MARKET INSIGHTS U.S. | 2019

Principles for successful long-term investing

Using Insights to achieve better client outcomes

J.P.Morgan
Asset Management

THE KEY TO SUCCESSFUL INVESTING ISN'T PREDICTING THE FUTURE, IT'S LEARNING FROM THE PAST AND UNDERSTANDING THE PRESENT. IN **"PRINCIPLES FOR SUCCESSFUL LONG-TERM INVESTING,"** WE PRESENT SEVEN TIME-TESTED STRATEGIES FOR GUIDING INVESTORS AND THEIR PORTFOLIOS THROUGH TODAY'S CHALLENGING MARKETS AND TOWARD TOMORROW'S GOALS. YOU WILL FIND SLIDES FROM OUR INDUSTRY-LEADING GUIDE TO THE MARKETS AND GUIDE TO RETIREMENT, ALONG WITH COMMENTARY PROVIDING ADDITIONAL PERSPECTIVE AND ACTION STEPS.

PRINCIPLES FOR SUCCESSFUL LONG-TERM INVESTING

1. PLAN ON LIVING A LONG TIME
2. CASH ISN'T ALWAYS KING
3. HARNESS THE POWER OF DIVIDENDS AND COMPOUNDING
4. AVOID EMOTIONAL BIASES BY STICKING TO A PLAN
5. VOLATILITY IS NORMAL; DON'T LET IT DERAIL YOU
6. DIVERSIFICATION WORKS
7. STAYING INVESTED MATTERS

1 PLAN ON LIVING A LONG TIME

LEFT: **We are living longer**

Thanks to advances in medicine and healthier lifestyles, people who are 65 today have a very good chance of reaching ages 80 or 90. A 65-year-old couple might be surprised to learn that at least one of them has a 48% probability of living another 25 years and needing investments to last until age 90.

RIGHT: **Many of us have not saved enough**

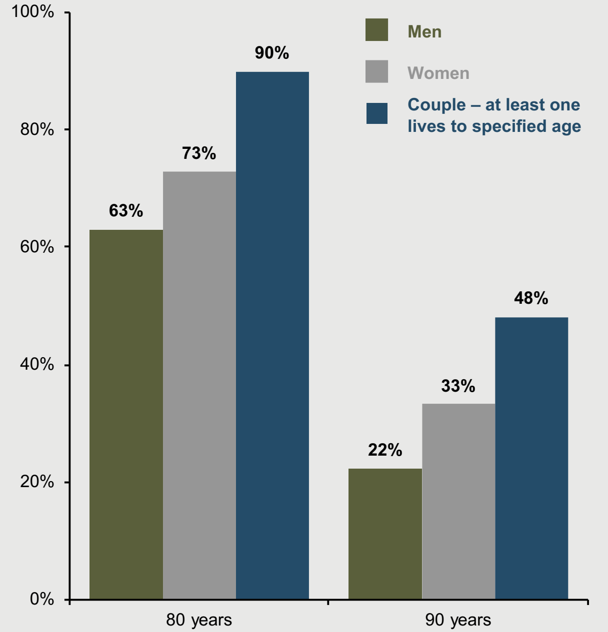
Studies reveal that individuals do not feel adequately prepared for retirement. Investors should start early by saving more, investing with discipline and having a plan for their future.

Life expectancy and retirement

Investing principles

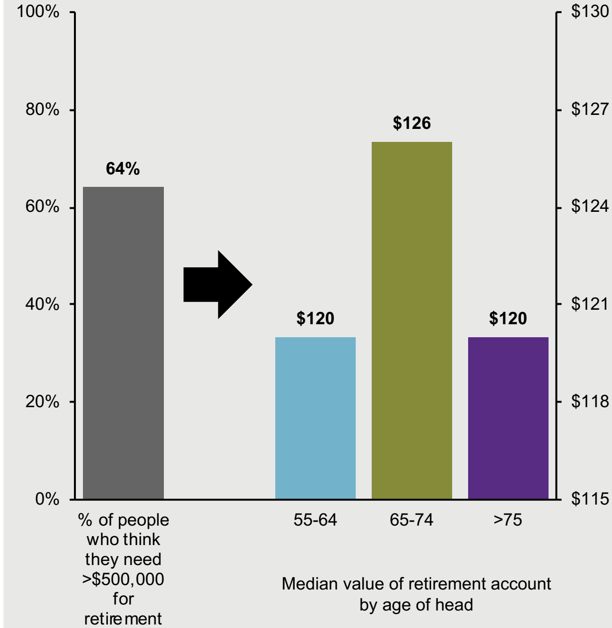
Probability of reaching ages 80 and 90

Persons aged 65, by gender, and combined couple



Retirement savings gap

Anticipated amount needed vs. actual savings, thousands



Source: J.P. Morgan Asset Management; (Left) SSA 2015 Life Tables; (Right) 2017 Retirement Confidence Survey, Employee Benefit Research Institute and Greenwald & Associates; 2016 Survey of Consumer Finances, Federal Reserve.
EBRI survey was conducted from January 6, 2017 to January 13, 2017 through online interviews with 1,671 individuals (1,082 workers and 589 retirees) ages 25 and older in the United States.
Guide to the Markets – U.S. Data are as of December 31, 2018.

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2 CASH ISN'T ALWAYS KING

LEFT: **Cash pays less**

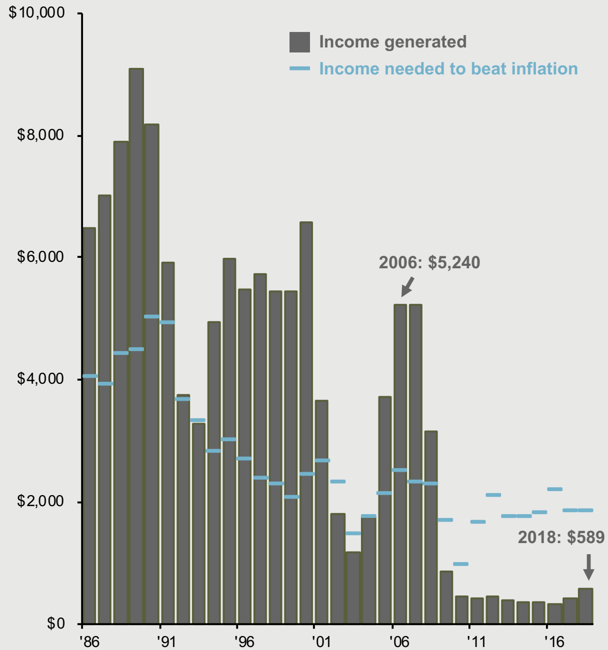
Investors often think of cash as a safe haven during volatile times, or even as a source of income. While interest rates have risen on many cash accounts, the average rate on a traditional savings account is still well below the rate of inflation. With the expectation that the Fed will not be raising rates much more this year, investors should be sure an allocation to cash does not undermine their long-term investment objectives.

RIGHT: **There is a lot of it**

More than $15 trillion of cash—greater than total consumer spending and mortgage debt in the U.S.—still sits on the "sidelines," potentially missing out on strong late-cycle returns.

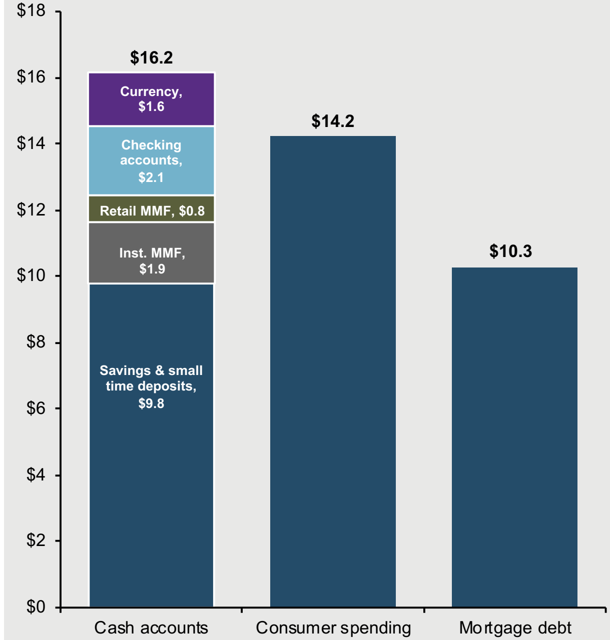
Investing principles

Income earned by $100,000 investment in a 6-mo. CD



Cash accounts in perspective

Trillions of U.S. dollars



Source: FactSet, J.P. Morgan Asset Management; (Left) Bankrate.com; (Right) BEA, Federal Reserve System.
Cash accounts and consumer spending are as of 11/30/18 and mortgage debt is as of 9/30/18. M2 includes M1 (currency in circulation and checking accounts) plus savings deposits, small-denomination time deposits and retail money market mutual funds. Institutional money market funds are considered a memorandum item, not included in M2. Annual income is for illustrative purposes and is calculated based on the 6-month CD yield on average during each year and $100,000 invested. Past performance is not indicative of comparable future results.
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3 HARNESS THE POWER OF DIVIDENDS AND COMPOUNDING

TOP: **The power of dividends and compounding**

In this simple illustration, an initial investment of $10,000 in the S&P 500 price return index would have grown to more than $270,000 since 1970. But if dividend payments were included, reinvested and allowed to compound over time, that same $10,000 investment would be worth more than $1,100,000 today.

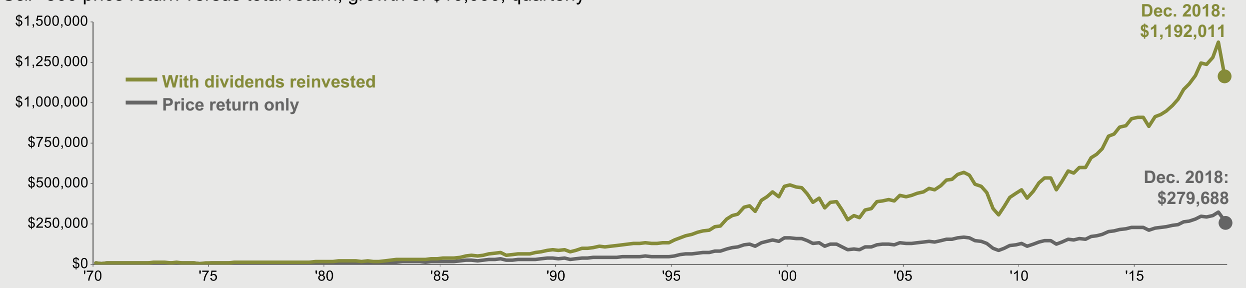
BOTTOM: **Investing in risk assets is critical**

Many investors shy away from the stock market, unwilling to take on added risk. But this chart shows a staggering difference in the value of $10,000 invested in a variety of different asset classes over time, ranging from low-risk T-bills to U.S. small cap stocks.

There is no guarantee that companies will declare, continue to pay or increase dividends.

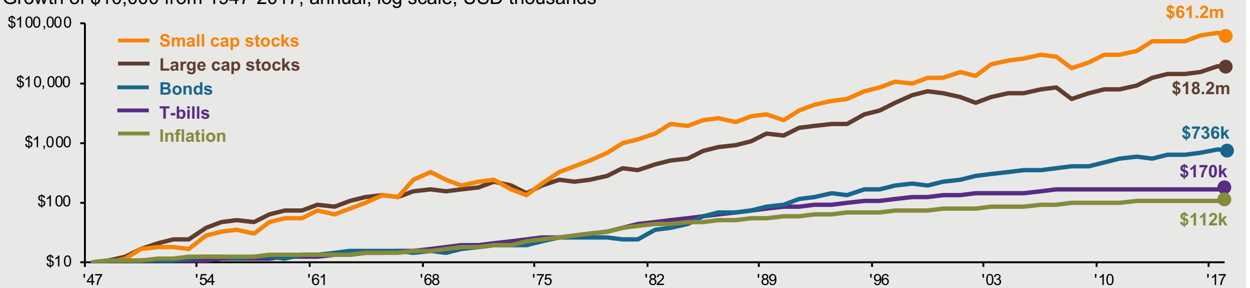
The power of compounding

S&P 500 price return versus total return, growth of $10,000, quarterly



Major asset classes versus inflation

Growth of $10,000 from 1947-2017, annual, log scale, USD thousands



Investing principles

Source: Ibbotson, Standard & Poor's, J.P. Morgan Asset Management.
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4 AVOID EMOTIONAL BIASES BY STICKING TO A PLAN

TOP: **In good times and bad, stick to a plan**

Some investors lament the fact that a diversified portfolio has failed to keep up with the raging bull market since 2009. This is only half of the story! As the chart shows, a portfolio that included bonds saw reduced losses during the financial crisis, enabling these diversified portfolios shown to recover much faster than a portfolio of stocks alone.

BOTTOM: **The heavy cost of market timing**

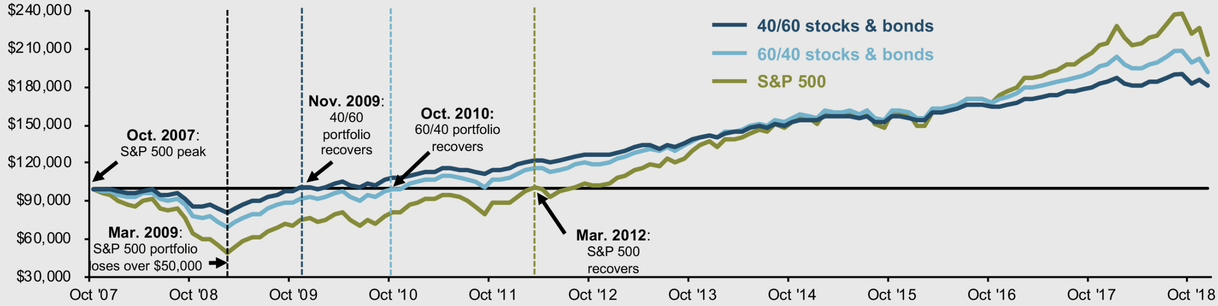
This chart is based on the famous Dalbar study titled "Quantitative Analysis of Investor Behavior." This study estimates that over the last 20 years, the average investor has achieved a scant 2.6% annualized return as compared to over 6% in a 60/40 stock/bond portfolio, thanks in part to badly timed (and often emotionally driven) investment decisions.

Diversification does not guarantee investment returns and does not eliminate the risk of loss. Diversification among investment options and asset classes may help to reduce overall volatility.

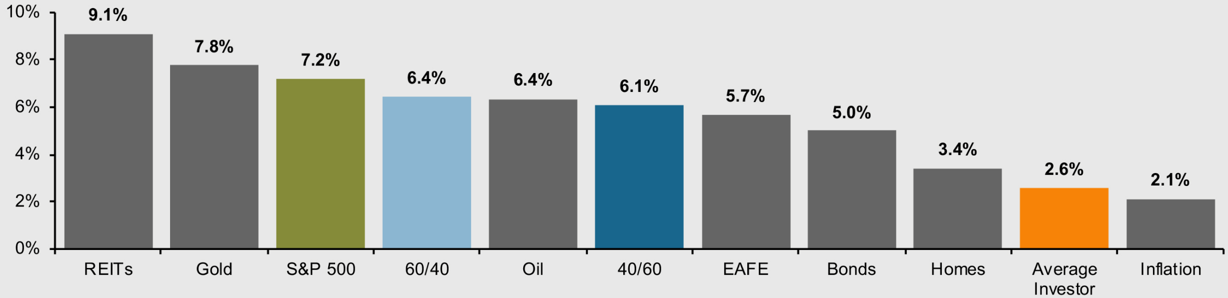
Diversification and the average investor

Investing principles

Portfolio returns: Equities vs. equity and fixed income blend



20-year annualized returns by asset class (1998 – 2017)



Source: J.P. Morgan Asset Management; (Top) Barclays, Bloomberg, FactSet, Standard & Poor's; (Bottom) Dalbar Inc.
Indices used are as follows: REITS: NAREIT Equity REIT Index, EAFE: MSCI EAFE, Oil: WTI Index, Bonds: Bloomberg Barclays U.S. Aggregate Index, Homes: median sale price of existing single-family homes, Gold: USD/troy oz., Inflation: CPI. 60/40: A balanced portfolio with 60% invested in S&P 500 Index and 40% invested in high-quality U.S. fixed income, represented by the Bloomberg Barclays U.S. Aggregate Index. The portfolio is rebalanced annually. Average asset allocation investor return is based on an analysis by Dalbar Inc., which utilizes the net of aggregate mutual fund sales, redemptions and exchanges each month as a measure of investor behavior. Returns are annualized (and total return where applicable) and represent the 20-year period ending 12/31/17 to match Dalbar's most recent analysis.
Guide to the Markets – U.S. Data are as of December 31, 2018.

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4 AVOID EMOTIONAL BIASES BY STICKING TO A PLAN (PART 2)

LEFT: **Home-country bias**

While the United States still boasts the single largest economy in the world, it accounts for only a small fraction of global GDP and just over 35% of the world's capital markets. Yet, statistics show that U.S. investors have 70% of their investments in U.S.-based assets.

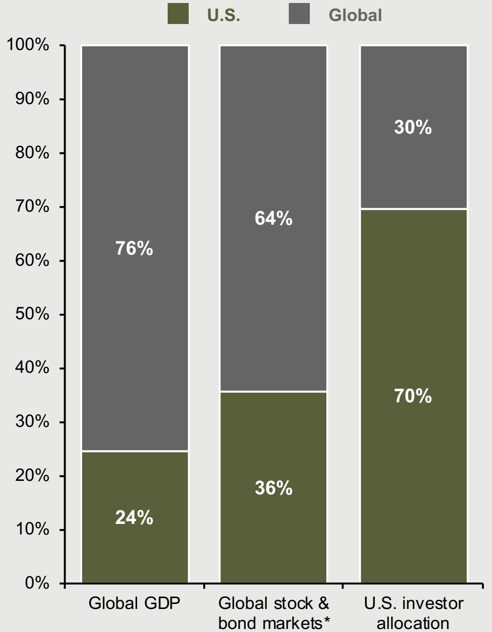
RIGHT: **Familiarity bias and concentrated positions**

Our investment biases show up in other ways too. Where we live, and even our field of expertise, can influence the way we allocate our assets. It is important that investors are aware of these biases and employ a disciplined investment plan that can help minimize their influence.

Local investing and global opportunities

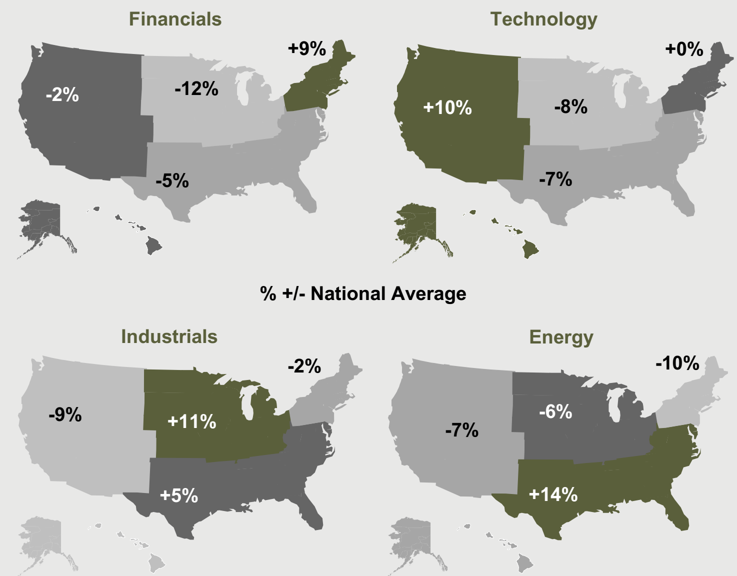
Investment universe & U.S. investors

Percentage of total net assets, 2017



Investor allocation by region

Likelihood of owning stocks in an industry vs. national average**



Source: IMF, Openfolio, Strategic Insight Simfund, J.P. Morgan Asset Management.
*Global stock and bond markets data are as of 2013. U.S. investor allocation is the total value of investments in global or domestic equity mutual funds and ETFs as of 2017. **Investor allocation by region is based on data collected by Openfolio. Average sector allocations at the national level are determined by looking at the sector allocations of over 20,000 brokerage accounts, and taking a simple average. Portfolio allocations are then evaluated on a regional basis, and the regional averages are compared to the national average to highlight any investor biases. Further details can be found on openfolio.com.
Guide to the Markets – U.S. Data are as of December 31, 2018.

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5 VOLATILITY IS NORMAL; DON'T LET IT DERAIL YOU

Seeing through the noise

Every year has its rough patches. The red dots on this chart represent the maximum intra-year decline in every calendar year for the S&P 500, since 1980. While these pull-backs can't be predicted, they can be expected; after all, markets suffered double-digit declines in 22 of the last 39 years.

But despite the many pull-backs, roughly 75% of those years ended with positive returns, as reflected by the gray bars. Investors need a plan for riding out volatile periods instead of reacting emotionally.

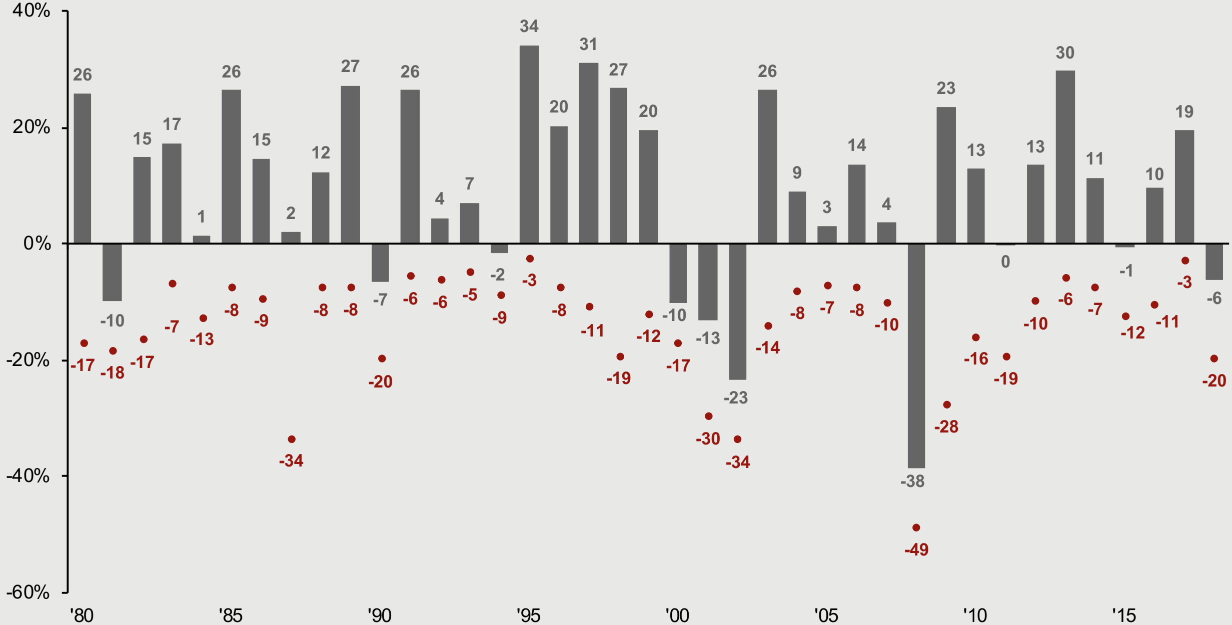
Annual returns and intra-year declines

GTM – U.S.

Equities

S&P 500 intra-year declines vs. calendar year returns

Despite average intra-year drops of 13.9%, annual returns positive in 29 of 39 years



Source: FactSet, Standard & Poor's, J.P. Morgan Asset Management.
Returns are based on price index only and do not include dividends. Intra-year drops refers to the largest market drops from a peak to a trough during the year. For illustrative purposes only. Returns shown are calendar year returns from 1980 to 2018, over which time period the average annual return was 8.4%.
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6 DIVERSIFICATION WORKS

Diversification has served its purpose

The last 15 years have provided a volatile and tumultuous ride for investors, with multiple natural disasters, numerous geopolitical conflicts and the deepest economic recession in the post-WWII era.

Yet despite these difficulties, cash was among the worst performing asset classes shown here. Meanwhile, a well-diversified portfolio of stocks, bonds and other uncorrelated asset classes returned over 6% per year over this time period (and roughly 150% on a cumulative total return basis.)

Asset class returns

GTM – U.S.

2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2004 - 2018 Ann.	2004 - 2018 Vol.
REITs 31.6%	EM Equity 34.5%	REITs 35.1%	EM Equity 39.8%	Fixed Income 5.2%	EM Equity 79.0%	REITs 27.9%	REITs 8.3%	REITs 19.7%	Small Cap 38.8%	REITs 28.0%	REITs 2.8%	Small Cap 21.3%	EM Equity 37.8%	Cash 1.8%	REITs 8.5%	REITs 22.4%
EM Equity 26.0%	Comdty. 21.4%	EM Equity 32.6%	Comdty. 16.2%	Cash 1.8%	High Yield 59.4%	Small Cap 26.9%	Fixed Income 7.8%	High Yield 19.6%	Large Cap 32.4%	Large Cap 13.7%	Large Cap 1.4%	High Yield 14.3%	DM Equity 25.6%	Fixed Income 0.0%	EM Equity 8.3%	EM Equity 22.1%
DM Equity 20.7%	DM Equity 14.0%	DM Equity 26.9%	DM Equity 11.6%	Asset Alloc. -25.4%	DM Equity 32.5%	EM Equity 19.2%	High Yield 3.1%	EM Equity 18.6%	DM Equity 23.3%	Fixed Income 6.0%	Fixed Income 0.5%	Large Cap 12.0%	Large Cap 21.8%	REITs -4.0%	Large Cap 7.8%	Small Cap 18.6%
Small Cap 18.3%	REITs 12.2%	Small Cap 18.4%	Asset Alloc. 7.1%	High Yield -26.9%	REITs 28.0%	Comdty. 16.8%	Large Cap 2.1%	DM Equity 17.9%	Asset Alloc. 14.9%	Asset Alloc. 5.2%	Cash 0.0%	Comdty. 11.8%	Small Cap 14.6%	High Yield -4.1%	Small Cap 7.5%	Comdty. 18.6%
High Yield 13.2%	Asset Alloc. 8.1%	Large Cap 15.8%	Fixed Income 7.0%	Small Cap -33.8%	Small Cap 27.2%	Large Cap 15.1%	Cash 0.1%	Small Cap 16.3%	High Yield 7.3%	Small Cap 4.9%	DM Equity -0.4%	EM Equity 11.6%	Asset Alloc. 14.6%	Large Cap -4.4%	High Yield 7.3%	DM Equity 17.6%
Asset Alloc. 12.8%	Large Cap 4.9%	Asset Alloc. 15.3%	Large Cap 5.5%	Comdty. -35.6%	Large Cap 26.5%	High Yield 14.8%	Asset Alloc. -0.7%	Large Cap 16.0%	REITs 2.9%	Cash 0.0%	Asset Alloc. -2.0%	REITs 8.6%	High Yield 10.4%	Asset Alloc. -5.8%	Asset Alloc. 6.2%	Large Cap 14.5%
Large Cap 10.9%	Small Cap 4.6%	High Yield 13.7%	Cash 4.8%	Large Cap -37.0%	Asset Alloc. 25.0%	Asset Alloc. 13.3%	Small Cap -4.2%	Asset Alloc. 12.2%	Cash 0.0%	High Yield 0.0%	High Yield -2.7%	Asset Alloc. 8.3%	REITs 8.7%	Small Cap -11.0%	DM Equity 5.2%	High Yield 11.0%
Comdty. 9.1%	High Yield 3.6%	Cash 4.8%	High Yield 3.2%	REITs -37.7%	Comdty. 18.9%	DM Equity 8.2%	DM Equity -11.7%	Fixed Income 4.2%	Fixed Income -2.0%	EM Equity -1.8%	Small Cap -4.4%	Fixed Income 2.6%	Fixed Income 3.5%	Comdty. -11.2%	Fixed Income 3.9%	Asset Alloc. 10.3%
Fixed Income 4.3%	Cash 3.0%	Fixed Income 4.3%	Small Cap -1.6%	DM Equity -43.1%	Fixed Income 5.9%	Fixed Income 6.5%	Comdty. -13.3%	Cash 0.1%	EM Equity -2.3%	DM Equity -4.5%	EM Equity -14.6%	DM Equity 1.5%	Comdty. 1.7%	DM Equity -13.4%	Cash 1.3%	Fixed Income 3.3%
Cash 1.2%	Fixed Income 2.4%	Comdty. 2.1%	REITs -15.7%	EM Equity -53.2%	Cash 0.1%	Cash 0.1%	EM Equity -18.2%	Comdty. -1.1%	Comdty. -9.5%	Comdty. -17.0%	Comdty. -24.7%	Cash 0.3%	Cash 0.8%	EM Equity -14.2%	Comdty. -2.5%	Cash 0.8%

Investing principles

Source: Barclays, Bloomberg, FactSet, MSCI, NAREIT, Russell, Standard & Poor's, J.P. Morgan Asset Management.
Large cap: S&P 500, Small cap: Russell 2000, EM Equity: MSCI EME, DM Equity: MSCI EAFE, Comdty: Bloomberg Commodity Index, High Yield: Bloomberg Barclays Global HY Index, Fixed Income: Bloomberg Barclays US Aggregate, REITs: NAREIT Equity REIT Index, Cash: Bloomberg Barclays 1-3m Treasury. The "Asset Allocation" portfolio assumes the following weights: 25% in the S&P 500, 10% in the Russell 2000, 15% in the MSCI EAFE, 5% in the MSCI EME, 25% in the Bloomberg Barclays US Aggregate, 5% in the Bloomberg Barclays 1-3m Treasury, 5% in the Bloomberg Barclays Global High Yield Index, 5% in the Bloomberg Commodity Index and 5% in the NAREIT Equity REIT Index. Balanced portfolio assumes annual rebalancing. Annualized (Ann.) return and volatility (Vol.) represents period of 12/31/03 – 12/31/18. Please see disclosure page at end for index definitions. All data represents total return for stated period. Past performance is not indicative of future returns.
Guide to the Markets – U.S. Data are as of December 31, 2018.

7

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7 STAYING INVESTED MATTERS

It's always darkest just before dawn

Market timing can be a dangerous habit. Sometimes, investors think they can outsmart the market; other times, fear and greed push them to make emotional, rather than logical, decisions.

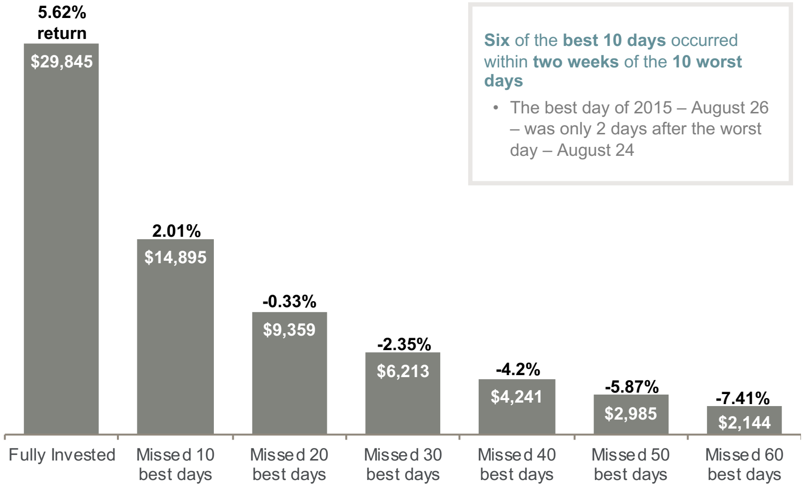
From our *Guide to Retirement,* this chart is a sobering reminder of the potential costs of market timing. By missing some of the market's best days, investors can lose out on critical opportunities to grow their portfolio, with devastating results. Importantly, as the slide also notes, "Six of the 10 best days occurred within two weeks of the 10 worst days."

Impact of being out of the market

Investing

Returns of the S&P 500

Performance of a $10,000 investment between January 4, 1999 and December 31, 2018



Six of the **best 10 days** occurred within **two weeks** of the **10 worst days**

- The best day of 2015 – August 26 – was only 2 days after the worst day – August 24

PLAN TO STAY INVESTED

Trying to time the market is extremely difficult to do. Market lows often result in emotional decision making. Investing for the long term while managing volatility can result in a better retirement outcome.

Source: J.P. Morgan Asset Management analysis using data from Bloomberg. Returns are based on the S&P 500 Total Return Index, an unmanaged, capitalization-weighted index that measures the performance of 500 large capitalization domestic stocks representing all major industries. Indices do not include fees or operating expenses and are not available for actual investment. The hypothetical performance calculations are shown for illustrative purposes only and are not meant to be representative of actual results while investing over the time periods shown. The hypothetical performance calculations for the respective strategies are shown gross of fees. If fees were included, returns would be lower. Hypothetical performance returns reflect the reinvestment of all dividends. The hypothetical performance results have certain inherent limitations. Unlike an actual performance record, they do not reflect actual trading, liquidity constraints, fees and other costs. Also, since the trades have not actually been executed, the results may have under- or overcompensated for the impact of certain market factors such as lack of liquidity. Simulated trading programs in general are also subject to the fact that they are designed with the benefit of hindsight. Returns will fluctuate and an investment upon redemption may be worth more or less than its original value. Past performance is not indicative of future returns. An individual cannot invest directly in an index. Data as of December 31, 2018.

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7 STAYING INVESTED MATTERS (PART 2)

Good things come to those who wait

While markets can always have a bad day, week, month or even year, history suggests investors are less likely to suffer losses over longer periods.

This chart illustrates the concept. While one-year stock returns have varied widely since 1950 (+47% to -39%), a blend of stocks and bonds has not suffered a negative return over any five-year rolling period in the past 69 years.

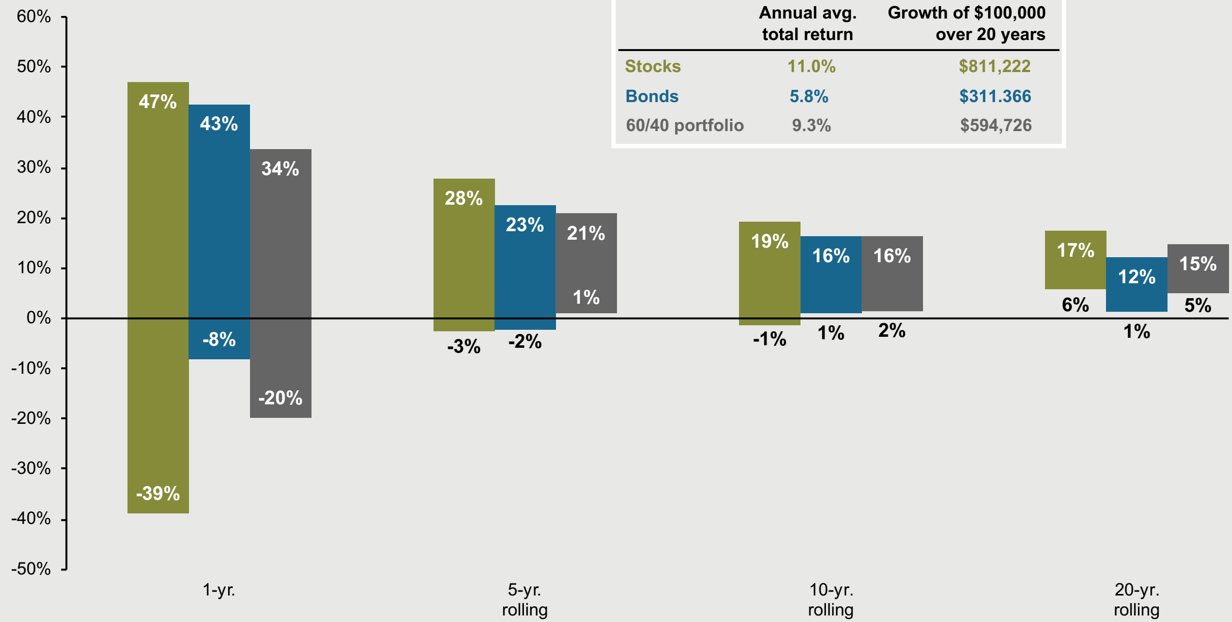
Important disclaimer: Investors should not necessarily expect the same rates of return in the future as we have seen in the past, particularly from bonds, which are starting with very low yields today.

Time, diversification and the volatility of returns

Investing principles

Range of stock, bond and blended total returns

Annual total returns, 1950-2018



	Annual avg. total return	Growth of $100,000 over 20 years
Stocks	11.0%	$811,222
Bonds	5.8%	$311.366
60/40 portfolio	9.3%	$594,726

Source: Barclays, FactSet, Federal Reserve, Robert Shiller, Strategas/Ibbotson, J.P. Morgan Asset Management.
Returns shown are based on calendar year returns from 1950 to 2018. Stocks represent the S&P 500 Shiller Composite and Bonds represent Strategas/Ibbotson for periods from 1950 to 2010 and Barclays Aggregate thereafter. Growth of $100,000 is based on annual average total returns from 1950 to 2018.
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PUTTING IT ALL TOGETHER

Each of the **PRINCIPLES FOR SUCCESSFUL LONG-TERM INVESTING** is vital to help investors navigate today's challenging markets to reach their financial goals. Important as they are alone, they are most effective and powerful when used together. And they all depend on staying invested—the most essential principle of all.

1

PLAN ON LIVING A LONG TIME

and perhaps, needing more savings smartly invested

2

CASH IS NOT ALWAYS KING

and does not earn what it used to

3

HARNESS THE POWER OF DIVIDENDS AND COMPOUNDING

have them on your side and working for you

4

AVOID EMOTIONAL BIASES BY STICKING TO A PLAN

to avoid the urge to market time

5

VOLATILITY IS NORMAL

plan for riding out volatile market periods instead of reacting emotionally

6

DIVERSIFICATION WORKS

a winning strategy over the long run

7

STAYING INVESTED

is the most essential principle of all

NOTES

FOR MORE INFORMATION ABOUT THE INSIGHTS PROGRAMS, INCLUDING ACCESS TO THE ENTIRE GUIDE TO THE MARKETS AND GUIDE TO RETIREMENT, PLEASE VISIT: WWW.JPMORGANFUNDS.COM/INSIGHTS

The Market Insights program provides comprehensive data and commentary on global markets without reference to products. Designed as a tool to help clients understand the markets and support investment decision-making, the program explores the implications of current economic data and changing market conditions.

Unless otherwise stated, all data are as of December 31, 2018.

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