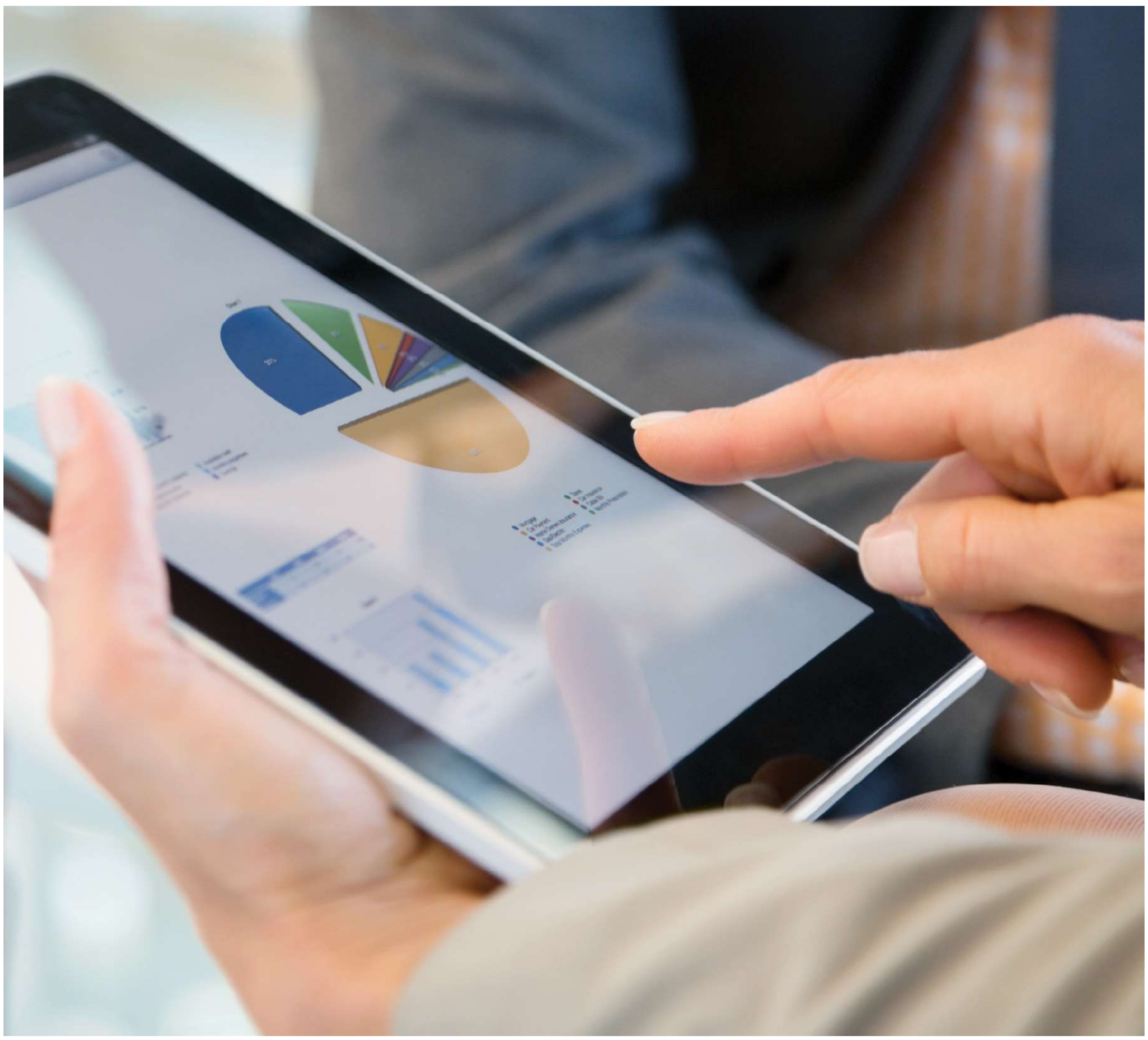
WELLS FARGO
INVESTMENT INSTITUTE

Women and Investing

Building on Strengths




January 2019

Understanding the Strengths of Women Investors

Women comprise more than half of the U.S. population,[1] but no two women are the same when it comes to managing their money. When we surveyed investors, women were statistically more likely to rate themselves as less-experienced investors and more likely to say they have high levels of stress when it comes to their financial life. We also found that women investors are more likely to work with an investment professional and more inclined stick to their investment plan.[2]

At some point in their lives, most women likely will be in charge of their family's finances.[3] This report explores our findings on the strengths of women investors and offers guidance on how women can take advantage of those strengths as they pursue long-term financial goals.

[1]U.S. Census, 2016: Women were 51% of the U.S. population.
[2]Wells Fargo/Gallup Investor and Retirement Optimism Index, November 12–20, 2018. The index includes 1,022 investors aged 18+ randomly selected from across the country with total savings and investments of $10,000 or more.
[3]"Women's Quick Facts: Compelling Data on Why Women Matter." STEMconnector ,® November 2016.

Overcoming Obstacles and Building on Strengths

What Women Say About Investing[4] — page 5

Our survey results showed that, in general, women feel less confident in their ability to invest than men do, even though women often have more financial skill[5] than they give themselves credit for having.

How Women Invest — page 7

Women tend to follow proven investment practices, such as trading less frequently, sticking to an investment plan, and working closely with an investment professional.[6]

Perception Meets Reality — page 9

Despite women's purported lack of confidence, studies have shown that the returns women receive on their investments lead men's on a risk-adjusted basis.[5]

Key Investment Concepts — page 11

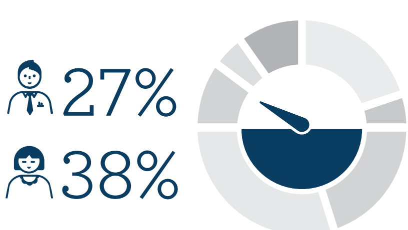
To gain more confidence and alleviate some fear of the markets, it is important to further educate yourself about investments and key investment concepts.

Educate, Research, Act — page 13

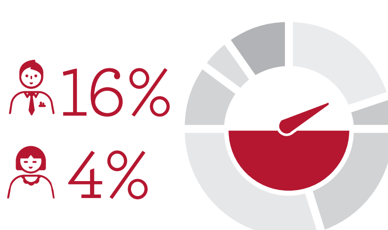
- Learn more about budgeting, saving, and investing.
- Research investment options.
- Act by developing, implementing, and monitoring your investment plan.

Women and Men May Have a Different Investing Mindset

In our survey[6], women tended to invest more conservatively than men. Having a portfolio that is too conservatively invested may lead to underfunded goals. On the other hand, a portfolio that is too aggressively invested may result in greater volatility.



More Conservative
"I'm taking little or no risk."



More Aggressive
"I'm taking a good deal of risk."

[4]Greene, Kelly. "Turning Daughters Into Investors." *The Wall Street Journal*, October 11, 2013.

[5]Source: *Gender Differences in Performance at Wells Fargo Advisors*, Wells Fargo Wealth and Investment Management (WIM) Analytics, December 2016. The total study included more than 900,000 investment accounts from December 2010–2015 with investable assets of $50,000 or more.

[6] Wells Fargo/Gallup Investor and Retirement Optimism Index, November 2018.

45% of S. millionaires are women.

Source: The American College, 2010

42% of women are their family's primary breadwinner.

Source: Center for American Progress analysis of data from the U.S. Census Bureau, 2015

Women control $14 trillion of U.S. personal wealth.

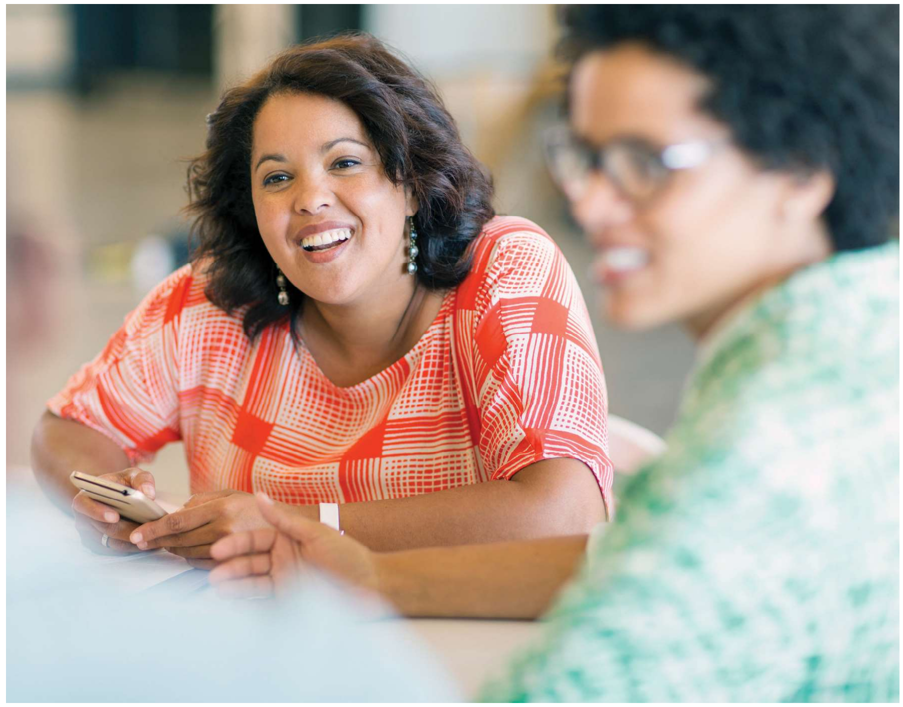
Source: BMO Wealth Institute, 2015

Nine out of 10 women eventually will take charge of their family's wealth.

Source: "Women's Quick Facts: Compelling Data on Why Women Matter," STEMconnector,® November 2016

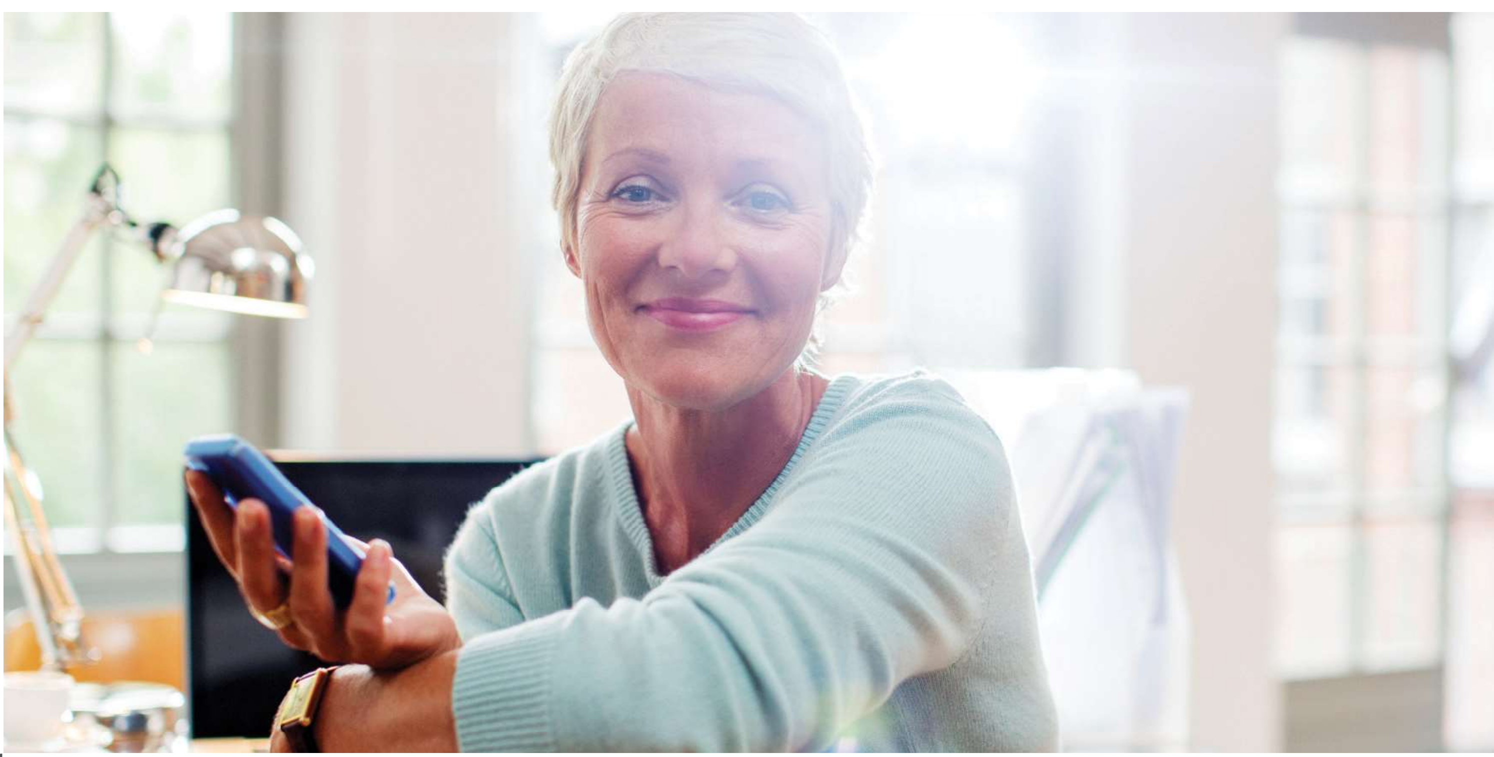
Five years—the amount of time that women outlive men, on average. That's five more years of living expenses that women may need beyond the needs of men.

Source: World Health Organization, 2016



Source: Bureau of Labor Statistics, 2017

Because women, on average, earn less per dollar than men, often take time off from work to care for others, and generally have very little extra time in their busy schedules, they can find themselves unprepared to reach their financial goals. If you feel apprehensive about investing, take a few steps to learn about the benefits of planning and investing. We believe that doing so can help you feel more confident about your (and your family's) financial future.



What Women Say About Investing

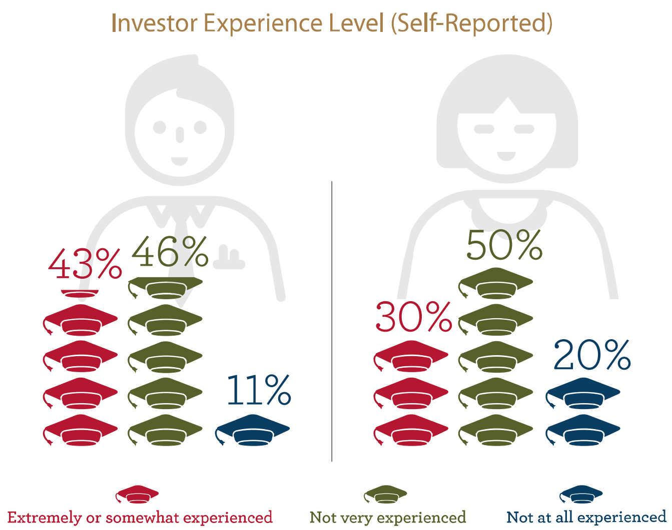
When asked to rate their own investor experience level, far fewer women say they have a higher level of experience (see chart below). This perceived lack of experience has consequences—more women than men are fearful of a market downturn, women tend to expect lower returns on their investments, and women are more likely to say that they are afraid to take investment risks in hopes of generating higher returns.[7]

Yet, according to data from the World Health Organization, women tend to live longer than men, meaning that their investment assets will have to last longer. Women generally have a longer investment time horizon than men of the same age, so women may benefit from becoming more comfortable with growth assets, such as stocks, in order to meet their financial goals.

A recent study of Wells Fargo Advisors' clients indicates that many women may have more expertise with money and finance than they give themselves credit for having. The study conducted in December 2016 showed that single women earned the highest returns, followed by female-led investment accounts. Male-led investment accounts and single men had the lowest average returns.[8] The takeaway? Many women effectively manage their own assets and have contributed to a stronger investment partnership when the responsibilities are shared.

Women Say They Have Less Investment Experience

One in five women surveyed said they are not at all experienced in investing. Learning more about some key financial concepts can help investors develop more confidence in their decisions.



Source: Wells Fargo/Gallup Investor and Retirement Optimism Index, November 2018.

[7]Wells Fargo/Gallup Investor and Retirement Optimism Index, November 2018.

[8]Gender Differences in Performance at Wells Fargo Advisors, Wells Fargo Wealth and Investment Management (WIM) Analytics, December 2016. The total study included more than 900,000 investment accounts from December 2010–2015 with investable assets of $50,000 or more.

KEY TAKEAWAYS

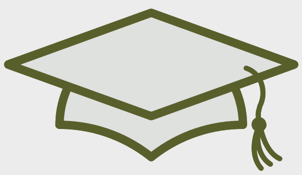
Women reported less confidence in their investment knowledge. This may make them more cautious about making investment decisions.

Investors with a longer time horizon should consider incorporating some growth assets, like stocks, in their portfolios.

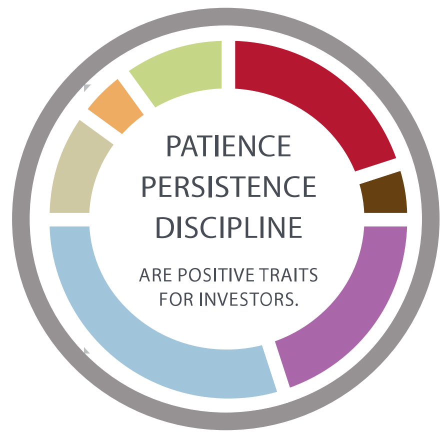
The good news is that many women effectively manage their own investment accounts and have even strengthened the returns of a shared account.

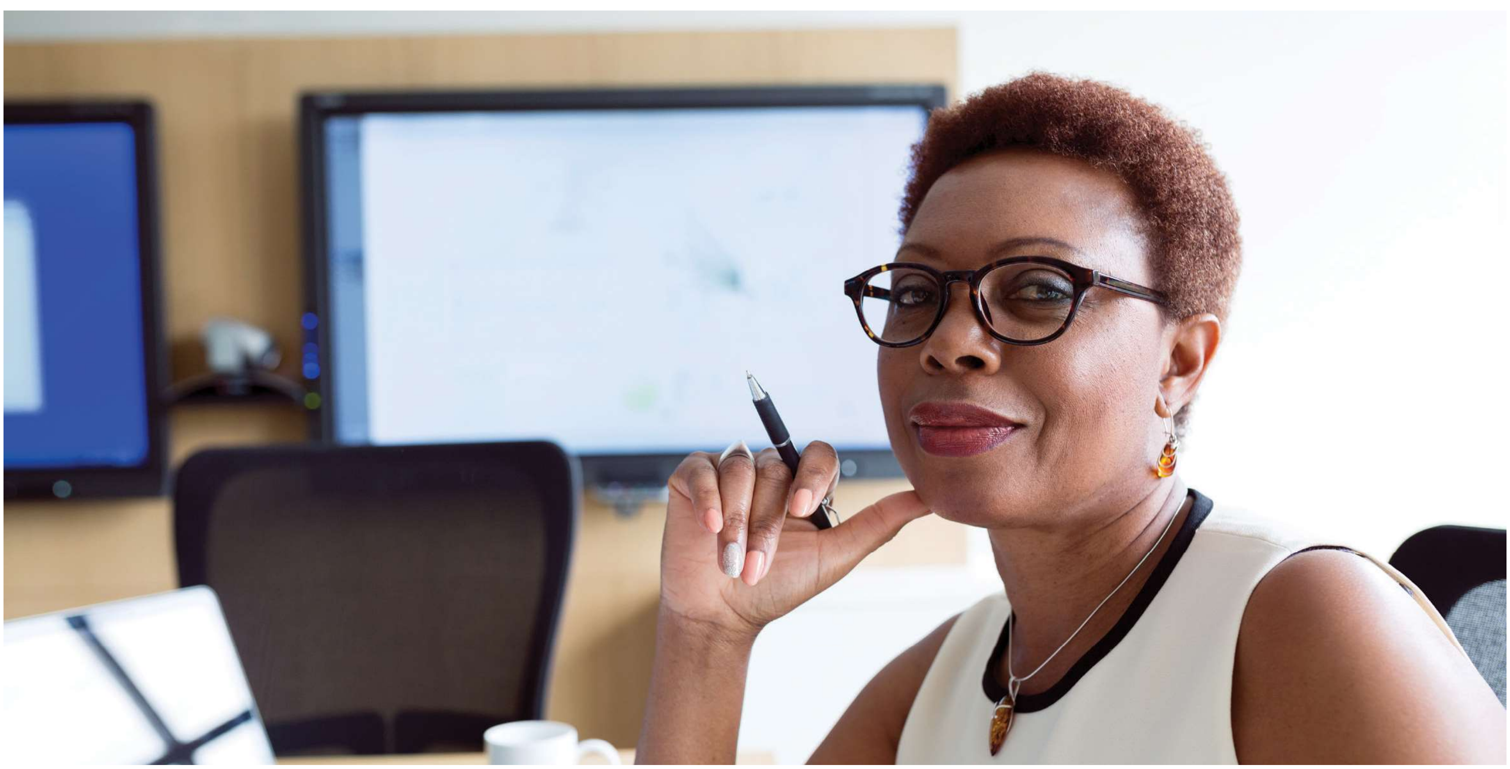
Psychological research has found that men are more likely to be overconfident about finances than women.

Source: "Boys Will Be Boys: Gender, Overconfidence, and Common Stock Investment," *The Quarterly Journal of Economics*, February 2001



To gain more confidence and alleviate some fear of the markets, become more educated about investments—research and ask questions.





How Women Invest

In our study of Wells Fargo Advisors' clients, we found that women's actual investment behavior tends to follow recommended investment principles more often than men's.

Patience: Our study[9] found that single women traded 27% less frequently than single men—possibly because men tend to be overconfident about their investment ability.[10] Psychological studies show that overconfident investors tend to believe that they know more than they actually do, and that tends to result in more frequent trading. Frequent trading exacts both direct and indirect costs that can dampen returns.

Discipline: Our findings show that women tended to have a more disciplined approach to investing that may have contributed to their stronger risk-adjusted returns[11] compared with men. Likewise, Betterment[12] found that male investors tended to invest 100% of their accounts in stocks at least twice as often as women. They also are six times more likely to make massive allocation shifts—switching from 100% stocks to 100% bonds or vice versa.

Willingness to Learn: Women are more likely to seek education and advice from investment professionals. In our 2018 investor survey, over half of women reported working with a personal financial advisor, compared with just under 40% of men.[13]

KEY TAKEAWAYS

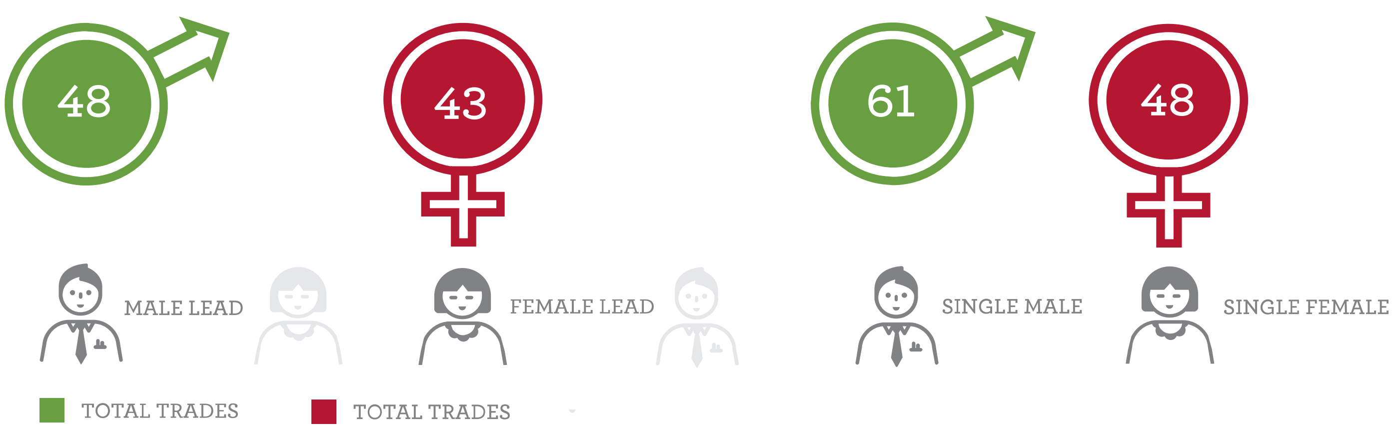
In our study, women, on average, traded less than men, benefiting their returns.[9]

Women tend to earn higher returns on their investments for the risks they take.

Women tend to be more willing to seek education and advice from investment professionals.

Trading and Gender

Women traded less frequently than men. Single men traded most frequently, but when men shared accounts with women, their trading fell significantly.



Source: Gender Differences in Performance at Wells Fargo Advisors, WIM Analytics, December 2016. Average trades over a five-year period from December 13, 2010–December 31, 2015.

[9]Gender Differences in Performance at Wells Fargo Advisors, WIM Analytics, December 2016.

[10]Brad M. Barber, and Terrance Odean, "Boys Will Be Boys: Gender, Overconfidence, and Common Stock Investment ," *The Quarterly Journal of Economics*, February 2001.

[11]Risk-adjusted returns control for account-level beta. Beta represents the systematic risk of a portfolio in comparison with the market as a whole.

[12]Findings from Betterment LLC, 2012–2015.

[13]Wells Fargo/Gallup Investor and Retirement Optimism Index, November 2018.

6.9%

Women have lower return expectations than men. In 2018, women expected to earn 6.9% on average on their investments, while men expected to earn 7.7% on average.

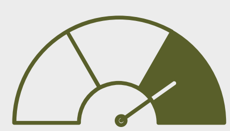
74%

74% of women believe that the stock market is a good place to grow their retirement savings, while over 80% of men believe so.

Source: Wells Fargo/Gallup Investors and Retirement Optimism Index, November 12–20, 2018. The index includes 1,022 investors aged 18+ randomly selected from across the country with total savings and investments of $10,000 or more.

Studies indicate that women outperform men on a risk-adjusted basis.

Sources: Gender Differences in Performance at Wells Fargo Advisors, WIM Analytics, December 2016.
"Boys Will Be Boys: Gender, Overconfidence, and Common Stock Investment," " *The Quarterly Journal of Economics*, February, 2001.



Single female investors outperformed other household segments, whether male lead, female lead, or single male.

Source: Gender Differences in Performance at Wells Fargo Advisors, WIM Analytics, December 2016

Perception Meets Reality

Women's greater willingness to show patience, forgo excessive trading, work with an advisor, and adhere to an investment plan are among the factors we believe led to better investment results. In December 2016, the Wealth and Investment Management (WIM) Analytics group conducted a study of Wells Fargo Advisors' accounts for which gender information was available. Single-female and female-led households represented 37% of these accounts. The study covered the period from December 2010 to December 2015 and supported the results of an earlier academic study—women investors tend to outperform men.[14]

Specifically, women investors in the study led men by a small absolute margin for the five-year period. Controlling for risk, however, led to higher average returns for the women investors.[15]

That is, women achieved higher returns on their investments while taking on less risk than men, if you measure risk by variability.[16] The WIM Analytics data showed that women investors, on average, took approximately 94% of the risk that men took.[15] Following a sound investment strategy and taking appropriate levels of risk are important to long-term results.

KEY TAKEAWAYS

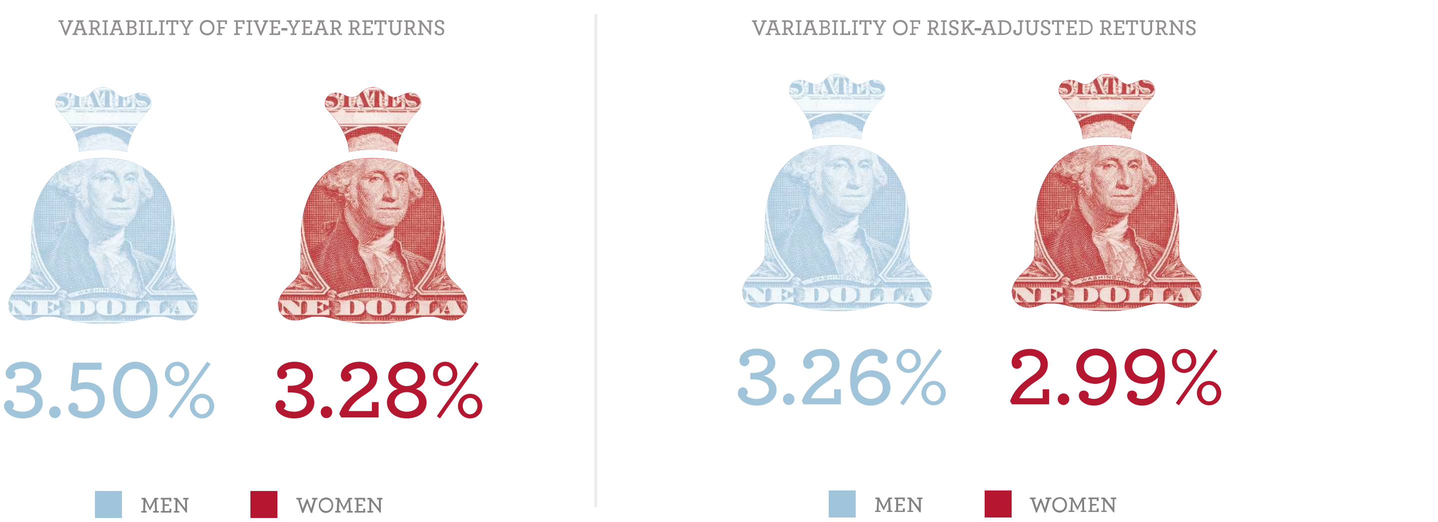
Women appear to have benefited from their lower trading activity, willingness to stick with a long-term investment plan, and openness to seeking investment advice.

Women's returns on their investments have led men's returns on a risk-adjusted basis.

Following a sound investment strategy and taking appropriate levels of risk are important to long-term results.

Variability of Returns for Women and Men

Women's investment returns showed less variability than those of men, despite their tendency toward higher performance.



[14]Source: "Boys Will Be Boys: Gender, Overconfidence, and Common Stock Investment," *The Quarterly Journal of Economics*, February 2001.

Note: Barber and Odean studied differences in equity portfolios while the WIM Analytics study compared full portfolio returns.

[15]Gender Differences in Performance at Wells Fargo Advisors, WIM Analytics, December 2016.

[16]Variability—a measure of how disperse (spread out) returns are relative to a benchmark. A lower variance indicates that returns are more similar across the data set.

Notes: Gender Differences in Performance at Wells Fargo Advisors, Wealth and Investment Management (WIM) Analytics, December 2016. The total study included more than 900,000 accounts from December 2010–2015 with investable assets of $50,000 or more. Excludes advisory accounts. Five-year time-weighted (or geometric mean) returns net of commissions and fees between December 2010 and December 2015. Past performance is no guarantee of future results. Performance results represent only the results of the survey.

KEYS TO BECOMING A BETTER INVESTOR

We think two keys to becoming a better investor are to know yourself and to review a few important investment concepts. You can determine your financial temperament,[17] or personality, by identifying your approach to investing.

Depending on your investment personality,[17] you may identify with one or more of these investor styles:

ARTISAN

- Is entrepreneurial and looking for new ways to make money
- Acts quickly on investments
- Is comfortable investing large sums of money in hopes of large returns

Financial Strength:
Searches out innovative ways to make money

What to Watch:
Possible overconfidence and tendency to focus too much on short-term investments

IDEALIST

- Prefers to focus energy on things other than money and finances
- Thinks of money as a necessary evil

Financial Strength:
Leaves investments alone to grow

What to Watch:
Not matching savings and investments to goals for which they have enthusiasm

GUARDIAN

- Is cautious with money
- Values financial security over growing wealth

Financial Strength:
Understands the importance of money

What to Watch:
Potential for low-risk investment

RATIONAL

- Is numbers oriented
- Considers themselves good with money
- Likes to stay involved with investments

Financial Strength:
Takes the time to understand investments

What to Watch:
Dwelling too much on previous poor investment decisions and losses

[17] Meir Statman, Ph.D., and Vincent Wood, CFA. "Behavioral Aspects of the Design and Marketing of Financial Products." *The Journal of Investment Consulting*. Summer 2004, Volume 7, Number 1.

Key Investment Concepts

Know Yourself: Understanding yourself as an investor can help you work better with a financial professional to find the style that's right for you. You may identify more as an artisan, a guardian, an idealist, or a rational. If you share finances, it also can help to understand your partner's investment personality—to consider what you can learn from them and what they can learn from you. There is no right or wrong type of investor—just people who relate differently to their money and who can potentially benefit from different strategies to help meet their investment goals and work toward financial independence.

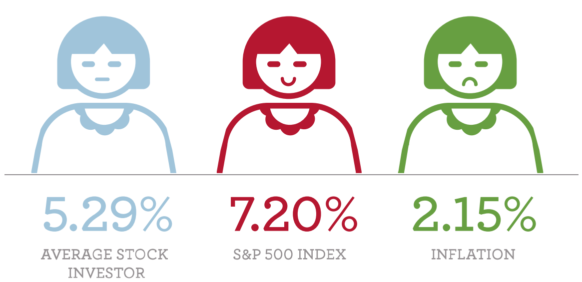
Know Your Asset Allocation: Many women self-identify as conservative investors, and one mistake that conservative investors can make is putting too much of their portfolio in cash. Given the current low yields on cash and cash alternatives, a better way to attempt to manage risk is through strategic asset allocation—spreading assets among stocks, bonds, real assets, and alternative investments. Academic studies[18] and our own research[19] have shown that strategic asset allocation tends to be the main driver controlling a portfolio's fluctuations. Specifically, our findings show that about 79% of return variability comes from strategic asset allocation. A relatively small percent comes from tactical asset allocation, security selection, and other unexplained variables.

Don't Time the Market: Investors who attempt to time the market can suffer from lower returns over time. According to a study by DALBAR, Inc., a financial services research firm, more than half of the gap in the return of the average stock investor and the return of the S&P 500 Index can be attributed to performance chasing and other bad investing habits. The message from DALBAR's yearly analysis has been consistent since its first study in 1994: "No matter what the state of the mutual fund industry, boom or bust: Investment results are more dependent on investor behavior than on fund performance. *Mutual fund investors who hold on to their investments are more successful than those who try to time the market.*[20]"

Note: Strategic Asset Allocation is a way of allocating different types of assets within an investment portfolio based on longer-term expectations for risk and return. Tactical Asset Allocation is a way of allocating different types of assets within an investment portfolio based on shorter-term expectations for risk and return.

Attempting to Time the Market Can Hurt Returns

Individual Stock Investors Versus the S&P 500 Index Over a 20-Year Period



[18]Gary P. Brinson, Randolph Hood, and Gilbert L. Beebower. "Determinants of Portfolio Performance." *Financial Analysts Journal* (July/August 1986). Gary P. Brinson, Brian D. Singer, and Gilbert L. Beebower. "Determinants of Portfolio Performance II: An Update." *Financial Analysts Journal* (May/June 1991).

[19]Determinants of Portfolio Returns, Wells Fargo Wealth Management, November 2011.

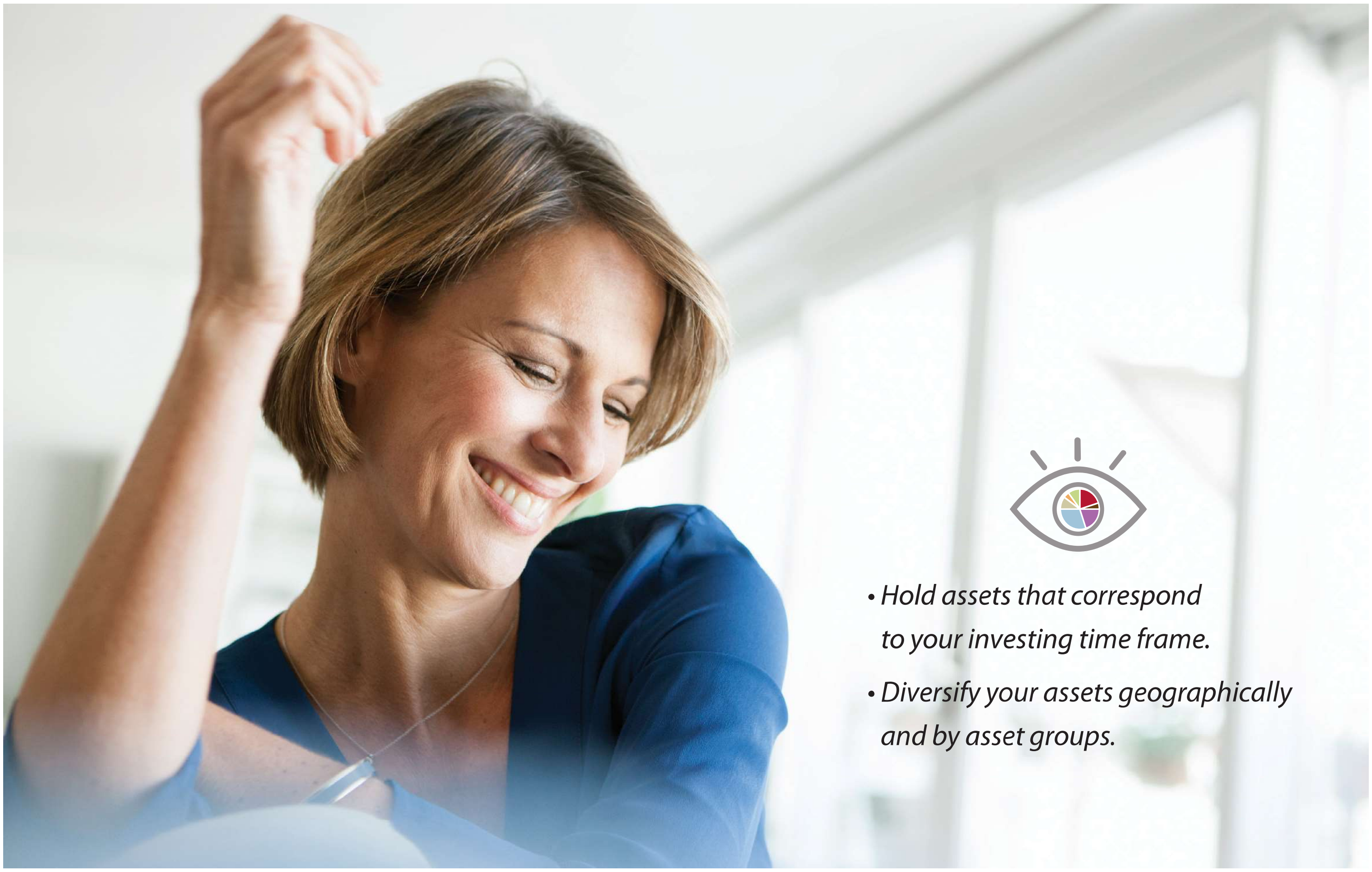
[20]Dalbar, Inc., 20 years from 1998–2017; "Quantitative Analysis of Investor Behavior," 2018, DALBAR, Inc., dalbar.com. **Past performance is not a guarantee of future results.** Dalbar computed the "average stock fund investor return" by using industry cash-flow reports from the Investment Company Institute. The "average stock fund return" figure represents the average return for all funds listed in Lipper's U.S. diversified equity fund classification model. All DALBAR returns were computed using the S&P 500 Index. Returns assume reinvestment of dividends and capital gain distributions. The fact that buy and hold has been a successful strategy in the past does not guarantee that it will continue to be successful in the future. The performance shown is not indicative of any particular investment.

KEY TAKEAWAYS

Identifying your investment personality can help you become a more competent and confident investor.

Risk-averse investors should focus more on their strategic asset allocation—which can help manage variability—and less on holding cash.

Investors should not attempt to time the market. Doing so can detract from returns.



- *Hold assets that correspond to your investing time frame.*
- *Diversify your assets geographically and by asset groups.*

"… the worst investment you can have is cash … We always keep enough cash around so I feel very comfortable and don't worry about sleeping at night. But it's not because I like cash as an investment. Cash is a bad investment over time. But you always want to have enough so that nobody else can determine your future essentially." —*Warren Buffett*

Source: CNBC, Warren Buffett, and Bill Gates: Keeping America Great, November 9, 2009

In our survey, men were more likely than women to say that they take advantage of opportunities, while women were more likely than men to say they stick with an investment plan. Sticking with an investment plan is usually considered a sound investment practice, while taking advantage of opportunities outside of the context of your plan could lead to market-timing pitfalls.

Source: Wells Fargo/Gallup Investor and Retirement Optimism Index, November 2018.

Educate, Research, Act

Learn More About Investing: Talking with an investment professional or a financial planner can help you understand the basics of investing—things like setting aside enough cash for an emergency, defining your time horizon and risk tolerance, and developing an appropriate asset allocation.

You can also learn about investing by reading financial journals, watching financial news channels to learn the industry terminology, or listening to investment-related podcasts or market updates on the radio.

Setting Investment Goals: Investment goals can be as varied as the people who define them, but they generally fall into the categories of income, growth, or a mix of the two. Moreover, each of your investment goals will generally have an associated time period that helps determine what type of assets you should potentially use to assist you in reaching your investment goals with the appropriate level of risk.

SAMPLE INVESTMENT GOALS	Time Horizon	Appropriate Risk Level	Assets to Consider
DOWN PAYMENT ON A HOUSE	6–12 Months	Low	Cash Alternatives (such as money market funds)
EDUCATION EXPENSES	5 Years	Modest	Bonds, Stocks, Public Real Estate (REITs)
GROWTH FOR RETIREMENT	15 Years	Higher	Bonds, Stocks, REITs, Commodities, Alternative Investments
BEQUEST TO CHARITY	30 Years	Very High	Stocks, REITs, Certain Types of Higher-Risk Bonds, Alternative Investments

Source: Wells Fargo Investment Institute Investor Attitude Survey, March 2017

Preparing for Retirement: If retirement is one of your investment goals, you need to consider your expected income from all sources versus your expected expenses. Even if you already are retired, it is still a good practice to periodically evaluate your income and expenses.

A general rule of thumb is that you will need to generate at least 80% of your preretirement income when you are retired. Also, women generally live longer than men, so they likely will end up spending more on everything from groceries to health care.

SOURCES OF INCOME

- Employment
- Social Security
- Pension
- Health Savings Account
- 401(k), 403(b), IRA, Roth IRA
- Other Investments

EXPENSES

- Housing/Rent
- Utilities
- Groceries
- Clothing
- Travel
- Health Care
- Other Expenses

KEY TAKEAWAY

A financial professional can help you match your investment goals with the appropriate assets to help you reach those goals.

If retirement is one of your goals, determine your expected income and expenses, and make plans to generate at least 80% of your preretirement income.

EDUCATE YOURSELF

- Use online budget and retirement calculators.
- Visit investment websites.
- Take an investment class.
- Meet with your investment professional and ask questions.

RESEARCH YOUR OPTIONS

- Know what retirement benefits your employer offers.
  - 401(k)
  - 403(b)
- Explore individual retirement accounts (IRAs).
- Know the differences between savings and investment accounts.
- Determine which provider types are right for you.
  - Full service
  - Telephone assistance
  - Digital advisor

TAKE ACTION

- Establish an investment plan.
  - Develop a budget that includes saving and investing.
  - Determine your appropriate asset allocation.
- Select investment vehicles.
- Monitor and rebalance your portfolio.
- Revisit your strategy when your circumstances change.

Risk Considerations

Asset allocation is an investment method used to help manage risk. It does not ensure a profit or protect against a loss. All investing involves risks, including the possible loss of principal. There can be no assurance that any investment strategy will be successful. Investments fluctuate with changes in market and economic conditions and in different environments due to numerous factors, some of which may be unpredictable.

Each asset class has its own risk and return characteristics. Alternative investments trade in diverse complex strategies that are affected in different ways and at different times by changing market conditions. Strategies may, at times, be out of market favor for considerable periods with adverse consequences for the investor. **Bonds** are subject to market, interest-rate, credit/default, liquidity, inflation, and other risks. Prices tend to be inversely affected by changes in interest rates. Credit risk is the risk that an issuer will default on payments of interest and/or principal. This risk is heightened in lower-rated bonds. **Cash alternatives** typically offer lower rates of return than longer-term equity or fixed-income securities and may not keep pace with inflation over extended periods of time. **Real assets** are subject to the risks associated with real estate, commodities, and other investments and may not be suitable for all investors. **Stocks** are subject to market risk, which means their value may fluctuate in response to general economic and market conditions, the prospects of individual companies, and industry sectors. **Real assets** are subject to the risks associated with real estate, commodities, and other investments and may not be suitable for all investors. **Real estate** has special risks, including the possible illiquidity of underlying properties, credit risk, interest-rate fluctuations, and the impact of varied economic conditions. The **commodities** markets are considered speculative, carry substantial risks, and have experienced periods of extreme volatility.

About the Authors

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Head of Global Asset Allocation Strategy

Tracie McMillion is the head of global asset allocation strategy for Wells Fargo Investment Institute (WFII). In her current role, Ms. McMillion leads the development of global asset allocation strategy. She oversees the creation of strategic asset allocation recommendations and writes economic and market commentary and analysis. Ms. McMillion has more than 22 years of experience in financial services. Prior to her current role, she served as an asset allocation strategist and a senior investment research analyst for Wells Fargo and predecessor firms. Earlier in her career, she served as lead portfolio manager for Evergreen Private Asset Management, where she managed assets for high-net-worth clients and philanthropic organizations. Ms. McMillion earned a Bachelor of Arts in Economics and a Master of Business Administration from the College of William and Mary in Virginia. She is a CFA® charterholder and a member of CFA Society North Carolina.

Veronica Willis
Investment Strategy Analyst

Veronica Willis is an investment strategy analyst for Wells Fargo Investment Institute (WFII). In her role, Ms. Willis assists in research and development of asset allocation recommendations and analysis of the economy and financial markets. Prior to her current role, she served as a research analyst for strategy around developed and emerging countries, commodities, and currencies. She began her career at Wells Fargo in 2012 and is an active member of several team member networks, including the Wells Fargo New Professionals Network, Women's Team Member Network, and Black/African American Connection.

Wells Fargo Investment Institute thanks Justin Kreiger, CFA, and John Morton, M.S., Ph.D., of Wells Fargo Wealth and Investment Management Analytics Group for the use of their research on "Gender Differences in Performance at Wells Fargo Advisors".

The Wells Fargo/Gallup Investor and Retirement Optimism Index was conducted August 5–14, 2016, by telephone. The index includes 1,021 investors randomly selected from across the country with a margin of sampling error of +/- four percentage points. For this study, the American investor is defined as an adult in a household with total savings and investments of $10,000 or more. About two in five American households have at least $10,000 in savings and investments. The sample size is composed of 71% nonretirees and 29% retirees. Of total respondents, 43% reported annual income of less than $90,000; 57% reported $90,000 or more.

Investment Expertise and Advice to Help You Succeed Financially

Wells Fargo Investment Institute is home to more than 100 investment professionals focused on investment strategy, asset allocation, portfolio management, manager reviews, and alternative investments. It's mission is to deliver timely, actionable advice that can help investors achieve their financial goals.

For assistance with your investment planning or to discuss the points in this report, please talk to your investment professional.