







Focus

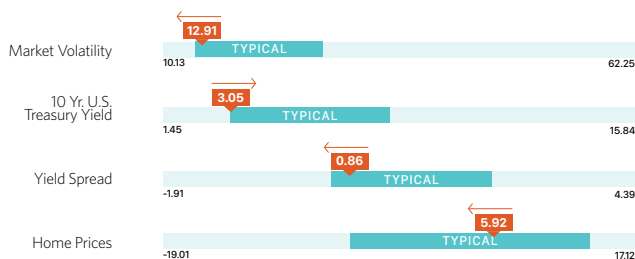
Risk: Frame of Reference

What risks do you take when you make an assumption about how your portfolio will perform based on headline numbers? Read more on page 6.

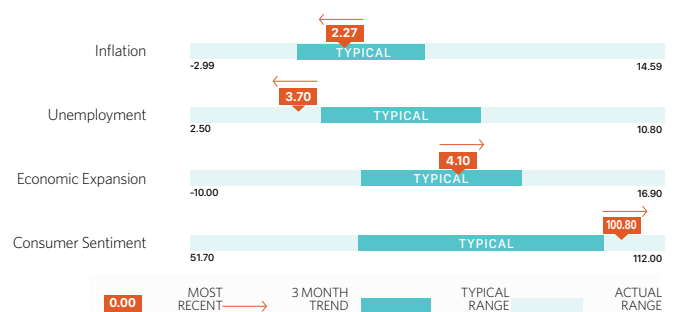
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MARKET SNAPSHOT



ECONOMIC SNAPSHOT





Downsizing:

An Emotional Transition that Brings New Opportunities



by *Guy Holman, CFP®*

During a meeting a few years ago, I posed a delicate question to a client in his 80s. The client, an artist, lived alone in a home full of treasures, but the house was getting difficult to maintain. “Would you consider downsizing?” I gently asked Jim Howard.

Jim was one of the nation’s leading artists during the golden age of fashion illustration from the 1960s to the 1980s. He worked for most of the major department stores in the U.S. sketching fashions by designers such as Chanel and Dior. His drawings, published in newspapers, helped sell millions in merchandise. In 2002, he moved to Denver and began a quiet semi-retirement. His home, stuffed with art and memories, was also his studio. When I suggested downsizing, Jim’s first thought was a panicky “no, not yet.”

Jim’s reaction is understandable. Downsizing is a major life event for millions of Americans. The U.S. Census estimates that two-thirds of retirees will move at least once, if not more, in their retirement. Still, downsizing is a transition fraught with anxiety and full of misconceptions. Many fear the loss of friendships forged over decades in a community. Some have anxiety about the prospect of making new friends or finding their way around a new neighborhood. Others dread getting rid of a lifetime of accumulated treasures including furniture, family heirlooms or a well-tended garden. Some postpone downsizing simply because that task seems too daunting.

Even beyond those practical considerations, downsizing is an official and very public acknowledgement of the reality of aging. Many people are afraid that it means



their lives – not just their homes – will get smaller. They are afraid of disappearing.

Downsizing your home can give you the ability to live a much larger life. Moving to a smaller home may lower not only the cost of living but also the stress of maintaining a large home. There's an amazing freedom that comes when you no longer have to worry about mowing the lawn or finding someone to do it for you. Downsizing frees up time and money to do the things you love. Additionally, fears of isolation after the big move may be exaggerated.

Downsizers who make an active effort to expand a robust social life and take up new hobbies are usually rewarded with a new network of friends.

Knowing when to downsize is critical. Some wait until their health falters or a partner dies to sell the big home, but that may be too late. The best time to downsize is before you have to do it. For one, the process usually takes longer than expected. Doing it alone can be overwhelming. Finding

a new home and selling the old one are stressful and financially significant decisions. Moving requires logistics, planning and, at times, tense negotiations with a partner. (The comfy old La-Z-Boy: bring it to the new place or haul it to the dump?) Give yourself plenty of time. You want to be thoughtful about your choices.

One of the biggest issues is figuring out what to do with all the stuff that won't fit into the new place. Some stuff is just the flotsam and jetsam that piles up in the attic over the years. That's easy to discard. What's more difficult are items with sentimental value such as old photos, children's artwork or family heirlooms. Sorting through those items and deciding what to keep can be exhausting and emotionally wrenching. Even unfinished projects can trigger strong feelings. We recommend spending only a few hours a day at the task so it doesn't get overwhelming.

And what about the items you can't keep but don't want to discard? That's where it gets complicated. Giving away stuff is a challenge. The painful reality is your children may not want all – or any – of it. Even charities are getting pickier. Antiques, fine furniture and collectibles that were once touted as good investments have plummeted in value in the last decade or so. Used furniture is almost worthless now. Goodwill may not want your mahogany dining set.

Even valuable assets can be troublesome. Today's retirees, and those on the cusp of retirement, are members of an affluent generation with lots of expensive toys: motorcycles, boats, second homes, etc. Gifting big-ticket items may stir up problems. How do you divide a boat among three children? Your children may not have the money, the time or the interest to maintain costly toys. Beware that gifts can cause rifts. You need to be careful. Downsizing sooner rather than later can help avert disputes among family members over assets. I encourage clients to be forthright and open about how they want valuable possessions distributed among heirs. Letting your family know your wishes early in the process goes a long way toward preventing disputes that can tear a family apart. I also suggest having assets appraised using a reputable firm before making any decisions.

Fortunately, there's plenty of help available for downsizers. Your local bookstore or library has how-to guides. Many communities offer workshops on downsizing. There's also a flourishing industry of professional consultants to help. Should you hold an estate sale? (It depends on the quality, style and condition of the furniture.) How much is that old art-deco bedroom set worth? (Not much in Cincinnati, but a lot in Miami. Ship it to a consignment shop in South Beach.) What to do with paper memorabilia like old diplomas and awards? (Digitize them and store them online.)

Your financial advisor can be a valuable resource. We navigate these situations with many of our clients and can help provide a network of experts and best practices throughout the process. Instead of approaching downsizing as a dreaded task, reframe it. Think of it as an opportunity for a fresh start. Be open to change.



That was particularly helpful for Jim Howard, the artist. Like a cascade of dominos, the downsizing suggestion led to the sale of the house which required sifting through possessions. Jim's drawings were a concern. Did they have any value? Over the course of two years, downsizing sparked one unlikely event after another, when earlier this year the unlikeliest event of all happened: Jim Howard was re-discovered at the age of 88 when his work was featured in a major exhibit at the Denver Art Museum.

At the opening gala in March, Jim was stunned by the outpouring of appreciation by museum patrons. "My drawings brought back memories. People remembered their mothers and grandmothers, the dresses they wore, the stores where they shopped," he recalls. So popular was the exhibit that curators are considering bringing the show to other cities in the U.S. Now a celebrity in Denver, Jim is easy to recognize with his black bowler hats, his colorful bow ties and his white handle-bar moustache.

Astonished, Jim is celebrating the almost magical transformation of his life. If not for the downsizing nudge from Guy, he says, "my work would have been lost. Now, I will be remembered. That means the world to me."

Guy W. Holman, CFP® is an Advisor in our Denver office and Shareholder for TCI Wealth Advisors.

Sketches have been reprinted with permission by Jim Howard.



Gifting Idea: 529 Gifting

by Jennifer Means, CFP®, FPQP™



My husband and I, much like many parents, are constantly thinking about and discussing the lessons we want our children to learn and the people we hope they become. Two of the values we highly agree upon are the importance of education as well as prioritizing the gift of time spent with loved ones over material possessions. With Thanksgiving and the busy holiday season, not to mention my oldest daughter's birthday, all quickly approaching, we embrace the opportunity to align our family's values with our "gifts" to one another. As an example—for our daughter's birthday parties, we've encouraged others not to bring gifts. However, if they wanted to give something they could instead contribute to our daughter's 529 plan—to invest in education. Last year, we included this poem in the birthday party invitations:

Below the poem we listed both the online link and a mailing address to send contributions.

We've had such positive feedback from sending this out. A few people still brought gifts in the traditional sense, but we did not open them in front of everyone. The end result was that the party became exactly what we wanted: time spent building relationships with people who we care for and love. This is something we plan to do for many years to come and encourage others to think outside the box as well.

Jennifer Means, CFP®, FPQP™ is a Support Advisor in our Reno office.

Gift Idea:

Gifts are quite nice that's safe to say,
But I want to go off to college someday.
Instead of a gift I'll play with once or twice,
How 'bout something to help me in life.
A donation into my 529 account
Will grow over time to a larger amount.
Then when I'm older and go off to school,
I can pay for myself which is really quite cool.
If you must get me a gift, I am learning to read,
A word learning book would be all that I need.





Frame of Reference Risk



by Sam Swift, CFA, CFP®, AIF®

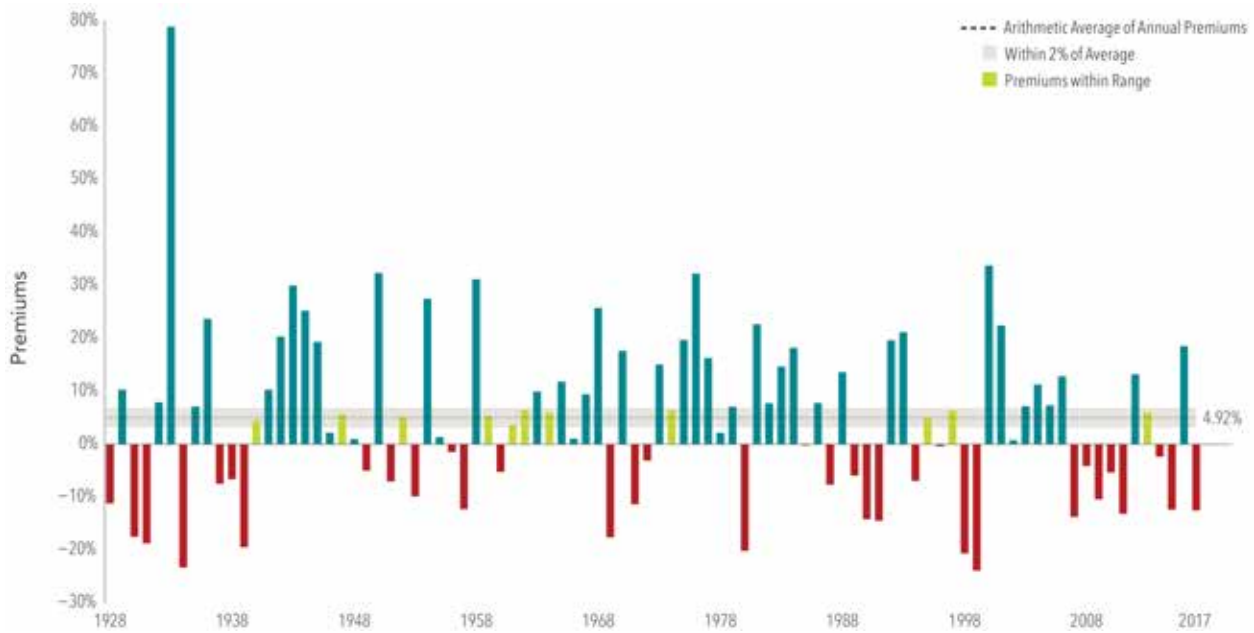
A particular sort of behavioral risk to investors has been increasing for the past several years even though many of us may not be aware of it. "Frame of reference risk" refers to the idea that we assume our portfolio should perform similarly to the headline numbers that we see all the time—namely the S&P 500 and the Dow. In fact, a globally diversified portfolio should almost always have significant differences, and as long as those differences are positive, we do not think too much about it. The risk, however, is that we choose to take (ill-advised) action because our globally diversified portfolio has underperformed the headline numbers. The last several years have seen this risk increasing as the S&P 500 has been one of the best performing asset classes over that time period.

The S&P 500 is made up of large stocks in the U.S. with no emphasis on value or growth. There are three main differences to a TCI portfolio that will cause it to deviate from S&P 500 returns:

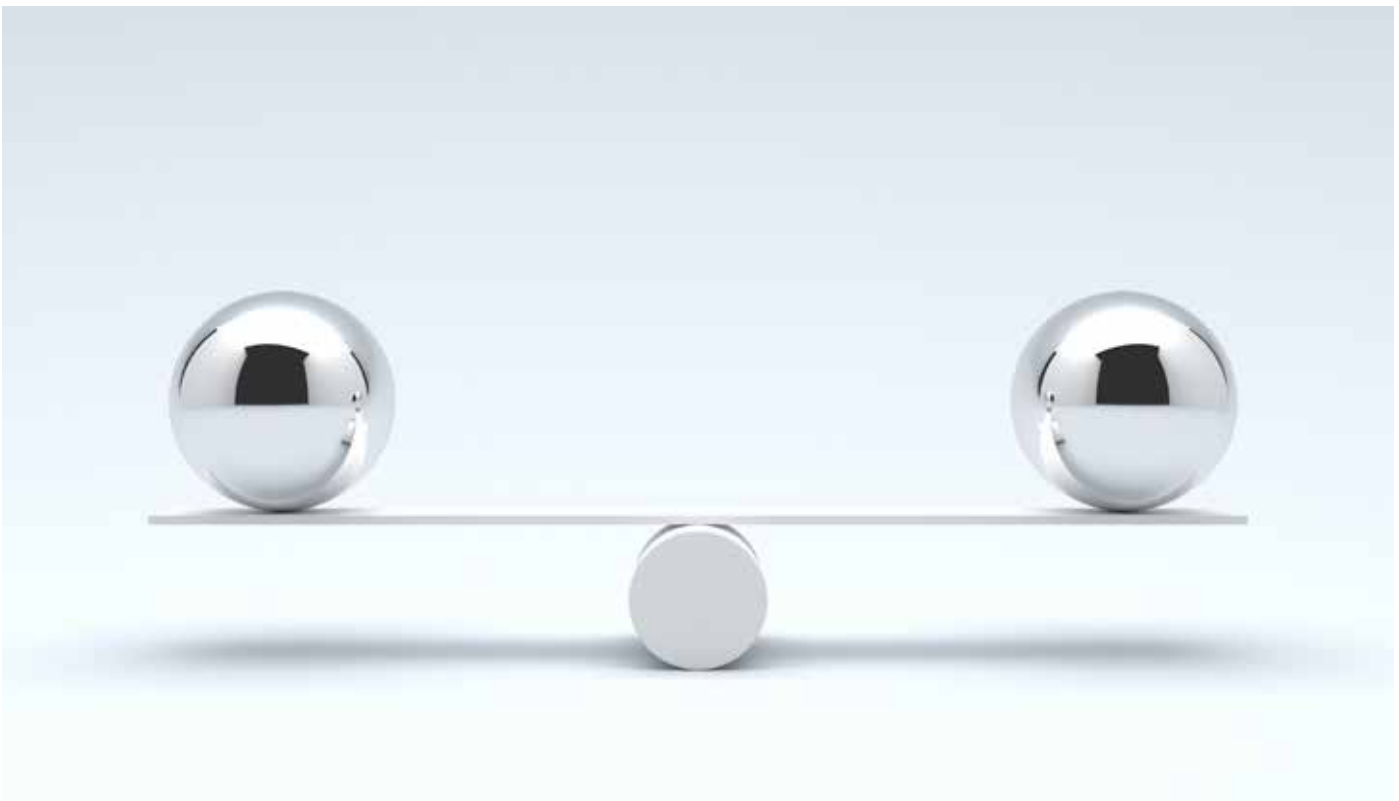
1. We diversify globally across both developed and emerging market countries.
2. We emphasize a tilt towards small stocks.
3. We emphasize a tilt towards value stocks.

All three of these factors are intended to increase expected returns over time through diversification and the capture of risk premiums but there is no guarantee they will outperform over shorter time periods. For example, going

Figure 1. Yearly Observations of Premiums — Value minus Growth: U.S. Markets, 1928-2017



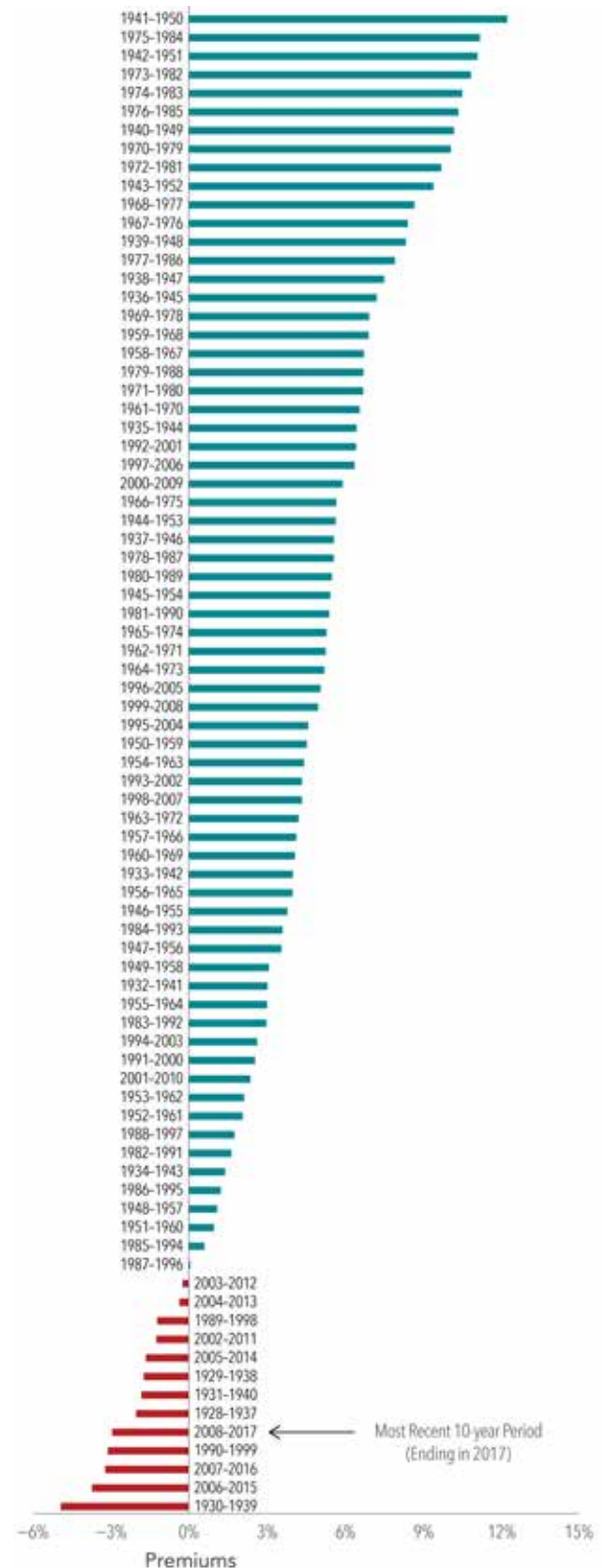
In U.S. dollars. The one-year relative price premium is computed as the one-year compound return on the Fama/French U.S. Value Research Index minus the one-year compound return on the Fama/French U.S. Growth Research Index. Fama/French indices provided by Ken French. Indices are not available for direct investment. Their performance does not reflect the expenses associated with the management of an actual portfolio. Past performance is no guarantee of future results.





In U.S. dollars. The 10-year rolling relative price premium is computed as the 10-year annualized compound return on the Fama/French U.S. Value Research Index minus the 10-year annualized compound return on the Fama/French U.S. Growth Research Index. Fama/French indices provided by Ken French. Indices are not available for direct investment. Their performance does not reflect the expenses associated with the management of an actual portfolio. Past performance is no guarantee of future results.

Figure 2. Historical Observations of 10-Year Premiums — Value minus Growth: U.S. Markets 10-Year Periods ending 1937-2017



back to 1970, the S&P did better than a globally diversified index in 19 years but worse in over 29 years. For the rest of this article we'll dive deeper into the value tilt, given its robust track record, as an example of what we expect with the three deviations from our "frame of reference".

From 1928–2017 the value premium in the U.S. had a positive annualized return of approximately 3.5%. In seven of the last 10 calendar years, however, the value premium in the U.S. has been negative. The question arises then: are periods of underperformance in the value premium that unusual? We can look to history to help make sense of this question.

SHORT-TERM RESULTS

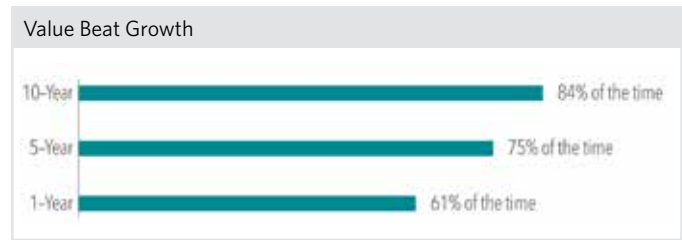
Figure 1 shows yearly observations of the U.S. value premium going back to 1928. The value premium is the return difference between stocks with low relative prices (value) and stocks with high relative prices (growth). We can see the annual arithmetic average for the premium is close to 5%, but in any given year the premium has varied widely, sometimes experiencing extreme positive or negative performance. In fact, there are only a handful of years that were within a 2% range of the annual average—most other years were further above or below the mean. In the last 10 years alone there have been premium observations that were negative, positive, and in line with the historical average. This data helps illustrate that there is a significant amount of variability around how long it may take a positive value premium to materialize.

LONG-TERM RESULTS

But what about longer-term underperformance? While the current stretch of extended underperformance for the value premium may be disappointing, it is not unprecedented. Figure 2 documents 10 year annualized performance periods for the value premium, sorted from lowest to highest by end date (calendar year). Premium computed as the return difference between the Fama/French U.S. Value Research Index and the Fama/French U.S. Growth Research Index.

This chart shows us that the best 10-year period for the value premium was from 1941–1950 (at top), while the worst was from 1930–1939 (at bottom). In most cases, we can see that the value premium was positive over a given 10-year period. As the arrow indicates, however, the value premium for the most recent 10-year period (ending in 2017) was negative. To put this in context, the most recent 10 years is one of 13 periods since 1937 that had a negative annualized value premium. Of these, the most recent

Figure 3. Historical Performance of Premiums over Rolling Periods — July 1926–December 2017



Value is Fama/French U.S. Value Research Index.
 Growth is Fama/French U.S. Growth Research Index.
 There are 979 overlapping 10-year periods, 1,039 overlapping 5-year periods, and overlapping 1-year periods

period of underperformance has been fairly middle-of-the-road in magnitude.

While there is uncertainty around how long periods of underperformance may last, historically the frequency of a positive value premium has increased over longer time horizons. Figure 3 shows the percentage of time that the value premium was positive over different time periods going back to 1926. When the length of time measured increased the chance of a positive value premium increased.

For example, when the time period measured goes from five years to 10 years, the frequency of positive average premiums increased from 75% to 84%.

What does all of this mean for us? While a positive value premium is never guaranteed, the premium has historically had a greater chance of being positive the longer the time horizon observed. However, even with long-term positive results, periods of extended underperformance can happen from time to time. Because these premiums have not historically materialized in a steady or predictable fashion, TCI believes a consistent investment approach that maintains an emphasis on the premiums combined with global diversification may allow investors to more reliably capture long-term enhanced returns.

Sam Swift, CFA, CFP®, AIF® is an Advisor in our Tucson office and Shareholder for TCI Wealth Advisors. Sam also leads TCI's Investment Committee which conducts on-going research and analysis that guides portfolio construction for TCI clients.

Two-Factor Authentication



by Brian Davis



In today's world of increasing digital crime and internet fraud it is important to stay informed in order to protect yourself. Password security continues to evolve and two-factor authentication, or 2FA, is now mainstream. Two-factor authentication is an extra layer of security that requires two pieces of verification and comes in a variety of forms. You may have experienced it when logging in to your Charles Schwab or TD Ameritrade accounts when they send you a text message containing a code. Let's explore what it is, why you want it, and a few different ways to use it.

How does Two-Factor Authentication work?

In security, there are three common factors of authentication: something you know, something you have, and something you are. Most common is something you know because we enter passwords and PINs all the time. Something you have could be a smart card, a hardware token, or even your phone. Something you are refers to your fingerprints, retina, DNA, etc. Many newer smartphones have a fingerprint reader built in that is used

to unlock the phone. Some phones will even use your face as a method to unlock the device.

Two-factor authentication is the practice of using two of these to authenticate you. Most commonly, this will be implemented with a password and something you have. For example, many banks will send you a text message with a code in addition to logging in with your password. Text messages, also called SMS, have their weaknesses but they are better than not using 2FA at all.

What types of Two-Factor Authentication exist?

There are a plethora of second factor methods using something you have. Most commonly, they aim to prove that the thing you have is your cell phone. SMS is one way to check this because, in most cases, SMS messages intended for you will only go to your phone.

For a more advanced physical second factor, we can turn to Time-based One Time Password generator apps, usually referred to as TOTP. When you set one of these up, a secret key is shared between you and the service you are using. When the generator app on your phone uses this key, it will generate a numerical code (usually six digits long) that only sticks around for 30-60 seconds. When you sign in to a website, instead of texting you this code, you will open the app on your phone and type the provided code into the login form. It does not require any cell service or data access to get the code. In most cases, if you lose your phone, you will lose these codes as well, so make sure you keep the backup codes that come from the setup process in a safe and secure place. Time-based one-time use passwords take a bit more work to set up than SMS but you will be better protected than with SMS as your second factor.

There are many choices available for TOTP apps. Google Authenticator is one of the most popular and easiest to set up but lacks some bells and whistles found in others. LastPass, a free password manager, provides its own authenticator app. If you are using LastPass to store your passwords, they will back up your TOTP codes on your account in case something happens to your phone. Authy also backs up codes if you do not want LastPass to do it, or if you are using a different password manager (you are using a password manager, aren't you?). If you do not like those options, Microsoft has its own offering and there are plenty more options out there.

If you are looking for even more protection, you might try a FIDO U2F key instead. These are pieces of hardware that generally come in a flash drive-like form factor. When logging into a website with one of these, you have to plug the device into your computer and push a



button. This will let the website send a challenge to the key and the key will generate a response for the website. Only your key will generate a correct response, and if an attacker is spoofing the real website to trick you, the key's response won't work. You'll be prevented from making that mistake! Just don't lose the key. If it is gone, you will need a backup method. Fortunately, it is possible to link more than one key to an account, so you can keep one in a safe place and only use it in case of emergency. You can also use the same key on multiple websites.

Not every website supports the FIDO U2F method, but if you want to buy one, the Yubikey is one of the most popular options. There are several more generic brand varieties on Amazon. Google is now selling their own, too.

How do I set up Two-Factor Authentication?

Setting up your 2FA depends on the website you are using, but in general, you will go to the security settings and look for a "Two-Factor Authentication" option. The website will walk you through the steps from there, whether it is giving them your phone number so they can send you a text message, scanning a barcode into a TOTP app, or plugging in your FIDO key. Google has a great page with instructions on setting it up for your Google Account at www.google.com/landing/2step.

TCI highly recommends using a password manager and implementing two-factor authentication whenever possible. As a testament to this and to ensure our client's

security, TCI will be adding two-factor authentication to our client portal in the coming months. Keep an eye out for updates!

Brian Davis oversees Information Technology at TCI Wealth Advisors.

Reminder —

OFFICE CLOSURES

TCI offices will be closed the following dates for the Holidays:

Wednesday, November 21st

*our office will close at 2:00 pm and remain closed through **Friday, November 23rd***

Monday, December 24th–Tuesday, December 25th

Monday, December 31st

*our office will close at 2:00 pm and remain closed through **Tuesday, January 1st***

Please advise TCI as soon as possible of any end of the year business or transactions that need to take place.

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TCI NEWS

Introducing Video Conferencing

We are excited to extend the ability to meet with your TCI team via video! While in-person meetings remain our preferred way to meet with clients, a great alternative is face-to-face through video conferencing. With the demands of a busy schedule, where you are located, or whatever it may be, we recognize that a purpose filled life can get hectic and do not want the inability to make it into one of our offices prohibit or delay having important conversations with your Advisor.

If a video meeting is more convenient for your upcoming meeting, feel free to reach out to your Advisor to coordinate. If it is your first time video conferencing, your TCI team will be



able to walk you through the setup step-by-step to ensure a smooth experience. In fact, we have received positive feedback from clients who have already taken advantage of video conferencing.