Principles of Long-Term Investing Resilience

Powering through the ups and downs

MFS®
Investment Management

43816.12

Principles of Long-Term Investing Resilience

Powering through the ups and downs

It's hard to stay calm when you're bombarded by news about the economy and markets. Anxiety about your portfolio can creep in, and before you know it, a media barrage may turn your anxiety into panic. And if that's not enough, investing has become more complex, pushing investors to take on more risk to achieve the same return they did 10 or 20 years ago.* So how do you keep calm when market volatility heats up? By considering the Principles of Long-Term Investing Resilience.

1. Understand Market Movements
2. Volatility Is Normal
3. You Control Your Emotions and Behavior
4. Take a Longer View
5. Compounding and How It Works
6. Diversification Benefits
7. Investments Should Align With Your Goals
8. Importance of Rebalancing
9. Understanding Risk Is Critical
10. Realize the Benefits of Working With a Professional

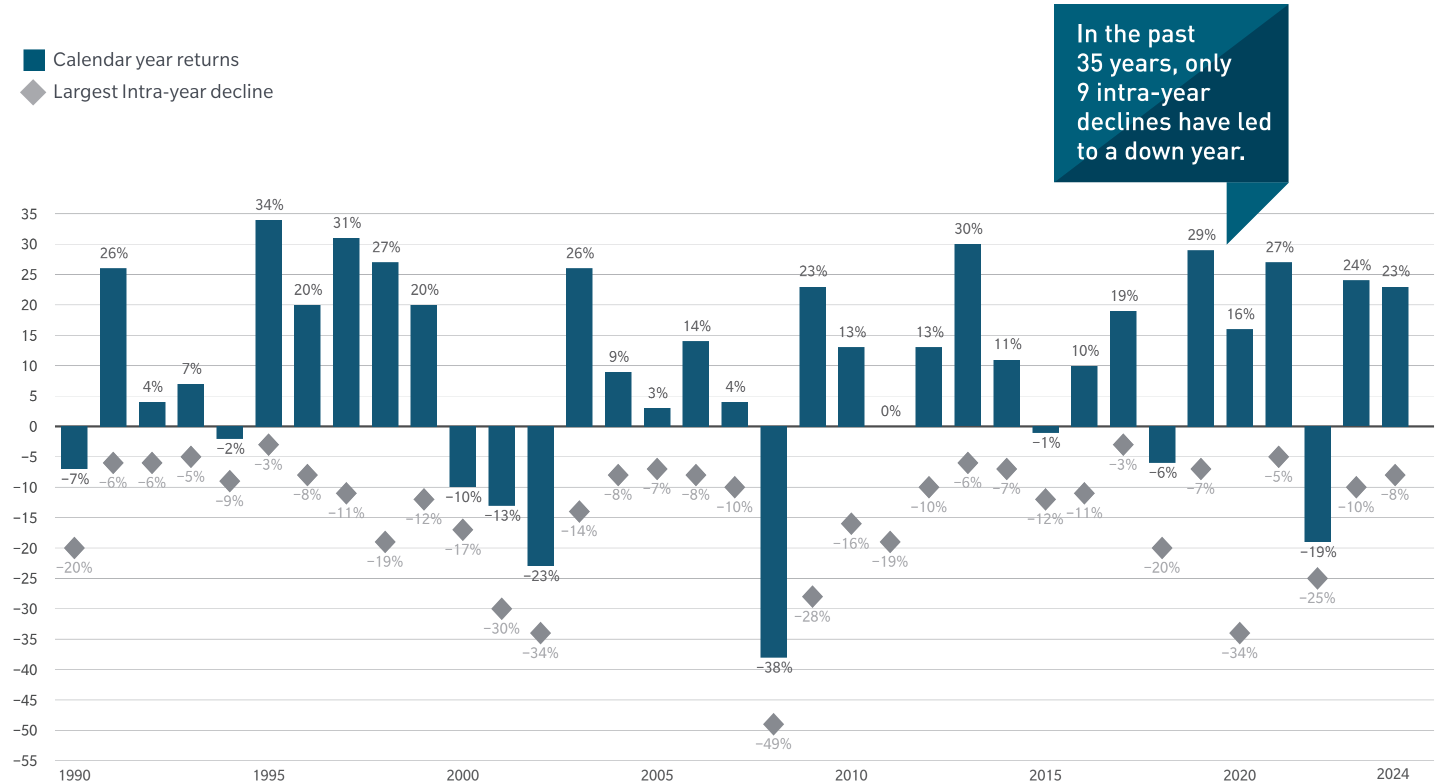
* Source: 2025 Callan, LLC. Hypothetical portfolios were created using historical index risk, return and correlations to achieve a 7.5% total return. Portfolios rebalanced monthly. All dates are as of December 31, 2024. Risk is measured by standard deviation.

1 Understand Market Movements

Markets have been resilient: History has shown declines have not lasted.

Key points

- A selloff, a correction, a bear market. Whatever it's called, it can be unsettling; but, market declines are inevitable and completely normal.
- Time after time, the stock market has recovered from the disruptive, but ultimately short-term, declines and has gone on to post gains.



Moving out of stocks potentially locks in losses and may prevent you from profiting from subsequent gains.

FactSet and S&P US. Daily data as of December 31, 1979 to December 29, 2024. Returns above are in US dollars and calculated based on the S&P 500 Price Return Index. The **S&P 500 Index** measures the broad US stock market. Largest Intra-year decline is the largest drawdown (peak-to-trough) within each calendar year. These data are not intended to represent the performance of any MFS portfolio. It is not possible to invest in an index.

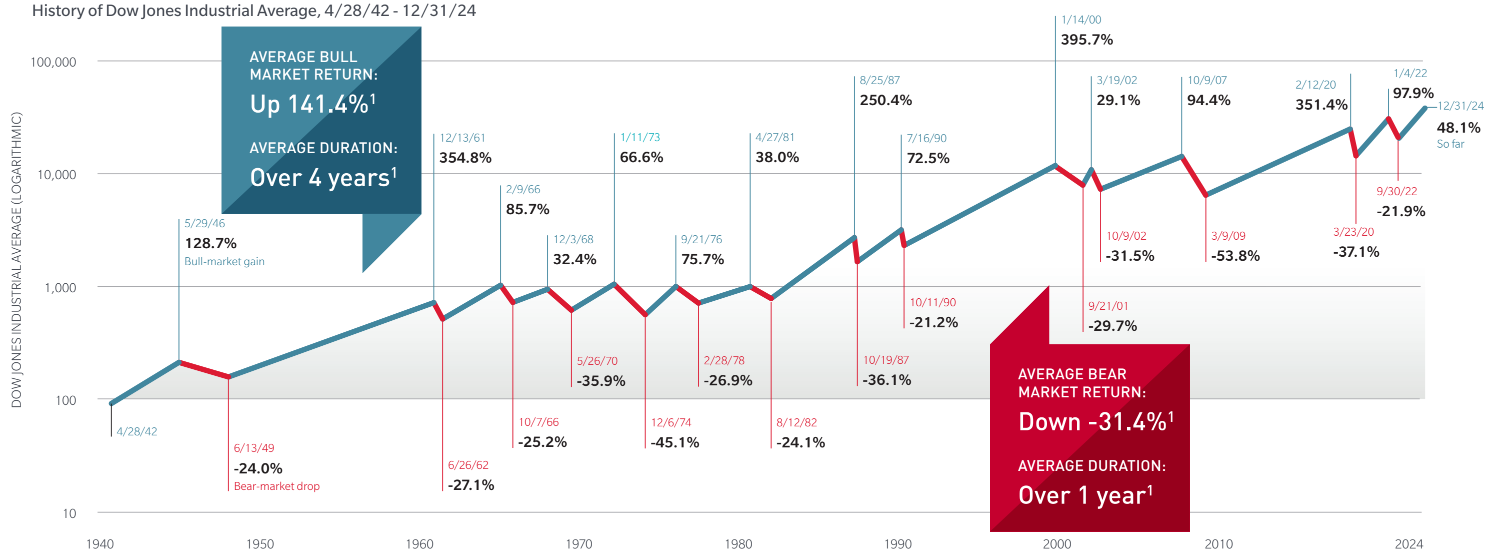
2 Volatility Is Normal

Historically, bull markets have beaten bears and driven long term gains.

Key points

- Markets are always moving — up, down and sideways. They rarely go straight up.
- Over time, stock markets have moved higher, bouncing back from what prove to be short-term declines.
- And if you sell when the market falls, you'll likely miss a rebound and any subsequent gains, possibly falling short of your goals.

History of Dow Jones Industrial Average, 4/28/42 - 12/31/24



Investing for the long term and having a disciplined plan can help you work toward reaching your goals.

Source: SPAR, FactSet Research Systems Inc. **Past performance is no guarantee of future results.**

It is not possible to invest in an index.

[1] Dow Jones Industrial Average, 4/28/42–12/31/24. Returns are shown based on price only.

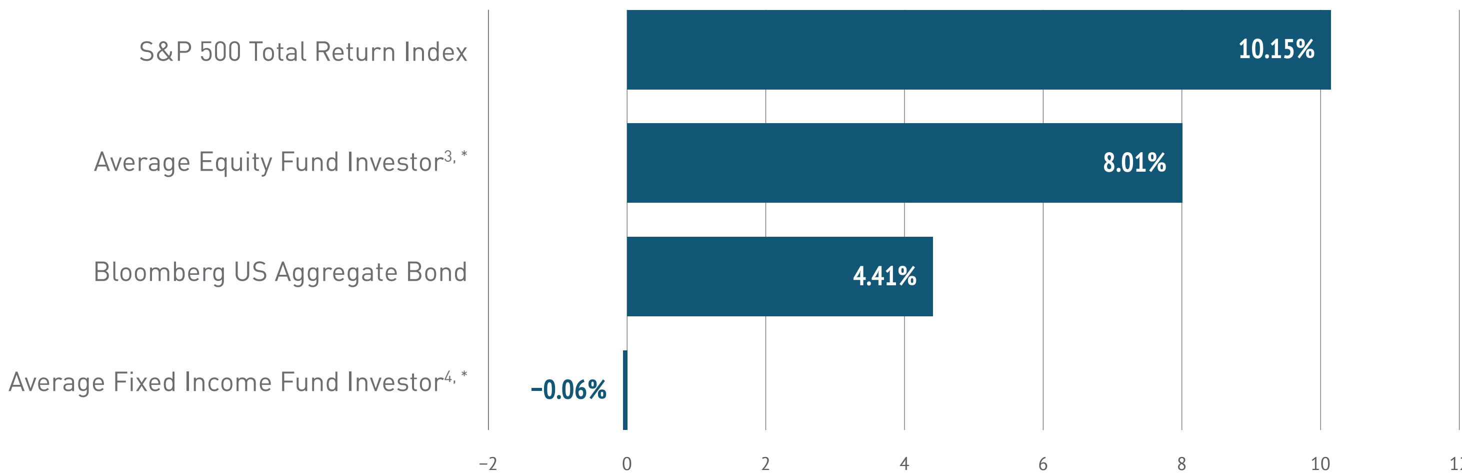
3 You Control Your Emotions and Behavior

Key points

- A financial professional can help you determine your overall comfort level with risk.
- Allocate, diversify and rebalance your assets accordingly.
- Review your overall investment portfolio, at least annually, to help keep you focused and on course with your goals.
- Choose investments aligned with your goals and risk tolerances and help you stay focused and on track as markets shift.

The average investor underperformed[1]

Market returns vs. average investor returns, 30 years, 1994-2023[2]



*Source: Dalbar, 2024 QAIB Report, as of December 31, 2023, latest data available.

This example is for illustrative purposes only and is not intended to represent the future performance of any MFS® product. Although the data is gathered from sources believed to be reliable, MFS cannot guarantee the accuracy and/or completeness of the information.

The **S&P 500 Total Return Index** measures the broad US stock market. **Bloomberg US Aggregate Bond Index** measures the U.S. bond market.

Past performance is no guarantee of future results. Keep in mind that all investments carry a certain amount of risk, including the possible loss of the principal amount invested.

A financial professional will help you create an appropriate financial strategy for pursuing your long-term financial goals.

[1] The Average Investor refers to the universe of all mutual funds investors whose actions and financial results are restated to represent a single investor. This approach allows the entire universe of mutual funds investors to be used as the statistical sample, ensuring ultimate reliability.

[2] Average investor return performance: Methodology: QAIB calculates investor returns as the change in assets, after excluding sales, redemptions, and exchanges. This method of calculation captures realized and unrealized capital gains, dividends, interest, trading costs, sales charges, fees, expenses and any other costs. After calculating investor returns in dollar terms, two percentages are calculated: total investor rate for the period and annualized investor return rate. Total return rate is determined by calculating the investor return dollars as a percentage of the net assets, sales, redemptions and exchanges for the period. Annualized return rate is calculated as the uniform rate that can be compounded annually for the period under consideration to produce the investor return dollars.

[3] The Average Equity Fund Investor comprises a universe of both domestic and world equity mutual funds. It includes growth, sector, alternative strategy, value, blend emerging markets, global equity, international equity and regional equity.

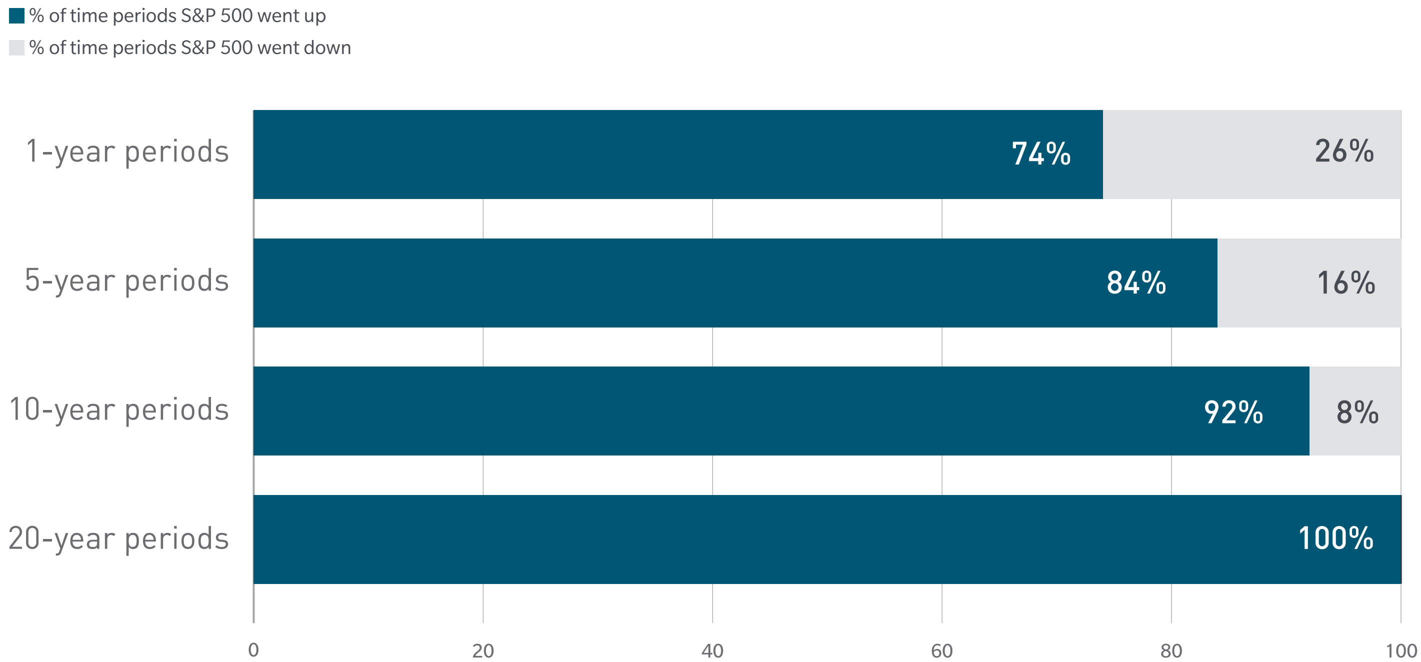
[4] The Average Fixed Income Investor is comprised of a universe of fixed income mutual funds, which includes investment- grade, high-yield, government, municipal, multisector, and global bond funds. It does not include money market funds.

Building wealth takes time. Think long term.

Key points

- Historically, investing in stocks has been one of the best ways to build wealth, because of their long-term growth potential relative to bonds and/or cash.
- Yet many investors underinvest in stocks or try to time the market.
- In either case, investors could be missing opportunities.
- That's because over long periods of time, the stock market has historically generated positive returns.

Stocks have generated positive returns 100% of the time over 20-year periods as of 12/31/24



As part of a well-balanced portfolio, consider stocks for their long-term growth potential.

Source: FactSet and S&P US. Monthly data as of December 30, 1949 to December 29, 2024. Price returns are that of the S&P 500 Index in US dollars.

The investments you choose should correspond to your financial needs, goals, and risk tolerance. For assistance in determining your financial situation, consult an investment professional.

The historical performance of the index cited is provided to illustrate market trends; it does not represent the performance of a particular MFS® investment product. The **S&P 500 (Price Return) Index** is a commonly used measure of the broad stock market. Index performance does not take into account fees and expenses. It is not possible to invest directly in an index. **Past performance is no guarantee of future results.**

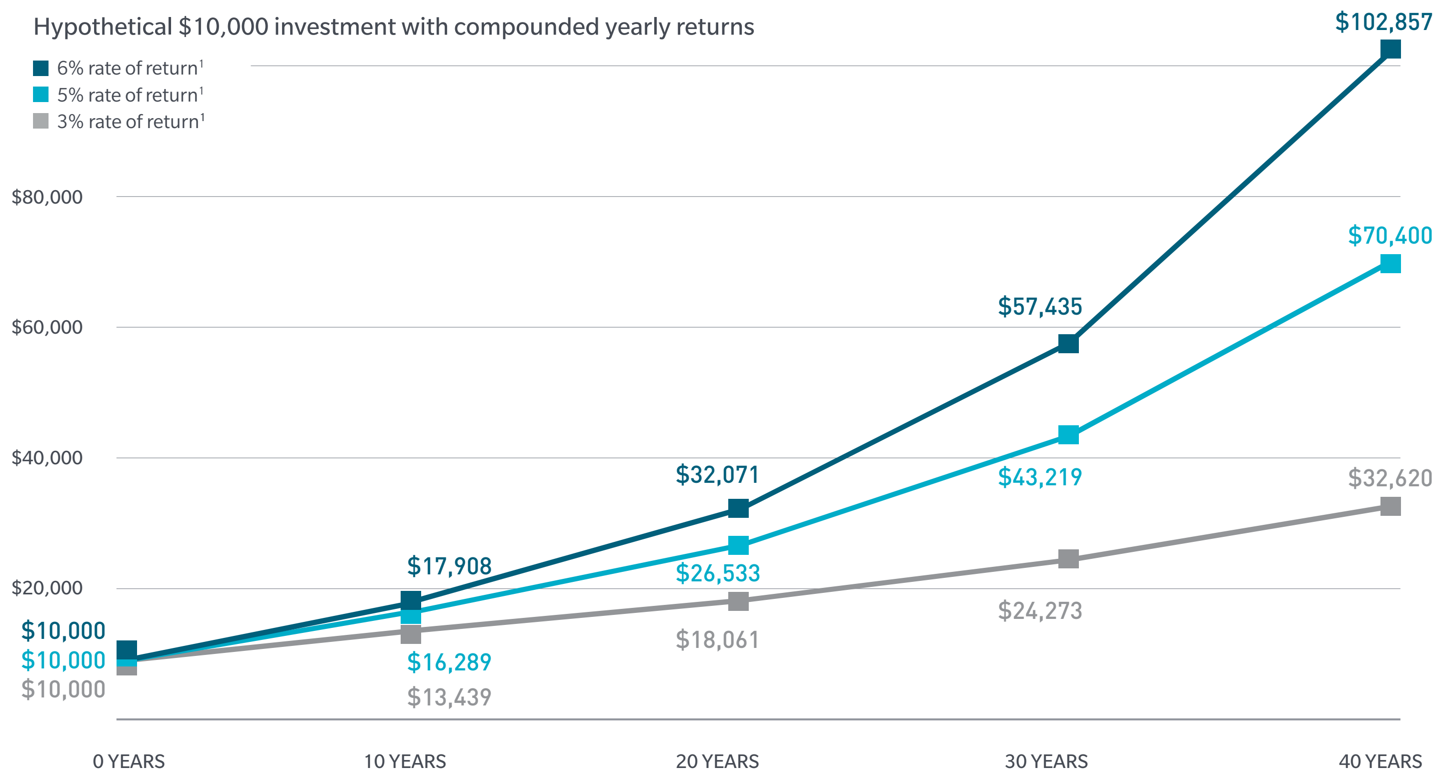
Common stocks generally provide an opportunity for more capital appreciation than fixed-income investments but have also been subject to greater market fluctuations. Keep in mind that all investments do not guarantee a profit or protect against a loss.

5 Compounding and How It Works

The power of compounding drives value.

Key points

- Compounding occurs when an asset's earnings, either gains or income, are reinvested to generate additional earnings.
- Compounding of gains and income over the long term is what typically drives most of the value in an investment or portfolio.
- Conservative investments like Treasury bills or even bonds may not provide the growth potential needed to achieve goals.[2]
- Despite higher volatility, a more aggressive investment, like stocks, may provide the growth potential needed to pursue goals.



Differences in the performance of stocks, bonds and cash can grow over time.

Source: MFS research. This example is for illustrative purposes only and is not intended to predict the returns of any investment choices. Regular investing does not ensure a profit or protect against loss in declining markets. Investors should consider their ability to continue purchasing shares during periods of low price levels.

[1] Assumed rate of return. Does not represent the performance of any MFS fund, which would vary according to the rise and the fall of the markets. It is not realistic to expect that the stock market or any investment vehicle will have 20 or more years of positive returns. These examples are for illustrative purposes only and are not intended to predict the returns of any investment choices. Rates of return will vary over time, particularly for long-term investments. There is no guarantee the selected rate of return can be achieved. The performance of the investments will fluctuate with market conditions.

[2] Treasury bills are guaranteed as to the timely payment of principal and interest.

6 Diversification Benefits

MFS®

Key points

- Markets change, and investments that performed strongly in one decade, may not do as well in the next.
- The asset class with the best performance changes from year to year and decade to decade. Trying to consistently pick the best performing asset is almost impossible, especially if emotions get involved.
- $100,000 invested in the diversified portfolio (black) grew to $334,598 over 20 years, generating competitive performance.

MARKET SEGMENT AND REPRESENTED BY

- Cash
  FTSE 3-month T-bill Index[1]
- Bonds
  Bloomberg US Aggregate Bond Index[2]
- Global bonds
  Bloomberg Global Aggregate Index[3]
- Diversified portfolio
  Equal allocations of all segments disclosed herein, excluding cash
- Large Cap Value stocks
  Russell 1000® Value Index[4]
- Commodities
  Bloomberg Commodity Index[5]
- International stocks
  MSCI EAFE Index[6]
- Large Cap Growth stocks
  Russell 1000® Growth Index[7]
- Small/Mid Cap stocks
  Russell 2500™ Index[8]
- REITs
  FTSE NAREIT All REITs Total Return Index[9]

A Tale of Two Decades: One Decade's Laggards . . .

BEST — ANNUAL RETURN — WORST

2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	10 YEAR ENTIRE DECADE ANNUALIZED RETURN 2005-2014
Commodities $121,363 21.36%	REITs $145,487 34.35%	Commodities $143,983 16.23%	Bonds $120,303 5.24%	Large Cap Growth $108,440 37.21%	REITs $121,805 27.58%	Bonds $146,421 7.84%	REITs $156,992 20.14%	Small/Mid Cap $215,428 36.80%	REITs $206,016 27.15%	Small/Mid Cap $230,659 8.72%
International $113,536 13.54%	International $143,441 26.34%	Large Cap Growth $128,377 11.81%	Global Bonds $116,853 4.79%	Small/Mid Cap $108,151 34.39%	Small/Mid Cap $137,036 26.71%	REITs $130,669 7.28%	Small/Mid Cap $157,481 17.88%	Large Cap Growth $199,860 33.48%	Large Cap Value $202,307 13.45%	Large Cap Growth $225,942 8.49%
REITs $108,288 8.29%	Large Cap Value $130,868 22.25%	International $159,463 11.17%	Cash $115,045 1.80%	International $118,981 31.78%	Commodities $128,715 16.83%	Global Bonds $139,321 5.64%	Large Cap Value $134,553 17.51%	Large Cap Value $178,319 32.53%	Large Cap Growth $225,942 13.05%	REITs $206,016 7.50%
Small/Mid Cap $108,108 8.11%	Small/Mid Cap $125,584 16.17%	Global Bonds $111,514 9.48%	Diversified $94,166 -27.54%	REITs $95,473 27.45%	Large Cap Growth $126,561 16.71%	Large Cap Growth $129,905 2.64%	International $132,143 17.32%	International $162,242 22.78%	Small/Mid Cap $230,659 7.07%	Large Cap Value $202,307 7.30%
Diversified $107,918 7.92%	Diversified $124,133 15.02%	Bonds $114,313 6.97%	Commodities $92,654 -35.65%	Diversified $116,499 23.72%	Diversified $134,823 15.73%	Large Cap Value $114,505 0.39%	Large Cap Growth $149,725 15.26%	Diversified $171,012 13.41%	Bonds $158,424 5.97%	Diversified $180,115 6.06%
Large Cap Value $107,054 7.05%	Large Cap Growth $114,814 9.07%	Cash $113,015 4.74%	Small/Mid Cap $80,476 -36.79%	Large Cap Value $98,747 19.69%	Large Cap Value $114,059 15.51%	Cash $115,471 0.08%	Diversified $150,784 12.02%	REITs $162,029 3.21%	Diversified $180,115 5.32%	Bonds $158,424 4.71%
Large Cap Growth $105,263 5.26%	Global Bonds $101,856 6.64%	Diversified $129,951 4.69%	Large Cap Value $82,502 -36.85%	Commodities $110,171 18.91%	International $128,203 7.75%	Diversified $134,607 -0.16%	Global Bonds $145,337 4.32%	Cash $115,611 0.05%	Global Bonds $142,391 0.59%	International $154,290 4.43%
Cash $103,000 3.00%	Cash $107,903 4.76%	Small/Mid Cap $127,313 1.38%	REITs $74,912 -37.34%	Global Bonds $124,951 6.93%	Bonds $135,774 6.54%	Small/Mid Cap $133,598 -2.51%	Bonds $152,593 4.21%	Bonds $149,505 -2.02%	Cash $115,650 0.03%	Global Bonds $142,391 3.60%
Bonds $102,429 2.43%	Bonds $106,868 4.33%	Large Cap Value $130,642 -0.17%	Large Cap Growth $79,033 -38.44%	Bonds $127,437 5.93%	Global Bonds $131,879 5.54%	International $112,637 -12.14%	Cash $115,554 0.07%	Global Bonds $141,561 -2.60%	International $154,290 -4.90%	Cash $115,650 1.46%
Global Bonds $95,515 -4.49%	Commodities $123,877 2.07%	REITs $119,545 -17.83%	International $90,291 -43.38%	Cash $115,233 0.16%	Cash $115,383 0.13%	Commodities $111,570 -13.32%	Commodities $110,391 -1.06%	Commodities $99,878 -9.52%	Commodities $82,891 -17.01%	Commodities $82,891 -1.86%

Source: SPAR, FactSet Research Systems Inc.

IMPORTANT RISK CONSIDERATIONS: **International:** Investing in foreign and/or emerging market securities involves interest rate, currency exchange rate, economic, and political risks. These risks are magnified in emerging or developing markets as compared with domestic markets. **Small/Mid Cap stocks:** Investing in small and/or mid-sized companies involves more risk than that customarily associated with investing in more-established companies. **Bonds:** Bonds, if held to maturity, provide a fixed rate of return and a fixed principal value. Bond funds will fluctuate and, when redeemed, may be worth more or less than their original cost. **Real Estate:** Real estate-related investments can be volatile because of general, regional, and local economic conditions, fluctuations in interest rates and property tax rates; shifts in zoning laws, environmental regulation and other governmental actions; increased operation expenses; lack of availability of mortgage funds; losses due to natural disasters; changes in property values and rental rates; overbuilding; losses due to casualty or condemnation, cash flows; the management skill and creditworthiness of the REIT manager, and other factors. **Commodity:** Commodity-related investments can be more volatile than investments in equity securities or debt instruments and can be affected by changes in overall market movements, commodity index volatility, changes in interest rates, currency fluctuations, or factors affecting a particular industry or commodity, and demand/supply imbalances in the market for the commodity. Events that affect the financial services sector may have a significant adverse effect on the portfolio.

The historical performance of each index cited is provided to illustrate market trends; it does not represent the performance of a particular MFS® investment product. It is not possible to invest directly in an index. Index performance does not take into account fees and expenses. Past performance is no guarantee of future results. The investments you choose should correspond to your financial needs, goals, and risk tolerance. For assistance in determining your financial situation, consult an investment professional. For more information on any MFS product, including performance, please visit mfs.com.

Note that the diversified portfolio's assets were rebalanced at the end of every quarter to maintain the equal allocations throughout the period.

6 Diversification Benefits

MFS®

Key points

- Diversification spreads your investments between asset classes that perform differently. Potentially, strength in one asset class can offset weakness in another.
- In down markets, diversification may help your portfolio lose less value than the market. In up markets, diversification can help your portfolio take part in market gains.
- A look at long-term, rather than short-term, performance shows how diversification can help your portfolio navigate volatility and potentially get you closer to your goals.

May Be the Next Decade's Leaders

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	10 YEAR ENTIRE DECADE ANNUALIZED RETURN 2015-2024	20 YEAR WHOLE PERIOD ANNUALIZED RETURN 2005-2024
	Large Cap Growth $105,667 5.67%	Small/Mid Cap $114,177 17.59%	Large Cap Growth $147,329 30.21%	Cash $103,027 1.86%	Large Cap Growth $197,899 36.39%	Large Cap Growth $274,077 38.49%	REITs $197,539 39.88%	Commodities $117,021 16.09%	Large Cap Growth $353,581 42.68%	Large Cap Growth $471,522 33.36%	Large Cap Growth $471,522 16.78%	Large Cap Growth $1,065,365 12.56%
BEST	REITs $102,290 2.29%	Large Cap Value $112,849 17.34%	International $125,257 25.03%	Bonds $106,880 0.01%	REITs $150,014 28.07%	Small/Mid Cap $184,021 19.99%	Large Cap Growth $349,712 27.60%	Cash $107,600 1.50%	International $159,872 18.24%	Large Cap Value $225,799 14.37%	Small/Mid Cap $233,467 8.85%	Small/Mid Cap $538,513 8.78%
	Bonds $100,550 0.55%	Commodities $84,208 11.77%	Small/Mid Cap $133,371 16.81%	Global Bonds $104,903 -1.20%	Small/Mid Cap $153,360 27.77%	Diversified $148,845 10.58%	Commodities $100,799 27.11%	Large Cap Value $177,128 -7.54%	Small/Mid Cap $208,462 17.42%	Small/Mid Cap $233,467 12.00%	Large Cap Value $225,799 8.49%	Large Cap Value $456,806 7.89%
	Cash $100,028 0.03%	REITs $111,785 9.28%	Large Cap Value $128,270 13.66%	Large Cap Growth $145,099 -1.51%	Large Cap Value $148,895 26.54%	Global Bonds $122,385 9.20%	Large Cap Value $191,568 25.16%	Bonds $106,991 -13.01%	Diversified $170,372 12.81%	Diversified $185,769 9.04%	Diversified $185,769 6.39%	REITs $354,518 6.53%
ANNUAL RETURN	International $99,186 -0.81%	Diversified $105,098 8.72%	Diversified $118,977 13.21%	REITs $117,136 -4.10%	International $131,756 22.01%	International $142,053 7.82%	Small/Mid Cap $217,480 18.18%	Diversified $151,021 -13.61%	REITs $164,937 11.48%	Cash $119,427 5.45%	REITs $172,083 5.58%	Diversified $334,598 6.22%
	Small/Mid Cap $97,099 -2.90%	Large Cap Growth $113,145 7.08%	REITs $122,144 9.27%	Diversified $111,864 -5.98%	Diversified $134,606 20.33%	Bonds $124,919 7.51%	Diversified $174,823 17.45%	International $135,212 -14.45%	Large Cap Value $197,431 11.46%	Commodities $113,560 5.38%	International $165,984 5.20%	International $256,096 4.81%
	Global Bonds $96,846 -3.15%	Bonds $103,212 2.65%	Global Bonds $106,177 7.39%	Large Cap Value $117,665 -8.27%	Bonds $116,196 8.72%	Large Cap Value $153,058 2.80%	International $158,053 11.26%	Global Bonds $97,675 -16.25%	Global Bonds $103,257 5.72%	REITs $172,083 4.33%	Cash $119,427 1.79%	Bonds $181,106 3.01%
	Diversified $96,672 -3.33%	Global Bonds $98,866 2.09%	Bonds $106,868 3.54%	Small/Mid Cap $120,031 -10.00%	Commodities $81,858 7.69%	Cash $105,960 0.58%	Cash $106,008 0.05%	Small/Mid Cap $177,531 -18.37%	Bonds $112,906 5.53%	International $165,984 3.82%	Bonds $114,318 1.35%	Global Bonds $144,545 1.86%
WORST	Large Cap Value $96,173 -3.83%	International $100,178 1.00%	Commodities $85,643 1.70%	Commodities $76,012 -11.25%	Global Bonds $112,078 6.84%	Commodities $79,301 -3.12%	Bonds $122,992 -1.54%	REITs $147,948 -25.10%	Cash $113,258 5.26%	Bonds $114,318 1.25%	Commodities $113,560 1.28%	Cash $138,117 1.63%
	Commodities $75,343 -24.66%	Cash $100,299 0.27%	Cash $101,143 0.84%	International $107,984 -13.79%	Cash $105,348 2.25%	REITs $141,223 -5.86%	Global Bonds $116,624 -4.71%	Large Cap Growth $247,817 -29.14%	Commodities $107,761 -7.91%	Global Bonds $101,513 -1.69%	Global Bonds $101,513 0.15%	Commodities $94,131 -0.30%

Source: SPAR, FactSet Research Systems Inc.

You can't predict the winners and losers. Diversification, however, can potentially add value and help you manage risk.

Diversification does not guarantee a profit or protect against a loss.

1 **FTSE 3-month Treasury Bill Index** tracks the daily performance of 3-month US Treasury bills. 2 **Bloomberg U.S. Aggregate Bond Index** measures the US bond market. 3 **Bloomberg Global Aggregate Index** provides a broad-based measure of the global investment-grade fixed income markets. 4 **Russell 1000® Value Index** measures US large-cap value stocks. 5 **Bloomberg Commodity Index** is composed of futures contracts on physical commodities. 6 **MSCI EAFE Index** measures the non-US stock market. 7 **Russell 1000® Growth Index** measures US large-cap growth stocks. 8 **Russell 2500™ Index** measures US small- and mid-cap stocks. 9 **FTSE NAREIT All REITs Total Return Index** tracks the performance of commercial real estate across the US economy.
It is not possible to invest directly in an index.

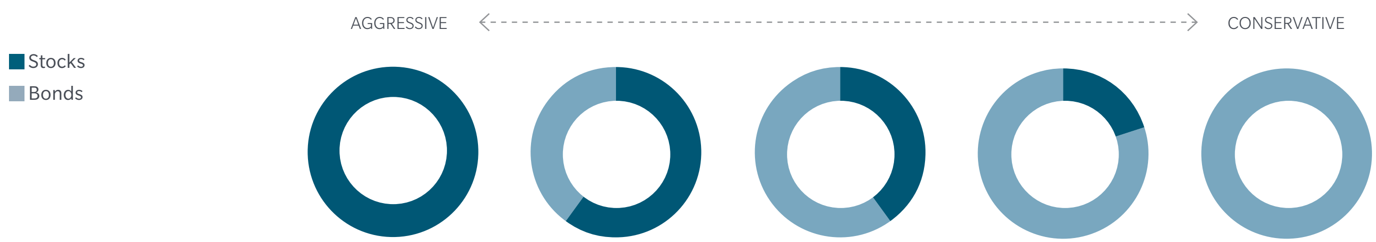
Note that the diversified portfolio's assets were rebalanced at the end of every quarter to maintain the equal allocations throughout the period.

7 Investments Should Align With Your Goals

Asset Allocation and Withdrawal Rates Are Key to Achieving Goals.

Key points

- Over time, your focus as an investor likely shifts from growing your portfolio to preserving it.
- Consider aligning your asset allocation with your goals — equities for growth and bonds for income and risk mitigation.
- Determining how much money you should withdraw annually when retired is equally as important.
- A high withdrawal rate may mean that you outlive your savings.



Withdrawal Rate (% of initial portfolio value)	100% US equities	60% US equities/ 40% bonds	40% US equities/ 60% bonds	20% US equities/ 80% bonds	100% bonds
	PERCENT CHANCES OF THE PAYOUT LASTING 30 YEARS				
8%	50%	19%	9%	4%	1%
7%	62%	43%	20%	9%	5%
6%	70%	59%	44%	25%	10%
5%	82%	81%	65%	40%	32%
4%	97%	100%	100%	82%	49%

An appropriate asset allocation and prudent withdrawal rate may help you meet your retirement income and estate planning goals.

Source: Ibbotson, MFS Analysis. Data for stock returns are monthly total returns to the Ibbotson US Large Stock Total Return Index from January 1926 through December 2024. Data for bonds returns are monthly total returns to the Ibbotson US Intermediate Term Government Bond Index from January 1926 through December 2023. Bloomberg US Treasury: 5-7 Year Index was used for January 2024 to December 2024 bonds return data. Withdrawals adjusted for inflation monthly using the Ibbotson published inflation rate for the relevant time period.

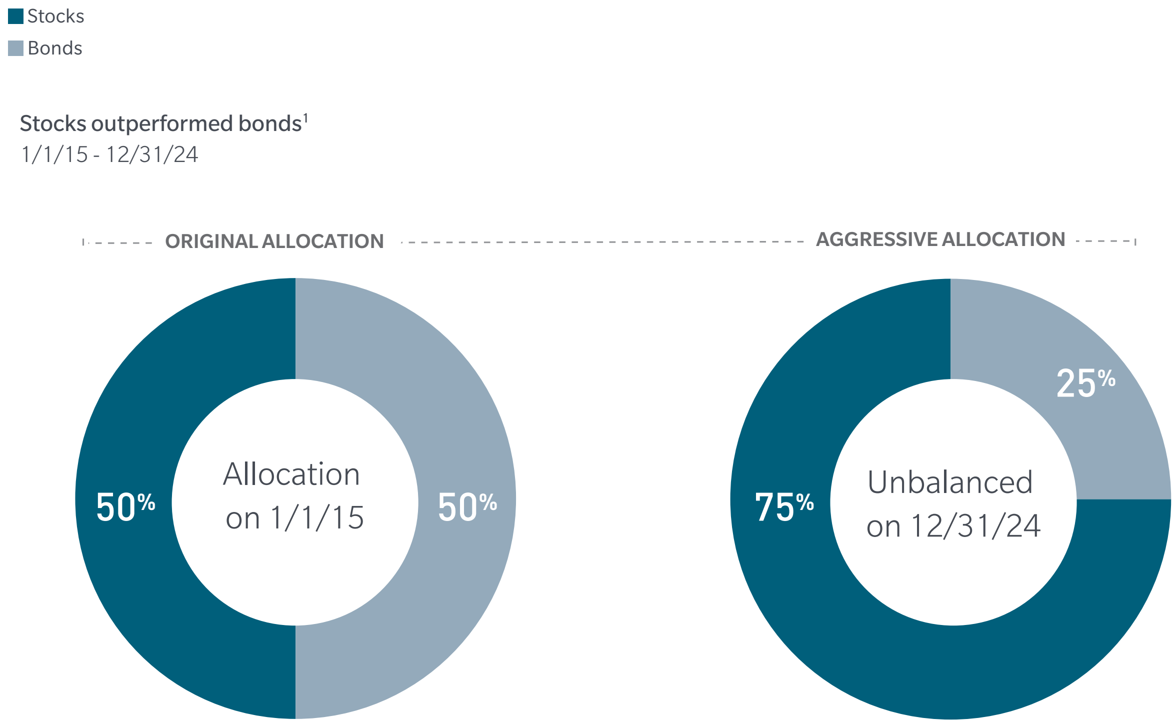
Past performance is no guarantee of future results.

Importance of Rebalancing

Don't make unintended bets. Consider rebalancing your portfolio.

Key points

- The relative market performance of asset classes shifts over time, which may alter your portfolio's mix of investments.
- For instance, if stocks outperform bonds, your allocation to stocks grows, potentially increasing risk.
- Conversely, if bonds outperform stocks and your allocation to stocks shrinks, you may miss out on potential growth.



Portfolio may be too risky and could lose more than the original portfolio if stocks fall.

Rebalancing may help your portfolio stay in line with your goals and risk tolerance.

[1] Time period above, reflecting a strong stock market, is based on performance of the **S&P 500 Index** (Stocks), which measures the broad US stock market, and the **Bloomberg US Aggregate Bond Index** (Bonds) which measures the U.S bond market. Index performance does not reflect the deduction of any investment-related fees and expenses. It is not possible to invest directly in an index.

Past performance is no guarantee of future results.

Determining the risk in your portfolio may make the difference when pursuing your goals.

Key points

- While you can't avoid risk, by understanding its nature, you may be able to manage it.
- One aspect to think about is how your asset manager tackles risk.
- At MFS, we've had a singular purpose since 1924: to put your money to work, responsibly.
- One of the ways we do that is through risk management.

MFS: Navigating risk from all angles

At MFS, we believe managing the downside is just as important as capturing the upside.

10 Realize the Benefits of Working With a Professional

Key points

- A financial professional — who knows your goals, temperament for risk, time horizon and total holdings — could be your most valuable asset in any type of market environment.

THE FINANCIAL PROFESSIONAL CAN

COMFORT LEVEL

Try to help avoid costly mistakes

Help you determine your overall comfort level with risk

KEEP YOU ON TRACK

Pursuing your goals

Allocate, diversify and rebalance your assets accordingly

LONG-TERM GOALS

Moving you forward

Create the best possible financial strategy for pursuing your long-term financial goals

Your financial professional can also review your overall investment portfolio, at least annually, to help keep you focused and on course with your goals. And as the market and your needs change over time, a financial professional will be right there with you, helping you make changes to your portfolio as necessary.

An investment professional will help you create an appropriate financial strategy for pursuing your long-term financial goals.

When volatility strikes, it's hard to stay calm and focused on your long-term goals.
Rather than bailing out of the market, strike back with a plan for investing with resilience.

- Invest for the long term
- Allocate, diversify and rebalance
- Manage risk
- Look for an asset manager that aligns with your goals

Work with your investment professional to develop your investment plan today.

MFSP-10POMR-BRO-1/25 43816.12