



NORTHERN TRUST

ASSET MANAGEMENT

10 PRINCIPLES OF EFFECTIVE INVESTING

and How to Make Them Work for You



Investment Solutions from Northern Trust Asset Management

10 PRINCIPLES OF EFFECTIVE INVESTING

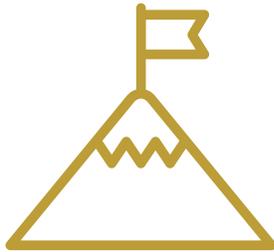
1. Investment Success Starts with a Plan
2. Be Risk Intelligent, Not Risk Averse
3. Market Participation is Important
4. Volatility Happens
5. Diversification is Key to Managing Risk
6. Assets Serve a Purpose
7. Asset Allocation Drives Outcomes
8. Buy Low, Sell High
9. Factors Can Help Meet Goals
10. Cost Matters. Value Does Too.

PRINCIPLE #1: INVESTMENT SUCCESS STARTS WITH A PLAN

- Developing an investment plan can be critical to achieving the outcomes you seek
- Different investment goals may require different strategies
- Consider a professionally managed investment solution that adapts to changing market conditions, such as the Diversified Strategist Portfolios (DSP)
- The important thing is to begin

Considerations for a successful investment plan:

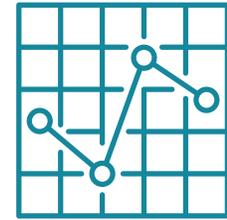
**Investment
Goals**



**Time
Horizon**



**Risk
Tolerance**



**Investable
Assets**



**Future
Contributions**



**Targeted
Returns**

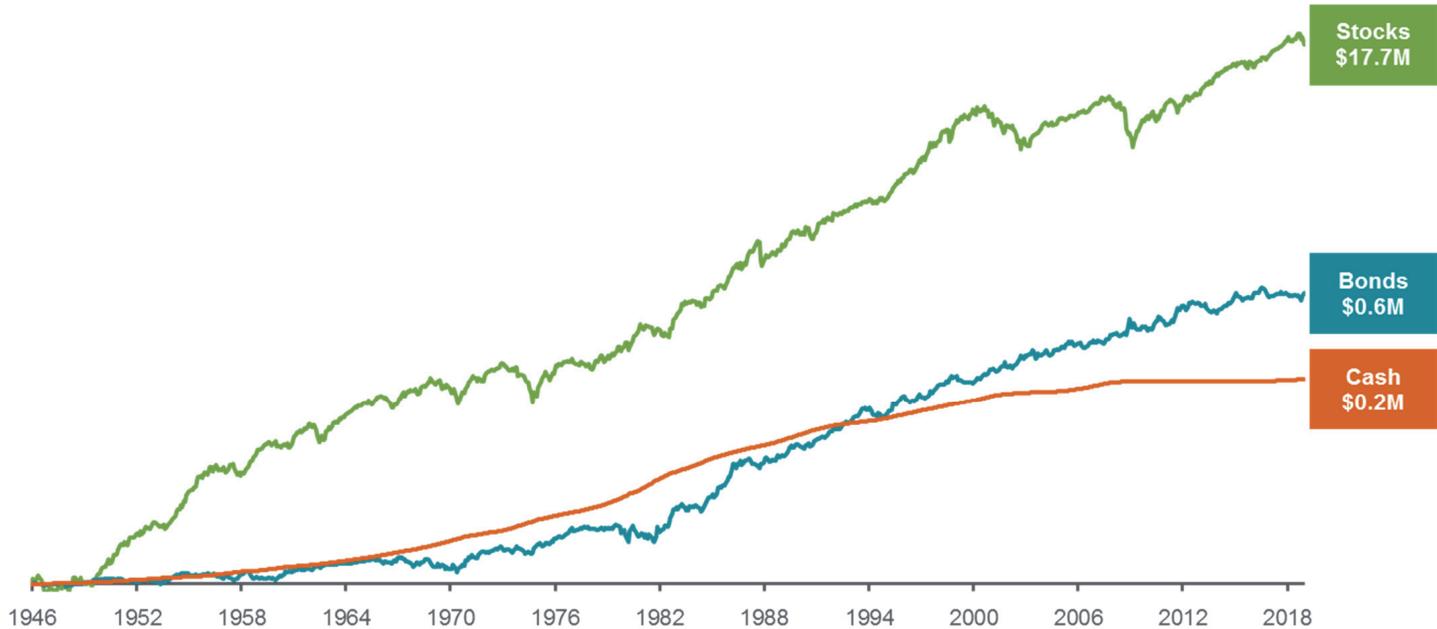


PRINCIPLE #2: BE RISK INTELLIGENT, NOT RISK AVERSE

- Historically, the markets have created value for investors over time
- Risk and return go hand in hand
- Seek to manage risk, not avoid it
- Stocks, bonds and cash all have a place in a well-diversified portfolio
- DSP offers built-in risk management to help deliver a smoother journey and improve investment outcomes

*Past performance is no guarantee of future results.
Diversification is no guarantee against loss.*

Hypothetical \$10,000 investment — 1946 to 2018



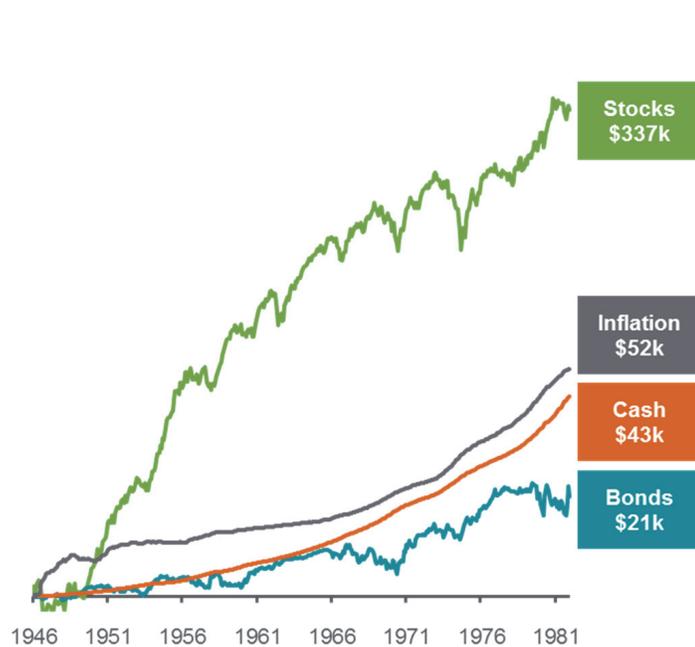
Source: Northern Trust Investment Strategy, Ibbotson. Data from 12/31/1945 to 12/31/2018. Past performance is no guarantee of future results. Returns reflect the reinvestment of dividends and other earnings and are shown before the deduction of investment management fees, unless indicated otherwise. Returns of the indexes also do not typically reflect the deduction of investment management fees, trading costs or other expenses. It is not possible to invest directly in an index. Indexes are the property of their respective owners, all rights reserved.

PRINCIPLE #3: MARKET PARTICIPATION IS IMPORTANT

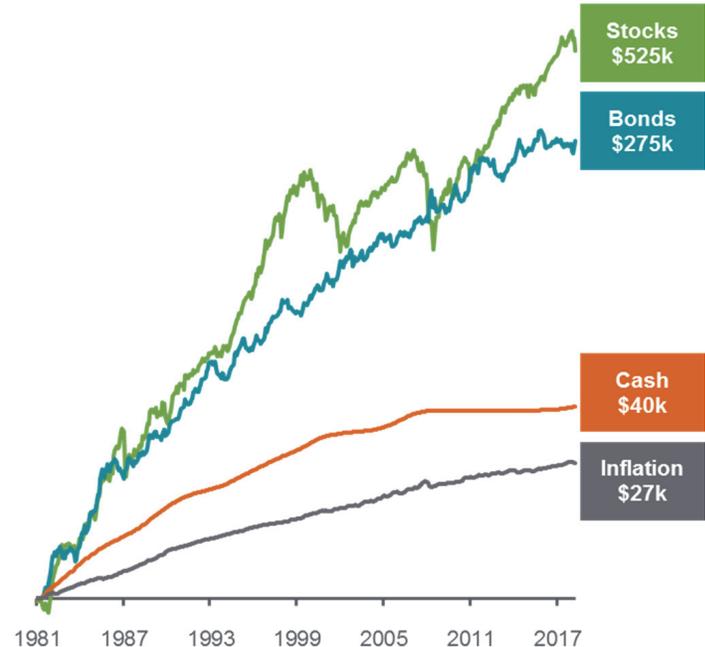
- Investments perceived as low risk may actually be quite risky when viewed through the lens of inflation
- Inflation can erode purchasing power over time
- Historically stocks have been one of the best investments to build wealth and outpace inflation
- DSP includes allocations to asset classes that seek to defend against rising inflation and participate in the market's potential for growth

Past performance is no guarantee of future results.

Hypothetical \$10,000 investment 1946 to 1981



Hypothetical \$10,000 investment 1981 to 2018



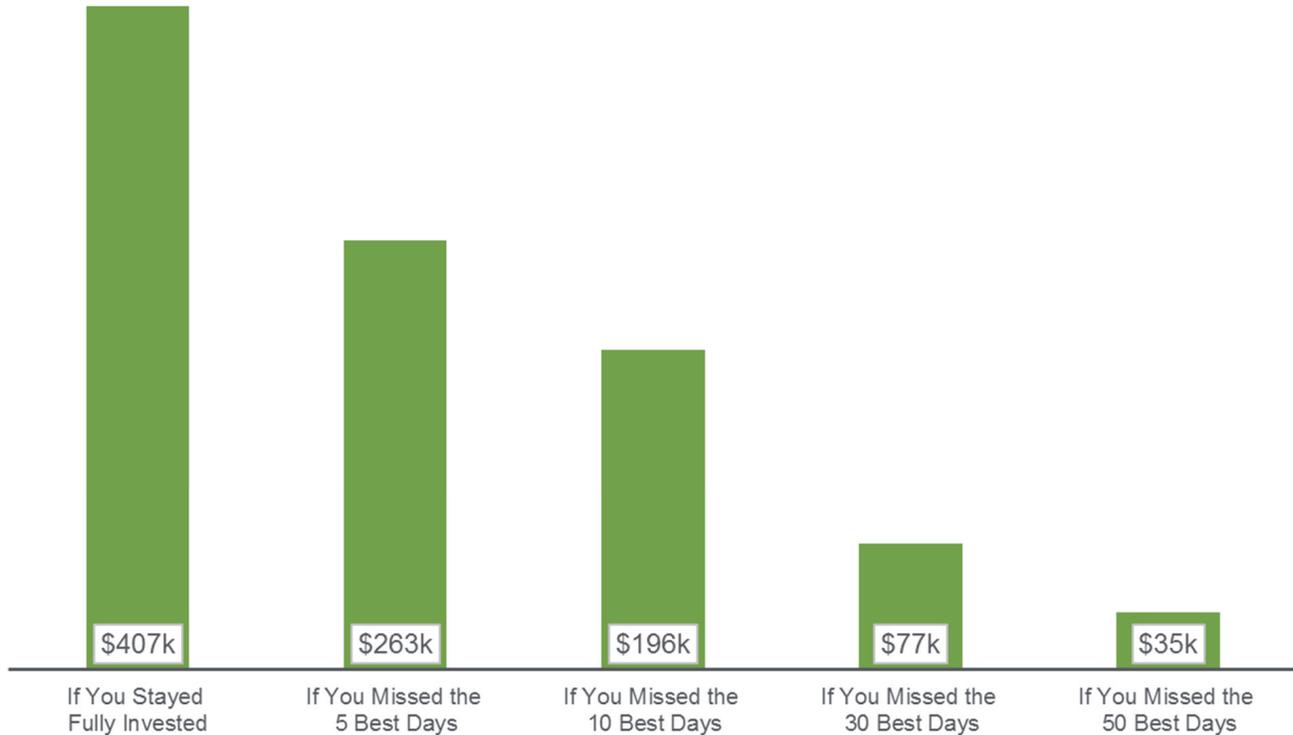
Source: Northern Trust Investment Strategy, Ibbotson. Left chart data from: 12/31/1945 to 12/31/1981. Right chart data from: 12/31/1981 to 12/31/2018. Past performance is no guarantee of future results. Returns reflect the reinvestment of dividends and other earnings and are shown before the deduction of investment management fees, unless indicated otherwise. Returns of the indexes also do not typically reflect the deduction of investment management fees, trading costs or other expenses. It is not possible to invest directly in an index. Indexes are the property of their respective owners, all rights reserved.

PRINCIPLE #4: VOLATILITY HAPPENS

- Market volatility is inevitable; reacting emotionally can be detrimental to investment success
- History demonstrates that after periods of volatility, the markets have not only recovered—but reached new highs
- Missing even just a few of the best days of returns can materially impact your portfolio's performance
- DSP can help you stick to your investment plan and thus increase the likelihood of a successful outcome

Past performance is no guarantee of future results.

Hypothetical growth of \$10,000 invested in the S&P 500 (Dec. 1981 – Dec. 2018)



Source: Northern Trust, Bloomberg. Data from 12/31/1981 – 12/31/18. Past performance is no guarantee of future results. Returns reflect the reinvestment of dividends and other earnings and are shown before the deduction of investment management fees, unless indicated otherwise. Returns of the indexes also do not typically reflect the deduction of investment management fees, trading costs or other expenses. It is not possible to invest directly in an index. Indexes are the property of their respective owners, all rights reserved.

PRINCIPLE #5: DIVERSIFICATION IS KEY TO MANAGING RISK

- Diversification is the process of allocating investment holdings across various asset classes, industries, companies and countries, at home and abroad
- The best-performing asset class changes from year-to-year; these cycles are difficult to predict
- Many investment opportunities exist outside the United States; home country bias can negatively impact investment results
- DSP seeks to enhance investment returns and reduce risk via professionally managed allocations to a variety of globally diversified asset classes

*Past performance is no guarantee of future results.
Diversification is no guarantee against loss.*

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	10 YEAR CAGR
Higher Returns	EM Equities 79.0	Global RE 20.0	TIPS 13.6	Global RE 29.8	U.S. Equities 32.6	Global RE 14.7	U.S. Equities 1.3	Natural Res. 31.6	EM Equities 37.8	Cash 1.8	U.S. Equities 13.1
	High Yield 58.8	EM Equities 19.2	Inv. Grade 7.8	EM Equities 18.6	Dev. ex-U.S. 21.6	U.S. Equities 13.4	Inv. Grade 0.5	High Yield 17.1	Dev. ex-U.S. 24.8	Inv. Grade 0.0	High Yield 11.1
	Natural Res. 53.6	Natural Res. 18.6	High Yield 5.0	Dev. ex-U.S. 17.0	Infrastructure 15.0	Infrastructure 13.0	Cash 0.0	Infrastructure 12.4	U.S. Equities 21.9	TIPS -1.3	Global RE 10.4
	Global RE 41.3	U.S. Equities 15.4	U.S. Equities 2.0	U.S. Equities 16.1	MAC 9.1	Inv. Grade 6.0	Global RE -0.4	U.S. Equities 11.6	Infrastructure 20.1	High Yield -2.1	EM Equities 8.4
	Dev. ex-U.S. 34.4	High Yield 14.9	Cash 0.1	High Yield 15.8	High Yield 7.4	MAC 4.5	TIPS -1.4	EM Equities 11.6	Natural Res. 18.9	U.S. Equities -4.5	Infrastructure 7.6
	U.S. Equities 27.1	MAC 12.3	MAC 0.0	MAC 12.4	Global RE 2.2	TIPS 3.6	Dev. ex-U.S. -2.6	MAC 7.8	Global RE 15.0	Global RE -5.5	MAC 7.3
	Infrastructure 25.3	Dev. ex-U.S. 9.4	Infrastructure -0.4	Infrastructure 11.9	Cash 0.0	High Yield 2.5	MAC -2.7	TIPS 4.7	MAC 14.2	MAC -5.7	Dev. ex-U.S. 6.8
	MAC 24.3	Inv. Grade 6.5	Global RE -8.1	Natural Res. 9.0	Natural Res. -0.3	Cash 0.0	High Yield -4.4	Global RE 4.6	High Yield 7.5	Infrastructure -9.5	TIPS 3.6
	TIPS 11.4	TIPS 6.3	Dev. ex-U.S. -11.8	TIPS 7.0	Inv. Grade -2.0	EM Equities -1.8	Infrastructure -11.5	Dev. ex-U.S. 3.3	Inv. Grade 3.5	Natural Res. -12.6	Inv. Grade 3.5
	Inv. Grade 5.9	Infrastructure 5.8	Natural Res. -12.5	Inv. Grade 4.2	EM Equities -2.3	Dev. ex-U.S. -3.9	EM Equities -14.6	Inv. Grade 2.6	TIPS 3.0	Dev. ex-U.S. -13.6	Natural Res. 3.1
Cash 0.1	Cash 0.1	EM Equities -18.2	Cash 0.1	TIPS -8.6	Natural Res. -7.2	Natural Res. -24.0	Cash 0.3	Cash 0.8	EM Equities -14.2	Cash 0.3	
Lower Returns											

Source: Northern Trust Investment Strategy, Bloomberg. Gross total returns in USD. MAC (Multi-Asset Class) = Northern Trust Investment Policy Committee Strategic Asset Allocation decisions for global asset allocation model, tracked using preferred Investment Policy Committee asset class index proxies. CAGR = Compound Annual Growth Rate (trailing 10 years through 12/31/18). Past performance is no guarantee of future results. Periods greater than one year are annualized except where indicated. Returns reflect the reinvestment of dividends and other earnings and are shown before the deduction of investment management fees, unless indicated otherwise. Returns of the indexes also do not typically reflect the deduction of investment management fees, trading costs or other expenses. It is not possible to invest directly in an index. Indexes are the property of their respective owners, all rights reserved.

PRINCIPLE #6: ASSETS SERVE A PURPOSE

- DSP employs an outcome-oriented investment approach that seeks to align assets with goals
- Risk assets serve to grow the value of your portfolio over time to fund longer term and discretionary goals
- Risk control assets serve as a risk management tool and can provide a stable source of funds to help meet income and liquidity needs
- Risk and risk control assets exhibit a low correlation with one another
- DSP features an optimized mix of risk and risk control assets including allocations to real assets, high yield fixed income and TIPS

RISK ASSETS

Assets designed to provide long-term capital appreciation in a risk-efficient way

GLOBAL EQUITIES

*Capital Appreciation
(Growth)*

HIGH YIELD

*Income
Generation*

**NATURAL
RESOURCES**

*Risk
Management*

**GLOBAL
REAL ESTATE**

*Risk
Management*

**GLOBAL LISTED
INFRASTRUCTURE**

*Risk
Management*

**RISK CONTROL
ASSETS**

Assets designed to dampen volatility and meet near-term goals

CASH

*Liquidity
Management*

**INVESTMENT
GRADE FIXED
INCOME**

*Income
Generation*

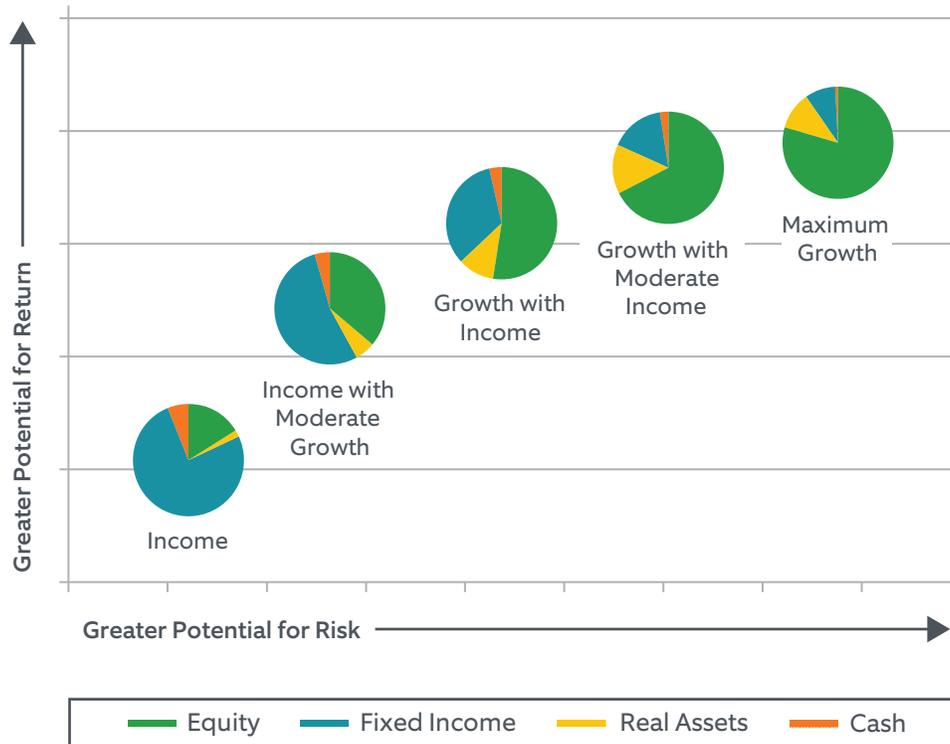
**INFLATION-
PROTECTED
FIXED INCOME**

*Risk
Management*

PRINCIPLE #7: ASSET ALLOCATION DRIVES OUTCOMES

- Asset allocation entails allocating your investment holdings to different asset classes including stocks (equity), bonds (fixed income), real assets and cash
- Asset allocation is widely recognized as a key factor in investment performance
- DSP offers multi-asset class solutions for five objectives from income to maximum growth
- DSP is built on an adaptive asset allocation framework that aligns with each portfolio's goal

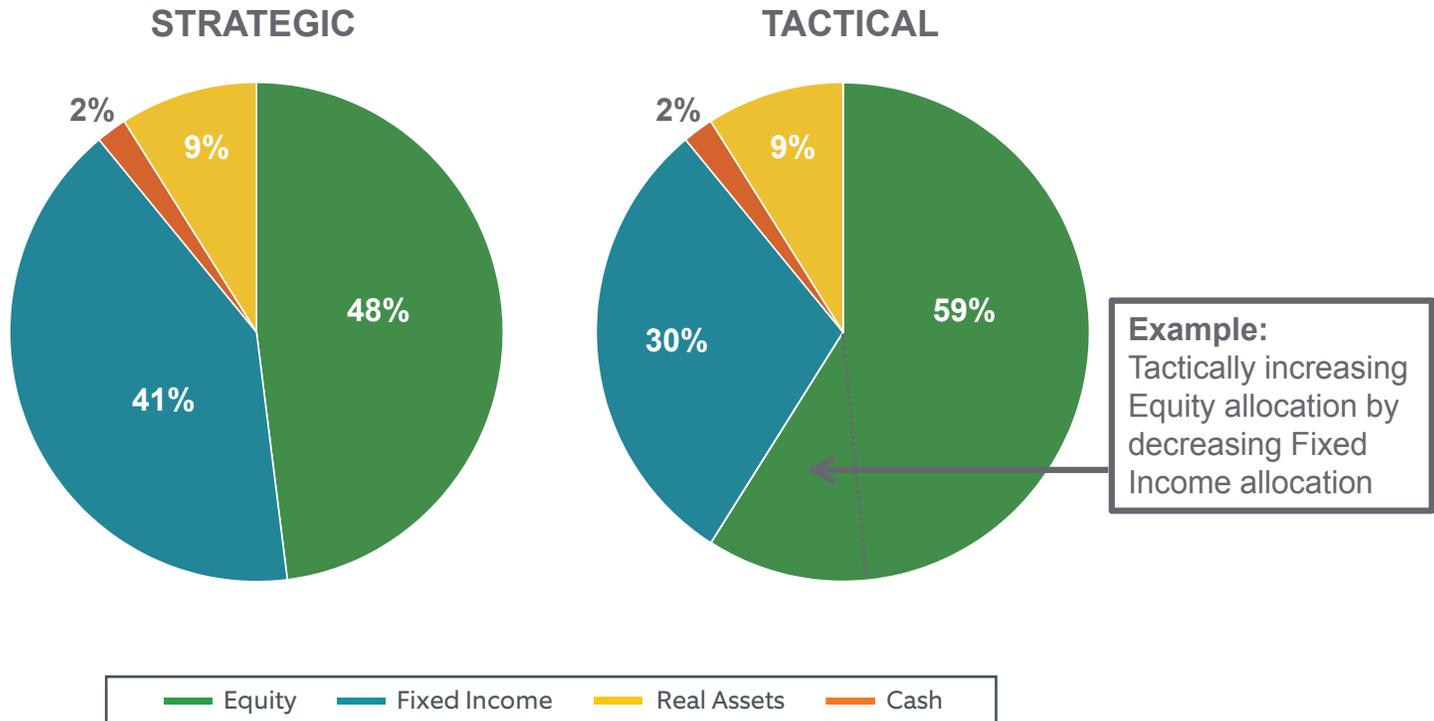
The Diversified Strategist Portfolios: Multi-asset solutions for a range of objectives



PRINCIPLE #8: BUY LOW, SELL HIGH

- Short-term market dips can be buying opportunities
- A dynamic approach to portfolio management can be beneficial
- DSP seeks to capitalize on market movements and defend against volatility via short-term tactical adjustments to the portfolios' long-term strategic allocations
- The tactical adjustments are made within specified guidelines
- These adjustments seek to add value over a static asset allocation approach

Tactical adjustments anchored to the strategic starting point

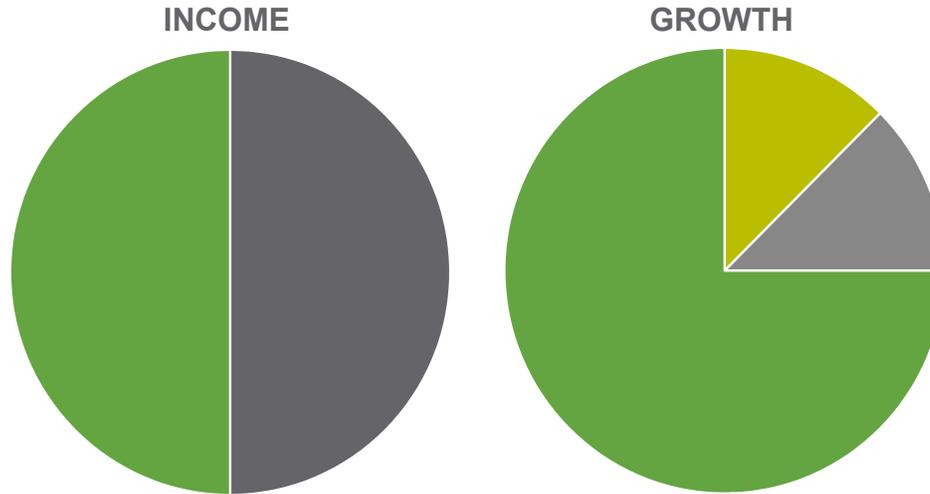


PRINCIPLE #9: FACTORS CAN HELP MEET GOALS

- Research shows that certain investment factors have demonstrated outperformance with less risk over time¹
- Such factors include: high quality, dividend yield, value and small size
- Targeting the right combination of factors can be critical
- DSP seeks to deliver added value through a core allocation to quality and other targeted equity factor exposures
- Investors looking for more income may look to dividend yield; those looking for growth may tilt toward small size and value

¹ *Understanding Factor Investing, Northern Trust, July 2018.
Past performance is no guarantee of future results.*

Carefully selected equity factors for investors looking for:



HIGH QUALITY

Companies with sound management, consistent earnings and steady finances

DIVIDEND YIELD

Companies providing above average dividends

VALUE

Companies whose stock prices are at cheaper levels

SMALL SIZE

Smaller companies with room to grow

PRINCIPLE #10: COST MATTERS. VALUE DOES TOO.

- DSP offers a holistic investment solution backed by Northern Trust's time-tested asset allocation, risk management and portfolio construction expertise
- DSP seeks to enable investors to pursue their goals with confidence
- DSP seeks to provide value at a reasonable cost
- Underlying investments include cost-efficient FlexShares® ETFs and Northern Funds managed by Northern Trust, within the structure of a single separately managed account

DIVERSIFIED STRATEGIST PORTFOLIOS

Portfolio Holdings as of December 31, 2018

Asset Allocation%¹

Equity Real Assets Fixed Income Cash/ST



FlexShares ETF / Northern Fund	Ticker	Expense Ratio	Maximum Growth	Growth with Moderate Income	Growth with Income	Income with Moderate Growth	Income
EQUITY			78.7%	59.7%	42.4%	24.6%	7.9%
US Equity							
FlexShares US Quality Large Cap Index Fund	QLC	0.32%	19.3%	18.3%	16.1%	—	—
FlexShares Morningstar US Market Factor Tilt Index Fund	TILT	0.25%	19.6%	12.3%	5.4%	—	—
FlexShares Quality Dividend Index Fund	QDF	0.37%	—	—	—	13.7%	4.5%
Developed ex-US Equity							
FlexShares Morningstar Developed Markets ex-US Factor Tilt Index Fund	TLTD	0.39%	26.8%	20.6%	14.5%	8.8%	3.4%
Emerging Market Equity							
FlexShares Morningstar Emerging Markets Factor Tilt Index Fund	TLTE	0.59%	13.0%	8.5%	6.3%	2.1%	—
REAL ASSETS			12.2%	8.9%	8.0%	4.7%	2.1%
Global Natural Resources							
FlexShares Morningstar Global Upstream Natural Resources Index Fund	GUNR	0.46%	8.0%	5.8%	5.0%	2.7%	1.1%
Global Real Estate							
FlexShares Global Quality Real Estate Index Fund	GQRE	0.45%	2.1%	1.5%	1.4%	1.0%	0.5%
Global Infrastructure							
FlexShares STOXX Global Infrastructure Index Fund	NFRA	0.47%	2.1%	1.6%	1.5%	1.0%	0.5%
FIXED INCOME			8.4%	29.5%	48.0%	69.0%	87.9%
US Investment Grade Fixed Income							
Northern Fixed Income Fund	NOFIX	0.46%	—	17.2%	35.8%	54.9%	74.1%
US High Yield Fixed Income							
Northern High Yield Fixed Income Fund	NHFIX	0.79%	8.4%	12.4%	11.1%	9.9%	7.7%
Treasury Inflation-Protected Securities							
FlexShares iBoxx 3-Year Target Duration TIPS Index Fund	TDDT	0.18%	—	—	1.1%	4.2%	6.1%
CASH & SHORT-TERM			0.7%	1.9%	1.6%	1.8%	2.1%
Money Market ²		0.35%	0.7%	1.9%	1.6%	1.8%	1.1%
FlexShares Ready Access Variable Index Fund	RAVI	0.25%	—	—	—	—	1.0%
Asset-weighted expense ratio ³			0.42%	0.44%	0.46%	0.46%	0.46%

Please see important disclosures on the following pages. Please contact your Financial Advisor to discuss Northern Trust strategies and investment solutions.

The portfolio weights and statistics shown are based on Northern Trust model portfolios and are not calculated or derived from any Unified Managed Account (UMA) or Model Delivery Platform (MDP). Under Model Delivery Platform (MDP) arrangements, Northern Trust only provides a model to the Sponsor Firm for Unified Managed Accounts (UMAs) and/or Separately Managed Accounts (SMAs), and does not have trading discretion over these accounts. As a result, MDP accounts may contain different investments based on parameters that govern the use of multiple managers and other restrictions. There may also be performance dispersion between accounts as a result of Northern Trust's lack of trading discretion over the MDP models.

¹ Asset Allocation percentages reflect those of Northern Trust's model portfolio as of close of business at the end of the calendar quarter. Current and future weights may differ at the discretion of the portfolio manager. Actual client portfolios may vary. There is no assurance that any of the securities discussed herein will remain in a portfolio at the time you receive this report or that securities sold have not been repurchased. It should not be assumed that any of the securities transactions or holdings discussed have been or will be profitable or that the investment recommendations or decisions we make in the future will be profitable or will equal the investment performance of the securities discussed herein.

² Money Market expense ratio assumes the use of Northern Trust's money market funds. The client's fee may vary based on the specific money market fund in which the client is invested.

³ Asset-weighted expense ratios are calculated by multiplying each fund's expense ratio by its portfolio weight and then summing the results. Each fund's expense ratio is sourced from the fund provider's website using the current expense ratios as stated in the most recent prospectuses as of the date of this report. Expense ratios calculate the cost to an investment company to operate a fund. The ratio is calculated annually by dividing a fund's operating expenses by the average dollar value of its assets under management. Operating expenses are taken out of a fund's assets and lower the return to a fund's investors. Actual portfolio fees will vary. Fund expense ratios do not reflect additional transaction, advisory, or management fees and other charges that may be paid for in a separately managed account (SMA), UMA, or MDP. Net investment returns would be reduced by those applicable fees. Clients should refer to their Financial Advisor for more information on such fees.

This report is provided for informational purposes only and is not intended to be, and should not be construed as, an offer, solicitation or recommendation with respect to any transaction and should not be treated as legal advice, investment advice or tax advice. Recipients should not rely upon this information as a substitute for obtaining specific legal or tax advice from their own professional legal or tax advisors. References to specific securities and their issuers are for illustrative purposes only and are not intended and should not be interpreted as recommendations to purchase or sell such securities. Indices and trademarks are the property of their respective owners. Information is subject to change based on market or other conditions.

All securities investing and trading activities risk the loss of capital. There is no assurance that any of the securities discussed herein will remain in a portfolio at the time you receive this report or that securities sold have not been repurchased. Each portfolio is subject to substantial risks including market risks, strategy risks, adviser risk and risks with respect to its investment in other structures. There can be no assurance that any portfolio investment objectives will be achieved, or that any investment will achieve profits or avoid incurring substantial losses. No investment strategy or risk management technique can guarantee returns or eliminate risk in any market environment. Risk controls and models do not promise any level of performance or guarantee against loss of principal. Any discussion of risk management is intended to describe Northern Trust's efforts to monitor and manage risk but does not imply low risk.

Past performance is no guarantee of future results. Performance returns and the principal value of an investment will fluctuate. Performance returns contained herein are subject to revision by Northern Trust. Comparative indices shown are provided as an indication of the performance of a particular segment of the capital markets and/or alternative strategies in general. Index performance returns do not reflect any management fees, transaction costs or expenses. It is not possible to invest directly in any index. Net performance returns are reduced by investment management fees and other expenses relating to the management of the account. Gross performance returns contained herein include reinvestment of dividends and other earnings, transaction costs, and all fees and expenses other than investment management fees, unless indicated otherwise. For additional information on fees, please refer to Part 2A of the Form ADV or consult a Northern Trust representative.

Forward-looking statements and assumptions are Northern Trust's current estimates or expectations of future events or future results based upon proprietary research and should not be construed as an estimate or promise of results that a portfolio may achieve. Actual results could differ materially from the results indicated by this information.

There are risks involved in investing including possible loss of principal. There is no guarantee that the investment objectives of any fund or strategy will be met. Risk controls and models do not promise any level of performance or guarantee against loss of principal. FlexShares™ ETFs and Northern Funds are sub-advised by Northern Trust Investments, Inc. For more information on the investment objectives, principle risks, and fees associated with these Funds, please see each Fund's prospectus and statement of additional information ("SAI"), which are available on the Advisors' websites at northernfunds.com and flexshares.com.

Northern Trust Investments, Inc. products including FlexShares ETFs and Northern Funds represent up to 100% of the portfolio holdings. With respect to such funds, NTI and its affiliates provide investment advisory, custodial, administrative, shareholder support and other services and receive fees. Such investments present a conflict of interest because NTI, an affiliate, or a related person has a financial interest in the transaction. Financial intermediaries and institutional investors that employ Northern Trust for model management, or overlay services may compensate Northern Trust for those services at a fee of up to 0.25%.

Northern Trust Investments, Inc. (NTI) is an investment adviser registered with the Securities Exchange Commission under the Investment Advisers Act of 1940. This company manages a variety of portfolios utilizing stocks, bonds, and exchange-traded funds (ETFs). The information is not intended for distribution or use by any person in any jurisdiction where such distribution would be contrary to local law or regulation. Northern Trust and its affiliates may have positions in, and may effect transactions in, the markets, contracts and related investments different than described in this information. This information is obtained from sources believed to be reliable, and its accuracy and completeness are not guaranteed. Information does not constitute a recommendation of any investment strategy, is not intended as investment advice and does not take into account all the circumstances of each investor.

Northern Trust Asset Management is composed of Northern Trust Investments, Inc., Northern Trust Global Investments Limited, Northern Trust Global Investments Japan, K.K, NT Global Advisors, Inc., 50 South Capital Advisors, LLC and investment personnel of The Northern Trust Company of Hong Kong Limited and the Northern Trust Company.

©2019 Northern Trust Corporation. Head Office: 50 South LaSalle Street, Chicago, Illinois 60603 U.S.A.

