



NORTHERN
TRUST

Asset Management

2015

A YEAR IN REVIEW

NORTHERN TRUST INSTITUTIONAL GROUP

“ Our strength lies in an investment-centric culture, deeply rooted in a fiduciary heritage that places the needs of our clients above all else.”

JASON TYLER

HEAD OF INSTITUTIONAL GROUP
NORTHERN TRUST ASSET MANAGEMENT



We have made significant investments in key strategic areas including Defined Contribution, ESG and Multi-Manager Solutions.



STEPHEN N. POTTER
President
Asset Management



JASON TYLER
Head of
Institutional Group
Asset Management

Dear Clients,

Throughout the year, we spend much of our time meeting with clients like you — and it's the best aspect of our jobs. We truly value these meetings, as they afford us the opportunity to not only share Northern Trust's views, but also hear what's top-of-mind for the world's most sophisticated investors.

Interestingly, whether we are meeting with clients in Chicago, London, Abu Dhabi or Hong Kong, we find many ask similar questions: where does Northern Trust see investment opportunities, what are your views on risk and what challenges are you helping other clients solve?

To help address some of these themes, we are pleased to introduce "A Year in Review," a special report from our Institutional Group — whose more than 150 professionals help clients around the globe invest well over \$600 billion. This report is a compilation of the best insights from both our business and thought leaders. It is intended to illustrate how we leverage our strong heritage and put our expertise to work for you.

Looking at 2016 and beyond, we realize you face a variety of headwinds, ranging from a changing regulatory landscape to uncertainty fueled by market volatility. To this end, our experts and diverse investment capabilities, which span far beyond cash and indexing, make us uniquely positioned to help you navigate such challenges. To capitalize on these resources, we have made significant investments in key strategic areas including Defined Contribution, ESG and Multi-Manager Solutions.

For decades our cash and index products have helped investors achieve their goals; however, we also recognize your needs are growing deeper and more complex. With your evolving needs in mind, we have expanded our offerings to include a range of innovative solutions. One solution that has seen considerable adoption by global institutional investors is our Engineered Equity™ factor-based strategies, which focus on managing volatility and taking compensated risks. Another area of expansion is within our Defined Contribution business, where we have driven substantial product development, as well as invested in strategic leadership talent.

We are confident that our demonstrated ability to innovate and adapt to changing market environments and client needs will help position you well for the years ahead. However, please know that we remain committed to our founding principles — delivering unparalleled service and expertise, with integrity, to our clients, at all times. We appreciate the confidence you have placed in us to help you achieve your goals. We will continue to work hard each day to be deserving of your trust.

Very sincerely,

STEPHEN N. POTTER

JASON TYLER

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2015 MARKET RECAP

SECTION **1**

The key to market performance has increasingly become the real economy, as investors are tiring of stimulus-led financial returns.



JIM MCDONALD

Chief Investment Strategist
Northern Trust

U.S. stock markets were a relative haven in 2015. The largest drawdown during the year reached 12%, while developed markets outside the United States reached a drawdown of 17%, and emerging markets witnessed a maximum correction of 27%, according to Bloomberg. Investor concern was focused on economic growth, including whether the drop in commodity prices was a worrisome signal about future demand or mostly a reflection of oversupply. Upsets in the high yield bond market at year-end also raised concerns about the state of the expansion. In addition, markets wrestled with conflicting messages from both the Federal Reserve and the European Central Bank (ECB) — both central banks appeared too reactive to market pressures. The last couple of months in the year also saw terrorist-linked attacks in Paris and California, raising the question of future political response in reaction to increasing voter concerns.

While we continue to have muted expectations for economic growth, we don't expect a material slowdown from current levels. The U.S. labor markets are showing signs of resiliency, and European growth is withstanding the further slowing of emerging markets. We believe weakness in commodity prices (Bloomberg Commodity Index down nearly 25%

in 2015) is importantly attributable to increased supply, and probably isn't signaling a future major growth disappointment for the global economy.

The ECB disappointed investors in 2015, despite significant new stimulus, as market sentiment ran ahead of ECB President Mario Draghi's ability to deliver. The Fed's decision to finally raise the Fed Funds rate by a quarter-point on December 16, 2015 is an important step toward an interest rate normalization that we expect to be very measured.

Financial markets, like history, are more likely to rhyme with the past than repeat it. Recent interest rate cycles have shown the ability of financial markets to digest central bank interest rate hikes, as long as they're within market expectations. Financial markets are currently expecting the Fed to raise rates twice in 2016 — a pace we believe may be too aggressive. The key to market performance has increasingly become the real economy, as investors are tiring of stimulus-led financial returns. With the Fed and the Bank of England the only major central banks likely to tighten policy in 2016, we expect continued appetite for U.S. dollar assets and some headwinds for emerging-market assets to persist.

U.S. MARKET SNAPSHOT

2015 MARKET RETURNS AND PRICES

	S&P 500®		NASDAQ	
	+1.38%		+6.96%	
HIGH	2,130.82	5/21/15	5,218.86	7/20/15
LOW	1,867.61	8/25/15	4,506.49	8/25/15
	BARCLAYS U.S. AGGREGATE		AVERAGE VIX® LEVEL⁴	
	+0.55%		+17.62%	
HIGH	1,955.55	2/2/15	40.74	8/24/15
LOW	1,900.87	6/10/15	11.95	7/17/15

2015 EQUITY ASSET CLASS RETURNS (%)

	VALUE	CORE	GROWTH
LARGE-CAP Russell 1000® Indices	-3.83	0.92	5.67
MID-CAP Russell Midcap® Indices	-4.78	-2.44	-0.20
SMALL-CAP Russell 2000® Indices	-7.47	-4.41	-1.38

2015 FIXED INCOME ASSET CLASS RETURNS (%)

MUNICIPALS	3.30
SECURITIZED	1.47
GOVERNMENT	0.84
U.S. INVESTMENT GRADE	0.55
CASH	0.19
CREDIT	-0.77
U.S. TIPS	-1.44
U.S. HIGH YIELD	-4.43
EMERGING MARKETS DEBT	-14.92

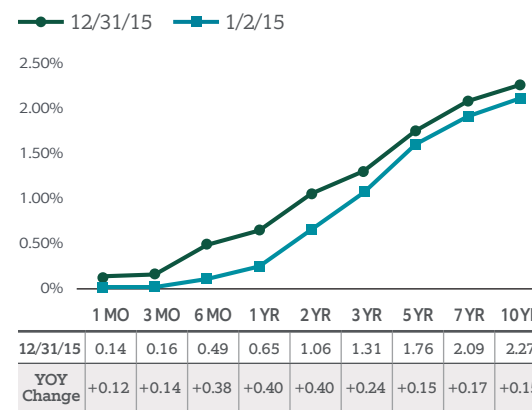
2015 ALTERNATIVE INVESTMENT RETURNS

VENTURE CAPITAL¹	HEDGE FUNDS²
+11.31%	-0.33%
PRIVATE EQUITY¹	COMMODITIES³
+5.33%	-24.70%

2015 EQUITY SECTOR PERFORMANCE (%)

Tele-communications	Technology	Consumer Staples	Health Care	Consumer Discretionary
3.40	5.92	6.60	6.89	10.11
Financials	Industrials	Utilities	Materials	Energy
-1.53	-2.53	-4.85	-8.38	-21.12

U.S. TREASURY YIELD CURVE RATES (%)



1 Returns YTD as of 9/30/15 due to nature of the investments and the longer pricing periods, represented by Cambridge Associates LLC U.S. Private Equity Index® and Cambridge Associates LLC U.S. Venture Capital Index®

2 Hedge Fund return represented by the HFRI Fund of Funds Composite Index.

3 Commodities return represented by Bloomberg Commodity Index.

4 The "Average VIX® Level" is calculated as the percent increase from average daily VIX® in 2015 from the average daily VIX® in 2014.

Source: Northern Trust, eVestment Alliance, U.S. Department of Treasury, Cambridge Associates, Bloomberg, Barclays, JP Morgan, Hedge Fund Research (HFR). All return data one year as of 12/31/15 unless otherwise noted.

Past performance is not indicative of future results. Index performance returns do not reflect any management fees, transaction costs or expenses. It is not possible to invest directly in an index.

INTERNATIONAL MARKET SNAPSHOT

DEVELOPED MARKETS RETURNS (%)

MSCI World Index

-0.87%

	TOP FIVE	BOTTOM FIVE	
Denmark	24.41	-23.59	Canada
Ireland	16.85	-17.68	Singapore
Belgium	12.98	-15.39	Spain
Israel	11.08	-14.22	Norway
Japan	9.90	-9.77	Australia

EMERGING MARKETS RETURNS (%)

MSCI Emerging Markets Index

-14.92%

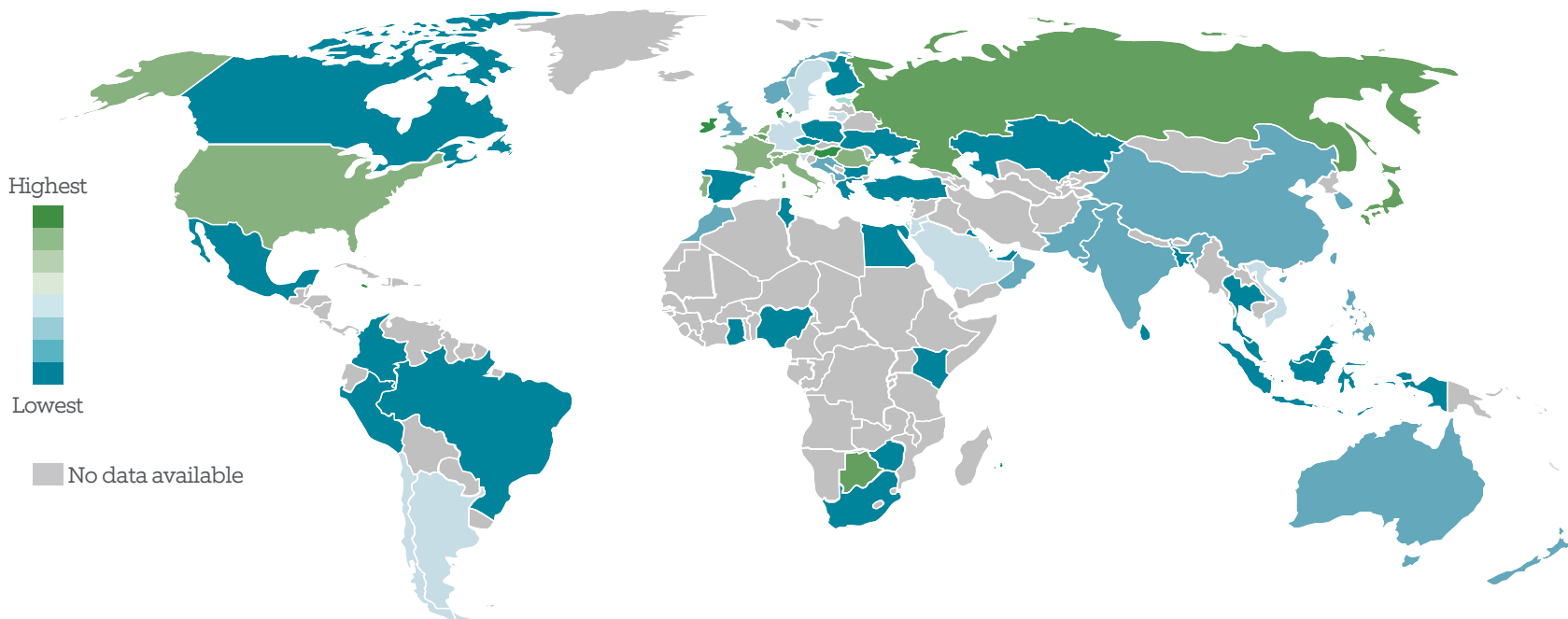
	TOP FIVE	BOTTOM FIVE	
Hungary	36.31	-61.25	Greece
Russia	5.00	-41.80	Colombia
India	-6.12	-41.18	Brazil
Philippines	-6.25	-31.66	Peru
Korea	-6.30	-31.55	Turkey

FRONTIER MARKETS RETURNS (%)

MSCI Frontier Markets Index

-14.46%

	TOP FIVE	BOTTOM FIVE	
Estonia	11.67	-45.55	Kazakhstan
Lebanon	3.80	-35.32	Bulgaria
Romania	1.80	-26.81	Serbia
Argentina	-0.42	-22.08	Sri Lanka
Jordan	-2.29	-21.33	Bahrain



Source: Northern Trust, MSCI, Bloomberg, eInvestment Alliance. All return data one year as of 12/31/15.

Past performance is not indicative of future results. Index performance returns do not reflect any management fees, transaction costs or expenses. It is not possible to invest directly in an index.

INSTITUTIONAL MARKET LANDSCAPE

Net Asset Flows and Search Activity

The institutional marketplace saw net outflows through the first three quarters of the year. U.S. equities saw the majority of net outflows at -\$213 billion, with large-cap equity being the largest detractor at -\$167 billion of net flows. Supporting that trend, completed mandates also lagged in the U.S. with a decrease in equity mandates by 25% and an overall decrease in total mandates by 5%.

U.S. COMPLETED MANDATES IN 2015 BY ASSET CLASS

	MANDATES	YOY CHANGE
PRIVATE EQUITY	696	3%
REAL ESTATE	371	9%
EQUITY	240	-25%
FIXED INCOME	210	0%
OTHER ALTERNATIVES*	147	-5%
HEDGE FUNDS	124	-24%
MULTI-ASSET	54	-23%
OTHER	5	-50%
TOTAL	1,847	-5%

EQUITY FLOWS BY MANAGEMENT STYLE (BILLIONS)

	U.S.	NON-U.S.
COMBINED APPROACH	-\$2	\$5
FUNDAMENTAL	-\$208	-\$50
QUANTITATIVE	-\$11	-\$16

GLOBAL ASSET FLOWS (BILLIONS)

	EQUITY	FIXED INCOME
U.S.	-\$213	-\$66
DEVELOPED MARKETS	\$26	-\$3
EMERGING MARKETS	-\$7	-\$11

U.S. EQUITY FLOWS BY ASSET CLASS (BILLIONS)

	ACTIVE	PASSIVE
ALL-CAP	-\$12	\$13
LARGE-CAP	-\$147	-\$20
MID-CAP	-\$13	\$10
SMALL-CAP	-\$19	\$4

TOP/BOTTOM ALTERNATIVE STRATEGIES BY FLOWS (BILLIONS)

MULTI-STRATEGY	\$50
MANAGED FUTURES	\$14
MACRO	\$9
CREDIT - RELATIVE VALUE	-\$4
EMERGING MARKETS	-\$5
EVENT DRIVEN	-\$6
Total Single Manager Hedge Funds	\$71

U.S. FIXED INCOME FLOWS BY ASSET CLASS (BILLIONS)

CORPORATE	\$22
MUNICIPAL	\$7
U.S. TIPS	\$3
GOVERNMENT	-\$8
CORE	-\$10
HIGH YIELD	-\$11
CASH MANAGEMENT	-\$34

All flows data is YTD as of 9/30/15 and represents the most up-to-date data at the time of publication.

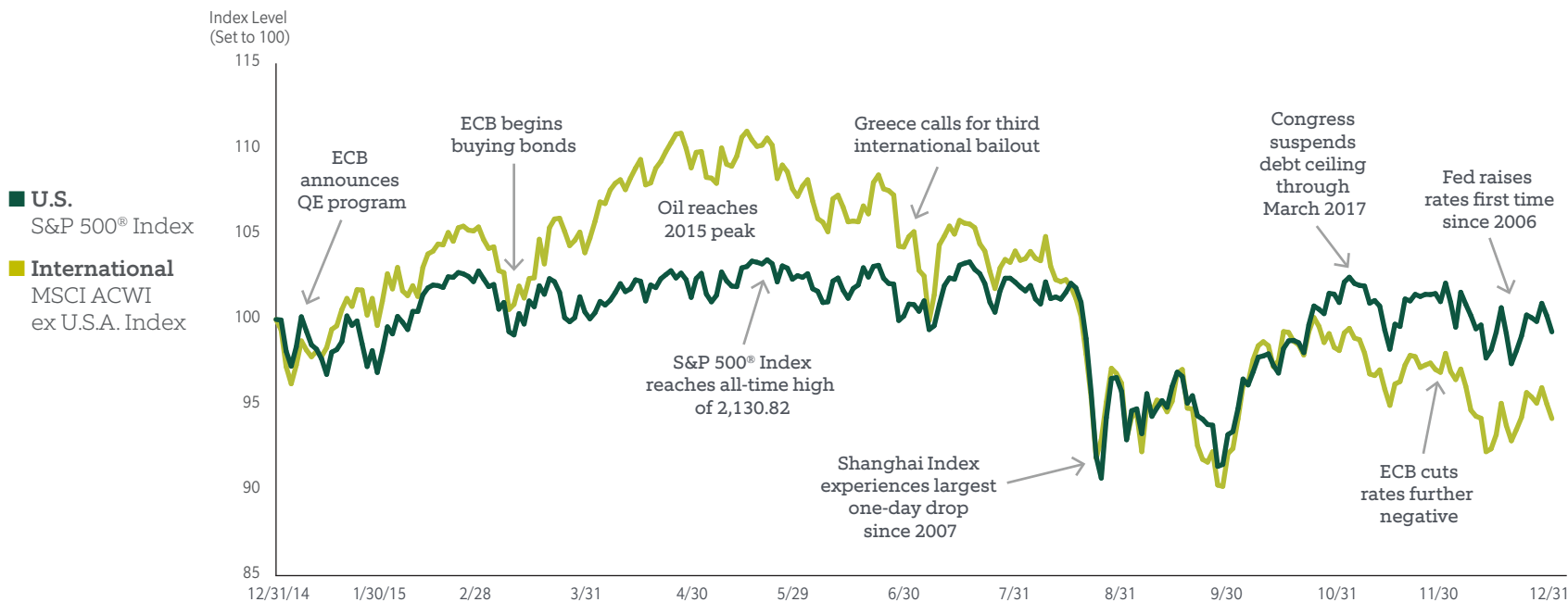
All mandate search data is for one year ended 12/31/15.

Source: eVestment Alliance universe flow data for institutional assets and iiSearches (*Institutional Investor*) for mandate search data.

*"Other Alternatives" includes: commodities, derivatives, distressed debt, real assets, tactical asset allocation and unspecified alternative.

ECONOMIC REVIEW TIMELINE

2015's KEY EVENTS AND MARKET RETURNS



U.S. ECONOMIC INDICATORS

	U.S. DOLLAR INDEX RETURN ²	UNEMPLOYMENT	INDUSTRIAL PRODUCTION GROWTH	CONSUMER PRICE INDEX (INFLATION)	REAL GDP GROWTH	REAL DISPOSABLE PERSONAL INCOME GROWTH
2015 Annual Average Forecast ¹	1.1%	5.3%	3.8%	0.8%	3.2%	3.1%
2015 Annual Average	10.0%	5.3%	1.3%	0.1%	2.4%	3.5%
2015 Actual Data (Non-Averaged)	11.8%	5.0%	-1.7% ³	0.7%	2.1%	2.9%

¹ 2015 forecast data from Blue Chip Economic Indicators® and Blue Chip Financial Forecasts.®

² U.S. Dollar represented by the U.S. Trade Weighted Dollar-Major Currencies Index.

³ Manufacturing production growth uses preliminary 12/31/15 estimate as of 1/15/16.

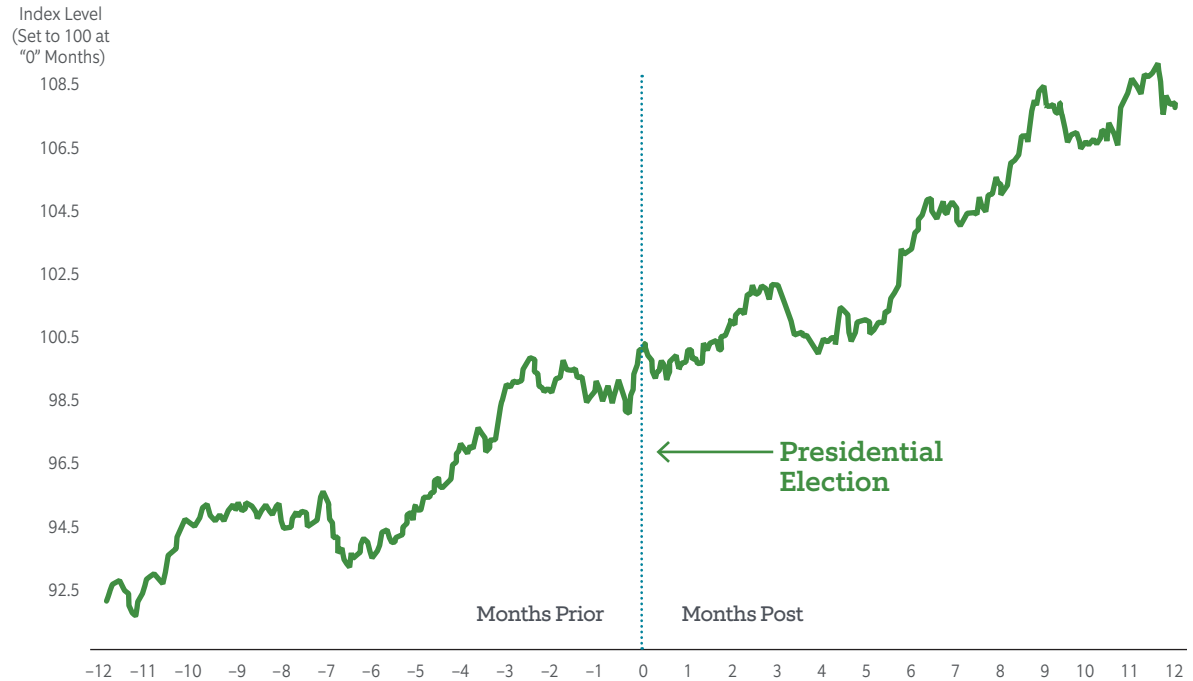
Source: Northern Trust, Bloomberg, eVestment Alliance, Haver Analytics.

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PERFORMANCE AROUND U.S. PRESIDENTIAL ELECTIONS

As we look forward to 2016, one of the biggest topics of conversation will be the presidential election in November. The chart at right displays the historic average return of the S&P 500® Index in the months before and after an election.

S&P 500 PERFORMANCE AROUND PRESIDENTIAL ELECTIONS (1/3/1928 – 1/20/2016)



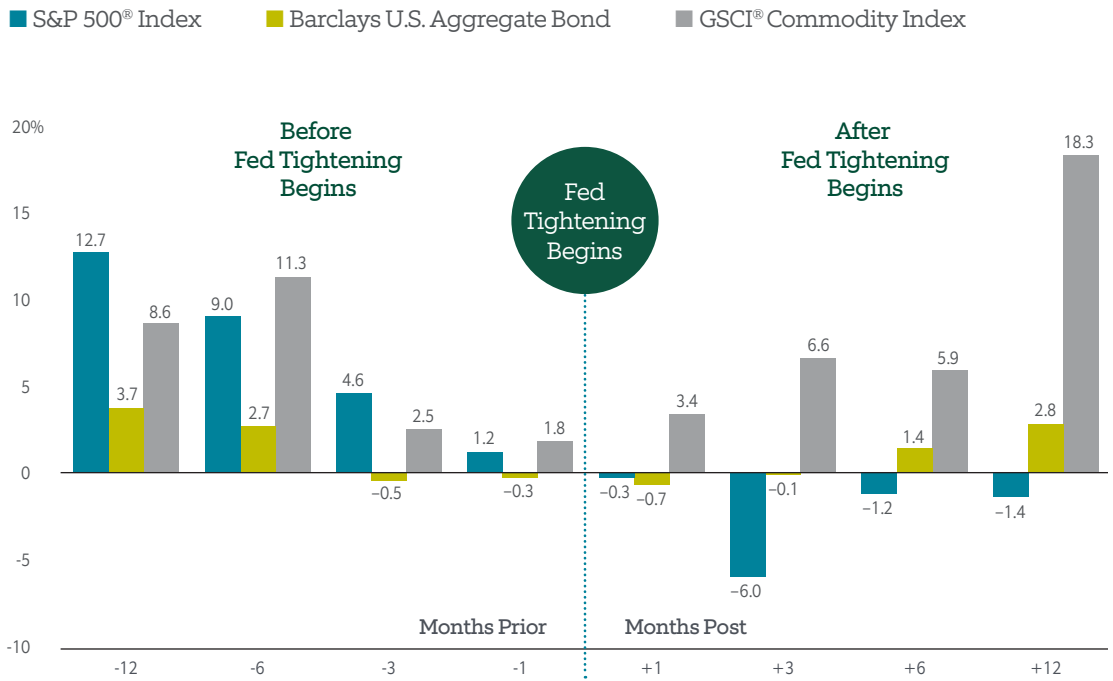
Source: S&P Dow Jones Indices.

Number of Months Around an Election	-12	-6	-3	-1	+1	+3	+6	+12
Historic Average Return (%)	6.86	5.07	1.95	1.45	-0.78	1.47	3.15	4.41

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Past performance is not indicative of future results. Index performance returns do not reflect any management fees, transaction costs or expenses. It is not possible to invest directly in an index.

PERFORMANCE AROUND FED TIGHTENING CYCLES

AVERAGE INDEX RETURN AROUND THE START OF FED TIGHTENING CYCLES (8/31/1977–1/15/2016)



After the interest rate hike in December 2015, the Federal Reserve began its first tightening cycle since 2004. The chart to the left displays representative U.S. equity, U.S. bond, and global commodity average returns surrounding the start of the last six Fed tightening cycles beginning in 1977, 1980, 1987, 1994, 1999 and 2004.

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NORTHERN TRUST ASSET MANAGEMENT OVERVIEW

SECTION **2**

NORTHERN TRUST ASSET MANAGEMENT OVERVIEW

A leading, trusted and dynamic global investment manager

Culture rooted in 125+ year fiduciary heritage

22 global offices

Serving clients in nearly 50 countries

Service

Relentless drive to provide exceptional service.

Expertise

Resolving complex challenges with multi-asset class capabilities.

Integrity

Acting with the highest ethics, utmost honesty and unfailing reliability.

Equity

4th Largest Manager in Passive Domestic Equity in the U.S.

Fixed Income

2013 & 2014 Fixed Income Municipal Manager of the Year²

Cash

Largest Institutional Cash Manager in the U.S.

Alternatives

Hedge Fund and Private Equity Solutions

OCIO/ Multi-Manager

3rd Largest OCIO Manager Worldwide³

Retirement Solutions

4th Largest Manager of Defined Benefit Assets in the U.S.

ETFs

Launched in 2011, Already 13th Largest ETF Sponsor

ESG

More than 25 Years of Managing Socially Responsible Portfolios

AUM IN BILLIONS

EQUITIES	\$447
FIXED INCOME	\$260
SHORT DURATION	\$147
OTHER	\$21
TOTAL AUM	\$875

13th largest manager

WORLDWIDE ASSETS

5th largest manager

SOVEREIGN WEALTH FUNDS

4th largest manager

ENDOWMENT/FOUNDATION ASSETS

4th largest manager

CENTRAL BANKS



World's **most admired** companies[®]

FORTUNE MAGAZINE¹
9th Consecutive Year

World's **most ethical** companies[®]

ETHISPHERE INSTITUTE¹

¹ For additional information on awards see important information on last page.

² *Institutional Investor* magazine, 2013 and 2014.

³ *Pensions & Investment* special report of the largest investment outsourcing managers with over \$50 billion in worldwide assets under management as of March 31, 2015.

The above rankings are not indicative of future performance. Unless otherwise noted, rankings based on total worldwide assets under management of \$934.1 billion as of December 31, 2014 by *Pensions & Investments* magazine's 2015 Special Report on the Largest Money Managers.

ASSET CLASS OFFERINGS

SECTION 3

I Equity

II Fixed Income and
Cash Management

III Alternatives

Disparate performance across factors supports the use of multi-factor portfolios as an effective means of diversification.



MATTHEW PERON

Managing Director, Head of Global Equity
Asset Management

After a steady stretch of positive returns over the past three years, 2015 brought increased volatility and low returns for global equities. Uncertainty picked up amid the implications of slowing growth in emerging markets, falling commodity prices and the first interest rate increase from the Federal Reserve in nearly a decade. As a result, many institutional investors showed increased focus on evaluating risk from various perspectives and using strategies that provide explicit, targeted exposures to better position portfolios for the evolving market environment.

As investors have become increasingly focused on better understanding the risks being taken in their equity portfolios, they have been looking to use a wider array of tools to monitor risk. To answer this demand, we have made our robust quantitative research capabilities available to our clients. In 2015, the Northern Trust Global Equity team worked with clients to create dozens of Portfolio Factor Analyses in which we provided detailed overviews of the various risk factor exposures across clients' manager lineups and, in many cases, provided solutions to better align those exposures with the unique objectives of each client.

As a result, investors continued to gravitate toward Engineered Equity™ strategies in 2015. The interest in these strategies has driven an increasingly sophisticated conversation with institutional investors regarding the potential uses of targeting factors in their equity portfolios and the implementation of factor exposures.

Performance of these factor-based strategies varied in 2015, partly due to the methodologies underlying the various products but largely due to the performance of the factors themselves. With the pick-up in uncertainty and the market correction in the third quarter, low volatility strategies tended to outperform. However, the same environment was challenging for value strategies, which underperformed to the point that we would suggest high value stocks now appear to be particularly inexpensive relative to historical norms. The disparate performance across factors is supportive of the use of multi-factor portfolios as an effective means of diversification.

Along with the interest in factor investing, the discussion surrounding environment, social and governance (ESG) risks has become more prevalent in the past year. A variety of institutional investors have begun researching the space to better understand how they can account for ESG issues without sacrificing investment performance. As a result of our own research on the topic, we launched our Quality ESG strategy, which combines the Quality philosophy underpinning our Engineered Equity™ platform with ESG considerations.

In 2016 we will continue to work with our clients to ensure that they have the tools to analyze their exposures and implement strategies to improve them, particularly in the current evolving market environment.

GLOBAL EQUITY BUSINESS

FAST FACTS

- 87 investment professionals
- Teams in U.S., Europe, Asia and Middle East
 - Over 16 years average industry experience

A pioneer in factor-based investing since 1994

\$378B in AUM

NEW SOLUTIONS LAUNCHED IN 2015

- Quality ESG
- Quality low volatility (global)

ENGINEERED EQUITY

Northern Trust's proven, factor-based equity strategy systematically combines the best of active and passive management. Over the past year, there has been considerable adoption of these strategies by global institutional investors because of the focus on managing volatility and taking compensated risks. Strategically combining exposures to the factors provides portfolios the right risk at the right time, over a certain time horizon.



INDUSTRY RECOGNITION¹

3rd largest manager
PASSIVE INTERNATIONAL EQUITY

4th largest manager
PASSIVE DOMESTIC EQUITY

11th largest manager
EMERGING MARKETS EQUITY



Engineered Equity: Evaluating the Efficiency of Smart Beta Indices: A New Metric

In response to the increasing importance of managing risk, we examine third-party smart beta indices and study how well they capture exposure to compensated risk factors as well as minimize uncompensated exposures. Our analysis, using our proprietary Factor Efficiency Ratio (FER), shows that indices with higher FER metrics tend to have higher risk-adjusted returns.



Choosing a "Smart Beta" Factor: Not Which, But When

Investors interested in reaping the benefits of factor-based investing in their portfolios have long believed the ultimate question to be, "Which factor should I choose?" However, our recent research shows that investors should instead be asking, "When should I favor each factor?"

All data above as of 12/31/15, unless otherwise noted.

¹ The above rankings are not indicative of future performance. Unless otherwise noted, rankings based on total worldwide assets under management of \$934.1 billion as of December 31, 2014 by *Pensions & Investments* magazine's 2015 Special Report on the Largest Money Managers.

Investors continued to focus on the timing of the first interest rate increase, despite our belief the projected future path of increases is more important for the markets.



COLIN ROBERTSON

Managing Director, Head of Fixed Income
Asset Management

The bond market delivered mixed results in 2015. Although bonds were supported by a continued backdrop of modest economic growth and low inflation, speculation regarding the timing of the U.S. Federal Reserve's (the Fed's) first rate increase since 2006 weighed on performance throughout the year. The short end of the yield curve saw the largest impact, where the two-year note rose 40 basis points while the 10-year note was roughly flat.

Investment-grade corporate bonds underperformed U.S. Treasuries as low interest rates encouraged corporations to issue debt to finance share buy-backs, dividend increases, and mergers and acquisitions. The primary reason for the downturn was significant weakness in the prices of commodities, which weighed heavily on the credit outlook for energy and mining issuers and bled into other sectors in the high-yield market as the year wore on. Although the backdrop for high-yield remained largely favorable — highlighted by positive economic growth and a low overall default rate — weakness in commodity prices proved to be the most important driver of performance. On the plus side, municipal bonds outperformed due to continued improvement in the finances of state and local governments.

The shifting outlook for the Fed's interest rate policy remained a key issue for the markets as the year drew to a close. Although the Fed has been poised to raise interest rates from their near zero levels for

some time, a series of roadblocks prevented them from enacting the initial interest rate hike.

Late in the year investors continued to focus on the timing of the first interest rate increase, despite our belief the projected future path of increases is more important for the markets. Inflation remains well anchored, providing the Fed with latitude for patience. In addition, slow global growth indicates monetary authorities such as the European Central Bank, the Bank of Japan and the Peoples Bank of China are likely to continue easing monetary policy. As a result, the Fed is likely to be cautious in raising interest rates in order to prevent the U.S. dollar from strengthening rapidly and impeding growth.

Amid this uncertainty, it should be noted that over time most asset classes have performed well during the initial phases of the interest rate cycle. The key issues are proper preparation of the markets and investor confidence that interest rate increases aren't going to push the economy into a recession. In contrast, the most negative outcome would be for the Fed to find itself with continued low interest rates amidst rising inflation. A material change in current inflation dynamics or a significant upturn in global growth would be necessary for that to occur. In my view, neither of these appears likely. As the fixed income markets continue to evolve, we remain focused on providing solutions to meet your needs.

GLOBAL FIXED INCOME BUSINESS

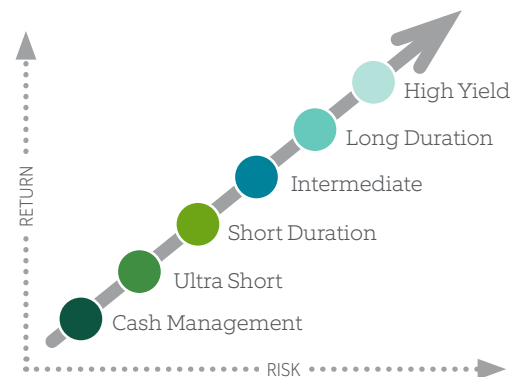
FAST FACTS

69 investment professionals
 – Teams in U.S., Europe and Asia
 – Nearly 18 years average industry experience
 \$127B in AUM

NEW SOLUTIONS LAUNCHED IN 2015

Global Aggregate Index
 Credit Scored U.S. Long Corporate Bond

ACTIVE MANAGEMENT CAPABILITIES



With more than \$54 billion in actively managed fixed income solutions, spanning from ultra-short duration to high yield products, our team has deeply rooted expertise in providing customized solutions to institutional clients.

INDUSTRY RECOGNITION¹

Institutional Investor Awards

2013 and 2014

Municipal manager of the year

2014

Fixed income indexer of the year

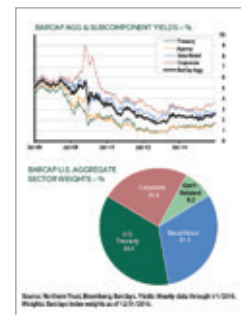
4th largest manager
 PASSIVE DOMESTIC FIXED INCOME

THOUGHT LEADERSHIP



Adding Value with Ultra-Short Fixed Income

Learn how ultra-short fixed income strategies can prove to be an attractive option for investors looking to improve returns while seeking to limit principal volatility — even during rising interest rate environments.



Weekly Fixed Income Market Review

The fixed income markets are constantly changing, but what does this mean for investors? Our weekly Fixed Income Market Review provides the timely insights and trend analysis you need to navigate the latest developments.

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CASH MANAGEMENT BUSINESS

FAST FACTS

12 dedicated cash portfolio managers
 – Over 13 years average industry experience
 \$212B in AUM

INDUSTRY RECOGNITION¹

The **largest** manager
 CASH STRATEGIES

THOUGHT LEADERSHIP



Money Market Reform Arrives in 2016 – Are You Prepared?

Money Market Reform is now right around the corner, set to go into effect in October 2016. Our cash management experts explain how investors can effectively navigate these changes by establishing a sound strategy and choosing innovative solutions.



Your Cash is Costing You

As investors prepare for the impending Money Market Reform, it's important to reconsider your current cash strategy. Our cash management team explores how two distinct groups are re-examining the opportunity cost of their cash allocation and arriving at one clear solution.

MONEY MARKET REFORM

REFORM GOES INTO EFFECT OCTOBER 14, 2016

THE KEY POINTS

FLOATING NAV: Institutional prime and tax-exempt funds no longer fixed at \$1.00.

FEES AND "GATES": Fund board of directors permitted to charge fees or restrict redemptions at set thresholds.

DISCLOSURE REQUIREMENTS: Funds must report daily/weekly liquidity levels, NAV and flows on website.

TAXES AND ACCOUNTING: IRS and Treasury will allow simplified accounting method.

WHAT YOU SHOULD DO

Begin evaluating liquidity levels, credit and interest rate risk of floating NAV funds.

Daily liquidity investors should analyze the strategy around their investment mix.

Incorporate new data transparency into your investment mix process.

Understand the potential tax implications around your current cash strategy.

Let our cash management expertise be **your solution.**

All data above as of 12/31/15, unless otherwise noted.

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Higher volatility, dispersion and interest rates have been historically good for hedge fund strategies.



ROBERT MORGAN
Managing Director
50 South Capital, LLC

In June of 2015, 50 South Capital Advisors, LLC was established by Northern Trust as a new investment advisor subsidiary. Formerly known as the Northern Trust Alternatives Group, we are an alternatives asset management firm that strives to meet the core needs of investors seeking access to hedge funds, private equity and other alternative assets. Our team primarily specializes in providing access to small and mid-size managers that offer unique and differentiated sources of return. Over the course of 2015 we saw expansive asset growth of more than 17% and currently have \$4.7 billions in assets.*

In 2015, capital markets and risk assets saw increased volatility and negative returns. The bright spots amongst risk assets were REITs and U.S. equities. Unlike traditional long-only managers, hedge funds have flexible mandates that allow them to navigate and manage risk in volatile markets. Despite market headwinds, hedge funds (represented by the HFRI Fund of Funds Composite Index) were able to eke out a favorable return in relation to other asset classes.

Higher volatility, dispersion and interest rates have been historically good for hedge fund strategies. With greater divergence between central bank policies, regional growth rates and corporate winners and losers, we see an excellent backdrop for long/short and event-driven strategies that can offer differentiated returns and diversification.

We continue to favor small and mid-size managers that are better equipped to shift exposures nimbly in a market characterized by shallow liquidity.

It was a bit of a slow finish for the private equity markets. Despite strong activity through the first three quarters of the year, overall capital raised and number of funds closed ended lower than 2014. Although there was a lower infusion of capital into the market for new deals, capital exited was lower and the number of exits was only slightly above 2014 levels. Regardless of these industry trends, we experienced asset growth in 2015.

Looking back at our business, a major highlight was our Annual Alternatives Conference in Chicago that saw 200+ attendees. Senior members of our team shared insights into private equity trends and our strategic focus on buyouts, secondaries and venture capital. We also discussed hedge fund performance, our outlook and our insights into trends in the event-driven, equity long/short and global macro spaces. Guest speakers included a variety of outside managers specializing in everything from buyouts to early stage venture capital.

In the coming year, we look forward to the continued growth of 50 South Capital and more successful industry events such as our Annual Alternatives Conference. With momentum building from 2015, we will strive to further increase our assets in the hedge fund and private equity space.

*Assets include \$3.3B in AUM and \$1.4B in AUA, as of 12/31/15.

ALTERNATIVES



FAST FACTS

27 investment professionals
Hedge fund and private equity solutions
Supported by Northern Trust infrastructure and platform
More than \$4B in assets¹

LATEST SOLUTIONS

Systematic alternatives solutions designed to provide exposure to various alternative risk premias including value, momentum, carry, low beta/quality and trend.

OUR ADVANTAGES

Private Equity

Access to top-tier, oversubscribed fund managers

Extensive resources and network

Specialized, experienced managers

Hedge Fund Solutions

Extensive Northern Trust brand network and infrastructure

A reputation for picking small to mid-sized managers with a definable “edge”

Strong risk management and oversight implemented at several levels

THOUGHT LEADERSHIP



2016 Hedge Fund Outlook: Changing Global Landscape and Increasing Opportunity

What can alternatives investors expect in the year ahead? Our investment team shares its hedge fund outlook for 2016 — and examines the portfolio decisions made in 2015.



How Hedge Funds Can Potentially Help Foundations and Endowments Meet Spending Requirements

One of the primary challenges facing endowments and foundations is balancing investments to meet their short-term liquidity needs, as well as long-term growth. Our team discusses the importance of these goals and how some investors are incorporating hedge fund solutions into their investment decision-making process.

¹ Assets include \$3.3B in AUM and \$1.4B in AUA, as of 12/31/15.

CAPABILITIES

SECTION **4**

I OCIO/Multi-Manager Solutions

III ETFs

II Retirement Solutions

IV Environmental, Social & Governance

I

OCIO/Multi-Manager Solutions

Our dynamic, client-focused business continues to expand and is well-positioned to capitalize on the growth we see in the market.



JOSEPH McINERNEY

Managing Executive, Multi-Manager Solutions
Asset Management

2015 was an exciting year in the Multi-Manager Solutions business as the industry experienced continued growth in the outsourced chief investment officer (OCIO) market. Assets managed worldwide for institutional investors by OCIO providers rose by 16% to \$1.4T.¹ Within Northern Trust's Multi-Manager Solutions business, we saw persistent interest from pensions and increasingly strong interest from various market segments including endowments, foundations, global family offices and non-qualified plans. We were also ranked as the second largest manager of U.S. outsourced assets and the third largest manager of outsourced assets worldwide.²

Our meetings in 2015 with prospects and clients confirmed that the key factors motivating the growth in the OCIO market in recent years are still in place today. Some of the key factors faced by investment programs include: increased complexity in the financial markets and investment products, a lower yield environment, increased regulation and the increasing costs of maintaining the investment resources needed to invest in complex markets.

As one of the longest tenured providers of OCIO services, we have built a well-resourced organization and continue to broaden our capabilities to address our clients' concerns and new developments. Our

group has added experienced client investment officers who are responsible for delivering comprehensive plan advice and customized solutions as a fiduciary. We've also added investment professionals to our research teams who source best-in-class active managers across alternative and traditional asset classes.

In addition to hiring new personnel to further strengthen our team, we recognize that a successful outsourcing relationship must include investor education and client access to the extensive resources of our organization. To that end, in 2015 we authored a number of papers to address issues our clients face including: "The Five Pillars: Risk Management for Endowed, Perpetual Charitable Entities," "Investment Outsourcing: How Many Managers Should You Use?" and "Pension Risk Management: Striking a Balance Between Upside Participation and Downside Protection."

As one of the largest OCIO providers in the world, we continue to invest in our capabilities to ensure we maintain the high level of investment expertise and client service our clients have come to expect. In the year ahead, we look forward to working with you to develop and implement effective investment programs that efficiently meet your objectives.

¹ Sourced from *Pensions & Investments* for the 12-month period ending March 31, 2015.

² The above rankings are not indicative of future performance. *Pensions & Investments* Special Report of the largest investment outsourcing managers with over \$50 billion in worldwide assets under management as of March 31, 2015.

OCIO/MULTI-MANAGER SOLUTIONS

FAST FACTS

Expertise dating back to 1979

Client capital invested with more than 300 managers across all asset categories and geographies

\$99B in assets¹

NEW SOLUTIONS LAUNCHED IN 2015

Liability Driven Investment Fixed Income Strategy

Asia Regional Equity Strategy

Limited partnership strategies investing in:

- U.S. Large Cap Equities
- Energy Infrastructure

INDUSTRY RECOGNITION

2nd largest
OCIO manager
in the U.S.²

3rd largest
OCIO manager
worldwide²

4th largest manager
ENDOWMENT/FOUNDATION ASSETS³

THOUGHT LEADERSHIP



The Five Pillars: Risk Management for Endowed, Perpetual Charitable Entities

How do you manage risk in a multi-generation investment portfolio? Start with “The Five Pillars of Risk Management” for endowments and foundations. Our team of investment professionals provide useful insights to help guide you to better manage your investment and distribution policies.



Investment Outsourcing: How Many Managers Should You Use?

Investors who outsource the management of their portfolios often wrestle with determining the optimal number of external asset managers to employ. To help investors address this question, we have established a simple framework that takes into consideration the benefits of manager diversification along with related costs.

All data above as of 12/31/15, unless otherwise noted.

¹ Assets include \$58B in AUM and \$41B in AUA.

² The above rankings are not indicative of future performance. *Pensions & Investments* special report of the largest investment outsourcing managers with over \$50 billion in worldwide assets under management as of March 31, 2015.

³ Rankings based on total worldwide assets under management of \$934.1 billion as of December 31, 2014 by *Pensions & Investments* magazine's 2015 Special Report on the Largest Money Managers.

We remain focused on finding innovative ways to help our clients provide better retirement outcomes for their participants.



SABRINA BAILEY

Global Head of DC Solutions
Asset Management

It was a great year for the Defined Contribution (DC) Solutions Group as we expanded our team, building upon our already strong group of DC experts. I was fortunate enough to join the team as the Global Head of DC, a new position created to strengthen Northern Trust's growing retirement solutions business. Furthermore, we deepened our focus on behavioral research with the addition of Gaobo Pang, Ph.D., a recognized conference speaker and academic practitioner. Finally, we folded in two additional members to manage our record keeper channel, a channel critical to the seamless utilization of our solutions by clients. Our team has never been stronger and we are positioned well to expand our DC solution set to meet the changing needs of the DC market worldwide.

From an investment perspective, two key themes emerged during the year: target date strategies continued to dominate and plan sponsors sought ways to better manage investment risk exposures. As it relates to the first, target date strategies continue to dominate asset flows in defined contribution plans as evidenced by our DC Tracker. We saw continued interest in both off-the-shelf and custom target date strategies from our clients. Our conviction around the global opportunity set in the equity space, as well as our diversification of growth assets outside of equities, generated a headwind for our Focus Funds this year. However, we believe by continuing to implement our proven strategic asset allocation framework, despite the short-term headwinds, our

investors are best positioned to achieve their investment-related retirement outcomes.

Second, as it relates to our theme of risk management, we are starting to see increased client interest in factor-based strategies. Interest for these strategies has been particularly strong in the equity space, as plan sponsors look to more effectively manage volatility for their DC participants. By investing in the right combination of factors, including quality, value, low volatility and size, there is potential to provide a smoother ride to retirement. It's not about taking on additional risk, but rather taking the right risk at the right time.

From a plan design perspective, we heard directly from participants in our *Path Forward* research that they want more from their DC plan. Specifically, more guidance on how much to save, simpler investment menus, income projections and solutions to address their income needs. We remain committed to helping plan sponsors refine and perfect DC plan design to help participants reach their retirement goals.

In 2016 we'll celebrate the 10th anniversary of the Pension Protection Act, which has helped improve retirement outcomes through the use of auto features and target date strategies. Given that, our focus will remain on our primary objective of finding innovative ways to help our clients provide better retirement outcomes for their participants.

RETIREMENT SOLUTIONS

FAST FACTS

Retirement solutions spanning the entirety of Northern Trust Asset Management's product offerings

\$112B in DC plan assets

\$7B in target date fund assets

NEW SOLUTIONS LAUNCHED IN 2015

Focus 2060 Fund

Collective Inflation Sensitive Assets Fund

INDUSTRY RECOGNITION¹

4th largest manager

DEFINED BENEFIT ASSETS

11th largest manager

DEFINED CONTRIBUTION ASSETS

THOUGHT LEADERSHIP



The Path Forward: DC Participants Want More

DC Plans are now the primary retirement savings vehicle for U.S. employees and are the only type of employer-sponsored retirement vehicle accessible to younger workers in the private sector. Recognizing these mounting pressures for DC Plan Sponsors to provide reliable savings options, this fifth installment of our ongoing DC research series outlines the tools needed to help with the process.



DC White Labeling: Simplify for Success

Plan sponsors continually try to find ways to provide more innovative and helpful solutions to their participants, such as white labeling. The team takes the concept of white labeling funds and dives into the potential benefits it may offer, as well as the important factors that should be considered when thinking about undertaking the strategy.

All data above as of 12/31/15, unless otherwise noted.

¹ The above rankings are not indicative of future performance. Unless otherwise noted, rankings based on total worldwide assets under management of \$934.1 billion as of December 31, 2014 by *Pensions & Investments* magazine's 2015 Special Report on the Largest Money Managers.

NORTHERN TRUST HAS RE-ENGINEERED THE TARGET DATE FUND

LIFE ENGINEERED™ FUNDS

Live well, for life.

A NEW GENERATION OF TARGET DATE RETIREMENT FUNDS.

The funds help defined contribution plan sponsors by providing participants with a comprehensive solution that **takes the guesswork out of investing** and builds a more secure retirement.

Using Northern Trust's proven asset allocation framework, the funds combine the expertise of Northern Trust's innovative factor-based Engineered Equity™ strategies and PIMCO's active fixed income and inflation-sensitive strategies.

The funds do not just balance growth and income along a glidepath. Rather, they invest in three distinct strategies, delivering the right combination of growth, income and inflation-sensitive securities — at the right time — to enhance retirement outcomes.

LIFE ENGINEERED

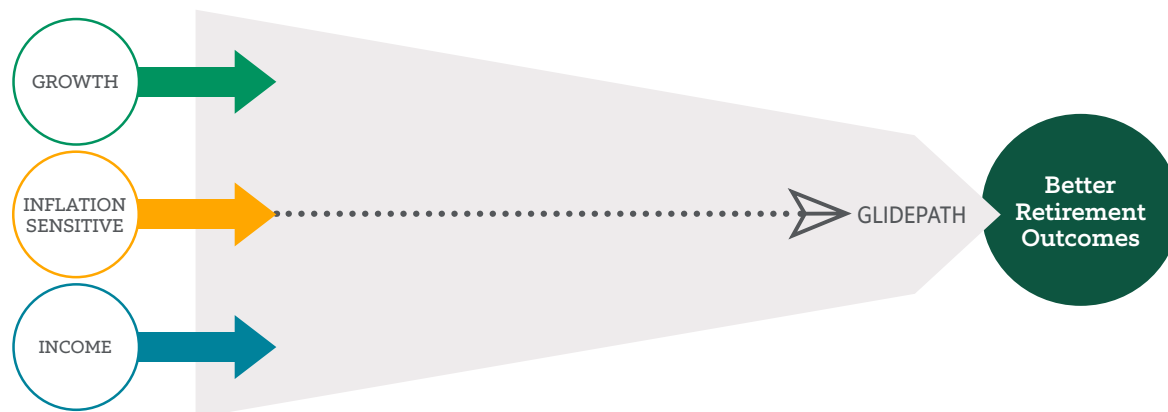
- 1 An asset allocation framework combining best-in-class investment management
- 2 The potential to deliver a better certainty of outcomes to employees
- 3 Addresses employees' behavior and keeps them oriented toward their goals
- 4 Adds value at a reasonable cost

THE CHALLENGE

Employees don't take the basic steps to prepare for retirement, and instead rely on plan sponsors to help them.

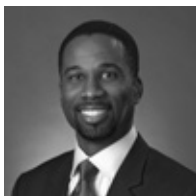
THE SOLUTION

Life Engineered™ Funds are an efficient target date solution designed to deliver more reliable lifetime income.





FlexShares leverages the investment expertise across our equity and fixed income disciplines to design solutions to address investor needs.



SHUNDRAWN A. THOMAS

Head of Funds and Managed Accounts
Asset Management

The FlexShares® philosophy centers on the investor. While that seems very basic, it is uncommon. Investors possess real goals. A pension plan sponsor may seek to manage inflation risk for plan participants while an insurance company may seek capital appreciation on surplus assets. We start with investors' goals, because that's what matters, but have to ask fundamentally different questions to identify the appropriate solution. We then construct strategies that best meet that objective, which we rigorously vet using empirical research and analysis.

FlexShares ETFs are "engineered" to produce persistent return attributes and serve as valuable components for portfolio construction. Our Flexible Indexing approach emphasizes transparency and cost efficiency to deliver non-traditional index strategies. Our approach to ETF product design is characterized as follows:

- We deliver distinctive products that target long-term investors.
- We utilize empirically driven analysis and application.
- We emphasize a deliberate product development and launch process.

Our decisions to launch specific strategies are supported by comprehensive research, as well as analysis of industry and competitive trends. This empirically driven approach to ETF product development is a core tenet of our approach. We bring investors our expertise as seasoned investment professionals intensely focused on identifying and delivering unique insights not already priced into the market. Investors can benefit from our dedication to advancing the science of index design and multi-asset class solutions and the clarity and transparency we deliver through our outcome-oriented ETF

solutions. To date, we have launched 22 FlexShares-branded ETFs.

According to the annual Greenwich survey, ETF usage continues to rise among institutional investors and advisors and is increasingly a core component of investment portfolios.

FlexShares leverages the investment expertise across our equity and fixed income disciplines to design solutions to address investor needs. Each strategy purposefully targets one or more of our fundamental investment objectives:

- **Capital Appreciation Solutions** are designed to meet specific goals over defined time horizons.
- **Risk Management Solutions** are created to help limit or hedge certain risks: inflation (or purchasing power over time) or concentration (diversification).
- **Income Generation Solutions** provide targeted, innovative income sources to respond to dynamic market factors.
- **Liquidity Management Solutions** offer targeted sources of liquidity in varied market environments and with levels of sensitivity.

As an ETF sponsor of choice, FlexShares leverages deep investment expertise, collaborative relationships with our clients and a rich fiduciary culture to deliver distinctive ETFs. Our portfolio management capabilities in index management, quantitative active strategies, fixed income and multi-asset class solutions provide a rich set of capabilities that enable innovative product development and cost-efficient fund solutions. In 2016, we will continue to provide innovative products, portfolio solutions and investment insights to help you reach your investment goals.

FAST FACTS

New sponsor — launched in 2011
 Managed by Northern Trust
 More than \$7B in AUM
 22 ETFs focused on four objectives

- Capital appreciation
- Risk management
- Income generation
- Liquidity management

NEW SOLUTIONS LAUNCHED IN 2015

FlexShares Real Assets Allocation Index Fund (ASET)
 FlexShares Currency Hedge Morningstar EM Factor Tilt Index Fund (TLEH)
 FlexShares Currency Hedge Morningstar DM ex-US Factor Tilt Index Fund (TLDH)
 FlexShares Credit Scored US Long Corporate Bond Index Fund (L KOR)
 FlexShares US Quality Large Cap Fund (QLC)

INDUSTRY RECOGNITION

13th largest manager

SPONSORED ETF ASSETS¹

Lipper Leader

70% OF FUNDS WITH AN “OVERALL” RATING RECEIVED A 4 OR 5 RATING FOR TAX EFFICIENCY AND CONSISTENT RETURN.²

Top Morningstar Ratings

80% OF FUNDS HAVE AN OVERALL RATING OF 4 OR 5 STARS³

THOUGHT LEADERSHIP



Flexible Indexing: An Investor-Centric Approach

Flexible indexing spans the entire process from concept through index construction and product design. This hands-on approach delivers a distinctive aspect of our value proposition to investors. This paper takes a deep look into this unique process.



ETFs vs. Mutual Funds: The Same, But (Very) Different

ETFs and mutual funds can be accurately characterized as “sister” investment products because of their similarities in composition and management. But that’s where the similarities end. Learn more about the significant differences between the two that may be outside the realm of preconceived notions.

All data above as of 12/31/15, unless otherwise noted.

1 The above rankings are not indicative of future performance. Unless otherwise noted, rankings based on total worldwide assets under management of \$934.1 billion as of December 31, 2014 by *Pensions & Investments* magazine's 2015 Special Report on the Largest Money Managers.

2 Source: Lipper Ratings for Consistent Return reflect fund historical risk-adjusted returns relative to peers. Lipper Ratings for Tax Efficiency (U.S. Only) reflect a fund's historical ability to postpone taxable distributions. Lipper Ratings **do not** take into account the effects of sales charges. Overall Ratings are based on an equal-weighted average of percentile ranks for each measure over 3-, 5-, and 10-year periods (if applicable).

3 Source: Morningstar. For additional information please see important information on last page.

IV Environmental, Social & Governance

We have seen expansive growth in ESG globally and continue to support and dedicate resources to this important space.



MAMADOU-ABOU SARR

Global Head of ESG Investing
Northern Trust

Environmental, Social, Governance (ESG) investing has seen great momentum over the past year. As of December 31, 2015, Northern Trust Asset Management was managing more than \$59 billion of assets globally incorporating ESG criteria. This was one of the highest growth product areas in the firm as we increased our number of client mandates by 13% during the year. We have seen expansive growth in ESG globally and continue to support and dedicate resources to this important space.

In 2015 it was difficult to ignore messages about climate change and reducing carbon emissions. It's an issue that we as a business have been taking seriously for years. Not only in the way we run our operations, but increasingly in how we look at investing opportunities. In 2013 we launched our first Dublin-domiciled equity fund with a low carbon objective — that fund had grown to nearly \$700 million by the end of 2015.

Additionally, we recently published our new Quality Low Carbon research integrating Engineered Equity™ with ESG. The strategy aims to deliver a reduction in portfolio carbon without negatively impacting performance — an investment innovation in ESG, which broadens the opportunities for low carbon investing to mainstream investors.

You may also have noticed that we were in Paris in December 2015 to participate in the Sustainable Innovation Forum, which took place alongside the seminal COP21 climate change discussions. We continue to actively participate in forums and

discussions regarding ESG issues and look forward to the innovative ideas and movements in the year ahead.

In May, I was honored to be selected to join the Listed Equity Steering Committee and Chair the United Nations-supported Principles for Responsible Investment (PRI) Sub-Committee. Additionally, one of our senior portfolio managers was asked to join the UNPRI Fixed Income Outreach Committee. By September, you may have noticed our increased presence in print and digital advertising vehicles as we proudly highlighted our ESG capabilities in a number of media outlets. September also marked another first: we hosted our inaugural internal Global ESG summit to discuss the ESG opportunities and identify new ideas and approaches. Lastly, we established an ESG Council to push forth our multi-asset class capabilities in order to deliver strategies and solutions to meet our clients' unique investment and ESG objectives. The ESG Council consists of partners from around the bank including representation from the ESG, Equities, Fixed Income, Outsourced CIO Programs, Manager Research, Wealth Management, Corporate Social Responsibility and Risk teams.

As we look ahead to 2016, we are excited to grow our global team further and build on the great momentum we saw in 2015. We pride ourselves on client dedication, and believe our commitment to the ESG business is an extension of this dedication.

ENVIRONMENTAL, SOCIAL & GOVERNANCE

FAST FACTS

More than 25 years of experience managing socially responsible portfolios

\$59B AUM for Socially Responsible Investing/ESG mandates

United Nations Principles for Responsible Investing (UNPRI) member since 2009

NEW U.S. SOLUTIONS LAUNCHED IN 2015

Quality ESG (Equity)

INDUSTRY RECOGNITION

Northern Trust added to CDP Carbon Disclosure Leadership Index.

Mamadou-Abou Sarr, Head of ESG, added to the UNPRI Listed Equity Advisory Committee and named Chairman of the UNPRI Outreach Committee.

Geeta Sharma, Senior Fixed Income Portfolio Manager, added to the UNPRI Fixed Income Outreach Committee.

THOUGHT LEADERSHIP



Preparing for a Low-Carbon Economy

Investors need not dissociate a low-carbon objective from their broader investment goals and risks. Alternatively, they can adopt a more holistic approach by investing in “high quality” companies which are defined by Northern Trust as companies that are “more profitable, more prudently managed and generate more cash flow than its peers.”



ESG Investing Bulletin

Get our latest insights into the ESG marketplace and potential implications for investors in our quarterly ESG Investing Bulletin. Recent issues touch on timely topics, such as the 2015 Paris Agreement and Carbon Pricing.

MARKET INSIGHTS

SECTION **5**

CAPITAL MARKET ASSUMPTIONS

OUR CAPITAL MARKET ASSUMPTIONS

What's in store for the years ahead?

Every year, Northern Trust's Capital Market Assumptions Working Group develops long-term forecasts for economic activity and financial market returns. Taking a "forward-looking, historically aware" approach, the working group identified six key themes investors would watch in the years ahead. These themes summarize our long-term outlook — and form the basis for our asset allocation recommendations.

Five-Year Themes

- 1** The slow burn of low growth
- 2** Productivity paradox
- 3** Inequality inaction
- 4** Low and slow monetary policy
- 5** Living in a low-yield world
- 6** Cyclical meets structural

Five-Year Asset Class Outlooks

Fixed Income	Equities
Real Assets	Alternatives

2015 Edition



OUR GLOBAL REACH

SECTION 6

A partner who can bring together learning and experience from one client type or country and implement them with different clients all over the world.



WAYNE BOWERS

Head of Asset Management International

Northern Trust operates in 22 countries and serves clients in nearly 50 different countries — we truly are a global organization. This is especially true in Asset Management. With over 120 people in 10 offices, speaking more than 25 languages and covering a 20-hour working day — it would be hard not to think globally.

For me this is essential — our clients are global and need a partner who can work with them in the same way. A partner who can bring together learning and experience from one client type or country and implement them with different clients all over the world.

ESG investing is just one example of how we are successfully applying our insight and expertise for various clients across multiple regions. With a strong presence in the Netherlands, the Nordics and in Australasia, we have developed ESG solutions for some of the most advanced and demanding investors in the world. This year we have seen the demand for these solutions grow exponentially and we now manage more than \$1 billion in our largest Dublin-domiciled ESG strategy: an index fund run to a customized MSCI World ESG index, which we determined based on the broad ESG beliefs of institutional investors across Europe. Our collaborative and investor-centric approach to developing this fund was unique, and given that the average

size of an ESG fund in Europe during 2014 (according to Morningstar) was \$480 million, our approach has been successful.

2015 was a strong year for our international team. We welcomed Hazel McNeilage as our new head of distribution for the EMEA region, we opened our first investment office in Australia and we fostered many new client relationships across the globe. Also, we successfully leveraged our local market knowledge to innovate and find solutions for investors such as the range of seven new tax-efficient Dutch funds for joint account (*fonds voor gemene rekening* or FGR). Whilst other asset managers were unable to create locally domiciled fund structures to deliver tax efficiency for Dutch investors, Northern Trust was able to identify the opportunity and develop product with a truly local flavor that also benefited from our global expertise in index management, factor-based investing and ESG investing. With two large distributors now using these funds, we have seen flows of almost \$4 billion into these funds since their inception in March 2015. Given such a strong showing we are now working on plans to launch a further two strategies in January 2016.

In 2016, we look forward to continuing to bring you innovative products and global solutions.

OUR GLOBAL REACH

FAST FACTS

Operate in 22 countries
Clients in nearly 50 countries
100+ professionals outside of North America
10 offices
25+ languages
Covering 20-hour working day

NEW SOLUTIONS LAUNCHED IN 2015

Tax Efficient Dutch Funds Structures (FGR) with seven underlying funds
Passive ESG Fixed Income Capabilities

INDUSTRY RECOGNITION

Managers Recommended to Other Pension Funds by 100% of Clients Award¹

INVESTMENT & PENSIONS EUROPE



2

THOUGHT LEADERSHIP



The Challenges of ESG Investing – Regulation

The changing shape of ESG “regulation” is among the main drivers of ESG investing growth. To better understand the issues around this topic, we examine the status of global efforts to pass legislation and implement codes of practice and self-regulation. What do these efforts mean for investors as they consider incorporating ESG criteria into their portfolios? And will these efforts encourage investors to look at ESG when they otherwise might not?



Reaching New Heights with Low Carbon Investment

Low carbon investment is growing in popularity, and reducing exposure to high carbon producers is not as difficult as it may seem. Emerging markets can now be accessed in a low cost and transparent way, whilst keeping carbon exposure in check.

1 According to clients surveyed by the Pension Fund Perception Programme as of 1/31/15.

2 For additional information on awards see important information on last page.

INSTITUTIONAL GROUP

SECTION 7

INSTITUTIONAL GROUP OVERVIEW

FAST FACTS

\$648B AUM

Serving 1,300+ institutional clients

Quarterly dedicated product training sessions

INDUSTRY RECOGNITION¹

5th Largest Manager

OF U.S. INSTITUTIONAL TAX-EXEMPT ASSETS

12th Largest Manager

OF WORLDWIDE INSTITUTIONAL ASSETS

OUR TEAM

140+ investment professionals in North America

– 18 CIMAs/CAIAs

– 40+ MBAs

– 36 CFA Designations

Management team averages over 24 years of industry experience

We are a leading partner to institutional investors around the world, delivering asset management expertise through **diverse product solutions** and **exceptional client service**.

SERVING VARIOUS INSTITUTIONAL CLIENTS ACROSS THE GLOBE

Pensions

Sovereign Entities

Fund Managers

Corporations

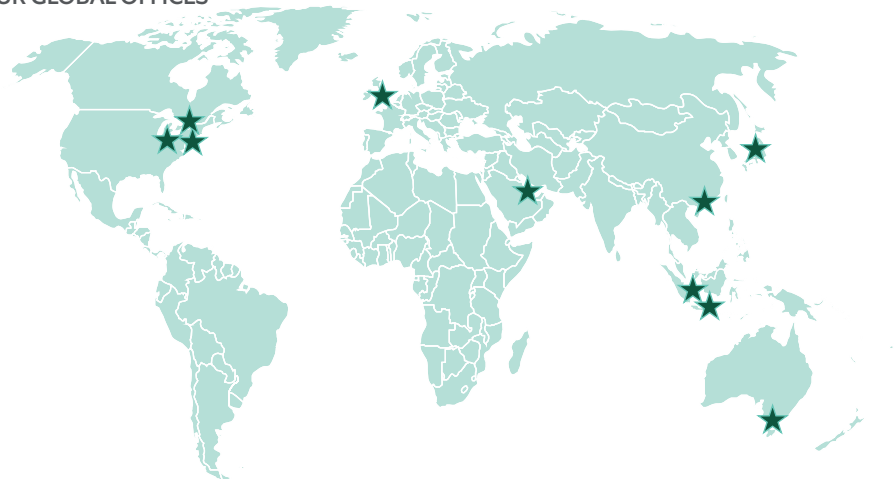
Foundations and

Endowments

Insurance Companies

Global Family Offices

OUR GLOBAL OFFICES



¹ The above rankings are not indicative of future performance. Unless otherwise noted, rankings based on total worldwide assets under management of \$934.1 billion as of December 31, 2014 by *Pensions & Investments* magazine's 2015 Special Report on the Largest Money Managers.

ACHIEVE GREATER

8

The top priority for 2016 is to continue expanding and integrating our communication channels, so we can deliver clear and engaging insights, while avoiding “information overload.”



MAUREEN BROMWELL

Chief Marketing Officer
Asset Management

Brand and commitment.

These are the two things that drew me to join Northern Trust in 2015. After spending more than 25 years in the investment management industry, of course I was familiar with the firm’s sterling reputation. But whenever I asked someone for their views on Northern Trust, two things rose to the top: the integrity of the brand and the steadfast commitment to its clients.

However, the most exciting part was being introduced to all that I didn’t know about it. Yes, it’s a top-tier wealth manager and one of the largest cash and index managers, but it’s also a firm with demonstrated leadership and strength in many other areas. During the discovery process, I found myself repeatedly saying, “I didn’t know that about Northern Trust.” For instance, did you know Northern Trust is also one of the largest asset managers for Defined Benefit, Defined Contribution, Sovereign Wealth Funds and Outsourced Chief Investment Officer solutions?

I was delighted by each new finding — especially as I learned the firm and I shared a commitment to continually improving the client experience.

The digital landscape has altered the way we consume and deliver information. We all want access to timely, concise, thoughtful information. My colleagues and I appreciate that you work with many investment managers — and you want information when, where and how you need it. One of my top priorities for 2016 is to continue expanding and integrating our communication channels, so we can deliver clear and engaging insights, while avoiding “information overload.”

With this goal in mind, we are developing platforms that enable our professionals to quickly share their market knowledge and provide deeper investment insights. We also will illustrate how other sophisticated investors are leveraging our investment solutions. And, we are working toward delivering this information in your preferred manner, not ours.

In the coming months you will see an evolution of our content and our brand. This reflects a commitment to continually evolve with the needs of our clients.

Northern Trust has earned its reputation by designing solutions to achieve greater outcomes, and I look forward to making it easier for you to learn more about our full breadth of expertise.

Achieve Greater

You may have noticed a few changes lately to the Northern Trust brand. We've just debuted a new logo and a bold new campaign we call "**Achieve Greater.**"

But as proud as we are of these new external expressions of Northern Trust, they are merely the signals of a new spirit that thrives inside our organization.

Every day, we challenge ourselves to leverage our strength and stability in innovative new ways. We strive to forge deeper connections and help our clients achieve bigger goals. And by working more globally than ever before, we continually push new technologies and ideas forward.



Achieve Greater
goes far beyond
a promise to you.

It's an ongoing
expectation we
have for ourselves.

FOR MORE INFORMATION

2014 & 2015 WORLD'S MOST ETHICAL COMPANIES:

Honorees are chosen by Ethisphere's network of leaders and the World's Most Ethical Companies Methodology Advisory Panel. Ethisphere's proprietary rating system is comprised of a series of questions based on the EQ Framework focusing on a comprehensive sampling of a company's corporate governance, risk, sustainability, social responsibility, compliance and/or ethics.

<http://worldsmostethicalcompanies.ethisphere.com/honorees>.

2015 ONE OF THE WORLD'S MOST ADMIRED COMPANIES:

Fortune's survey partners at Hay Group start with approximately 1,400 companies: the Fortune 1,000 (the 1,000 largest U.S. companies ranked by revenue); non-U.S. companies in *Fortune's* Global 500 database with revenues of \$10 billion or more. Hay then selects the 15 largest for each international industry and the 10 largest for each U.S. industry, surveying a total of 668 companies from 29 countries. To create the 55 industry lists, Hay polls executives, directors and analysts to rate companies in their own industry on nine criteria, from investment value to social responsibility. A company's score must rank in the top half of its industry survey to be listed.

<http://fortune.com/worlds-most-admired-companies/northern-trust-corp-100000>.

MORNINGSTAR RATING:

FlexShares Quality Dividend Index Fund (ticker: QDF) has a 5 star rating for the 3-year period ending December 31, 2015, out of 1,190 peers in the Large Value category, based on total return. **FlexShares Quality Dividend Defensive Index Fund** (ticker: QDEF) has a 5 star rating for the 3-year period ending December 31, 2015, out of 1,190 peers in the Large Value category, based on total return. **FlexShares iBoxx 30 Year Target Duration TIPS Index Fund** (ticker: TDTT) has a 5 star rating for the 3-year period ending December 31, 2015, out of 203 peers in the Inflation-Protected Bond category, based on total return. **FlexShares Morningstar Developed Markets ex-US Factor Tilt Index Fund** (ticker: TLTD) has a 4 star rating for the 3-year period ending December 31, 2015, out of 694 peers in the Foreign Large Blend category, based on total return. **FlexShares iBoxx 5-Year Target Duration TIPS Index Fund** (ticker: TDTF) has a 4 star rating for the 3-year period ending December 31, 2015, out of 203 peers in the

Inflation Protected Bond category, based on total return. **FlexShares Morningstar U.S. Market Factor Tilt Index Fund** (ticker: TILT) has a 4 star rating for the 3-year period ending December 31, 2015, out of 389 peers in the Mid Cap Blend category, based on total return. **FlexShares Ready Access Variable Income Fund** (ticker: RAVI) has a 4 star rating for the 3-year period ending December 31, 2015, out of 124 peers in the Ultrashort Bond category, based on total return. **FlexShares Quality Dividend Dynamic Index Fund** (ticker: QDYN) has a 4 star rating for the 3-year period ending December 31, 2015, out of 1,190 peers in the Large Value category, based on total return.

Best Smart Beta Strategies Awards are presented to the asset management house or pension fund that has demonstrated the best "smart beta" approaches; in doing so they will have combined both passive and active elements to deliver the best of both worlds: transparent construction, the promise of diversification, and all at low cost. The panel of judges will explore how such strategies are put together, how they have performed over the past decade, and how they can be used by investors.

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NORTHERN TRUST
50 S. La Salle Street
Chicago, IL 60603
312-630-6000
northerntrust.com

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