Q3 2017
INVESTMENT PERSPECTIVES

DAVE KEEVINS
CHIEF INVESTMENT OFFICER

ANDREW KREI, CFA
HEAD OF INVESTMENT RESEARCH

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- **GEOPOLITICAL TENSIONS INCREASE; SO DO STOCK VALUATIONS:** Even as rhetoric between the US and North Korea became more heated, stocks soared to record highs around the globe. Non-US stocks continued to lead the move higher in 2017, with emerging markets indices posting the best Q3 2017 and year-to-date performance among major asset classes.
- **VOLATILITY HITS ALL-TIME LOWS:** Despite various forms of uncertainty dominating headlines—geopolitical, legislative, meteorological (i.e., hurricanes Harvey, Irma, and Maria)—the most widely-followed measure of volatility expectations for US large cap stocks (the VIX index) reached its lowest level since its inception in 1990 as investors showed little concern about the stock market's trajectory.
- **FED SHIFTS FROM "QE" TO "QT":** After years of quantitative easing ("QE") aimed at bolstering the economy and financial markets in the wake of the 2008 global financial crisis, the Federal Reserve announced that it would begin to reduce its balance sheet in October. This quantitative tightening ("QT") process will begin unwinding some of the extraordinary policy measures taken by the Fed to inject liquidity into the system and keep interest rates low.

MARKET RECAP

Global markets extended year-to-date gains in the third quarter as stocks and bonds responded to the favorable combination of strong earnings growth and supportive monetary conditions. Despite the Fed signaling that it would likely raise rates in December and begin the process of trimming its balance sheet, accommodative measures from the European Central Bank (ECB) and Bank of Japan (BOJ) more than offset any investor concern about quantitative tightening triggered by the US Federal Reserve.

Non-US stocks were the standout performers for the third consecutive quarter owing to healthy economic data and renewed investor interest in the cheaper valuations of global markets relative to the US market. The global commodity complex also extended its year-to-date gains as a weaker US dollar buoyed prices across metals and materials markets.

FIXED INCOME

	USD Total Return (%)	
INDEX	**Q3**	**YTD**
Barclays 1-10 Yr Muni	0.7%	3.7%
Barclays US Agg. Bond	0.9%	3.1%
BofA/ML HY Master II	2.0%	7.1%

EQUITIES

	USD Total Return (%)	
INDEX	**Q3**	**YTD**
Russell 3000	4.6%	13.9%
S&P 500	4.5%	14.2%
Russell 2000	5.7%	10.9%
MSCI All Country World	5.2%	17.3%
MSCI EAFE	5.4%	20.0%
MSCI Emerging Mkts	7.9%	27.8%

Source: Morningstar (Data as of 9/30/17)

NEW HIGHS FOR STOCK MARKETS AROUND THE WORLD

Strong results during the Q2 2017 earnings season continued to lift stocks around the globe to new highs. For the first time since 2012, global earnings growth over the past 12 months exceeded 10%, highlighting the synchronized nature of the economic acceleration. According to August 2017 manufacturing data compiled by the Institute of Supply Management, only one major global economy was contracting—down from six at the beginning of the year and 10 at the beginning of 2016.

Despite the Fed raising rates twice in 2017, global liquidity continues to be plentiful thanks to the European and Japanese central banks' ultra-accommodative stances. With interest rates remaining low and global growth statistics exceeding expectations, investors have continued to bid the prices of financial assets higher.

VOLATILITY'S VANISHING ACT

Perhaps the most remarkable feature of the rally in stocks this year has been the utter lack of volatility experienced by the market. Since 1990, this year's levels of S&P 500 volatility are on track to be the lowest recorded. Moreover, the VIX—or the S&P 500 Volatility Index, a measure of investors' volatility expectations—has averaged its lowest level since its inception in 1990. Even more extraordinary is that, despite investors' historically low expectations for volatility this year, they have still managed to overestimate actual volatility by roughly 60%. That is nearly three times higher than the long-term average and the biggest divergence between expectations and reality since 1992.

The biggest driver behind this phenomenon has been the lack of correlation between individual stocks and sectors in the S&P 500. In other words, on a day-to-day basis, stocks in the index are experiencing a wide range of performance dispersion rather than moving in lockstep. The overall buoyancy of the S&P 500, despite very poor performance from a few individual sectors, highlights how investors have been rotating capital from one sector to another, as opposed to selling stocks outright. This has kept sector volatility in a fairly normal range relative to historical levels, but has caused the precipitous decline in volatility for the broader market. This trend will likely reverse, but stock investors continue to enjoy a historically smooth ride in the meantime.

EMERGING MARKETS: FROM LAGGARD TO LEADER

After being one of the poorest performing asset classes since 2012, emerging market stocks have been the top performers in 2017, posting gains of 27.8% this year (MSCI Emerging Markets Index). This strong performance has been driven by a variety of factors. First and foremost, China—the biggest weighting in the MSCI Emerging Markets Index—has shown signs of reaccelerating trade growth and appears to have avoided any issues related to its domestic credit excesses for the time being. Second, a weaker US dollar and ultra-accommodative global monetary conditions have created the type of environment where EM stocks have historically thrived. Third, commodity prices—an integral part of a number of emerging markets' economies—have either stabilized or moved higher in 2017 after a period of price declines. Lastly, some of the more notable corruption headlines that had plagued emerging markets—namely, Brazil—have generally faded into the background.

INFLATION COOLS AND ECONOMISTS DEBATE "WHY?"

Bond investors and Fed-watchers have been fixated on inflation statistics as a cue for the future trajectory of interest rates. Despite showing some signs of acceleration in the beginning of the year, measures of US inflation cooled during Q3. Inflation readings are lagging indicators, however, and the market for Treasuries that are adjusted for inflation suggests that consumer prices may actually be on the upswing. These inflation-protected

continued on page 3

bonds, known as TIPS, are now forecasting 1.9% annual inflation over the next 10 years—up from 1.7% at the end of Q2 2017.

Beyond having an impact on what households spend on goods and services, inflation is a key input into the Fed's short-term interest rate policy which, in turn, can have a substantial impact on economic activity. There has been an ongoing debate between economists over whether the economy can actually escape a 1.0-1.5% inflation environment. The Fed has argued that transitory factors such as commodity prices and wireless plan discounts are to blame for the recent soft patch, and that a tight labor market should begin to more reliably generate inflation over the coming quarters. This would argue for higher short-term interest rates to keep the economy from overheating. Other economists suggest that the downward pressure on prices is more attributable to structural factors, such as the rise of the "gig economy" (e.g., Uber, Lyft, Airbnb, Postmates, etc.), manufacturing automation, and the "Amazon effect." Persistently low inflation would mean that low long-term interest rates are likely here to stay. In this scenario, if the Fed were to aggressively raise rates based on antiquated inflation models, it would risk triggering a recession.

INTEREST RATES TAKE A ROUND-TRIP

10-year Treasury rates took a round-trip course from roughly 2.3% at the beginning of Q3, to 2.1% in early September, and back to 2.3% by the end of the quarter. The Republican tax reform framework released in September led many to speculate that near-term deficits may need to be funded by issuing additional government debt. At the same time, the Fed has outlined its intentions to begin tapering its holdings of US Treasuries. With the potential for a wave of supply hitting the market, bond traders worried that demand would not be sufficient to keep yields at their current levels.

Core bonds finished the quarter in the black, extending their year-to-date gains. As measured by the Barclays Aggregate Bond Index, core fixed income is up 3.1% in 2017. Longer duration bonds—or bonds with a greater sensitivity to changes in interest rates—have been the best performers in the category, with the Barclays US Long Government/Credit Index outperforming its short duration (1-5 year) counterpart by nearly 6.1% this year.

Municipal bonds sold off at the end of the quarter in response to the proposed tax reform measures that would lower tax brackets across the board. In general, lower tax rates should make municipal bonds less attractive relative to taxable bonds on an adjusted basis. Despite the sell-off, municipal bonds remain a strong performer within fixed income this year, having returned 3.7% year-to-date.

NORTH KOREA CONTINUES ITS SABRE-RATTLING; TRUMP THREATENS TOTAL DESTRUCTION

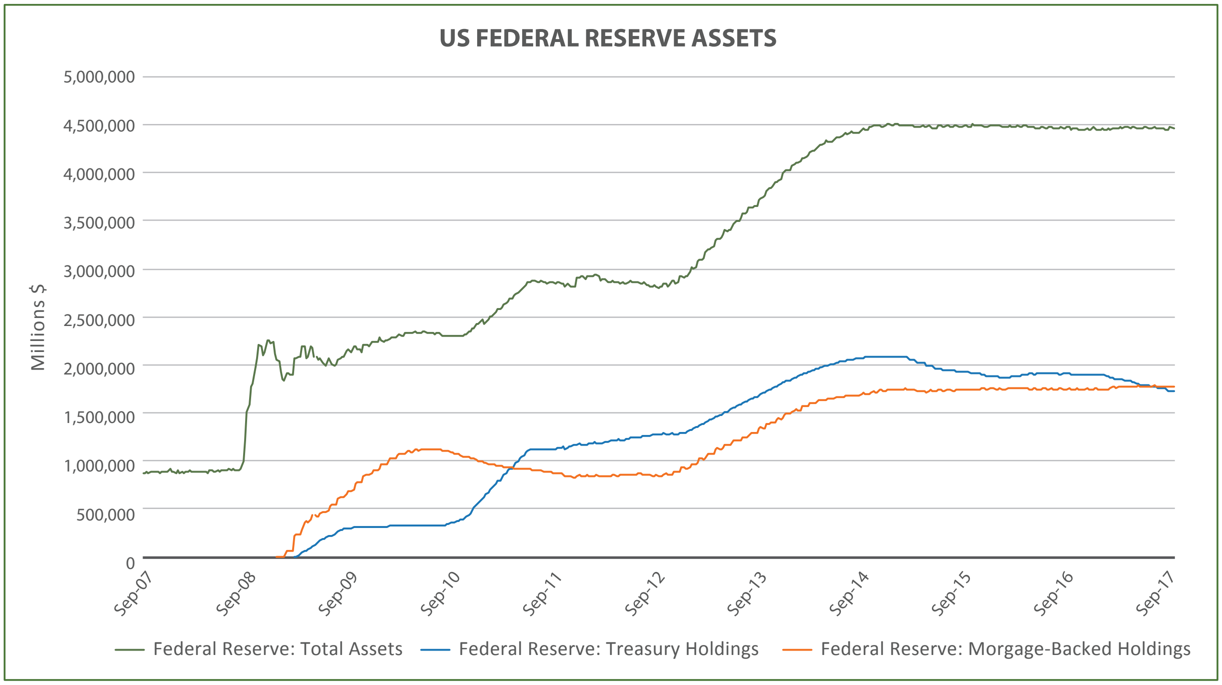
North Korea's leader, Kim Jong-un, continued his bellicose provocations by conducting multiple missile tests and detonating a hydrogen bomb at an underground site during the quarter. The tests, which included firing missiles over Japan, were widely condemned by nations around the world, and multiple rounds of economic sanctions were imposed on North Korea by the United States as well as the United Nations. In President Trump's address to the United Nations General Assembly, he threatened to "totally destroy North Korea" if deemed necessary. While the rhetoric has been heated, the market's reaction—or lack thereof—suggests that investors continue to view the likelihood of nuclear war as remote. We hope the markets are right.

THE FED'S GRADUAL MOVE TOWARD NORMALIZATION

Having managed to raise short-term interest rates four times since Q4 2015 without causing any damage to market confidence, the Federal Reserve turned its attention to shrinking its $4.5 trillion balance sheet without

continued on page 4

unnerving investors. For context, the chart below illustrates how, via three rounds of quantitative easing ("QE") post-financial crisis, the Fed came to own $4.5 trillion of assets. The majority of the Fed's holdings are Treasuries ($1.7 trillion) and mortgage-backed securities ($1.8 trillion) that it began buying in 2009 in an effort to provide liquidity and support to the financial system.



Source: Y Charts (Data as of 9/30/17)

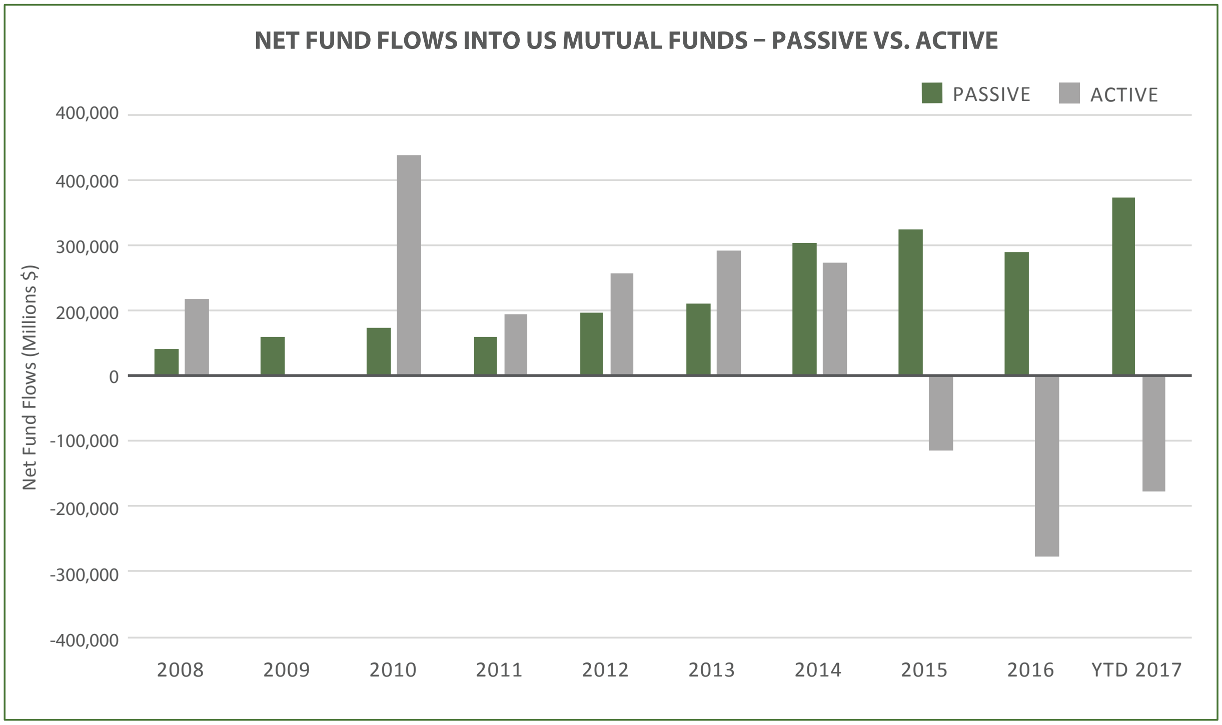
In the Fed's September 2017 meeting minutes, the Open Market Committee outlined its plan to allow a portion of the interest and maturity payments from securities held on its balance sheet to roll off—i.e., not be reinvested into new securities. By avoiding outright sales of assets and telegraphing its intentions to be "gradual and predictable," the Fed hoped to avoid a repeat of 2013's "taper tantrum"—when the bond market suffered a substantial dislocation after then-Fed Chair Bernanke suggested the Fed would reduce its bond purchases. So far, the Fed's strategy appears to be working; interest rates have held relatively steady and equity markets continued their climb higher after Chair Yellen's announcement.

MOTHER NATURE TAKES A TOLL

The Atlantic's 2017 hurricane season ramped up in earnest during the quarter, and three major storms—Harvey, Irma, and Maria—combined to cause billions of dollars of damage throughout the US gulf region and the Caribbean islands. Never before had three Category 4 or higher hurricanes made landfall in the US during a single season.

While the precise economic impact of the storms remains to be determined, economists suggest that near-term growth figures may take a slight hit as businesses were forced to temporarily shut down and residents were displaced from their homes. Over the medium to longer-term, however, it is unlikely that the hurricanes will have any material impact on overall US economic performance. Gasoline prices surged in the immediate aftermath of Hurricane Harvey as oil refineries on Texas' gulf coast were forced to shut down, thereby constraining supplies. Conversely, West Texas Intermediate Crude Oil prices dipped after Hurricane Harvey due to reduced demand from the refineries impacted by the storms. Despite the disruption, the majority of Texas energy executives surveyed by the Dallas Fed in the aftermath of the storm said that they expected the issues within energy markets to be resolved over the next six months. In fact, crude oil prices had already recouped their losses and were approaching the highest levels of the year at the end of the quarter. ●

The "Active vs. Passive" Debate



Source: Morningstar (Data as of 8/31/17)

With actively-managed mutual funds experiencing their third consecutive year of net outflows and passive strategies continuing to represent a growing share of the investment universe, many will argue that passive investing is finally winning the years-long debate over the "right" approach to investing. We would argue that this conclusion is a gross oversimplification. We take a different approach, trying to combine the best characteristics of each strategy and tailoring solutions to each individual's circumstances and psychology.

When it comes to determining which investment style is best suited for an individual—active managers that try to beat their benchmarks and/or mitigate risk through security selection, or passive strategies that track indexes at a low cost—it is important to candidly assess an investor's priorities and investment "personality." Here are a few examples to consider:

- Some investors prefer to focus on risk mitigation, whereas other investors want to maximize returns. Said differently, some investors are highly loss averse, whereas other investors have an overwhelming fear of missing out.

- Some investors are truly comfortable taking a long-term (i.e., 5-10 years) view, whereas others are more concerned with short-term fluctuations.

- Some investors have little tolerance for periods of underperformance, whereas other investors accept the inherent risk of underperforming when attempting to outperform (to paraphrase Howard Marks from Oaktree Capital, in order to be different and better, one must risk being different and worse).

continued on page 6

A highly risk-averse investor that may be his/her own worst enemy by emotionally selling during a market correction may be better suited for a conservative, actively-managed strategy that focuses on limiting downside. Alternatively, an investor more concerned with performance relative to a benchmark may choose a passive strategy in order to minimize his/her performance deviations each quarter. There can be many different motivations driving investor attitudes, and we believe it is critical to explore these factors.

Beyond investor temperament considerations, what are some of the other key dynamics we evaluate when determining whether an active or passive strategy is appropriate? Here are a few thoughts:

- **The relative efficiency of asset classes.** Research generally supports the concept that managers focusing on more inefficient pockets of the investment universe have a higher probability of outperforming passive strategies. Higher levels of inefficiency have historically been associated with smaller capitalization companies, non-US markets and underserved or fragmented niches. Typical characteristics of these market segments include higher dispersion of returns (i.e., a wider gap between the best and worst performers), lower intra-market correlations, limited research analyst coverage and a general lack of informational efficiency (i.e., information is neither circulated quickly nor processed rapidly). We believe that these attributes help shift the odds in the favor of active managers over the long run, and conversely, an absence of these attributes should favor passive strategies.

- **The cyclicality of active vs. passive.** Findings from institutional research firms, such as the Leuthold Group, have shown that outperformance from active managers tends to be cyclical. For the same reasons that investors construct diversified portfolios, not all asset classes or investing styles work in every market environment.

  In general, active managers tend to perform better later in market cycles and through corrective phases, while passive strategies often perform better in the early and middle stages of a market cycle. It is impossible to precisely identify where we are in a market cycle, but having a sense for whether we are in the earlier or later stages can help dictate the active/passive mix.

- **Investor mandate.** In some instances, a more goals-based approach is required to meet an investor's needs. A bespoke, active strategy may be necessary to immunize a portfolio against future liabilities, generate a specific annual cash flow stream, diversify around a concentrated position, etc.

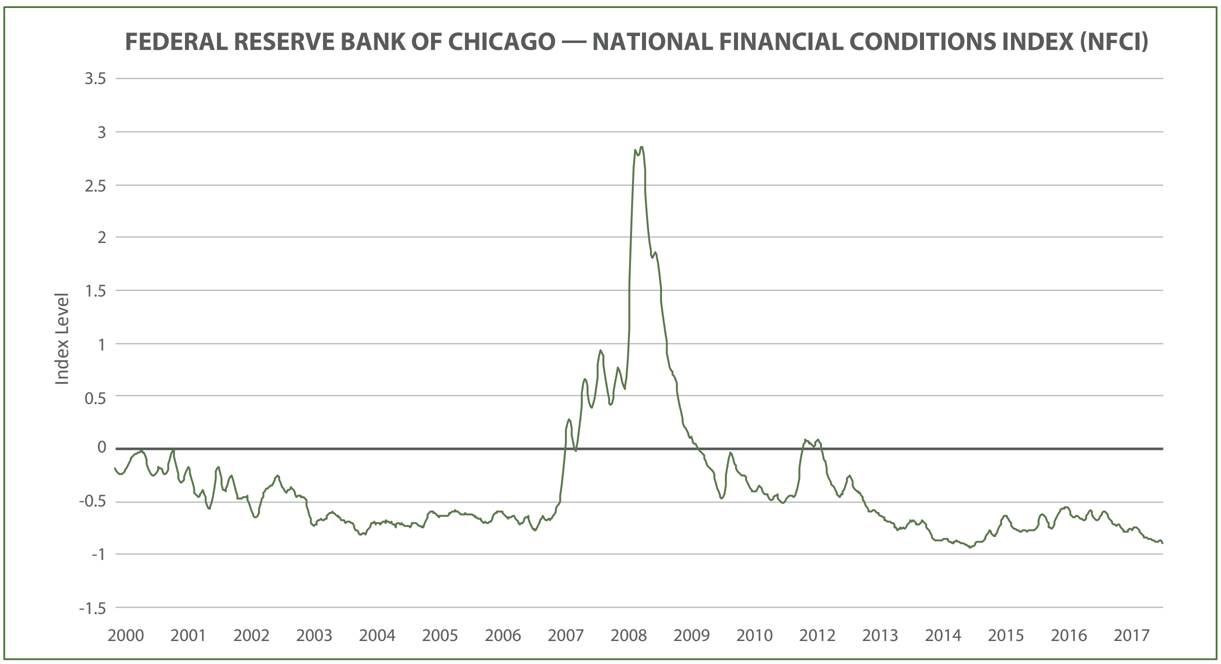
In sum, we do not see the active versus passive issue as a debate that yields a right and wrong answer. Rather, there may be different answers for different investors, and we strive to find the right balance by thoughtfully assessing the considerations highlighted above.

Chart of the Quarter

With the Fed raising rates two times this year, Chairperson Janet Yellen outlining the Fed's intentions of trimming its balance sheet starting in October, and markets forecasting a third Fed rate hike in December, the strong recent performance from stocks and bonds alike may seem to contradict conventional wisdom. We have received inquiries from clients along the lines of "Shouldn't interest rates be rising (i.e., bond prices declining) and stocks be facing headwinds in this environment rather than the opposite reaction?" While it is true that the benchmark Fed Funds rate has increased this year, dig a bit deeper and you will see that overall financial conditions are actually more accommodative now than they were at the beginning of 2017.

That brings us to the Chart of the Quarter. Below, you will see a plot of the Federal Reserve Bank of Chicago's National Financial Conditions Index (NFCI) since 2000. The NFCI is designed to track the relative looseness or tightness of US financial conditions by combining 105 measures of risk, credit, and leverage into a single number. A reading of zero would indicate that the financial system is operating at its historical average, while negative readings reflect looser-than-average conditions and positive readings imply tighter-than-average conditions.

At its current reading of -0.89 (9/15/17), the NFCI suggests that the US financial system is operating in one of the most accommodative environments since this metric's inception in 1971. Market volatility has been subdued, liquidity is plentiful, credit is readily accessible, and corporate leverage is at a manageable level. These factors have combined to create an attractive backdrop for investing in risk assets.



Source: Y Charts (Data as of 9/30/17)

The other years when financial conditions were this loose? 1976 (into the beginning of 1977), when the S&P 500 returned 23.8%; 1993, when the S&P 500 gained 10.0%; and 2014, when the S&P 500 advanced 13.5%. Interestingly, in the year immediately following those ultra-loose readings, the average return for the S&P 500 was -1.4%. While there are too few data points to draw any definitive conclusions, those rates of return at least suggest that the NFCI could be a contrary indicator at extremes.

So, while the Fed Funds rate is likely to end the year roughly 0.75% higher than it started—typically a negative development for stocks and bonds—taking a broader view of US financial conditions highlights how accommodative the recent environment has been for investors. How long this will persist remains to be seen.

Cybersecurity and Your Money

This quarter, several high profile cybersecurity-related events occurred, including the Equifax hack (publicly announced on September 7th) and the cyber incident at the U.S. Securities & Exchange Commission (identified in August 2017 and linked to an incident previously detected in 2016). At a time when headlines regarding large-scale cyber breaches are the norm, the question for investors has changed from "what do I do if my information is compromised? " to "what do I do before my information is compromised?"

This may not be a pure investment discussion, but we all know that personal data falling into the hands of hackers or other bad actors can put your investment accounts, other financial accounts and identity at risk—at which point cybersecurity and your investments become intertwined. While nobody is immune from cybersecurity threats and nothing can be done to fully protect one's identity from all cybersecurity-related risk, the following are some practices to consider implementing in an effort to mitigate cyber risk:

- Enroll in an identity theft protection/mitigation service, such as Experian IdentityWorks Premium or Life Lock Ultimate Plus.
- Go to annualcreditreport.com and follow the prompts to check each of your credit reports through each credit bureau. This is a free service and accessible once per year.
- Check bank account and credit card history regularly for any suspicious activity.
- If any of the above reveals fraudulent activity, place a fraud alert at one of the credit bureaus by going to one of their websites or calling them:

  Experian: (888) 397-3742 | Transunion: (800) 680-7289 | Equifax: (800) 525-6285

  A fraud alert established at one bureau automatically notifies the others.
- For your online banking, investment account and e-mail log-ins, create strong passwords containing at least six characters; a combination of upper case and lower case letters, numbers and symbols. Be sure not to choose easy to predict letter and number combinations and change passwords frequently.

Please feel free to contact your Client Advisor if you have questions about protecting your identity.

Contact us

Dave Keevins
Chief Investment Officer

Andrew Krei, CFA
Head of Investment Research

Crescent Grove Advisors, LLC

100 Field Drive
Suite 120
Lake Forest, IL 60045
847-752-0292

333 N. Plankinton Avenue
Suite 216
Milwaukee, WI 53203
414-386-5340

3284 Northside Parkway NW
Suite 495
Atlanta, GA 30327
678-585-6625

crescentgroveadvisors.com