

# 1 Overview

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## 1.1

# Resilience, optimism and a call for investor action

DAVID BAILIN - Chief Investment Officer

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The new economic cycle is set to strengthen in 2021. Investors need to take action to prepare portfolios for a post-COVID world.

- We believe this is an important time to be an investor, and it requires you to act
- We see a confluence of four important factors: a quicker-than-usual recovery, accelerating innovation, the mispricing of many securities, and a period of structurally low interest rates
- A key part of our advice is to put any excess cash in your core portfolio to work and stay fully invested
- As the new economic cycle strengthens, our tactical positioning is bullish

We believe this is an important time to be an investor.

As COVID departs, the new economic cycle that has already begun will accelerate. The investment opportunities in this expansion will reflect new realities, shaped by the numerous impacts of technology upon our lives as well as upon the values that we share.

In a word, what we are experiencing is resilience. In just a few short weeks after the pandemic hit, many businesses went remote. The global financial system kept functioning smoothly. Governments made major decisions to provide financial support to individuals and businesses. New technologies substituted for old. And the scientists went to work, developing vaccines in record time.

As we look back on 2020, we see that the world has had an opportunity to “test drive” the future - and it looks bright. Four of our **Unstoppable trends** - [Digitization](#), [The rise of Asia](#), [Greening the world](#), and [Increasing longevity](#) - were all in force before the pandemic struck. However, we did not fully appreciate their worth in our lives or portfolios. We have now experienced their inherent value, their “unstoppability.”

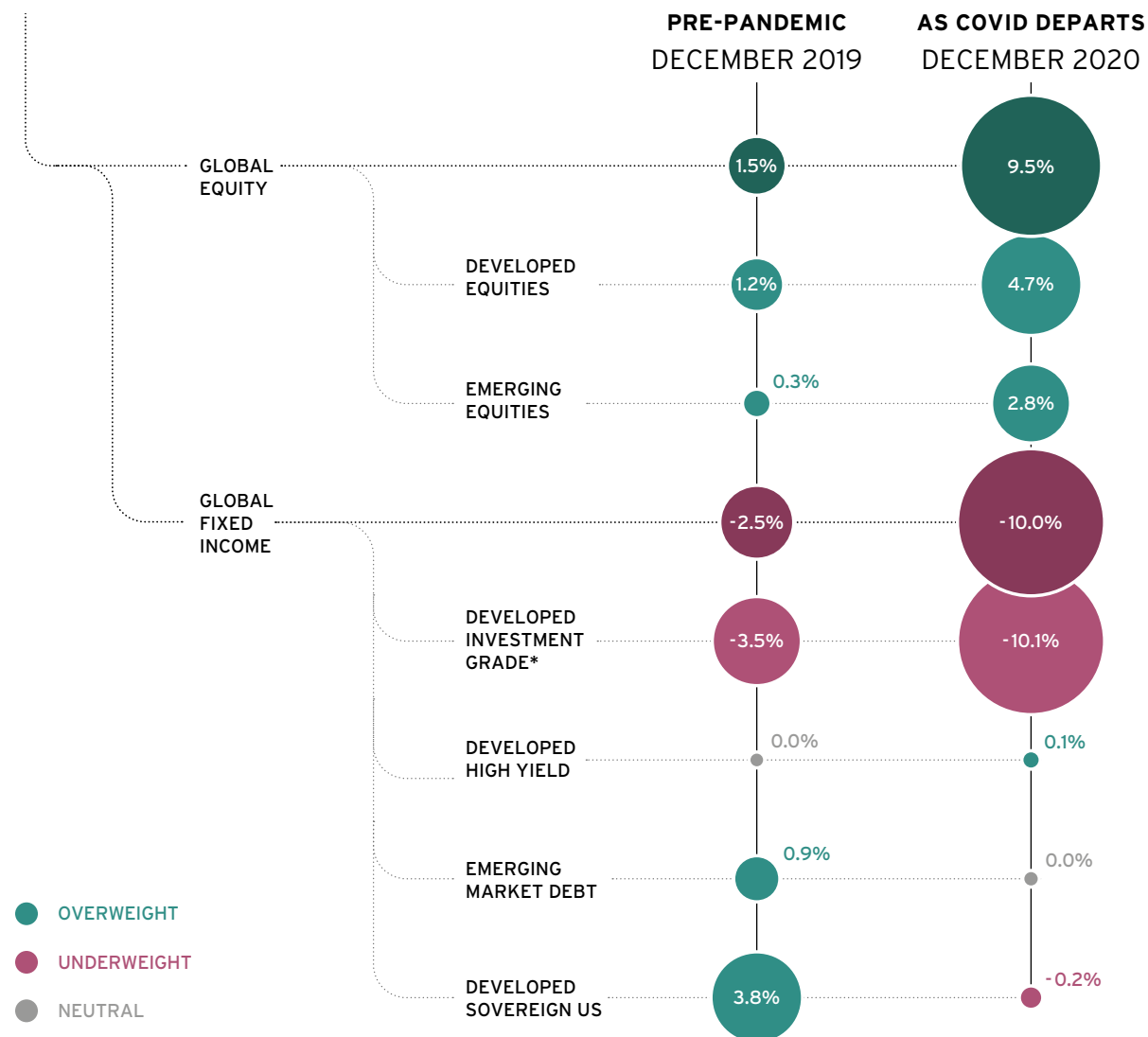
## Four reasons to act

What makes this an especially important time for investor action is the confluence of four factors:

- The global economy will recover more quickly and robustly from the COVID recession than after a more typical large downturn. The virus was an exogenous shock, whose effects were far more unevenly spread than in other crises. Parts of the global economy were largely spared and some benefited mightily. Governments are providing the necessary fuel to support the recovery. Employment and spending will rebound faster as a result.
- Innovation will accelerate. So will the adoption of technology. The impact of this next industrial revolution will generate great value for investors and for society. Environmental, social and governance solutions will direct capital to companies whose actions are consonant with values that will make the world healthier - see [Greening your portfolio as the world goes green](#).
- A period of structurally low interest rates is upon us. When rates are held below normal levels for extended periods of time, the value of cash and many fixed income investments is diminished. Earning negative real returns is harmful to portfolios - see [Overcoming financial repression](#).
- The mispricing of securities caused by COVID will be reversed. The present extent of the mispricing is underappreciated and presents an alpha creation opportunity that seldom appears in markets this broadly - see [Exploiting mean reversion](#).



## Our positioning



Office of the Chief Investment Strategist,  
Citi Private Bank, as of 28 Nov 2020

\*Factors in non-US Developed Market Investment Grade underweight

## Opportunities

### GLOBAL SMALL- AND MID-CAP EQUITIES

SELECT BEATEN-DOWN NATIONAL  
AND REGIONAL MARKETS

COVID CYCLICALS INCLUDING FINANCIALS,  
INDUSTRIALS AND REAL ESTATE

PRIVATE EQUITY STRATEGIES FOCUSING ON  
SMALL- AND MID-CAP FIRMS UNABLE TO ACCESS  
PUBLIC MARKETS

DISTRESSED REAL ESTATE STRATEGIES,  
PARTICULARLY FOCUSING ON HOSPITALITY ASSETS

REPLACING SOME LOW- AND NEGATIVE-YIELDING  
BONDS IN PORTFOLIOS WITH:

- GLOBAL "DIVIDEND GROWER" AND SELECT HIGH DIVIDEND YIELD EQUITIES
- SELECT FIXED INCOME ASSETS, INCLUDING MORTGAGE CREDIT AND BOND-LIKE ALTERNATIVES
- CERTAIN ALTERNATIVE STRATEGIES THAT MAY PROVIDE RECURRING DISTRIBUTIONS
- CAPITAL MARKETS STRATEGIES THAT SEEK INCOME FROM VOLATILITY

HYPER-CONNECTIVITY INVESTMENTS,  
INCLUDING 5G SUPPLIERS AND BENEFICIARIES

EXPOSURE TO THE ONGOING RISE OF ASIA

INNOVATIVE HEALTHCARE-RELATED PROVIDERS  
LINKED TO AGING POPULATIONS

RENEWABLE ENERGY

## A new economic cycle begins

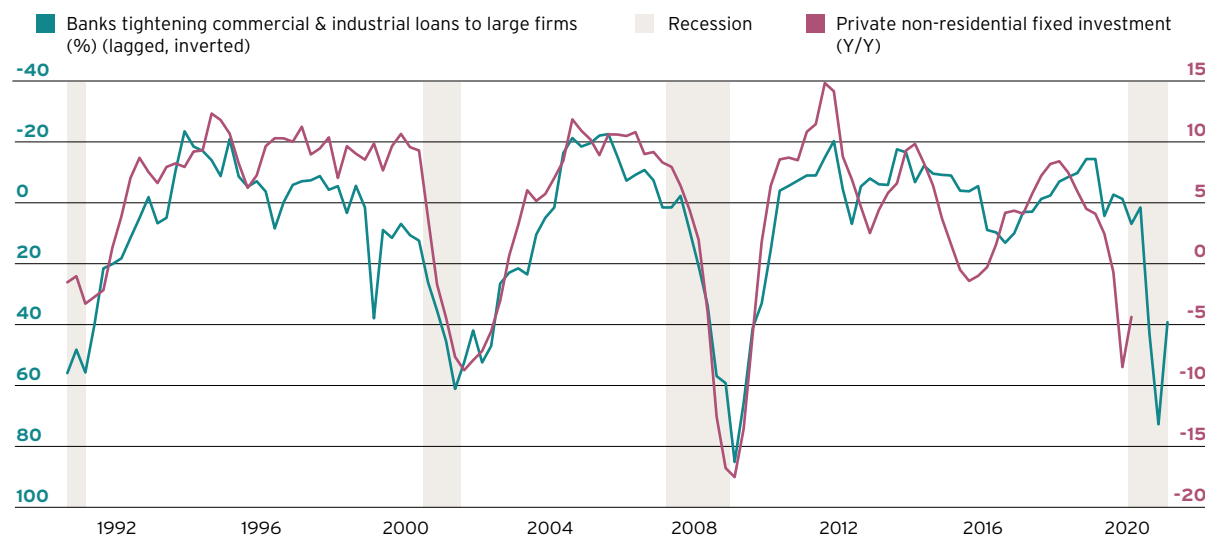
The backdrop for our optimistic outlook is the remarkable health of the global economy despite the pandemic. Financial institutions are strong. Household saving rates remain high. And confidence levels among businesses and consumers alike demonstrate a growth mindset. These positive circumstances are surprising for a world coming out of the worst global healthcare crisis since 1918, but they are as real as the virus itself.

Innovative digital business models from e-commerce to telemedicine have not only been effective, but they have saved lives and provided a better experience for users. Asian countries and governments responded to the pandemic with very different and highly effective policies. As a result, many fewer people will have died across Asia as a whole compared with the West. We expect increased competition between the East and West in the coming decade in healthcare and technology, in particular – see [The rise of Asia: Asian development in a “G2 world”](#).

The healthcare crisis itself has brought to the world’s attention that there are collective issues, such as climate change and the delivery of healthcare, which will require global innovation, cooperation and significant expenditure. Finally, we have just passed a tipping point, at which renewable energy options across industries are also the most cost-effective solutions, without subsidies – see [Unstoppable trends: Greening the world](#). For each of the trends we have identified, the post-pandemic period will afford investors an opportunity to build stronger portfolios by increasing exposure to the major beneficiaries of this new economic cycle.

There are other structural reasons for investment optimism, at least for equity investors. The Federal Reserve’s decision to hold interest rates at atypically low levels to encourage a full recovery reminds us of the period from 1945 to 1965 when such a policy devalued cash and bond holdings intentionally. Now, governments worldwide have followed suit. About four-fifths of the world’s investment grade debt yields 1% or less. Interest rates in emerging economies are falling, too. We classify this as a period of “financial repression” – see [Overcoming financial repression](#) – and it calls for substantial changes to core portfolios.

FIGURE 1. AS LENDING STANDARDS EASE, CAPITAL INVESTMENT RISES



Source: Haver, as of 26 Nov 2020.





## A bullish environment for equities

Investing in productive assets will be necessary to earn real returns. That is especially good for equities. With the cost of capital low, smart managers are likely to use technology to improve and expand the operation of their companies - **FIGURE 1**. In turn, the providers of that software and hardware will benefit. For investors, winning providers and users of that technology will drive revenue and profit growth over time. And some equities will also serve as fixed income alternatives by providing meaningful dividend income. This is one reason why our asset allocation - see [Our positioning](#) - has materially changed as we enter the new economic cycle. As of early December 2020, our Global Investment Committee is 9.5% overweight global equities and 10% underweight global fixed income. That's bullish.

We have written extensively about the impact that COVID-19 had upon financial markets and the relative pricing of securities. Although equity market indices in the US and China are near all-time highs, the dispersion of performance within those markets reflects which industries were pandemic beneficiaries and which suffered. Investors infrequently get an opportunity to exploit "mean reversion" globally. The opportunity is clear: as this crisis ends, the relative pricing of securities will return to more typical relative valuations anticipating broad vaccine use.

At this moment, the pricing ascribed to different industries and regions remains distorted and there are many ways and places for investors to gain exposure to undervalued assets. Emerging markets, from Southeast Asia to Latin America, are mispriced on an historical basis. So, too, are some cyclical industries like banking and energy. Around the globe, small- and mid-cap companies are still generally undervalued. And within the alternative investment marketplace, private equity investors and hedge funds alike are still able to buy assets more cheaply - sometimes much more cheaply - than prior to the pandemic.

Finally, we believe that even after the pandemic departs, even after the pricing distortions unwind, that the relative attractiveness among asset classes will continue to be impacted by the pandemic, the interest rate environment and the prior performance of markets for years to come - see [The long-term outlook for asset classes: What's changed for 2021 and beyond](#).

There are risks to this collective optimism, of course. Although the vaccine cavalry has arrived, we need to understand the safety and longevity of the vaccines themselves. With a new US government, there is hope for more normalized trade and international relations, but the very composition of governments from the Americas to China to Brazil may limit the ability to achieve much. And without sustained low rates, the recovery itself may be imperiled. These risks all must be carefully monitored and considered.

## A call for investors to act now

So, given all this, what do we advise that investors do now?

The strengthening of a new economic cycle in 2021 requires thought, analysis and action on the part of all investors. Here are some important and timely suggestions:

First, we suggest that you think deeply about the amount of “strategic cash” you truly need to hold for the next five to ten years. During the decade from 2010, investors held too much cash, always waiting for a “better time to invest” or for a “better entry point - see [The critical importance of staying fully invested](#). This foolish and profit destroying behavior is well worth avoiding in the next decade. So, decide on what needs to be set aside for safety purposes and invest the rest.

Second, alter the composition of your portfolios in four ways:

- The ratio of equity to debt should be modified to reflect this period of financial repression.
- The exposure of portfolios to **Unstoppable trends** should be increased as a proportion of overall equity exposure.
- The ability to capture “alpha” as markets normalize coming out of the pandemic can be added as a tactical opportunity. In short, mean reversion will take time and portfolios can be positioned for it.
- Fixed income portfolios should only reflect the best yield opportunities across the globe and, for qualified investors, include capital markets strategies that can create income from market volatility

And, finally, seek advice continuously. We offer you tools that you can use regularly to compare your portfolio's holdings and performance with those of the asset allocation we recommend for you - see [Keeping your portfolio strong: Introducing the gap analysis](#). These tools are available by consulting your Private Banker or Investment Counselor and requesting them. Get a “tele-financial” check-up regularly. It is smart portfolio medicine in a post-COVID world.

We wish you and your family a healthy, prosperous and (soon) more proximate 2021.

David Bailin,  
Chief Investment Officer, Citi Private Bank



## 1.2

# As COVID releases its grip

STEVEN WIETING - Chief Investment Strategist and Chief Economist

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With an end to the pandemic coming into view, we highlight the key considerations for investing for a new economic cycle.

- As COVID retreats, we look for large-scale rotation into certain sectors and regional markets
- We stress replacing particular bonds in portfolios with income-producing substitutes
- We continue to stress long-term exposure to Unstoppable trends, including those related to digitization that have performed strongly amid the pandemic





“Our ‘new cycle investment strategy’ is to retain or expand exposures to the best-valued income-generating investments and long-term growth opportunities while adding exposure to depressed assets that will be deemed undervalued a year or more from now.”

That is what we wrote in our Mid-Year Outlook 2020 at the start of June, reiterating our investment strategy for the COVID crisis and beyond. It has helped us achieve both absolute and improved relative investment performance in 2020, but more importantly, has allowed clients to maintain investment discipline through an unprecedented shock. We expect it to guide us as conditions evolve further.

COVID is the first true global pandemic in more than a century. As we discuss throughout Outlook 2021, COVID’s eruption in early 2020 tore through global markets, altering the price of every asset in the world. Even after the discovery of two or more potential vaccines, it seems less well accepted that COVID’s departure will reprice all assets again as it leaves.

The most important investment chart that had emerged by March 2020 remains the most important one as of early December 2020 – **FIGURE 1.** The adaptation and substitution of various kinds of economic activity boosted around half of the world’s asset prices, an effect that was amplified by enormous fiscal and monetary easing. By contrast, the other half fell. As we await the mass distribution of the recently-discovered vaccines against COVID within 2021, sizeable changes in long-term interest rates and industry composition will arise. This will generate

large-scale rotation into certain sectors and regional markets, as we explore in our [Exploiting mean reversion](#) theme.

The deliberate, widespread suspension of daily life in response to COVID-19 generated the most rapid economic declines in recorded history. The world economy shrank 10% almost in an instant in March as leaders of nations great and small ordered the closure of “non-essential” businesses and the “sheltering in place” of much of the world’s population. Unprecedented policy easing steps followed to help “bridge the chasm” of the shock. While the US was among the slowest to act

to stem the spread of COVID, it was the fastest in its dramatic fiscal and monetary easing response. Given the US dollar’s role as a trade, finance and reserve currency, this assisted widespread easing across the world.

Aside from easing fiscal and monetary policy, there were other reasons global financial markets were able to absorb the COVID shock better than many had expected. First – and as we anticipated – long-term investors treated the pandemic as a discrete exogenous shock, not as a rare, but more typical deep recession precipitated by a set of internal economic maladies. Second, healthcare

**FIGURE 1. MEAN REVERSION IN STORE**

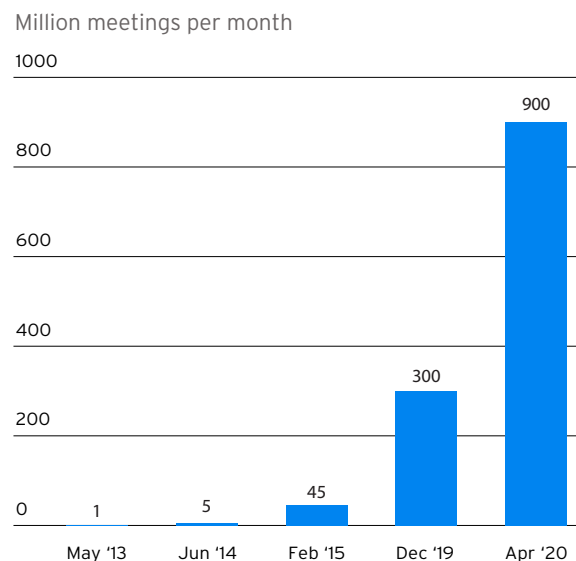


Source: Bloomberg and FactSet as of 16 Nov 2020. COVID cyclicals: Financials, industrials, energy, materials, real estate, consumer discretionary ex–Amazon COVID defensives: IT, healthcare, communication services, consumer staples, utilities, Amazon Indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only and do not represent the performance of any specific investment. Index returns do not include any expenses, fees or sales charges, which would lower performance. For illustrative purposes only. Past performance is no guarantee of future results. Real results may vary. All forecasts are expressions of opinion and are subject to change without notice and are not intended to be a guarantee of future events.

policy was poorly prepared for the arrival of a pandemic, with certain countries performing worse than others. In contrast, technology was serendipitously ready to help the world face the challenge - **FIGURE 2** - and [Unstoppable trends are changing the world](#) and [Increasing longevity: The healthcare opportunity](#).

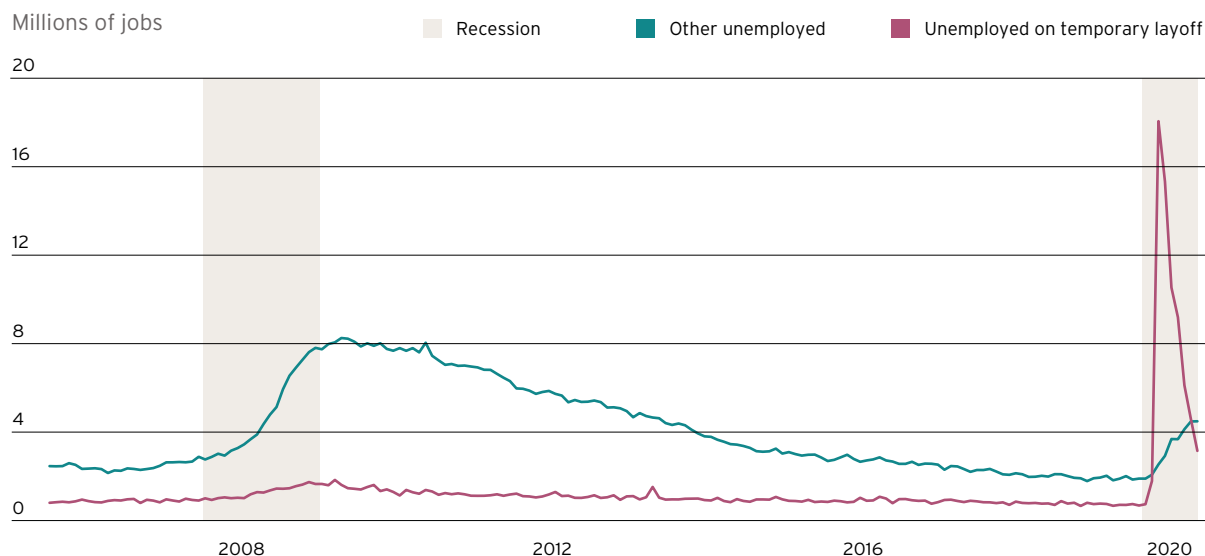
Beyond these reasons, the world economy was not positioned for a downturn, but rather poised for a stronger recovery after the trade war years of 2018-2019 - see **Outlook 2020**. Of course, that did not prevent the subsequent economic contraction. However, it did assist in making the

**FIGURE 2. THE RISE OF THE VIDEO MEETING**



Source: Zoom, as of 1 Nov 2020

**FIGURE 3. TEMPORARY AND PERMANENT JOB LOSSES**



Source: Haver, as of 31 Oct 2020.

contraction period much shorter. Once again, if world policy makers act collectively, or simply do not not inflict collective harm, the world is poised for a stronger recovery within 2021.

Despite the announcement of two or more effective vaccines in November 2020 - and others in late-stage clinical trials - the discrete nature of the present shock, and strong grounds to expect a cyclical recovery in 2021, we see central bankers embarking on a non-traditional course.

## The Fed's new position

In the last cycle, the Federal Reserve kept its key policy rates close to zero for seven years. In this cycle, we see the underlying recovery dynamics of the US and world economy quite differently from the housing bubble period's long-term challenges. However, the Fed has again strongly signaled a zero interest rate policy for the next three years at a minimum. This is even as it expects a cumulative 9.5% gain in real GDP and a drop to a 4% unemployment rate over that time.

The Federal Reserve announced in August that it has changed its framework for inflation to allow for “catchup” periods, so that inflation would average 2%, not simply hit that target. This came after the Fed’s preferred inflation measure – which allows for more frequent substitution of goods and services than the well-known Consumer Price Index (CPI) – rose at an average 1.6% pace in the past ten years. This measure has long trended 0.3% lower annually than the CPI. Some might call the Personal Consumption Expenditures Price Index “the CPI for what you can still afford.”

Current US 10-year real interest rates are near a record low -1%. The Fed’s policy target rate would be about -2% in real terms through 2023 if the Fed sticks to its guidance – **FIGURE 4**.

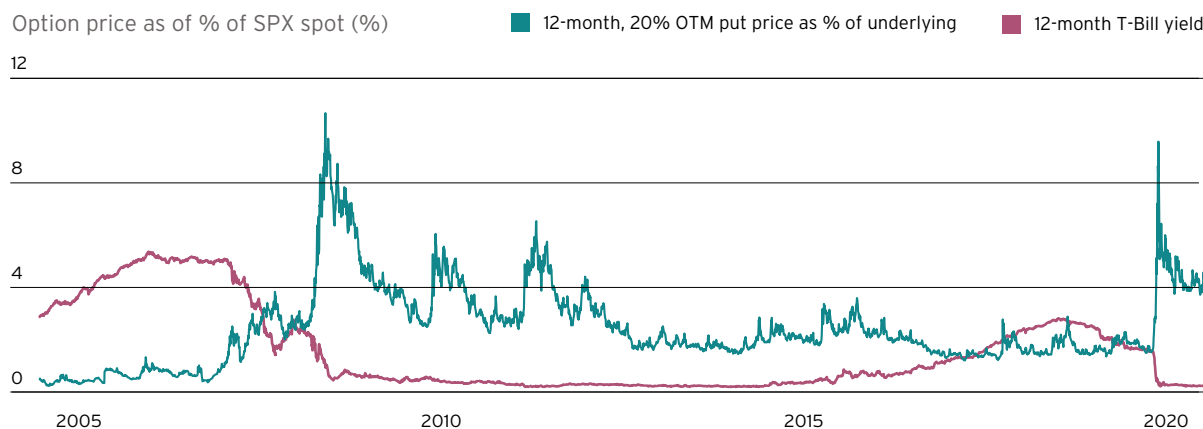
As global bond yields have fallen to a record low of 1% – including emerging markets and high yield – there is a predominant view that central banks have extinguished volatility in markets. This is certainly true in fixed income markets, where overall US bond market implied volatility – the range of asset price expectations derived from buyers and sellers of options – has fallen to an all-time low. Implied volatility in high yield bonds is barely above that of the investment grade bond market. However, equity-implied volatility has remained about double its historical average level – **FIGURE 5**. The income that can be derived from volatility buyers – that is, hedgers – in the equity asset class, equity dividends, alternative investments and relatively attractive credit risk premia that remain in credit markets are all components of our strategy for [Overcoming financial repression](#).

**FIGURE 4. NEGATIVE REAL RATES**



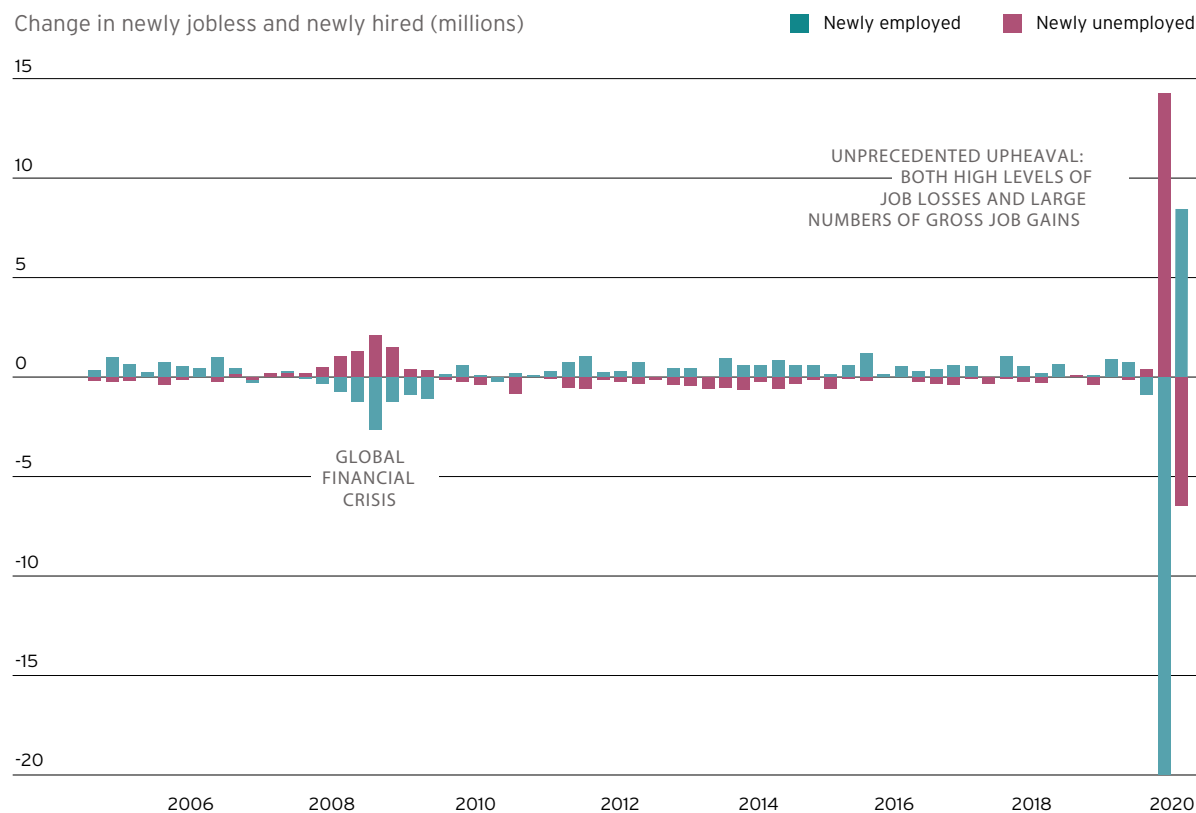
Source: Haver, as of 15 Nov 2020. Past performance is no guarantee of future results. Real results may vary. All forecasts are expressions of opinion and are subject to change without notice and are not intended to be a guarantee of future events.

**FIGURE 5. S&P 500 20% OUT OF THE MONEY VS 1-YEAR T-BILL YIELD**



Source: Haver, as of 20 Nov 2020. Past performance is not indicative of future returns. Indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only. Past performance is no guarantee of future returns. Real results may vary.

FIGURE 6. QUARTERLY CHANGES IN US NEWLY JOBLESS AND NEWLY HIRED



Source: Haver, as of 31 Oct 2020.

## Near- and long-term winners

Despite the external nature of the pandemic and its massive but short-term effects, the nature of business cycle recoveries always demands more time for rebuilding than for demolition.

The smallest businesses bore the true brunt of the crisis. And despite large up- and downswings in aggregate employment, many of these firms could simply not outlast COVID. The Partnership for New York, for example, expects as many as one-third of the city's businesses - mostly small enterprises - never to reopen. Employment overall has remained remarkably dynamic, with new job openings shifting to industries that have helped the economy cope with the virus - FIGURE 6. However, it still takes time for new business formations to make up for a loss of this magnitude.

With this in mind, political and scientific developments have shifted the world significantly towards combining fiscal stimulus with investments to combat climate change. Well before the pandemic, technological change was making new energy and battery technology both greener and cheaper, presenting a secular threat to fossil fuels - see **Unstoppable trends** in **Outlook 2020**. In [Greening the world](#), we see the large investments in green infrastructure in both Eastern and Western economies as a new driver.

Malcolm Spittler and Joseph Fiorica  
contributed to this article

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# Watchlist

Are you positioned for  
the new economic cycle?

With COVID-19's departure in 2021, we expect the new economic cycle to strengthen.

However, many clients still have portfolios positioned for 2020, and almost all hold too much cash.

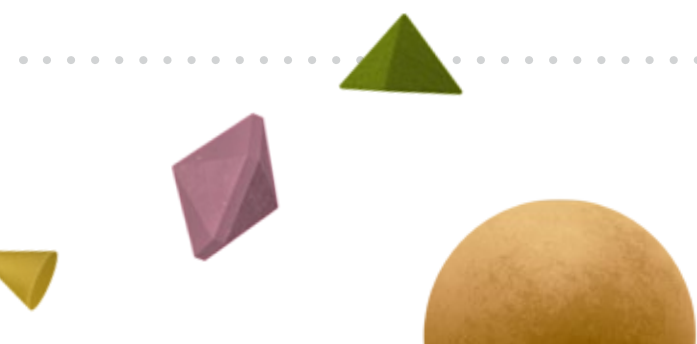
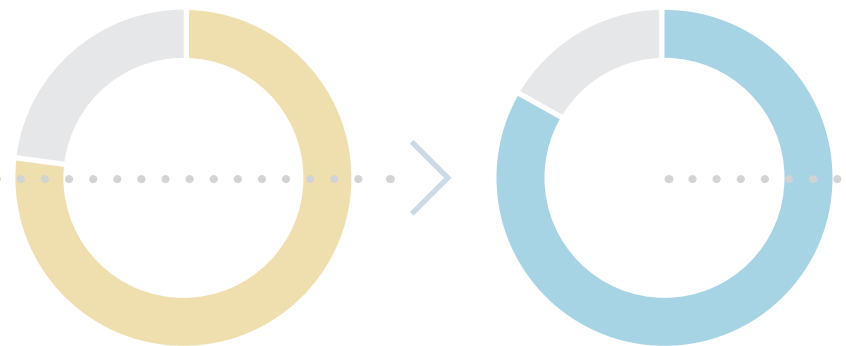
Our Outlook 2021 report sets out strategies to help you get positioned for 2021 and beyond.

And our Outlook Watchlist presents a customized view of your portfolio's positioning in relation to our themes.

We can also offer you customized analyses to help you to:

- Get a holistic view of all your investments held at Citi and elsewhere
- Understand whether your cash is working hard enough
- Determine your portfolio's environmental, social and governance impact
- Gauge your positioning relative to your peer group's portfolios

To receive the analyses of your choice, please ask your relationship team.







## 1.3

# The long-term outlook for asset classes: What's changed for 2021 and beyond

GREGORY VAN INWEGEN

Global Head of Quantitative Research and Asset Allocation, Citi Investment Management

Our strategic asset allocation methodology flashes a warning-sign for certain fixed income investment categories and lowers expected returns from others. Find out where the risks and opportunities are.

- Determining an appropriate mix of global asset classes to hold in your portfolio is the most important decision you take as an investor
- The worst pandemic in over a century unleashed unprecedented disruption in global financial markets, with some impacts that will long outlast COVID-19
- The Strategic Return Estimate for equities from emerging markets is well above that for developed markets

Determining your strategic asset allocation - an appropriate mix of global asset classes to hold in your portfolio - is the most important decision you take as an investor. Over the long term, it will shape both your returns and the amount of risk you take.

So, how should you go about it? Citi Private Bank believes that the answer depends predominantly on the outlook for individual asset class returns over the next decade.

Our own strategic asset allocation methodology - Adaptive Valuation Strategies (AVS)<sup>1</sup> - forecasts returns for asset classes over a ten-year horizon. We call these asset class forecasts Strategic Return Estimates or SREs. AVS calculates SREs based on the current valuation of different asset classes. Over time, low current valuations have tended to be followed by high returns and, as you might expect, high valuations by low returns. Other things being equal, AVS then recommends larger allocations to asset classes with higher SREs and smaller allocations to those with lower SREs.

So, what does AVS currently say about the outlook for returns between now and 2030? The most striking message concerns fixed income - **FIGURE 1**. The global pandemic unleashed unprecedented disruption in global financial markets. Some of these impacts will long outlast COVID-19.

Central banks flooded markets with liquidity, causing a decline in fixed income SREs worldwide and the SRE for US Cash to drop to 0.7% - see [Overcoming financial repression](#). The SRE for Developed Investment Grade Fixed Income - bonds from advanced economies like the US and Europe - is just 1.2%. That is well below the long-term average return of 5.6%. High Yield Fixed Income - lower quality debt from advanced economies - is forecast to return an annualized 3.9%. Again, this is 2.7% below the historic average of 6.6%. The SRE for Emerging Fixed Income is 3.6%.

**FIGURE 1. STRATEGIC RETURN ESTIMATES (%)**

GLOBAL DEVELOPED EQUITY	5.0
GLOBAL EMERGING EQUITY	9.2
GLOBAL DEVELOPED INVESTMENT GRADE FIXED INCOME	1.2
GLOBAL HIGH YIELD FIXED INCOME	3.9
GLOBAL EMERGING FIXED INCOME	3.6
US CASH	0.7
HEDGE FUNDS	4.0
PRIVATE EQUITY	14.2
REAL ESTATE	8.8
COMMODITIES	1.2

Source: Citi Private Bank Asset Allocation team, preliminary estimates as of 31 Oct 2020. Strategic Return Estimates are in US dollars; all estimates are expressions of opinion and are subject to change without notice and are not intended to be a guarantee of future events. Strategic Return Estimates are no guarantee of future performance.

<sup>1</sup> To read about more about our methodology, see [Adaptive Valuation Strategies – A New Approach to Strategic Asset Allocation: 2020 Annual Update](#)

The strong run up in equities globally, as the world recovers from the depths of the pandemic induced crash, has led to today's historically high valuations. The SRE for Global Developed Equity – which includes the US, Europe, and Japan – is 5.0%, is less than half the long-term average realized return for this asset class. By contrast, Global Emerging Equity – shares from developing economies like China and Brazil – has an SRE of 9.2%, indicating meaningful opportunities for return growth by adding emerging markets into a balanced portfolio allocation – see [Exploiting mean reversion](#).

For investors willing to sacrifice liquidity and increase risk, Real Estate is an attractive asset class, with an SRE of 8.8%. However, Private Equity is a standout, benefiting from pandemic related dislocations, with an annualized SRE of 14.2%. Given the depressed level of forecasted returns in traditional asset classes, the forecast premium of Private Equity relative to these asset classes is the highest of the last 30 years. Finally, Hedge Funds – which can play an important role as a portfolio hedge during cyclical downturns –

are estimated to return 4.0%. This is consistent with expected returns after a down-cycle has ended.

Given this broad range of SREs, some investors inevitably ask us why they should not build portfolios exclusively from the asset classes where potential returns are highest. Citi Private Bank would not advocate such an approach. While our methodology does recommend greater allocations to asset classes and regions with higher SREs, there are still diversification benefits from having exposure to asset classes with historically low SREs. That is because different asset classes gain and lose value at different times, reducing the volatility in portfolios overall. Given the post-COVID environment, we continue to stress the value of globally diversified multi-asset class portfolios for safeguarding wealth in 2021 and beyond.

Paisan Limratanamongkol, Andy Zhu, Gene Desello, Xin He and Wenjing Wu also contributed to this article.





## 1.4

# The critical importance of staying invested

DAVID BAILIN  
Chief Investment Officer

GREGORY VAN INWEGEN  
Global Head of Quantitative Research and Asset Allocation, Citi Investment Management

STEVEN WIETING  
Chief Investment Strategist and Chief Economist

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Trying to time the market in 2020 was almost impossible. Sitting on the sidelines in cash reduced portfolio returns as the year went on. For 2021, we recommend you put your core portfolio's excess cash to work.

- Many investors waiting on the sidelines for better market entry points have failed to invest and have missed the first phase of the pandemic recovery
- Given our view of market opportunities in a post-COVID world, investors should maintain cash balances based on their portfolio requirements and establish or maintain full core positions
- The onset of financial repression means that cash will earn even less
- We recommend you seek to invest fully, in line with your customized long-term plan, emphasizing the wide range of opportunities that the post-COVID world presents

As the new economic cycle begins, how much of your core portfolio consists of cash and very short duration bonds? For many wealthy families, the answer might easily be 20% or even more. In many instances, this has been the case for much of the last decade. Such investors have typically positioned themselves in this way to be “safe” or to fund a future entry into risk assets that has never happened. However, waiting in cash for a “better time” to buy has almost never been advisable. And in the coming years, in a period of financial repression, it may prove harmful to wealth.

The COVID-19 pandemic period has provided a stark reminder of the perils of market timing. As the markets plunged in March, some perturbed investors liquidated equity holdings and retreated to the perceived safety of cash. Aside from crystalizing their losses, many believed they could time their re-entry into equities and other risk assets at lower levels in due course. When the turnaround arrived, however, it came sooner and more sharply than anyone might have anticipated. In 2020, being on the sidelines for the S&P 500 Index's strongest two up-days - which occurred just around the bear market's lows - reduced an investor's return by 19.3%.

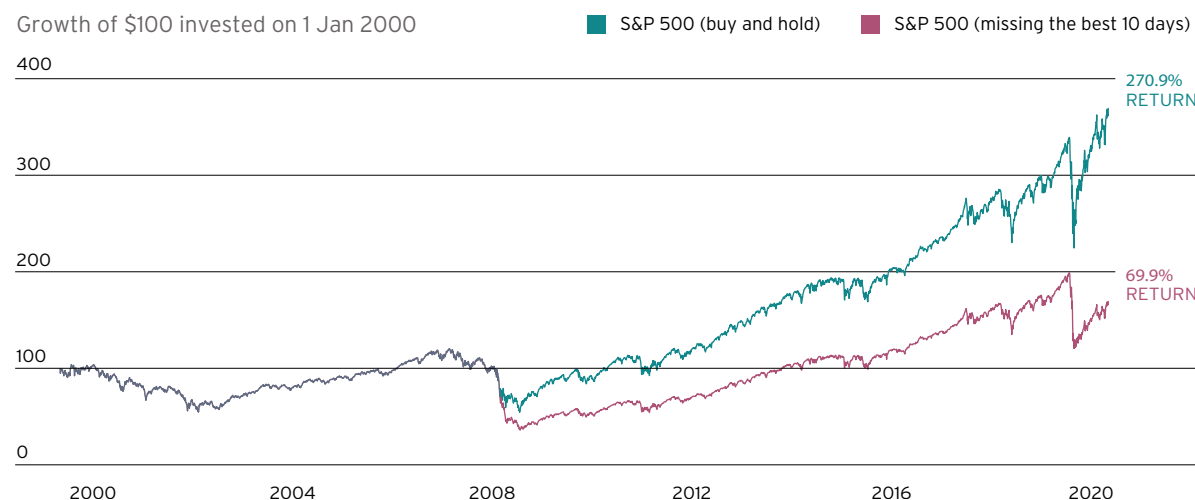
No less damaging are the typical results of market timing over longer periods. **FIGURE 1** shows the returns on the S&P for a market timer who missed the ten strongest up-days between January 2000 and October 2020. Including reinvested dividends, such an investor would have achieved a return of 60.7% for the entire period. By contrast, an investor who stayed fully invested in the S&P for the same period would have achieved a return of 250.7%.

With US and global equities having recovered to all-time highs in the months since March, you may feel tempted to await a dip in valuations before

putting any excess cash to work. The underlying fear here is typically that investing immediately will be poorly timed and result in imminent losses. This fear outweighs the fear of foregoing returns from “just waiting.” Over the long run, though, the clear lesson is that what matters most is not choosing the lowest entry-point at which to invest, but having a fully invested core portfolio at all times.

The cost of waiting could be about to become even more painful. In recent decades, it has typically been possible to earn some positive return on cash after inflation. This allowed

**FIGURE 1. THE PERILS OF MARKET TIMING**



S&P 500 total returns with and without the 10 best days (1 Jan 2000 - 21 Oct 2020) Source: Global Asset Allocation, Global Investment Lab, Bloomberg, as of 24 Nov 2020. Past performance is no guarantee of future results. Indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only. Past performance is no guarantee of future returns. Real results may vary.



investors to preserve and even grow their purchasing power, albeit by a lot less than if they had had a fully invested core portfolio. In the period ahead, this may no longer be true. In much of the world, we expect a toxic combination of very low or negative interest rates and higher inflation, or “financial repression.” In such an environment, holding excess cash as well as many low-yielding bonds results in an erosion of purchasing power. An investment held in cash from 1945 would have taken 38 years to earn a positive return – see [Overcoming financial repression](#).

## Get fully invested – and stay that way

As you think about investing in 2021 and thereafter, we urge you to address two vital issues. The first is how much cash you really need to hold for the next five to ten years. This requires you to determine the liquid resources you truly need to maintain for a rainy day or rainy year. We stand ready to help you do so. Next, the question is how to allocate your capital in your core portfolio. The long-term investment plan that we customize for you provides our answer to this.

The methodology that we use to create your long-term plan – [The long-term outlook for asset classes: What’s changed for 2021 and beyond](#) – is founded on certain key principles. These include keeping you fully invested throughout economic cycles and eschewing market timing. They also

include global multi-asset class diversification and regular rebalancing to keep your portfolio in line with your plan. Risk reduction is based on diversification and not market timing.

To implement your long-term plan in your core portfolio, we then recommend appropriate strategies for you. In today’s new economic cycle, it is extremely important for investors with an average risk profile and return goals to hold a substantial core portfolio, allocated predominantly to equities with both growth and income prospects. Among the higher equity allocations should be certain categories of stock that we believe can serve as fixed income substitutes. Dividend equities, focused on companies that have strong earnings prospects and a history of maintaining dividend payouts, are one example. These portfolio additions are important in a period of financial repression.

At a lower allocation, we favor mortgage REITs that offer much higher income returns for investors willing to endure higher volatility. And there are preferred stocks that can serve as a fixed income proxy during periods when rates are being held down artificially. We discuss some of these possibilities in [Overcoming financial repression: How dividend equities work overtime in your portfolio](#) and [Finding yield in a repressed world](#). We also recommend long-term exposure to our other themes of [Unstoppable trends](#) and [Exploiting mean reversion](#).

So, what should you do next? A good first step is to ask us to carry out an analysis of your core investment portfolio. We can then highlight any excess cash and other areas where your portfolio is not following your long term plan, including its alignment to our investment themes. Your Investment Counselor can then work with you to get your core portfolio fully invested and keep it that way. Building wealth over time requires planning and patience, not market timing.



## 1.5

## Keeping your portfolio strong: Introducing the gap analysis

PHILIP WATSON - Head of the Global Investment Lab

VISWANATHAN VENUGOPALA - Head of the Lab for Family Offices

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Following a plan is vital to your long-term investment performance. A gap analysis can help determine whether your core portfolio is on track.

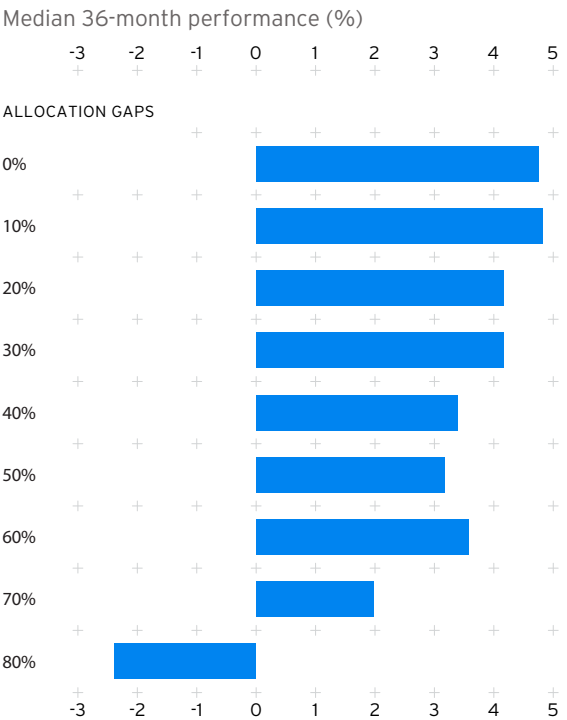
- Core portfolios that follow a customized, robust long-term plan are likelier to achieve risk and return objectives than those that do not
- A gap analysis can highlight divergences between your core portfolio and your customized plan
- As well as your overall asset class positioning, a gap analysis explores your core portfolio's exposures and can identify risks due to macroeconomics, concentrations and other factors
- Having identified gaps in your portfolio construction, we can suggest strategies to help realize your plan



Behind every great investment portfolio is a carefully constructed plan. Over many decades, both financial theory and practical experience have demonstrated the critical value of creating and then adhering to such a plan. Investors who follow their plan for their core portfolios are much likelier to meet their long-term objectives than those that do not. Specifically, following the plan can achieve higher returns and take less risk than would otherwise be the case.

Despite the importance of developing and following a plan, many investors fail to do so. Although we customize a long-term investment plan for each client, we regularly see instances where core portfolios deviate significantly from these plans. Ignoring entire asset classes or regions of the world, holding concentrated positions in a security or sector, and hoarding excess cash are some of the destructive behaviors that we encounter most often.

FIGURE 1.  
THE IMPORTANCE OF FOLLOWING YOUR PLAN



Source: Citi Private Bank Global Investment Lab, as of 31 Oct 2020. Divergence from our recommended allocation is represented here by allocation gaps. Allocation gaps measure the degree to which clients' portfolios follow our recommended allocations at all risk levels. The lower the gap percentages, the more aligned the portfolios with our recommended allocations. A reading of 0% indicates full alignment with our recommendation. This information is drawn from the Private Bank's proprietary data covering 6,000 continuing client portfolios whose reference currency is US dollars. Past performance is no guarantee of future returns. Real results may vary.

Here is some useful evidence that illustrates why this is such a serious matter. Our analysis of some 6,000 client portfolios over the three years to October 2020 finds that the portfolios that have most closely followed the globally diversified asset allocations we recommended have generally outperformed those that have not over that three-year period - FIGURE 1. The difference in average returns between portfolios that followed their plans and those that did not was substantial. By missing returns over time, clients increase their risk, reduce returns and can make portfolios less resilient in times of stress.

## How a gap analysis works for you

So, is your core portfolio following a plan or not? To answer this question, we can turn to gap analysis. Gap analysis is a detailed diagnostic exercise designed to uncover gaps between your plan and your portfolio. As well as deviations from the weightings recommended in your plan, gap analysis can highlight particular biases, hidden risk exposures, inefficiencies and other shortcomings of which you might have been unaware.

A thorough gap analysis scrutinizes your core portfolio's current positioning in light of your return objectives, risk appetite and other preferences, as set out in your investment policy statement. It will ask whether your current portfolio is consistent with the pursuit of those objectives. The most important element here is obviously your core portfolio's positioning compared to the strategic asset allocation - or long-term investment plan - that we customize for you using our own methodology. (For our methodology's latest ten-year return estimates - see **The long-term outlook for asset classes: What's changed for 2021 and beyond.**)

Having an appropriate mix of asset classes from global markets can help enhance your returns and mitigate your risks. A gap analysis first addresses any deviations between the asset classes you actually own and those defined by your plan, as well as the size of each allocation. It may well be that you have exposure to all the recommended asset classes, but that your holdings have drifted away from their target weights over time. The powerful performance of technology equities in 2020, for example, has left

many investors with a larger long-term weighting than we would advise.

Exposure to our multi-year investment themes is another important consideration for your core portfolio. Every year, we make a customized Outlook Watchlist report available to you to highlight whether your asset allocation has exposure to our themes. The Watchlist is a gap analysis that addresses this element within your core portfolio. A full gap analysis can identify shortfalls in portfolio construction and thematic exposures.

Having determined your broad asset class and thematic exposures, a gap analysis can drill down into the characteristics of your holdings in each asset class. For example, it can highlight your exposure to equity return drivers such as size (large- versus small-cap), growth and value, quality and momentum. It can also identify exposure to macroeconomic factors, including interest rate and currency risks within an otherwise high-quality fixed income allocation. These are less readily observable than broad asset class exposures, but play an important part in your core portfolio's performance, both in the shorter and longer term. The larger and more complex your core portfolio, the more likely it is that you may have inadvertently built up an outsized exposure to certain individual securities or sectors.

## Cash is not king

Some portfolio gaps are less obvious, but the "gap" caused by having too much cash is one that is often assumed to enhance portfolio safety. Can



one even have too much cash? The answer is yes. And the main reasons are two-fold. First, cash during a period of financial repression is an asset that loses value relative to inflation. Second, the opportunity cost of too much cash is the absence of a return one would have earned over time. For example, if a fully invested portfolio would have earned 2% more per annum over an investment cycle, that portfolio is inherently riskier.

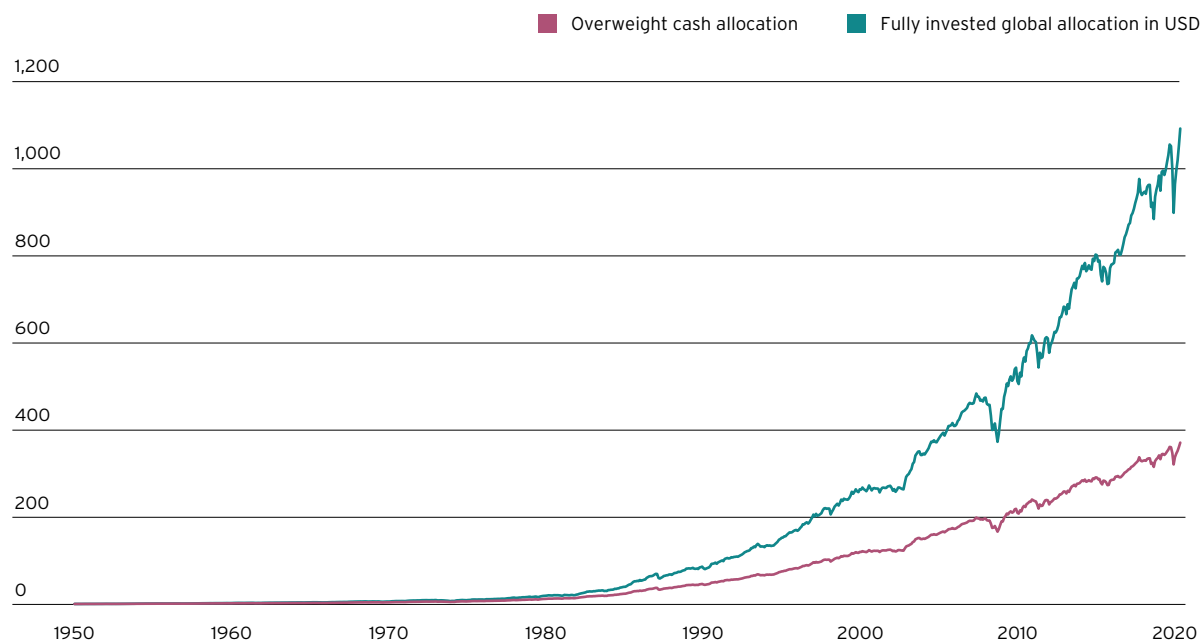
Excess cash weightings are all too common in core portfolios. Indeed, we frequently see portfolios with a 30% weighting in cash and sometimes more. **FIGURE 2** compares the performance of a fully invested global multi-asset class allocation to an allocation with a large cash overweight position. The greater your excess cash holding, the bigger the drag on your performance over time. Sitting on the sidelines is a costly strategy - see [The critical importance of staying fully invested](#). In the coming years, we believe it could become even more hazardous for your wealth, given the likelihood of continued negative real interest rates - see [Overcoming financial repression](#).

## From minding the gap to filling the gap

Performing a gap analysis upon your core portfolio is an essential exercise. But it is also only the first step. Having rigorously identified gaps through an annual review, you need to take action to fill them. Based on your core portfolio's specific needs, your relationship team - working in partnership with our Managed Investments and Capital Markets specialists - can suggest suitable

strategies. We can then help keep your customized plan implemented in your portfolio going forward. Please ask your Private Banker or Investment Counselor for a gap analysis of your core portfolio.

**FIGURE 2. FULLY INVESTED ALLOCATIONS HAVE TROUNCED CASH-HEAVY ALLOCATIONS OVER TIME**



The US\$ portfolio cash overweight, a historical allocation on an asset class level assumes 42% equity and 28% fixed income proportions and 30% cash, rebalanced on an annual basis. The Global US dollar allocation represents AVS Risk Level 3, the 31 Dec 2019 allocations. They include allocations to equities, fixed income, commodities, cash and hedge funds. Risk levels are an indication of clients' appetite for risk. Risk Level 3 - Seeks modest capital appreciation and, secondly, capital preservation. Source: Global Investment Lab, Citi Private Bank, as of 31 Oct 2020. The returns shown were calculated at an asset class level using indices and do not reflect fees, which would have reduced the performance shown. Past performance is no guarantee of future returns. Real results may vary. Diversification does not ensure against loss of investment.



## Glossary

### ASSET CLASS DEFINITIONS:

**Cash** is represented by US 3-month Government Bond TR, measuring the US dollar-denominated active 3-Month, fixed-rate, nominal debt issues by the US Treasury.

**Commodities** asset class contains the index composites – GSCI Precious Metals Index, GSCI Energy Index, GSCI Industrial Metals Index, and GSCI Agricultural Index – measuring investment performance in different markets, namely precious metals (e.g., gold, silver), energy commodity (e.g., oil, coal), industrial metals (e.g., copper, iron ore), and agricultural commodity (i.e., soy, coffee) respectively. Reuters/ Jeffries CRB Spot Price Index, the TR/CC CRB Excess Return Index, an arithmetic average of commodity futures prices with monthly rebalancing, is used for supplemental historical data.

**Emerging Markets (EM) Hard Currency Fixed Income** is represented by the FTSE Emerging Market Sovereign Bond Index (ESBI), covering hard currency emerging market sovereign debt. Global Developed Market Corporate Fixed Income is composed of Bloomberg Barclays indices capturing investment debt from seven different local currency markets. The composite includes investment grade rated corporate bonds from the developed-market issuers.

**Global Developed Market Equity** is composed of MSCI indices capturing large-, mid- and small-cap representation across 23 individual developed-market countries, as weighted by the market capitalization of these countries. The composite covers approximately 95% of the free float-adjusted market capitalization in each country.

**Global Developed Investment Grade Fixed Income** is composed of Barclays indices capturing investment-grade debt from twenty different local currency markets. The composite includes fixed-rate treasury, government-related, and investment grade rated corporate and securitized bonds from the developed-market issuers. Local market indices for US, UK and Japan are used for supplemental historical data.

**Global Emerging Market Fixed Income** is composed of Barclays indices measuring performance of fixed-rate local currency emerging markets government debt for 19 different markets across Latin America, EMEA and Asia regions. iBoxx ABF China Govt. Bond, the Markit iBoxx ABF Index comprising local currency debt from China, is used for supplemental historical data.

**Global High Yield Fixed Income** is composed of Barclays indices measuring the non-investment grade, fixed-rate corporate bonds denominated in US dollars, British pounds and Euros. Securities are classified as high yield if the middle rating of Moody's, Fitch, and S&P is Ba1/BB+/BB+ or below, excluding emerging market debt. Ibbotson High Yield Index, a broad high yield index including bonds across the maturity spectrum, within the BB-B rated credit quality spectrum, included in the below-investment-grade universe, is used for supplemental historical data.

**Hedge Funds** is composed of investment managers employing different investment styles as characterized by different sub categories – HFRI Equity Long/Short: Positions both long and short in primarily equity and equity derivative securities; HFRI Credit: Positions in corporate fixed income securities; HFRI Event Driven: Positions in companies currently or prospectively involved in wide variety of corporate transactions; HFRI Relative Value: Positions based on a valuation discrepancy between multiple securities; HFRI Multi Strategy: Positions based on realization of a spread between related yield instruments; HFRI Macro: Positions based on movements in underlying economic variables and their impact on different markets; Barclays Trader CTA Index: The composite performance

of established programs (Commodity Trading Advisors) with more than four years of performance history.

**High Yield Bank Loans** are debt financing obligations issued by a bank or other financial institution to a company or individual that holds legal claim to the borrower's assets in the event of a corporate bankruptcy. These loans are usually secured by a company's assets, and often pay a high coupon due to a company's poor (non-investment grade) credit worthiness.

**Private Equity** characteristics are driven by those for Developed Market Small Cap Equities, adjusted for illiquidity, sector concentration, and greater leverage.

#### INDEX DEFINITIONS:

**The Bloomberg Barclays Global Aggregate Bond Index** is a flagship measure of global investment grade debt from twenty-four local currency markets. This multi-currency benchmark includes treasury, government-related, corporate and securitized fixed-rate bonds from both developed and emerging markets issuers.

**Bloomberg Barclays US Corporate Bond Index** measures the investment grade, fixed-rate, taxable corporate bond market. It includes US dollar denominated securities publicly issued by US and non-US industrial, utility and financial issuers.

**Bloomberg Barclays US Treasury Index** measures US dollar-denominated, fixed-rate, nominal debt issued by the US Treasury.

**Bloomberg-JP Morgan Asia** currency index is a spot index of the most actively traded currency pairs in Asia's emerging markets valued against the US dollar.

**FTSE All-World Index** is a stock market index representing global equity performance that covers over 3,100 companies in 47 countries starting in 1986.

The **FTSE Nareit Mortgage REITs Index** is a free-float adjusted, market capitalization-weighted index of US Mortgage REITs. Mortgage REITs include all tax-qualified REITs with more than 50 percent of total assets invested in mortgage loans or mortgage-backed securities secured by interests in real property.

**MSCI AC Asia ex-Japan Index** captures large and mid-cap representation across 2 of 3 Developed Markets (DM) countries\* (excluding Japan) and 9 Emerging Markets (EM) countries\* in Asia. With 1,187 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country.

**MSCI China Index** captures large and mid-cap representation across China A shares, H shares, B shares, Red chips, P chips and foreign listings (e.g. ADRs). With 704 constituents, the index covers about 85% of this China equity universe.

**MSCI Emerging Markets Index** captures large- and mid- cap representation across twenty-four Emerging Markets (EM) countries. With 837 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country.

**MSCI Emerging Markets (EM) Latin America Index** captures large and mid-cap representation across five Emerging Markets (EM) countries in Latin America. With 113 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country.

The **MSCI Global Alternative Energy Index** includes developed and emerging market large-, mid- and small-cap companies that derive 50% or more of their revenues from products and services in Alternative energy.

The **MSCI AC World Automobiles Index** is composed of large- and mid-cap automobile stocks across emerging and developed countries.

The **MSCI World Information Technology Index** tracks the large- and mid-cap IT segments across 23 developed markets countries.

The **MSCI World Index** covers large- and mid-cap equities across 23 Developed Markets countries. With 1,603 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country.

**Nasdaq 100** is a large-cap growth index consisting of 100 of the largest US and international non-financial companies listed on the Nasdaq Stock Market based on market capitalization.

The **Russell 2000 Index** measures the performance of the small-cap segment of the US equity universe. The Russell 2000 Index is a subset of the Russell 3000 Index representing some 10% of the total market capitalization of that index.

The **S&P 500 Index** is a capitalization-weighted index that includes a representative sample of 500 leading companies in leading industries of the US economy. Although the S&P 500 focuses on the large-cap segment of the market, with over 80% coverage of US equities, it is also an ideal proxy for the total market.

The **S&P Global Dividend Aristocrats** is designed to measure the performance of the highest dividend yielding companies within the S&P Global Broad Market Index (BMI) that have followed a policy of increasing or stable dividends for at least ten consecutive years.

The **VIX** or the Chicago Board Options Exchange (CBOE) Volatility Index, is a real-time index representing the market's expectation of 30-day forward-looking volatility, derived from the price inputs of the S&P 500 index options.

#### OTHER TERMINOLOGY:

**Adaptive Valuations Strategies** is Citi Private Bank's own strategic asset allocation methodology. It determines the suitable long-term mix of assets for each client's investment portfolio.

**Correlation** is a statistical measure of how two assets or asset classes move in relation to one another. Correlation is measured on a scale of 1 to -1. A correlation of 1 implies perfect positive correlation, meaning that two assets or asset classes move in the same direction all of the time. A correlation of -1 implies perfect negative correlation, such that two assets or asset classes move in the opposite direction to each other all the time. A correlation of 0 implies zero correlation, such that there is no relationship between the movements in the two over time.

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**Bond rating equivalence**

Alpha and/or numeric symbols used to give indications of relative credit quality. In the municipal market, these designations are published by the rating services. Internal ratings are also used by other market participants to indicate credit quality.

Bond credit quality ratings	Rating agencies		
	Moody's <sup>1</sup>	Standard and Poor's <sup>2</sup>	Fitch Ratings <sup>2</sup>
<b>Investment grade</b>			
Highest quality	Aaa	AAA	AAA
High quality (very strong)	Aa	AA	AA
Upper medium grade (strong)	A	A	A
Medium grade	Baa	BBB	BBB
<b>Not Investment grade</b>			
Lower medium grade (somewhat speculative)	Ba	BB	BB
Low grade (speculative)	B	B	B
Poor quality (may default)	Caa	CCC	CCC
Most speculative	Ca	C	CC
No interest being paid or bankruptcy petition filed	C	D	C
In default	C	D	D

<sup>1</sup> The ratings from Aa to Ca by Moody's may be modified by the addition of a 1, 2, or 3 to show relative standing within the category.

<sup>2</sup> The ratings from AA to CC by Standard and Poor's and Fitch Ratings may be modified by the addition of a plus or a minus to show relative standing within the category.

choose to borrow money at a lower interest rate, while paying off its previously issued bonds. As a consequence, underlying bonds will lose the interest payments from the investment and will be forced to reinvest in a market where prevailing interest rates are lower than when the initial investment was made.

(MLP's) – Energy Related MLPs May Exhibit High Volatility. While not historically very volatile, in certain market environments Energy Related MLPs may exhibit high volatility.

Changes in Regulatory or Tax Treatment of Energy Related MLPs. If the IRS changes the current tax treatment of the master limited partnerships included in the Basket of Energy Related MLPs thereby subjecting them to higher rates of taxation, or if other regulatory authorities enact regulations which negatively affect the ability of the master limited partnerships to generate income or distribute dividends to holders of common units, the return on the Notes, if any, could be dramatically reduced. Investment in a basket of Energy Related MLPs may expose the investor to concentration risk due to industry, geographical,

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Mortgage-backed securities ("MBS"), which include collateralized mortgage obligations ("CMOs"), also referred to as real estate mortgage investment conduits ("REMICs"), may not be suitable for all investors. There is the possibility of early return of principal due to mortgage prepayments, which can reduce expected yield and result in reinvestment risk. Conversely, return of principal may be slower than initial prepayment speed assumptions, extending the average life of the security up to its listed maturity date (also referred to as extension risk).

Additionally, the underlying collateral supporting non-Agency MBS may default on principal and interest payments. In certain cases, this could cause the income stream of the security to decline and result in loss of principal. Further, an insufficient level of credit support may result in a downgrade of a mortgage bond's credit rating and lead to a higher probability of principal loss and increased price volatility. Investments in subordinated MBS involve greater credit risk of default than the senior classes of the same issue. Default risk may be pronounced in cases where the MBS security is secured by, or evidencing an interest in, a relatively small or less diverse pool of underlying mortgage loans.

MBS are also sensitive to interest rate changes which can negatively impact the market value of the security. During times of heightened volatility, MBS can experience greater levels of illiquidity and larger price movements. Price volatility may also occur from other factors including, but not limited to, prepayments, future prepayment expectations, credit concerns, underlying collateral performance and technical changes in the market.

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Asset allocation does not assure a profit or protect against a loss in declining financial markets.

The indexes are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only and do not represent the performance of any specific investment. Index returns do not include any expenses, fees or sales charges, which would lower performance.

Past performance is no guarantee of future results.

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Factors affecting commodities generally, index components composed of futures contracts on nickel or copper, which are industrial metals, may be subject to a number of additional factors specific to industrial metals that might cause price volatility. These include changes in the level of industrial activity using industrial metals (including the availability of substitutes such as manmade or synthetic substitutes); disruptions in the supply chain, from mining to storage to smelting or refining; adjustments to inventory; variations in production costs, including storage, labor and energy costs; costs associated with regulatory compliance, including environmental regulations; and changes in industrial, government and consumer demand, both in individual consuming nations and internationally. Index components concentrated in futures contracts on agricultural products, including grains, may be subject to a number of additional factors specific to agricultural products that might

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