2019 Outlook
Three experts discuss the year ahead in markets, trade policy and more.
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CC2265544 (0119-8220) ADP104264-00 (10/18) 00217734
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CEO’s NOTE

Look Past the Present

When markets are churning, keep your eyes on the big picture.

Decisions made in the heat of the moment can have a big impact on our lives. Selling when markets get rocky is a prime example. Periods of uncertainty can tempt us to make decisions that fly in the face of our goals. An analysis by the Schwab Center for Financial Research found that investors who missed just the top 10 trading days of 2009—a very volatile year for stocks—would have fared worse than those who stayed invested through the ups and downs.¹

Market swings are an inevitable—and uncontrollable—part of investing. What is within our control is how we react to the ups and downs. By sticking to your plan and ignoring the day-to-day buzz of the market, you’re less likely to make irrational decisions that could upend your goals. And if you ever need help putting together a plan that will serve you in good times and bad, we’re always just a phone call or click away.

Sincerely,

Walt Bettinger
President & CEO

¹Schwab Center for Financial Research with data from Morningstar. Example compares two hypothetical $100,000 investments made on 01/01/2009. One portfolio remained invested for the full year. The other missed the top 10 best-performing days of the year. Market returns are represented by the S&P 500® Index, and top days are defined as the best-performing days during 2009. The year began on the first trading day in January and ended on the last trading day of December, and daily total returns were used. Returns assume reinvestment of dividends. Fees and expenses would lower returns. When out of the market, cash is not invested. Past performance is no guarantee of future results.
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2. Quicken Loans received the highest numerical score in the proprietary J.D. Power 2010 – 2016 Primary Mortgage Origination studies and the 2014 – 2017 Primary Mortgage Servicer studies. 2017 Origination (or Sales) based on 5,893 total responses and measures the opinions of customers who originated a new mortgage or refinanced within the past 12 months, surveyed in July – August 2017. 2017 Servicing based on 7,374 total responses and measures the opinions of homeowners on their mortgage servicing company, surveyed in March – April 2017. Your experiences may vary. Visit JDPower.com.

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Spoiler Alert

How to help stop health care costs from ruining your retirement.

Medicare isn’t a perfect shield against unexpected health care costs in retirement. Indeed, health-related expenses accounted for three of the top five financial shocks cited in a recent survey of retirees.

“Most people know that Medicare is there for them starting at age 65, but they may not understand as much as they could about the coinsurance, copays, deductibles, premiums, options and rules—and of course what’s not covered at all,” says
Rob Williams, vice president of financial planning at the Schwab Center for Financial Research. “Even under the best of circumstances, Medicare won’t cover everything.”

Here are four ways to help ensure you don’t come up short.

**Consider Medigap …**

This private insurance supplements Medicare Part A, which covers hospitalization, and Medicare Part B, which covers doctor visits (the two parts together are sometimes referred to as Original Medicare). There are currently 10 Medigap plans standardized by the government, though prices vary depending on where you live (check medicare.gov for pricing).

Depending on which option you choose, Medigap can reduce or eliminate copays, coinsurance and deductibles and limit your out-of-pocket costs. It may also provide limited coverage when traveling outside the United States. Once you enroll in Medicare, you have a six-month open-enrollment window during which to buy a Medigap plan without preexisting conditions affecting cost or eligibility.

… or Medicare Advantage

Also known as Medicare Part C, this private insurance replicates the benefits of Original Medicare and is often less expensive but restricts you to certain doctors and hospitals, much like a health maintenance organization (HMO) or preferred provider organization (PPO) does.

If you have Medicare Advantage, you don’t need—and shouldn’t purchase—Medigap. That said, Medicare Advantage may offer benefits that Original Medicare plus Medigap do not, such as basic dental, hearing and vision care, and even fitness benefits. Most Medicare Advantage plans also include drug coverage (under Original Medicare, you must sign up for a stand-alone prescription drug program, known as Medicare Part D).

**Budget for out-of-pocket costs**

Medicare Part B, Medigap, Medicare Advantage and Part D drug coverage each come with their own costs. And even with drug coverage and basic dental, hearing and vision care, you can still be on the hook for health care costs that aren’t covered by insurance.

Schwab recommends budgeting $450 to $600 per month per person as a starting point to cover premiums and out-of-pocket expenses. However, health care costs—which have escalated exponentially in recent decades (see “Uphill battle,” above)—can vary widely depending on individual circumstances, including your place of residence.

**Do your homework**

Check medicare.gov for more details about what’s covered by Medicare, Medigap and Medicare Advantage. Rob recommends you explore your options closer to retirement—but well before you reach age 65, so there’s still time to plan ahead and, if necessary, boost your retirement savings to guard against any unpleasant surprises.

“Sock away money in a Health Savings Account, if available to you, can be especially effective,” Rob says. That’s because contributions are tax-deductible, earnings are tax-free and withdrawals are also tax-free if used for qualified medical expenses—including Medicare (though not Medigap) premiums and out-of-pocket costs.


Need help planning for health care costs in retirement? Visit schwab.com/advice to see all the ways Schwab can help.

See page 42 for important information. (0219-8275)
Walk the Line

Even if you don’t itemize, you may still be eligible for above-the-line deductions.

The Tax Cuts and Jobs Act nearly doubled the standard deduction. As a result, 28.5 million fewer Americans are expected to itemize for 2018.1 That said, even taxpayers who don’t itemize for 2018 may be eligible for one or more above-the-line deductions—that is, expenses that can be subtracted from your gross income before you calculate your taxable income.

For savers

- **Traditional Individual Retirement Account (IRA) contributions:** Depending on your situation, you may be able to deduct some or all of your contributions to a traditional IRA (see chart, below)—up to the annual maximum of $5,500 ($6,000 in 2019), or $6,500 for those ages 50 and older ($7,000 in 2019).

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Full deduction allowed if:</th>
<th>Partial deduction allowed if:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single</td>
<td>• You earned less than $63,000 ($64,000 in 2019) or • You were covered by an employer-sponsored retirement plan and you earned between $63,000 and $73,000 (between $64,000 and $74,000 in 2019)</td>
<td>• You earned less than $101,000 ($103,000 in 2019) or • Both you and your spouse were covered by an employer-sponsored retirement plan and you earned between $189,000 and $199,000 (between $193,000 and 203,000 in 2019)</td>
</tr>
<tr>
<td>Married filing jointly*</td>
<td>• You were not covered by an employer-sponsored retirement plan and you earned between $63,000 and $73,000 (between $64,000 and $74,000 in 2019)</td>
<td>• Neither you nor your spouse was covered by an employer-sponsored retirement plan</td>
</tr>
</tbody>
</table>

*Income limits are for combined earnings.

For the self-employed

- **Health insurance premiums:** Individuals can deduct 100% of their health insurance premiums, up to the total annual profit from the business. However, those who have multiple businesses must choose only one business when determining deductibility.

- **Retirement plan contributions:** Annual contributions to SEP IRAs, SIMPLE IRAs and solo 401(k) plans are generally 100% deductible up to the contribution limits. Plan limits vary, however, so be sure to consult a tax advisor for help determining deductibility.

- **Self-employment tax:** Those who are self-employed must pay the employee and employer portions of their Social Security and Medicare taxes (12.4% and 2.9%, respectively). However, the IRS allows you to deduct 50% of the total from your personal tax return.

For students

- **Student loan interest:** Individuals can deduct up to $2,500 in student loan interest, provided their modified adjusted gross income is less than $65,000 for single filers or $135,000 for married couples, at which points the deduction begins to phase out.

You may be entitled to other above-the-line deductions not listed here, so be sure to check with a tax professional before filing your return.

1 Tables Related to the Federal Tax System as in Effect 2017 Through 2026, United States Congress Joint Committee on Taxation, 04/23/2018.

Ready to get a jump on your taxes? Log in to schwab.com/taxforms to download the 2018 forms for your Schwab accounts.

See page 42 for important information. This information does not constitute and is not intended to be a substitute for specific individualized tax, legal, or investment planning advice. Where specific advice is necessary or appropriate, Schwab recommends consultation with a qualified tax advisor, CPA, financial planner, or investment manager. (0219-8ZU1)
Tax Return Identity Theft
How scammers target taxpayers—and what to do about it.

Imagine going to the trouble of filing your tax return only to discover that an identity thief had beaten you to it. Fraudsters using false identities pocketed at least $1.6 billion in tax refunds in 2016, according to the Government Accountability Office, and the IRS confirmed almost 600,000 cases of fraudulent returns in 2017.

What can taxpayers do to help protect themselves? Here are some tips:

■ File early: File your taxes right away—especially if you’re expecting a refund. It may sound like a small thing, but filing early can deprive scammers of the time they need to file a fraudulent return in your name.

■ Don’t take the bait: A common form of tax-related identity theft starts with a fraudster requesting personal information or even a tax payment over the phone or via email. Don’t fall for it—IRS policy forbids personnel from requesting financial or other personal information over the phone or via email, text or social media channels. The agency would also never call to demand immediate payment. It would mail you a bill instead.

■ Speak up: If you suspect you’re the victim of identity theft—tax-related or otherwise—immediately file an identity-theft report with the Federal Trade Commission at identitytheft.gov.

■ Add protection: Certain taxpayers can request a six-digit Identity Protection PIN from the IRS as an added layer of protection for tax filings. Visit the IRS website for more information about eligibility requirements.1

If your refund check is improperly issued to someone else, the fraudster’s next step will likely be to deposit it into an account illegally opened in your name. Freezing your credit account with each of the three consumer credit-reporting agencies can help keep unauthorized financial accounts from being established (see “Digital Self-Defense,” page 34).

Your financial institution may also be able to help. Banks and brokerage houses, including Charles Schwab, work with the IRS to help reduce tax-related identity theft. In 2017 alone, such firms helped recover 144,000 refunds totaling some $204 million.2

“We work closely with the IRS to identify potentially fraudulent accounts and deposits, with large IRS refund checks given special scrutiny,” says Carol Sniegowski, managing director of fraud investigation at Schwab. “When we can prevent stolen refund checks from being deposited, we help thwart theft and reduce the time necessary to get warranted refunds to the appropriate person.”

Cycle vs. Cycle

Are business and stock market cycles one and the same?

What's the difference between a stock market cycle and a business cycle? While often used interchangeably, the two phenomena are related but distinct.

Stock market cycles are measured by the performance of benchmark indexes such as the S&P 500® and have two phases: a bull market, when a benchmark index is rising, and a bear market, when a benchmark index has fallen 20% or more from its previous high.

Business cycles—also called economic cycles—are natural expansions and contractions of the economy.

Out of sync

Of the 13 bear markets since WWII, five did not coincide with an economic recession.

- 05/1945
- 06/1949
- 08/1956
- 10/1966
- 11/1970
- 01/1973
- 11/1980
- 08/1982
- 08/1987
- 03/2000
- 01/2002
- 10/2007
- 11/2008
- 01/2009–03/2009

Want to build a portfolio that can help you weather the market’s ups and downs? Call 888-484-5340 to speak with a Schwab investment professional.

Source: Charles Schwab. Data from 01/02/1945 through 01/02/2019. Past performance is no guarantee of future results.

See page 42 for important information. (0219-9RG1)
Put the real power of Asia in your portfolio.

With Asia representing one-third of global GDP and more than half of the world’s annual growth, we believe that investors should consider making a dedicated allocation to the world’s fastest growing region.

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Find out more about our experience, insight and passion for Asia—and the role Asia can play in your portfolio—at matthewsasia.com/missing or view the Matthews Asia Funds available with no transaction fee (NTF) through Schwab Mutual Fund OneSource® service at www.schwab.com/matthewsasia.
Dear Reader,

The headlines are indeed alarming:

- “The Student Loan Debt Crisis Is About to Get Worse” (Bloomberg).
- “Student Loan Debt Statistics in 2018: A $1.5 Trillion Crisis” (Forbes).
- “The Student Debt Problem Is Worse Than We Imagined” (The New York Times).

However, student debt doesn’t have to be overwhelming. In fact, when used responsibly, it can lead to a more secure future.

That’s because debt often fits into one of two categories: bad or good. Borrowing at a high interest rate to buy a depreciating asset—like using credit cards to pay for clothing or other consumer goods—is the kind of bad debt that can undermine your financial stability.

Borrowing at a reasonable rate to buy an asset with the potential to appreciate, on the other hand—like securing a mortgage to purchase a first home—is the kind of good debt that can actually pave the way for a better future.

So which camp does student debt fit into? Potentially either, depending on the amount of debt, the terms of the debt and your ability to pay it back. Let’s take a look at how you can manage student debt so it works in your favor.

Consider your future income

The first rule of any financial transaction is to go in with your eyes open. When you’re contemplating a student loan, think carefully about your future earnings prospects.

Although personal circumstances vary, one useful rule of thumb is to

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### Navigating Student Loans

When employed thoughtfully and managed responsibly, student loans can pave the way to a brighter future.

Dear Carrie,

I’m college-bound and beginning to look at financing options. Given the sometimes alarming headlines about student-debt levels, should I be worried about overextending myself?

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Consider your future income

The first rule of any financial transaction is to go in with your eyes open. When you’re contemplating a student loan, think carefully about your future earnings prospects.

Although personal circumstances vary, one useful rule of thumb is to
limit your total loan balance to no more than the amount you will reasonably earn in your first year on the job. If you’re planning a career in social work, for example, this might mean borrowing no more than $50,000, whereas a doctor might justify as much as $200,000.

Better yet, do the math not just for the first year but for the entire life of the loan to better understand how much you’ll be paying each month—and for how long. There are a variety of student loan calculators available online, including the U.S. Department of Education’s Repayment Estimator, which you can find at studentloans.gov/repaymentestimator.

Minimize your loans
Besides attending an in-state public university, which is much less expensive, on average, than an out-of-state or private university, there are several other ways to keep a lid on your debt:

**Graduate in four years:** Although obvious, it still bears pointing out that a five-year plan costs 25% more than a four-year plan.

**Hunt for scholarships:** Online resources such as fastweb.com and petersons.com can help you beat the bushes, surfacing even obscure sources of funding.

**Look for no-loan schools:** If you have a stellar academic record and your family is of moderate means, consider colleges that offer “no-loan” financial aid packages, which are meant to significantly reduce or even eliminate the need for student loans. These are generally offered by the top schools in the country, including Harvard and Stanford (both of which cover most costs for families earning less than $65,000). It may not be a free ride, but it can constitute substantial savings.

**Maximize federal funding:** If you do have to borrow, use federal loans first. They generally offer lower interest rates than private loans and often offer better repayment terms.

**Start at a community college:** Sometimes referred to as a 2+2 program, this strategy involves attending a community college for two years, then transferring to a college or university for another two years, which can help cut costs considerably.

**Manage your debt wisely**
Some 65% of 2017 graduates had student loan debt, owing $28,650 each, on average. No matter how big your student loan burden, however, here are four steps you can take to manage or even reduce it.

1. **Automate your payments:** If you sign up for automatic loan payments, you may qualify for a reduced interest rate. Be sure not to miss a payment due to, say, insufficient funds, however, lest the benefit disappear.

2. **Plan your payments:** As soon as you graduate, make a list of all of your loans and monthly payment amounts, then factor them into your post-college budget. Most loans have a six-month grace period before payments begin, but if you have a job lined up and are able to start sooner, consider doing so.

   Conversely, if your federal-loan payment seems unmanageable relative to your income, look into lower-payment options such as a Revised Pay As You Earn Program, which generally limits your payments to 10% of your discretionary income, or Income-Based Repayment, which caps payments based on family size and income.

3. **Save on taxes:** If you make less than $80,000 ($165,000 for married couples), you can deduct up to $2,500 of student loan interest from your taxable income, even if you don’t itemize.

4. **Tap your employer:** If you’re still looking for a job, consider one of the many companies that now offer student loan repayment assistance. Note, however, that any such assistance will count as taxable compensation.

There’s an ongoing debate about whether higher education is worth the cost. To me, that’s a closed subject, not only because studies have shown college graduates earn more than those who don’t get a degree, but also because the value of your education goes beyond the expenses incurred. Whether you pursue a degree in engineering or literature, you’re broadening yourself in unquantifiable ways—just don’t break your personal bank to do it.

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

1. “Student Debt and the Class of 2017,” ticas.org, 09/19/2018.

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. (0219-8F6K)
2019 Outlook
What to watch for in the year ahead.
last year was a rough ride. Interest rates uncertainty slowing growth and trade tensions all weighed on the markets, leaving the S&P 500® Index down 4.38% for the year. With all the three factors still in play, On Investing sat down with Schwab’s Chief Investment Strategist Liz Ann Sanders, Chief Global Investment Strategist Jeffrey Kleintop, and Chief Fixed Income Strategist Kathy Jones in January to find out what they would be watching for in the year ahead.

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### Trade

Liz Ann: I believe the biggest near-term issue is trade. The tensions between China and the United States are likely to continue this year, which could continue to hurt the economy and business optimism, especially if the two sides can’t reach some sort of deal.

Jeffrey: Higher tariffs on Chinese imports act as a “tax” on U.S. corporations and put downward pressure on gross domestic product (GDP) growth. If the Trump administration were to move forward with its proposed tariffs on all Chinese imports, it could knock a full percentage point off our growth rate. And there would be ripple effects, too. Inflation could accelerate, and capital spending, profit margins, and business and investor confidence could all suffer.

Liz Ann: One positive for the markets last year was the evolution from a potential trade war between the United States and everyone else to a one-front trade battle between the United States and China. That change made the potential costs to the global economy a bit more manageable.

I think the financial health of the Chinese consumer is definitely something to watch, as well. China is a big country, and it recently made a major transition from an export-dependent economy to a consumption-driven one. To give a sense of what that means: Sales during China’s Singles Day holiday were five times what U.S. retailers saw on Black Friday in 2018. Meanwhile, Starbucks is talking about shutting down some U.S. locations, even as it plans to open 600 new storefronts in China this year.

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### Interest rates

Liz Ann: I’ve got my eyes on the yield curve—that is, the difference between short- and long-term interest rates on U.S. Treasury bonds. The curve has flattened considerably since the Federal Reserve began raising interest rates in December 2015 (see “A tale of two curves,” far right).

It’s normal for the curve to flatten in such conditions, but as short-term rates rise relative to longer-term rates, the yield banks earn when they lend shrinks. Banks tend to borrow at very short-term rates but lend over the intermediate term. If banks’ borrowing costs rise relative to what they can earn from lending, they may pull back on lending. That can make it tougher for consumers and businesses to borrow, which tends to slow economic growth.

The spread between three-month and two-year U.S. Treasuries is a particularly useful tool for tracking lending. When it narrows, that can signal there is less credit available for borrowers.

For bond investors, some slowing is good because it tends to keep interest rates down, thereby boosting real yields, but it’s a fine line between a slowdown and a recession. In a recession, bonds from riskier issuers could underperform safer bonds like Treasuries.

I’ll also be closely monitoring Fed communications. Starting this year, the Fed will hold a press conference after every meeting of the Federal Open Market Committee—the group that sets interest rate policy—which should provide additional clues as to how much higher the Fed thinks rates need to go.

Jeffrey: Rising interest rates in the United States can have global effects. For example, emerging market companies operating in underdeveloped local markets often borrow in U.S. dollars. When exchange rates are stable, it has little impact on these companies’ returns. But when U.S. interest rates start to rise—which often leads to a stronger dollar—it becomes more expensive for emerging market companies to pay their dollar-denominated debts. So, emerging-market performance may remain closely linked to the Fed’s actions in 2019.

There’s something else, too. If you look back over the past 50 years, whenever 10-year Treasury bond yields fell below three-month Treasury bill yields, it often coincided with a peak in international stocks. We’ll be watching for signs of inversion again because it has historically been a very effective signal of trouble ahead for international markets.

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### Corporate credit

Liz Ann: Corporate credit spreads are currently at my radar range. I want to point out the difference between Treasury yields and corporate bond yields widens, that means investors are building a risk premium into corporate bonds because they see their risk as rising. That, in turn, increases businesses’ borrowing costs.

Widening spreads are not a natural part of the economic cycle, but at some point you may start to worry about the growing risk of defaults. A lot of investment-grade bonds are now rated BBB—the bottom tier of Standard & Poor’s investment-grade scale—because the debt-rating agencies see increased risk of default.

At this point, there’s cause for concern, but no reason to panic. However, if a significant portion of the BBB-rated bonds are downgraded further, that could cause prices to fall quickly. (Remember, when bond prices fall, yields rise.) The high-yield market is much smaller than the investment-grade market, so it might be difficult to find buyers if a rash of downgrades suddenly floods the market with new supply. Holding on to such a bond would mean living with default risk (and a potential hit to your portfolio value as bond prices tumble), while selling in such conditions could mean locking in a significant loss.

Corporate debt levels are high relative to the size of the economy, in part because companies have used leverage for stock buybacks and dividends. That’s said, we shouldn’t ignore the other side of the corporate balance sheet: Liquid assets have actually risen faster than debt. That could provide a cushion for corporate bonds in a downturn.

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### Earnings

Liz Ann: Corporate earnings are likely to slow significantly this year, especially...
when compared with 2018, which saw a big boost from the tax cuts. For example, corporate earnings grew about 28% in the third quarter of 2018 and likely grew more than 20% for all of 2018. In contrast, earnings growth estimates for the first three quarters of 2019 range from 6% to 8%.

Even those estimates might prove too high given the recent collapse in oil prices and the effect it’s likely to have on the energy sector and related industries. The forecasts also don’t account for last year’s strength in the U.S. dollar, which tends to reduce demand for American-made goods over time and hurt the earnings of export-oriented companies.

**Leading indicators**

Historically, a narrowing gap between unemployment and inflation rates has been a good indicator of when a country has reached the peak of the economic cycle. When that happens, it may be a sign the economy is overheating. That was true of many of the past recessions in the United States, as well as in Japan and the U.K. Two recent exceptions were the bursting of the dot-com bubble in 2000 and the financial crisis in 2008, when the economic cycle was cut short by external forces.

The inflation and unemployment rates have been inching closer for the better part of a decade (see “Mind the gap,” above), so I’ll be paying close attention to see whether they continue their current trend.

**Liz Ann** When it comes to market data, I’m less interested in absolute levels than I am in the general direction or trend. For example, if we continue to see several consecutive months of rising initial unemployment claims, it could be cause for concern. The stock market has also been weaker recently. We’re starting to see more indications that a recession may be in the offing sooner than the consensus view among market watchers. A further deterioration in the trade situation wouldn’t help.

The good news is that, on the whole, the leading indicators are still rising, albeit at a slower pace than they have recently. If the expansion continues past July 2019—and I think it will—it will be the longest in the post-WWII era. However, the risks of a recession are rising.

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See page 42 for important information. * Past performance is no guarantee of future results. * Any company mentioned above should not be construed as an endorsement or recommendation. * Forecasts contained herein are for illustrative purposes, may be based upon proprietary research and are developed through analysis of historical public data. * High-yield bonds and lower-rated securities are subject to greater credit risk, default risk, and liquidity risk. * 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. * International investments involve additional risks, which include differences in financial accounting standards, currency fluctuations, geopolitical risk, foreign taxes and regulations, and the potential for illiquid markets. Investing in emerging markets may accentuate these risks. (0219-8J9A)
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Move It

How the Global Industry Classification Standard’s new sector—and the stocks being moved into it—may impact your investments.

By Brad Sorensen

As the market changes, so too must the systems used to track it. In September 2018, S&P Dow Jones Indices and MSCI, creators of the Global Industry Classification Standard (GICS®)—which separates more than 29,000 stocks into 11 major market sectors—adjusted three of those sectors to better reflect the breadth, depth, and evolution of the market.

Of all the changes, those to Telecommunication Services—now known as Communication Services—may be the most dramatic. Let’s take a look at what’s behind the changes and what they might mean for investors.

Sector shuffle

Traditional telecommunication services (think fax and landlines) have long been moving toward obsolescence. At the same time, the ways in which we communicate—from email and text to Skype and all manner of social media—have never been more varied.

This evolution helps explain why technology-based social media platforms such as Facebook and Twitter—along with Alphabet, the parent of search giant Google—were shifted from the Information Technology sector into the new Communication Services sector. Several media companies—including Netflix and Walt Disney—also decamped for the new Communication Services sector, from Consumer Discretionary (see “Introducing: Communication Services,” far right).

With so many large companies shifting places, the effects on the sector composition of the S&P 500® Index are significant. Before the shuffle, Information Technology represented 26.5% of the S&P 500 Index; now it’s just 21%. And Telecommunication Services made up a scant 1.9%, whereas its successor, Communication Services, accounts for 10%.

So, what are the consequences for investors?

Defensive disposition

Before the change, Telecommunication Services, with its relatively high dividend and stable earnings, was an attractive option for investors looking to play defense during a downturn. But with the addition of low-dividend-paying tech companies, the new Communication Services sector may no longer be the defensive darling its predecessor was. Indeed, the sector’s dividend yield has fallen from 5.4% to just 1.5%—well below the S&P 500’s yield of 1.9%.1

Information Technology, on the other hand, may prove more defensive than it once was. While the sector’s dividend yield increased only slightly as a result of the reclassifications—from 1.2% to 1.5%—its return on equity rose from 28.5% to 31.4%.2 Together, these increases suggest the Information Technology sector may be better positioned to weather a market downturn than in the past.

Fierce competition

Many of the big-name technology companies have long been known for their stellar growth. Because of that, investors may assume Communication Services is destined to be a fast mover. That may not be the case. Many companies in the sector are locked in a fierce and expensive battle for consumers’ finite attention. Netflix alone has committed to spending $18.6 billion on content in the coming years, even as AT&T looks to unveil a streaming service built around HBO as part of its $53.4 billion acquisition of Time Warner. And both AT&T and Verizon are in the midst of launching competing next-generation cellular wireless services.

Proceed with caution

While companies in the Communication Services sector should continue to grow, profits may dwindle as competition intensifies and costs take their toll. That may be the case for companies that are adversely affected by new competition coming from next-generation cellular wireless services.

What are some of the factors that may impact your investments in Communication Services?

• Dividends and stable earnings, which are attractive to investors looking to play defense during a downturn.
• The sector’s high return on equity compared to the Information Technology sector, which may have recently benefited from the reclassifications.
• The sector’s low dividend yield, which may be one reason many investors have shifted to the consumer sector. However, the yield on the Information Technology sector has been increasing.
• The potential for fierce competition in the sector, as companies battle for consumers’ attention.

Source: MSCI Inc. Note: This is not a complete list of companies that make up the Communication Services sector; see msci.com/gics for more details.

Introducing: Communication Services

The brand-new Communication Services sector is made up of all the companies that were formerly part of the Telecommunication Services sector, plus several big-name companies from Consumer Discretionary and Information Technology.

Alphabet Inc.—Class A (GOOGL)
Alphabet Inc.—Class C (GOOG)
AT&T Inc. (T)
CBS Corp. (CBS)
CenturyLink Inc. (CTC)
Comcast Corp. (CMCSA)
Discovery Communications Inc.—Class A (DISCA)
Discovery Communications Inc.—Class B (DISCK)
DISH Network Corp. (DISH)
Electronic Arts Inc. (EA)
Facebook Inc. (FB)
Netflix Inc. (NFLX)
News Corp.—Class A (NWSA)
News Corp.—Class B (NWS)
TripAdvisor Inc. (TRIP)
Twenty-First Century Fox Inc.—Class A (FOX)
Twenty-First Century Fox Inc.—Class B (FOX)
Twitter Inc. (TWTR)
Verizon Communications Inc. (VZ)
Viacom Inc. (VIAB)
Walt Disney Co. (DIS)

Formerly part of Consumer Discretionary
Formerly part of Telecommunication Services
Formerly part of Information Technology

See page 42 for important information. • Any company mentioned above should not be construed as an endorsement or recommendation. • Performance may be affected by risks associated with non-diversification, including investments in specific countries or sectors. Each individual investor should consider these risks carefully before investing in a particular security or strategy. • Past performance is no guarantee of future results. (0219-BX96)
Who’s Afraid of a 500-Point Drop?

Lots of folks—but should they be?

The first time the Dow Jones Industrial Average lost more than 500 points in a single trading day was October 19, 1987—Black Monday. So perhaps it’s no surprise that 500-point drops continue to haunt the headlines.

“It’s a classic case of anchoring bias, at least on the part of the media,” says Mark Riepe, head of the Schwab Center for Financial Research, referring to people’s tendency to fixate on a single data point—which can be especially risky when that data is no longer relevant.

Case in point: Black Monday’s 508-point decline would need to be roughly 10 times that to have the same market impact today. “Although the size of the market has changed dramatically in the past three decades,” Mark says, “our frame of reference hasn’t.”

Instead, Mark says we should reframe the way we think about fluctuations by focusing on percentages, not points—and even by that standard to take daily volatility with a grain of salt: “When the market drops, the best answer may often be the simplest: do nothing.” Mark says. “So long as your portfolio is aligned with your time horizons and comfort with risk, you should focus on your goals, not daily or even monthly gyrations.”


See page 42 for important information. ◆ Past performance is no guarantee of future results. ◆ Investing involves risk, including loss of principal. (0219-9PZB)
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CC2297819 (0319-BRKL) ADP104602-00 (12/18) 00218805
Have you ever spent hours identifying a potential trade, only to see the stock drop on unexpected company news, be it a sudden CEO departure, a product recall or a public inquiry?

For traders who have a hard time stomaching such uncertainty, exchange-traded funds (ETFs) may be able to help.

**Why ETFs?**

First, like stocks, ETFs can be bought and sold throughout the trading day. Indeed, some ETFs are traded just as heavily as individual equities, so you can move in and out of them with relative ease.

Second, because ETFs track a basket of securities, the individual performance of a single holding is less likely to impact the outcome of your trade. If one stock in the fund plunges but the others hold their ground, for example, the net effect may be only a marginal decline. Measure the...
historical volatility of any individual broad-market ETF against virtually any individual stock and the ETF will almost invariably be less volatile.

Third, your worst-case scenario with stocks is a total loss should the price fall to zero. With ETFs, on the other hand, it’s almost inconceivable that all of its stocks would go to zero. And in those unlikely instances when an ETF provider decides to shut down a fund—only 138 of more than 2,000 U.S. exchange-traded products closed in 2017—its investors would still get the market value of their investments once the fund’s assets have been liquidated.

ETFs are still subject to market risk, or the risk of losses when the broader market is weak. In general, ETFs are just as volatile as the indexes they track, so one that tracks the S&P 500®, for example, will generally mirror that index’s performance.

Unique risks
Traders in ETFs will want to pay particular attention to the bid/ask spread, or the difference between the highest price that a buyer is willing to pay and the lowest price that a seller is willing to accept. Due to the way ETFs are priced, their bid/ask spreads can sometimes be wide—especially for those that trade infrequently or track niche segments of the market in which the underlying assets are illiquid.

For example, if you place a market order to buy or sell immediately at the current market price, the wider the bid/ask spread, the higher the potential price you’ll pay or the lower potential price you’ll receive. For this reason, Schwab generally advises traders not to use market orders for ETFs that trade infrequently. Using a simple limit order, in which you set the price you want to pay or be paid, will help offset any discrepancies in an ETF’s price.

Traders should also be wary of leveraged and inverse ETFs, which attempt to use debt and derivatives to multiply the returns of their underlying assets. Leveraged and inverse ETFs with “2x” or “3x” in their titles, for instance, seek to return twice or thrice the daily return or daily inverse return of their underlying holdings.

However, these funds also have the potential to incur significant losses, which can be magnified to the same degree as their potential gains. Therefore, if you’re trading ETFs in part to help manage your risk, trading leveraged or inverse ETFs can be a big step in the wrong direction.

Finally, ETFs are sometimes confused with exchange-traded notes (ETNs), which are debt instruments backed only by the creditworthiness of the issuer, rather than a basket of securities, and as such involve both less diversification and greater credit risk.

Building confidence
Trading ETFs requires a slightly different practice than trading individual equities but can be a rewarding way to get your sea legs, help manage your volatility and potentially build some early successes until you’re ready to increase your risk-taking. They can also be a great fallback for seasoned traders when a stock’s price swings become too unsettling. Just as with stocks, however, you’ll want to have a plan—and stick with it. Specifically:

- **Know your investing time horizon:** Determine ahead of time how long you plan to hold a given ETF.
- **Minimize your exposure:** Most traders should risk no more than 2% to 3% of their account on a single trade.
- **Know where the exits are:** Set profit and loss targets for each trade and consider using stop orders during market hours to help lock them in.
- **Review your performance:** For instance, if you got stopped out too early, you may need to set wider price parameters or find an ETF with lower volatility. Conversely, if the ETF didn’t move all that much, you might want to find one with greater volatility. Keep in mind that both of these changes will also increase your overall risk.

With a few tweaks in your trading regimen, you should be able to find an ETF that aligns with your risk appetite.

1 ETF.com. Total number of ETFs as of 04/13/2017 and total closures as of 11/22/2017. 
2 Conditions apply: Trades in ETFs available through Schwab ETF OneSource® (including Schwab ETFs®) are available without commissions when placed online in a Schwab account. Service charges apply for trade orders placed through a broker ($25) or by automated phone ($5). An exchange processing fee applies to sell transactions. Certain types of Schwab ETF OneSource transactions are not eligible for the commission waiver, such as short sells and buys to cover (not including Schwab ETFs). Schwab reserves the right to change the ETFs we make available without commissions. All ETFs are subject to management fees and expenses. Please see the Charles Schwab pricing guide for additional information.

See page 42 for important information. • Investment returns and principal value will fluctuate and are subject to market volatility, so that an investor’s shares, when redeemed or sold, may be worth more or less than their original cost. Unlike mutual funds, shares of ETFs are not individually redeemable directly with the ETF. Shares of ETFs are bought and sold at market price, which may be higher or lower than the net asset value (NAV). • Leveraged ETFs seek to provide a multiple of the investment returns of a given index or benchmark on a daily basis. Inverse ETFs seek to provide the opposite of the investment returns, also daily, of a given index or benchmark, either in whole or by multiples. Due to the effects of compounding, aggressive techniques, and possible correlation errors, leveraged and inverse ETFs may experience greater losses than one would ordinarily expect. Compounding can also cause a widening difference between the performances of an ETF and its underlying index or benchmark, so that returns over periods longer than one day can differ in amount and direction from the target return of the same period. Consequently, these ETFs may experience losses even in situations where the underlying index or benchmark has performed as hoped. Aggressive investment techniques such as futures, forward contracts, swap agreements, derivatives and options can increase ETF volatility and decrease performance. Investors holding these ETFs should therefore monitor their positions as frequently as daily. • The information provided here is for general informational purposes only and should not be considered an individualized recommendation or personalized investment advice. The investment strategies mentioned here may not be suitable for everyone. Each investor needs to review an investment strategy for his or her own particular situation before making any investment decision. (0219-BU93)
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Whether you’re up or down, here’s how to know when to shed an investment.

When

to

Sell
Saying goodbye is never easy.

But it can be especially tough when it comes to your investments. Puzzling out when to take the gains on your winners can be as difficult as knowing when to realize the losses on your losers.

Still, there’s often good reason to let an investment go. It may no longer fit your risk appetite, particularly as you get closer to, say, retirement. Or your winners may have thrown your portfolio out of balance.

Of course, sometimes investments simply go bad—and it’s then that investors may face the greatest difficulty. That’s because four out of five U.S. investors suffer from what behavioral economists call the disposition effect, the tendency to hold on to losers, hoping they’ll somehow recover, rather than lock in a loss (see “More guidance on the disposition effect,” page 30).

“Selling magnifies the pain because realizing a loss is tantamount to admitting you made a mistake,” says Mark Riepe, head of the Schwab Center for Financial Research. “But you can compound the issue when you hold on to a losing position for too long.”

That said, reflexively bailing on equities when the broader market turns south is equally ill-advised. “Following the crowd is not a sound selling strategy,” Mark says. “Your decisions should be based on your needs and goals, not everyone else’s.”

So what’s a worthwhile signal when it comes to selling an investment—and what’s just noise? Here’s what three Schwab experts look for before they hit the sell button.

Stocks

If a stock has dropped precipitously while the broader market has not, you should investigate whether the setback is temporary or just getting started, says Steve Greiner, senior vice president of Schwab Equity Ratings.

- Check the company’s recent earnings: If it’s consistently falling short or facing unexpected weakness in a core part of its business, the stock could have a difficult time recovering. (A dividend cut is often a clear sell signal, but that typically happens only after earnings have already started to soften—which is generally too late.)
- Look for erosion in the company’s balance sheet: Rapidly rising liabilities are a bad sign, because they may indicate that a disproportionate share of the company’s future cash flow will be needed to service debt.
- Check analysts’ earnings estimates: “Generally speaking, the less consensus there is among credible analysts’ earnings estimates, the greater the lack of visibility into future earnings, which can set you up for some negative surprises,” Steve says.
- Consider external factors: If the stock is dropping but the company’s fundamentals appear sound, some other factor outside the company’s control may be to blame, such as rising oil prices. “You need to ask yourself whether you’d consider selling if that external force weren’t in play,” Steve says. “If the answer is no, you might want to sell tight.”

You might also think about a sale if the stock has significantly appreciated. Steve says investors should set a price target for individual stocks—consider 30% or more above your purchase price.

The key is to sell when the price hits that target, even if you retain up to half of your position to capture any future growth. Investors often continue to ride a hot position in its entirety in the hope of owning a piece of the next Amazon or Netflix, but few stocks accomplish this feat, Steve says. Many more end up rising to a peak and then losing altitude. “You can find a lot more examples of when you should have gotten out than when you shouldn’t have,” Steve says.

Finally, for investors who don’t have the desire or time to monitor the trajectories of individual stocks, Schwab Equity Ratings—which tracks some 3,000 U.S. stocks—can be particularly helpful when it comes to decisions to sell. A or B ratings constitute a Buy, a C rating suggests a Hold, and D or F ratings mean it may be time to Sell. You can sign up for alerts whenever a rating changes on a stock in your portfolio.

- To find the Schwab Equity Rating for an individual stock, log in to schwab.com/research and enter its ticker symbol.

Four out of five U.S. investors suffer from the disposition effect, the tendency to hold on to losers, hoping they’ll somehow recover, rather than lock in a loss.

Bonds

Price is much less of a factor when considering whether to sell a bond. That’s because bonds often serve a defined purpose in a portfolio—say, generating income on a set schedule. Selling individual bonds before they mature can upset this strategy, particularly if you hold bonds of different durations in a bond ladder that is designed to acquire and retire bonds at regular intervals.

That said, there may be occasions when you want to sell based on changes in the market, says Kathy Jones, senior vice president and chief fixed income strategist at the Schwab Center for Financial Research. “When the creditworthiness of a bond issuer deteriorates, for example, it increases the likelihood of default,” she says.

Keeping tabs on a municipal bond issuer is fairly straightforward. Reports that an issuer faces financial difficulties are likely to appear in the regular media, as was the case with the recent problems in Detroit and Puerto Rico. Corporate bonds can be tougher to track in this regard and may require some digging into a company’s earnings and other fundamentals. “All things being equal, you want to keep an eye on debt relative to earnings and make sure there’s enough positive cash flow to cover interest payments,” Kathy says.

You can also look to the credit-rating agencies, which will often put an issuer
When to Sell

WHEN TO SELL

WHEN TO SELL

When your exchange-traded funds (ETFs) or mutual funds aren’t performing as expected, you could consider looking for a better alternative. “The nice thing about funds is they offer a natural basis for comparison, against either their benchmark index or other funds in the same category,” says Michael Iachini, vice president and head of manager research at Charles Schwab Investment Advisory. “You can almost always find another fund that’s similar to what you own.” But performance means something different depending on which type of fund you hold. With passive ETFs or index funds, for example, you want the fund to track its underlying index closely. “If it isn’t, then the fund manager is dropping the ball,” Michael says. The mission of actively managed funds, on the other hand, is to produce better results than their underlying indexes. For example, a large-cap stock fund may look to outperform the S&P 500 Index. Michael cautions that every active manager suffers periods of underperformance, but if the fund is consistently falling short of its benchmark, it may be time to check out the competition.

Another way to assess an actively managed fund’s performance is to determine whether it consistently outperforms or underperforms other funds in its Morningstar category (see “For comparison’s sake,” right).

Changes in the way a fund is constructed might be another reason to sell. Sometimes, a passive-fund manager may elect to track a different index, at which point you should be notified and appraise the investment anew.

Actively managed funds switch up their holdings much more frequently, but investors should be wary of managers who change their underlying approach too often. “If they keep changing their stripes, their strategy may not be working,” Michael says.

Cost is a final consideration. That’s less true of passive ETFs and index funds, because fees across the board have been trending lower in recent years, so there might not be much to gain from switching funds on the basis of cost.

Actively managed funds, on the other hand, typically command higher fees—though they may be justified, Michael says, such as when fund managers are doing a deep dive into opaque parts of the market. However, investors should be wary of funds that are increasing their fees in the current environment. “These days, if your fund is raising fees, you can probably find a better option,” Michael says.

Funds

If your actively managed fund is consistently falling short of its benchmark, it may be time to check out the competition.

More guidance on financial decisions

Cool and Calculated

There are plenty of good reasons to hold on to an investment, even if it’s performing poorly—but reluctance to admit a mistake shouldn’t be one of them.

That’s an argument for periodically taking a fresh look at every investment in your portfolio. And if you can’t be objective about it, consider bringing in an investment professional to help.

For comparison’s sake

To assess an actively managed fund’s performance against that of its peers, log in to schwab.com/research, search for the fund’s ticker symbol, click the Performance tab, then scroll down to Rank Within Category. There you’ll find 10 years’ worth of the fund’s performance data, ranked into quartiles relative to its peers within the same category.

“Want a fund that consistently falls within the top two quartiles, which indicates it has outperformed at least half its peers,” says Michael Iachini, vice president and head of manager research at Charles Schwab Investment Advisory (see top image, above). “Seeing a long string of blue boxes in the bottom two quartiles, on the other hand, is a sign of chronic underperformance” (see bottom image, above).
It’s not always easy to make good decisions. We’re often quick to abandon our plans when impulse strikes. We fear losses more than we value gains. Our view of the future is hopelessly colored by the past.

Such biases can get in the way of our best intentions—not least when we’re trying to manage our finances. The effects can be costly.

Fortunately, behavioral scientists are on the case. Meet Katy Milkman—Wharton School professor and host of Schwab’s Choiceology® podcast—on solutions to our naturally faulty decision-making.

**Secrets of Self-Improvement**

Katy Milkman—Wharton School professor and host of Schwab’s Choiceology® podcast—on solutions to our naturally faulty decision-making.

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**FINANCIAL FIX:** Creating a budget can be the financial equivalent of choosing a healthy entrée ahead of time. But that’s just a start. Investing a fixed dollar amount on a set schedule—say, monthly or quarterly—can be another way to overcome present bias in favor of your future self. You could also commit to saving future pay increases. Think of it as putting your savings plan on autopilot by automatically banking any bumps in your paycheck—before you have a chance to spend them.

**Commit yourself**

→ Katy says another way to fight present bias is to use a so-called commitment device to help keep yourself focused on a goal—say, by agreeing to forfeit money if you fail to follow through on a plan. If your goal is to put a certain sum of money into an emergency fund each month, for example, commit to forfeiting an additional sum of money to charity should you miss your target.

There are websites that facilitate such monetary commitments, but a friendly side bet with a co-worker or spouse can serve the same purpose.

**FINANCIAL FIX:** Investors can actually use this lic to their advantage by reframing a potential gain as a potential loss. For instance, if your employer offers up to $500 a year for a gym membership, you can make the incentive more effective by thinking of the $500 you’ll lose if you don’t sign up. Katy says. That same lesson applies to matching contributions to a company 401(k) plan. Frame any match you might fail to capture not as an unmet gain but as a realized loss.

**Reframe your gains and losses**

→ A large body of research has shown that people are far more motivated to avoid a loss than they are to rack up an equally large gain. Behavioral scientists call this loss aversion, and it’s a real bugbear for investors.

Katy explains it this way: “Finding a $20 bill on the way to work would probably make you feel pretty good. But how would you feel if you turned around and lost it later in the day?” Research tells us you’d be twice as unhappy about the loss as you were happy from the gain.

In another example, researchers found that charging shoppers 5 cents per disposable bag cut their use roughly in half, whereas paying them 5 cents per reusable bag had virtually no effect at all. In other words, the threat of losing a nickel proved more motivating than the prospect of gaining one.

Loss aversion can also affect the way we invest. For example, research has shown that we’re far more likely to sell a winning stock than a losing one because we want to realize a gain and reluctant to lock in a loss.

**FINANCIAL FIX:** Traders, in particular, need an objective way to assess their performance, lest their winners unduly overshadow their losers. Schwab clients enrolled in Schwab Trading Services can use the Gain/Loss Analyzer (schwab.com/analyzertool) to accurately gauge their overall performance.

Although there are some behavioral biases for which researchers have developed solutions, there are many more that still pose challenges, Katy says. “The goal of my work is to figure out what regular people can do to overcome these pitfalls, and Schwab’s Choiceology podcast is meant to help investors do just that.”

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*References* Catch up on Season 2 of Choiceology at schwab.com/podcast or through your favorite podcasting app.

See page 42 for important information. *Charles Schwab Investment Advisory, Inc., is an affiliate of Charles Schwab & Co., Inc. (Schwab). (0219-8BAM)*

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*FINANCIAL FIX:* Announcing how much money you plan to save for retirement and by what date—say, to a spouse or financial advisor—can similarly act as a commitment device, since there’s reputational risk in not following through on your plan. "It’s weird, right?” Katy says. "But these kinds of self-imposed incentives have been shown to help combat present bias.”

→ People make poor intuitive statisticians, which can lead to erroneous assumptions, Katy says. Consider the probability that, in a set of randomly selected people, two of them will have the same birthday. You can be 100% certain that in a group of 367 people, at least two of them will share a birthday because there are only 366 possible birthdays (including February 29). “However—counterintuitive as it may seem—there’s a 99.9% probability with just 70 people and a 50% probability with just 23 people.” Katy says.

Our trouble assessing probabilities can skew the way we gauge our performance as investors. Say you buy a handful of individual stocks and find that, after three years, they’ve all outperformed the broader market. While it may be tempting to conclude you have a gift for picking equities, you might also have gotten lucky.

“Until proven otherwise, don’t believe it’s anything but chance,” Katy cautions. “It’s easy to be blinded by your successes, which is why it’s so important to have an objective way to assess your outcomes.”

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Digital Self-Defense

Seven ways to stay safe online.
As the custodian of more than $3.4 trillion in client assets, the Charles Schwab Corporation takes security seriously.

“From biometric identification to Schwab’s Security Guarantee, we have a number of extremely robust safeguards in place to help protect our community of investors,” says Greg Ruppert, senior vice president of financial crimes risk management at Schwab (see “Security at Schwab,” below).

That said, Greg recommends clients take additional steps to protect themselves and their loved ones from increasingly sophisticated financial scams. After all, this issue is much bigger than Schwab. In 2017 alone, the Federal Bureau of Investigation’s Internet Crime Complaint Center received more than 300,000 complaints about internet scams, representing more than $1.4 billion in losses.

Here are seven ways to assess your virtual risk and help guard against potential threats.

1. Automated alerts

Schwab uses pattern analysis and other advanced analytical systems to detect suspicious activity and deter unauthorized access. Schwab will notify you right away if it notices anything out of the ordinary, as well as whenever sensitive transactions—such as account transfers or password updates—occur.

2. Biometric technologies

- Voice ID: Once recorded, your unique voice signature can be used to confirm your identity whenever you reach out to Schwab by phone. Find out how to record your Voice ID at schwab.com/voiceID.

- Digital wallet

Help secure your Schwab-issued debit cards by adding them to your smartphone’s digital wallet. When you pay with your phone, a one-time transaction code is transmitted to the merchant, keeping your credit card details private.

Want to add a debit card to your digital wallet? Visit schwab.com/digitalwallet.

3. Security Guarantee

Because we want to have the highest level of confidence when doing business with Schwab, the company offers this guarantee: Schwab will cover 100% of any losses due to unauthorized activity in any of your Schwab accounts.* For more information, visit schwab.com/securityguarantee.

4. Be careful what you click

Despite the rise of increasingly sophisticated scams—including those involving minors (see “No kidding,” above)—the most successful method of cyberattack is still spear phishing, Greg says. Spear phishing is the practice of sending fraudulent emails purportedly from companies you trust in order to obtain confidential information or get consumers to click on potentially damaging links. Instead of clicking on embedded links, always log in directly at schwab.com and other websites.

If you’re ever suspicious of an email from Schwab, confirm the message by calling us at 1-800-803-7465—and be all means forward suspicious communications to phishing@schwab.com for further investigation.

5. Be prepared

Always keep a copy of your most important data and documents—including account and insurance information—on a secure cloud server for easy access in case of emergency. (Periodic computer backups are also a good idea.) One of the many tragedies of the recent hurricanes in Houston and Puerto Rico has been homeowners’ inability to access everything from health care directives to wills, to say nothing of the insurance policies required to get folks back on their feet.

From switching up your passwords to taking advantage of the latest protections offered by the companies with which you do business, the best approach is holistic, Greg says. “Sometimes the simplest precautions can prove to be the most effective.”

6. Just say no

Never grant remote access to or download software from a technology support professional without first confirming her or his identity. In many such scams, fraudsters install malware that can capture every click on your computer.

7. Keep your phone

A trusted contact is a resource Schwab may contact on your behalf, if necessary, to attempt to close accounts or settle potential financial expenditures. Greg Ruppert, senior vice president of financial crimes risk management at Schwab, explains Clyde Langley, head of fraud risk management at Schwab.

If you’re the victim of a data breach—the private data of 143 million Americans was exposed in a single Equifax hack in 2017, for example—you may be eligible for free credit monitoring or identity protection from the company that was compromised.

Now what if you think you’ve been the victim of identity theft? You can place a fraud alert with the three consumer credit–reporting agencies. Whichever one you contact is required to contact the other two on your behalf. These alerts notify creditors that your account may have been compromised and require them to verify your identity before issuing new credit in your name. They last for one year, though they can be extended for up to seven if you’ve filed a report with either the police or the Federal Trade Commission at identitytheft.gov.

Federal law allows Americans to freeze a single Equifax hack in 2017, for example—you may be eligible for free credit monitoring or identity protection from the company that was compromised.

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*To ensure your protection under this guarantee, it is your responsibility to safeguard your account-access information. If you share this information with anyone, Schwab will consider them to be authorized to use your account and insurance information—on a secure cloud server for easy access in case of emergency. (Periodic computer backups are also a good idea.) One of the many tragedies of the recent hurricanes in Houston and Puerto Rico has been homeowners’ inability to access everything from health care directives to wills, to say nothing of the insurance policies required to get folks back on their feet.

**“Sometimes the simplest precautions can prove to be the most effective.”**

Designate a trusted contact

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Designate a trusted contact

Family members and friends can make great resources.
With thousands of fund choices available, building a diversified portfolio can be challenging. Schwab’s Personalized Portfolio Builder simplifies the selection process by helping you find the mutual funds or ETFs that meet your needs.

**How does it work?**

The tool helps you create a portfolio of funds using Schwab’s asset-allocation models. These models help you determine an appropriate allocation across various asset classes, based on your financial goals, risk tolerance and time horizon.

**How do I get started?**

Log in to schwab.com/ портfoliobuilder to build a portfolio in five easy steps:

**Step 1** Choose the account in which you want to build your portfolio.

**Step 2** Select your fund preference. You can build an all-mutual-fund portfolio—and choose taxable-bond funds or municipal-bond funds—or an all-ETF portfolio.

**Step 3** Select your risk tolerance, ranging from conservative to aggressive.

**Step 4** Specify your initial investment. There is no minimum, but we suggest at least $5,000 to ensure proper diversification.

**Step 5** Choose from a selection of funds within each asset class and click “Trade” to complete your portfolio.

See page 42 for important information. Investors should consider carefully information contained in the prospectus or, if available, the summary prospectus, including investment objectives, risks, charges and expenses. You can request a prospectus by calling Schwab at 800-435-4000. Please read the prospectus carefully before investing.

When using the Personalized Portfolio Builder, be aware that Schwab is not analyzing your investment portfolio; your individual circumstances; or considering or recommending what you should buy, hold or sell in your account.

This is an example of a screen you might see when using the Personalized Portfolio Builder tool. This is for illustrative purposes only and does not depict actual funds or results. (0119-8UPK)
Simplify Your Financial Life
With Schwab Mobile

Use the Schwab Mobile app to check your accounts, place a trade or deposit a check.

With the Schwab Mobile app, you don't need to log in to a computer to manage your account. Whether it's scanning the latest financial news, checking stocks in your portfolio or on your watch list, placing a trade, or depositing a check, the app allows you to get it all done on your phone or tablet.

Available for both Apple and Android devices, Schwab Mobile app is there when you need it—between meetings, during a halftime break or whenever you have a few minutes to check in.

Key capabilities:

• View your current account balances and daily change.
• Track stocks, mutual funds, exchange-traded funds and more on your personal watch list.
• View real-time market indexes,¹ breaking news and Schwab’s daily market update.
• Watch financial videos or access podcasts in the Media Center.
• Place trades and get status updates.
• Get immediate notifications when your account needs attention.
• Check statements.
• Make mobile deposits,² transfers and payments.

And Schwab adds new capabilities and enhancements all the time.

Here’s how to get it:

1. Download the Schwab Mobile app from the app store on your phone or tablet.

2. Log in with your Schwab online login ID and password or even use a fingerprint login if supported on your device.

¹System availability and response times are subject to market conditions and mobile connection limitations. ²Schwab Mobile Deposit™ is not available on all devices. The Schwab Mobile Deposit service is subject to certain eligibility requirements, limitations and other conditions. Enrollment is not guaranteed and standard hold policies apply.

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Traveling? Ensure access to your bank account funds with Schwab Bank Travel Notices.

Planning to travel soon? Schwab Bank customers can now let us know by submitting a Travel Notice through the Schwab Mobile app¹ or online at schwab.com. By sending us a Travel Notice, you can reduce the risk of a transaction being declined when you use your Schwab Bank Visa® Platinum Debit Card during your trip.

We’ll continue to watch for suspicious transactions, and if your card is lost or stolen, we’ll send you a new one—wherever you are. Help us keep an eye on your account so you can keep your eyes on the sights.

Here’s how to submit a Travel Notice:

Schwab Mobile app
• Log in to your Schwab Bank account.
• Select “More” in the lower-right corner and then “Travel Notice” under “Client Service.”
• Select your Schwab Bank Visa Platinum Debit Card.
• Enter your departure and return dates and add your destination(s).
• Tap “Continue,” confirm travel details and click “Submit Travel Notice.”
• Look for an email confirming your Travel Notice.

Online
• Log in to schwab.com/travelnotice.
• Under your Schwab Bank Visa Platinum Debit Card, click “+ Travel Notices.”
• Enter your departure and return dates and add your destination(s).
• Click “Add Travel Notice.”
• Look for an email confirming your Travel Notice.

Other useful information
• Check the expiration date on your Schwab Bank Visa Platinum Debit Card before submitting your Travel Notice to ensure that your card doesn’t expire during your trip. If you need a new card prior to traveling, please call Schwab Bank at 888-403-9000.
• You can update Travel Notices anytime.
• Will you be using a different phone number while traveling internationally that is not on your Schwab profile? Call Schwab Bank at 888-403-9000 so we can add it to your profile.

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All expressions of opinion are subject to change without notice in reaction to shifting market conditions. Data contained herein from third-party providers is obtained from what are considered reliable sources. However, its accuracy, completeness or reliability cannot be guaranteed.

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

Pg. 8: This information is not intended to be a substitute for specific individualized tax, legal or investment-planning advice. Where specific advice is necessary or appropriate, Schwab recommends that you consult with a qualified tax advisor, CPA, financial planner or investment manager.

Pg. 9, 32–33: Investing involves risk, including loss of principal.

Index definitions
Bloomberg Index Services Limited.

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ONLINE

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Cut through the fog. Focus on the facts.

American Funds beat their Lipper peer indexes in 92% of 20-year periods.*

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Investments are not FDIC-insured, nor are they deposits of or guaranteed by a bank or any other entity, so they may lose value. Investors should carefully consider investment objectives, risk, charges, and expenses. This and other important information is contained in the fund prospectuses and summary prospectuses, which can be obtained from a financial professional and should be read carefully before investing. For details, please contact your financial professional.

*Equity funds have beaten their Lipper peer indexes in 89% of 10-year periods and 96% of 20-year periods. Fixed income funds have beaten their Lipper indexes in 51% of 10-year periods and 80% of 20-year periods. Based on Class F-1 share results for rolling periods through December 31, 2017. Periods covered are the shorter of the fund’s lifetime or since the comparable Lipper index inception date (except Capital Income Builder and SMALLCAP World Fund; instead the Lipper average was used for Capital Income Builder’s peer group [Lipper Global Equity Income Funds] and SMALLCAP World Fund’s peer group [Lipper Global Small-/Mid-Cap Funds], because the Lipper index for each of the categories was not in existence at the inception of each fund).

Securities offered through American Funds Distributors, Inc.
uch as we may dislike them, taxes are a necessary part of civic life. The good news is that paying taxes means you earned something in the first place.

When it comes to investing, however, I encourage people to minimize their taxes, because then you can put more of your money to work building a financially secure future.

One approach is to select tax-efficient investment vehicles. Index mutual funds and exchange-traded funds, for example, generally have less portfolio turnover than their actively managed peers, meaning they generate fewer capital-gains distributions.

Another strategy is tax-loss harvesting. Whenever you sell investments for a profit, look for an underperforming investment in your portfolio you might sell at a loss. Doing so can offset some of the taxes you would otherwise owe on your gains.

At its essence, minimizing taxes is a matter of thoughtful planning. Have you considered what steps you can take to reduce your tax bill, both now and in the future? If not, it might be time to consult your financial planner or tax advisor. After all, it’s not what you make but what you keep that counts.

Charles R. Schwab
Founder & Chairman

See page 42 for important information. (0219-8ZAS)
Tuition, fees, books, room and board. It all adds up, and quickly. Whether you are saving for your child, grandchild, or other loved ones, a Schwab 529 Plan can offer the tax advantages, professional management, and flexibility you'll need to pursue your education savings goals.

Learn more at Schwab.com/529 or call 1-888-903-3863.
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Visit schwab.com/cards or call 866-912-8258 to learn more about the Charles Schwab Cards from American Express.

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ADP9441Q219-00 (0518-86C3) (09/18)