

Navigating life together

Creating and Managing Wealth

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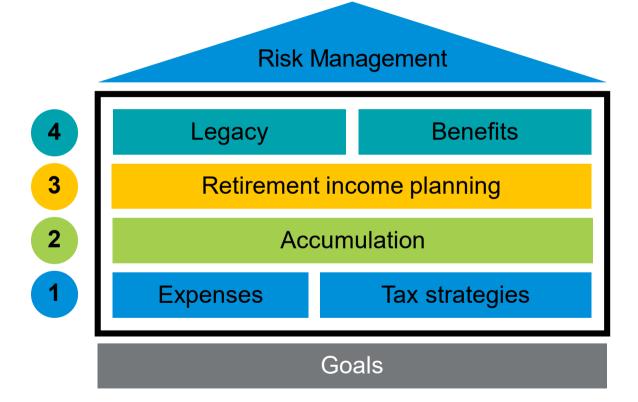




What is important about retirement planning to you?



Building your "retirement house"





Looking at an important relationship

M	Current	Retir	
Monthly Expenses	Wants	Needs	
Housing and Related Expenses			
Rent / mortgage			
Real estate / association fees			
Heat / AC / electric			
Phone			
Water / sewer / garbage			
Property taxes			
Home insurance			
Property care (lawn, etc.)			
Home maintenance (repairs, painting, etc.)			
Cable / internet / subscriptions			
Other:			
Other:			
Housing Totals:			
Car payments			
License / registration / maintenance			
Gas / parking			
Insurance			
Public transportation (bus, train, etc.)			
Other:			
Transportation Totals:			
Personal Expenses			
Childcare			
Groceries / restaurant / takeout			
Personal care, hairdresser, etc.			
Clothing / shoes			
Gym membership / hobbies			
Vacation / leisure / entertainment			
Education (you / spouse / children)			
Debts (other than car / mortgage)			
Charitable donations			
Gifts to children / grandchildren / others			
Pet care			
Savings			
Federal income tax			
State income tax			
Other:			
Personal Totals:			
Medical Expenses / Insurance Premiums			
Medical (copay, prescriptions, etc.)			
Eye care (glasses, contacts, etc.)			
In-home care services			
Health Insurance Premiums (Medicaid / Medicare)			
Long-Term Care Insurance Premiums			
Life Insurance Premiums			
Disability Income Insurance Premiums			
Other:			
Medical / Insurance Totals:			
Total Monthly Expenses:			





Annual x 25 = Nest Egg $\frac{1}{4}$ \frac

Source: TheBalance.com July 2017



Applying the **Rule of 25** to calculate the total assets needed to meet retirement goals

Assume an assets drawdown of 4%, starting at retirement in 15 years

Monthly	Annual	
\$5,000	\$60,000	 need based on homework
\$2,500	\$30,000	 available via Social Security, pensions
\$2,500	\$30,000	 gap we need to fill
_	x 25	 100 divided by 4% drawdown
	\$750,000	 of assets needed
	\$500,000	 of assets available
	\$250,000	 additional assets needed

Figures, calculations and illustrations are hypothetical in nature and are for illustrative purposes only and do not take into account the potential impact of fees, expenses or taxes.



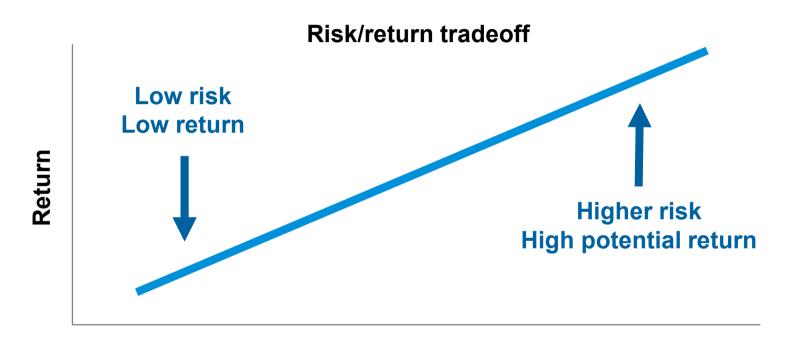
Investment guiding principles

- Manage Risks: Understand the risks inherent in different types of investments
 - **Get Invested:** Don't pay the cost of waiting
 - **Diversify:** A diversified portfolio of investments may allow for more consistent returns
- **Stay Invested:** It's "time in" the market, not "timing" the market
 - **Balance:** Periodic adjustments are needed due to varied economic conditions

Manage risks: Understand the risks inherent in different types of investments



Risk/return relationship



Standard deviation (or risk)

Source: www.Investopedia.com



Inflation risk: How much will things cost in the future?





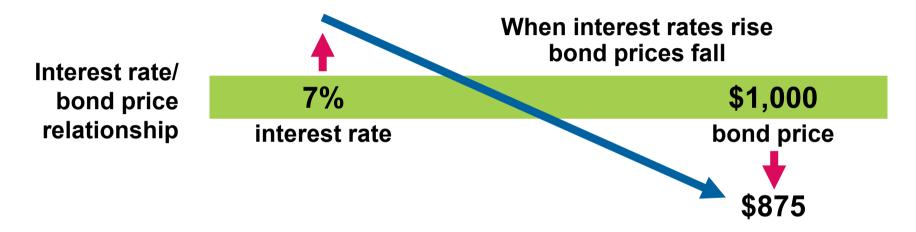
Ford Mustang 1985 \$6,572

Ford Mustang 2019 \$39,355

Source: 2019 Ford Mustang GT Premium, Ford.com



Interest rate risk: Understanding the impact of interest rates on bond prices



KEY TAKEAWAY: Bond prices and **interest rates** have an *inverse* relationship

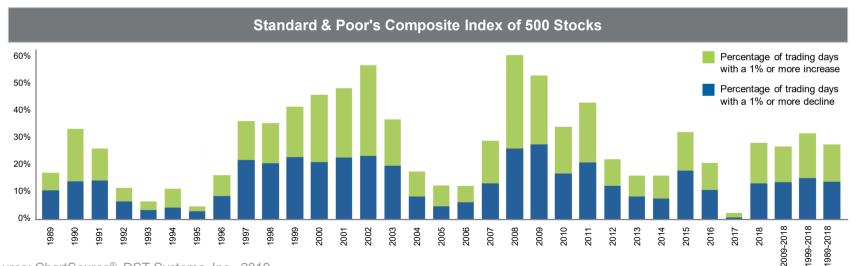
Bonds and other fixed-income securities involve both credit risk and market risk, which includes interest rate risk. Please be sure you understand any risk relative to bonds that may affect you. This is a hypothetical example shown for illustrative purposes only. It does not reflect any specific investment.



Volatility risk

Trading days with changes of 1% or more in domestic stock prices

Stock market volatility may unnerve investors who watch it closely. This chart could help put daily volatility in perspective. It shows that while daily moves of 1% or more have been relatively common at some points, there have been significant variations from year to year. Investors should keep this in mind when evaluating daily changes in stock prices.



Source: ChartSource®, DST Systems, Inc., 2019



Get invested: Don't pay the cost of waiting



Foundation	Conservative	Growth	Alternative
 Savings Money Market	 Municipal Bonds Government	• Stocks	 Precious
Accounts	Bonds Corporate Bonds		Metals Art Real Estate



Certificates of Deposit (CDs)*

Savings account

Checking account

Short-term government bonds

Money Market accounts

KEY TAKEAWAY:

Cash equivalents are safe and accessible but don't protect against inflation

*CDs may have penalties for early withdrawals





Bonds

- Tax-free bonds
 - Municipal: Federal tax-exempt; may be state or local, depending on your location
 - Government: Local tax-exempt
- Taxable bonds
 - Corporate

KEY TAKEAWAY:

Bonds involve more risk than cash equivalents but offer the possibility of higher returns

Bonds can be a **key tool** in your tax-diversification strategy

Bonds and other fixed-income securities involve both credit risk and market risk, which includes interest rate risk. Please be sure you understand any risk relative to bonds that may affect you.





Equities

- Common stock
- Preferred stock

KEY TAKEAWAY:

While stocks offer the greatest potential for growth, they also offer the greatest risk of market volatility





Specialty Investments

- Precious metals
- Art
- Real estate

KEY TAKEAWAY:

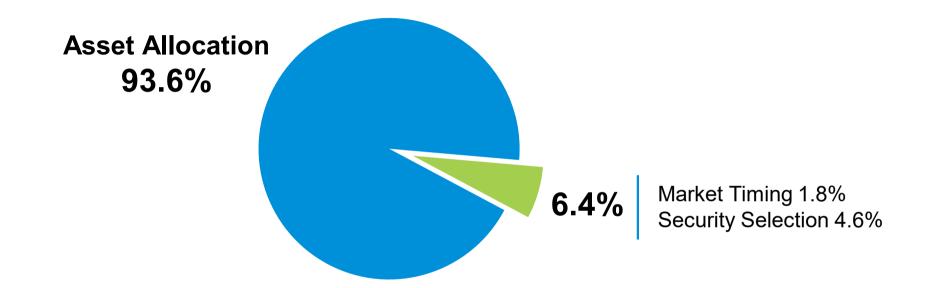
Alternative investments usually have a low correlation to stocks, making them less impacted by market volatility. They may, however, be less liquid.



Diversify: A diversified portfolio of investments may allow for more consistent returns



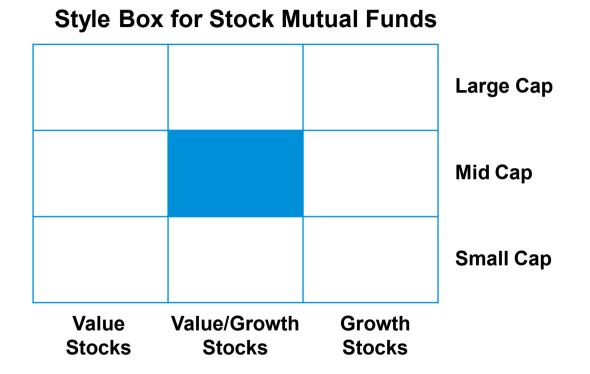
Determinants of portfolio performance



Source: 1986 Brinson, Hood, and Beebower's study (also known as "Determinants of Portfolio Performance")



Consider fund investment styles



Source: Morningstar.com

The value of a diversified approach

Annual Returns for Key Indices Ranked in Order of Performance (2007–2018)

Source: Callan Associate Inc., 2019. The Table highlights the uncertainty inherent in all capital markets. Rankings change every year.

2007	2008	2009		2011	2012		2014	2015		2017	2018
Emerging	U.S.	Emergin	Small Cap	U.S.	Real	Small Cap	Real	Large	Small Cap	Emerging	Cash
	Fixed	Marke		Fixed	Estat	Equity	Estate	Cap	Equity	Market	Equivalent
	Income	Equity		Income				Equity		Equity	
39.3 8%	5.24%	78.51%	26.85%	7.84%	27.73%	38.82%	15.02%	1.38%	21.31%	37.28%	1.87%
Non-U.S.			r al	High Yield		r je	Large	U.S.	Hig neld	Non-U.S.	U.S.
			F 🗚 te			Cà	Cap	Fixed			Fixed
						Equit	Equity	Income			
12.44%	4.39%	58.21%	,9.6: 6	4.98%	18.23%	32.39%	13.69%	0.55%	7.13%	24.21%	0.01%
	Cash	Real	źmerg, g			Non-U.S.	U.S.	Cash	Large	Large	High Yield
		Estate	Marke				Fixed		<u> </u>	Cap	
			Equity				l rome		Equity	L nuity	
11.03%	2.06%	37.13%	18.88%	4.36%		21.02%	-	0.05%	11.96%		-2.08%
U.S.			High Yield	Large	Small Cap	Nigh Yie 🧃	Small Cap	Real	Emergir	Small Cap	Non-U.S.
Fixed		Eqv y		Cap	Equity		Equity	Estate	Marke	Equity	Fixed
Income				Equity					Equity		Income
6.97%	anne.		15.12%	2.11%	16.35%	7.44%	4.89%	-0.79	11.19%	14.65%	-2.15%
Large	Small Cr	mall Cap			Large	Real	High rield	Non-I S.	Real	Non U.S.	Large
Cap	Equit	Equity	Cap	Eq ival nt	Cap	Estate		₹q/ ty	Estate	Fix	Cap
Equity			Equity		Equity					Incom	Equity
5.49%	-33.79%	27.17%	15.06%		16.00%	3.67%	2.45%	- North	4.06%	10.51%	-4.38%
Cash	y ge	Large	Non-U.	Small Cap	High Yield	Cash	Cash	Small Cap		Real	Real
Equivalent		Cap	Equit	Equity			Equivalent	Equity	Equity	Estate	Estate
	Equity	Equity									
5.00%	-37.00%	26.47%	8.95%	-4.18%	15.81%	0.07%	0.03%	-4.41%	2.75%	10.36%	
High Yie	Non-U.S.		U.S.	rteal	U.S.	U.S.		High rield	U.S.	High Yie	Small Cap
	Equity		Fixed	Estate	Fixed	Fixed	Market		Fixed		Equity
	40 50%	Income		0.400/		Income	Equity	4 470/		7 50%	44.040
and the	-43.56%	7.53%	6.54%	-6.46%	4.21%	-2.02%	-2.19%	-4.47%	2.65%	7.50%	-11.01%
Small Cap	Real	U.S.		Non-U.S.						U.S.	Non J.S.
Equity	Estate	Fixed		Equity						Fixed	Equity
4 570	40.049	Income		40.0494	Income	Equity	Income		Income		44.00%
-1.57%	-48.21%	5.93%	4.95%	-12.21%	4.09%	-2.60%	-3.09%	-6.02%	1.49%	3.54%	-14.09%
Real	Emerging	Cash	Cash		Cash		Non-U.S.		Cash	Cash	Emerging
Estate	Market	Equivalent	Equivalent		Equivalent		Equity	Market	Equivalent		
-7.39%	Equity -53.33%	0.24%	0.4.20/	Equity	0.119/	Income -3.08%	4 2 20/	Equity	0.220/	0.86%	Equity -14.58%
-7.39%	-53.33%	0.21%	0.13%	-18.42%	0.11%	-3.08%	-4.32%	-14.92%	0.33%	0.86%	-14.50%

Market index descriptions for annual percentage returns chart (slide 23-24)

Large Cap Equity (S&P 500) measures the performance of large capitalization U.S. stocks. The S&P 500 is a marketvalue-weighted index of 500 stocks. The weightings make each company's influence on the Index performance directly proportional to that company's market value.

Small Cap Equity (Russell 2000) measures the performance of small capitalization U.S. stocks. The Russell 2000 is a market-value weighted index of the 2,000 smallest stocks in the broad-market Russell 3000 Index.

Non-U.S. Equity (MSCI World ex USA) is an international index that is designed to measure the performance of large and mid cap equities in developed markets in Europe, the Middle East, the Pacific region, and Canada.

Emerging Market Equity (MSCI Emerging Markets) is an international index that is designed to measure the performance of equity markets in 24 emerging countries around the world.

U.S. Fixed Income (Bloomberg Barclays US Aggregate Bond Index) includes U.S. government, corporate, and mortgage-backed securities with maturities of at least one year. **High Yield (Bloomberg Barclays High Yield Bond Index)** measures the market of USD-denominated, non-investment grade, fixed-rate, taxable corporate bonds. Securities are classified as high yield if the middle rating of Moody's, Fitch, and S&P is Ba1/BB+/BB+ or below, excluding emerging market debt.

Non-U.S. Fixed Income (Bloomberg Barclays Global Aggregate

ex US Bond Index) is an unmanaged index that is comprised of several other Bloomberg Barclays indices that measure the fixed income performance of regions around the world, excluding the U.S.

Real Estate (FTSE EPRA/NAREIT Developed REIT Index)

is designed to measure the stock performance of companies engaged in specific real estate activities in the North American, European, and Asian real estate markets.

Cash Equivalent (3-month Treasury Bill) is a short-term debt obligation backed by the Treasury Department of the U.S. government with a maturity of less than one year.

Diversifying with mutual funds

Investors pool their money to purchase shares in a professionally managed portfolio of stocks, bonds, or other investments This provides an affordable way to access professional money managers

The money managers buy and sell securities based on the stated objective of the mutual fund which often includes diversification

Sample	Growth	Balanced
Investment	Income	Sector
Objectives	Socially Responsible	Tax-Free

While diversification is a useful technique that can help to manage overall portfolio risk and volatility, there is no certainty or assurance that a diversified portfolio will enhance overall return or outperform one that is not diversified.



Diversifying with mutual funds

Index Funds: A portfolio constructed to match or track the components of a market index, such as the Standard & Poor's 500 Index (S&P 500) Index Funds seek to generate returns that equal the return of the respective index minus fees

An index fund generally provides broad market exposure, low operating expenses and low portfolio turnover

Source: Jordan Wathen (TMFValueMagnet), August, 2016



Evaluating mutual funds

Sales Charges	Expense Ratios
Commissions and Loads	All annual fees charged by all funds, including the management fee, the administrative costs, 12b-1 distribution fees and other operating expenses

Turnover

Measures how long the holdings are held, which can **impact capital gains taxes**

Investment Policy

Cash reserves on hand

KEY TAKEAWAY:

These four factors impact earnings



Mutual funds are sold by prospectus, which is available from your registered representative. Please carefully consider investment objectives, risks, charges, and expenses before investing. For this and other information about any mutual fund investment please obtain a prospectus and read it carefully before you invest. Investment return and principal value will fluctuate with changes in market conditions such that shares may be worth more or less than original cost when redeemed. Diversification cannot eliminate the risk of investment losses, and past mutual fund performance is not a guarantee of future results.



Determining your risk tolerance

Risk Tolerance Assessment

To measure your risk tolerance, circle a number for each item, then add up the numbers* to determine a risk tolerance score.

Circle one number for each question:

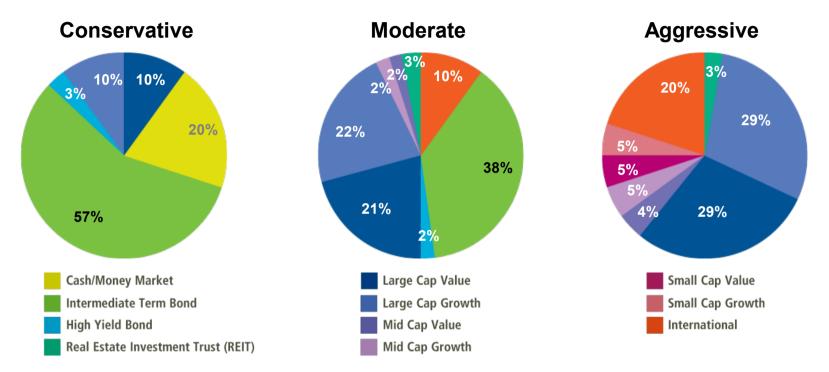
I have a short investment time horizon, few years until I'll need most of my money.	< 1 2 3 4 >	I have a long investment time horizon, many years until I'll need most of my money.
I try to minimize the risk of investment losses, both long term and short term.	< 1 2 3 4 >	I'm willing to tolerate short-term losses to earn higher long-term returns.
I would feel great if a very conservative fund allocation kept me from losing money when the stock market declined.	< 1 2 3 4 >	I would feel great if an aggressive fund allocation allowed me to make large investment gains when the stock market increased dramatically.
In choosing between funds, my primary goal is to not lose any principal contributed to my account.	< 1 2 3 4 >	In choosing between funds, my primary goal is to earn as high a rate of return as possible.
I'm willing to contribute a greater percent of salary, so I can invest conservatively and avoid risk.	< 1 2 3 4 >	I'm willing to risk losing my principal for the chances of earning higher returns over time, so I can reduce my monthlycontributions.
I would be very upset if my quarterly or annual return was negative.	< 1 2 3 4 >	I could accept a quarterly or annual negative return, if my aggressive allocation gave the chance for higher longterm returns.
If the stock market dropped 10% over a few days, I'd probably move my savingsout of stocks to keep from losing more money.	< 1 2 3 4 >	If the stock market dropped 10% over a few days, I'd probably move more of my savings into stocks to get in on the next market increase.
The time horizon and cost of my goals are not flexible, so unexpected investment losses would be a difficult setback for me.	< 1 2 3 4 >	The time horizon and cost of my goals are flexible, so unexpected investment losses would only mean delaying the goal or spending less on it.

*If you don't answer all of the questions, divide your score by the number of items answered and multiply by 8.

Add Up Your Risk Tolerance Score

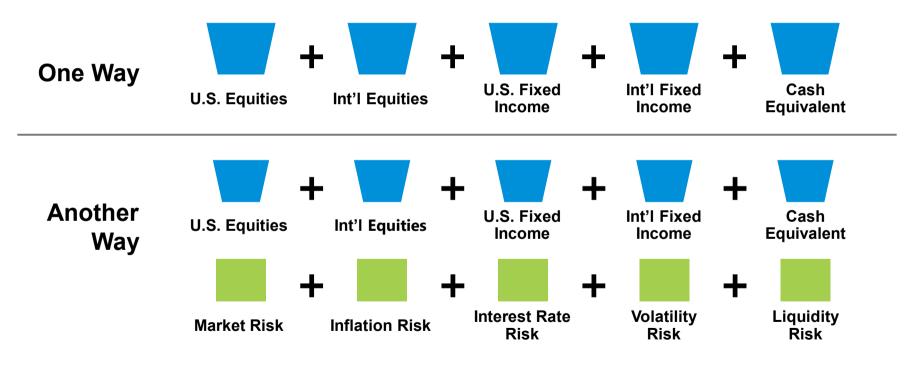


Determining your asset allocation

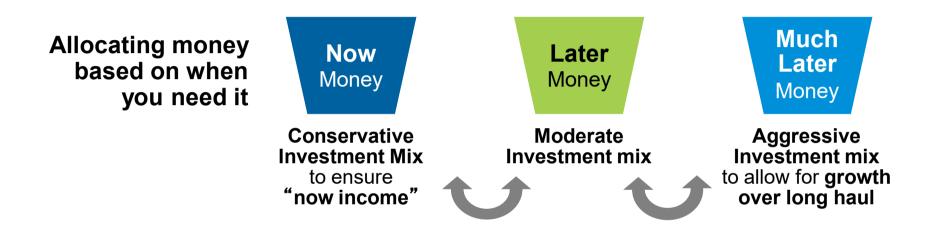


While diversification through an asset allocation strategy is a useful technique that can help to manage overall portfolio risk and volatility, there is no certainty or assurance that a diversified portfolio will enhance overall return or outperform one that is not diversified.

Risk allocation: traditional asset allocation and risk allocation



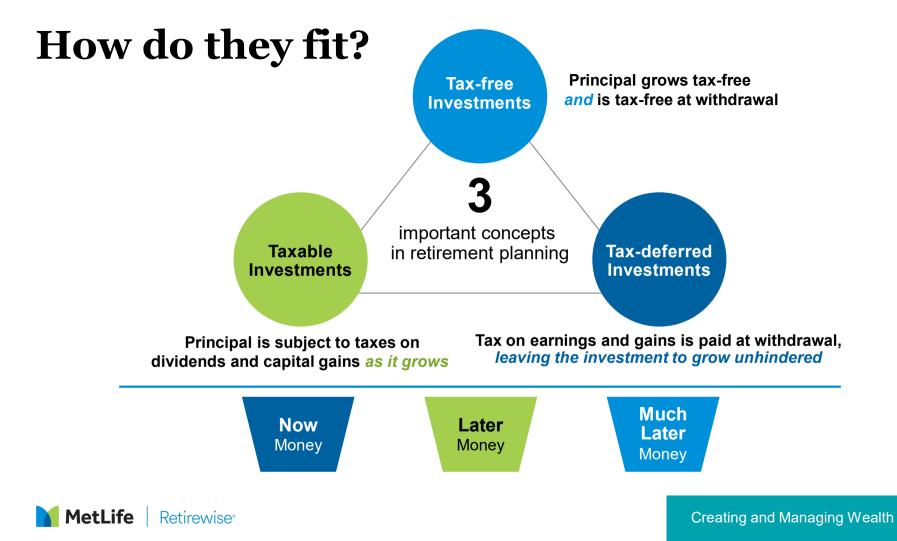
Managing risk with the bucket approach



KEY TAKEAWAY: Different allocations may make sense for **different time frames**

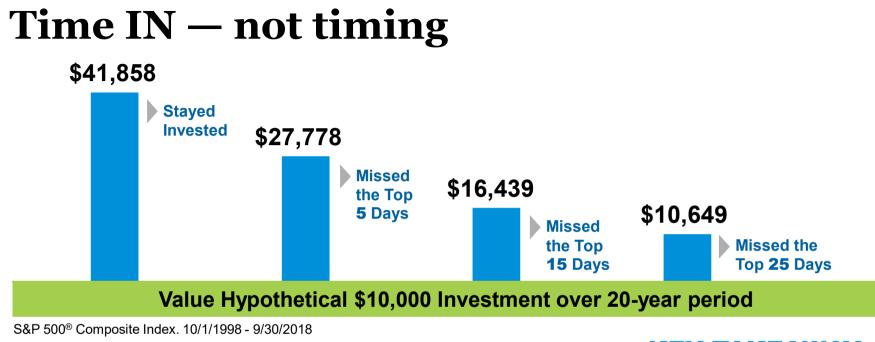
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Stay invested: It's "time in" the market, not "timing" the market





KEY TAKEAWAY:

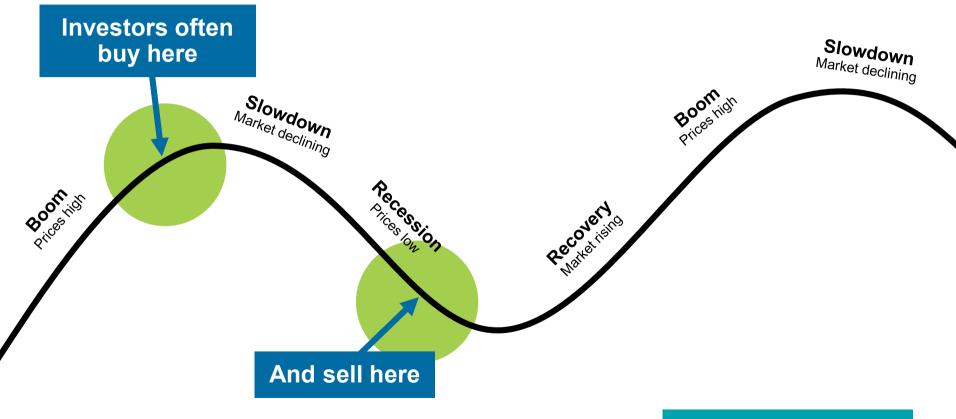
This example is hypothetical and for illustrative purposes only. It does not represent the past, present or future performance of any actual investment nor is it a guarantee of any kind.

Worth repeating: It's time IN, not timing

Source: ChartSource[®], DST Systems, Inc. For the period from October 1, 1998 to September 30, 2018. Based on total returns of Standard & Poor's Composite Index of 500 Stocks, an unmanaged index that is generally considered representative of the U.S. stock market. It is not possible to invest directly in an index. Past performance is not a guarantee of future results. Copyright © 2019, DST Systems, Inc. Reproduction in whole or in part prohibited, except by permission. All rights reserved. Not responsible for any errors or omissions.



Don't let your emotions get the best of you





Let dollar cost averaging work for you

Month	Monthly Investment	Share Price	Shares Purchased
January	\$500	\$10.00	50.0
February	\$500	\$9.00	55.6
March	\$500	\$8.00	62.5
April	\$500	\$9.00	55.6
Мау	\$500	\$10.00	50.0

Average Cost/Share: **\$9.13** (\$2,500/273.7)

KEY TAKEAWAY: When the share price declines, the same monthly investment buys more shares

Dollar Cost Averaging does not ensure a profit nor does it protect against a loss in declining markets. It involves continuous investment in securities regardless of fluctuating price levels. An investor should consider his or her ability to continue purchases in periods of low or fluctuating price levels.



Balance: Periodic adjustments are needed due to varied economic conditions



Portfolio rebalancing . . . don't become the investor that you're not



KEY TAKEAWAY: Rebalance your portfolio periodically to stay in line with your goals

*Rebalancing involves selling some investments in order to buy others. Investors should keep in mind that selling investments can result in a tax liability.



Homework: Your retirement budget

Monthingtopones



Today's key learning:

Risk and reward go hand-in-hand

Diversification attempts to minimize the effect of volatility while being invested in the markets



Recognizing risks and finding ways to manage them . . . can be just as important as choosing the right investments.





MetLife administers the Retirewise program, but has arranged for Massachusetts Mutual Life Insurance Company (MassMutual) to have specially-trained financial professionals offer financial education and, upon request, provide personal guidance to employees and former employees of companies providing Retirewise through MetLife.

Any discussion of taxes is for general informational purposes only, does not purport to be complete or cover every situation, and should not be construed as legal, tax or accounting advice. Clients should confer with their qualified legal, tax and accounting advisors as appropriate.

Past performance is no guarantee of future results. Diversification does not ensure a profit or guarantee against a loss.

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Establishing Your Retirement Income Stream





