



Nationwide New
Heights® fixed
indexed annuities

Domestic Equity
Index Guide

NYSE® Zebra Edge® Index

An opportunity to benefit from unpopular stocks



“Has Ibbotson found a better way to beat the market?”

Source: TheStreet, 2014.

Roger G. Ibbotson, PhD.

- Chairman and Chief Investment Officer, Zebra Capital Management
- Professor Emeritus, Yale School of Management
- Founder of Ibbotson Associates, now a Morningstar Company

Since 1977, Roger Ibbotson has conducted groundbreaking research on asset allocation and investment strategies. His daring prediction—large-cap stock returns over 11% annually would lead to the Dow breaking 10,000—made him one of the most famous names in finance.¹

His four-decade teaching career with the University of Chicago and Yale University has included 10 prestigious Graham and Dodd Awards and placed him among a select group of academics who have helped change the way investors think.

Professor Ibbotson and his team at Zebra Capital Management now bring that wealth of experience to the design of the new NYSE® Zebra Edge® Index. This dynamic index capitalizes on the core insight of his career: stocks historically have provided higher returns than bonds.

¹ Source: The Equity Risk Premium, 2006.

This brochure was designed to provide information on the NYSE® Zebra Edge® Index and should be used in conjunction with the Nationwide New Heights® fixed indexed annuity materials. It does not describe the New Heights product or historical crediting rates of the product. For more information on New Heights, please ask your financial professional for a product brochure. Fixed indexed annuities are not an investment and do not directly invest in the stock market or any index.



“Can we potentially achieve lower risk and higher return?”

—Prof. Roger G. Ibbotson

Early in his career, Professor Roger Ibbotson realized that for different asset classes — like stocks, bonds and cash — more risk generally offers more return. More recently he specifically looked within the stock market, and the relationship wasn't there — riskier stocks did not consistently offer higher returns. To find out why, Ibbotson turned to behavioral finance.

Ibbotson found his answer in what he calls “popularity.” The most popular stocks based on trading frequency had a tendency, in general, to provide below average returns. Ibbotson believed that stocks that were less popular had a better opportunity for returns: “The people who were popular in high school are not going to become more popular in later life. That is good news for those of us who were not. Things that have something wrong with them are easier to improve.”²

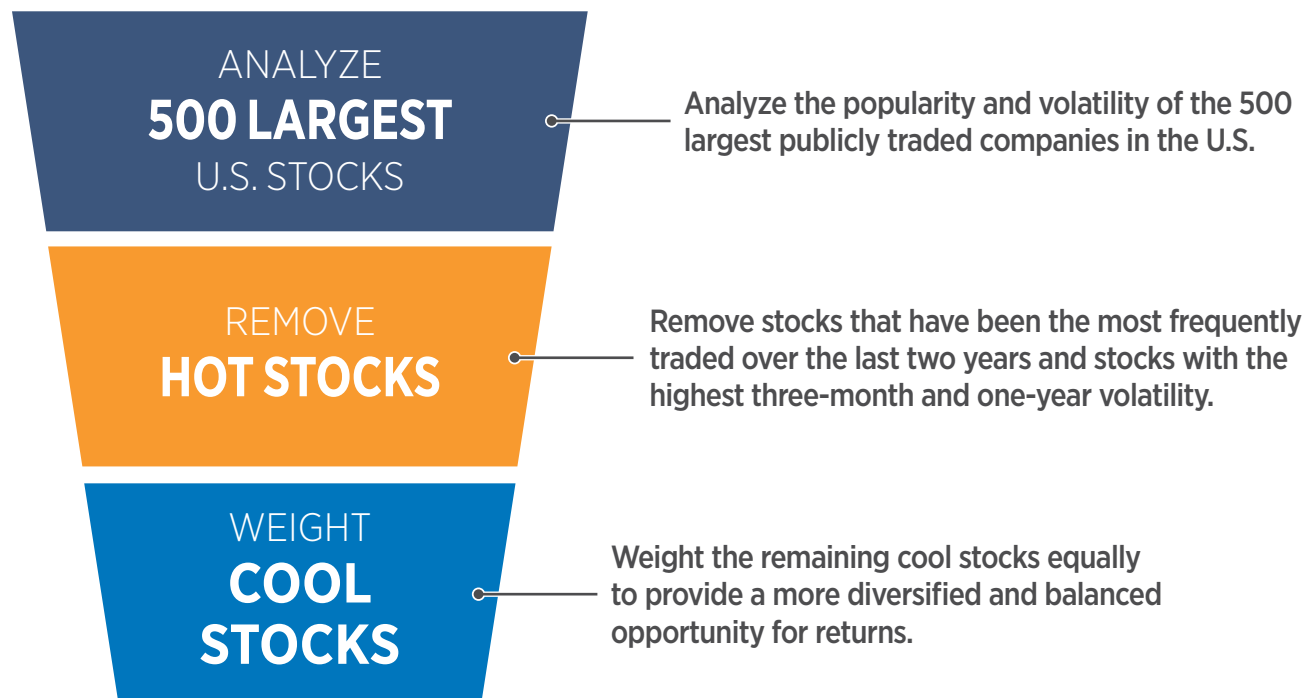
The NYSE® Zebra Edge® Index is a rules-based, risk-controlled index which leverages Ibbotson's behavioral research. Less popular and less volatile stocks provide the potential for consistent long-term returns.

Risk control seeks to provide smoother returns and mitigate sharp market fluctuations. While this type of strategy can lessen the impact of market downturns, it can also lessen the impact of market upturns, potentially limiting upside potential. For additional information regarding the NYSE® Zebra Edge® investment strategy and related risks, please visit www.nyse.com/zedgeny.

² Source: The Financial Times, 4 Mar 2016.

Ibbotson's cool stock selection process

The NYSE[®] Zebra Edge[®] Index evaluates the 500 largest publicly traded companies in the United States each quarter and removes the most popular and the most volatile.³ The diagram below shows how every three months the NYSE[®] Zebra Edge[®] Index selects on average 197 stocks with the potential for higher returns with less risk.



NYSE[®] then applies a risk control methodology that makes daily adjustments to the allocations between the selected Cool Stocks, U.S. Treasuries and an interest-free cash account. This daily re-allocation further reduces risk when markets are volatile, moving rapidly up or down.

Key Terms

- **Cool stocks** – Stocks that have been less frequently traded over the last two years and have had lower volatility over the last three months and one year.
- **Hot stocks** – Stocks that have been the most frequently traded over the last two years and have had higher volatility over the last three months and one year.
- **Popularity** – The tendency for some stocks to be traded more frequently than others because of name recognition or other factors.
- **Volatility** – The daily price changes in a stock, up or down, which historically has been an indication of risk.

³ The 500 largest publicly traded companies in the United States as represented by the NYSE[®] U.S. Large Cap Equal Weight Index. The stock selection process occurs in February, May, August and November.

The power of selecting the cool stocks

While cool stocks often include lesser known companies, Ibbotson and his team at Zebra Capital Management have found that, on average, they also had a tendency to provide higher long-term returns. Hot stocks often include well-known brand names and, in general, had a tendency to experience higher volatility. The table below lists some examples of cool and hot stocks.

A SAMPLE OF COOL AND HOT STOCKS

COOL STOCKS	HOT STOCKS
Danaher	Netflix
United Technologies	Best Buy
Ingredion	Chipotle
Kimberly-Clark	Harley-Davidson
Accenture	Ralph Lauren
Blackrock	Halliburton
Alphabet	Wynn Resorts
Waste Management	Under Armour

Hot and cool stocks based on the quarterly selection in November 2017. This is not a complete list of the selected stocks, which may change each selection and is not a recommendation to buy or sell any individual stock.

THE POTENTIAL BENEFIT OF AVOIDING HOT STOCKS

Over time, the NYSE[®] Zebra Edge[®] Index's approach of selecting the cool stocks would have provided a higher average annual return than the hot stocks that were eliminated.

NYSE[®] Zebra Edge[®] Index

6.00% Annual Return

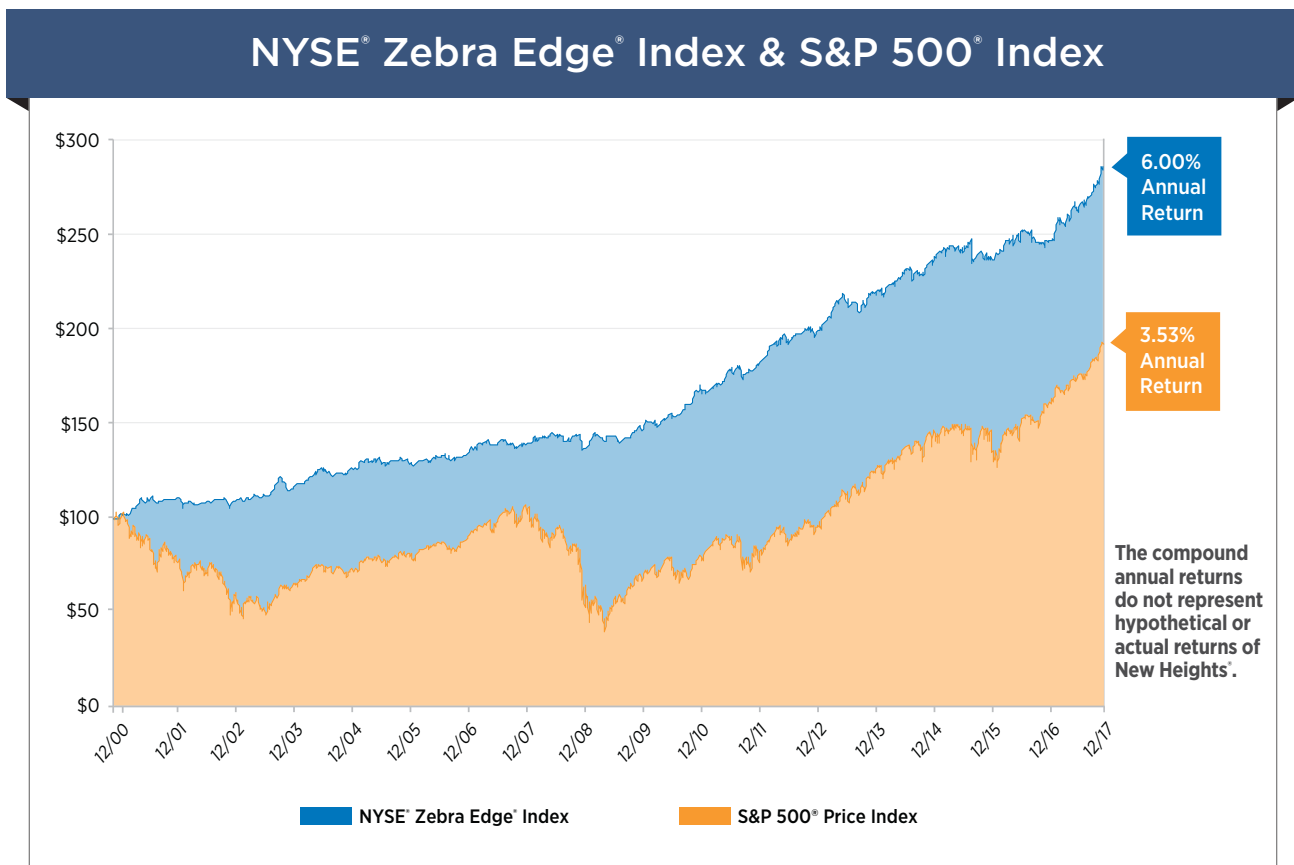
HOTTEST STOCKS

5.11% Annual Return

Performance period from 7/6/00 to 12/31/17. Compound annual returns for the NYSE[®] Zebra Edge[®] Index and a non-risk controlled hot stocks strategy that is equally weighted. The NYSE[®] Zebra Edge[®] Index was established on 10/11/16. Performance for the NYSE[®] Zebra Edge[®] Index is back-tested by applying the NYSE[®] Zebra Edge[®] Index strategy, which was designed with the benefit of hindsight, to historical financial data. A non-risk controlled hot stocks strategy could provide higher returns during certain periods of time. Back-tested performance is hypothetical and has been provided for informational purposes only. Past performance is not indicative of nor does it guarantee future performance.

Cool stocks may provide lower risk with higher returns

The NYSE[®] Zebra Edge[®] Index would have provided consistent returns over a variety of market environments through the cool stock selection process. The graph below shows how the NYSE[®] Zebra Edge[®] Index would have provided 70% higher compound annual returns than the S&P 500[®] Price Index with 73% less volatility.⁴



Source: NYSE[®] and S&P Dow Jones[®]. From 7/6/00 to 12/31/17. The NYSE[®] Zebra Edge[®] Index was established on 10/11/2016. Performance for the NYSE[®] Zebra Edge[®] Index is back-tested by applying the NYSE Zebra Edge[®] Index strategy, which was designed with the benefit of hindsight, to historical financial data. Certain components of the NYSE[®] Zebra Edge[®] Index were unavailable before 7/6/00. Back-tested performance is hypothetical and has been provided for informational purposes only. The S&P 500[®] Price Index results are actual for the full period and are not risk controlled. Past performance is not indicative of nor does it guarantee future performance. The NYSE[®] Zebra Edge[®] Index could underperform relative to other equity investment strategies. The hypothetical data includes index transaction fees.

⁴ Volatility based on standard deviation of the daily price changes in each index from 7/6/00 to 12/31/17.

More information on the NYSE[®] Zebra Edge[®] Index, including information on the risks of the index strategy, please visit www.nyse.com/zedgeny



For more information on New Heights, please visit
www.nationwidewheights.com.

For more information on the NYSE® Zebra Edge® Index, please visit
www.nyse.com/zedgeny.



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