THE RIGHT ETF STARTS WITH THE RIGHT INDEX



Deeper knowledge about how indexes work can drive better portfolio outcomes for wealth advisors

November 2020

CONTENTS

- 5 INTRODUCTION
- **6 WHAT IS AN INDEX?**
- 8 INDEXES AS BASIS FOR INVESTMENT VEHICLES
- 10 THE KEY TO AN ETF's POWER?
 AN "INVESTABLE" INDEX
- 13 ETF ECOSYSTEM
- 14 COMMON ETF CONSIDERATIONS
 FOR CLIENT PORTFOLIOS
- 16 ABOUT FTSE RUSSELL
- 23 CONTACTS
- 24 WHITEPAPERS ON FLAGSHIP INDEXES UNDERLYING ETFs

ALL OF YOUR CLIENTS WANT POSITIVE OUTCOMES.

But each client has unique objectives no two investors share the same goals, time horizon, and risk profile.

How can you improve outcomes for a wide segment of clients and gain a competitive advantage?

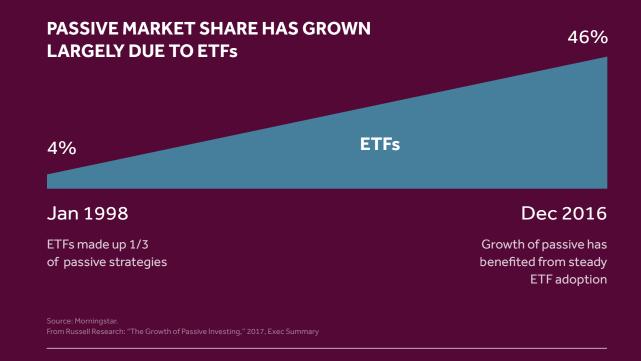
A better understanding of indexes and passive strategies can help.

Indexes are what powers Exchange Traded Funds (ETFs), and all indexes are not created equally.



PASSIVE HAS BECOME MASSIVE

When constructing portfolios, wealth advisors rely on passive strategies both for their ability to accurately capture targeted exposures and for the cost-efficiency. There are many different passive strategies to choose from, but having so much choice for each situation can be confusing.



UNDERSTANDING HOW INDEXES WORK REVEALS THE CAPABILITIES OF ETFs

Helping your clients achieve their goals requires time and research. But that hard work is easier when you understand how indexes work—it helps you make smart portfolio choices. And when you know an ETF is based on a FTSE Russell index, that tells you a lot about how accurately that index represents the selected market, as well as the investability features of the index.



An index is a basket of securities selected on specific criteria and aims to track a particular investment theme, such as a market, a region, an asset class, sector, industry, or strategy. Generally, the goal is to accurately represent the risk/return profile of that theme.

KEY TERMS



Basket

The exact compilation of securities in an index



Weighting

The proportion of the index that each individual security comprises



Value

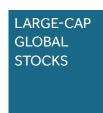
A single number that, when referenced to a starting value (or level), describes how the index has performed over time

WHY INDEXES?

Markets or individual market sectors can be enormous, including hundreds and even thousands of securities.

Buying all these securities just to access one market or trend can be expensive and time-consuming. And it can be ineffective. That approach inevitably would include securities with negligible influence on the portfolio.

Indexes are comprised of only the securities most relevant to their investment theme, allowing you to follow market trends without having to track the entire available universe of securities. Essentially, an index acts as a yardstick, capturing representative exposure to a particular market or sector.



NORTH AMERICAN OFFICE REITs

EMERGING MARKETS BONDS/ DEBT AND MORE..

Chances are, if you can imagine it, there's an index for it. And you can use indexes in a variety of ways:



Assess a given market's performance

Gauge how well an active strategy is working

Serve as the foundation for investment products, such as ETFs or mutual funds

Evaluate a market's risk profile or its diversification benefits

Measure passive risk premia

 ϵ

Indexes as the basis for

INVESTMENT VEHICLES

Because an index is a hypothetical basket of securities, it cannot be invested in directly. However, indexes are often licensed by fund managers to be used as the basis for passively invested products that track an index, such as:



Let's say you feel strongly that the large-cap US equity market is going to outperform the small-cap US equity market over the long term. You may seek exposure to only the large-cap US equities market segment then.

Rather than purchasing each US large-cap stock individually, you adopt a passive strategy. You choose an investment product that tracks an index designed to represent precisely iust the US large-cap equities market.

CHOOSING PASSIVE INVESTMENT PRODUCTS

While some investors prefer actively managed investments, which rely on a manager's stock selection skills, others turn to passively managed investment products for the following reasons:

Representation



Since the goal of the investment vehicle is to target a particular market or market segment, the chosen index should be as representative of this market segment as possible.

Simplicity



Passively managed index products are comprised of the same securities and at the same weights as the index on which they are based. That makes it easy to track and measure performance.

Lower cost



Passively managed investments that track equity indexes typically cost less than their actively-managed counterparts. They have lower (or no) transaction costs or fees because there isn't a manager to make investment decisions based on expertise, opinions and analysis.

Objective and transparent



When an investment vehicle is replicating the index, it's important that the index's rules and calculation methodology are published openly. You should be able to understand and anticipate changes to the index.

Investable



The index should only include securities that are freely available for purchase by average investors, rather than those held by employees or other investors who are restricted from selling their shares. Otherwise, replicating the index can be difficult, and unnatural stock price spikes can occur.

As index solutions continue to expand and evolve, you can rely on us to offer tools to help you achieve your investment goals.

THE KEY TO AN ETF'S POWER? AN "INVESTABLE" INDEX

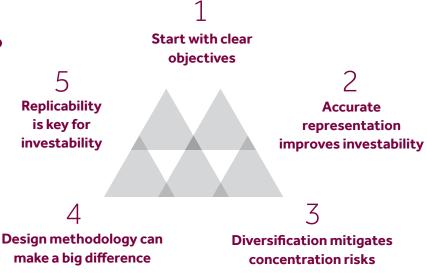
UNDER THE HOOD WITH MARK BARNES HEAD OF INVESTMENT RESEARCH, AMERICAS, GLOBAL INVESTMENT RESEARCH, FTSE RUSSELL



It is imperative that ETF product developers as well as fund selectors and analysts in the wealth space grasp how index selection can impact an investment product's ability to meet its objectives.

WHAT MAKES AN INDEX INVESTABLE?

Before embarking on any journey for an exchange-traded product, providers must consider core index construction tenets that serve as a strong foundation for investability.





Start with clear objectives

From the outset, ETF providers must define a clear vision of their goals, such as enhancing return, lowering volatility, or achieving targeted factor exposure(s). Then product providers and index engineers work together to map all the requirements and characteristics of an underlying index. Best practice is to design that index with a long view toward investability, ensuring the original objectives can be maintained over time.

EXAMPLE

The Russell 1000 Index ha the objective of tracking the top 1,000 US equities by market cap

When designing an index, practical, real-world implementation issues must be considered. It has to be investable, meaning an investment product replicating the index can be traded in the market efficiently, and at a high capacity.



Accurate representation improves investability

It is important to assess indexes from multiple angles—not just market performance. An index that effectively represents a market does so by delivering an unbiased, complete view of the market or market segment it is designed to measure. This is only accomplished through the application of an objective, transparent construction methodology. Arbitrarily excluding opportunities available to market participants can impact the weights of index members. Differences in weights and returns can impact index performance.

The introduction of constraints can be a useful safeguard against any unwanted extreme positions. In other words, an investable index must be "true-to-label."

EXAMPLE

represents the top 3,000 investable stocks in the US stock market



Diversification mitigates concentration risks

To achieve a stated objective, any index runs the risk of becoming overly concentrated. Naturally, its design can start to resemble an active approach relative to the market capitalization of the benchmark. Ensuring appropriate levels of diversification within an index can mitigate potential sector, country, or stock-specific concentration risks.

EXAMPLE

FTSE Global RIC
Capped Indexes were
built to help investors
meet concentration
and diversification
requirements



Design methodology can make a big difference

Index providers differ in their build methodologies. Each brand brings their own toolkit to design for particular objectives. In the process, trade-offs are made along the way: targeted factor exposure vs diversification, simplicity vs complexity, etc.

Investability relies on the most efficient methodology that most closely meets the stated objectives.

EXAMPLE

FTSE Fixed Income Indexes are designed to appeal to a broad range of market participants and are widely followed by the investment community



5 Replicability is key for investability

A popular criticism of the latest generation of indexes (e.g. smart beta) is they rely on theoretical academic analysis and on back-tested data to simulate attractive performance outcomes. Investability relies on practical, real-world implementation issues; i.e., an investment product replicating the index can be traded in the market efficiently, and at a high capacity. Index design addresses many questions, such as: Can the fund manager trade the number of stocks? Is that market segment liquid enough? What are the turnover and likely trading costs? The most investable indexes are tempered by reality.

EXAMPLE

The Russell 2000 Index aims to accurately measure the performance of the small-cap segment of the US equity market

THREE ESSENTIAL GROUPS AND ROLES

Do you have the tools and information you need to consider all of your opportunities across markets, asset classes, styles or strategies? As indexes and portfolio strategies continue to evolve, you need an index provider who helps you stay well-informed. FTSE Russell is an integral part of the global ETF industry, providing indexing and data solutions to a wide variety of market participants.

ETF ECOSYSTEM



PRIMARY PROVIDERS

Index providers

Key services: indexes, benchmarks, and asset class proxy

Index data is licensed to an ETF sponsor who then replicates the index into an ETF

ETF sponsors

Manage and promote ETFs

ETF administrators

Day-to-day operation of the ETF

REGULATORY ENTITIES

SUPPORTING PROVIDERS

Distributors

Increase the availability of ETFs to investors

Auditors

Audit for accounting and regulatory requirements

SEC and CFTC

Monitor, report, and investigate all aspects of the ETF ecosystem

Fund counsel

Legal guidance and opinion

Advisors

Provide ETF investment advice to investors directly

COMMON ETF CONSIDERATIONS FOR CLIENT PORTFOLIOS

Up to this point you've been learning about index basics. Now, here is a brief overview of how understanding those basics gets put into action within an investment portfolio.

The growing devotion to ETFs is in large part due to their ability to cater for a wide variety of investment objectives and risk profiles in a cost-effective manner. This flexibility is a key reason why financial advisors and portfolio managers employ ETFs in the construction of portfolios sometimes alongside active strategies.

22/25
top ETF issuers
work with FTSE
Russell¹

\$3.5 T

SINCE THEIR FIRST LAUNCH IN THE US, ETFs HAVE GROWN IN NUMBER AND ASSETS UNDER MANAGEMENT:

14

\$6.5 M

1993

2018

Single index-based ETF with \$6.5M in assets

Typically, advisors allocate to ETFs in three ways

There are many reasons why wealth advisors use ETFs in portfolio construction. Those reasons dictate the balance of active and passive strategies in that investment approach.

The top three considerations are:

PORTFOLIO ALLOCATION

PASSIVE ACTIVE 3

PRIMARY VEHICLE FOR MARKET EXPOSURE

A portfolio allocated with a majority of passive investments typically relies on a mix of ETFs and other passive investments to keep costs and taxes low.

UP TO HALF OF A PORTFOLIO'S BETA

A blend of passive and active investments in a portfolio takes advantage of ETFs' efficient factor exposure and lower costs balanced with expectations for a more active role in risk management and performance beta.

MINORITY POSITION FOR TACTICAL EXPOSURE

A portfolio consisting mostly of active with a small percentage of passive investments is likely to concentrate on a specific tilt or factor while utilizing ETFs for costefficient exposure.

The process

ETFs aim to replicate an underlying index or benchmark. Index providers license an index to an ETF issuer or asset manager. The ETF issuer or asset management company will replicate the index in an ETF usually by buying the

index's constituents.

This results in an ETF being "benchmarked" to that index.

Source: Morningstar, December 31, 2019.

WE BUILD THE INDEXES THAT

HELP WEALTH ADVISORS FOCUS ON CLIENT GOALS

Global provider

to the world's top asset owners, asset managers, and investment banks 30+ years

multi-asset experience \$16 trillion*

benchmarked to our indexes

More than \$3.75T of investment product assets passively track FTSE Russell indexes. Wealth managers and institutional investors around the world select these investment products to build portfolios that meet their clients' specific investment objectives. Analytics tools designed for financial advisors support proportional allocation to asset classes and potentially improve risk-adjusted returns, along with simple portfolio-level performance reporting and customizable capabilities like ESG ratings.

Basis of investable products
Performance measurement
Investment analytics
Risk management
Asset allocation
Research

Insights for better decision making
Examine global market conditions
Uncover risks and opportunities
Identify trend inflection points
Power investment strategies
Risk management

Uncover risks and opportunities
Inform corporate strategies
Support trading, tracking
and reporting
Insights for better decision making
Research



*Data as of December 31, 2019 as reported on April 1, 2020 by eVestment for institutional assets, Morningstar for retail mutual funds, insurance products, and ETFs, and additional passive assets directly collected by FTSE Russell. AUM data includes blended benchmarks and excludes futures and options. AUM data will not include active and passive assets not reported to a 3rd party source or FTSE Russell. Passive assets directly collected by FTSE Russell have been removed from third party sources to prevent double counting. No assurances are given by FTSE Russell as to the accuracy of the data.

WE'RE A DIFFERENT KIND OF **INDEX PROVIDER**

FTSE RUSSELL INDEX SERIES

Global ETF-linked assets

22/25

top global ETF issuers work with FTSE Russell¹

~\$663B

ETF-linked assets benchmarked²

in equity ETF assets benchmarked²

~\$48B

in fixed income ETF assets benchmarked⁶

~\$258B

in ETF-linked assets benchmarked to FTSE GEIS2 (FTSE Global Equity Index Series)2

~\$13B

~\$606B

in ETF assets benchmarked to listed real estate²

~590

Top 30

Exchanges list FTSE Russell-

linked ETFs

ETFs benchmarked to FTSE Russell indexes

Global benchmarked assets

\$16T

in reported fund AUM for FTSE Russell benchmarks³ 98/100

top asset managers use FTSE Russell indexes4

We calculate indexes across a vast variety of asset classes and markets. Here are some examples.

RUSSELL US INDEXES

Since 1994, Russell US Indexes are the leading US equity benchmark for institutional investors.

FTSE GLOBAL FACTOR

Single and multi-factor indexes. FTSE Russell is renowned for its proprietary tilt-tilt methodology.

FTSE FIXED INCOME

Having joined the FTSE Russell index family as part of the Citi acquisition in August 2017, this range offers broad coverage in terms of currency, region, asset class, and credit quality.

FTSE GLOBAL RIC CAPPED

Provides the market cap-weighted index base for individual countries and regions by meeting concentration and diversification requirements.

OUR COMMITMENT

To help our clients capture opportunity, manage risk, and find a competitive advantage

Quality

We provide global multiasset solutions with a focus on quality, timeliness and precision

Reliability

We deliver resilient solutions underpinned by a robust governance framework that comprises indexes, analytics, technology, and operations

Pioneering

We want to help our clients become future-ready, and we continually innovate to grow our industry and shape its future

Responsive

We create agile, clientcentric solutions that evolve to meet changing market needs

Service

We have a global team of experts dedicated to meeting our clients' needs

Transparent

We take pride in fostering transparency throughout the investment process

Accessible

We partner with distributors around the world to ensure easy access to our data

Partnership

We partner with industry thought leaders and clients to embed innovation and trust

Global and local

We combine global perspective with local knowledge. We are sensitive to market needs



To learn more, visit ftserussell.com; email info@ftserussell.com; or call your regional ETF/ETP representative

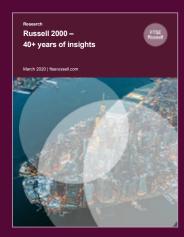
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DOWNLOAD WHITEPAPERS TO LEARN MORE



Flagship indexes underlying ETFs



Russell 2000 – 40+ years of insights

The Russell 2000 has become the preeminent representative of the US small-cap stock domain since its inception in 1984. More than 40 years of data enables deep insights into the relative performance and distinct characteristics of small-cap stocks. While there has been no clear performance advantage of small-cap stocks over large-cap stocks over the past four decades, there have been material differences over shorter periods, primarily driven by the underlying industry composition and economic sensitivities that distinguish large companies from their smaller counterparts.



Russell US Indexes – 40 years of insights

The Russell US Indexes were created in 1984 by the Frank Russell Company (now part of FTSE Russell) with the goal of providing accurate representation of the investable US equity market. When initially introduced, the Russell indexes provided five years of simulated back-history so that a historical record would exist, enabling investors to use the indexes at launch without requiring a live track record to be accumulated. As a result, there are now 40 years of performance, characteristics and sector data available for the major indexes within the Russell US Index family as of year-end 2018. The depth and detail of this available information allows us to take a deeper historical view of the US equity market to help investors understand its dynamics and how US equity fits into their overall asset allocation.



How to build a climate-adjusted government bond index (Full version)

Climate change is a substantial challenge, which is expected to have a significant impact on global economies, both in terms of its physical effects and mitigating efforts. There exist multiple, distinct design and methodological challenges associated with incorporating climate risks into government bond indexes. We characterize these risks into three distinct types: Physical, Transition and Resilience.

The purpose of this paper is to outline ways in which government bond investors can take climate risks in their investment approaches into account. It presents and articulates the climate methodology that underpins the FTSE Advanced Climate World Government Bond Index (Advanced Climate WGBI) in detail, emphasizing the rationale behind each climate pillar (transitions risk, physical risk, and resilience) and also qualifying the chosen calibration.

Equity indexes underlying ETFs

Factor behavior through the cycle. FTSE Dynamic Single and Multifactor Index Series

Russell 1000 Equal Weight. Equal weighting refined

Harnessing the long-term potential of dividend growth

⊥ Indexing the World

□ Building blocks for the low carbon economy: Managing climate risk in real estate investing

FEATURED INDEXES

FTSE ESG Low Carbon Select Indexes

Russell 1000 Invesco MultiFactor Index (& Russell 2000 Invesco MultiFactor Index)

FTSE 1000 Equal Weight Index

Russell 2000 Dividend Growth Index

FTSE EPRA Nareit Global Real Estate

Index Series

FTSE Global Equity Index Series (GEIS)

FTSE EPRA Nareit Green Indexes

Fixed income indexes underlying ETFs

Benchmarking the Canadian mortgage-backed securities market

Emerging market fixed income – development and characteristics of the asset class

Fallen Angels in the US credit market

y Bond ETFs show maturity during Covid market mayhem

How to build a climate-adjusted government bond index (Condensed version)

FTSE Goldman Sachs China Government Bond Index

FTSE Canada NHA MBS 975 Index (& FTSE Canada Fixed Income)

FTSE Emerging Markets Government Bond Index

FTSE Time-Weighted US Fallen Angel Bond Select Index

FTSE Fixed Income Indexes

FTSE Advanced Climate World Government Bond Index

For more information about our indexes, please visit ftserussell.com.

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Past performance is no guarantee of future results. Charts and graphs are provided for illustrative purposes only. Index returns shown may not represent the results of the actual trading of investable assets. Certain returns shown may reflect back-tested performance. All performance presented prior to the index inception date is back-tested performance. Back-tested performance is not actual performance, but is hypothetical. The back-test calculations are based on the same methodology that was in effect when the index was officially launched. However, back-tested data may reflect the application of the index methodology with the benefit of hindsight, and the historic calculations of an index may change from month to month based on revisions to the underlying economic data used in the calculation of the index.

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