NORTHERN TRUST

Asset Management

FOCUS INVESTMENT RESEARCH

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FOCUS Investment Research offers a solid foundation for the development of a sound investment management practice.

ROB CARLEN

FOCUS Senior Relationship Manager

FOCUS Investment Research provides access to impartial and authoritative insights from Northern Trust's global team of experts, along with practical solutions to help you meet the needs of today's increasingly sophisticated investors.

Northern Trust has built one of the broadest buy-side investment research offerings to provide intelligence that is directly applicable to portfolio decision-making. As a recognized authority on asset allocation with expertise in capital market expectations, research and portfolio implementation, we deliver comprehensive solutions to help advisors build effective investment management methodologies. Included within our service model are robust processes to help meet regulatory expectations around due diligence and decision-making for asset allocation, portfolio construction and security selection.

A FOCUS subscription includes the following key components to assist you in evaluating and implementing effective investment solutions:

Asset Allocation Strategy – Our guidance combines comprehensive, bottom-up analysis with top-down strategy insights to generate asset allocation advice for both strategic and tactical time horizons.

Equity Research – Our Equity Research team provides in-depth coverage of 11 sectors, 60 industries and approximately 280 equity securities, along with a guidance list that includes ratings and analysis for each stock.

Fixed Income Research – Providing extensive coverage of more than 1,000 global issuers across the sovereign, credit and municipal sectors conducted by a team of 21 analysts and guided by fundamental research and a focus on risk management.

Economic Research – Encompassing a long history of unique perspectives on the global economy, our service includes insights around current events and country risk, as well as timely forecasts for interest rates, inflation and economic growth.

Insights Beyond Investments – Thought leadership on a variety of wealth planning and practice management topics to help advisors navigate fiduciary duties and deliver comprehensive client solutions.

Consulting and Resources – Investment portfolio analysis and support including asset allocation and portfolio construction, optimization and fulfillment guidance as well as assistance with Northern Trust research, investment solutions and investment platforms.

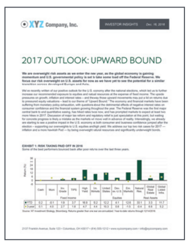
SERVICE LEVEL OUTLINE

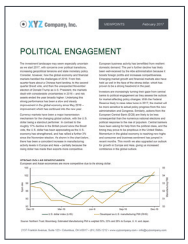
FOCUS STANDARD

- **A Comprehensive Equity Package** including:
  - Equity Guidance List covering approximately 280 large cap companies (weekly)
  - Daily Equity Research Summary
  - Equity Investors' Weekly
  - Sector Views (monthly)
- **Capital Markets Assumptions Five Year Outlook** (annually)
- **Asset Allocation Models** for both strategic and tactical time horizons (monthly)
- **Financial Market Update Conference Calls** with Northern Trust senior strategists and leadership (monthly)
- **Client Meeting Support** for all research and asset allocation recommendations
- **Portfolio Construction Support**
- **Timely Economic and Market Commentaries**
- **Benchmark Index Returns** (monthly)
- **Fixed Income Commentary** (weekly/monthly)
- **Fixed Income Guidance List** including suggested Treasuries, agencies and corporates (weekly)
- **Distinguished Speaker Series Calls** with Northern Trust subject matter experts (quarterly)
- **Invitation to the Annual FOCUS Investment Research and Asset Management Conference** for all registered users
- **FOCUS Investment Research and Managed Account Solutions Web and Mobile Access** for up to 10 registered users enabling on-demand access to relevant materials
- **Customized Content Delivery** (multi-channel communications delivered daily, weekly, monthly, quarterly and ad hoc)

FOCUS PREMIER

- **All Standard Service Components**
- **Model Equity Portfolio** a fundamentally driven, high-quality Large Cap Core model portfolio designed with a goal to provide upside participation while minimizing the effects of market downturns
- **Market Update Call with Northern Trust Equity Research Analysts** highlighting our sector outlook, trends and top picks (monthly)
- **Access to Northern Trust Equity Research Analysts and Staff** including a dedicated, email-based Premier Hotline providing instant access to our experts for questions and call back requests
- **Asset Allocation Support** - direct access to Northern Trust's investment strategy team and Investment Solutions Group
- **Private Label Market Insights** customized with your logo and contact information to support communication with your client base





- **Executive Peer Winter Roundtable** at Northern Trust's Asset Management Offices in West Palm Beach, Florida with Northern Trust senior executives, active equity portfolio managers, and subject matter experts
- **FOCUS Investment Research and Managed Account Solutions Web and Mobile Access** for 10 additional users (20 users total – additional users negotiable)

ASSET ALLOCATION STRATEGY

We believe effective asset allocation can reduce investment risk and provide the potential for more predictable long-term returns.

Northern Trust's detailed asset allocation process combines bottom-up analysis with top-down strategy insights to generate asset allocation advice for both strategic and tactical time horizons. This comprehensive approach to portfolio management begins with our Capital Market Assumptions.

On an ongoing basis, Northern Trust's Investment Policy Committee leverages expertise from across the firm to develop our long-term economic and financial market outlook, as well as product ideas that reflect these views. The output from our Capital Market Assumptions process is utilized to drive our investment processes firm-wide.

Each year, we combine our forward-looking themes with historical analysis to generate hypothetical five-year (strategic) total return expectations that reflect our "Forward Looking; Historically Aware" mandate. Northern Trust's Portfolio Construction team then integrates our market expectations with risk and correlation data to develop models that maximize efficiency (i.e., seek to potentially provide the most return for a given level of risk).

Next, the strategic models are overlaid with tactical recommendations consisting of sector weightings developed for a 12 month time horizon. This process relies on input from the Tactical Asset Allocation Committee, which reviews bottom-up analysis on interest rates, credit spreads and earnings, and combines that analysis with top-down macro strategy views.

Finally, we monitor the active risk associated with the tactical recommendations compared to the strategic portfolio, as well as risk factor exposures within the positions such as market risk, credit risk, commodity risk, etc.

Our asset allocation guidance enables investment advisers to:

- Manage client expectations with long-term return outlooks
- Facilitate the investment policy statement development process and align client goals with appropriate risk profiles based on Northern Trust's strategic asset allocation recommendations
- Capitalize on potential opportunities to add alpha by leveraging tactical asset allocation insights including near-term views on the risk-taking environment

JIM MCDONALD
Chief Investment Strategist

DAN PHILLIPS, CFA®
Senior Investment Strategist

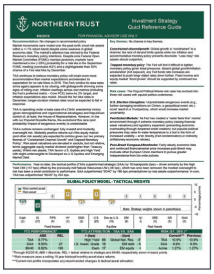
ASSET ALLOCATION MATERIALS

SUBSCRIPTION COMPONENTS

Weekly Market Update

A snapshot review of market and economic news from the previous week along with pertinent datapoints and a preview of what lies in store for the week ahead.

Monthly Investment Guide



Monthly recommendation summary and performance review using Northern's Global Tactical Asset Allocation model as a proxy. Includes U.S. economic, interest rate, spread and currency forecasts as well as S&P earnings and price targets, YTD returns and next 12 months forecasts.

Capital Markets Assumptions & Annual Outlook White Papers

Published annually, these white papers include historical analysis, asset class return forecasts and charts supporting Northern's five-year investment themes.

Perspective Newsletter

This monthly newsletter from Jim McDonald, Chief Investment Strategist, is designed to keep subscribers abreast of the latest economic and market developments.

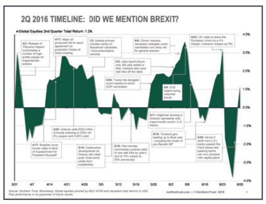
Perspective Chartbook

The Perspective Chartbook features a robust collection of graphical illustrations providing overviews and outlooks for global economic environments, markets and individual asset classes.

Quarterly Review Newsletter

A review of the quarter's key developments and financial market returns in an easy-to-read four page document suitable for client communications.

Quarterly Review Chartbook

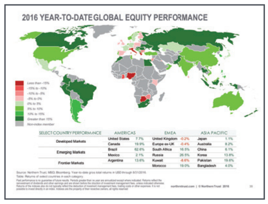


A review of the quarter's key developments and financial market returns formatted as a presentation deck.

Investment Strategy Commentary

Produced by the Investment Strategy team, this publication includes commentary on a variety of topics such as interest rate sensitivity, commodities, U.S. and global economies and markets, emerging markets and more.

Northern Trust Chart Library



Our comprehensive library of market and economic data supporting all research and asset allocation recommendations, summarized monthly in a collection of charts.

Typically comprising approximately100 pages, the Chart Library provides a detailed analysis of the factors and trends driving global economies and the financial markets.

Asset Allocation Templates

Strategic and tactical asset allocation recommendations to facilitate the investment policy statement development process and portfolio construction (provided as Microsoft Excel files).

EQUITY RESEARCH

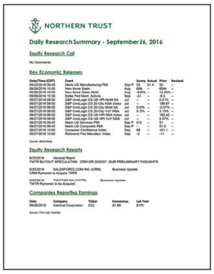
Our equity research analysts provide timely analysis on the sectors and stocks they cover as well as practical insights for prudent investment decision-making.

MATT PERON
Managing Director,
Head of Global Equity

CHRIS SHIPLEY
Director,
Equity Research

Covering a universe of approximately 280 equity securities, our equity research analysts provide insights at both the sector and individual stock levels to help advisers identify, evaluate and capitalize on investment opportunities around the globe.

SUBSCRIPTION COMPONENTS


NORTHERN TRUST
Daily Research Summary - September 26, 2016
Equity Research Call
Key Economic Releases
Equity Research Reports
Companies Reporting Earnings

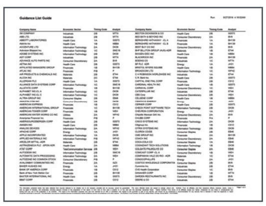
Daily Equity Research Summary

A summary of our Daily Research call along with updates on key economic releases, research reports, companies reporting earnings, market news and more.

Equity Investors' Weekly

A consolidated document containing all research reports generated during the week with a table of contents for easy reference.

Equity Guidance List

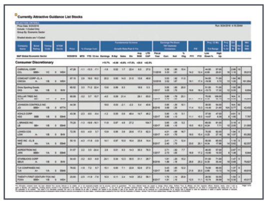

Guidance List Guide

Northern Trust's Equity Guidance List includes company names, tickers, sectors, timing codes and the analysts covering each security.

Additions, Deletions and Coding Changes YTD

A week-by-week documentation of changes to the Northern Trust Equity Guidance List.

Currently Attractive Guidance List Stocks


Currently Attractive Guidance List Stocks

A list of equity securities coded 1/A, 1/B or 1/C.

Guidance List by S&P Global Economic Sector

Northern Trust's Guidance List organized by sector.

Guidance List Company Research Reports

Timely research reports featuring an in-depth analysis of each company on Northern Trust's Guidance List.

Research Sector Views

Sector analyses including Northern's recommended sector weightings, sector themes, performance, earnings, demand trends, valuation, long-term drivers, favored stocks and more.

FIXED INCOME RESEARCH

We believe that through fundamental research and risk management we can identify and implement investment strategies that add value for the risks taken.

COLIN ROBERTSON

Managing Director,
Head of Fixed Income

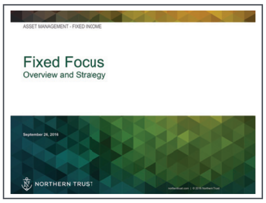
BRAD CAMDEN, CFA®

Director,
Fixed Income Strategy

Supported by more than four decades of fixed income market experience, our global fixed income team employs a collaborative approach that blends top down macro factors with bottom up security analysis to provide insights on the sovereign, credit and municipal sectors.

SUBSCRIPTION COMPONENTS

Fixed FOCUS



A weekly update including index results, rate, corporate, municipal and high yield recaps and money market commentary.

Fixed Income Guidance List

Northern Trust's Fixed Income Guidance List includes suggested Treasury, agency, mortgage-backed and corporate securities.

Active, High Yield and Municipal Quarterly Updates

These Northern Trust product updates include an analysis of the current market and economic environments and outlook, yield curve and duration positioning, sector allocation and security selection analyses, and performance attribution.

ECONOMIC RESEARCH

Our goal is to inform clients about market and economic events, to enhance the quality of investment decisions.

CARL TANNENBAUM
Chief Economist

ASHA BANGALORE
Economist

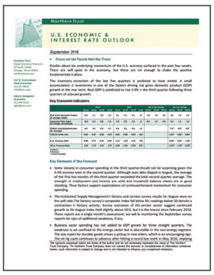
Our Economic Research team is currently staffed with six economists who conduct research and analysis to offer timely insights on the U.S. and global economies, inflation, interest rates and country risk, providing the clarity you need to make informed decisions.

SUBSCRIPTION COMPONENTS

Weekly Economic Commentary

Our Weekly Economic Commentary features the latest analysis and insights around the current U.S. economic and interest rate environments, as well as the issues driving market performance.

U.S. Economic and Interest Rate Outlook



U.S. ECONOMIC & INTEREST RATE OUTLOOK

This monthly research paper focuses on the current U.S. economic and interest rate environments as well as expectations for future developments.

Global Economic Outlook

This quarterly research paper includes analyses and forecasts for the major world markets.

Economic Update

Periodic updates covering breaking news of special interest.

The View From Here

THE VIEW FROM HERE
BROAD THOUGHTS ON THE ECONOMY

Authored by Carl Tannenbaum, Chief Economist, this quarterly editorial features Carl's insights on topical issues relating to the economy and financial markets.

INSIGHTS BEYOND INVESTMENTS

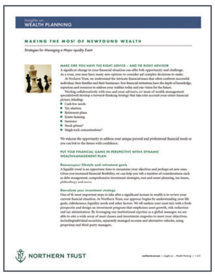
Thought leadership on a variety of wealth planning and practice management topics to help advisors navigate fiduciary duties and deliver comprehensive client solutions.

Complementing our research offering, our *Insights Beyond Investments* materials offer perspective and guidance to help advisors anticipate opportunities and challenges and navigate the many dimensions of wealth planning and practice management.

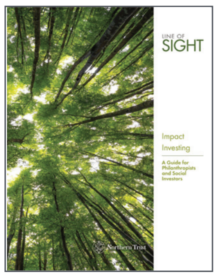
SAMPLE TOPICS AND MATERIALS

- Regulatory issues
- Wealth planning
- Family education and governance
- Tax strategies
- Trusts
- Estate planning
- Philanthropy
- Cybersecurity
- Marketing

Wealth Planning



Philanthropy



Tax Strategies

MULTI-CHANNEL COMMUNICATIONS

Multi-channel communications to support our service offering as well as ongoing educational events to help advisors deliver effective client solutions.

FOCUS Investment Research includes extensive commentary and exhibits to provide financial advisors with talking points, presentation decks and collateral materials to support effective client meetings. Furthermore, the service offers a variety of educational opportunities to expand your investment knowledge and keep you abreast of the latest developments, with regard to both the economy and markets, and the industry at large.

DELIVERY CHANNELS:

Web

Visit NTFOCUS.com for on-demand access to all FOCUS subscription materials.

Mobile App

Download the NTFOCUS app to access subscription materials on the go.

email

Opt-in to receive the latest research reports, commentaries and more via email.

Webinars

Participate in timely webinars featuring insights on the economy, markets, asset allocation and more.

Conferences

Earn CE credit and engage with Northern Trust experts and industry colleagues at our annual FOCUS conference and Winter Roundtable.

DEDICATED CONSULTING SUPPORT

The Investment Solutions Group (ISG) leverages a diverse range of experience, knowledge and skills to support our financial intermediary clients with asset allocation and portfolio construction, optimization and fulfillment guidance.

DENNIS LICO

Manager, Investment Solutions Group

SHAWN KIRBY, CAIA®

Senior Investment Program Consultant

Northern Trust's Investment Solutions Group (ISG) offers a centralized point of contact for investment solutions support. Utilizing proprietary optimization software and industry leading vended financial modeling tools, the team supplies guidance around implementing product both strategically and tactically, employing Northern Trust's investment guidelines as a framework. In addition, ISG can provide in-depth analysis at both the asset class and investment component levels, to understand how they may behave within the program models. These insights facilitate the construction of optimized portfolios that reflect client objectives and meet expectations in a variety of market environments.

MENU OF SERVICES

- Returns-based analysis
- Mutual fund, ETF and managed account analysis
- Asset allocation modeling support
- Correlation analysis
- Side-by-side analysis of investment products and/or indices
- Portfolio construction and completion strategies
- Coordination of additional resources (e.g., attribution analysis, market commentaries, product commentaries)
- Marketing and educational tools to support business development and client retention
- Advisor support desk staffed Monday – Friday, (8:30 a.m. – 5:00 p.m. CT)

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