing basis. WisdomTree SmallCap Dividend Index: A fundamentally weighted index that measures the performance of the small-capitalization segment of the U.S. dividend-paying market. The Index comprises the companies that constitute the bottom 25% of the market capitalization of the WisdomTree Dividend Index after the 300 largest companies have been removed. The Index is dividend weighted annually to reflect the proportionate share of the aggregate cash dividends each component company is projected to pay in the coming year, based on the most recently declared dividends per share. Russell 2000 Value Index: Measures the performance of the small-cap value segment of the U.S. equity universe. It includes those Russell 2000 Index companies with lower price-to-book ratios and lower forecasted growth values. Russell 2000 Index: Measures the performance of the small-cap segment of the U.S. equity universe. The Russell 2000 is a subset of the Russell 3000 Index, representing approximately 10% of the total market capitalization of that Index. It includes approximately 2,000 of the smallest securities based on a combination of their market cap and current index membership. WisdomTree International Equity Index: Fundamentally weighted index that measures the performance of dividend-paying companies in the industrialized world, excluding Canada and the United States, that pay regular cash dividends and that meet other liquidity and capitalization requirements. It comprises companies incorporated in 15 developed European countries, Japan, Australia, New Zealand, Hong Kong, Israel and Singapore. Companies are weighted in the Index based on annual cash dividends paid. MSCI EAFE Index: A market cap-weighted index composed of companies representative of the developed market structure of developed countries in Europe, Australasia and Japan. WisdomTree International LargeCap Dividend Index: A fundamentally weighted index that measures the performance of the large-capitalization segment of the dividend-paying market in the industrialized world outside the U.S. and Canada. The Index comprises the 300 largest companies ranked by market capitalization from the WisdomTree International Equity Index. Companies are weighted in the Index based on annual cash dividends paid. WisdomTree International High Dividend Index: A fundamentally weighted index that measures the performance of companies with high dividend yields selected from the WisdomTree International Equity Index. MSCI EAFE Value Index: A market capitalization-weighted subset of stocks within the MSCI EAFE Index that have lower share prices relative to their earnings or dividends per share. WisdomTree International MidCap Dividend Index: A fundamentally weighted index that measures the performance of the mid-capitalization segment of the dividend-paying market in the industrialized world outside the U.S. and Canada. The Index comprises the companies that constitute the top 75% of the market capitalization of the WisdomTree Dividend Index after the 300 largest companies have been removed. The Index is dividend weighted annually to reflect the proportionate share of the aggregate cash dividends each component company is projected to pay in the coming year, based on the most recently declared dividends per share. MSCI EAFE MidCap Index: A free float-adjusted market capitalization-weighted equity index that captures mid-cap representation across developed markets around the world, excluding the U.S. and Canada, focusing on those with higher book value-to-market value ratios. WisdomTree International SmallCap Dividend Index: A fundamentally weighted index that measures the performance of the small-capitalization segment of the dividend-paying market in the industrialized world outside the U.S. and Canada. The Index comprises the companies that make up the bottom 25% of the market capitalization of the WisdomTree International Equity Index after the 300 largest companies have been removed. Companies are weighted in the Index based on annual cash dividends paid. MSCI EAFE Small Cap Index: A free float-adjusted market capitalization-weighted equity index that captures small-cap representation across developed market countries around the world, excluding the U.S. and Canada. WisdomTree Europe SmallCap Dividend Index: A fundamentally weighted index meant to measure the performance of dividend-paying European small-cap equities; weighted by cash dividends. MSCI Europe Small Cap Index: A free float-adjusted market capitalization-weighted index designed to measure the performance of developed equity markets in Europe, specifically focusing on the small-cap segment of these equity markets. WisdomTree Japan SmallCap Dividend Index: Designed to provide exposure to dividend-paying small-capitalization companies in Japan. MSCI Japan Small Cap Index: A free float-adjusted market capitalization-weighted index designed to measure the equity market performance of Japanese small-cap securities.

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WTGM-1596