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STRATEGIES & IDEAS
FOR THE CHARLES
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FALL 2019

SNEAK PEEK
CHARLES R. SCHWAB'S
NEW MEMOIR



Yours, Mine & Ours

Strategies for investing together—and apart. Page 26

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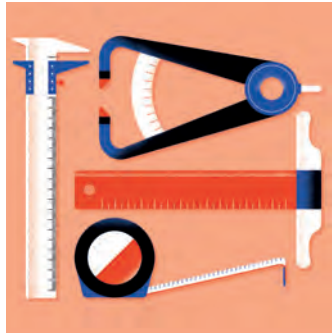
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SCHWAB ORIGINALS

Read



Learn more about Charles Schwab's new memoir, *Invested: Changing Forever the Way Americans Invest*, at aboutschwab.com/invested. And turn to page 30 for a sneak peek.

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CEO's NOTE

Planning Made Easy

With Schwab Intelligent Portfolios Premium™, creating a financial plan is easier and more affordable than ever.



Time and time again, investors with a financial plan say it helps them save regularly, better manage their debt and achieve greater wealth. Indeed, research has shown that those who have a plan and stick with it achieve three times more wealth than those without a plan.¹ So why don't more of us have one?

According to Schwab's 2019 Modern Wealth Survey—which tracks how well Americans across the wealth spectrum are planning, managing and engaging with their money—only 28% of people have a written financial plan. Of those respondents without a plan, nearly half believe they don't have enough money

to warrant one, while others assume the planning process is too complex or time-consuming.

That's why we launched Schwab Intelligent Portfolios Premium. It combines the powerful automated investing technologies behind Schwab Intelligent Portfolios® with unlimited one-on-one guidance from a CERTIFIED FINANCIAL PLANNER™ professional who can help prioritize your saving goals and create a personalized plan for reaching them.

Schwab Intelligent Portfolios Premium is subscription-based: After a one-time planning fee, there's a monthly subscription similar to what you might pay for music and movie services. Everyone enjoys the same pricing, regardless of how much they have to invest.

The sooner you get started on your financial plan, the better. For your future, please consider taking the next step today at schwab.com/portfoliospremium.

Sincerely,

Walt Bettinger
President & CEO

¹Annamaria Lusardi and Olivia S. Mitchell, *Financial Literacy and Planning: Implications for Retirement Wellbeing*, National Bureau of Economic Research, 05/2011.

See page 42 for important information. ♦ Please read the Schwab Intelligent Portfolios Solutions™ disclosure brochures at schwab.com/intelligentdisclosurebrochure for important information, pricing and disclosures related to the Schwab Intelligent Portfolios and Schwab Intelligent Portfolios Premium programs. (0819-9NX2)

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Own your tomorrow.

THE BOTTOM LINE

CONTENTS **CASH** | COLLEGE SAVINGS | SIDESTEPPING SCAMS | GREENWASHING | AND MORE



Cashing In

Where to park your cash to help capture higher yields.

Repeated interest rate hikes by the Federal Reserve since 2015 have boosted returns on some cash investments—so much so that three-month Treasury bills (which are considered a form of cash investment) were delivering their highest yields in more than a decade earlier this year.¹

That doesn't mean you should sell other investments to stockpile more cash; after all, past performance is no guarantee of future results. But it does

mean the time is ripe to put your cash to work. How hard depends on your time horizon:

■ **Everyday funds** should be kept somewhere ultraliquid—think a standard checking or savings account. Such accounts have recently been earning just a fraction of a percentage point, however, so if you've got cash you don't need for daily use, you might want to park it elsewhere.

■ **Short-term reserves** set aside to cover unexpected expenses could be invested in a money market fund—a very liquid type of mutual fund that invests in high-quality short-term debt securities such as Treasury bills. Although yields fluctuate, such funds strive to preserve the value of your investment, at the very least.

■ **Money you won't need for at least a month** also could be appropriate

for money market funds. However, certificates of deposit (CDs) might make more sense, depending on your time horizon. That's because CDs offer higher yields the longer your cash is invested (though if you need the money sooner than expected, you may be charged an early withdrawal penalty). What's more, CDs offer a fixed rate of return, which

can be advantageous when interest rates are in decline.

"It helps to have a clear understanding of your choices," says Rob Williams, CFP® and vice president of financial planning at the Schwab Center for Financial Research. "That way, you can put your cash to the best possible use."

¹Federal Reserve Bank of St. Louis, as of 04/22/2019.

See page 42 for important information. ♦ An investment in a money market fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. Although a money market fund seeks to preserve the value of your investment at \$1.00 per share, it is possible to lose money by investing in a money market fund. (0519-9THG)

NEXT STEPS

Compare your options and see current yields at schwab.com/cash.

The Leftovers

What to do if you over-contribute to a 529 college savings plan.



The prospect of a scholarship, grant or gift may have some parents wondering how much is too much when it comes to funding a 529 college savings account.

"An overfunded 529 is a common concern but actually not that common an occurrence," says Robert Aruldoss, a senior financial planning analyst at the Schwab Center for Financial Research. "Finding that college costs more—not less—than expected is a much likelier scenario."

Be that as it may, there are several options for oversavers—no matter the reason.

■ **Save it for later:** Once the beneficiary has earned an undergraduate degree, the remaining funds can be used at any point in the future for graduate, trade or vocational education.

■ **Change the beneficiary:** You can reassign a 529 to any direct relative, meaning not just offspring but also nephews, nieces, cousins, aunts and uncles—even yourself.

■ **Pay the penalty:** You can use 529 funds for noneducational purposes, but you'll have to pay a 10% penalty and federal income tax on at least a portion of the withdrawal (not to mention state taxes if you benefited from a state tax credit or deduction). Why

just a portion? Because only gains are taxable. For example, if a 529 account's overall holdings are 75% contributions and 25% gains, then 25% of any non-qualified withdrawal is taxable:

Nonqualified withdrawal	\$20,000
Percentage gains	25% (\$5,000)
Taxes	\$1,250*
10% penalty	\$500
Total taxes	\$1,750

That said, there are exceptions to the 10% penalty. If a student secures an employer-sponsored education benefit, tax-free scholarship, or certain other awards or grants, for instance, the 529 account holder is permitted to withdraw an equivalent amount without penalty, though ordinary income taxes will still apply.

"The important thing is to save away, secure in the knowledge you've got options if you happen to overdo it," says Robert.

*Assumes a federal income tax rate of 25%, no state income tax liability, and no state tax credit or deduction on contributions.

See page 42 for important information. (0819-9CEH)

NEXT STEPS

Learn about Schwab's 529 Savings Plan at schwab.com/529.



Spotting Scams

How awareness of common financial schemes can help you avoid them.

LEARN MORE

See all the ways Schwab helps keep your data safe at [schwab.com/schwabsafe](https://www.schwab.com/schwabsafe).

When a scammer succeeds in parting you from your money, there's an added insult you don't have with other types of financial fraud: You've been sucked in—duped—and that hurts. "You lose a bit of your self-respect along with your money," says Peter Campbell, a managing director in Charles Schwab's Financial Crimes Risk Management group.

Cybercrimes accounted for \$2.7 billion in financial losses in 2018, according to the FBI's most recent Internet Crime Report.¹ And while identity theft gets most of the headlines, other types of fraud cost consumers more.

Here are some potentially costly scams—and how to avoid them.

1. Email account compromise

■ **What it is:** Scammers target individuals by hacking or phishing their email to request unauthorized wire transfers.

Consumers are particularly vulnerable to this scam during real estate transactions, when they anticipate moving large sums of money.

■ **What you can do:** "Real estate scams, in particular, can cost consumers tens of thousands of dollars per transaction," Peter says. "As a result, you should verbally verify all wire transfers by calling the escrow or title company at a known phone number—not one contained in an email that might have been written by a fraudster."

2. Confidence fraud/romance

■ **What it is:** Perpetrators gain trust by pretending friendship or romantic interest, then persuade the victim to reveal sensitive financial information or even send money.

■ **What you can do:** "An interaction that occurs entirely online is a tip-off for a potential friendship/romance scam," Peter says. "Never send money to anyone you haven't met in person."

3. Nonpayment/nondelivery

■ **What it is:** Sending goods without ever getting paid, or paying without ever receiving goods.

■ **What you can do:** "When buying something valuable online that's not from a known retailer, ask to physically inspect the item or get an appraisal—or request proof of the seller's identity," Peter says.

4. Investment

■ **What it is:** Fraudsters offer large returns with minimal risk based on false information—think Ponzi, pyramid and retirement schemes.

■ **What you can do:** "If it sounds too good to be true, it probably is," Peter says. In particular, turn down opportunities that are available today only. "That's another sure sign of a scam," he says.

¹IC3 Annual Report Released," [fbi.gov](https://www.fbi.gov), 04/22/2019.

See page 42 for important information. (0819-920K)



Green Screen

Are environmental bonds worthy of the label?

Global issuance of environmentally conscious “green” bonds has exploded in recent years—from roughly \$10 billion in 2013¹ to \$168 billion in 2018.² Such bonds were created to fund projects with direct environmental benefits such as clean energy, low-carbon transportation and water-management systems. Unfortunately, they don’t all live up to the name.

Climate Bonds Initiative, a London-based nonprofit that certifies and tracks green bonds, has reportedly denied certification to hundreds of issuances that failed to meet its low-carbon requirements. In one case, an issuer was purportedly planning to use the proceeds of a green-bond issuance to finance upgrades to coal- and gas-power facilities.³

NEXT STEPS

Need help finding green-bond funds for your portfolio? Check out Schwab’s Socially Conscious Funds List at [schwab.com/social](https://www.schwab.com/social) or log in to [schwab.com/fundscreener](https://www.schwab.com/fundscreener) to screen for bond funds using a variety of criteria.

“It can be very difficult for individual investors to identify truly green bonds,” says Cooper Howard, director of fixed income and income planning at the Schwab Center for Financial Research. “Bond offering statements will sometimes say what the proceeds are being used for, but those documents can be cumbersome to wade through.”

That said, Cooper has two tips for investors interested in such bonds:

■ **Use a bond fund:** Fund managers can shoulder some of the burden of ensuring that funds intended for green projects are being used as promised. However, a fund’s green bona fides won’t always be evident from its name, so investors may need to do some research to find a fund that matches their goals. Also be aware that some green-bond funds might include a portion of bonds from nongreen projects to round out their holdings.

■ **Check reputable sources:** The Climate Bonds Initiative, for example, maintains a list of certified green bonds at climatebonds.net. Schwab also includes green-bond funds on its quarterly Socially Conscious Funds List (see “Next steps,” left).

The yields on green bonds and green-bond funds are often only slightly less than those paid by their nongreen counterparts. “Our research shows that you may take a bit of a haircut on yield,” Cooper says, “but many investors see it as a fair trade-off for knowing their money is being used to finance projects that align with their values.”

Investors looking for other ways to make a social impact with their investing might also consider municipal bonds. “Not all bonds issued by state and local governments are focused on the environment,” Cooper says, “but some offer another way to invest in projects that can have a positive social benefit.”

¹*Bonds and Climate Change: The State of the Market 2018*, climatebonds.net, 09/2018. |

²*Green Bonds: The State of the Market 2018*, climatebonds.net, 2019. | ³Mike Bird and Manju Dalal, “Environmentally Unfriendly Deals Highlight Gray Areas for ‘Green Bonds,’” [wsj.com](https://www.wsj.com), 08/19/2018.

See page 42 for important information.

◆ Fixed income securities are subject to increased loss of principal during periods of rising interest rates. Fixed income investments are subject to various other risks including changes in credit quality, market valuations, liquidity, prepayments, early redemption, corporate events, tax ramifications and other factors.

(0519-9BZB)

Prospecting Prospectuses

How to identify the most useful information in mutual fund filings.

For something that's supposed to supply information, the average mutual fund prospectus seems to do a better job of obfuscating it.

Nearly 80 years after the Securities and Exchange Commission (SEC) mandated such disclosure documents,

most existing and prospective fund investors disregard them because they contain too much information or are too difficult to understand, according to the Investment Company Institute.¹ Last year, the SEC even solicited feedback from everyday investors about how to improve disclosures in fund prospectuses and other shareholder reports.

While the SEC has yet to make improvements, investors can still unearth useful nuggets—particularly in the following three areas, says Michael Iachini, vice president and head of manager research at Charles Schwab Investment Advisory.



1 Fund fees and expenses: When comparing similar funds, be wary of those allocating a disproportionate amount of their overall operating expenses to costs other than management fees. “Distribution fees and other costs unrelated to the quality of the fund’s management can come at a cost to shareholders,” Michael says. If a fund’s “other expenses” category (which includes administrative and legal costs) is more than its management fee, for example, you may want to keep looking.

2 Principal investment strategies: The more reputable mutual funds go into some detail about the types of companies in which they’re looking to invest and their process for buying and selling their shares. “The vaguer their strategy, the more cautious investors should be,” Michael says. This is also where you find out how far a fund is permitted to deviate from its strategy. An investment-grade bond fund that allows up to 25% of its holdings in high-yield debt, for example, might be too risky for some.

3 Principal risks: Investing inevitably involves risks; the question is, are they within the limits of what you’d expect? If your plain-vanilla index fund cites “counterparty risk,” for example, it’s likely using outside parties of varying quality to gain exposure to different parts of the market. “There might be a perfectly good reason for it,” Michael says, “but without knowing your specific exposure, such unexpected risks can sometimes be cause for concern.”

“Taken together, these and other prospectus sections can give investors a much fuller picture of a prospective mutual fund—and ultimately lead to better decision-making,” Michael says.

¹*Mutual Fund Investors’ Views on Shareholder Reports: Reactions to a Summary Shareholder Report Prototype*, 10/2018.

See page 42 for important information.
♦ Investing involves risks, including loss of principal. (0819-95HL)

NEXT STEPS

To find a fund’s prospectus and other filings, log in to schwab.com/research, enter its ticker symbol and then click the Prospectus link.

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ASK CARRIE



BY CARRIE SCHWAB-POMERANTZ

Lesson Plans

How to talk to kids about money.

Q

Dear Carrie,
As someone who had to learn about money management the hard way, I'd like to ensure my daughter and son are financially savvy *before* they head out on their own. What would you suggest?

A

Dear Reader,
This is such an important subject and well-timed as our children head back to school. But before I answer your question, I'd like to ask two of my own:

- Will any of your children's classroom time be devoted to learning about money?
- When it comes to financial know-how, do you believe your daughter and son are on equal footing? ▶



You may not be surprised to learn most people answer “no” to the first question. Only 17 states have mandated financial curricula, so the majority of kids are missing out on this important part of their education. But you may not be aware that the issue is all too often compounded for girls, who, despite advances in many other areas, are still not getting the same financial start as boys.

The good news? As parents, we can make a difference. Here are seven ways we can help our children—sons *and* daughters—become financially self-sufficient adults.

1 Talk openly—and equally

One of the first rules of the road when teaching kids about money is to talk about it openly. Studies show that parents are more likely to talk to girls about budgeting and boys about long-term financial planning like investing. So it's up to us to make sure we have the same money conversations with our daughters and sons—whether it's about paying for groceries or saving for retirement.

2 Get them involved

Taking a trip to the store? Even young children can learn to handle money, comparison shop, and choose between a need and a want. Planning a family vacation? Get everyone involved in a cost analysis and savings plan. Is college on the horizon? Both girls and boys should be aware of the costs and how they'll be covered—including possibly contributing some of their own earnings to a college savings account. Of course, the extent to which you include your kids in day-to-day money issues will depend on their ages, but make certain when you do include them you don't divide topics by gender.

3 Make equal pay for equal work a given at home

On average, women are paid only 80 cents for every dollar paid to men,¹ and

With women living longer and generally earning less, financial independence is essential.

often that pay gap begins at home. If your kids earn their allowances by doing chores, be sure to pay an equal amount for equal work. Try not to divide chores by gender (e.g., girls clean the kitchen, boys mow the lawn) and don't value one type of work over another. You can help your daughter gain the confidence to negotiate a fair salary in the future by showing her at an early age that a job well done has the same value no matter who does it.

4 Teach financial responsibility

Once kids have money of their own, they need to learn how to manage it. You can start the savings habit by having young kids set aside a portion of their own money for something special. Encourage older kids to get a part-time job and then make them responsible for sharing the cost of some of their own expenses. When it comes time for big-ticket items like a car, include your kids in the process of research and financing. These aren't gender-based lessons; they're real-world situations that everyone needs to learn how to handle.

5 Explain financial realities for women

Even if you're doing all the right things at home and treating your kids equally, the reality is that women do face unique challenges. So even before your daughter enters the workforce, have an open and honest conversation about the wage gap and other potential inequalities. As she applies for jobs, discuss the importance of researching

qualifications and salaries so she's prepared to present her skills and be her own advocate. Excellence is excellence, no matter your gender, and should be compensated as such—but chances are she'll still have to take added steps to prove her worth.

6 Encourage financial independence

As soon as your kids have an income, help them open a retirement account and begin to save for the future. When they have access to a 401(k), encourage them to contribute 10% to 15% of their annual salary, or at least enough to get the full company match. But don't stop there: Help your children to invest, especially your daughter. With women living longer, generally earning less and working for fewer years than men, financial independence is essential. One of the realities is that women are more risk averse than men and hesitate to get into the market. But being too cautious is itself a risk—and one reason women fall behind men in retirement savings.

7 Set a good example

Kids learn as much by what we do as by what we say. The example you set consciously or unconsciously will send a message about male and female roles around money. Are both parents equally involved in the household finances? Or does Mom pay the bills and Dad handle the investments? The kids will notice.

While every family has its own way of divvying up financial tasks, the important thing is to show that both men and women have the capability—and responsibility—to understand and be involved. If you can do that, you'll be providing all your children with the tools they need to thrive. ■

Carrie Schwab-Pomerantz (@carrieschwab), CFP®, is president of Charles Schwab Foundation and senior vice president of Schwab Community Services at Charles Schwab & Co., Inc.

¹America's Women and the Wage Gap, National Partnership for Women & Families, 05/2019.

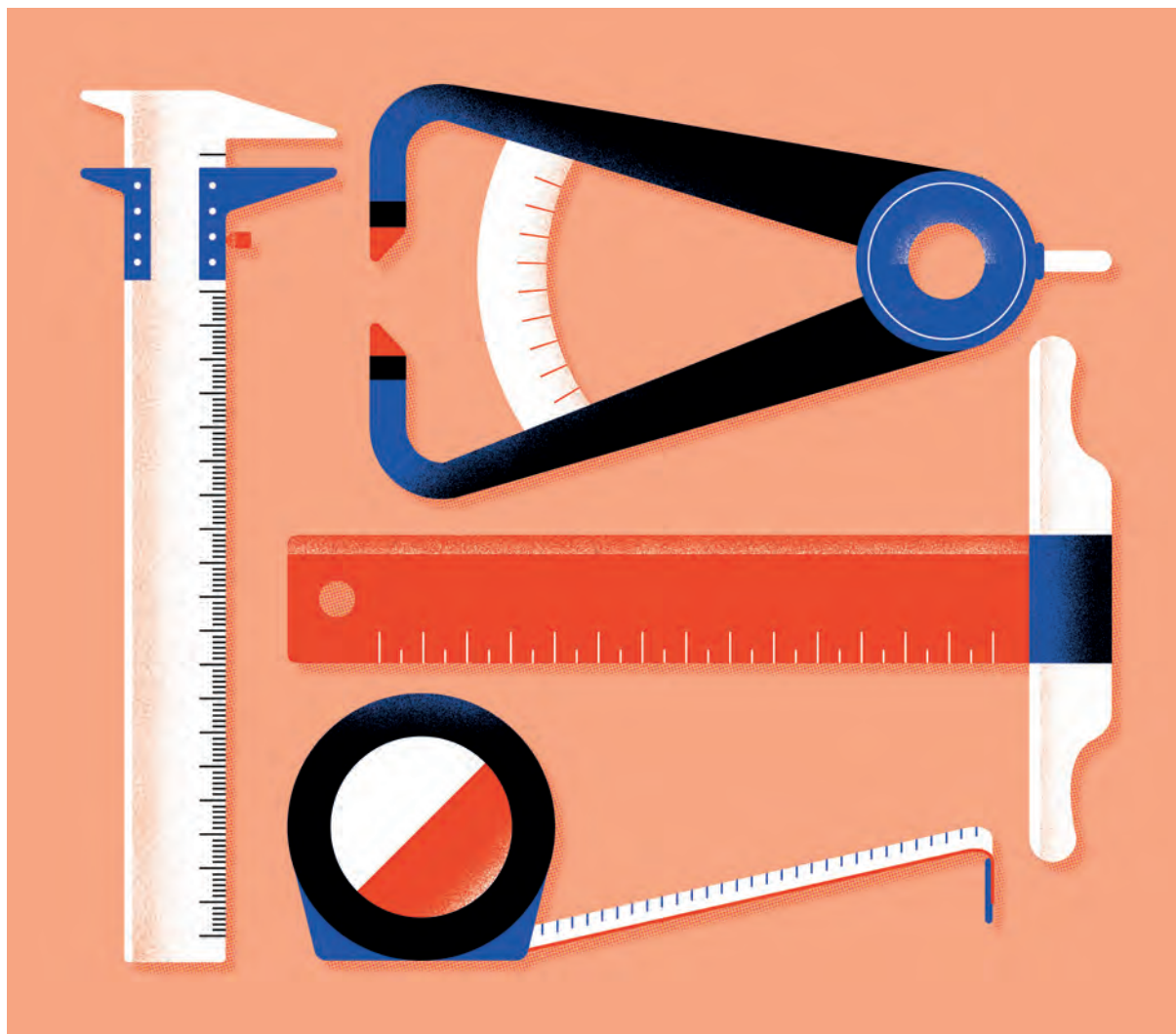
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NEXT STEPS

Read more answers to real-world money questions at schwab.com/askcarrie.

PERSPECTIVES

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4 Tools for Picking Value Stocks

Our favorite financial metrics for building a stock portfolio.

By Steven P. Greiner, Ph.D.

Picking stocks isn't simply a matter of choosing a few companies you like, then executing some trades—just because a company makes stellar products doesn't guarantee it will be a good investment.

If you want to find quality stocks that have the potential to go the distance, it's far better to dig into their financials. How are profit margins? Is the company overleveraged? What about cash flow?

The fundamental goal here is to identify companies that might be undervalued in the marketplace, also known as value stocks. Here are our four favorite metrics for evaluating the financial health of such stocks. ▶

1 Price-to-earnings ratio

Looking at a company's price-to-earnings (P/E) ratio—that is, its current stock price relative to its earnings per share—is useful for determining its intrinsic worth relative to its market value. A lower P/E ratio, for example, suggests the stock may be underpriced and could have room to rally.

Some investors look at a P/E ratio based on expected earnings; however, that introduces another layer of guesswork. We suggest sticking with historical earnings and looking at profits over the past four quarters. And since these ratios tend to vary between sectors, make sure you're comparing the P/E ratios for companies within the same sector.

- To view a company's P/E ratio over time, log in to schwab.com/research, enter its ticker symbol, click the Charts tab and then select P/E Ratio from the Indicators dropdown.

2 Return on equity

After gauging a company's valuation, you'll want to know about the quality of its earnings. Does the company have the financial strength to maintain its profits or, ideally, to grow them? One way to assess this is by looking at its return on equity (ROE), or how efficiently the company uses its capital. One formula for determining this is:

$$\text{net income} \div (\text{assets} - \text{liabilities})$$

A higher percentage is better, but, as with P/E ratio, a company's ROE should be assessed relative to its peer group.

Be aware that a sudden jump in ROE may be due to an increase in a company's debt—not an improvement in its profitability. So always check to see whether a company's debt levels have changed significantly.

- To find a company's ROE, log in to schwab.com/research, enter its ticker symbol and then click the Ratios tab.

3 Volatility

Swings in the price of a stock can be an indication that investors are uncertain about its earnings. What is the degree to which the daily share price fluctuates relative to its industry peers?

Generally speaking, you want a stock to have lower-than-average volatility, as it may signal steadier earnings. Unfortunately, such analyses can be difficult for individual investors to perform, in which case consulting volatility forecasts from industry experts can help.

- Schwab Equity Ratings® include a Price Volatility Outlook for all rated stocks. To screen for stocks by their volatility outlook, log in to schwab.com/stock screener, click Analyst Ratings, select SER Volatility Outlook, and then choose Low, Medium and/or High.

4 Momentum

Increasing investor interest is a positive sign, all else being equal. If, over the past six months, a stock's price has broken above the range it had been trading within for an extended period, the stock could have momentum and may continue to climb. That said, positive momentum is more like extra credit and shouldn't trump other metrics such as valuation.

- To view a company's momentum over time, log in to schwab.com/research, enter its ticker symbol, click the Charts tab and then select Momentum from the Indicators dropdown.

Proceed with caution

These four metrics are a start, but successfully picking individual value stocks is difficult, mostly due to the amount of research and time it takes. As a result, even the most talented amateurs might want to limit their investment in individual equities to 5% to 10% of their nonretirement portfolio. ■

See page 42 for important information. ♦ Schwab Equity Ratings and the general buy/hold/sell guidance are not personal recommendations for any particular investor or client and do not take into account the financial, investment or other objectives or needs of, and may not be suitable for, any particular investor or client. Investors and clients should consider Schwab Equity Ratings as only a single factor in making their investment decision while taking into account the current market environment. ♦ Investing involves risks, including loss of principal. (0819-9P9T)

Do it yourself (with help)

For those wishing to pick their own value stocks, Schwab Equity Ratings can help.

Schwab Equity Ratings is a system we developed at the Schwab Center for Financial Research that evaluates some 3,000 U.S.-traded stocks using a wide variety of financial metrics. We assign each stock a letter grade from A through F, depending on how likely we think it is to outperform or underperform the market over the next 12 months. Stocks that earn an A rating, for example, are expected to strongly outperform the market, while those that earn an F are expected to strongly underperform.

Just how well does the ratings system work? If you look back at nearly 17 years of data, top-rated (A) stocks outperformed middle-rated (C) stocks by an average of 3.47 percentage points, while the lowest-rated (F) stocks underperformed the middle group by an average of 8.58 percentage points.*


If you have your own ideas for how to pick stocks but want to narrow the pool you select from, screening for A or B stocks may be a good place to start.

- To find the Schwab Equity Rating for a prospective stock investment, log in to schwab.com/research, enter its ticker symbol and then click its Schwab Equity Rating letter grade to view the full report.

*Source: Schwab Equity Ratings. Data from 05/06/2002 through 04/23/2019.



Steven P. Greiner, Ph.D., is senior vice president of Schwab Equity Ratings at the Schwab Center for Financial Research.



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Conscientious Investing

Putting your money where your values are can be enriching in more ways than one.

By Michael Iachini

Some people have investing goals that go beyond earning a return. For those who want to use their investment dollars to support their personal values, socially conscious investing—which seeks to deliver environmental and social improvements alongside competitive financial returns—is one way to go.

Once considered an investment fad, socially conscious investing is today a \$12 trillion business,¹ with nearly 400 exchange-traded funds (ETFs) and mutual funds guided by socially responsible investing (SRI) strategies.² What's more, these funds have demonstrated they can keep up with—if not exceed—the performance of more traditional funds.

So, how do you go about identifying and selecting an SRI fund that aligns with your values? Here are three factors to consider.

1 Investment approach

Most SRI funds follow one of three strategies:

■ **Exclusionary:** A fund manager begins with a broad market index—say, the S&P 500®—and then removes those companies that don't align with the fund's stated social goals. Some funds exclude companies in certain lines of business—firearms, gambling or tobacco, for instance—while others screen based on company behavior, such as those in violation of international human rights standards.



Exclusionary approaches may eliminate entire sectors, which could reduce diversification and lead to significant performance differences relative to a fund's benchmark index.

■ **Thematic:** Employing an inclusive rather than exclusive approach, fund managers use environmental, social and governance (ESG) criteria—such as business ethics, carbon emissions and human rights—to determine a company's ethical and environmental impact and potential future financial performance. Thematic funds tend to be dominated by a single industry and concentrated on issues such as air quality, alternative energy or clean water. Because thematic funds are relatively narrow in focus, they may be better suited to the margins of your portfolio.

■ **Best in class:** A fund manager selects securities based on strong ESG criteria relative to industry peers. Best-in-class funds may therefore include defense, energy, paper/timber and utility companies among their holdings—sectors that might be prohibited by other SRI approaches. Though often more diverse, these funds might be regarded as less socially responsible than exclusionary or thematic SRI funds.

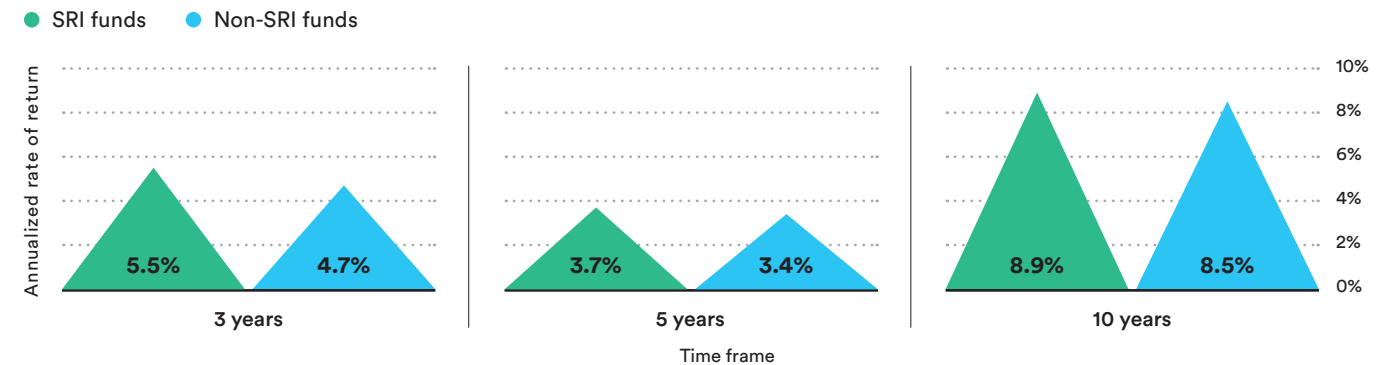


Michael Iachini, CFA®, CFP®, is vice president, head of manager research at Charles Schwab Investment Advisory, Inc.

ORIGAMI AND PHOTOGRAPHY BY TARO STUDIO

Doing well by doing good

Over the past decade, SRI funds have slightly outperformed non-SRI funds.



Source: Charles Schwab Investment Advisory, Inc., with data from Morningstar, as of 12/31/2018. Returns represent the average annualized performance of U.S. equity open-end socially responsible and non-socially responsible mutual funds. Past performance is no guarantee of future returns. Morningstar defines funds as socially responsible if they invest according to noneconomic guidelines such as environmental responsibility, human rights or religious views.

Be that as it may, the methodology used to score companies and optimize performance can get complicated. What's more, the skill of the manager and the rules governing the construction of the SRI index (in the case of passively managed funds) are of key concern. Make sure you understand both when selecting an investment that's suitable for you.

2 Performance

For years, critics argued that SRI investors sacrificed performance on the altar of good intentions. While that may have been the case in the past, today's SRI funds have been keeping pace with their non-SRI peers.

For example, the MSCI KLD 400 Social Index produced an average annual return of 7.53% over the 15-year period ending December 2018—just a quarter of a percentage point below the S&P 500's 7.77% over the same period.³ And data from Morningstar shows that, on average, SRI mutual funds have slightly outperformed their non-SRI counterparts in the short, medium and long terms (see "Doing well by doing good," above).

That said, many SRI funds have limited performance histories, meaning it may not be clear how they will perform under varying market conditions.

3 Fees

Selecting companies for socially responsible funds is an involved, time-consuming process that requires specialized skills, which may lead to higher operating expense ratios than those of comparable non-SRI funds—although SRI pricing has become more competitive over time.

Of the funds that Morningstar identifies as socially conscious, for example, 53% have lower expense ratios than their non-SRI peers.⁴ You should nevertheless determine for yourself whether the fees associated with a particular SRI

What about bonds?

With socially conscious bonds, creating a values-based portfolio with adequate diversification can be challenging. That's because the lion's share of the U.S. bond market is made up of Treasuries and mortgage-linked bonds, whose environmental and social impact are difficult to measure.

However, there are SRI funds for corporate bonds (see "Green Screen," page 8), and even balanced funds that blend socially responsible bonds and stocks within a single investment vehicle (on the Schwab Socially Conscious Funds List, look for funds whose Morningstar Category includes the word "Allocation").

fund are acceptable vis-à-vis its non-SRI counterparts.

Building a values-based portfolio

While most socially conscious funds are eager to advertise their bona fides, don't assume that an SRI fund aligns with your values until you have verified its holdings and methodology. One resource is a fund's prospectus document, which details principal investment strategies and risks, among other information (see "Prospecting Prospectuses," page 9).

Schwab's ETF screener (schwab.com/ETFscreener) and mutual fund screener (schwab.com/fundscreener) both have filters that allow clients to find and compare SRI funds that meet certain ESG criteria. You can also consult the Schwab Socially Conscious Funds List (schwab.com/social) to find socially responsible ETFs and mutual funds prescreened by Schwab experts. ■

¹Report on US Sustainable, Responsible and Impact Investing Trends 2018, ussif.org. | ²Morningstar Direct, as of 12/31/2018. | ³Ibid. | ⁴Ibid.

See page 42 for important information. ♦ Examples provided are for illustrative purposes only and not intended to be reflective of results you can expect to achieve. ♦ Socially screened funds exclude certain investments and therefore may not be able to take advantage of the same opportunities or market trends as funds that do not use social screens. (0819-9DJS)

End of an Era

The Federal Reserve paused on rate hikes—now what?

By Kathy Jones

After raising interest rates nine times between December 2015 and December 2018, in January the Federal Reserve hit pause on further hikes, citing slowing global and U.S. growth.

This new “neutral” stance means the Fed is now neither encouraging nor inhibiting economic growth. Let’s take a

hike—especially if the following four key indicators start to signal a more significant economic slowdown.

■ **Lending conditions:** Banks’ willingness to lend is key to Fed policy decisions. Credit standards are already tightening; if they become too tight, the Fed may consider cutting rates to help stimulate borrowing and investing.

■ **Manufacturing production:** Since 1984, five of nine rate-cutting cycles were preceded by a drop below 50 in the ISM Manufacturing Index—which tracks changes in manufacturing production levels. In May, the index

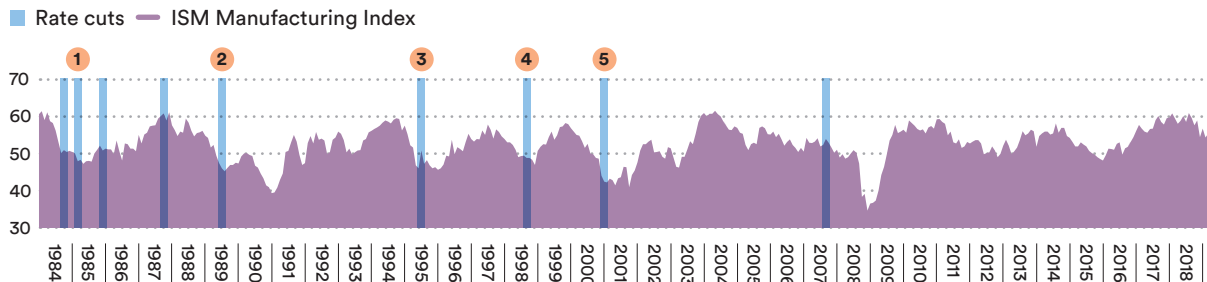
expect. That makes many people nervous, because an inverted yield curve has preceded every modern recession.

What to do now

Given the spate of yield-curve inversions this year, we suggest fixed income investors hold bonds with both short-term maturities of one to three years and intermediate-term maturities of seven to 10 years. (Those with maturities between three and seven years have lately been most likely to yield less than their short-term counterparts.)

Too close for comfort

The ISM Manufacturing Index dipped below 50 ahead of five of the past nine rate-cutting cycles.



Source: Bloomberg L.P. Data from 01/01/1984–05/31/2019. Blue bars indicate the first rate cut in past easing cycles.

look at what prompted the policy shift, the likelihood of any future Fed rate adjustments and how investors should navigate the current environment.

What drives the Fed?

Many global central banks are easing their monetary policies to accommodate weakened growth due to a slowdown in business investment and trade. Meanwhile, the domestic economy has been cooling—so much so that the Fed downgraded its U.S. gross domestic product growth estimates, from 2.3% to 2.1% for 2019.

As a result, we believe the Fed’s next move is more likely to be a rate cut than

sat at 52.1 and has been trending lower for more than a year (see “Too close for comfort,” above).

■ **Unemployment:** At 3.6%, the unemployment rate in May was at its lowest level in a half-century. Should it start ticking upward, as the Fed projects, even a seemingly modest increase—say, less than half a percentage point—could take a toll on the economy by way of decreased production and consumer spending.

■ **Yield curve:** The yield curve, which plots the difference in yields between short- and long-term U.S. Treasury bonds, has inverted several times this year—meaning short-term rates were higher than long-term rates, which is the opposite of what you’d normally

Furthermore, the recent downgrades in both U.S. and global economic forecasts may have an outsized impact on equity income— income from dividend-paying stocks, for example. For investors with exposure to such assets, it’s important to diversify with higher-quality bonds, such as U.S. Treasuries, which may help offset some risk in the event of an economic slowdown. ■



Kathy Jones (@kathyjones) is a senior vice president and chief fixed income strategist at the Schwab Center for Financial Research.

NEXT STEPS

Want to adjust your bond portfolio to fit the interest rate environment? Talk to a Schwab fixed income specialist at **866-893-6699**.

See page 42 for important information. ♦ Fixed income securities are subject to increased loss of principal during periods of rising interest rates. Fixed income investments are subject to various other risks including changes in credit quality, market valuations, liquidity, prepayments, early redemption, corporate events, tax ramifications and other factors. **(0819-9G1A)**

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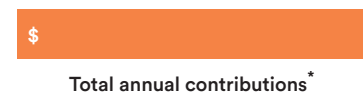
On Track for Retirement?

Here's how much savings you should have on hand if you're going to reach your goal.

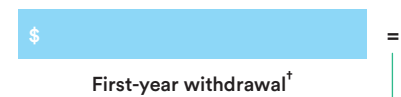
As a general rule, you want to enter retirement with a portfolio that's roughly 25 times the amount you'll need to withdraw your first year, after accounting for Social Security and other income sources. So, if you'll need \$40,000 from your portfolio, you'll want to enter retirement with \$1 million.

But once you know your retirement-portfolio goal, how do you know if you're on track to reach it? Here's how to calculate how much you should have saved by now—and what to do if you're falling short.

1 How much are you saving in your retirement accounts each year?



2 How much money will you withdraw from your portfolio in your first year of retirement?



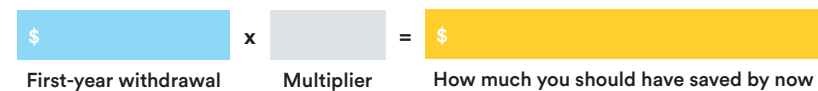
Savings rate

Age	0%	5%	10%	15%	20%	25%	30%
30	6.5	5.5	4.5	3.6	2.6	1.6	0.6
35	7.9	7.0	6.1	5.2	4.3	3.3	2.4
40	9.6	8.7	7.9	7.1	6.3	5.5	4.6
45	11.6	10.9	10.2	9.4	8.7	8.0	7.3
50	14.0	13.5	12.9	12.3	11.7	11.1	10.6
55	17.0	16.6	16.2	15.7	15.3	14.9	14.5
60	20.6	20.4	20.2	19.9	19.7	19.5	19.2

Multiplier‡

3 Cross-reference your savings rate with your age (rounding up, if necessary) to find your multiplier.

4 Multiply your first-year withdrawal by your multiplier to calculate how much you should have saved by now to be on track toward your goal.



Let's look at how the calculation plays out for three hypothetical investors. ▶

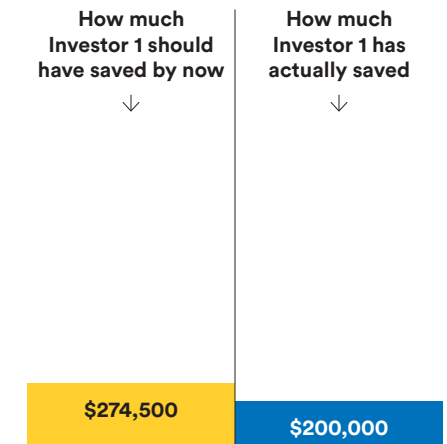
*Total annual contributions include employer contributions, if offered. †In today's dollars. ‡Multipliers are calculated using a variety of factors, including life expectancy and projected investment returns.

See page 42 for important information.

◆ Please read the Schwab Intelligent Portfolios Solutions™ disclosure brochures for important information, pricing, and disclosures related to the Schwab Intelligent Portfolios and Schwab Intelligent Portfolios Premium programs. Schwab Intelligent Portfolios® and Schwab Intelligent Portfolios Premium™ are made available through Charles Schwab & Co. Inc. ("Schwab"), a dually registered investment advisor and broker dealer. ◆ Examples provided are for illustrative purposes only and not intended to be reflective of results you can expect to achieve. ◆ Investing involves risks, including loss of principal. (0819-9HGY)

Investor 1 is behind

Total annual contributions:	\$4,500
First-year withdrawal:	\$45,000
Savings rate:	10%
Age:	35
Multiplier (see table):	6.1



If you're behind

Don't panic—but do act. Here are a few things you can do to get back on track:

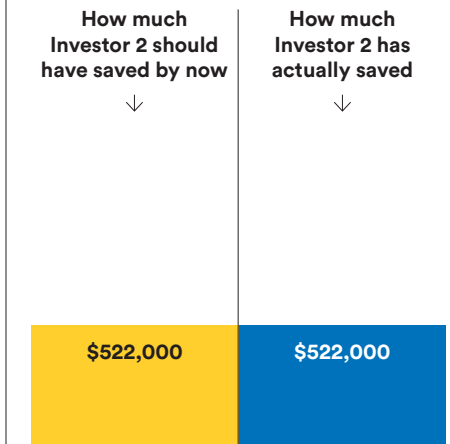
➔ **Save more now:** It's the most obvious—and often most difficult—solution. But the sooner you boost your savings, the longer your money has to benefit from compound growth. If Investor 1 started saving an extra \$400 per month today, for example, they'd be on track.

➔ **Reassess your goal:** Will you really need as much as you think? Don't forget to consider Social Security and other sources of income when calculating how much you'll need from your portfolio in that first year. To estimate your future Social Security benefits, visit ssa.gov/oact/quickcalc.

➔ **Stay flexible:** If you think you might fall short, don't get discouraged. If you work a few years longer, or if you work part time in retirement, you may not need to tap your portfolio for your full annual target right away. That could also help delay Social Security, which could boost your benefit. (For more, see "Retirement Countdown," page 34.)

Investor 2 is on track

Total annual contributions:	\$12,000
First-year withdrawal:	\$60,000
Savings rate:	20%
Age:	45
Multiplier (see table):	8.7



If you're on track

Keep up the good work:

➔ **Max out your retirement accounts:** If you're age 50 or older, in 2019 you can contribute up to \$25,000 to a 401(k) and \$7,000 to an Individual Retirement Account. (Those under 50 can contribute up to \$19,000 and \$6,000, respectively.)

➔ **Stick with stocks:** Your portfolio should become more conservative as you near retirement—but not too conservative. Consider maintaining at least some exposure to stocks to capture market growth, but not so much that you lose sleep should the market stumble. (For more, see "Retirement Countdown," page 34.)

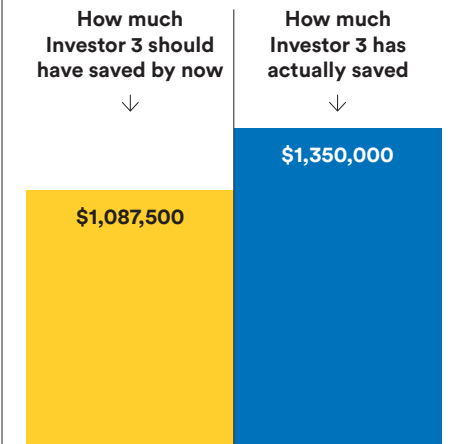
NEXT STEPS

Need help creating a realistic retirement plan? Work one-on-one with a CERTIFIED FINANCIAL PLANNER™ professional when you enroll in Schwab Intelligent Portfolios Premium™. Get started at schwab.com/portfoliospremium.

Source: Schwab Center for Financial Research. These examples are hypothetical and for illustrative purposes only. The table illustrates the required portfolio size as a multiple of the retirement income needed for a 30-year retirement starting at age 65. Calculation uses a 4% initial withdrawal rate based on current age and annual contributions as a percent of the future income need. Future income need is adjusted at a constant 2% annualized inflation rate. Annual savings increase by a constant 2% until retirement. Assumes a constant 6% return. Does not assume taxes or fees.

Investor 3 is ahead

Total annual contributions:	\$22,500
First-year withdrawal:	\$75,000
Savings rate:	30%
Age:	55
Multiplier (see table):	14.5




If you're ahead

Congrats—your diligent saving is paying off. To maintain your cushion:

➔ **Keep saving:** It's wise to continue saving as much as you can for as long as you can. You never know when life—or the market—will throw you a curveball.

➔ **Revisit your assumptions:** Double-check that you haven't underestimated how much income you'll need in retirement or overestimated how long you can stay in the workforce. And be sure you've accounted for expenses that may go up in retirement, such as health care and housing. (For more, see "Retirement Countdown," page 34.)



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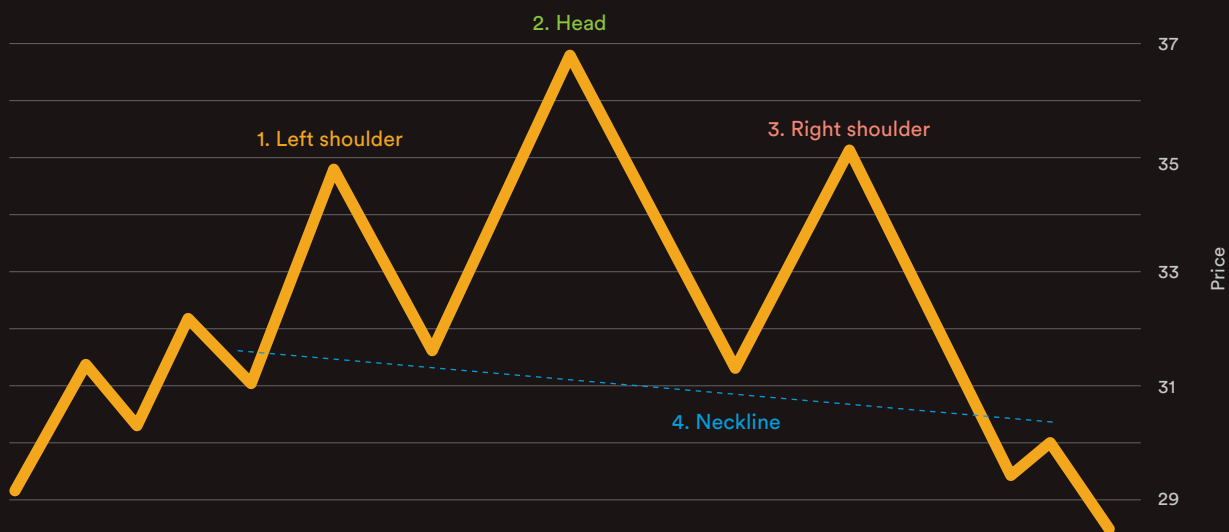
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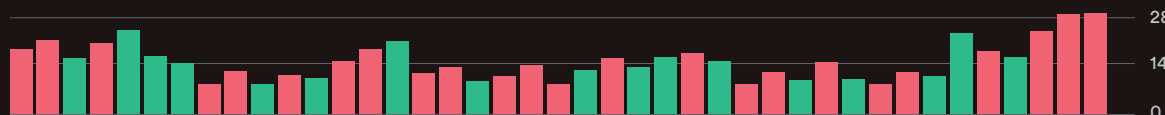
TRADING

Heads-Up

Identifying head-and-shoulders patterns can be tricky but profitable. By Lee Bohl



Volume (in millions)*



Take a look at any intraday stock chart and you're bound to see head-and-shoulders patterns—a central peak flanked by two smaller peaks—popping out all over the place.

These triple-peaked chart patterns can be useful indicators of a major trend reversal but are also among the easiest to misread. Indeed, many investors have paid a steep price for placing a trade without waiting for signals confirming the pattern.

What to look for

To detect a true head-and-shoulders trend reversal, it helps to understand how they're created:

1 *The left shoulder* forms when investors pushing a stock higher temporarily lose enthusiasm.

2 *The head* forms when enthusiasm peaks and then declines to a point at or near the stock's previous low.

3 *The right shoulder* forms as the stock price rallies once again but fails to reach its previous high before falling again.

4 A fourth component—*the neckline*—is formed by drawing a line underneath the troughs established just before and just after the head. When the

stock's price dips below this trend line, it's usually a strong indication that the pattern has broken and it's time to sell your position.

Confirming signals

Even when the stock price breaches the neckline, it doesn't necessarily mean it's a lock to continue in that direction. To help confirm the trend, you should consider two more factors:

Volume: The number of shares trading is one indication of the strength behind a price move. With a classic head-and-shoulders pattern (see above), you'll see the trading volume

start to lessen as the price moves higher toward the head, and then again when it rebounds to form the right shoulder, indicating limited investor enthusiasm. A spike in volume when the price moves below the neckline suggests that selling pressure will remain intense. If neither of these volume signals is in play, the decline may be short-lived, though there are no guarantees.

Time frame: Profitable trend reversals require strong trends leading into them. One commonly used rule of thumb is that the uptrend heading into the pattern should be at least twice as long as the distance between the shoulders. This makes it more likely that any reversal of the trend will be significant enough to trade—and that rule of thumb applies whether you're looking at an intraday opportunity or a lengthier one.

Setting your stops

Now that you know what to look for, how do you trade it? By using some of the same risk-management tools that are part of your regular trading plan.

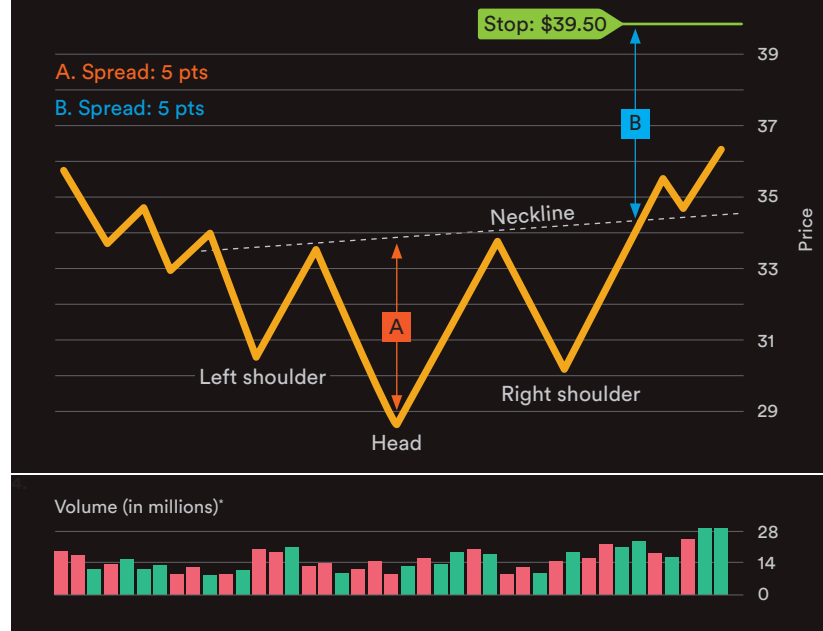
Stop orders, in particular, can be useful for trading head-and-shoulders opportunities—both for limiting your losses from downward price moves and for initiating purchases when the stock breaks higher. However, be aware that there is no guarantee a stop order will be executed at or near the stop price. (For profit-taking, consider placing limit orders at your target price.)

If you already own a stock and believe a traditional head-and-shoulders pattern may be developing, identify the potential neckline when the stock is forming the right shoulder and set your sell-stop price just below it. For instance, if the stock retreated to \$35, rebounded to a new high of \$37 and then retreated back to \$35 before

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Target practice

Inverse head-and-shoulders patterns can help traders identify profit targets.



Lee Bohl, CMT, is trading services manager at Charles Schwab & Co., Inc.

A Measure the vertical distance from the head to the neckline.

B Find the breakout point—where the price first breaks the neckline after the right shoulder forms—and add that distance to the breakout price.

climbing back up, consider setting your sell-stop price just under the possible new support level of \$35.

If you're looking to add a position, the formation of an *inverse* head and shoulders, with a stock price breaking above the neckline, often indicates a bearish trend has ended and the stock is poised for higher highs. In such cases, set your buy-stop price just above the neckline.

For example, if the stock rebounded to \$35, retreats to a new low of \$33 and then climbs back up to \$35 before again declining, consider setting your buy-stop order just above perceived resistance at \$35.

Measure twice, sell once

A unique feature of inverse head-and-shoulders patterns is that they can be used to estimate a profit target after the pattern is complete (as shown in the chart above). To determine the target spread:

Some technical analysts believe this can give you a good sense for how far the price could climb based on the size of the pattern, and where you should consider setting your limit-sell price.

Patience is profitable

In my experience, those new to technical analysis tend to see head-and-shoulders patterns everywhere. That's why taking the time to confirm signals, such as volume and the time frame of the preceding trends, is usually worth it. After a while, it will get easier to separate the heads and shoulders from the head fakes. ■

*Green volume bars indicate days on which the stock closed higher than the previous day; red bars indicate days on which it closed lower.

See page 42 for important information.
 ♦ Examples provided are for illustrative purposes only and not intended to be reflective of results you can expect to achieve.
 ♦ Schwab does not recommend the use of technical analysis as a sole means of investment research. ♦ **Past performance is no guarantee of future results.** (0819-9JHT)



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*Morningstar, Fund Spy, Russel Kinnel: “28 Terrific Funds,” September 2018. Morningstar’s criteria for the Terrific list included: cheapest quintile of broad level category groupings; manager investment of more than \$1 million in the fund; Morningstar Risk rating below the High level; Morningstar Analyst Rating of Bronze or higher; Parent rating of Positive; returns above the fund’s benchmark over the manager’s tenure; category benchmark for allocation categories; no institutional share classes; and no funds of funds.

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Couples who agree to spend their lives together—whether married or not—often share their savings, spending and financial planning.

That said, they may also maintain at least some separate accounts—out of necessity in the case of a company 401(k), or out of personal preference to accommodate different investment and spending priorities. “If one spouse is more of a spender, for example, it can cause friction,” says Bob Lucker, an investment advisor at Schwab Private Client Investment Advisory in Lone Tree, Colorado. “Keeping at least some money separate can help with that.”

Indeed, nearly one in three adults in a relationship reports money as a major source of conflict, according to the American Psychological Association.¹ “I see a lot of families who aren’t on the same page, which is why communication is so key to building a solid foundation for your family finances,” says Anthony Davidow, asset allocation strategist at the Schwab Center for Financial Research. “And the earlier couples engage in that kind of open dialogue, the better off they may be.”

Two people, one path

Among the most important strategies couples can employ is putting their financial priorities on paper. They needn’t be in lockstep on everything, but it’s important to build an overall consensus. For example:

- What goals are you working toward, both individually and together?
- What’s your strategy for multiple goals, like a down payment on a new home versus retirement savings?

- Where do you differ, and how can you honor both of your approaches to money matters?

- What will you do when the inevitable market downturn hits?

“These discovery sessions can help couples determine when it makes sense to consolidate—and when to keep things separate,” says Mark Wilson, another investment advisor at Schwab Private Client Investment Advisory. “For example, many couples choose to join forces on big-ticket items like a down payment or a mortgage but go their separate ways for personal goals like a new car. It’s all about finding a balance that serves you both.”

Retirement, on the other hand, is in a league all its own. “This is likely your biggest shared goal, so make sure you’re in agreement regarding how much you’ll save each month, the amount of risk you’re willing to take and the strategies available to you as a couple,” he says. “For example, one spouse’s employer may offer a better matching contribution or more robust investment options than the other, so be sure to take those factors into account when creating your overall retirement savings plan.”

Once you’ve nailed down the basics, Bob suggests holding at least one annual, formal meeting about family finances in which you budget out the coming months, determine discretionary and necessary spending, assess whether the family’s investment goals are on track, and agree on any changes in both saving and spending.

“I always emphasize the importance of having an overarching asset allocation strategy and then periodically reviewing it to make sure that circumstances haven’t changed,” Tony says. “Otherwise, you may wake up one day to find that what you have is a collection of individual investments where both partners are doing different things, sometimes at cross-purposes.” In other words, you may be setting yourselves up for failure by, say, being inadvertently underdiversified or taking on more risk than you’d bargained for.

Working together

Having fundamentally different approaches to saving and investing

can sometimes be a plus—provided both partners communicate their strategies. For example, blending one partner’s aversion to risk with another’s desire to outperform the market can lead to a mutually balanced approach.

One married couple with whom Bob works has struck this balance. The wife wanted a conservative portfolio, while the husband preferred a more aggressive approach. Although they set up separate accounts tailored to their individual attitudes, “we look at it holistically as one balanced plan,” Bob says. “That way, the more conservative spouse doesn’t lose sleep during a bear market, the more aggressive spouse is adequately positioned to capitalize on a bull market, and together they’re prepared for just about anything.”

Other solutions can be tailored according to a partnership’s particular needs. Among Mark’s clients, for example, is a couple with a 20-year age difference. The older, retired spouse is in his mid-70s and focused on capital preservation, while his wife is still in her prime working years and looking for growth.

“After putting our heads together, we decided that each spouse’s individual portfolio could reflect their personal risk preference without sacrificing their shared goals,” Mark says. “As a result, their overall portfolio is perhaps a bit more aggressive than he’d typically be comfortable with and a little more conservative than she’s used to, but this balanced approach is one they can both live with.”

Watch your risk

Even with thoughtful planning, having multiple accounts with multiple strategies can involve unforeseen pitfalls, such as wildly uneven returns during a bear or bull market. As a result, “you might want to revisit your accounts more frequently when markets are turbulent to ensure your overall portfolio remains on track to reach your long-term goals,” Tony says.

Managing multiple accounts can also make it more difficult to develop a holistic picture. As investors transition to new employers, for example, they often end up with multiple retirement plans. “Consolidating those accounts can give you a much clearer picture of your overall situation as a couple,” Bob says, “which is the key to any successful partnership.”

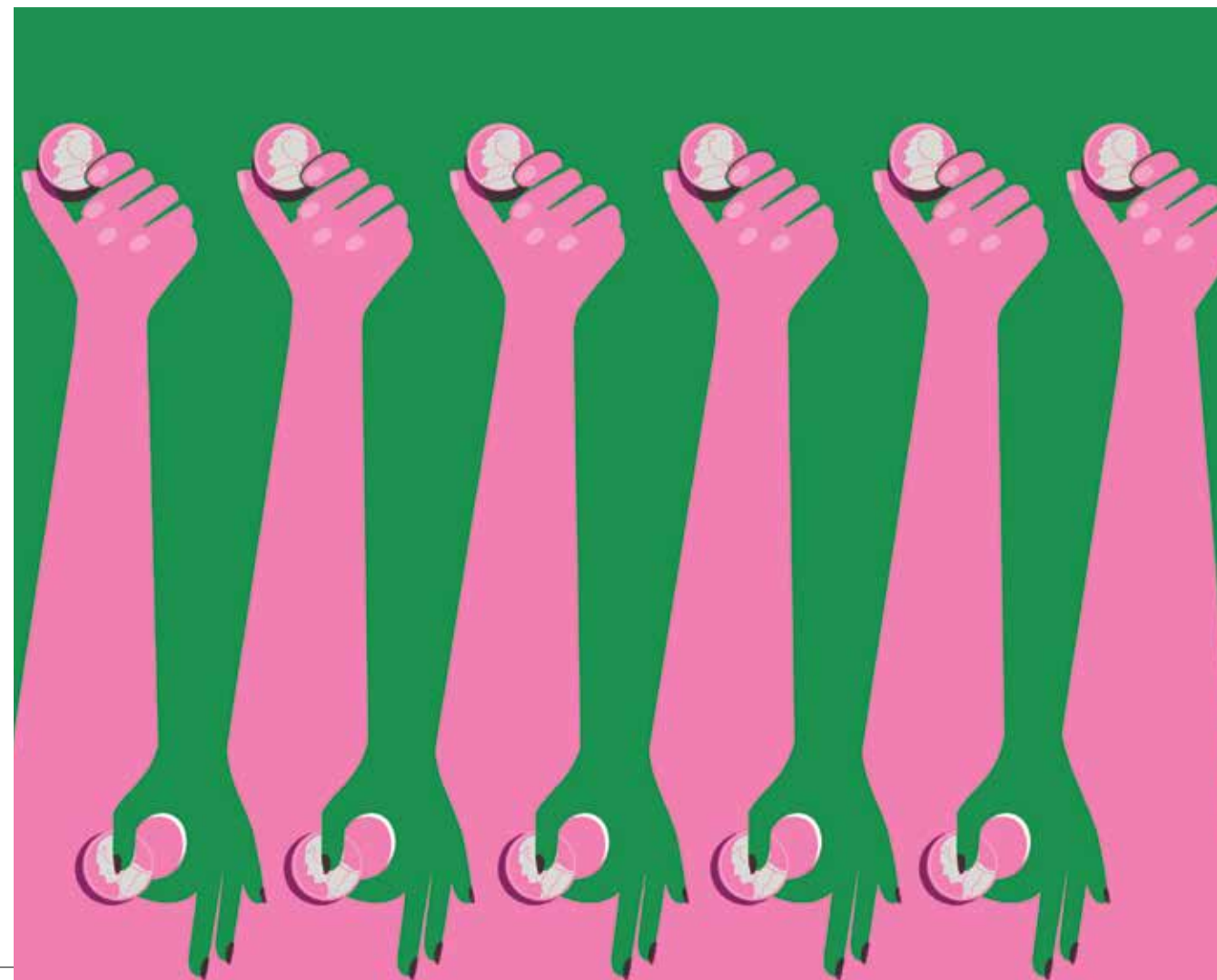
Of course, even the best partnerships hit some rough patches, which is where an advisor can help. “Not only can a financial consultant help you assess your various assets and put a comprehensive plan in place, but he or she can also provide an unbiased opinion,” Mark says. “Sometimes, just adding that neutral third party can defuse a difficult situation and refocus the conversation on what truly matters: reaching your goals together.” ■

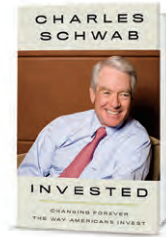
¹Stress in America: Paying With Our Health, 02/04/2015.

NEXT STEPS

Need help creating your shared plan? Work one on one with a CERTIFIED FINANCIAL PLANNER™ professional when you enroll in Schwab Intelligent Portfolios Premium™ at schwab.com/portfoliospremium.

See page 42 for important information. ♦ Please read the Schwab Intelligent Portfolios Solutions™ disclosure brochures at schwab.com/intelligentdisclosurebrochure for important information, pricing and disclosures related to the Schwab Intelligent Portfolios and Schwab Intelligent Portfolios Premium programs. Schwab Intelligent Portfolios® and Schwab Intelligent Portfolios Premium™ are made available through Charles Schwab & Co. Inc. (“Schwab”), a dually registered investment advisor and broker dealer. ♦ Diversification and asset allocation strategies do not ensure a profit and cannot protect against losses in a declining market. (0819-9SRT)





Invested: Changing Forever the Way Americans Invest

8 lessons from Charles R. Schwab's forthcoming memoir.

When Charles Schwab founded the company that shares his name almost 50 years ago, he had a simple yet audacious goal: Create a different kind of brokerage. The deeper he dug into the investment world, the more he realized the deck was stacked against independent-minded investors—and he envisioned a company that was centered on helping individuals gain equal access to the markets and lower costs.

Chuck's overriding determination and strongly held values led him to create Charles Schwab & Co., which helps empower individual investors to take control of their financial lives, free from the high costs and conflicts of traditional brokerage firms.

In his new book, *Invested: Changing Forever the Way Americans Invest*, Chuck provides the reader with a behind-the-scenes look into his personal and professional lives, reflecting on his triumphs, his equally important defeats, and how numerous times he had to reinvent his company in order to succeed.

Here are eight excerpts—containing eight lessons we all can learn from.

1. BE ENGAGED

During his second year at Stanford Graduate School of Business, Chuck took a job at an investment firm, where he worked evenings and weekends before joining full time upon graduation. The experience gave Chuck a foundation for what he would eventually build:

So that first investing job was an eye-opener. I learned about risk, about volatility, about markets—and how they can be influenced and manipulated. I learned about speculation and greed and fear. I learned about the stories they tell on Wall Street; the better the stories,

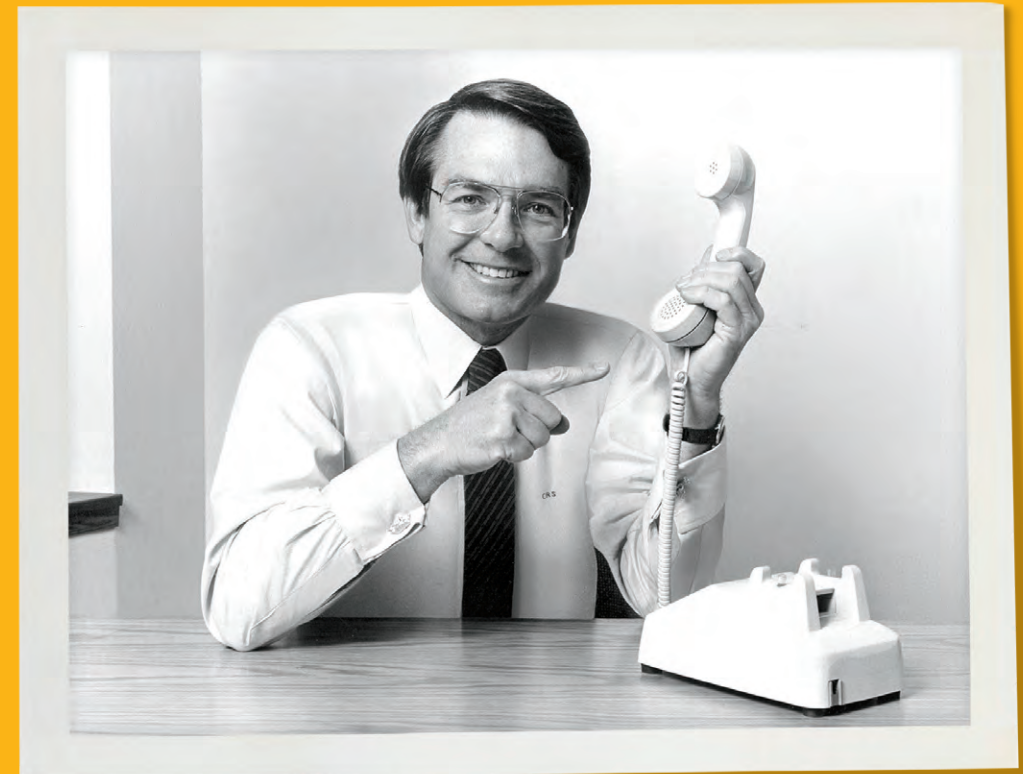
the more stocks they'd sell. The riskier the product, the more they'd get paid. I found out who was too often the winner in the broker-client relationship—and it wasn't the client. I tested every part of the fire to see how hot it was, and I got all my fingers burned. And still I was not dissuaded. I loved what growing businesses offered. Through investing, you own a piece of that ... a piece of the action. I hadn't exactly found my place in the finance world yet, but I knew I had discovered the work I was meant to do.

2. EMBRACE CHANGE

In 1975, the federal government deregulated commissions for buying and selling shares of stocks—abolishing the fixed rates that had kept the cost of trading stocks sky-high. More than 30 New York Stock Exchange member firms would close that year alone, but Chuck remembers embracing the change:

To me, here was an opportunity to advance the cause of reform, do right by the ordinary investor, expand ownership of equities to a bigger slice of the U.S. population (which I've come to believe is essential to the preservation of democracy ... call it skin in the game) and along the way build a substantial business.

In a real way, Charles Schwab was born of my own frustration. I was an independent investor. I was passionate about the market. I did my own stock research. I believed in taking charge of my own financial destiny. I loved the thrill of the chase. The last thing I needed was some broker's questionable advice about what to buy, and when to buy or sell. And I resented paying for services I wasn't using. I was also deeply frustrated. For I had come to believe that the brokerage business had a nagging problem with conflicts of interest. I knew that the big Wall



In 1982, the Charles Schwab Corporation became the first brokerage to offer 24/7 telephone order-entry and quote services.

In a real way, Charles Schwab was born of my own frustration. The last thing I needed was some broker's questionable advice about what to buy, and when to buy or sell.

Street brokerage firms that were also investment banks—despite their so-called Chinese walls—couldn't easily put the interests of individual investors first. The same was true for commissioned salespeople, many of whom made their living by trading in and out of stocks—not by building up their clients' portfolios. Not their fault: It was just how the system worked.

3. DO THINGS DIFFERENTLY

With the advent of Charles Schwab & Co., gone was the typical broker-customer relationship in which the broker would initiate a transaction, calling her or his client with a hot tip, or a buy or sell recommendation. Instead, Chuck took a different path:

“Good morning, you've reached Charles Schwab.”

“This is account number 12105002. Buy 2,000 shares of Motors, limit \$57.” Click.

That's it. Two thousand shares of General Motors at a price no higher than \$57/share. Done.

Most of our customers 30 years ago didn't even bother telling us their names. It was a radically new way of trading stocks, light years removed from the old model. Charles Merrill, founder of Merrill Lynch, used to say, “Stocks aren't bought; they're sold.” We came at it from exactly the opposite direction. In our case, the customer initiated the transaction, not the broker. We weren't out there buying lunches for clients or taking them golfing. We weren't calling anybody up with hot tips. In fact, I'd fire people if they gave stock advice. Nothing happened unless the customer asked first. Our only role was to carry out the customer's wishes. Period. I had put a couple of ads out to publicize ourselves, and people started coming in. I had a sense that people really liked what we were doing. It started slow, 20 or 30 trades a day, and then we got to 100, and on it went.

4. TREAT FAILURE AS AN OPPORTUNITY

In the 1970s, Schwab set up a telephone exchange in Reno, Nevada, to save on long-distance-call charges. One of Chuck's trusted employees came up with the seemingly brilliant idea of selling the exchange's services to other companies outside of Schwab's business hours. What could possibly go wrong?

As it happened, there was a company in Reno, National Data Corporation (NDC) that was in the business of answering toll-free calls for other companies. After leasing our lines to NDC for a while, we ended up buying their call center. So now we owned a 100-seat call center in Reno. By day, we handled stock trades. By night, we answered pledge calls for KQED, provided dealer locator services for Ford, sold records and even took orders for lingerie for Frederick's of Hollywood. It worked surprisingly well—until August 16, 1977, the day Elvis Presley died. Suddenly, our lines were swamped day and night with orders for Elvis memorabilia and records. Some of our brokerage customers could not get through to make trades. I sent Rich Arnold to Reno to clean up the mess, and we wound up selling the call center back to NDC. That ended

I loved investing—everything about it: the idea that companies are meant to grow, that anyone can participate in that growth and build up their own financial independence over time.



In the early 1950s, a young Chuck (pictured here with his grandfather and a friend) tended to his Santa Barbara chicken business.

our brief foray into third-party-transaction processing. Sometimes a bright idea with a bad outcome is the one that gets you back on track toward the right one.

5. LEARN FROM THE CHALLENGES

Just prior to October 19, 1987, Schwab had been averaging 17,000 trades a day and Chuck thought the company was doing a great job handling the volume. When Black Monday's volume surged to over 50,000 trades in one day, however, Schwab's systems couldn't keep up—though Chuck now recalls that failure as a blessing:

Our speed and responsiveness simply weren't good enough. If you're a growth company like Schwab was, and your objective is to be the best at what you do, you've got to be looking further out. Anticipating what's around the corner. Some customers never forgave us, and we lost them forever. We paid the price for years to come in their lost revenue. Worse, to my way of thinking, we had failed in the eyes of those clients. Once lost, trust is hard to regain. Ultimately that experience led us to develop state-of-the-art call centers, which could handle far greater fluctuations in volume, and eventually to pioneer the development of automated systems using touch-tone telephones and the internet. We learned from our shortcomings.

In many ways it was a blessing in disguise. That moment, that crisis, I think of now as the final episode in the formative stage of The Charles Schwab Corporation. In the years to come, we would emerge bigger, stronger, more resilient, more innovative, more profitable and more influential than ever before.

PHOTOGRAPHS: COURTESY OF CHARLES R. SCHWAB (TOP LEFT) AND THE CHARLES SCHWAB CORPORATION (BOTTOM RIGHT)

6. PLAY THE LONG GAME

Because of his fervent belief in the benefits of long-term, diversified, low-cost investing, Chuck urges investors to learn to live with short-term uncertainty—as hard as it may be:

I don't think human nature deals very well with the patience and strong stomach investing requires. We're wired for fight or flight. There is a central truth about investing: Time is on your side when there's plenty of it; it can be your worst enemy when it's scarce. Look at a chart of the S&P 500® Index over 40 years and you see an endless series of jagged peaks and valleys. Each one of those downs and ups is a moment of panic or elation. But step back for a wider view and you see the inevitable direction is up. Stick with it and ride out the emotions and you're an investor.

By the same token, there are seven tenets of long-term investing that he champions at every opportunity:

- Companies are built to grow (that is management's mandate: Perform or get replaced).
- The U.S. and world economies will continue to grow ... indefinitely, with hiccups along the way.
- The most important factors to put in your favor are diversification, time and low costs.
- Diversification lessens the risk that any one investment or asset class will harm you while capturing some of the growth of winning investments.
- Time captures the economy's tendency to grow and helps you get past the downturns and recessions that occur regularly over time.
- Low investment costs mean more of your money is working for you.
- Investing doesn't have to be complicated; index investing is among the simplest ways to invest, and today there are also low-cost managed accounts that take care of all the investment decisions for you.

7. TURN PASSION INTO SUCCESS

One question Chuck gets asked often is from people looking for career advice: What's the key to success? Here's how he typically responds:

What are you good at, what do you love doing, what can you talk about without even thinking about it and without tiring of it? I ask them. That's where you should put your energy. There is tremendous power in that because it drives you forward through the ups and downs—and there will always be plenty of both. That passion and knowledge also signal to others that you are genuine, with personal ambitions, true expertise, a direction in life—the real deal. People are attracted to that and you will need the support of others.

In my case, I loved investing—everything about it: the idea that companies are meant to grow, that anyone can participate in that growth and build up their own financial independence over time. Feeling that passion and then learning that most people were missing out because the system wasn't designed to serve the average investor ... well, that became an endless opportunity and a powerful cause that others would embrace with me!

8. EVOLVE BUT STAY TRUE TO YOUR CORE

Chuck sums up Schwab's nearly half-century history this way:

We're a different firm from when I started out but also not so different. The dream of an integrated financial experience for individuals, from banking to brokerage to financial planning and personalized investment advice and everything in between; it's a reality, and we're integrating the latest technologies and amazing computing power to make it as easy and effective as possible. In many ways, 2004 to the present was the final piece of our development, by moving from being exclusively a transaction specialist to now being able to provide personal relationships. And now because of our scale, we can do it while keeping our expenses incredibly low. That puts us in a fabulous competitive position that I don't think other players can match.

The secret sauce was building a company from a very simple and basic belief: that you view your decisions through the lens of your clients' needs and goals. What would they think; what would make their lives better, easier, more productive; what would they believe is the right thing to do? If you do that, then everything else will follow. ■

(0819-9PYR)

READ MORE *Invested: Changing Forever the Way Americans Invest* by Charles Schwab will be available nationwide on October 8, 2019. More information is available at aboutschwab.com/invested.

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7	22.84	20.23		7.44
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9	28.07	23.17	\$20	6.07
10	27.50	24.44		7.50
11	28.93	25.71		8.93
12-12%	30.36	26.98		10.36
13	31.79	28.25	\$25	6.79
14	33.22	29.52		8.22
15	34.65	30.80		9.65
16	36.08	32.06		11.08
17	37.51	33.34		12.51
18	38.94	34.60		13.94
19	40.37	35.88		15.37
20	41.80	37.14		16.80

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Retirement Countdown

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What to do in the years leading up to the big day.

For most of your career, retirement is a distant reality. But beginning about a decade out, there are key steps every future retiree should take to help ensure a smooth transition.

“The act of retiring isn’t one and done—it’s a process,” says Rob Williams, CFP® and vice president of financial planning at the Schwab Center for Financial Research. “If you suddenly come to your retirement date without having thought it through, it can be overwhelming.”

So, what are the most important milestones, and when should you tackle them? Here’s a rough timeline and list of what to do *before* you enter your golden years.



Establish a road map

This is the time to take a high-level view of the retirement you envision—and how to get there.

➔ **Paint a picture—and share it:** What does retirement mean for you: travel, a passion project, part-time or volunteer work? As you take stock of your goals, discuss them with your spouse or significant other to ensure your expectations are aligned. “It may sound obvious, but this kind of honest and open discussion can make the transition to retirement easier,” Rob says.

➔ **Calculate cash flow:** On average, retirees spend about 80% of what working households spend on an annual basis, according to the Employee Benefit Research Institute (EBRI). (That said, nearly half spend more in the first few years of retirement than they did in the years immediately preceding it, reports EBRI, as many relocate, travel or pursue long-delayed interests.)

To estimate how much annual income you’ll need from your portfolio only, take the amount you expect to spend in your first year of retirement and subtract pensions, Social Security and other nonsavings sources of income. In terms of savings, a common rule of thumb is to aim for a portfolio that is 25 times the size of that initial portfolio withdrawal by the time you retire to have a high degree of confidence that your

savings will go the distance (see “Do the math,” next page).

➔ **Make catch-up contributions:** In 2019, those age 50 and older can contribute an additional \$1,000 a year to their IRAs—and an additional \$6,000 to their 401(k) accounts. These so-called catch-up contributions may not sound like much, but they can help turbocharge your retirement savings in the decade leading up to retirement.

➔ **Pay down debt:** Start with credit-card and other high-interest consumer debt, which unlike a home loan isn’t tax-deductible. “Liabilities are as important as assets when it comes to calculating your net worth and potential income in retirement,” Rob says. “The smaller your liabilities, the more flexibility you’ll have.”

➔ **Consider long-term care insurance:** According to the Department of Health and Human Services, 70% of those over age 65 will require some kind of long-term care—and the earlier you purchase this type of insurance after age 50, the more cost-effective it is likely to be. (You may be able to obtain even lower premiums before age 50, but you’ll be paying them for longer, potentially defeating the purpose of a lower rate.)



Dive into the details

“At this point, it’s appropriate to flesh out your plan in a little more detail—ideally, with the help of a financial planner,” Rob says.

Adjust asset allocations:

The portfolios of many in their prime working years are heavily weighted toward stocks, which can decline in value during bear markets. As you approach retirement, however, you have fewer and fewer years to wait out a recovery, which is why it’s important to start mixing more bonds and other fixed income investments into your portfolio. A typical allocation at retirement can be 60% stocks and 40% bonds, revisited annually thereafter.

Look into health care:

Since 1970, per capita health care costs have risen nearly 500%, according to the Kaiser Family Foundation. Medicare can cover some costs, but you still may wish to consider Medigap or other supplemental insurance. In any case, “make sure your retirement date lines up with your Medicare start date—typically age 65,” Rob says. If it doesn’t, you may need to plan for other types of coverage (see “Coming of age,” above).

Consider downsizing: The bigger the house, the bigger the upkeep costs. A smaller residence, or even a move to a city with a lower cost of living, could help ease your bottom line.

COMING OF AGE

Regardless of when you retire, keep these important dates in mind.

59½: The age at which you can start withdrawing money from your tax-deferred retirement accounts without penalty.*

62: The earliest age at which you can begin receiving your Social Security benefit, though it will be reduced by about 30% compared with your so-called full retirement age (currently 66 but rising to 67 for those born in 1960 or later†). Once you attain full retirement age, every year you wait up to age 70 increases your benefit by 8%.

65: If you’re already receiving Social Security benefits, you’ll be automatically enrolled in Medicare. If not, enrollment begins three months before the month you turn 65 and ends three months after. Miss that seven-month window and you could end up paying penalties and higher premiums.

70½: The IRS mandates taking required minimum distributions from your tax-deferred savings accounts. Failing to make these withdrawals incurs a penalty of 50% of the amount not taken.

*For Roth accounts, investors must hold the account for at least five years to make tax-free withdrawals. †For more details, see ssa.gov/planners/retire/retirechart.html.

DO THE MATH

The ideal investment portfolio contains at least 25 times the amount of income you’ll need in your first year of retirement.

$$\begin{array}{rcccl}
 \$90,000 & - & \$40,000 & = & \$50,000 \\
 \text{Projected} & & \text{Predictable} & & \text{Portfolio} \\
 \text{expenses} & & \text{income} & & \text{withdrawal} \\
 \text{(including taxes)} & & \text{(e.g., Social Security, pension)} & & \\
 \hline
 \$50,000 & \times & 25 & = & \$1,250,000 \\
 \text{Portfolio withdrawal} & & & & \text{Target portfolio}
 \end{array}$$



Finalize a budget

Now is the time to start tackling specific tasks on a more granular level.

Build a budget: List your current expenses and decide which are necessary—such as groceries and housing—and which are discretionary, such as eating out, hobbies and travel. Which of the latter would you like to continue in retirement, and which could you live without, if necessary? “Budgeting can be daunting,” Rob says, “but itemizing your current spending habits is a great place to start.” In particular, look at your bills over the past year, from housing and utility payments to a line-by-line review of your credit card statements.

Drill down on your income strategy:

In addition to the reliable income from pensions and/or Social Security, consider adding more income-generating investments to your portfolio, including annuities, bonds and dividend-paying stocks. And since few people can survive solely on dividends and interest, most investors would benefit from working with a financial planner to create a multiyear income plan, if they haven’t already done so. That said, limiting the first withdrawal to no more than 4% of your total portfolio (adjusted annually for inflation) can help keep income flowing throughout your retirement (see “Built to last,” right).



Prepare for liftoff

The remaining tasks are oriented toward ensuring a seamless transition from career to retirement.

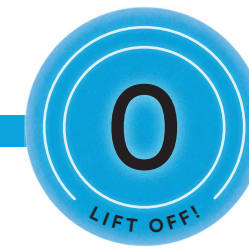
Set aside at least a year’s worth of cash: This is what you’ll need, along with income from Social Security or other sources, for everyday expenses throughout the year. If possible, consider allocating another two to four years’ worth of spending needs to cash investments, certificates of deposit, and short-term bonds or bond funds. The more cash you have on hand, the more readily you’ll weather any monetary emergencies without having to sell securities during a downturn.

Centralize your accounts: Consolidating various accounts can simplify spending and investment. Deposit predictable income into an account

for daily use, along with any other cash you’ve set aside. Consider rolling over company 401(k)s into IRAs that can offer lower fees or more investment options.

Check your dates: Failing to sign up for Medicare in a timely manner can have negative consequences, including a lifetime of higher premiums. By the same token, the longer you wait to claim Social Security, the larger your lifetime benefit will be—up to age 70, past which there is no incremental benefit (see “Coming of age,” upper left).

Get a second opinion: Double-check your assumptions with a financial advisor.



Post retirement

Keep an eye on assets and evaluate an estate plan.

Unless you have enough reliable income to weather a severe market downturn, continue to adjust your asset allocation away from equities and toward cash and fixed income. This is also the time to establish an estate plan if you haven’t done so already, or to update your plan if circumstances have changed.

And last, with all that work behind you, sit back, relax and enjoy the kind of hard-won retirement you strove all those years to achieve!

BUILT TO LAST

The shift from saving to spending can be a nerve-racking adjustment for new retirees. Creating a sustainable spending plan can help.

Balance your portfolio: A healthy mix of stocks, bonds and cash is important for growth and stability. That said, the more aggressive your portfolio, the greater its potential for growth. Talk to a financial advisor about striking the right balance, depending on your time horizon and appetite for risk.

Maintain confidence: How likely is your portfolio to see you through retirement? No one can predict the future, but set a comfortable spending limit—and prepare to adjust it as circumstances change—in order to maintain a high degree of confidence that your portfolio will last.

Remain flexible: The so-called 4% rule—or limiting your first year’s withdrawal to no more than 4% of your total portfolio, adjusted annually for inflation thereafter—assumes a roughly 30-year retirement. You may want to scale back or bump it up, depending on your time frame.

LET’S TALK

Need help thinking through your transition to retirement? Call 888-484-5340 or visit schwab.com/branch to schedule an appointment with a Schwab financial consultant.

See page 42 for important information. ♦ Examples provided are for illustrative purposes only and not intended to be reflective of results you can expect to achieve. (0819-9TGU)

Add Non-Schwab Accounts to Your View

Your finances live in many places, but now you can view them all on one site.

See both Schwab and outside accounts with your customized portfolio overview on [schwab.com](https://www.schwab.com).

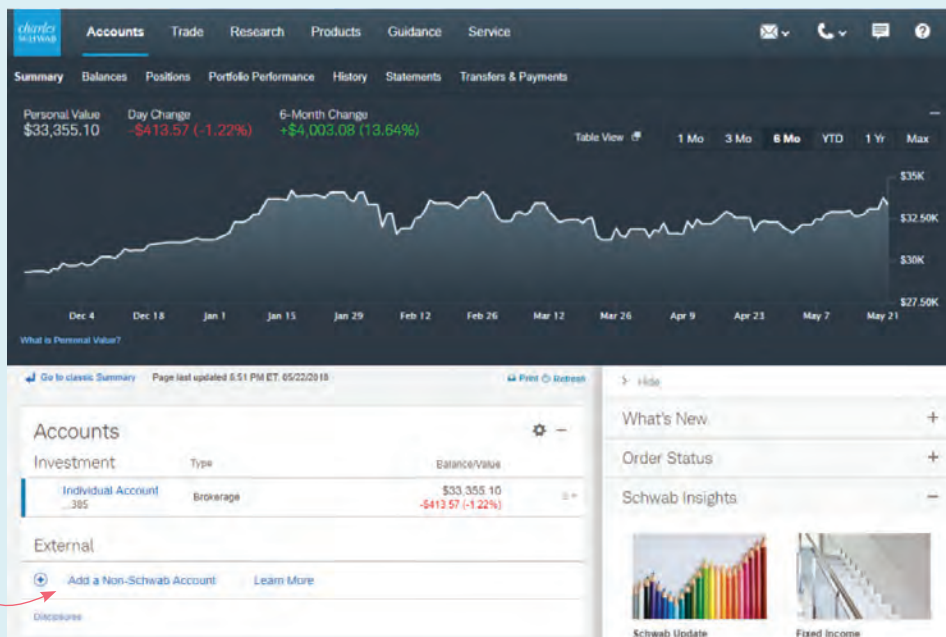
Try it now:

1

Log in to your account on [schwab.com](https://www.schwab.com).

2

At the bottom of your Account Summary page, click “Add a Non-Schwab Account” to get started.



How it works:

A single view. Combine your view of Schwab and non-Schwab accounts within the [schwab.com](https://www.schwab.com) Account Summary page.

Customize your experience. Choose which accounts appear in your Personal Value chart and Positions section.

Monitor your investment allocations. Non-Schwab accounts can also be included in tools like Portfolio Checkup, so that you can check asset allocations across your whole portfolio—regardless of where your accounts are held.

Our commitment to security. Schwab uses advanced encryption and has read-only access to your outside accounts.

NEXT STEPS

To see all your financial accounts in one place, log in to [schwab.com](https://www.schwab.com) today.

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SPOTLIGHT
FROM
SCHWAB
BANK

Charles Schwab Bank High Yield Investor Checking[®]

Designed with you in mind.

Do you know Schwab Bank? You should. Schwab Bank delivers high-quality banking products and services that put you and your financial goals first—and now is Highest in Overall Customer Satisfaction for Direct Banking, according to the J.D. Power 2019 Direct Banking Satisfaction Study^{SM, 1}

In fact, Schwab Bank's High Yield Investor Checking account offers a competitive 0.37% annual percentage yield (APY) with no minimum balance requirement. Your balance grows, and we don't nickel and dime you with fees. Welcome to a banking experience where you matter most.



Why a High Yield Investor Checking account?



A 0.37% annual percentage yield on your account balance²



No monthly service fees, account balance minimums or foreign transaction fees³



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A linked Schwab One[®] brokerage account, accessible through one Schwab login⁵



Bill Pay on **schwab.com** and Schwab Mobile^{TM6}



Security features like debit card transaction alerts, travel notices and card lock/unlock

The High Yield Investor Checking account delivers the benefits you've come to expect from Schwab: superior service, fewer fees and competitive rates. It's designed with your financial success in mind. Get to know Charles Schwab Bank and the High Yield Investor Checking account today at [schwab.com/checking](https://www.schwab.com/checking).

¹Charles Schwab Bank received the highest score in the J.D. Power 2019 Direct Banking Satisfaction Study of customers' satisfaction who have direct banking accounts. Visit [jdpower.com/awards](https://www.jdpower.com/awards). |

²The Schwab Bank High Yield Investor Checking account, with a minimum balance of \$0.01, offers a 0.37% interest rate and a 0.37% annual percentage yield (APY) as of 07/01/2019. This rate is variable and may change without notice. | ³Charles Schwab Bank does not assess foreign transaction fees (i.e., fees to convert U.S. dollars to local currency) to debit cardholders. If you use your Card to withdraw foreign currency from an ATM or to pay for a purchase with foreign currency, Schwab Bank charges your account for the U.S. dollar equivalent of the transaction. Depending on the specific arrangements that are in place, the exchange rate and calculation of the U.S. dollar equivalent will be done by the bank at which you conduct the transaction, the network to which the ATM belongs, or Visa. The bank or network may also charge a fee. **See the Schwab Bank Visa Debit Card Agreement for details.** | ⁴Unlimited ATM fee rebates apply to cash withdrawals using the Schwab Bank Visa[®] Platinum Debit Card wherever it is accepted. ATM fee rebates do not apply to any fees other than fees assessed for using an ATM to withdraw cash from your Schwab Bank account. Schwab Bank makes its best effort to identify those ATM fees eligible for rebate, based on information it receives from Visa and ATM operators. In the event that you have not received a rebate for a fee that you believe is eligible, please call a Schwab Bank Client Service Specialist for assistance at **888-403-9000**. Schwab Bank reserves the right to modify or discontinue the ATM fee rebate at any time. | ⁵The Schwab Bank High Yield Investor Checking[®] account is available only as a linked account with a Schwab One[®] brokerage account. The Schwab One brokerage account has no minimum balance requirements, minimum balance charges, or minimum trade requirements, and there is no requirement to fund this account when opened with a linked High Yield Investor Checking account. | ⁶Requires a wireless signal or mobile connection. Access to Electronic Services may be limited or unavailable during periods of peak demand, market volatility, systems upgrade, maintenance, or for other reasons. Functionality may vary by operating system and/or device. Mobile carrier data charges may apply.

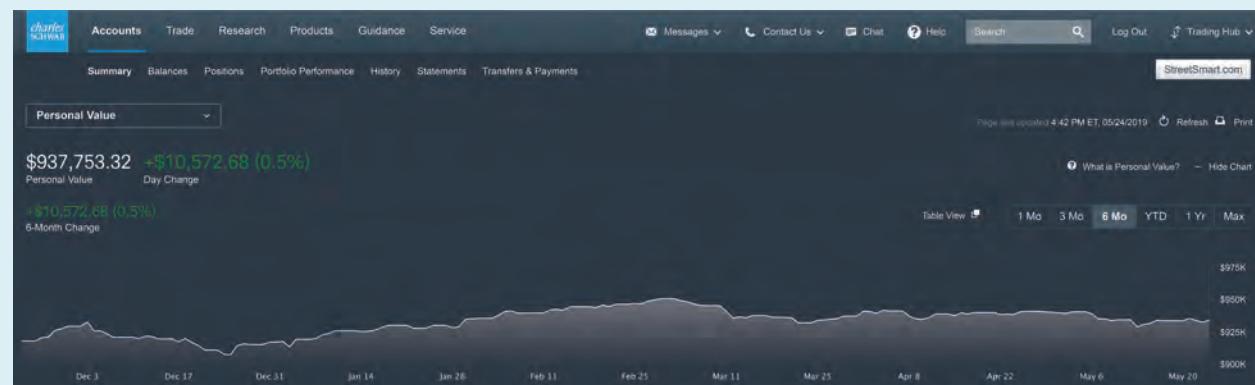
Brokerage Products: Not FDIC-Insured • No Bank Guarantee • May Lose Value

See page 42 for additional offer information. ♦ Charles Schwab & Co., Inc. and Charles Schwab Bank are separate but affiliated companies and subsidiaries of The Charles Schwab Corporation. Brokerage products, including the Schwab One brokerage account, are offered by Charles Schwab & Co., Inc., Member SIPC. Deposit and lending products, including the High Yield Investor Checking account, are offered by Charles Schwab Bank, Member FDIC and an Equal Housing Lender. ♦ ©2019 Charles Schwab Bank. All rights reserved. Member FDIC. (0819-9CA1)

Streamlined, Simple & Convenient

These two resources can help you get the most out of **schwab.com**.

Meeting your investing goals just got a little easier with the launch of our redesigned Account Summary page and All-in-One Trade Ticket. Now, you can monitor your investments, make trades and more, all with just a few clicks. Here's how these features can help you maximize your online experience:



1

Accounts	Type	Balance/Value	Day Change \$	Day Change %
SIP Account	Schwab Intelligent Portfolios®	\$34,448.34	+\$393.17	+0.04%
ABC Company	Independent Investment Advisor Brokerage	\$34,448.34	+\$393.17	+0.04%
Joint Brokerage	Brokerage	\$34,448.34	+\$393.17	+0.04%
Accounts Total		\$34,448.34	+\$393.17	+0.04%

2

Positions	Symbol / Name	Quantity	Price	Price Change \$ %	Market Value	Day Change \$ %	Cost Basis	Gain / Loss \$ %	Ratings
Equities	MMM 3M	6,8681	\$146.39	+\$2.03	\$829.46	+\$11.50	N/A	N/A	C
	AXP								

3

4

Account Summary page

This customizable page offers you a comprehensive look at your portfolio value, investment status, and relevant news and updates. Simply log in to **schwab.com** for a powerful view into your finances:

1

See your total account values—and add your non-Schwab accounts—for a holistic overview.

2

Drill down on specific accounts to access data on price change, market value and more.

3

Review your holdings, easily monitor the status of your orders and quickly access next steps.

4

Keep track of the latest market and financial news tailored to your specific holdings.

All-in-One Trade Ticket

With the All-in-One Trade Ticket on **schwab.com**, you can buy and sell stocks, ETFs and more—quickly and conveniently. Log in to **schwab.com** and click “Trade” in the top navigation menu to:

1

View recently searched symbols, your open positions in the security and the buying power of your displayed accounts.

2

Set up market, stop, limit and stop-limit orders, as well as advanced orders such as trailing stops.

3

Get clear explanations on topics including order timing, order types and buying power with a single click.

4

Access tools like the Trade & Probability Calculator to help guide your trading decisions.

1. Enter Order | 2. Verify Order | 3. Order Received

1 Roth Contributory IRA Available to Trade: \$556.59 using Cash & Cash Investments

2 Action: Buy Quantity: 100

3 Order Type: Stop Stop Price: \$190 Timing: Day Only

4 + Trade & Probability Calculator

Estimated Amount: \$19,000.00

NEXT STEPS

Log in to **schwab.com** today to customize your Account Summary page and explore the All-in-One Trade Ticket.

All corporate names and market data shown on these pages are for illustrative purposes only and are not a recommendation, offer to sell, or a solicitation of an offer to buy any security.

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Examples provided are for illustrative purposes only and not intended to be reflective of results you can expect to achieve.

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Pg. 5-6: Fixed income securities are subject to increased loss of principal during periods of rising interest rates. Fixed income investments are subject to various other risks including changes in credit quality, market valuations, liquidity, prepayments, early redemption, corporate events, tax ramifications and other factors.

Pg. 6: Investors should consider, before investing, whether the investor's or designated beneficiary's home state offers any state tax or other state benefits such as financial aid, scholarship funds, and protection from creditors that are only available in such state's qualified tuition program.

Pg. 8: Tax-exempt bonds are not necessarily a suitable investment for all persons. Information related to a security's tax-exempt status (federal and in-state) is obtained from third parties and Schwab does not guarantee its accuracy. Tax-exempt income may be subject to the Alternative Minimum Tax (AMT). Capital appreciation from bond funds and discounted bonds may be subject to state or local taxes. Capital gains are not exempt from federal income tax.

Pg. 8, 13-14, 20-21, 26-29: The Schwab Center for Financial Research is a division of Charles Schwab & Co., Inc.

Pg. 8, 18: Past performance is no guarantee of future results.

Pg. 16-17, 18: Diversification and asset allocation strategies do not ensure a profit and cannot protect against losses in a declining market.

Pg. 34-37: A rollover of retirement plan assets to an IRA is not your only option. Carefully consider all of your available options which may include but not be limited to keeping your assets in your former employer's plan; rolling over assets to a new employer's plan; or taking a cash distribution (taxes and possible withdrawal penalties may apply). Prior to a decision, be sure to understand the benefits and limitations of your available options and consider factors such as differences in investment related expenses, plan or account fees, available investment options, distribution options, legal and creditor protections, the availability of loan provisions, tax treatment, and other concerns specific to your individual circumstances.

Pg. 40-41: Clients should periodically review their Schwab and other account statements. ♦ The information may not be a complete listing of a client's Schwab holdings and may include outside holdings. For a complete listing of Schwab holdings, clients should review their most recent account statements or the "Positions" section on schwab.com.

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The **S&P 500® Index** is a market-capitalization weighted index that consists of 500 widely traded stocks chosen for market size, liquidity and industry group representation. ♦ The **MSCI KLD 400 Social Index** is a capitalization weighted index of 400 US securities that provides exposure to companies with outstanding Environmental, Social and Governance (ESG) ratings and excludes companies whose products have negative social or environmental impacts. The parent index is MSCI USA IMI, an equity index of large, mid and small cap companies. The Index is designed for investors seeking a diversified benchmark comprised of companies with strong sustainability profiles while avoiding companies incompatible with values screens. Launched in May 1990 as the Domini 400 Social Index, it is one of the first SRI indexes. Constituent selection is based on data from MSCI ESG Research.

Indexes are unmanaged, do not incur management fees, costs and expenses, and cannot be invested in directly. For additional information, please see schwab.com/indexdefinitions.

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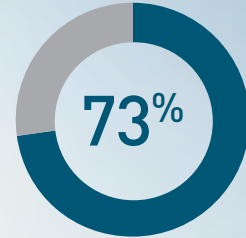


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ESSENTIAL FIXED INCOMESM

Our fixed income funds were in the top half of their Lipper classification over the 10-year period¹



IS YOUR FIXED INCOME TRULY FIXED INCOME?

Even in volatile markets, fixed income strategies should aim to deliver the essentials: diversification, income and risk management. Does yours? At MFS[®], we've held an unwavering belief in Essential Fixed Income — our focus on rigorously researched credit that's guided us for over 40 years.

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¹ Source: Lipper as of 3/31/19, based on Class A shares at NAV and Class A assets.

Keep in mind that a high relative ranking does not always mean the fund achieved a positive return during the period. Lipper rankings do not take into account sales charges and are based on historical total returns, which are not indicative of future results.

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

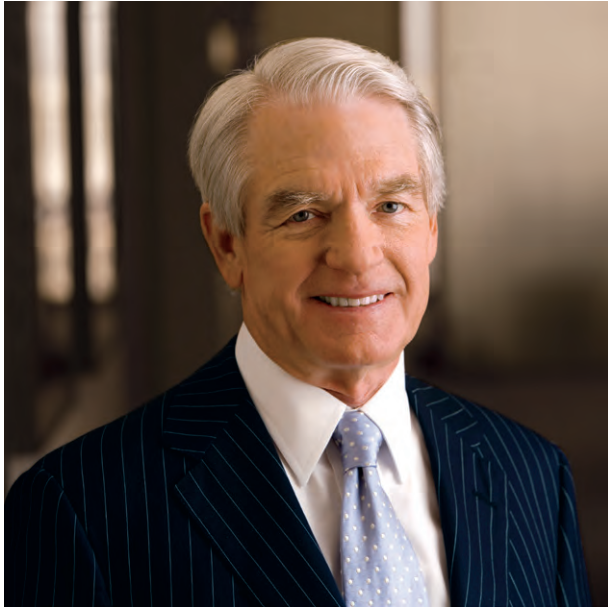
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ON YOUR SIDE

All Ears

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Has your doctor ever prescribed a remedy before hearing your symptoms? I certainly hope not, because that's not the way medicine works—and it's not the way personal finance should work, either.

We believe the best financial advice addresses your specific circumstances. And in order to do that, we must first ask questions. How long before you need to spend the money? How does it fit within your


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At Schwab, listening—*really* listening—has always been a top priority. If you're looking for informed, unbiased financial advice tailored to your specific needs, come talk to us. We're here to help.



Charles R. Schwab
Founder & Chairman

See page 42 for important information. (0819-934B)



Saving for college?
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Schwab 529 Plan.

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Learn more at [Schwab.com/529](https://www.schwab.com/529) or call **1-888-903-3863**.



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As with any investment, it is possible to lose money by investing in this plan.

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