Real Assets

Flexible Indexing

A rules-based investment strategy to help achieve defined investment outcomes



NONTRADITIONAL INDEXING EVOLVES

The practice of contemporary investment management builds on a foundation of economic theory and empirical research. It evolves via advances in the science of investing and, like any scientific area, its development is cumulative and progressive. Innovation in investment processes and product development derives from years of research and experimentation.

In the last half century, the science of investing has developed rapidly. Consider:

- The pioneering work of Harry Markowitz on modern portfolio theory;
- William Sharpe's advances on the Capital Asset Pricing Model;
- The three-factor risk model of Eugene Fama and Kenneth French with their inclusion of size and value factors;
- Mark Carhart's extension to a four-factor model adding momentum as a compensated risk factor.

These and other innovations in economic theory have helped shape the practice of investment management. This rich history also has established a sound lexicon that underpins the practice of investment management. The language of investing is important. The effective communication of economic theory and investment principles that inform our business best serves investors. Terms such as *beta* and *alpha* cannot be reduced to marketing conventions. Rather, they must connote clear investment concepts. Entrusted with the fiduciary responsibility of managing investor assets prudently, practitioners must employ discipline in both our promotion and practice of investment management.



ENDURING PRINCIPLES

These considerations are especially timely as the use of exchange traded funds, or ETFs, continues to grow in popularity. Over the past two decades, three waves of product innovation have shaped the ETF industry. The first stage focused almost exclusively on broad-based equity benchmark indexes such as the S&P 500. ETFs were primarily used by institutional investors for interim exposure. The second stage witnessed the expansion into a variety of asset classes, including fixed income, commodities and real estate, which helped democratize access to these types of investments. Professional investors have embraced ETFs in increasing numbers. The current leg reflects investor demand for distinctive investment strategies, with particular interest in nontraditional index strategies and managed funds.

As a provider of distinctive ETF products and a driver of the third leg of innovation, we pursue a clear exposition of our approach known as *flexible indexing*. Our approach produces ETFs that are actively designed yet passively managed. We seek to articulate the established investment concepts and sound investment principles that inform our distinct approach to delivering ETF products and solutions. While our practices evolve, our principles endure.



KEEP IT SIMPLE

The FlexShares' philosophy centers around offering a product that achieves a particular investment goal. Investors possess real goals that they are attempting to achieve and we start with attempting to find the most efficient and effective way to help them achieve a particular goal. We translate the goals into four fundamental investing objectives: growing assets, managing risk, generating income and providing liquidity. We also understand that investment goals span different time horizons and because of that we tend to focus on the needs of long-term investors.

Development of each new FlexShares fund begins by considering the investor objectives we seek to address. While our investment strategies are expressed ultimately in our distinctive fund products, the path to discovery is important. After carefully considering the desired objectives, we formulate the investment strategy. Employing empirical analysis, we assess whether the strategy produces persistent results. Next we engage an index provider to collaborate on designing an index based on the strategy. A successful product-development process produces a FlexShares fund managed against the subject index.

Our approach produces ETFs that are actively designed yet passively managed.

We translate the goals into four fundamental investing objectives:

1 Growing Assets

2 Managing Risk

3 Generating Income

4 Providing Liquidity *Flexible indexing* spans the entire process from concept through index construction and product design and development. This hands-on approach delivers a distinctive aspect of our value proposition to professional investors. Our empirically driven process emphasizes risk-adjusted returns building upon the fundamental risk concepts of beta and alpha.

EMPIRICAL ANALYSIS



Beta is a measure of volatility and a proxy for systematic or market risk.

An index-based methodology can capture multiple risk factors.

> Alpha measures idiosyncratic risk

Beta is a measure of volatility and a proxy for systematic or market risk. In the Capital Asset Pricing Model (CAPM), all equity returns link directly to the market and, thus, are largely explained by beta. It's increasingly common for investors to associate beta with index investing, yet the two terms are not synonymous. In fact, an index-based methodology can capture multiple risk factors. This is an important aspect of our *flexible indexing* approach.

The evolution of economic theory has identified other likely drivers of equity returns such as size, value, momentum and quality. Empirical evidence that suggests these independent factors are drivers of equity return matches our investment philosophy. This important consideration informs the view of other concepts such as alpha and, moreover, influences investment philosophy and approach.

Now, let's also consider alpha. Alpha measures idiosyncratic risk. Simply stated, it is the difference between a portfolio's expected return and its actual return. The expected return is relative both to the benchmark used and the model employed, such as the CAPM. Alpha is viewed as a proxy for "excess return" beyond exposure to systematic risk.

If we simply view alpha as excess return relative to a model such as the CAPM, then it reflects both targeted exposure to risk-based factors (size, value, momentum, quality) and the skill a portfolio manager employs through portfolio construction, security selection or even market timing. Conversely, if you use an expanded model such as the Carhart model, alpha is defined more acutely as the skill or value the manager adds.

For the purposes of this article, I refer to excess return in the broader sense that encompasses exposure to compensated risk factors such as size, value, momentum, and in our case, quality. In practice, an investor may encounter both aforementioned definitions. So, it is important to understand the benchmark and the model employed when considering an assessment of alpha.



Three Failings that Result from Investor Biases:

Failure to prudently mitigate concentrated risk exposure.

2

Failure to get appropriately compensated for specific risks.

3

Failure to adequately account for explicit and implicit costs.

123s

Now we must move from the ABCs to the 123s. For investors, the real-world application of these concepts boils down to the net returns their portfolio produces. To maximize risk-adjusted returns, investors must be wary of the three Cs – concentration, compensation and costs. With careful attention to these elements, risk-adjusted returns can add up favorably. An essential aspect of our flexible investing approach involves guarding against our own biases and those of investors broadly.

We perceive three consistent biases among investors that may lead to less-optimal portfolios. With the first, they often concentrate their risk exposure. In this context, we don't want to confuse the exposure to risk factors – such as size, low relative valuation or price momentum – with active portfolio management. The latter considers manager skill, as previously described. The concentration of risk exposure often results from employing a core-and-satellite approach.

With the core of the portfolio, the investor engages a passively managed approach that tracks a legacy benchmark index. With the satellites, the rest of the portfolio, the investor takes risk through alternative investments and concentrates risk exposure in these satellites. Our *flexible indexing* approach involves the design and use of nontraditional index strategies. These strategies systematically provide exposure to compensated risk factors or target specific investment outcomes such as managing duration volatility in a portfolio. The strategies apply to the core and satellite components of the portfolio and offset the bias toward concentrated risk exposure.

The second bias also relates to risk management. Investors often fail to get compensated appropriately for the risk they assume. Our approach identifies two categories of risk:

Specific risks such as equity, credit, currency and interest rate are areas in which we aim to ensure investors are compensated appropriately in the form of risk-adjusted return. Composite risks such as inflation or tail risk are more difficult to predict and manage. In turn, we strive to mitigate or hedge these portfolio risks. By developing products that explicitly incorporate this risk-management framework, we endeavor to offer better portfolio solutions.

Our aim is to help investors manage risk and provide more efficient portfolio solutions.

The third bias involves an inadequate assessment of costs. Investors often focus on certain explicit costs such as management fees and transaction costs. Conversely, there is limited consideration of the impact of costs such as cash drag, taxation or opportunity cost relative to the underlying investment strategy. Most managers fail to exceed benchmark returns. This is in large part due to the associated costs of managing the fund. It is therefore imperative to employ strategies that are cost efficient. The *flexible indexing* approach considers implicit and explicit costs throughout the development process. An essential component of our value proposition lies in the careful consideration of total cost of ownership in the development of each fund.

Addressing these three prevalent biases underscores several core benefits of our *flexible indexing* approach. We aim chiefly to help investors manage risk and provide more efficient portfolio solutions. Our philosophy doesn't confuse the "what" with the "how." Our approach uses index-based strategies in a variety of targeted portfolio applications, not simply to capture the return of a market segment associated with *beta* but, systematically, to provide targeted risk exposures that enhance risk-adjusted returns. Both the process and our products are different by design.

THE LAST WORD

We envision continued growth for nontraditional indexing strategies. We engineer our products in a disciplined manner to meet real-world investor needs. This lets us tackle our fiduciary responsibility of delivering cost-effective fund products. We think about the costs and consider the value the investor obtains from them. This approach doesn't necessarily imply registering the lowest explicit costs. Instead, it reflects looking at after-cost returns vs. comparable strategies.

Flexible indexing takes a fresh approach to delivering investment outcomes. We start with fundamental objectives translated into persistent investment strategies rather than with an existing benchmark. It's all about our focus: Ours pays very clear attention to the investors' objectives, and also on how to approach risk, viewed by specific and composite risks.

And, yes, lexicon matters. The investment concepts highlighted reflect an important fabric of the history and practice of investment management. When used deliberately, they enable investors to properly understand our process and our products. We believe we must be disciplined and transparent about our industry's language. This is innovation today. It's also the validation that asset management is an intellectual pursuit, one we're always trying to improve.



It's all about our focus: Ours pays very clear attention to the investors' objectives, and also on how to approach risk, viewed by specific and composite risks.



Focus on the fundamental investor objectives of growing assets, managing risk, generating income and providing liquidity to guide product development.



Employ empirical research and analysis in an effort to develop a distinctive investment strategy that produces a persistent, measurable outcome.



Evaluate the investment strategy in a portfolio context to ascertain how it contributes to portfolio risk and return and to address common investor biases. \$

Consider the explicit and implicit costs of the investment strategy.



Translate the investment strategy into a rules-based methodology expressed in an investable index.



DEFINITIONS

Traditional Index Management is a methodology wherein a rules-based investment strategy is implemented, which tracks the performance of an index. The intent is to provide exposure to a defined market, which may be identified by security type, asset class, sector, geography, etc.

Traditional Active Management is a methodology wherein an active investment strategy is implemented to produce positive risk-adjusted returns relative to a prescribed benchmark or index. Judgment or discretionary decisions regarding asset allocation, security selection, risk weighting and other factors are typically relied upon to achieve investment objectives.

Flexible Indexing is a methodology wherein a rules-based investment strategy is implemented to achieve defined investment outcomes including growing assets, managing risk, generating income and providing liquidity. Fundamental or risk factors generally serve as the basis for the reference indexes tracked to achieve investment outcomes.

Market capitalization refers to the total dollar market value of a company's outstanding shares of stock.

S&P 500 is a stock market index tracking the stock performance of 500 of the largest companies listed on stock exchanges in the United States.

FIND OUT MORE

The FlexShares approach to investing is, first and foremost, investor-centric and goal oriented. We pride ourselves on our commitment to developing products that are designed to meet real-world objectives for both institutional and individual investors. If you would like to discuss the attributes of any of the ETFs discussed in this report in greater depth or find out more about the index methodology behind them, please don't hesitate to call us at 1-855-FlexETF (1-855-353-9383)

IMPORTANT INFORMATION

Before investing, carefully consider the FlexShares investment objectives, risks, charges and expenses. This and other information is in the prospectus and a summary prospectus, copies of which may be obtained by visiting www.flexshares.com. Read the prospectus carefully before you invest.

Foreside Fund Services, LLC, distributor.

Please remember that all investments carry some level of risk, including the potential loss of principal invested. They do not typically grow at an even rate of return and may experience negative growth. As with any type of portfolio structuring, attempting to reduce risk and increase return could, at certain times, unintentionally reduce returns.

Past performance is no guarantee of future results. There is no guarantee these investment strategies will be successful. An investment in FlexShares is subject to numerous risks, including possible loss of principal. Fund returns may not match the return of the respective indexes. A full description of risks is in the prospectus.

The views and information discussed in this paper are subject to change and may not reflect the current views of the writer(s). The views expressed represent an assessment of market conditions at a specific point in time, are opinions only and should not be relied upon as investment advice regarding a particular investment or markets in general. Such information does not constitute a recommendation to buy or sell specific securities or investment vehicles. It should not be assumed that any investment will be profitable or will equal the performance of the portfolios or any securities or any sectors mentioned herein. The subject matter contained herein has been derived from several sources believed to be reliable and accurate at the time of compilation.