Principles for successful long-term investing

Using Insights to achieve better client outcomes
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
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

Probability of reaching ages 80 and 90
Persons aged 65, by gender, and combined couple

- Men
- Women
- Couple – at least one lives to specified age

80 years
- 63% Men
- 73% Women
- 90% Couple

90 years
- 22% Men
- 33% Women
- 48% Couple

Retirement savings gap
Anticipated amount needed vs. actual savings, thousands

- 64% of people who think they need >$500,000 for retirement
- $120 Median value of retirement account by age of head
- 55-64
- 65-74
- >75

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.
**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.
Cash accounts

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

- Income generated
- Income needed to beat inflation

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.

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

Source: Ibbotson, Standard & Poor’s, J.P. Morgan Asset Management.

PRINCIPLES FOR SUCCESSFUL LONG-TERM INVESTING

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

**Portfolio returns: Equities vs. equity and fixed income blend**

- Oct. 2007: S&P 500 peak
- Nov. 2009: 40/60 portfolio recovers
- Oct. 2010: 60/40 portfolio recovers
- Mar. 2009: S&P 500 portfolio loses over $50,000

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

<table>
<thead>
<tr>
<th>Asset Class</th>
<th>20-Year Return (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>REITs</td>
<td>9.1%</td>
</tr>
<tr>
<td>Gold</td>
<td>7.8%</td>
</tr>
<tr>
<td>S&amp;P 500</td>
<td>7.2%</td>
</tr>
<tr>
<td>60/40</td>
<td>6.4%</td>
</tr>
<tr>
<td>Oil</td>
<td>6.4%</td>
</tr>
<tr>
<td>40/60</td>
<td>6.1%</td>
</tr>
<tr>
<td>EAFE</td>
<td>5.7%</td>
</tr>
<tr>
<td>Bonds</td>
<td>5.0%</td>
</tr>
<tr>
<td>Homes</td>
<td>3.4%</td>
</tr>
<tr>
<td>Average Investor</td>
<td>2.6%</td>
</tr>
<tr>
<td>Inflation</td>
<td>2.1%</td>
</tr>
</tbody>
</table>

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.
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.

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

- U.S.
- Global

Global GDP
- 24%
- 76%

Global stock & bond markets*
- 36%
- 64%

U.S. investor allocation
- 70%
- 30%

Investor allocation by region
Likelihood of owning stocks in an industry vs. national average**

- Financials
  - U.S.: -2%
  - Global: -12%
  - National Average: +9%

- Technology
  - U.S.: -5%
  - Global: -7%
  - National Average: -8%

- Industrials
  - U.S.: -10%
  - Global: +10%
  - National Average: +11%

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.

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

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.
Retumns 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%.

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.)
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

Returns of the S&P 500
Performance of a $10,000 investment between January 4, 1999 and December 31, 2018

- Fully Invested: $29,845 (5.62% return)
- Missed 10 best days: $14,895 (2.01%)
- Missed 20 best days: $9,359 (-0.33%)
- Missed 30 best days: $6,213 (-2.35%)
- Missed 40 best days: $4,241 (-4.2%)
- Missed 50 best days: $2,985 (-5.87%)
- Missed 60 best days: $2,144 (-7.41%)

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

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.

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.
**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

Range of stock, bond and blended total returns

Annual total returns, 1950-2018

<table>
<thead>
<tr>
<th></th>
<th>1-yr.</th>
<th>5-yr. rolling</th>
<th>10-yr. rolling</th>
<th>20-yr. rolling</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stocks</td>
<td>47%</td>
<td>43%</td>
<td>34%</td>
<td>17%</td>
</tr>
<tr>
<td>Bonds</td>
<td>-8%</td>
<td>-3%</td>
<td>23%</td>
<td>12%</td>
</tr>
<tr>
<td>60/40 portfolio</td>
<td>-20%</td>
<td>21%</td>
<td>1%</td>
<td>5%</td>
</tr>
</tbody>
</table>


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.

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.
STAYING INVESTED is 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

J.P. MORGAN ASSET MANAGEMENT
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.

For the purposes of MiFID II, the JPM Market Insights and Portfolio Insights programs are marketing communications and are not in scope for any MiFID II / MiFIR requirements specifically related to investment research. Furthermore, the J.P. Morgan Asset Management Market Insights and Portfolio Insights programs, as non-independent research, have not been prepared in accordance with legal requirements designed to promote the independence of investment research, nor are they subject to any prohibition on dealing ahead of the dissemination of investment research.

This document is a general communication being provided for informational purposes only. It is educational in nature and not designed to be as advice or a recommendation for any specific investment product, strategy, plan feature or other purpose in any jurisdiction, nor is it a commitment from J.P. Morgan Asset Management or any of its subsidiaries to participate in any of the transactions mentioned herein. Any examples used are generic, hypothetical and for illustration purposes only. This material does not contain sufficient information to support an investment decision and it should not be relied upon by you in evaluating the merits of investing in any securities or products. In addition, users should make an independent assessment of the legal, regulatory, tax, credit, and accounting implications and determine, together with their own professional advisers, if any investment mentioned herein is believed to be suitable to their personal goals. Investors should ensure that they obtain all available relevant information before making any investment. Any forecasts, figures, opinions or investment techniques and strategies set out are for information purposes only, based on certain assumptions and current market conditions and are subject to change without prior notice. All information presented herein is considered to be accurate at the time of production, but no warranty of accuracy is given and no liability in respect of any error or omission is accepted. It should be noted that investment involves risks, the value of investments and the income from them may fluctuate in accordance with market conditions and taxation agreements and investors may not get back the full amount invested. Both past performance and yields are not reliable indicators of current and future results.

J.P. Morgan Asset Management is the brand for the asset management business of JPMorgan Chase & Co. and its affiliates worldwide.

To the extent permitted by applicable law, we may record telephone calls and monitor electronic communications to comply with our legal and regulatory obligations and internal policies. Personal data will be collected, stored and processed by J.P. Morgan Asset Management in accordance with our Company's Privacy Policy. For further information regarding our regional privacy policies please refer to the EMEA Privacy Policy; for locational Asia Pacific privacy policies, please click on the respective links: Hong Kong Privacy Policy, Australia Privacy Policy, Taiwan Privacy Policy, Japan Privacy Policy and Singapore Privacy Policy.

This communication is issued by the following entities: in the United Kingdom by JPMorgan Asset Management (UK) Limited, which is authorized and regulated by the Financial Conduct Authority; in other European jurisdictions by JPMorgan Asset Management (Europe) S.à r.l.; in Hong Kong by JF Asset Management Limited, or JPMorgan Funds (Asia) Limited, or JPMorgan Asset Management Real Assets (Asia) Limited; in Singapore by JPMorgan Asset Management (Singapore) Limited (Co. Reg. No. 197601586K), or JPMorgan Asset Management Real Assets (Singapore) Pte Ltd (Co. Reg. No. 201120355E); in Taiwan by JPMorgan Asset Management (Taiwan) Limited; in Japan by JPMorgan Asset Management (Japan) Limited which is a member of the Investment Trusts Association, Japan, the Japan Investment Advisers Association, Type II Financial Instruments Firms Association and the Japan Securities Dealers Association and is regulated by the Financial Services Agency (registration number “Kanto Local Finance Bureau (Financial Instruments Firm) No. 330”); in Australia to wholesale clients only as defined in section 761A and 761G of the Corporations Act 2001 (Cth) by JPMorgan Asset Management (Australia) Limited (ABN 55143832080) (AFSL 376919); in Brazil by Banco J.P. Morgan S.A.; in Canada for institutional clients’ use only by JPMorgan Distribution Services Inc. and J.P. Morgan Institutional Investments, Inc., a member of FINRA; and J.P. Morgan Investment Management Inc.

In APAC, distribution is for Hong Kong, Taiwan, Japan and Singapore. For all other countries in APAC, to intended recipients only.

Copyright 2019 JPMorgan Chase & Co. All rights reserved. March 2019.

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