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2021 ASSET ALLOCATION PERSPECTIVES / OUTLOOK

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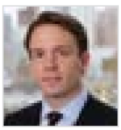

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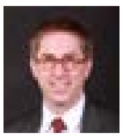

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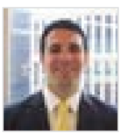

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YEAR IN REVIEW

We would like to begin this piece by sending our best wishes for the health and safety of all of our readers, their families and friends. It is difficult to write about the investment landscape with the current backdrop of human tragedy around the world. It is particularly unsettling to do so when the positive outcomes of financial markets have so meaningfully diverged from the health outcomes and the economic reality for so many. We're especially grateful this year to have the privilege to help our clients navigate through these challenging times.

WILD RIDE

This year was unlike any we can remember. Markets dropped sharply and recovered at a pace not seen in any of our lifetimes. Global stocks fell nearly 35% in a matter of weeks and recovered nearly as quickly. A market cycle that normally plays out over five years was experienced in just five months. Investors were given less time to analyze and react, and received a much swifter reward for their patience and discipline. Governments and central bankers were quick to employ and expand their 2008 playbooks with trillions of dollars of fiscal and monetary stimulus, which provided cash in consumers' pockets and a swift stabilization of markets. The arrival of vaccines with more than 90% effectiveness cleared a path toward a major economic recovery and pushed markets even higher.

Economists may well remember 2020 as the year in which central bankers took an important step toward loosening monetary policy by shifting to "average inflation targeting," essentially a promise to keep rates low until inflation is well above their 2% target. This step signals a new phase of "lower for longer" interest rates. Fed chair Jerome Powell has pledged to keep rates near zero until 2023, inviting investors to price assets with the expectation of basically no yield on their cash for years to come. **This shift has forced us to reduce our exposure to cash, increase our exposure to high-quality short duration bonds and shift more capital to alternative investments.***

Stock pickers may see this year as defined by the historically disparate returns. The NYSE FANG+ Index, made up of large-cap technology-oriented companies, was up 103% versus a global stock market that rose 16%. Despite catching up somewhat in the fourth-quarter rally, value-oriented company stocks and much of the world outside the U.S. were largely left behind in this tech-driven market. As we look forward to 2021 and the administration of the COVID-19 vaccines, we expect a more balanced market where earnings growth should be led by some of the companies and industries hardest hit by the lockdowns. We still expect that high-quality growth companies, increasingly rare in a world starved for structural growth, should command premium valuations. Falling interest rates have disproportionately impacted the valuations of these growth companies as future cash flows can be discounted at lower rates, making them more valuable today. While we don't expect further major moves in interest rates in the near term, these growth stocks are more vulnerable to rising rates. We have been rebalancing portfolios, as is best practice (see chart below), out of high-quality U.S. growth companies, where valuations are less attractive, towards other areas of our portfolio that have been left behind.

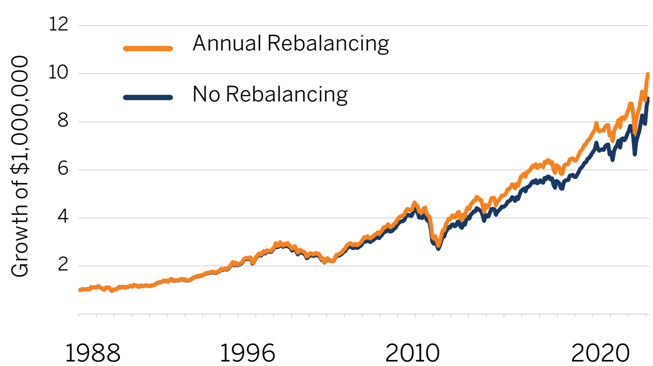
The unique nature of this economic recession has led to what some have called the "Great Acceleration." The increased pace of adoption of digital commerce, workflows, advertising, communication, and entertainment has condensed years of future growth into just a few months, generating scale advantages and other benefits to some companies and industries for years to come. At the same time, many businesses have experienced more temporary increases in demand. This needs to be carefully accounted for when considering current valuations. Increases in valuations of all of these so-called COVID-19 beneficiaries have left large parts of the market behind and offering attractive value.

Another notable trend this year was an increased focus from investors on sustainability and diversity within their investment managers. Both have long been priorities of ours, and we believe that applying these lenses to our research enhances returns and social outcomes. All investors should seek to understand how these trends can impact the risks of the businesses in which they invest and the opportunities that stem from changing consumer preferences. Firms must also respond to an increasing desire from clients and colleagues to understand their

*PRIVATE AND ALTERNATIVE INVESTMENTS (INCLUDING HEDGE FUNDS AND PRIVATE EQUITY, CREDIT AND REAL ESTATE FUNDS) MAY BE AVAILABLE FOR QUALIFIED PURCHASERS AND/OR ACCREDITED INVESTORS ONLY.

Finding Balance

Prudent portfolio rebalancing, especially during periods of equity markets stress, can add value over time.



SOURCE: BLOOMBERG, 70% MSCI ACWI/ 30% BLOOMBERG BARCLAYS AGGREGATE PORTFOLIO. REBALANCED ANNUALLY TO 70% EQUITIES, 30% BONDS, REINVESTING DIVIDENDS AND INTEREST. CHART COVERS TIME PERIOD OF 12/1/88-11/30/20.

Stimulus Response

Unprecedented stimulus from central banks and policymakers, with more likely on the way, has helped support the global economy during the ongoing COVID-19 crisis. Additional stimulus would boost short-term economic activity, but how might more government spending impact the economy and financial markets in the long term? Last year's fiscal stimulus was unprecedented in scale and speed, but history shows that nations have experienced higher debt loads (see chart below)—particularly during wars or recessions—without triggering debt crises. As long as rates and the cost of servicing debt remain low, and deficit spending does not exceed nominal GDP growth, developed economies can likely weather this period.

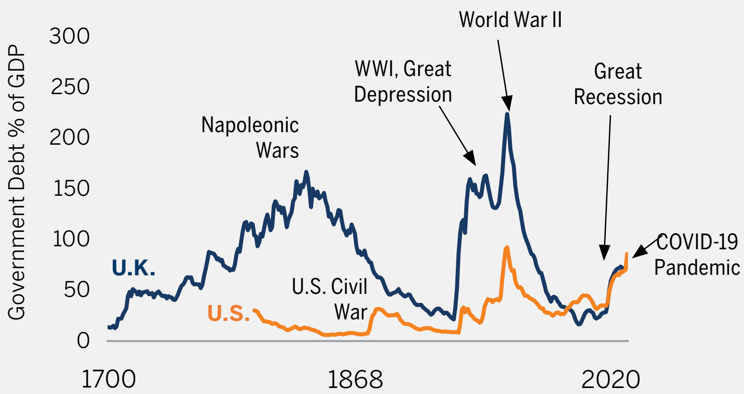
However, larger government spending may lead to negative outcomes in the medium term, such as:

1. ***Accelerating inflation:*** Stimulating growth can often stimulate inflation as well. This is a two-way street—if central banks try to combat inflation by raising rates, they might hinder the real economy and financial markets.
2. ***Secular stagnation:*** As demonstrated in Japan and Italy, a prolonged period of elevated debt levels can hurt productivity by crowding out private investment and reducing economic dynamism.
3. ***Financial instability in some emerging economies:*** While developed economies can likely tolerate higher debt loads, some emerging market countries, like Turkey or South Africa, face the twin problems of high debt and inflation.

These dynamics suggest a wide range of potential effects stemming from current and future stimulus, and we aim to balance portfolios appropriately to embrace the full range of risks. Within equities, we seek to maintain allocations to value-oriented and smaller-cap stocks that would benefit from a strong pickup in economic activity, and we seek balanced exposure to both U.S. and non-U.S. stocks. We favor companies across the world with pricing power to withstand inflation and healthy balance sheets to withstand financial shocks. Additionally, we see real estate and infrastructure assets as examples of investments that can benefit from an inflationary environment. With these types of investments, we believe we can build resilient portfolios prepared to weather the scenarios above while meeting clients' long-term financial goals.

We've Been Here Before

Current U.S. and U.K. sovereign debt as a percentage of GDP is high but not unprecedented for these developed economies.



SOURCE: FEDERAL RESERVE ECONOMIC DATA, CONGRESSIONAL BUDGET OFFICE

business' impact on their communities. We have seen a marked acceleration of the trend of traditional asset managers increasing their own transparency in these areas and requesting greater accountability from their portfolio companies. We expect these trends are here to stay and may well define the next decade of investing.

In time, 2020 will hopefully be remembered for ushering in a new era of scientific achievement. The Wellcome Trust notes that it had historically taken an average of 10 years and $500 million to develop a vaccine. However, from the first confirmed COVID-19 case in the U.S. on January 21, 2020, it was only 11 months until the first FDA-approved vaccine shots were delivered. This was due to tens of billions of dollars of investment and the application of a novel mRNA vaccine approach, which may permanently improve future vaccines' timeline and efficacy. The leap forward in vaccines this year is one of many exciting developments within life sciences during an age of great innovation, one of the reasons we have been growing our exposure to biotechnology investments in both the public and private investment world.

DON'T PANIC!

As many of our readers have heard before, our strong belief is that remaining disciplined and focused on the long term is the most important key to investment success. As with past market declines, this year presented another opportunity to enhance one's financial future based on adherence to one's discipline.

We wrote last year of our push to increase exposure to safe, liquid investments in our portfolios - what we call our **operating bucket.** Given heightened valuations and falling market liquidity, we wanted to ensure we could meet clients' spending needs and "play offense" during a market correction. In March and April, we moved quickly to take money out of our cash and fixed income portfolios, particularly any U.S. Treasury positions that had held up well. We moved into higher-quality investment-grade corporate bonds and the equities of high-quality, growing companies that posed a limited risk of loss with a long-term outlook. We also used the opportunity to access previously closed external managers and build new relationships we hope will last many years into the future, much as we did back in 2008. A highlight for this year was the growth in our relationship with Viking Global, which is now our largest external manager investment with more than $750 million of our clients' capital as of December 31, 2020. We added more than $150 million to Viking throughout the year, and it has rewarded us with its best year of performance in nearly a decade, due in part to its successful investments in health care and biotechnology stocks.

Today, we still recommend having a large operating bucket but have shifted more of that exposure from cash, which yields nothing (or less than nothing in some countries), to short-term, high-quality bonds, which offer some yield to partially offset inflation.

QUALITY REIGNS AND STOCK PICKING SHINES IN UNCERTAIN TIMES

A notable difference during this crisis was that it was challenging to predict the survival of some industries and companies, much less estimate their value. This resulted in our first purchases being focused exclusively on higher-quality, more predictable situations. This included stocks and bonds of companies that were hard hit by the pandemic but had the financial flexibility to withstand a multiyear period of depressed economic activity, as well as some of the highest-quality technology and internet-enabled consumer companies whose business prospects actually improved as a result of the pandemic. Companies like Alphabet, Home Depot, and Microsoft were briefly on sale, and we jumped at that opportunity.

As the economy and credit markets began to recover and the path toward a vaccine became clearer, we began to shift more capital toward areas of the market that had lagged in the recovery. This included markets outside the U.S., small-cap stocks and quality "value" stocks. We continue to put a premium on the management teams' strength and the stability of the balance sheets of the companies we are backing. Those characteristics are even more valuable during downturns. The long-term value of high-quality companies with near-term challenges like Disney, Hilton, Safran and Booking was on full display. We also made allocations to distressed investment strategies that should benefit from an economic recovery and these managers' expertise in complex restructurings.

From an asset allocation perspective, we saw our internal and external investors take advantage of the many opportunities provided by market volatility and near-term uncertainty. We moved capital toward managers with more global and flexible investment mandates to allow them to sift through the bottom-up opportunities presenting themselves across various sectors around the world. It was a great period of time for long-term investors to find bargains.

PARTY LIKE IT'S 1999?

A world awash in liquidity and commission-free trading has led to pockets of speculation in everything from high multiple technology stocks to Bitcoin to special purpose acquisition companies (SPACs). It is unusual to see late-cycle dynamics so early in the economic recovery. Still, it appears the short duration of this crisis has allowed investors to pick up right where they left off in January 2020. Certain parts of the market have shifted from valuing assets based on their fundamentals and cash flows to valuing them on "what someone else is willing to pay," also known as the greater fool theory. This is not a recipe for long-term investment success.

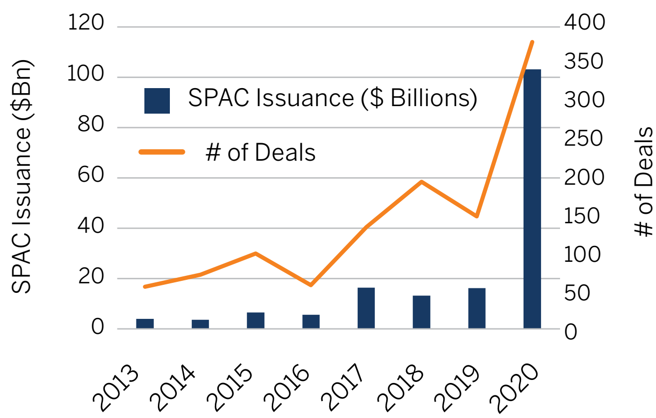
Retail trading volumes in the U.S. were up a staggering 500% from 2019 according to Bloomberg, and retail trading of options was up by more than a factor of 10. Robinhood, a disruptive new online broker, took the industry by storm with a compelling new platform. Online brokerage accounts doubled in Japan and the U.K. according to The Japan Times, along with the U.S. Traders sharing ideas on Reddit message boards drove heavily shorted stocks up 42% in January 2021. This briefly made a challenged video game retailer, GameStop, the largest company in the Russell 2000 Index. Markets have experienced periods like this in the past, most notably in the late '90s, where a similar rise in retail trading, online investment forums and some outright manipulation contributed to that mania. While there are still many differences between current markets and the broad-based "irrational exuberance" of late 1999, our concerns are growing. We are working diligently to avoid these areas of excess and make sound investments focused on fundamental value.

Likewise, SPACs, otherwise known as "blank check" companies, have experienced an explosion (see chart below). They raised ~$100 billion over the year, which is nearly 10 times as much money as they

Blank Checks

Special purpose acquisition companies (SPACs) have historically offered attractive economics and flexibility to their sponsors, and unattractive returns to investors. They can serve a measure of speculation in markets and have surged recently.

SPAC ISSUANCE, 2013-2020



SOURCE: BLOOMBERG. CHART COVERS TIME PERIOD OF 1/1/2013-12/31/2020

did in 2019 and 100 times what they raised 10 years ago according to Bloomberg. The pace only accelerated in 2021, with an average of $1 billion of issuance every day of this year according to Bloomberg. That pace would total $400 billion by the end of the year, a fourfold increase from 2020's record. These companies offer attractive economics and flexibility to their sponsors, and historically unattractive returns to investors who stick around for the acquisitions they make. They may be a measure of speculation in markets. Investors are willing to pay a premium for something they haven't even seen yet, and the last big spike in issuance was in 2007. There are some notable structural shifts in the SPAC market of late, with higher-quality sponsors lending greater legitimacy. Still, there are also many questionable deals being done, including celebrity SPACs, that we believe will leave later investors holding the bag.

We last discussed Bitcoin in our 2018 outlook, after which it declined ~85% from its peak. We feel compelled to write about what some call "digital gold" after its ascent to new all-time highs and announcements from Tesla and other companies that they are investing corporate cash in the asset. There are growing opportunities in blockchain technology, which may redefine and improve the tracking and execution of transactions, financial and other, in the years to come. Decentralized and transparent networks that don't need to rely on a trusted intermediary are set to grow in importance, and we continue to work to understand their disruptive impact and evolution. We have exposure to blockchain technologies and some cryptocurrencies through our venture capital investments, as well as public financial institutions and technology companies adopting the technology. However, we still struggle to find a place for pure digital currencies like Bitcoin in portfolios. They exhibit far higher volatility than any other asset class, possess no cash flow characteristics and have a history of association with illegal financing activity. They are also exposed to existential regulatory risk, as evidenced by China and India's attempts to ban or limit their mining, trading or use. While some of these concerns may fade if Bitcoin becomes more institutionally accepted, the regulatory risk may be growing, as no country will want to cede control of its monetary policy. We would also wager that the value of Bitcoin is correlated to the presently elevated animal spirits of the investment community, as evidenced by the growing use of options and leverage to purchase Bitcoin. Importantly, we typically do not take views on individual currencies or commodities, as we are cash flow-oriented, fundamental investors at heart. There is no reliable fundamental model to value Bitcoin. The expansion of the money supply by central banks worldwide has increased fears of inflation and demand for stores of value where supply is constrained, including gold and Bitcoin. We also have long-term concerns about currency devaluation in a world of progressive central bankers and Modern Monetary Theory. However, we prefer less risky and more fundamentally researchable assets in which to store value, such as quality cash flow-generating stocks, real estate, infrastructure and hard assets.

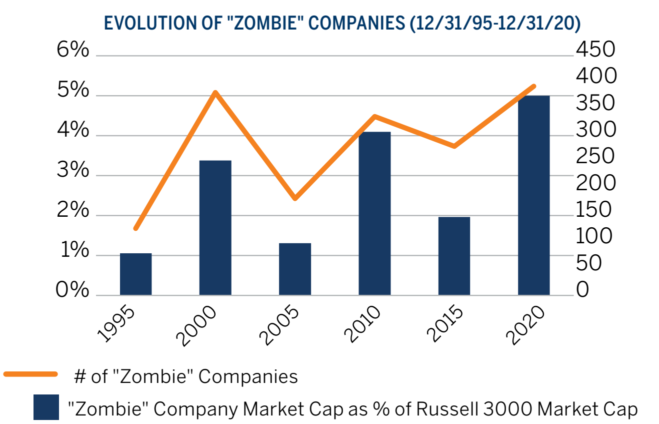
A CLEARER PATH, BUT WHAT LIES AT THE END?

There is still a great deal of uncertainty that lies ahead in terms of the near-term path of the virus, the agenda setting of a new presidential administration in the U.S., the impacts of wealth inequality, and growing nationalist sentiment across the globe, to name a few concerns. However, the road looks far clearer than it did in March or even October 2020. The global economy looks set to build on a nascent recovery, and pent-up demand from consumers for many goods and services appears robust. Corporate earnings are expected to increase by 20% worldwide according to Bloomberg. Central banks seem committed to keeping rates low and using every tool in their toolbox to nurse the global economy back to health. There are likely to be meaningful bumps in the road along the way. We won't endeavor to predict if the world will "return to normal" this year, but we expect a strong recovery to begin in earnest in 2021. But while so many near-term signs are positive, current market valuations in stocks and bonds suggest long-term returns that are well below historical standards. We continually ask ourselves what the world will look like once the economy has recovered. Low interest rates have heavily influenced asset prices, reduced the cost of debt and increased company cash flows. A return to a more normal level of rates, perhaps driven by a rise in inflation, could negatively impact both cash flows and valuations. Central banks may keep short-term interest rates low for years to come, but if the global economy is strong enough, it may force longer-term interest rates higher.

Debt levels and government deficits are also a growing concern. As the U.S. government runs the largest budget deficits seen since World War II, we do wonder when we might see the return of fiscal hawks in the U.S. or the austerity crew in Europe. Government debt levels are high and rising, and corporate debt levels are growing as well. One interesting result of the current low rate and easy money environment is the percentage of companies that can't generate enough cash flows to service their debt (see chart at bottom left). One might expect this level to be quite low given the interest rate environment, but it is actually at a multidecade high, as the market supports first-time borrowings from high-growth non-earners and continued issuance from struggling energy companies, retailers and other businesses with existential risk. These so-called zombie companies are now 17% of all U.S. public companies according to Bloomberg, and many are unproductive assets but also highly susceptible to either an economic downturn or a rise in interest rates.

The Walking Dead

"Zombie" companies don't generate enough cash flow to cover their interest payments, and their numbers are at multidecade highs. Zombies can be seen as unproductive assets and a consequence of easy money policies.



SOURCE: BLOOMBERG, U.S. UNIVERSE USING RUSSELL 3000 ® INDEX EX. FINANCIALS GICS SECTOR STOCKS. ZOMBIE COMPANY DEFINED AS A COMPANY WHOSE FISCAL YEAR EBITDA/INTEREST RATIO IS LESS THAN 1.. CHART COVERS TIME PERIOD OF 12/31/1995-12/31/2020

OUR CURRENT STANCE

We have made some meaningful shifts to portfolios this year, responding to the extremely low interest rate environment and unattractive long-term return expectations in bonds. We have reduced our exposure to bonds and tilted the remaining exposure into both higher-quality and shorter-duration strategies that can provide the security and liquidity our portfolios need. This capital has moved toward a few areas, namely alternative investments such as hedge funds and real estate, as well as high-quality, yielding equities and infrastructure assets. We have also responded to the heightened valuations in U.S. large-cap growth stocks by shifting more capital overseas, particularly toward Asia ex-Japan. We also rebalanced to maintain our structural overweight to small-cap stocks, particularly small-cap value stocks, which we believe present more attractive prospective returns.

Our overall levels of equity market risk, or beta, in portfolios remains just below our long-term targets, and we recently "tapped the brakes" to reduce this risk further, given the signs of euphoria we are seeing in certain markets. While stock market valuations on almost any metric look expensive versus history, the one metric against which they look cheap are interest rates—and we are conscious that all asset prices have a strong relationship with interest rates. With central banks committed to keeping rates low for years to come, there is a reasonable likelihood that valuations in the stock market remain elevated for some time. We still expect much better long-term returns from stocks than we do from bonds. That said, we will be monitoring inflation and longer-term interest rates closely to determine if we should become more cautious on equity valuations, as rising rates may pose the greatest risk to all portfolios.

Losing Interest

The relentless decline of interest rates since the 1980s has been a major boon to investment returns. It is worth considering the downside potential if this long-term trend should reverse itself in the coming years. The risks here are numerous; here, we highlight a few that are top of mind for us.

Equities are one of the primary beneficiaries of falling interest rates and currently appear expensive on almost every valuation metric—except relative to interest rates. Equity valuations are intertwined with interest rates. Rising rates could remove a primary justification investors rely on to own equities at currently elevated valuations (see table below).

Growth stocks can benefit more from low interest rates because investors are able to assign a greater value when discounting future cash flow growth. If rates rise, growth stock valuations could have more to lose as future cash flows become less valuable. For these reasons, we are maintaining a balanced approach to portfolio construction that includes investments in long-term growth companies, as well as quality companies that exhibit lower valuations grounded in more near-term cash flows.

Since a bond's price has an inverse relationship with its yield, bonds have benefited directly from falling interest rates. Therefore, an increase in interest rates broadly could have a negative impact on bond prices overall. This risk can be mitigated by shortening a bond portfolio's duration.

A less obvious risk in bond markets is a growing percentage of companies that can't generate enough cash flow to service their debt. The level of these so-called zombie companies has reached a multidecade high.

	S&P® 500 INDEX	
Valuation Metric	Current	Historical Percentile
U.S. Market Cap/GDP	239%	100%
EV/Sales	3.0x	100%
Forward P/E	22.3x	96%
Cash Flow Yield	6.1%	93%
Price/Book	3.9x	92%
Cyclically Adjusted P/E*	33.4	97%
Free Cash Flow Yield	3.8%	60%
Yield Gap vs. 10-Year U.S. Treasury Yield**	367 basis points	37%
Median Metric		92%

SOURCE: BLOOMBERG. *SHILLER CAPE GOING BACK 100 YEARS. **DATA GOING BACK TO 1960. REST OF DATA STARTING 1990 SHILLER CAPE DATA: 12/31/1920 - 12/31/2020. YIELD GAP DATA: 12/31/1960 - 12/31/2020 REST OF DATA: 12/31/1990 - 12/31/2020

This is a symptom of a growing number of companies with unproductive assets and corporations re-leveraging back to prior credit cycle peaks. In November, analysis done by Bloomberg showed that 527 (18%) companies within the Russell 3000 Index, representing $1.4 trillion of debt, fit this definition. This debt could fuel a future credit market event if the issuers cannot refinance their debt due to higher borrowing costs and contribute to our cautious view of credit-sensitive fixed income.

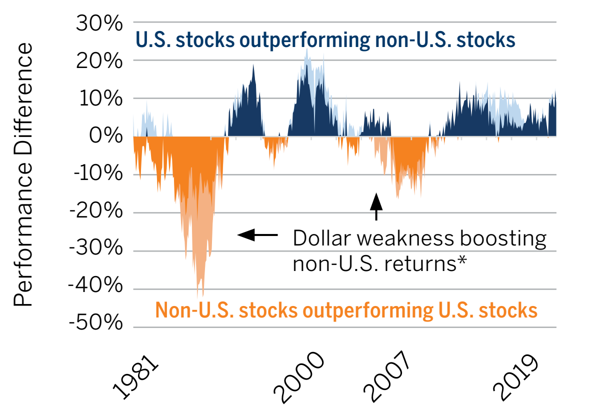
Whether interest rates rise or not, their current low level and correspondingly high equity market valuations will constrain forward returns in stocks and bonds. We believe investors should consider alternatives, such as hedged strategies, to generate returns more independent of the interest rate environment.

We don't expect inflation to rise meaningfully in the near term due to both structural and cyclical deflationary pressures. However, we are consciously increasing exposure to asset classes that we believe present good value today and will protect us if inflation begins to rise. Real estate, infrastructure assets and high-quality companies with pricing power provide us that protection, often with an element of rising yields that can pay us as we wait to see if prices rise. We prefer these opportunities over more volatile, lower-quality options in the commodity space that often have zero or even negative yields.

Equities: We seek to balance our exposure to equity markets, the core of most client portfolios, with exposure to other diversifying asset classes. Currently, we recommend the following:

Passing The Buck

U.S. equities benefited from broader exposure to tech and growth in 2020, but non-U.S. stocks present potentially more attractive returns given lower relative valuations. Other tailwinds for non-U.S. stocks include a stronger global cyclical rebound and a weakening dollar.



SOURCE: BLOOMBERG. CHART COVERS TIME PERIOD OF 12/31/81-12/31/20.
*NOTE: LIGHTER SHADED AREAS DENOTE FX IMPACT FROM A STRONGER DOLLAR (LIGHT BLUE) OR WEAKER DOLLAR (LIGHT ORANGE) RELATIVE TO A BASKET OF NON-USD CURRENCIES.

- **Shifting capital from U.S. to global equity exposure:** A change last year in March and April was to shift more of our capital to global managers with more flexible investment mandates. Companies are more globally competitive than ever before, and this forces strong research teams to cover competitors both at home and overseas. This global industry knowledge allows our teams, both internal and external, to more quickly make investment decisions on a bottom-up company basis when prices move. Increasingly, top investors are choosing to manage capital in these less constrained strategies to take advantage of a larger, global opportunity set, and we want to maximize our exposure to these proven managers. This reduces our flexibility in making regional asset allocation decisions and increases our opportunities for stock selection outperformance.

Greener Pastures

We think emerging Asia offers a rare opportunity, combining a large but inefficient market with strong long-term growth drivers and reasonable valuations. Growth potential in the region remains strong as these markets catch up with developed markets. GDP per capita in emerging Asia is about one-fifth of South Korea's and one-tenth of that of the U.S. according to the International Monetary Fund. Positive economic reforms are improving labor productivity, and financial markets are increasingly transmitting economic growth to equity market returns. The region's demographics and sovereign balance sheets are favorable compared to many developed countries, and it is more politically stable than many other emerging markets.

Scale is also key: Emerging Asia is home to half of the world's population and is expected by the International Monetary Fund to generate half the world's GDP growth over the next 30 years. Many market-leading companies in the region are now legitimate global competitors that cannot be ignored. Markets were previously dominated by state-owned enterprises (SOEs) and commodity-oriented firms. Today, technology and consumer companies represent a far greater share of markets today (see table below), making these markets better environments for minority shareholders (meaning investors like us). While quality is improving, these markets remain relatively inefficient: Short-term, retail-oriented investors represent a far greater share of ownership than in developed markets.

A New Generation

Consumer and technology companies have replaced state-owned enterprises (SOEs) and commodity-oriented companies (shaded in gray) in emerging Asian markets, as evidenced by the change in the ten largest Asia ex-Japan companies by market capitalization, in 2020 versus 2010.

2010	2020
Samsung Electronics	Taiwan Semiconductor
China Mobile	Alibaba
China Construction Bank	Tencent Holdings
Taiwan Semiconductor	Samsung Electronics
I & C Bank of China	AIA Group
Posco	Meituan
Hon Hai Precision Industry	Reliance Industries
Reliance Industries	JD.com
China Life Insurance	China Construction Bank
CNOOC	Ping An Insurance

SOURCE: BLOOMBERG

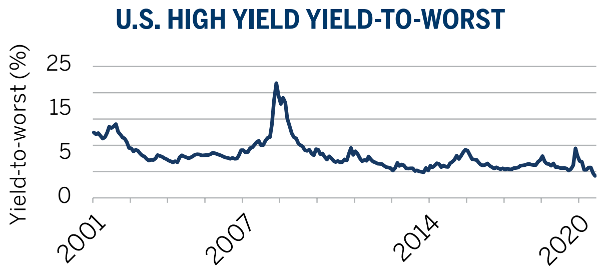
Other positive recent developments have been the region's handling of the pandemic and the potential for a friendlier trade environment under the new U.S. administration. However, this positive outlook may not be fully priced into regional markets. Current valuations in the region are roughly in line with historical norms, similar to most international markets, and far lower than U.S. valuations.

Key risks include China's relatively poor demographics, geopolitical tensions, and other political risks such as the recent ban on trading Chinese defense companies and China's own increased regulatory pressure on its technology sector. However, we see the opportunities outweighing the risks; the economic growth in the region presents a tremendous opportunity for companies to create shareholder value. While we expect continuing volatility in emerging Asian markets, overall we see an opportunity for strong long-term risk-adjusted returns.

- **Overweight U.S. small-caps versus large-caps, focused on value:** The underperformance of small-cap stocks earlier in the year widened the valuation discount of these shares versus the large-cap universe, and we added to these strategies to maintain our structural overweight to small-caps. Small-cap stocks tend to have better long-term, risk-adjusted returns and present greater structural inefficiency for outperformance through security selection. Fewer analysts cover these stocks, which allows for a greater informational advantage for diligent analysts and more volatility to allow for good buying opportunities. Within the space, we are emphasizing value strategies, as the growth segment of small-cap has become more expensive.
- **Overweight Asia, and increasingly China, within emerging markets:** Asia's long-term attractiveness still exists, with higher structural economic growth, a fast-growing middle class, deep and liquid markets, and improving corporate governance. We think China, in particular, presents a unique opportunity. It has nearly as many public companies as the U.S., trading volumes similar to the U.S., and many high-quality, fast-growing consumer, health care, and technology companies. Chinese markets are also dominated by retail investors, who account for an estimated 70% of trading volumes according to FTSE Russell, versus closer to 20% in the U.S. This helps create far less efficient pricing than in more developed markets like the U.S. and Europe. China carries with it unique risks of government influence in the private sector, as seen by the recent scuttling of the Ant Financial IPO and draft anti-monopoly laws. Still, valuations appear to reflect both those risks and the risks of rising trade tensions with the U.S., which have been appreciated by investors for some time. In addition to placing some 90% of our emerging markets exposure in Asia, we have added a specialist China manager to portfolios this year for the first time, sharpening our focus on this area.
- **Increasing exposure to value, but focused on quality:** We learned long ago that we haven't added much outperformance by predicting when growth will outperform value or vice versa, and the return on our time commitment has been quite low. But even within our value strategies, we do look for quality assets and management teams, and some element of structural growth. We believe those two elements are important to long-term success and allow a greater margin of error in investing. In the current low interest rate environment, we expect companies that grow to continue to command premium multiples. When one can discount future cash flows at lower rates, the multiple one is willing to pay for current cash flow increases by a much greater margin for growth companies. But a lot of that increase in valuations has already occurred, leaving growth stocks more vulnerable to rising rates or disappointing fundamentals.

(Not So) High Yield

Federal Reserve support has pushed credit spreads to unattractive levels. We prefer to achieve higher yields through private credit, real estate and asset-backed loans.



SOURCE: BLOOMBERG BARCLAYS U.S. CORPORATE HIGH YIELD INDEX

Fixed Income: We made many shifts this year, including closing out our successful TIPS investment and shifting that capital to investment-grade corporate bonds during March and April. As credit spreads have tightened and yields have fallen (see chart on next page), we have reduced our overall exposure to bonds while decreasing our interest rate duration and credit risk. However, we have no plans to abandon fixed income, as it remains an attractive source of liquidity and diversification in portfolios.

- **Increasing high-quality, short-duration strategies:** We decreased both our target exposure to cash and core fixed income in portfolios in favor of a larger position in high-quality, short-duration fixed income to deal with two separate issues: 1) the high cost of holding cash at 0% interest rates and 2) the unattractive risk-adjusted returns of core fixed income in a low-rate, low-credit-spread environment.
- **Increasing our underweight to interest rate duration:** The addition of short duration strategies and our continued exposure to lower-duration "unconstrained" bond funds leave us with lower interest rate risk than we had to enter the year. The risk of interest rate movements becomes asymmetric to the upside as bond yields fall, and the benefit to investors during times of crisis diminishes when starting from a lower yield. That being said, we believe high-quality fixed income is the best source of diversification in a period of market stress, even if the starting point is at the low levels of yield we see today.
- **No dedicated exposure to high-yield credit:** We came into last year with no exposure, and while we made some opportunistic purchases in March and April for some portfolios, we were quick to eliminate that exposure as spreads tightened. The support from the Federal Reserve quickly pushed credit spreads to levels that we find unattractive from a risk/return perspective, particularly as debt covenants continue to weaken, leverage levels remain high and the percentage of previously mentioned zombie companies that don't generate enough cash flow to cover their interest payments is at multidecade highs. We prefer to achieve higher yields through private credit markets, through both corporate, real estate and other asset-backed loans.

Private investments: Our focus remains on identifying managers with expertise in sourcing, evaluating and adding value to the companies and assets they purchase - all of which is even more important in today's environment of heightened valuations. As you may have heard us say before, if timing public markets is hard, timing private markets is impossible. This is because multiyear investment periods mean you don't really know the price you will buy. As such, we continue to have a programmatic approach that focuses on accessing top managers on a consistent basis.

- **Real estate:** We strongly prefer getting our exposure to real estate in private markets versus public REITs given lower valuations, leverage, control and the owners' incentives to maximize value rather than gather assets. We have benefited from our focus on multifamily, industrial and logistics assets in this part of our portfolio. With a great deal of uncertainty regarding the future of commercial and retail real estate, we are likely to maintain our focus on those areas, which continue to exhibit the strongest fundamentals and greatest visibility into future cash flows. While we see pockets of opportunity in retail, it remains a small minority of our overall allocations and is targeted in smaller properties where the value-add of our vertically integrated investment partners is paramount to our future success. Our approach continues to be investing with a small number of high-conviction, value-added managers who are vertically integrated owner-operators, and have improving cash flows and exit multiples on the assets they own. These managers can add value in sourcing, managing and selling their assets, and seek to generate returns and yields in excess of the broader market. We also seek to enhance this performance and reduce the fees we pay through select co-investments in direct properties.
- **Buyout and growth:** We haven't seen much change in market valuations despite the economic struggles this year, so we find ourselves as focused as ever on partnering with managers adding meaningful value operationally to their companies, investing in smaller middle-market transactions, or exploiting industry or geographical expertise to generate strong returns. Many of our growth managers have shown great success "buying down" their entry valuations through growing their portfolio companies via acquisitions, expansion into new markets, or broadening their suite of products or services, creating platforms at much lower multiples than their initial purchase price. We have added dedicated allocations to managers with expertise in distressed investing and restructurings, given what we expect will be continued struggles for many industries in the years to come. Our focus on managers employing lower levels of leverage in their deals saved us a great deal of heartburn this year. It underscored the value of generating returns away from financial engineering. We added our first dedicated China manager to the platform this year after adding our first dedicated European manager last year. We think China is a market with great long-term growth potential and even greater inefficiency, and we are excited to grow that exposure in the future.
- **Venture capital:** The market for venture capital remains white-hot, with a new record for venture capital raising set in 2020 despite the challenges of COVID-19. That said, the pace of innovation across multiple sectors, such as software, consumer internet and health care/biotechnology, has led to many new disruptive companies that have taken meaningful market share and even created entirely new markets. The success of companies like Snowflake, Doordash, and AirBnB is a reminder of how quickly industries are changing and how much value creation is accruing to private market investors. As the market cap and opportunity set of venture-backed companies have increased, so has our exposure. But we are keeping a high

bar in seeking access to top managers with industry expertise, networks, and an attractive value proposition to entrepreneurs. We complement our exposure to leading venture capitalists with smaller investments in promising emerging managers earlier in their life cycle. We also continue to build out a highly selective direct co-investing capability to reduce fees and sharpen our focus on particular market segments and companies.

- **Income strategies:** Our approach within private credit strategies has been to seek a diversified collection of middle-market lending across the capital structure, real estate debt and other asset-backed lending. We still see a meaningful yield premium in private markets. The spread between the protections available to private market investors versus public market investors grows each year as public credits become dominated by covenant-lite issuance. This is a key component in addressing the low interest rate environment, but clearly, manager selection and market opportunity are key. We intend to launch our second Private Income Partners vintage in 2021.

Hedge funds: We have seen three straight years of strong performance from our hedge fund portfolios. As we said last year, we think this is no accident as the environment for hedge funds has improved, and the top tier of managers have taken advantage. Assets have flowed out of the industry, many have given up on shorting stocks and bonds, and market volatility has increased opportunities. That, combined with the falling correlation between stocks, has contributed to an improved opportunity to add value on both longs and shorts. It is still a highly competitive industry, where the median manager does not earn their fees and where manager selection and access make all the difference. Despite the struggles of long/short equity managers in January 2021, we remain confident in these strategies and also note there are many strategies outside of equities that continued to perform well during the recent well-publicized short squeeze. We have been reducing our long/short equity exposure in favor of other diversifying strategies.

- **Adding small, nimble equity long/short managers:** The most challenging part of hedge fund investing is shorting stocks. Often, the best short opportunities come in smaller companies. Small- and mid-cap stocks have less analyst coverage and tend to be a more inefficient space. In recent years, we have renewed our focus on smaller but still institutional-scale managers who have meaningful exposure to small- and mid-cap companies. These firms have the added benefit of being managed by often younger, hungrier teams and are a bit more flexible on fees. The recent "squeeze" in heavily-shorted stocks is a reminder of the importance of focusing on managers with the expertise and risk management to manage the short side of their portfolio, but also an opportunity for skilled short sellers. These smaller managers serve as a worthy complement to our investments with larger, more proven managers that enjoy different benefits that come with their scale.
- **Increasing exposure to hybrid public/private managers:** There are great informational advantages to covering both public and private companies, and a select few managers utilize that information to improve both their public and private investment efforts. We have grown our relationships with a very small number of these managers with excellent results in recent years.
- **Increasing exposure to health care/biotechnology specialists:** We have added a specific focus on this sector in the last two years based on our views that 1) it is a highly inefficient market ignored or intentionally avoided by most institutional investors, who lack the medical or scientific knowledge to invest, and 2) this is a particularly interesting time in biotech, where the pace of innovation and value creation is something in which we want to participate. We have spent the last few years scouring the universe to find a small number of partners in this space who we think have the scientific expertise and financial market savvy to produce outperformance in the years to come.
- **Increasing event-driven, long/short credit, and global macro strategies:** These are diversifying strategies that generally have a lower correlation to broad market moves. In this environment of heightened equity valuations, low interest rates and tight credit spreads, we believe these strategies are increasingly attractive given their more idiosyncratic nature. To that end, we are increasing our focus on providing downside protection when we need it most through our hedge fund allocations.

CONCLUSION

Throughout the 21st century, tragedy and transformation have been the norm rather than the exception; from the internet revolution, to the 9/11 attacks and through the global credit crisis, it has felt like every few years, we experience events that change the world forever. Even against that backdrop, 2020 seemed utterly unprecedented—partly because of the sweeping global impact of the pandemic, and perhaps in part because we were all cut off from our normal lives, bunkered down at home, spending many hours thinking about the state of things.

Our tone throughout this report has been fairly cautious, as we are in many ways in uncharted economic and geopolitical territory entering 2021. However, our caution and vigilance should not be mistaken for despair. While there is a great deal of uncertainty ahead, we see a fairly balanced mix of potential risk and opportunity across capital markets, and have tried to convey that in our report this year. We have made a few defensive shifts in our asset allocation stance over the past year or so, but we want to emphasize that these shifts, as always, are incremental in nature. Our overarching strategy for long-term success has nothing to do with placing bets on the future direction of the market; we believe our success depends on consistent adherence to a long-term plan for each client through the highs and lows of market cycles, and careful diligence to ensure that the managers we recommend to clients have the potential to serve as able stewards of their capital for many years to come.

We appreciate your ongoing confidence in Brown Advisory and welcome a continued conversation with you about our investment thinking.

2021 ASSET ALLOCATION VIEWS

Long-Term Outlook (7 to 12 Years)

Our asset allocation stance is largely based on our long-term return and drawdown risk estimates across asset classes. For equities, the key inputs for our long-term return estimates are starting valuations, economic growth expectations (or potential GDP growth) and changes in interest rates, whereas for fixed income the predominate indicator of return is starting yields (incorporating both base government bond yields and spreads) with some influence from the slope of the yield curve and anticipated changes in yields.

Falling interest rates and rising valuations led to a substantive decline in forward returns across most asset classes. Because the shift was fairly broad in nature, our long-term strategic asset class ranges remain similar because the relative differentials have not significantly changed, despite significant intrayear changes. However, we do believe that investors need to be cognizant of the fact that both stocks and bonds likely borrowed future returns into recent years and need to adjust expectations accordingly.

Medium-Term Outlook (18 to 36 Months)

There is significant potential for a robust global economic recovery in 2021, given the potential for recently developed vaccines to bring an end to the pandemic, along with tremendous stimulus coming from both fiscal and monetary policymakers. However, tremendous uncertainty still exists. It stems from the ongoing pandemic, the unintended consequences of unprecedented stimulus measures, and continued political and geopolitical tensions, among other factors. Therefore, the largest change in our scenario analysis is a reflection of this uncertainty, with the "base case" scenario appearing less likely in favor of a broader range of other scenarios. Some additional specific changes include:

- The unprecedented stimulus, which we discuss in more depth in this publication, increases the probability of both positive, "Global Acceleration" and negative, "Inflation Heat" scenarios. Either could be the outcome of the massive influx of capital being put into the global economy.
- Within Emerging Markets, we see a bifurcation in our scenario analysis, given how the pandemic has impacted these markets. We see a greater chance of a "Protracted Challenge in Vulnerable Markets" given the stress being put on sovereign balance sheets and political institutions for weaker emerging nations. Conversely, we also see a scenario in where "Asia Leads Recovery" as the region has handled the pandemic relatively well, which could set the region up to be a leader coming out of it.

2021 ASSET ALLOCATION VIEWS

Note: Asset allocation ranges and targets presented in the table are intended for U.S. dollar-based portfolios.

		U.S. Equities	Europe and U.K. Equities	Japan Equities	Asia Equities (ex. Japan)
	graphic not to scale	Top of Range: 40% Target: 33% Bottom of Range: 25%	Top: 15% Target: 8% Bottom: 3%	Top: 8% Target: 0% Bottom: 0%	Top: 10% Target: 8% Bottom: 3%
Factors — Long Term (10 years)	**Expected Baseline Return**	4.9%	4.9%	4.2%	6.2%
	Alpha Opportunity	0–1%	1–1.5%	1–1.5%	1.5–2.5%
	Drawdown Risk (1-in-10 / 1-in-20)	-26% / -43%	-27% / -48%	-27% / -48%	-44% / -60%
Factors — Medium Term (2–3 years)	**Valuation**	Negative	Slight Negative	Slight Negative	Neutral
	Macroeconomics	Positive	Slight Positive	Neutral	Positive
	Most Favorable Scenarios	Global Acceleration	Global Acceleration	Global Acceleration	Global Acceleration, Asia Leads the Way
	Least Favorable Scenarios	Extended Economic Downturn	Extended Economic Downturn, Strong Borders	Extended Economic Downturn	Extended Economic Downturn

		High-Yield Bonds	Hedged Strategies*	Commodities	Private Equity*
	graphic not to scale	Top of Range: 10% Target: 1% Bottom of Range: 0%	Top: 15% Target: 13% Bottom: 5%	Top: 5% Target: 0% Bottom: 0%	Top: 15% Target: 7% Bottom: 5%
Factors — Long Term (10 years)	**Expected Base Return**	3.2%	3.7%	3.7%	7.9%
	Alpha Opportunity	0–1%	2–3%	0%	3–7%
	Drawdown Risk (1-in-10 / 1-in-20)	-13% / -28%	-13% / -23%	-31% / -49%	-33% / -54%
Factors — Medium Term (2–3 years)	**Valuation**	Slight positive	Slight Negative	Slight Negative	Negative
	Macroeconomics	Global Acceleration, Slow Return to Normal	Slight positive	Neutral	Positive
	Most Favorable Scenarios	U.S. Acceleration	Global Acceleration	Inflation Heat	Global Acceleration
	Least Favorable Scenarios	Global Economic Slowdown	Extended Economic Downturn	Extended Economic Downturn	Extended Economic Downturn

*Alternative investments may be available for qualified purchasers and/or accredited investors only. Past performance is not a guarantee of future performance and you may not get back the amount invested. All investments involve risk. The value of the investment and the income from it will vary. There is no guarantee that the initial investment will be returned.

Long-Term Ranges/Medium-Term Targets

Latin America Equities	Investment-Grade Bonds
Top: 7% Target: 1% Bottom: 0%	Top: 35% Target: 24% Bottom: 20%
5.8%	1.0%
1.5–2.5%	0–1%
-50% / -62%	-6% / -12%
Slight Negative	Negative
Slight Positive	Slight Negative
Global Acceleration	Slow Return Normal, Extended Economic Downturn
Extended Economic Downturn, Protracted Challenge in Vulnerable Markets	Inflation Heat

Real Estate*	Private Credit*
Top: 8% Target: 3% Bottom: 2%	Top: 8% Target: 2% Bottom:0%
7.1%	5.7%
3–5%	2–4%
-16% / -26%	-13% / -28%
Neutral	Slight Negative
Slight Positive	Slight Positive
Global Acceleration	Global Acceleration
Extended Economic Downturn	Extended Economic Downturn, Inflation Heat

SOURCE: Brown Advisory

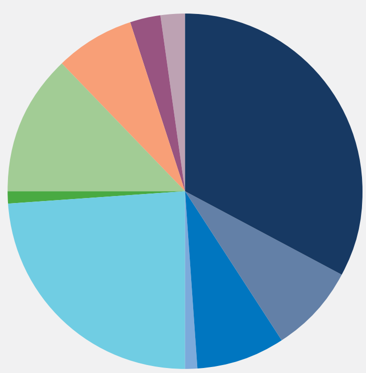
Notes

The **long-term ranges** in the chart (depicted by the vertical lines) express what we consider to be prudent boundaries for each asset class in a typical long-term-oriented portfolio, given our 10-year outlook for that asset class. We consider a variety of factors in setting these boundaries; three key drivers of our thinking are our expectations for **baseline 10-year annualized return**, maximum likely **drawdown risk** (expressed as worst likely one-year outcomes over 10-year and 20-year periods) and the **alpha opportunity** we think we can reasonably achieve from selection of adept managers.

The **medium-term targets** in the chart (depicted by the hollow dots placed along each vertical line) express our current guidance for where to position portfolios within each asset class. We determine these targets by considering a broad range of economic scenarios, the risks and opportunities presented by those scenarios, and relevant bottom-up, security-specific research from our team and our managers. We aim to select targets that we believe offer us the **best aggregate outcome across all potential scenarios**, as opposed to any attempt to pick the "right" scenario and build an investment plan dependent on that scenario playing out. Our medium-term targets are illustrated below. Note that the chart represents "look-through" exposure (e.g., our 1% exposure to Latin American stocks stems from holdings held by several managers, rather than a dedicated LatAm allocation).

We want to emphasize that, as a firm, we do not apply universal model portfolios to broad groups of clients. Instead, we use our asset allocation research as a foundation, from which we tailor every client's portfolio specifically to address their return goals, risk tolerance, liquidity needs and other factors unique to their circumstances.

Medium-Term Allocation Targets as of 12/31/2020



- U.S. Equities................................33%
- Europe and U.K. Equities.............8%
- Japan Equities 0%
- Asia Equities 8%
- Latin America Equities...................1%
- Investment-Grade Bonds...........24%
- High-Yield Bonds...........................1%
- Hedged Strategies* 13%
- Commodities 0%
- Private Equity* 7%
- Real Estate* 3%
- Private Credit*..............................2%

The allocation presented is not necessarily representative of any current portfolios. Recommendations may change depending on risk tolerance, investment objective and assets available for investment. *Investments available for qualified purchasers and accredited investors only.

*Alternative investments may be available for qualified purchasers and/or accredited investors only. Past performance is not a guarantee of future performance and you may not get back the amount invested. All investments involve risk. The value of the investment and the income from it will vary. There is no guarantee that the initial investment will be returned.

MEDIUM-TERM (18 - 36 MONTH) SCENARIO ANALYSIS SUMMARY, AS OF Q1 2021

Base-Case Scenario

Slow but Steady Return to Normal

Relatively strong growth overall, but with plenty of setbacks that make for protracted road to return to pre-pandemic levels of GDP. Interest rates and inflation remain stuck at relatively benign levels as central banks slowly withdraw stimulus measures.

Most Likely Scenario

Bull-Case Scenarios	Bear-Case Scenarios
Global Acceleration The combination of massive fiscal and monetary stimulus and an effective vaccine result in a strong recovery once the economic disruption is over. The vast majority of the decline in economic activity proves to be deferred instead of lost. ***Moderate to Low Likelihood***	**Inflation Heat** Unprecedented monetary and fiscal stimulus related to efforts to mitigate the impact of COVID-19 leads to a sharp rebound in inflation. Energy prices rise with rising demand, along with constrained supply due to years of underinvestment. Central banks are slow to raise rates in an attempt to support economic growth. ***Moderate to Low Likelihood***
Asia Leads Recovery After Asia handled the pandemic better than most Western nations and, outside of Japan, features better demographic and sovereign debt dynamics, it is able to lead the global economy back into growth, continuing the shift of economic power from West to East. ***Moderate Likelihood***	**Strong Borders** The current health crisis further stokes nationalist sentiments, leading to further protectionist policies and rising geopolitical tensions. Global trade suffers, damaging global economic growth. ***Moderate Likelihood***
	Protracted Challenge in Vulnerable Market The challenges of containing COVID-19 and stresses on sovereign balance sheets create an economic sovereign debt crisis. Emerging market countries with weaker funding status and weaker health care systems (many of which are in Africa and Latin America) prove particularly vulnerable. ***Moderate Likelihood***
	Extended Economic Downturn Ending the pandemic proves far more complicated than anticipated, constraining economic activity for a protracted period. Disrupted sectors bring stress to credit markets, and GDP remains stuck at subdued levels. ***Low Likelihood***

The following indexes were used throughout this report to represent returns and characteristics of various asset classes and regions:

U.S. Equities: The **S&P 500® Index** represents the large-cap segment of the U.S. equity markets and consists of approximately 500 leading companies in leading industries of the U.S. economy. Criteria evaluated include: market capitalization, financial viability, liquidity, public float, sector representation, and corporate structure. An index constituent must also be considered a U.S. company. Standard & Poor's, S&P, and S&P 500 are registered trademarks of Standard & Poor's Financial Services LLC ("S&P"), a subsidiary of S&P Global Inc. The **Volatility Index, or "VIX,"**is a real-time index that represents the market's expectation of 30-day forward-looking equity-market volatility. The VIX is a trademark of the Chicago Board Options Exchange. The **Russell 2000® Index** is a market-capitalization weighted equity index that provides exposure to the small-cap segment of the U.S. stock market. It tracks the performance of the 2,000 smallest U.S.-traded stocks. **The Russell 1000® Growth Index** measures the performance of the large-cap growth segment of the U.S. equity universe. It includes those Russell 1000 Index companies with higher price-to-book ratios and higher forecasted growth values. **The Russell 1000® Value Index** measures the performance of the large-cap value segment of the U.S. equity universe. It includes those Russell 1000 Index companies with lower price-to-book ratios and lower forecasted growth values. Russell Indexes are completely reconstituted annually. All Russell Indexes and Russell® are trademarks/service marks of the London Stock Exchange Group of companies. The **NYSE FANG+ Index** is an equal-dollar weighted index designed to represent a segment of the technology and consumer discretionary sectors consisting of highly-traded growth stocks of technology and tech-enabled companies such as Facebook, Apple, Amazon, Netflix, and Alphabet's Google. The **Russell 3000 Index** is composed of 3000 large U.S. compaonies, as determined by market capitalization. This portfolio of securities represents approximately 98% of the investable U.S. equity market. The **Russell 3000 ex. Financials Index** is the Russell 3000 Index less stocks classified under the Financials GICS Sector classification.

Emerging market equities: The **MSCI Emerging Markets® Index** captures large- and mid-cap representation across 26 Emerging Markets countries. With 1,402 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country. The **MSCI Emerging Markets Net Total Return (USD) Index** tracks the performance of the MSCI Emerging Markets Index in U.S.-dollar terms. The MSCI Emerging Markets (EM) Asia Index captures large- and mid-cap representation across 9 Emerging Markets countries in Asia. With 1,117 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country. The **MSCI Emerging Asia Net Total Return (USD) Index** tracks the performance of the MSCI Emerging Asia Index in U.S.-dollar terms. ***European equities:*** The **MSCI Europe Index** is designed to represent the performance of large- and mid-cap equities across 15 developed markets. With more than 400 constituents, the index covers approximately 85% of the free float-adjusted market capitalization across European developed-market equity. ***Japan equities:*** The **MSCI Japan® Index** is designed to measure the performance of the large- and mid-cap segments of the Japanese market. With 319 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in Japan. ***EAFE equities:*** The **MSCI EAFE Index** is designed to represent the performance of large- and mid-cap securities across 21 developed markets in Europe, Australasia and the Far East, excluding the U.S. and Canada. With more than 900 constituents, the MSCI EAFE Index covered approximately 85% of the free float-adjusted market capitalization in each country. The **MSCI EAFE Net Total Return (Local) Index** tracks the performance of the MSCI EAFE Index in local-currency terms. ***Asia ex-Japan equities:*** The **MSCI Asia ex Japan Index** captures large- and mid-cap representation across 2 of 3 developed market countries (excluding Japan) and 9 emerging markets countries in Asia. With 953 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country. ***Latin American equities:*** The **MSCI Emerging Markets (EM) Latin America Index** captures large- and mid-cap representation across 5 emerging markets countries in Latin America. With 108 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country. ***Global equities:*** The **MSCI All-Country World Index, or "ACWI,"** captures large- and mid-cap representation across 23 developed and 26 emerging markets. With more than 3,000 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each market.

Market Cap: The market value of a publicly traded company's outstanding shares. This measure uses the S&P 500 Index's aggregate market capitalization (i.e. the sum of the index's constituents' market capitalization). **E/V Sales:** Financial valuation measure that compares the aggregate Enterprise Value of the S&P 500 to aggregate sales. Enterprise value is the sum of a company's debt and equity market capitalization less cash and cash equivalents. **Cash-Flow Yield:** Measured as trailing 12-month cash flow from operations divided by company's share price. **Price-to-book ratio:** Ratio of a share of a company's stock price compared to its per-share book value. **Cyclically adjusted P/E ratio:** The Cyclically Adjusted P/E Ratio (CAPE Ratio or Shiller Cyclical P/E) is a P/E ratio variant that uses a trailing, inflation-adjusted long-term average (typically 10 years) as its earnings figure **Free cash-flow yield:** Cash-flow yield is calculated as free cash flow divided by share price. Figure is calculated aggregating S&P 500 constituent data. **Yield Gap:** measured as the S&P 500 earnings yield (i.e. earnings per share divided by last share price) less the yield of 10-year U.S. treasury. ***Investment-grade bonds:*** The **Bloomberg Barclays Aggregate Bond Index** is an unmanaged, market-value weighted index composed of taxable U.S. investment grade, fixed rate bond market securities, including government, government agency, corporate, asset-backed and mortgage-backed securities between one and 10 years. ***High-yield bonds:*** **Bloomberg Barclays U.S. Corporate High Yield Index** measures the USD-denominated, high yield, fixed-rate corporate bond market. Securities are classified as high yield if the middle rating of Moody's, Fitch and S&P is Ba1/BB+/BB+ or below. Bonds from issuers with an emerging markets country of risk, based on Barclays EM country definition, are excluded. The **Bloomberg Barclays U.S. Aggregate Government/Credit Bond Index** measures the performance of USD-denominated U.S. Treasuries, government-related and investment-grade U.S. corporate securities that have a remaining maturity of greater than one year.

Terms and definitions: **Earnings Growth** refers to the growth rate of a company's net profit. **Price-Earnings Ratio (P/E Ratio)** is the ratio of the share of a company's stock compared to its per-share earnings. **Forward P/E Ratio** refers to the P/E ratio based on a company's estimated earnings over the pending one-year period. **Yield to maturity** is the total return anticipated on a bond if held until it matures. **Upside capture ratio** is defined as how well a portfolio performs in time periods where the benchmark's returns are greater than zero. For example, if the benchmark's upside capture is 100% and the portfolio's is 110%, then when the benchmark is up 10% your portfolio is up 11.0%. This example portfolio did better than the benchmark when the market returns were up in certain historical periods. **Downside capture ratio** is defined as how well a portfolio performs in time periods where the benchmark's returns are less than zero. For example, if the benchmark downside capture is 100% and the portfolio's is 94%, then when the benchmark is down 10% your portfolio is down 9.4%. This example portfolio did better than the benchmark when the market returns were down in certain historical periods. **Alpha** is a measure of risk-adjusted excess return above that of a benchmark.