

---

# THE MINIMUM-VOLATILITY PHENOMENON

Jeremy Schwartz — Global Chief Investment Officer, Matt Wagner — Associate Director, Research  
03/07/2019

Exchange-traded fund (ETF) flows can be a good indicator of investor sentiment.

So far this year, sentiment toward developed international equities has been tempered—of the top 30 flow gatherers, none are focused on this segment of the market.<sup>1</sup>

But in developed markets broadly, both the U.S. and internationally, there has been significant movement into funds that target minimum [volatility](#).

With so much demand for holdings that exhibit lower historical volatility, what exactly are the characteristics of these stocks?

Let's focus on the developed international universe, where the most compelling case for that market seems to come down to favorable valuations.

## Watch the Price Tag

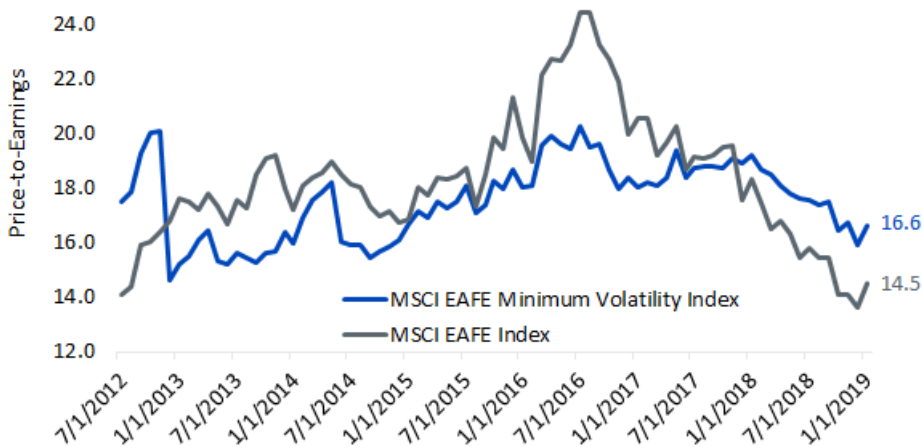
Basic finance theory tells us that a riskier basket of stocks should command a greater equity risk premium than a less volatile basket. Thus, it makes sense that a minimum volatility index would trade at a premium to the broader market.

We can test this theory by looking at the valuations of the [MSCI EAFE Index](#) and the [MSCI EAFE Minimum Volatility \(USD\) Index](#). Going back to 2012, the [valuation](#) gap between the two indexes has oscillated between premium and discount. Oddly enough, investors have often gotten away with not paying a premium for lower-vol stocks.

Why? In part because those stocks have at times been discounted since they are over-weight in sectors with lower growth expectations, such as Utilities and Real Estate.

Today's nearly 15% multiple premium for the min-vol index is near the most expensive valuation gap over the past five years. At these elevated valuations, investors modeling long-term returns based on this min-vol index need to dampen return expectations relative to the broader index.

## Developed International Price-to-Earnings Over Time



Sources: WisdomTree, Bloomberg. Data for the period 7/1/12–1/31/19. Past performance is not indicative of future results. You cannot invest directly in an index.

**Looking for [Quality](#)?**

Min-vol indexes tend to have greater exposure to profitable companies, which explains in part the high correlation between the min-vol and quality factors. The loading to quality is evident from the table below that shows factor loadings across the [Fama-French five-factor model](#). The trade-off for a 0.53 loading to quality is the -0.30 loading to [value](#).

This has been an understandable trade-off of value and quality over time: a higher-quality basket comes at a higher cost.

**Value-Quality Trade-off**

Index	Fama-French Five-Factor Model Loadings				
	Mkt-RF (Beta)	SMB (Size)	HML (Value)	RMW (Quality)	CMA (Investment)
MSCI EAFE Minimum Volatility (USD) Index	0.74	-0.03	-0.30	0.53	0.43
MSCI EAFE Index	1.01	-0.21	0.00	0.04	0.08

Sources: WisdomTree, Kenneth French Data Library, returns for the period 12/1/09–12/31/18. The MSCI EAFE Minimum Volatility (USD) Index was launched on 12/1/09.

In addition to the returns-based regression, we have sorted the MSCI EAFE Index universe of stocks into volatility quintiles going back to 2002. Interestingly, the lowest-vol quintile has actually been less expensive than the market—a median [price-to-earnings ratio \(P/E\)](#) of 14.3x for the low vol quintile compared with 15.5x for the MSCI EAFE Index.

In addition to being historically less expensive, the lowest vol quintile typically has had a significantly higher [return on equity \(ROE\)](#) than the MSCI EAFE Index.

	Price-to-Earnings Ratio (1/31/02–1/31/19)			ROE (1/31/02–1/31/19)			
	Low-Vol Quintile	MSCI EAFE Index	Low-Vol Discount/Premium	Low-Vol Quintile	MSCI EAFE Index	Low-Vol Discount/Premium	
Latest P/E	14.20x	13.31x	106.6%	Latest ROE	11.0%	11.3%	97.3%
Median Historical P/E	14.28x	15.51x	94.7%	Median Historical ROE	14.6%	10.3%	139.4%
Difference	-0.09x	-2.19x	11.9%	Difference	-3.6%	1.0%	-42.1%

Sources: WisdomTree, FactSet. Past performance is not indicative of future results. You cannot invest directly in an index.

Today, the characteristics are reversed. The P/E ratio of the low-vol quintile is at a premium to the MSCI EAFE Index, with a lower-quality basket of stocks as measured by ROE.

This prompts two questions: With all the interest in min-vol, are the prices justified by lower-quality characteristics than the market? And second, is there a way to tap into developed international equities with an eye toward a more balanced factor exposure?

The [WisdomTree International Multifactor Fund \(DWMF\)](#) has had remarkably similar volatility as the MSCI EAFE Minimum Volatility Index since its inception in August 2018.<sup>2</sup> However, this performance has been achieved with a portfolio that is presently at a discount to the MSCI EAFE Index on a P/E basis and with higher quality as measured by ROE.<sup>3</sup>

We will drill in deeper on these points in subsequent posts.

<sup>1</sup>Source: WisdomTree, for the period 1/1/19–2/28/19.

<sup>2</sup>Sources: WisdomTree, FactSet. Returns for the period 8/10/18–2/28/19.

<sup>3</sup>Sources: WisdomTree, FactSet, as of 2/28/19.

#### Important Risks Related to this Article

Investing involves risk, including possible loss of principal. Investments in non-U.S. securities involve political, regulatory and economic risks that may not be present in U.S. securities. For example, foreign securities may be subject to risk of loss due to foreign currency fluctuations, political or economic instability, or geographic events that adversely impact issuers of foreign securities. Derivatives used by the Fund to offset exposure to foreign currencies may not perform as intended. There can be no assurance that the Fund's hedging transactions will be effective. The value of an investment in the Fund could be significantly and negatively impacted if foreign currencies appreciate at the same time that the value of the Fund's equity holdings falls. While the Fund is actively managed, the Fund's investment process is expected to be heavily dependent on quantitative models, and the models may not perform as intended. Please read the Fund's prospectus for specific details regarding the Fund's risk profiles.

For the top 10 holdings of DWMF please visit the Fund's fund detail page at <https://www.wisdomtree.com/etfs/equity/dwmf>

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.

For more investing insights, check out our [Economic & Market Outlook](#)

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

## **IMPORTANT INFORMATION**

**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.**

There are risks involved with investing, including possible loss of principal. Foreign investing involves currency, political and economic risk. Funds focusing on a single country, sector and/or funds that emphasize investments in smaller companies may experience greater price volatility. Investments in emerging markets, currency, fixed income and alternative investments include additional risks. Please see prospectus for discussion of risks.

Past performance is not indicative of future results. This material contains the opinions of the author, which are subject to change, and should not to be considered or interpreted as a recommendation to participate in any particular trading strategy, or deemed to be an offer or sale of any investment product and it should not be relied on as such. There is no guarantee that any strategies discussed will work under all market conditions. This material represents an assessment of the market environment at a specific time and is not intended to be a forecast of future events or a guarantee of future results. This material should not be relied upon as research or investment advice regarding any security in particular. The user of this information assumes the entire risk of any use made of the information provided herein. Neither WisdomTree nor its affiliates, nor Foreside Fund Services, LLC, or its affiliates provide tax or legal advice. Investors seeking tax or legal advice should consult their tax or legal advisor. Unless expressly stated otherwise the opinions, interpretations or findings expressed herein do not necessarily represent the views of WisdomTree or any of its affiliates.

The MSCI information may only be used for your internal use, may not be reproduced or re-disseminated in any form and may not be used as a basis for or component of any financial instruments or products or indexes. None of the MSCI information is intended to constitute investment advice or a recommendation to make (or refrain from making) any kind of investment decision and may not be relied on as such. Historical data and analysis should not be taken as an indication or guarantee of any future performance analysis, forecast or prediction. The MSCI information is provided on an "as is" basis and the user of this information assumes the entire risk of any use made of this information. MSCI, each of its affiliates and each entity involved in compiling, computing or creating any MSCI information (collectively, the "MSCI Parties") expressly disclaims all warranties. With respect to this information, in no event shall any MSCI Party have any liability for any direct, indirect, special, incidental, punitive, consequential (including loss profits) or any other damages ([www.msci.com](http://www.msci.com))

Jonathan Steinberg, Jeremy Schwartz, Rick Harper, Christopher Gannatti, Bradley Krom, Tripp Zimmerman, Michael Barrer, Anita Rausch, Kevin Flanagan, Brendan Loftus, Joseph Tenaglia, Jeff Weniger, Matt Wagner, Alejandro Saltiel, Ryan Krystopowicz, Kara Marciscano, Jianing Wu and Brian Manby are registered representatives of Foreside Fund Services, LLC.

WisdomTree Funds are distributed by Foreside Fund Services, LLC, in the U.S. only.

You cannot invest directly in an index.

## DEFINITIONS

**Volatility** : A measure of the dispersion of actual returns around a particular average level.&nbsp;

**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.

**MSCI EAFE Minimum Volatility Index** : The Index optimizes the MSCI EAFE universe for the lowest absolute risk using a given set of constraints.&nbsp;

**Valuation** : Refers to metrics that relate financial statistics for equities to their price levels to determine if certain attributes, such as earnings or dividends, are cheap or expensive.

**Quality** : Characterized by higher efficiency and profitability. Typical measures include earnings, return on equity, return on assets, operating profitability as well as others. This term is also related to the Quality Factor, which associates these stock characteristics with excess returns vs the market over time.

**Fama-French** : Refers to a factor-based model to describe stock returns developed by Eugene Fama and Kenneth French. Their original three-factor model breaks down the components of stock returns to market risk, company size and book to market ratio, or value. &nbsp;

**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.

**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.

**Return on Equity (ROE)** : Measures a corporation's profitability by revealing how much profit a company generates with the money shareholders have invested.