

MID-YEAR OUTLOOK | 2020

From Fear to Prosperity:

Investing in a New Economic Cycle



Private Bank



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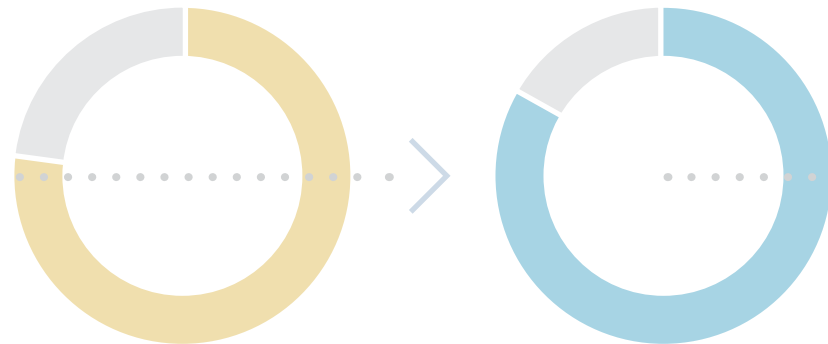
Watchlist

Get fully invested for the new cycle.

A new cycle in the global economy and markets is beginning. But many clients do not own the right equities for this new recovery, and almost all have too much cash. Earning more safely does not mean staying out of markets or holding cash while waiting for the “right time” to invest.

To help you understand how your portfolio currently measures up, we can provide you with your very own Outlook Watchlist report. Your relationship team can then recommend strategies for getting properly invested for the new cycle.

So why not make a start by requesting your Outlook Watchlist report from your relationship team?





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“When one admits that nothing is certain one must, I think, also add that some things are more nearly certain than others” - Bertrand Russell

Letter from the CIO

DAVID BAILIN
CHIEF INVESTMENT
OFFICER



To Our Clients,

I am very mindful that all of us have been impacted personally and professionally by the pandemic. Across the Citi Private Bank community, some have lost loved ones to COVID-19, all of us are worried about our families, and there are more than a few of our clients serving on the front lines, as doctors, researchers, and vaccine innovators. It is also a time of strife due to major social issues and unemployment. We are a resilient bunch, sharing our experiences, adapting to new realities, and developing fortitude as we seek to restore elements of normality to our lives and respect in our political discourse.

This is a rare and remarkable time.

The events of the last few months have brought an end to the longest economic expansion in history. That expansion - from July 2009 to February 2020 - was of sufficient magnitude to allow the world to enter this crisis from a position of relative economic strength. The US personal savings rate was a healthy 8% when COVID-19 struck. Globally, inflation was low, and there were no major booms to unwind. But the global virus also hit at a time of de-globalization, when traditional political alliances are fraying, the balance of power between the US and China is shifting, and when populism is becoming more prevalent. The varied, disjointed, and uncoordinated health and economic responses to the global spread of the virus reflect these less stable times.

So, it is with a great sense of responsibility and gratitude that I pen this guide and introduction to our Mid-Year Outlook entitled, **From Fear to Prosperity: Investing in a New Economic Cycle**.

Normally, our mid-year report is an update to the outlook we publish at the beginning of the year.

This is not the case for 2020. Our global team of researchers, economists, and portfolio managers has revisited every assumption in our models. We have updated our Strategic Return Estimates, the foundational ten-year return projections that drive our core asset allocation. We have looked at the political, economic, governmental, and market reactions to the pandemic to devise and assess scenarios that reflect a range of possible outcomes. We have considered which trends will accelerate as a result of the pandemic, and which industries and activities will be less relevant afterwards. And, we have taken your questions into account. Our Global Investments team has had more frequent contact with our clients than at any time in the past decade.

We have a great deal to tell you about what we know and what we do not know. When a crisis of such magnitude occurs, knowledge is in short supply. As the British philosopher Bertrand Russell said, “some things are more nearly certain than others.” Where we have facts and data, we can craft stronger recommendations. Our highest conviction views are grounded, in part, on historical relationships between the economy and markets,

but are also based on observations of atypical market behavior, new portfolio realities, and the acceleration of important trends in business and politics.

Mid-Year Outlook 2020 reflects the complexities and new realities of our time. Let me share them in summary form for you, with references to the articles that follow:

1 This is a brand new economic cycle. It is beginning with a brief, extremely deep, rolling global recession, which is likely to be followed by an initial, sharp snapback in global economic activity that will achieve only a partial, uneven recovery. (To illustrate how atypical this period is, note that 60% of all job losses occurred in just three major industry groups: leisure, education/health care, and retail.) We then expect a slow expansion that will take us back to 2019 levels of corporate profitability by 2022 - see [Investing in a new economic cycle](#).

2 The temporary global shutdown and the path to recovery from the pandemic have altered the dynamics of the global economy in material ways. Certain industries, such as technology, are permanent beneficiaries. Other sectors, like traditional retailing, are permanent victims. Large companies will, by and large, weather the storm better than small ones. Developed nations with more economic and natural resources will fare better than less developed countries. And there will be millions of small- and medium-sized businesses that fail. The virus will affect every individual and every business in ways that are uneven and sometimes unfair, with winners and losers standing side by side in stark contrast to one another. The world's stock markets have rapidly reflected this, with highly divergent valuations in equities of resilient firms and those in significantly impacted industries - see [Investing in a new economic cycle](#).

FIGURE 1. ESTIMATE OF US COVID-19 DEATHS AND PROJECTED DEATHS

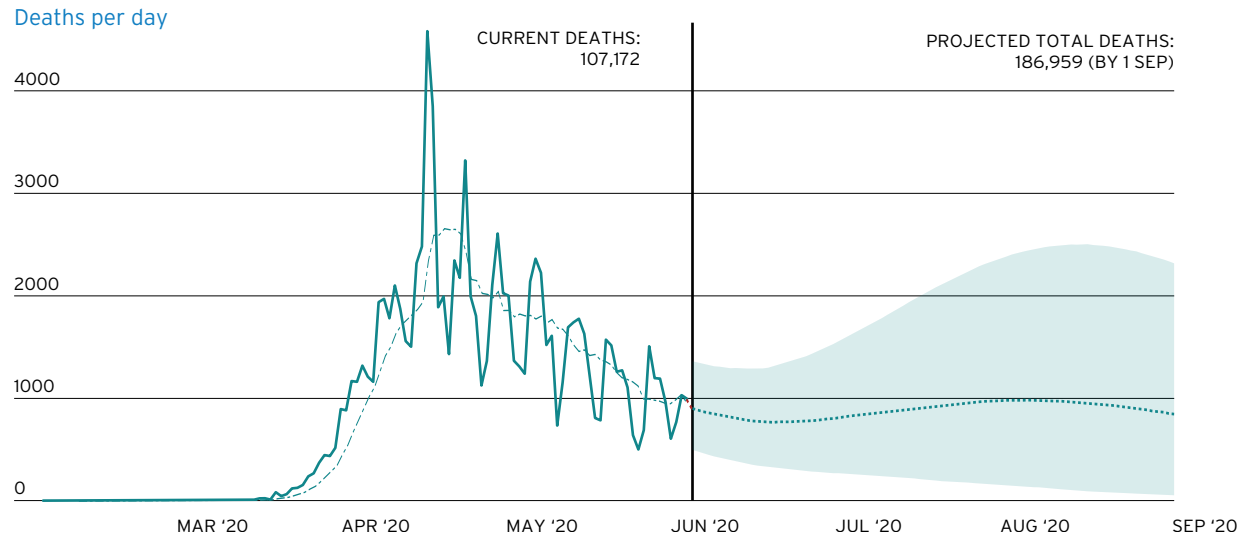
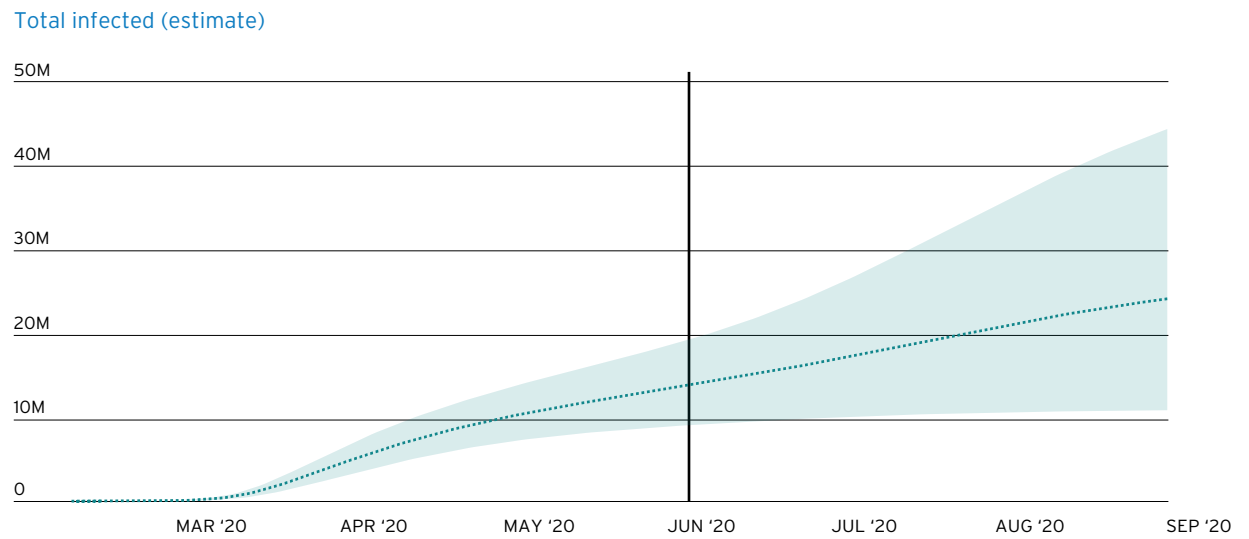


FIGURE 2. ESTIMATE OF US COVID-19 TOTAL INFECTED



Source: covid19-projections.com/us as of 4 Jun 2020.

All forecasts are expressions of opinion and are subject to change without notice and are not intended to be guarantees of future events.

- 3 The most material issue for investors over the next five years will be low rates.** With the yield on US Treasuries falling closer to zero, asset allocations will have to change materially. Historically, fixed income zigged when equities zagged. Their negative correlation served as a natural hedge. That is no longer true. Then there is the associated issue of long-term returns. If fixed income cannot provide reasonable returns and as much diversification, portfolios should reflect such realities. We have, therefore, re-run our Strategic Return Estimates to reflect the pandemic, low rates, and how markets have performed thus far - see [Major changes to our Strategic Return Estimates](#). The results suggest that clients make major changes to their core, long-term portfolios. Increased exposures will include small- and medium-sized companies, emerging market debt and equity. For suitable investors, they will include certain capital markets strategies - see [What smart families are doing in capital markets](#) - as well as private equity, real estate, and late-stage venture capital - see [The best results for alternative investments often follow economic crises](#). We also continue to emphasize the value of select companies with a track record of growing dividends - see [Seek sustainable dividends](#). We then set out why we believe investors are likely to focus even more upon companies with the highest environmental, social, and governance standards, both during the pandemic and for the long term - [The power of Investing with Purpose](#). Finally, there is the issue of cash itself. Clients hold way too much of it, and failure to manage cash wisely is a major negative for portfolios - see [Cash is not king](#).
- 4 The major "fear" is the virus itself.** And that is because the pandemic is not at its end. Looking at US data, for example, we see that there may be as many as 190,000 fatalities just three months from now - **figure 1**. But we can also see that 50 million people at most will have been

infected by then. Only when infection rates (Ro) fall sustainably to 0.5 or less, may the end of the pandemic be in sight. This means that COVID-19 will remain prevalent globally for a year or two or longer, unless a vaccine is found and broadly distributed. The economic friction associated with living and working through a pandemic across a modern economy has never been experienced or modeled.

- 5 Until a vaccine is found, the global economy will not fully normalize, and health frictions will dampen economic activity overall.** When a vaccine is found, there will be a rapid path to a "new normal," as well as a further acceleration of economic activity in industries and companies that are strategically and financially well-positioned. Although we have highlighted our Unstoppable trends before (and these performed well over the past few months!), the pandemic will accelerate growth across many industries. These are investable and we believe you should own more of them - see [Truly Unstoppable trends perform well even during a pandemic: Reviewing our investment themes](#).
- 6 Finally, if anyone still had any doubts about the destruction that market timing can wreak upon portfolios, the pandemic should have dispelled them.** Over the twenty-four trading days between 19 February and 23 March, US equities dropped 34%. From 23 March to 27 May, they gained 36%. The largest up-day was 9.4% on 24 March and the largest down-day on 16 March was negative 12%. These were some of the biggest single-day moves in stock market history and they occurred very close together. Keep your core portfolio fully invested at all times and reallocate within it - see [Towards a new asset allocation](#) and [The wisdom of lump-sum investing: Why you should get fully invested now](#).

Although it seems almost inappropriate to talk about "prosperity" - profits and opportunity as a result of the pandemic - this is a resilient world. To earn above-average returns, you have to make calls on what to buy and when. Great investments often arise at times of great dislocation and even discomfort. We identify out-of-favor markets and those industrial groups, including airlines, which are under extraordinary stress but must come back in order for the global economy to heal again. We are prepared to look ahead with eyes wide open, and while we will be wrong on some recommendations, perhaps about the timing to invest or perhaps about the investment itself, there is greater risk if we look only in the rear view mirror.

As I said at the outset, there are some things we are more certain about. We know the global economy will fully recover, but not the exact timing. And we know that innovation, invention, and ingenuity will continue to power changes, and that leaders in such endeavors will be well rewarded. And we also know that darker days give way to lighter ones and sunshine.

It is a humble honor to work with colleagues so committed to looking long and hard at a world changing so fast. And it is an equal honor to serve all of you as CIO. I have never had so many meaningful conversations in such a short time with so many of you. I wish you and your family health, prosperity, and renewal.

Warmly,

David Bailin
Chief Investment Officer
Citi Private Bank

2 Overview

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2.1

Investing in a new economic cycle

STEVEN WIETING, CHIEF INVESTMENT STRATEGIST
AND CHIEF ECONOMIST

DAVID BAILIN, CHIEF INVESTMENT OFFICER

The COVID collapse and policy response have profoundly affected our Strategic Return Estimates, asset allocation strategy, portfolio construction, and tactical market recommendations. We are entering a new economic cycle and this demands a new approach to investing.

KEY MESSAGES

- The COVID collapse in the economy was caused by an exogenous shock that collapsed world business activity
- The fiscal and monetary response was quick and large enough to convince investors that they can have confidence in a recovery
- As the world moves from fear to prosperity in the coming years, the new cycle demands a new approach to investing
- The global economic recovery will be uneven regionally, and across sectors, leading to wide dispersion in returns
- Larger firms, companies that produce and consume technology wisely, and many healthcare providers have outperformed sharply during the shutdowns, masking much distress elsewhere
- We maintain a long-term commitment to our Unstoppable trends in healthcare, digital disruption, and Asia as a region
- We advise that you target depressed assets that will be deemed undervalued a year or more from now as recovery unfolds
- Aggregators of small businesses including private equity are all likely beneficiaries of the new cycle
- Reflecting beaten-down valuations, we have added overweight positions in select cyclical sectors, such as US small-cap equities, and regions like Latin America, where values have collapsed similar to 2008



The COVID-19 pandemic ended the longest economic expansion in history. The 128 months from June 2009 to March 2020 was a period of modest growth for the world economy following the Global Financial Crisis.

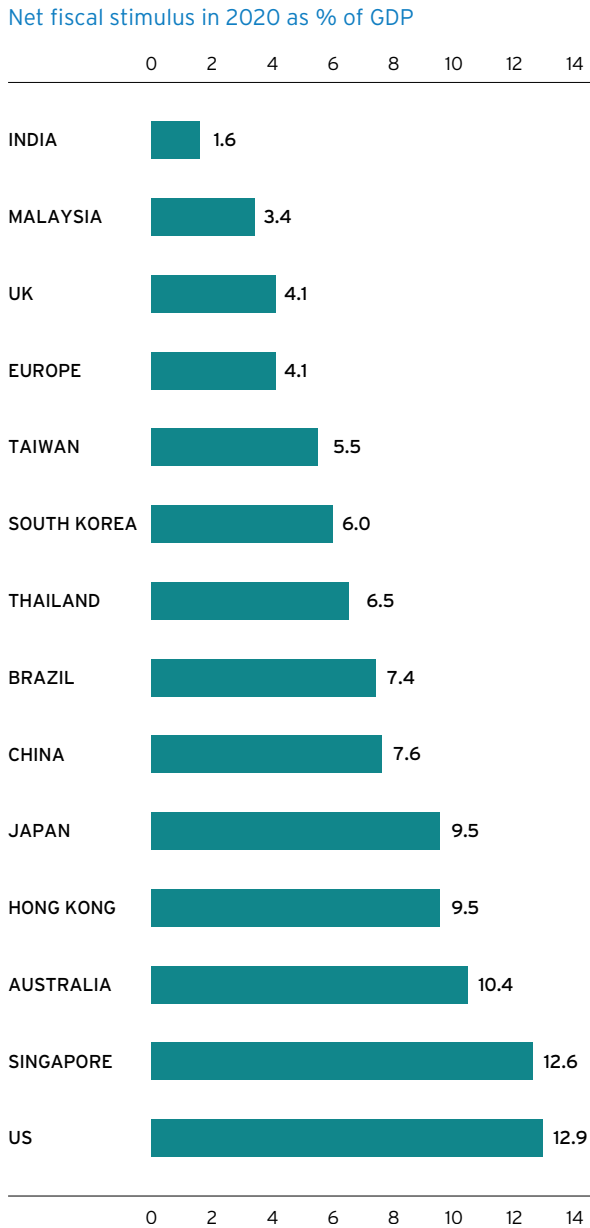
Now, we begin a new economic and financial market cycle.

The COVID collapse was caused by an exogenous shock that shut down world business activity. But unlike 2008, governments worldwide were swift and decisive in spending current and future resources to build a bridge to economic recovery. Globally, policymakers will deliver \$6 trillion in current-year spending, while central banks have embraced open-ended asset purchases of an equivalent amount. As **figure 1** shows, the US is leading global stimulus efforts, with roughly half the world's fiscal and monetary easing in the US dollar. The Federal Reserve also cut US policy rates back to zero, pledging to keep them there until labor markets "normalize." These anticipatory actions will serve as the starting gun for a recovery that will begin in the third quarter of 2020.

A rapid economic contraction of this severity and speed would normally elicit equally bearish sentiment from backward-looking investors. But the level of fiscal and monetary stimulus was so massive that it brought confidence to investors willing to look beyond the deep chasm. Markets responded with a recovery that confounded pundits and experts alike.

Whereas prior recessions allowed time for appreciated bonds to be liquidated and exchanged for depressed equities, this one has not. Even Warren Buffett could not put Berkshire Hathaway's huge cash pile to work quickly enough. Clear market leadership by technology companies - those least negatively impacted by the economic shutdowns - provided a catalyst for the market rebound. The speed of the equity market recovery

FIGURE 1. STIMULATING: ESTIMATED 2020 FISCAL SPENDING INCREASES



Source: FactSet and Citi Research through 12 May 2020.

will require investors to make faster and bolder investment decisions. We think the quality of these decisions may significantly shape your performance for the coming decade.

While markets jumped higher and faster than in any prior post-recessionary period, investors were discerning. Defensive equities rose and cyclical equities fell disproportionately, punishing industrials and banks, to name just two sectors. Some overseas markets were similarly hit hard. So, as we reflect on what is different this time, the new economic cycle demands a tactical approach. We will need to allocate between particular market segments and regions over time. We will need to expose client portfolios to parts of the market, like small- and mid-cap equities, as the recovery takes shape.

In short, the new economic cycle will require new approaches to everything from security selection to portfolio construction to asset allocation.

The path of decline and recovery: An inevitable rise

Shutting down whole economies has produced history's fastest economic collapse. We estimate the annualized pace of decline in second quarter US GDP may be 35%-40%. A drop this large distorts the math of recovery, as gains and losses are asymmetric. For example, we expect only half of those unable to work in the second quarter across western economies will be able to return to their jobs in the third quarter. We estimate this partial rebound alone is likely to result in GDP growth of 25%-30%. As you can see, the numerical growth will look large, but only just begin filling the employment hole.

In terms of consumer spending, we can look overseas for clues as to how the recovery might look in the West. The path of Chinese auto sales is one such data point. As China's economy shut down, auto sales fell 83% in February. As Chinese workers

now fear using public transport, auto sales quickly exceeded their pre-COVID pace by April. While March saw only part of this two-month recovery, the monthly gain was 240%.¹ Other clues are likely to emerge. For example, Germany's Lufthansa is rapidly expanding intra-European flights. In all cases, the ensuing sector recoveries will likely be significant, but fall well short of full recovery.

Importantly, certain countries and regions are unable or unwilling to provide economic stimulus. Some of them will suffer deeper shocks owing to their dependence on international tourism, exports or both - **figure 2**. Emerging markets with high external borrowing requirements, those that borrow in foreign currencies or have pegged currencies are more vulnerable, as they have the ability to steer their economies to higher ground.

The Eurozone lagged the US during the recovery after the Global Financial Crisis of 2008-09.² With a greater trade and tourism shock and less fiscal stimulus, the Eurozone should expect a 2020 growth decline nearly twice as large as that in the US. Along with greater demographic constraints

FIGURE 2. RELIANCE ON TRADE AND TOURISM

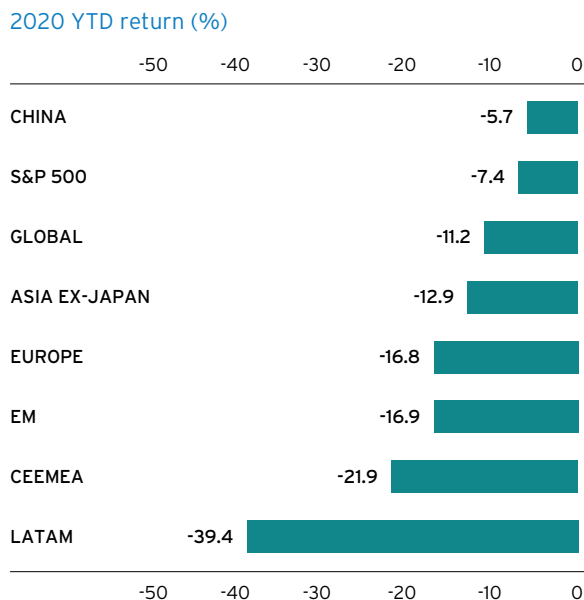
	BI-DIRECTIONAL TRADE SHARE OF GDP (%)	TOURISM SHARE OF GDP (%)
US	20	7.9
UK	41	10.5
EUROPE EX-UK	68	10.5
DEV. ASIA	52	8.7
EM ASIA	41	10.3
EM EMEA	58	8.0
EM LATIN AMERICA	38	10.5

Source: FactSet and Citi Research through 20 May 2020

and more slower-growing industries, an inadequate level of regional support for the most COVID-impacted Eurozone countries is likely to result in a weaker regional recovery for several years to come.

We also see oil-producing states as likely to experience sustained pressure. We expect production cuts and a modest resumption of travel to boost oil's price toward \$40 by year-end. But oil is unlikely to regain pre-pandemic levels due to a long-term secular shift away from fossil fuel consumption, increased US supplies, and a technology revolution in alternative energy.³

FIGURE 3. YEAR-TO-DATE EQUITY RETURNS



MSCI Indices in all cases, except for S&P. Source: Bloomberg through 20 May 2020. Past performance is not indicative of future returns. Real results may vary. Indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only. See Glossary for definitions.

Our economic assumptions are already significantly reflected in regional financial returns so far in 2020 - **figures 3** and **4**. Our goal will be to assess which regions and markets are over- or underestimating the recovery going forward.

Seeing the dispersion in markets as an opportunity

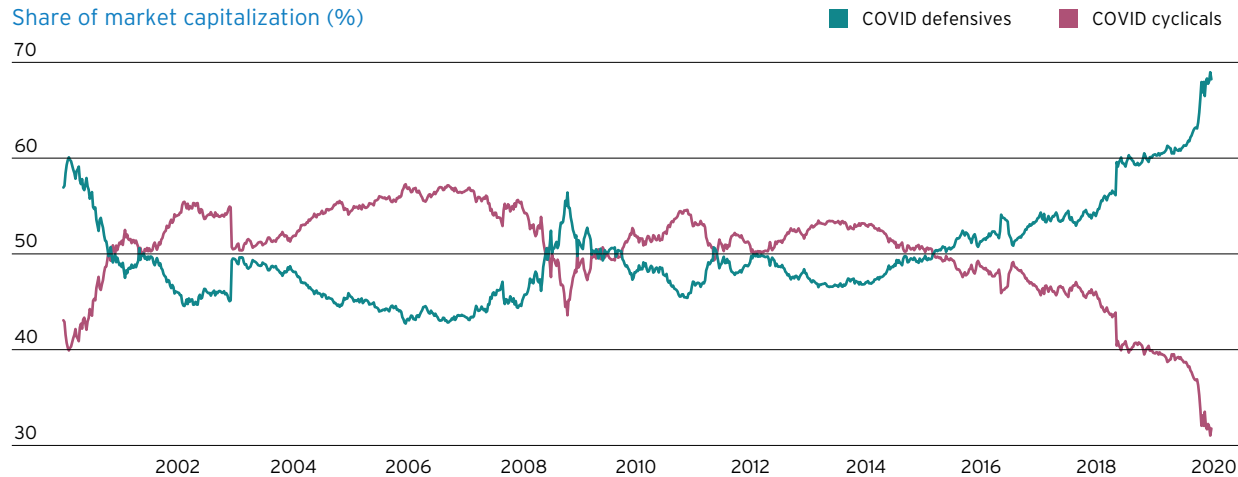
We believe today's massive dispersion in potential returns between regions, industries, and companies represents the biggest opportunity for investors at the inception of this recovery. We will guide investors on the opportunities and their sequencing. For discretionary investors, we will reallocate portfolios accordingly. And for opportunistic investors, we think you will need to act decisively, as adding the appropriate exposures at the right time may improve future returns. Likewise, failure to act may well hinder your subsequent portfolio growth.

FIGURE 4. CITI PRIVATE BANK REAL GDP GROWTH ESTIMATES

	2020 (%)	2021 (%)	2022 (%)
CHINA	2.0	5.5	5.0
US	-4.3	3.6	3.0
EU	-8.0	3.0	3.0
UK	-6.0	2.5	2.5
GLOBAL	-3.0	3.2	3.5

Source: Office of the Chief Investment Strategist, Citi Private Bank, as of 20 May 2020. All forecasts are expressions of opinion and are subject to change without notice and are not intended to be guarantees of future events. 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 results, actual results may vary.

FIGURE 5. US COVID DEFENSIVES TROUNCED COVID CYCLICALS



Source: Bloomberg through 5 May 2020. Past performance is not indicative of future returns. Real results may vary. Indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only.

COVID cyclicals: Financials, industrials, energy, materials, real estate, consumer discretionary ex-Amaon

COVID defensives: IT, healthcare, communication services, consumer staples, utilities, Amazon

As the crisis unfolded, we rapidly saw that “COVID defensives” – our label for US sectors including information technology, e-commerce, healthcare, and staple industries – massively outperformed beaten-up “COVID cyclicals” – our label for industrials, energy, financials, and real estate – **figure 5**.

In our view, this outperformance is unsustainable and presents an investment opportunity. Market leadership by companies less impacted by the economic shutdown makes sense, but the degree to which they have appreciated relative to the poor performance of industrial companies does not.

Given the exogenous nature of the shock and the rebound off the bottom, consumer and business confidence were not dashed as much as one might expect. Hence, we expect spending in industrials will do better, as will those equities over time.

Build portfolios for 2021 and beyond, not 2020

Our new Strategic Return Estimates show major changes as we enter the new cycle. Importantly, the portfolio value of fixed income broadly has fallen. With the exception of EM debt and some parts of the high yield market, lower interest rates pinned near zero have reduced bonds’ diversification value and their long-term return prospects even more so – see [Major changes to our Strategic Return Estimates](#). We therefore need to consider other ways to seek diversification⁴ and returns. In equities, the performance of indices is not the story. There are sub-sectors that will be more valuable as portfolio components.

With the global economy still shrinking, equity investors have largely taken the wise leap to believing in eventual recovery. Consequently, broad risk asset pricing does not offer outsized prospective returns. Yet, it is possible that a future equity setback could change that. While

broad equity markets mostly rise and fall together, the relative value of markets and their future prospects will play out in unexpected ways. Europe faces great risks, but also has scope to recover, if policymakers show unity and resolve. For now, however, we are underweighting equities across the Eurozone and the emerging markets (EM) of Europe, the Middle East and Africa. This includes Eurozone government bonds, where we also remain underweight.

Oil markets will also continue to experience boom and bust. Following the present bust and likely recovery, it will still be a great challenge for oil-producing states to diversify their economies enough in a world where oil demand is waning - see **The future of Energy** in [Outlook 2020](#).

Also at the heart of our new cycle investment strategy is increasing exposure to attractively valued investments with the potential to generate income - see [Seek sustainable dividends](#) - and long-term growth opportunities. We also want to add exposure gradually to depressed assets that will be deemed undervalued a year or more from now. By contrast, we will reduce exposures in regions and sectors whose recoveries will likely lag - see [Our favored markets](#).

We want to reiterate our conviction in our **Unstoppable trends**. These include Digital disruption - such as digital media content, e-commerce, and cybersecurity providers - and Increasing human longevity - global healthcare. China and the US have led major global equity markets, and we are overweight both. Importantly, these markets have the highest weightings in COVID-defensives - **figure 6**. Asia, as a whole, remains an Unstoppable trend for reasons that are eminently clear, including accelerating demographics and the changing geopolitical environment.

Of course, in this new cycle, those assets we classified as “unstoppable” performed well relative to others in the COVID collapse. We therefore remind investors that assets whose prices have not fallen cannot rebound. Consequently, we advise you to retain these assets for the long term, while tactically adding to beaten-down sectors in the near term.

FIGURE 6. GLOBAL DISTRIBUTION OF COVID CYCLICALS AND DEFENSIVES (% OF MARKET)

	COVID CYCLICALS (%)	COVID DEFENSIVES (%)
US	38.0	62.0 ←
DM	45.2	54.8
GLOBAL	46.7	53.3
EUROPE EX-UK	50.5	49.5
EUROPE	52.2	47.8
EM ASIA	52.2	47.8
EUROZONE	56.2	43.8
EM	57.4	42.6
UK	57.5	42.5
JAPAN	57.7	42.3
ASIA EX-JAPAN	58.0	42.0
LATAM	65.3	34.7
CEEMEA	82.0	18.0

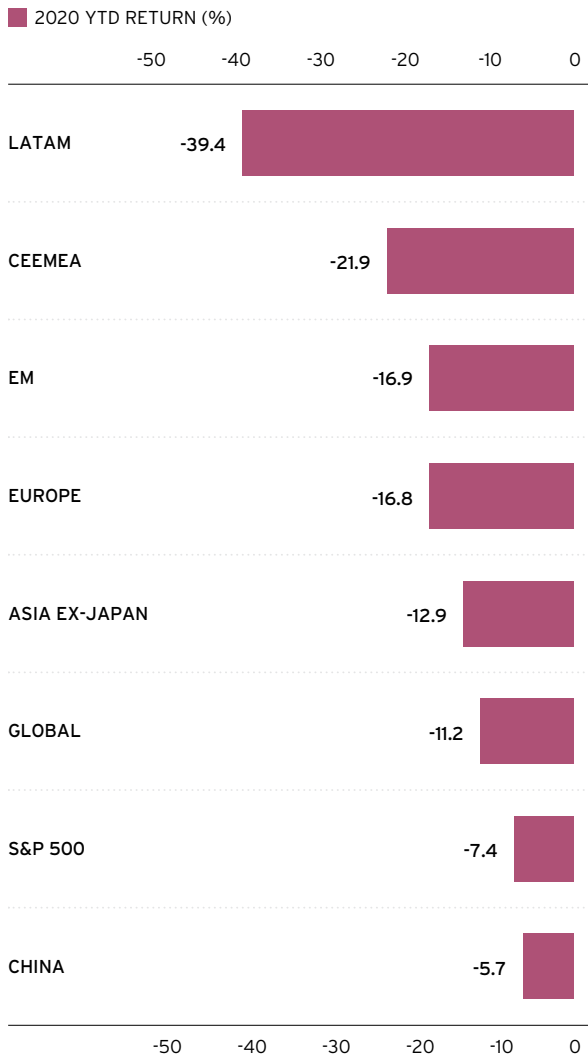
Source: Bloomberg through 5 May 2020. Past performance is not indicative of future returns. Real results may vary. Indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only

COVID cyclicals: Financials, industrials, energy, materials, real estate, consumer discretionary ex–Amazon

COVID defensives: IT, healthcare, communication services, consumer staples, utilities, Amazon

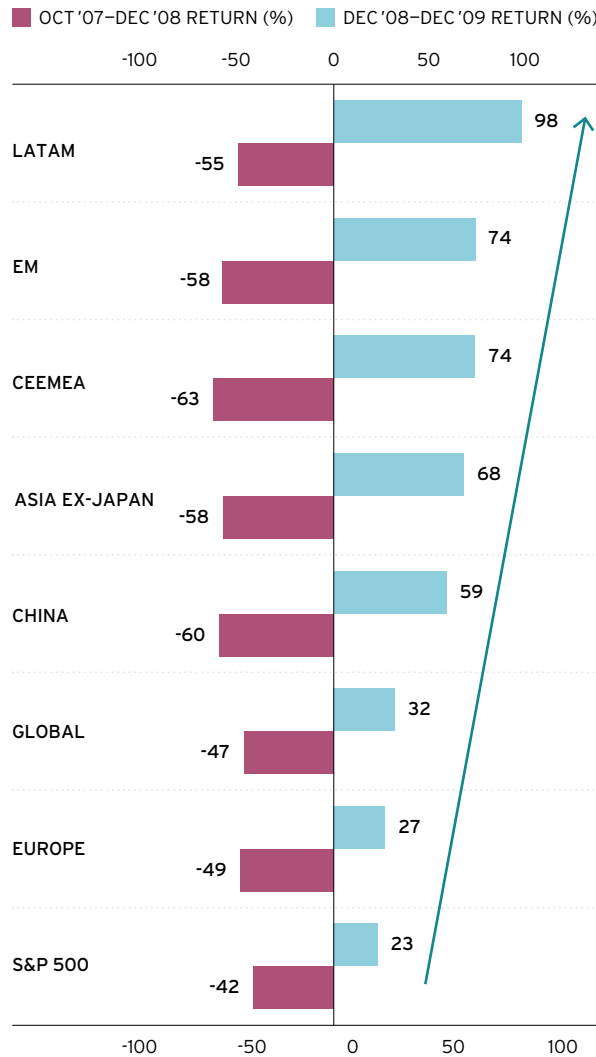


FIGURE 7. REGIONAL PERFORMANCES IN 2020



MSCI Indices in all cases, except for S&P. Source: Bloomberg, as of 5 May 2020. Source: Bloomberg, as of 5 May 2020. Past performance is not indicative of future returns. Real results may vary. Indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only. See Glossary for definitions.

FIGURE 8. BIGGER FALLS, BIGGER REBOUNDS IN 2008-09



MSCI Indices in all cases, except for S&P. Source: Bloomberg, as of 5 May 2020. Past performance is not indicative of future returns. Real results may vary. Indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only

Among the underperforming “COVID cyclicals,” we see higher probability that US small- and medium-sized firms experience a quicker and more decisive rebound. Meanwhile, valuations in Latin America - 2020’s worst regional performer to date - appear to have suffered a much deeper de-rating than other EM regions. But we should recall that Latin American equities posted a 98% gain in US dollars in 2009.⁵ Their 2008 decline barely exceeded this year’s drop thus far - **figures 7 and 8**.

Our regional preference to overweight US bonds - with Europe and Japan already negatively yielding and “priced for crisis” before COVID-19 - remains a key position. Fed easing has again resulted in sharply lower yields across the US Treasury yield curve, despite record US borrowing. Real US government bond yields are significantly negative, largely closing the gap with negative European

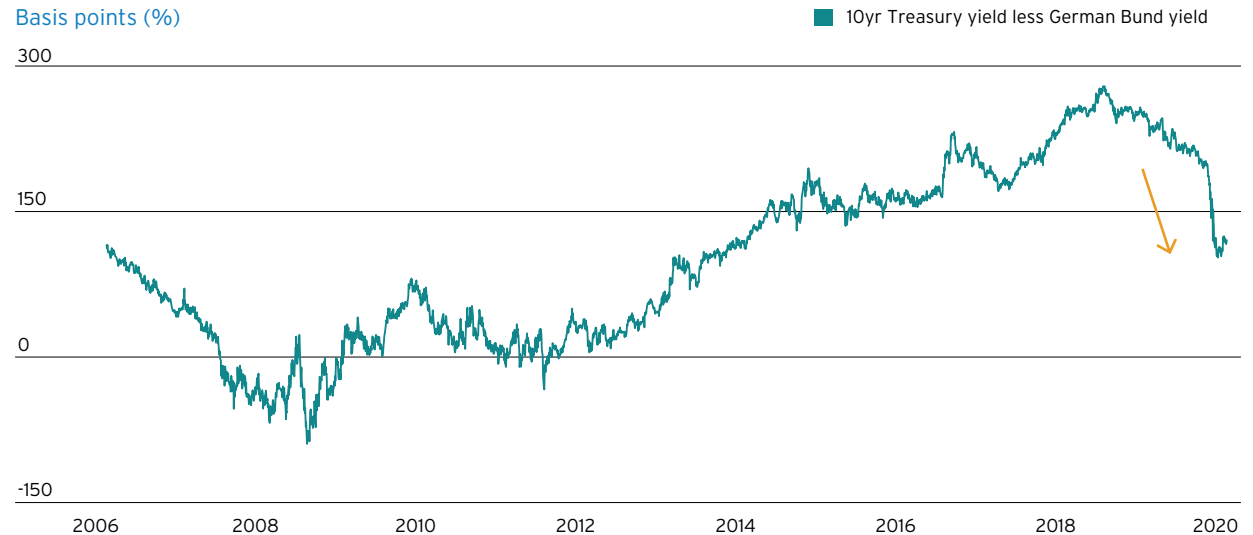
and Japanese nominal yields - **figure 9**. But with long duration US Treasury prices surging as much as 40% over the past year, we have pared back to a neutral weighting. With 10- to 30-year yields now ranging from 0.65% to 1.30%, we see US Treasuries now solely as a risk hedge rather than an income source - see [Cash is not king](#).

The plunge in cash interest rates and bond yields represents the key asset allocation dilemma of the future, with US real yields now negative too. Credit instruments can eke out positive real returns, but generally proportional to their default risk. Credit's potential to substitute for sovereign credit in asset allocation looks increasingly suspect - see [Towards a new asset allocation](#).

What you need to do in the new cycle

Today's new cycle in the economy and markets is already markedly different from many past cycles. The recent rapid advance in equity markets is unprecedented, coming so soon after the most devastating economic event in the past century. As the world transitions from fear to prosperity, we now advise you to follow a post-pandemic asset allocation. Rates are low and are going to stay low. That requires considering how to manage your cash more wisely, and how to create less reliance on fixed income for diversification. We also believe that the choice of equity exposures and the sequencing of how and when to invest will be essential. Further, with so much dispersion occurring in the aftermath of COVID-19, we must position portfolios to take advantage of this dispersion and the mean reversion that is likely to occur. As this new recovery cycle continues to advance over the coming years, we expect to adopt a greater risk-taking posture reflecting the expected and unexpected opportunities that will most certainly arise.

FIG 9. US TREASURIES' YIELD PREMIUM



Source: Bloomberg, as of 5 May 2020. Past performance is not indicative of future returns. Real results may vary.

- ¹ China Association of Automobile Manufacturers, as of 1 May 2020
- ² Bureau of Economic Analysis and Eurostat, as of 1 May 2020
- ³ All forecasts are expressions of opinion and are subject to change without notice and are not intended to be a guarantee of future events.
- ⁴ Diversification does not ensure against loss.
- ⁵ Past performance is not indicative of future returns.

Opportunities

- 

LONG-TERM GROWTH OPPORTUNITIES LINKED TO OUR UNSTOPPABLE TRENDS OF DIGITAL DISRUPTION, THE RISE OF ASIA, AND INCREASING HUMAN LONGEVITY
- 

COVID-CYCLICALS: SECTORS WHOSE BUSINESSES WERE STRUCK HARDEST DURING THE PANDEMIC
- 

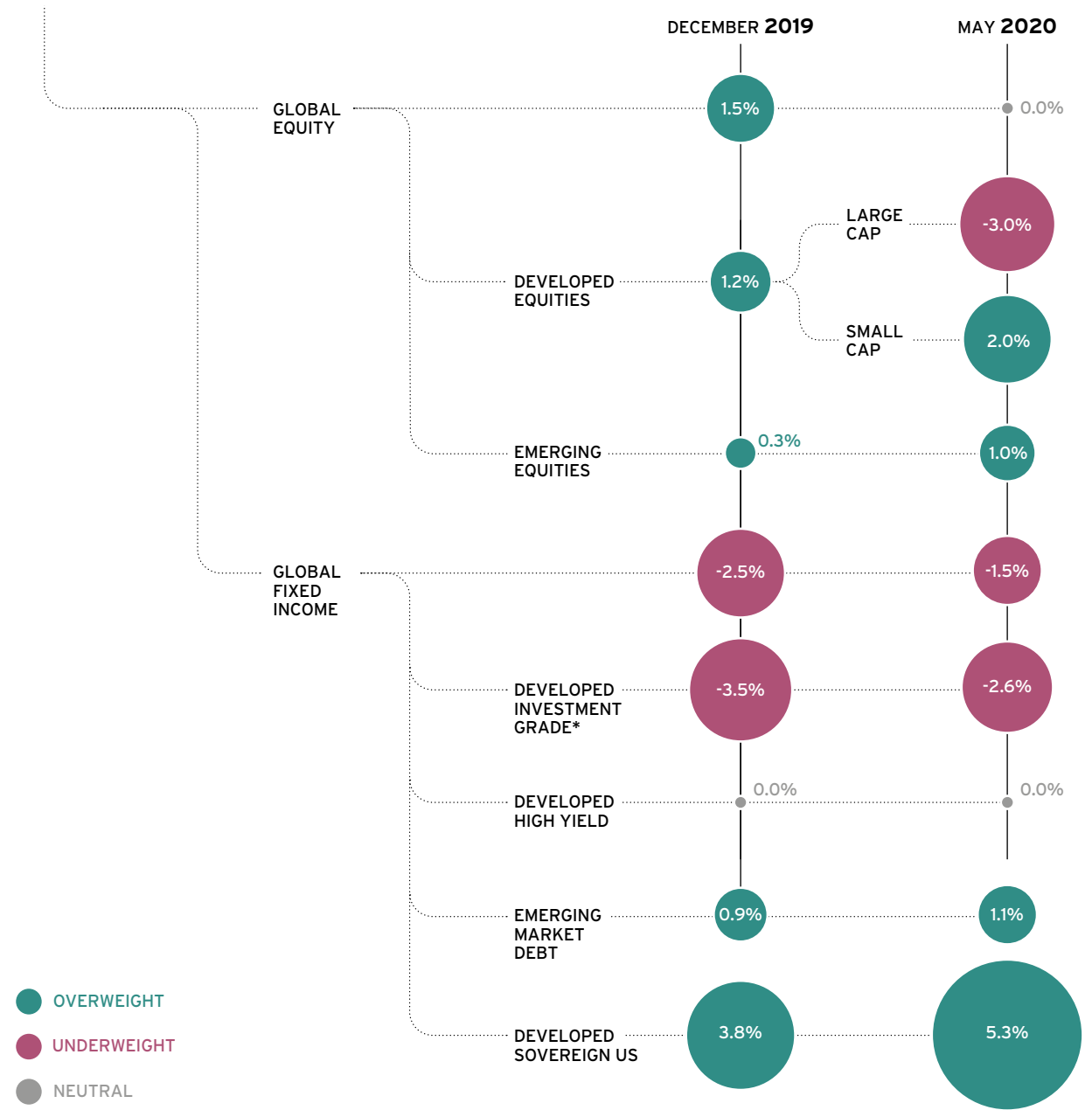
CAPITAL MARKETS STRATEGIES THAT SEEK INCOME FROM VOLATILITY AS WELL AS THE POTENTIAL TO BUY EQUITIES AT LOWER LEVELS
- 

PRIVATE EQUITY AND REAL ESTATE MANAGERS THAT TARGET STRESSED AND DISTRESSED ASSETS
- 

HEDGE FUNDS THAT SEEK TO TAKE ADVANTAGE OF LIQUIDITY STRAINS AND FORCED SELLING
- 

DIVIDEND GROWERS WITH RESILIENT BUSINESS MODELS FROM CERTAIN INDUSTRIES

Our positioning



Citi Private Bank, as of 20 May 2020

*Factors in non-US Developed Market Investment Grade underweight

2.1.1 Our favored markets

As we enter the new cycle, we are overweight emerging market (EM) equities, developed small- and mid-cap equities, as well as US sovereign fixed income and EM debt.

EUROPE

EQUITIES EPS GROWTH FORECAST ¹

EUROPE	■	26.9%
UNITED KINGDOM	■	26.6%
SWITZERLAND	■	14.4%

SECTORS EPS GROWTH FORECAST ¹

CONSUMER STAPLES	■	9.6%
HEALTHCARE	■	11.5%
INFORMATION TECHNOLOGY	■	27.6%
COMMUNICATION SERVICES	■	13.8%

FIXED INCOME YIELD ⁵

EURO INVESTMENT GRADE CORPORATES		1.1%
EURO CAPITAL SECURITIES (ADDITIONAL TIER 1)	■	5.7%
HIGH QUALITY EURO HY BONDS (BB-RATED)	■	3.7%

NORTH AMERICA

EQUITIES EPS GROWTH FORECAST ²

USA	■	24.5%
CANADA	■	28.0%
US SMID	■	46.1%

SECTORS EPS GROWTH FORECAST ²

HEALTHCARE	■	15.3%
FINANCIALS	■	34.1%
INDUSTRIALS	■	37.8%

FIXED INCOME YIELD ⁵

US INVESTMENT GRADE CORPORATES		2.5%
US MUNICIPAL BONDS (TEY)		2.7%
US PREFERRED SECURITIES (FIXED-TO-FLOAT)	■	5.8%
HIGH QUALITY US HY BONDS (BB-RATED)	■	5.1%

ASIA-PACIFIC

EQUITIES EPS GROWTH FORECAST ³

MSCI ASIA EX JP	■	21.0%
CHINA	■	17.9%
INDONESIA	■	13.3%
SINGAPORE	■	12.0%

SECTORS EPS GROWTH FORECAST ³

CONSUMER DISCRETIONARY	■	43.7%
INFORMATION TECHNOLOGY	■	31.6%
FINANCIALS	■	9.9%
COMMUNICATION SERVICES	■	19.9%

FIXED INCOME YIELD ⁵

USD ASIA INVESTMENT GRADE CORPORATES		3.0%
HIGH QUALITY ASIA HY BONDS (BB-RATED)	■	7.3%
LOCAL CURRENCY SOVEREIGNS		2.5%

LATIN AMERICA

EQUITIES EPS GROWTH FORECAST ⁴

MSCI EM LATIN AMERICA	■	44.1%
ARGENTINA	■	64.3%
BRAZIL	■	43.7%
MEXICO	■	54.9%
CHILE	■	50.0%
COLOMBIA	■	24.0%
PERU	■	21.6%

SECTORS EPS GROWTH FORECAST ⁴

ENERGY	■	106.9%
MATERIALS		3.9%
CONSUMER DISCRETIONARY	■	22.3%
FINANCIALS	■	13.0%
INDUSTRIALS	■	11.0%

FIXED INCOME YIELD ⁵

MEXICO BONOS (LOCAL)	■	5.9%
USD SOVEREIGNS AND CORPORATES (EX. ARGY, VENE AND ECUADOR)	■	4.8%

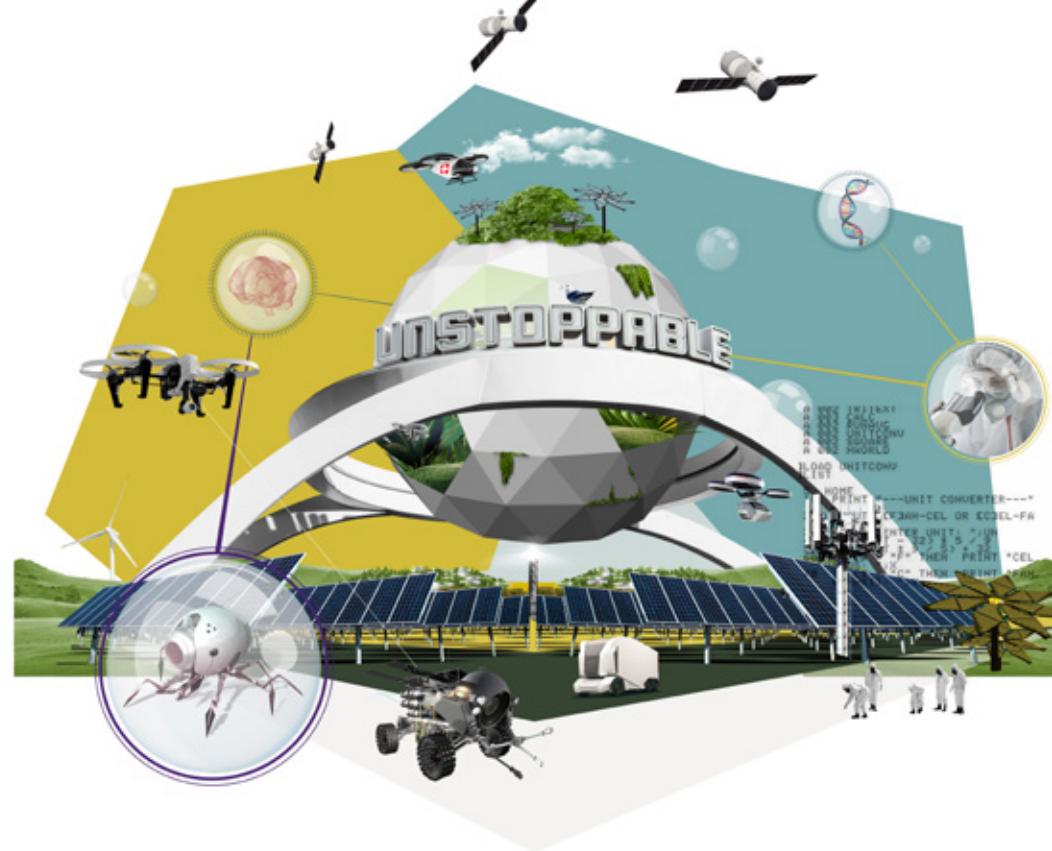
1 – MSCI, FactSet as of 7 May 2020; 2 – Factset as of 20 May 2020; 3 – FactSet as of 10 May 2020; 4 – Bloomberg as of 10 May 2020; 5 – Bloomberg and Bloomberg Barclays Indices as of 6 May 2020. Past performance is no guarantee of future returns. Real results may vary. Indices are unmanaged. An investor cannot invest directly in an index. All forecasts are expressions of opinion and are subject to change without notice and are not intended to be a guarantee of future events.

2.2

Truly Unstoppable trends perform well even during a pandemic: Reviewing our investment themes

STEVEN WIETING, CHIEF INVESTMENT STRATEGIST AND CHIEF ECONOMIST

Our key investment themes and recommendations have performed well amid COVID-19. We continue to emphasize their long-term importance to portfolios.



KEY MESSAGES

- Many of the industries that we were already recommending as part of our Unstoppable trends theme were some of the least negatively impacted by economic shutdowns and social distancing
- We believe that the experience of COVID-19 - and the post-pandemic outlook - is likely to add further momentum to these Unstoppable trends
- Our advice in Outlook 2020 to avoid very low- or negative-yielding bonds and to seek income instead from various other investments is even more relevant today

Unstoppable trends are COVID-immune

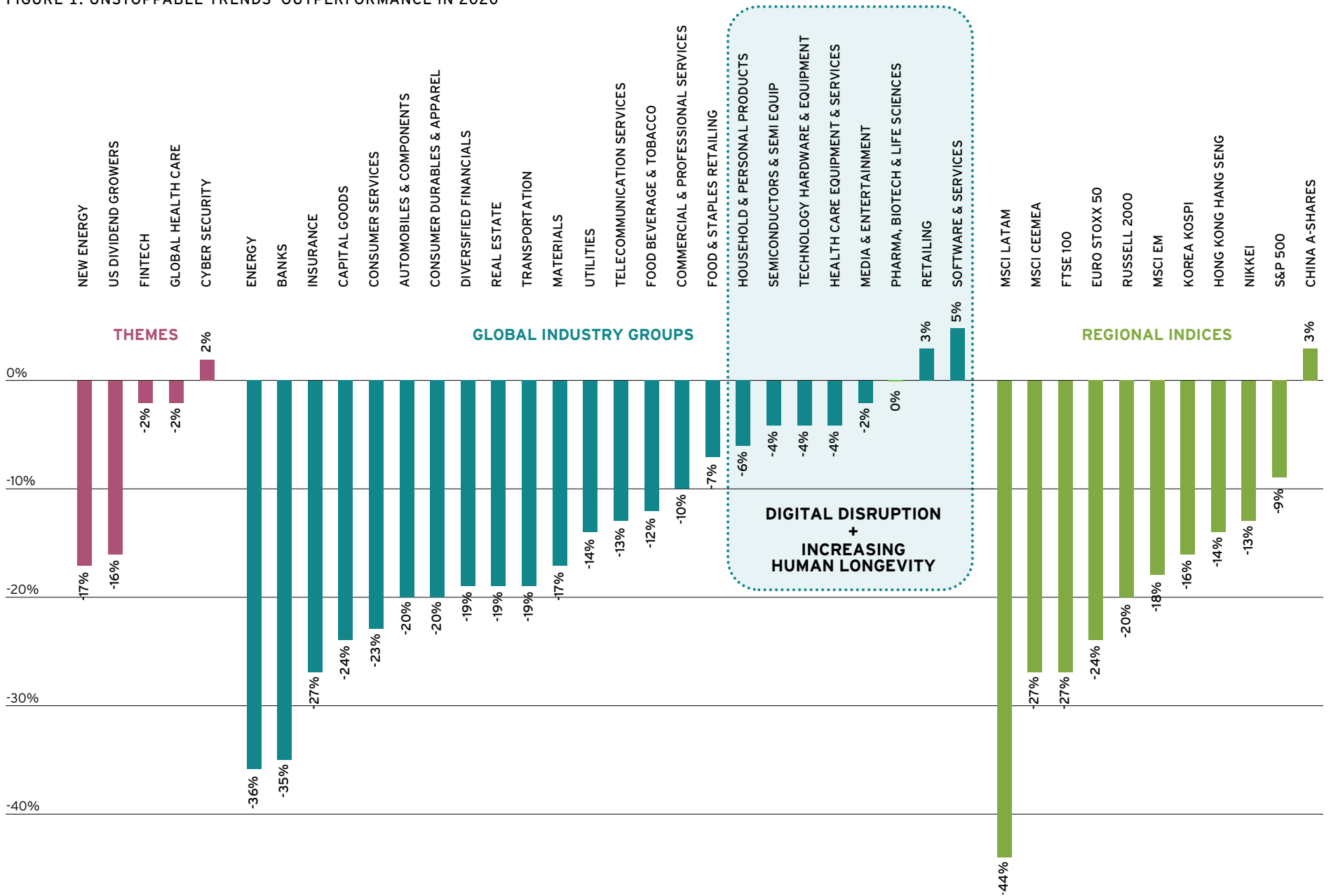
As the global prevalence of COVID-19 started to become clear in February, Citi Private Bank reduced its allocation to equities, adding instead to US Treasuries and gold - see [Investing in a new economic cycle](#). We also advised directing new investment dollars towards industries that were likely to be least impacted by the peculiar phenomena of economic shutdowns and social distancing. Unsurprisingly, this included many industries that we were already recommending as part of our Unstoppable Trends theme.

We define unstoppable trends as powerful long-term forces that are revolutionizing the ways we live and do business globally. These trends can endure throughout an economic cycle - and in the case of a pandemic, see an acceleration of

their drivers, offering resilient growth potential to portfolios. Our trend of [Digital disruption](#) considers how digital innovation is revolutionizing companies and industries. [The rise of Asia](#) addresses the steady shift in global economic power from West to East. [Increasing human longevity](#) explores how the aging of the world's population will impact demand patterns, especially for healthcare. All of these trends are likely to last for two decades or more.

Some sectors and companies related to these trends have been among the strongest performers of 2020 so far - **figure 1**. Digital disruptors in software, e-commerce, and digital media have not only managed to outperform a falling market, but also register absolute gains. China - a key element within both [The rise of Asia](#) and [Digital disruption](#) - has also outperformed. Its large domestic tech

FIGURE 1. UNSTOPPABLE TRENDS' OUTPERFORMANCE IN 2020



Source: Haver, as of 20 May 2020.

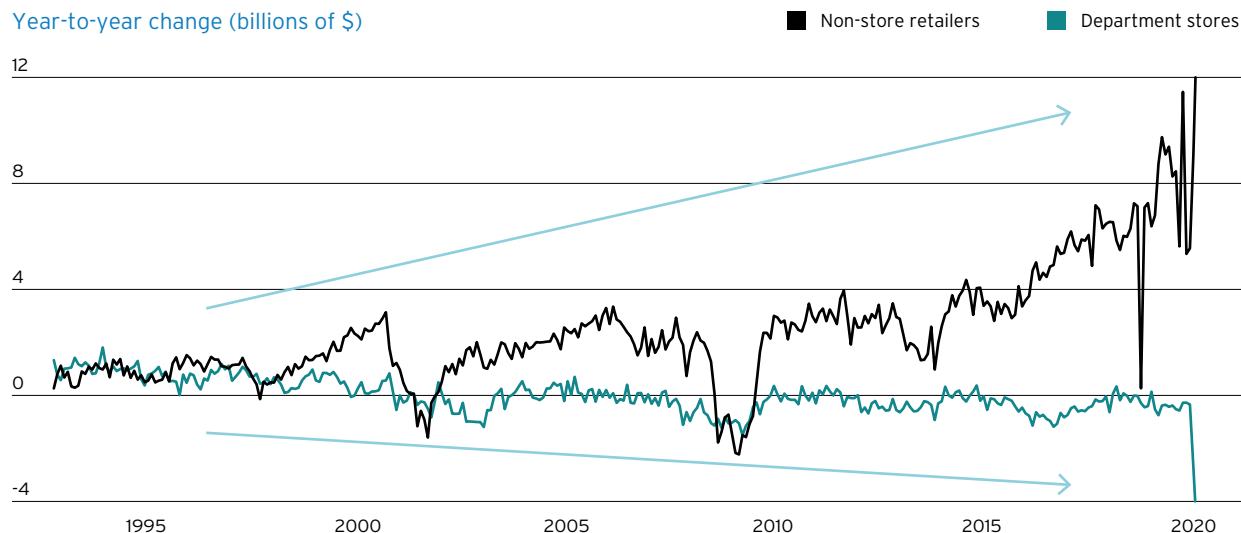
Indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only. Past performance is no guarantee of future returns. Real results may vary.

sector and its early recovery from the pandemic helped drive good year-to-date results. Along with IT industries, healthcare - our **Increasing human longevity** theme - has outperformed as one might expect amid a pandemic. Traditional energy - the secularly challenged sector whose vulnerability to sustainable alternatives we highlighted in [The future of energy](#) - has been the worst performer year-to-date. The collapse in demand for transportation fuel has deepened the fossil fuel industry's slump that we described as "gradually unfolding" in [Outlook 2020](#) published at the end of last year - **figure 3**.

We believe that the experience of COVID-19 - and the post-pandemic outlook - is likely to add further momentum to these Unstoppable trends. Here are some examples. E-commerce has become even more dominant at the expense of traditional retailers, such as department stores - **figure 2**. As fifth generation (5G) wireless networks continue to roll out over the next few years, we expect the uptake of digital content and other services to increase still further.

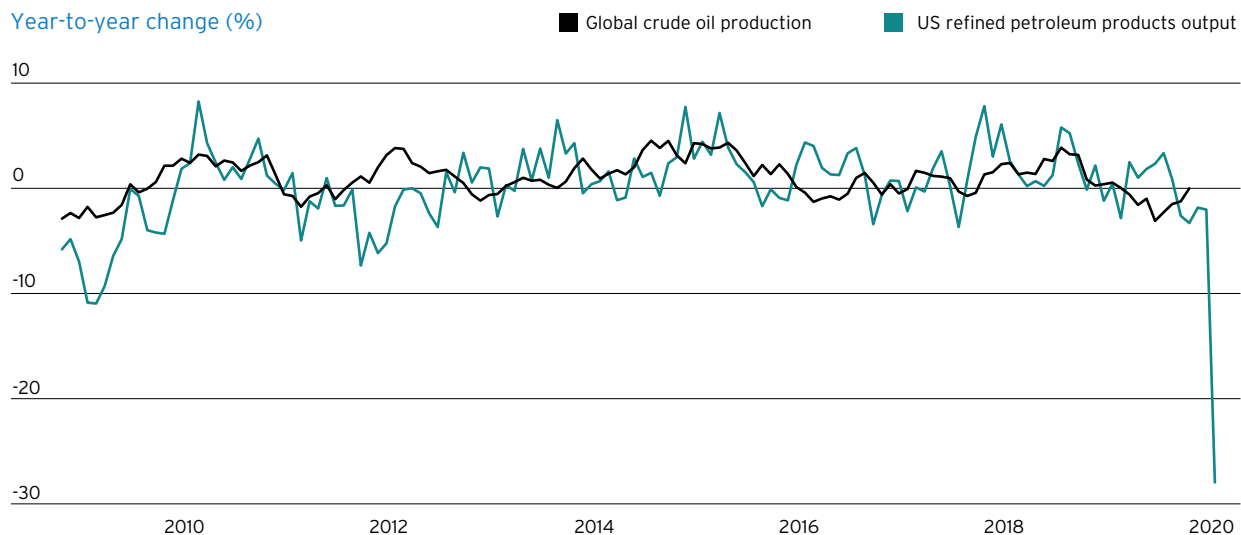
We remain confident in the long-term growth prospects of our Unstoppable trends. Despite their recent strong performance, we would not divest investments related to these themes. Since last March, however, we have gradually broadened our preferences to include recovery prospects, rather than just assets that would better withstand the COVID-19 turmoil. Exposure both to Unstoppable trends and industries, sectors, and countries most likely to recover more quickly than expected is a powerful portfolio combination, in our view. (Note: To make room for "recovery" investments, we will underweight some of the regional investments likely to be most challenged or limited in their recoveries.)

FIGURE 2. E-COMMERCE'S GROWING DOMINANCE



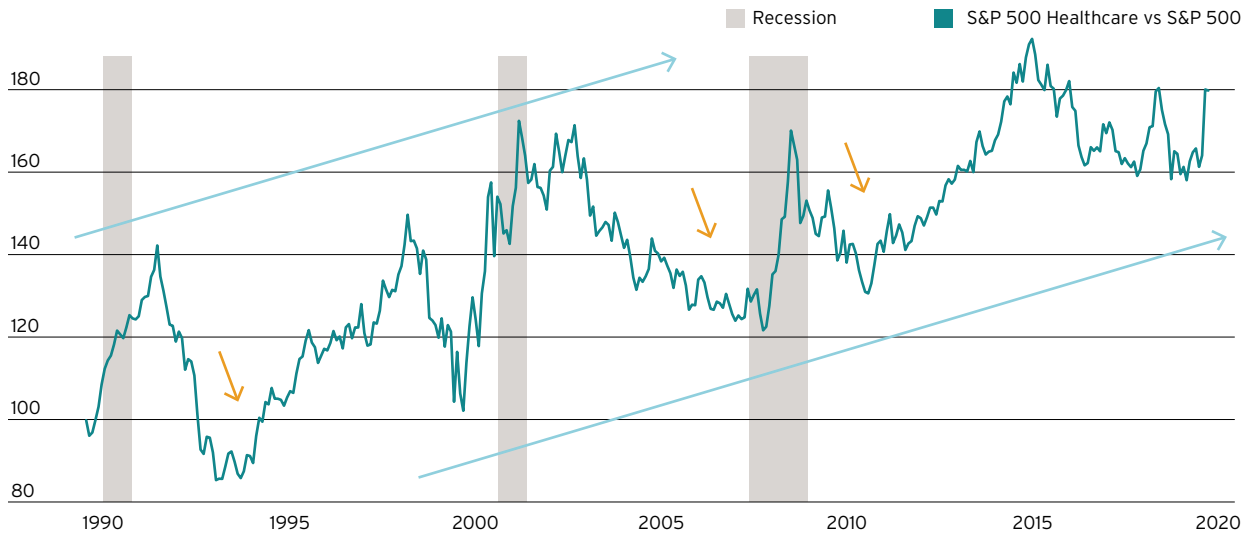
Source: Haver, as of May 2020.

FIGURE 3. CRUDE DEMAND COLLAPSES



Source: Haver, as of May 2020

FIGURE 4. HEALTHCARE: LONG-TERM OUTPERFORMER, BUT UNDERPERFORMS EARLY CYCLE



Source: Haver, as of 20 May 2020. Index rebased to 100 as of 1 Jan 1990. Indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only.

Healthcare - a favored sector of ours - has a consistent record of revenues and earnings growth throughout cycles. However, it has tended to underperform in the early years of new economic cycles - **figure 4**. As our tactical investment allocations evolve, we will make sure not completely to exclude investments that have suffered the "COVID collapse" - see [Investing in a new economic cycle](#).

Identifying yield alternatives

In Outlook 2020, we suggested avoiding very low or negative yielding bonds and seeking income instead from various other investments. This advice is even more relevant today. We therefore reiterate our recommendations to allocate to the highest quality dividend growers - see [Seek sustainable dividends](#) - as well as to select fixed income assets that still offer yield - see [Cash is not king](#). We also continue to advocate income-producing capital markets strategies for qualified investors - see [What smart families are doing in capital markets](#).

Joe Fiorica also contributed to this article.



2.3 Cash is not king

DAVID BAILIN,
CHIEF INVESTMENT OFFICER

KRIS XIPPOLITOS,
GLOBAL HEAD OF FIXED INCOME STRATEGY

Holding excess cash is a costly strategy in today's ultra-low interest rate world. Instead, we see various opportunities to put cash to work and seek yield, while also diversifying portfolio risks.

KEY MESSAGES

- In past times of market turmoil, it was often said that “cash is king”
- Cash served not only to dampen portfolio volatility, but also often acted as a steady source of modestly positive returns
- Cash currently offers no yield, little diversification value, and is likely to be the largest drag on portfolio returns
- In this environment, we want to focus you upon opportunities for generating better returns from bonds

In past times of market turmoil, people often said that “cash is king.” Cash served not only to dampen portfolio volatility, but also often acted as a steady source of modestly positive returns. Let us be honest, it also always “felt good” to see something constant when markets tumbled. Today, this is no longer the case. In response to the COVID-19 pandemic’s financial fallout, the US Federal Reserve lowered its policy rate to 0.0-0.25%. As a result, cash currently offers no yield, little value in the way of diversification, and is likely to be the largest drag on portfolio returns.

Our strategic asset allocation methodology now estimates an annualized return before inflation of just 0.6% over the coming decade - see [Major changes to our Strategic Return Estimates](#). In this environment, we want to focus you upon opportunities for generating better returns from bonds, while holding modest cash balances sufficient to cover real expenditures for a reasonable period. Here are several fixed income options:

Investment-grade corporates

For a brief period in April, US IG corporate bond yield curves were near their flattest since 2009. However, the bounce-back in global risk assets has driven curves sharply steeper, with short-term yields falling. This presents an opportunity to extend duration modestly beyond cash and cash alternatives. For example, yields on US IG corporates maturing in three to five years is near 2.0% or 50 basis points (bp) more than similar bonds maturing between one and three years. Although adding a small amount of interest rate risk to portfolios, this is the largest yield pick-up on this part of the IG curve in over two years.

US municipals

For US investors, tax-exempt municipal bonds may provide compelling opportunities. While yields on high quality munis have fallen sharply, lingering market uncertainties have left some lower-rated IG issuers behind. Looking at index levels, moving from AA-rated to A-rated quality municipals can fetch an additional 100bp in yield. Moving down to BBB-rated garners you another 150bp. This is the largest yield-pick up between these ratings buckets since 2013.

Moving down in credit rating requires a more selective approach. Finding value in lower quality bonds should be approached on a case-by-case basis. Depending on an individual’s tax status, particular short-term bonds whose issuer is considered “high quality” by Moody’s can offer tax-free yields above 4.0%. This implies a taxable equivalent yield near 7.0%, or higher depending on state tax exemptions. Of course, not all bonds with these types of yields should be considered equal.

High yield and emerging markets

For those who cannot take advantage of the tax benefits in US munis, taxable high yield and emerging markets bonds can also introduce some opportunities. We would prefer to keep an “up in quality” bias, with a focus on BB-rated issuers. In the case of US HY bonds, yields of 5.4% are 250bp higher than BBB-rated IG. This “cross-over” yield pick-up of 150bp is 100bp greater its 10-year average. It goes without saying that these securities come with greater credit risk. However, SREs of 5.9% and 6.2% are much higher than any other fixed income asset class. While allocations in balanced portfolios may be limited to avoid duplicating equity risk, we would consider overweight positions for fixed income only investors.

Preferred securities

Although longer in duration, preferred stocks or capital securities can produce some compelling yields, without incurring a significant amount of credit risk.* Although junior in capital structure, these securities are primarily issued by well-capitalized financial institutions in the US and Europe. Some of the larger US banks have particular securities whose yields can exceed 5%. True, these assets can be more volatile during periods of equity pullbacks. However, during the previous zero-rate era between 2010 and 2015, preferreds’ average annual return was 9%. At the same time, the average annual return for cash was 5bp.

Structured credit

Finally, high quality, short-term asset-backed securities (ABS) or structured credit can also offer some cash alternatives, but without much underlying default risk. Supported by the Federal Reserve Term Asset-Backed Loan Facility (TALF), 3-year AAA-rated credit card or auto loan ABS offer yields at LIBOR +70-100bp. Based on current LIBOR rates, this would equate to an all-in yield of 1.0-1.3%.

Despite today’s ultra-low interest rate environment, therefore, plenty of opportunities still exist seeking for yield. While they involve taking some risk, we believe their overall portfolio contribution more than justifies this. Putting cash to work is now king.

*Preferred securities can be called prior to maturity, which may reduce yield if purchased at a premium. Preferred securities may be subject to other call features or corporate restrictions that may have an effect similar to a call. Prices may fluctuate, reflecting market interest rates and the issuer’s credit status.



2.4 Seek sustainable dividends

JOE FIORICA, GLOBAL HEAD OF EQUITY STRATEGY, CITI PRIVATE BANK

WIETSE NIJENHUIS, EQUITY CLIENT PORTFOLIO MANAGER, CITI INVESTMENT MANAGEMENT

While economic shutdowns represent a widespread threat to dividends, the value of dividends and the companies that can sustain them has risen. We favor companies from certain industries that combine solid track records of dividend growth and resilient business models.

KEY MESSAGES

- Economic shutdowns are calling into question the sustainability of dividends, as well as share buybacks
- We are seeking out companies whose balance sheets and cash flow previously gave them the scope to do share buybacks in normal times
- Certain parts of the tech sector stand out here, as well as healthcare
- Among those likeliest to cut dividends and buybacks are the energy and travel & leisure sectors

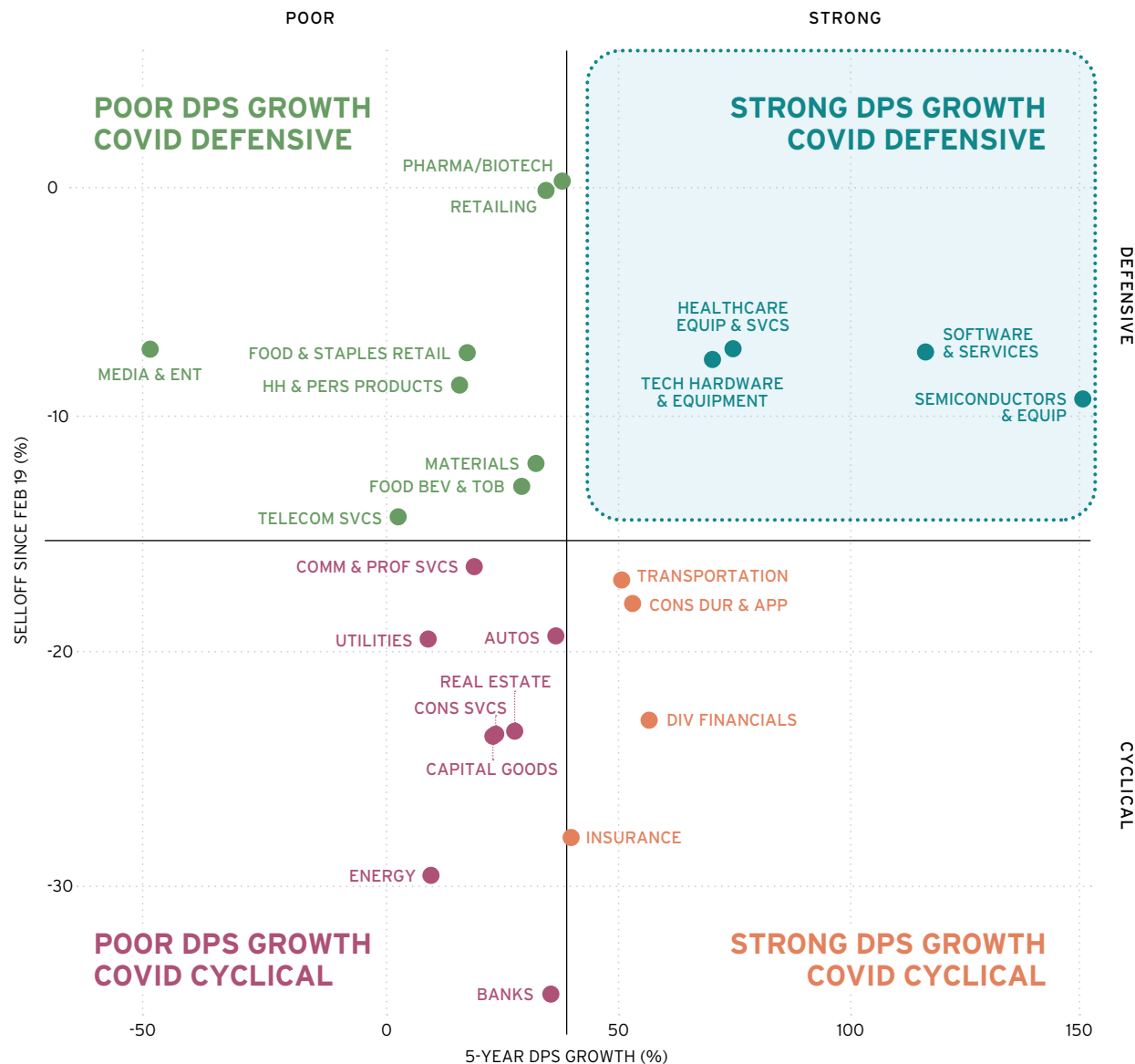
Unprecedented economic shutdowns are calling into question the sustainability of dividends, as well as share buybacks. Companies in certain industries could be forced to preserve their cash, at least until there is more clarity around the length and depth of the economic downturn. This even includes some enterprises that grew dividends throughout the Global Financial Crisis of 2008-09.

In these unprecedented times, we are seeking out companies whose balance sheets and cash flow previously gave them the scope to do share buybacks in normal times. We think these companies are more likely to be able to maintain their dividends. Certain parts of the tech sector stand out here, as many technology businesses have been less impacted by the economic effects of social distancing. In the case of the healthcare sector, ample free cash flow has tended to finance buybacks and mergers & acquisitions activity. Both could be scaled back to maintain dividend payouts.

Meanwhile, as the worst-hit industries focus on survival, they are likely to cut buybacks, dividends, and expenses deeply. The energy and travel & leisure sectors stand out, especially those constituents that have been borrowing to meet dividends. As the second largest buyback sector after tech, the banking industry's ability to maintain dividend payments looks solid at first glance. Banks' balance sheets are much stronger today than they were going into the 2008-09 crisis. However, banks are inextricably linked to the economy's health and to government policies that might constrain their financial flexibility. Therefore, if corporate and consumer delinquencies grow despite government support, banks could see material balance sheet impacts, including major reserves for credit losses. We expect this worst-case scenario to be avoided, but close monitoring of threats to banks' payouts is vital.

Regionally, we see Europe at greater risk of dividend cuts than the US. Current dividend yields

FIGURE 1. DIVIDEND GROWER SECTORS WITH COVID-RESILIENT BUSINESSES HAVE OUTPERFORMED



Source: Factset, through 19 May 2020. Past performance is no guarantee of future returns. DPS is dividends per share. We define COVID defensives and COVID cyclicals as sectors whose business models have proved more resilient and more vulnerable respectively during the pandemic. See Glossary for definitions.

are higher and share repurchase buffers are lower, especially in the financial and energy sectors, the former being the region's largest sector. After a decade of weak profitability, Europe's banking system is much less healthy than its US counterpart. Indeed, its banks have already announced widespread dividend suspensions. Political pressure to focus on supporting employment over dividends is greater in Europe.

Seek growing, sustainable dividend yields

Over time, reaching for high current yield can be risky. Such strategies often include investments in companies in danger of cutting dividend payments. These companies offer temptingly high yields, but have balance sheets that cannot sustain them. We prefer "dividend growers," companies that have consistently grown their dividend payments over time, demonstrating fiscal discipline to do so - see [Realigning income portfolios: Go for growers](#) in Outlook 2020. Many did so even during the 2008-09 financial crisis. These firms' dividend payments represent a sustainable proportion of profits, without a need to maximize payouts or assume unsustainable debt to pay them.

The combination of a track record of growing dividends, a resilient business model, and being in the "right" industry is likely to prove the best guide for identifying those likeliest to sustain dividends through this crisis. We note that since February's market peak, dividend growers in more insulated industries have outperformed the market - **figure 1**. Given the unique nature of the current environment, active managers may be better poised to identify such firms than purely passive strategies based solely upon historical dividend growth.





2.5 The best results for alternative investments often follow economic crises

DAN O'DONNELL, GLOBAL HEAD OF CITI INVESTMENT MANAGEMENT ALTERNATIVES

As economic and financial stress mounts, opportunities for high quality private equity, real estate, and hedge fund managers typically multiply. The best managers possess the discipline, deep knowledge, and ready cash to exploit them.

KEY MESSAGES

- Over time, private equity, real estate, and hedge fund managers have achieved some of their strongest performances after crises
- The pandemic is likely to produce significant economic and financial stress for businesses and asset owners across many industries and asset classes
- It is our view that the best distressed opportunities will become available later this year and during 2021
- For qualified investors, a diversified core allocation of alternatives can act as a stabilizer in times of turmoil and an alpha generator when we look back on this period

We know how investors feel. It is hard to commit to invest for five, seven or even ten years in the midst of intense economic difficulties. Looking at history, however, private equity, real estate, and hedge fund managers have achieved some of their strongest performances after crisis periods. Limited partners who invested boldly subsequently benefited from their skillful managers' taking advantage of market dislocations. In 2001 and 2008, for example, average private equity vintage returns increased by 800 and 710 basis points respectively over the prior year's level.¹

The pandemic is likely to produce significant economic and financial stress for businesses and asset owners across many industries and asset classes. In sectors like leisure, private health care, education and retail, there will be numerous restructurings, recapitalizations, and bankruptcies, many more than in the 2008-09 period. We expect more favorable valuations due to purchase multiple contraction in private equity (PE) and capitalization rate expansion in real estate (RE). When these lower valuation metrics are applied to lower short-term earnings expectations, entry prices for new money can become quite compelling. Amid this distress, certain fund managers should also be able to borrow cheaply.

Where patient money will be rewarded

While we are on the cusp of a unique and significant opportunity, we would emphasize that private market valuations typically lag those of public markets. The most attractive investment opportunities in private markets will likely present themselves over time, rather than all at once. It is our view that the best distressed opportunities will become available later this year and during 2021. In other words, we expect them to occur after the initial macro-level credit support from central banks is scaled back and the economy is actually in recovery.

Even as we see the number of "stressed company" opportunities begin to rise, we have not yet seen the spike in default rates and ratings downgrades that are likely to prompt further forced asset selling. In past cycles, there has been a multi-year period that allowed for managers to take advantage of stressed and distressed situations. We think this pattern will be repeated in this COVID-led recession. Many smaller and less well-capitalized PE firms will have problem companies in their portfolios. Companies with stressed balance sheets will need to unload assets to deleverage. And some companies will want to do strategic acquisitions that require external capital. All of these are opportunities for specialized and well capitalized managers that have the patience and requisite teams to capitalize on them.

Good companies needing capital will have to pay more for it

In private equity, specialists targeting growth and pre-IPO equity may benefit disproportionately. Some of the better growth companies will accept lower valuations as they bolster their balance sheets to enable their businesses' further expansion in a recessionary landscape. Opportunistic and turnaround specialists will face an opportunity-rich landscape, where money and managerial talent will be rewarded. This is especially true of opportunities overseas. In hedge funds, the largest gains following dislocations have often accrued to liquid distressed debt and structured credit strategies. In real estate, we favor managers with established track records over previous cycles of identifying fundamentally sound assets that have been repriced, overleveraged, and/or undercapitalized. We also believe that the repurposing of retail assets will be a major opportunity in the 2020-25 period.

Alternative investing in Unstoppable trends

Within our Unstoppable trends universe, the COVID-19 economic shutdown has highlighted certain special opportunities in healthcare and digital infrastructure. These areas have shown resilience, but also require additional capital investment over the coming years. Many well positioned companies will want to make strategic acquisitions and the cost of capital will benefit limited partners in a recessionary environment. Conversely, the hospitality sector and certain urban real estate have been hit hard by COVID-19 and will likely require fundamental restructuring, given pandemic-driven changes in consumer behavior and working patterns.

¹ Source: Cambridge Associates

Certain hedge funds will see unusually good opportunities

In hedge funds, managers with the requisite fundamental and trading skills - or restructuring expertise in the case of corporate credit - should be well positioned for opportunities arising from liquidity strains and forced selling. In structured credit, the market has already witnessed heavy bouts of selling, ranging from daily liquidity funds to highly leveraged mortgage REITs. In the corporate credit markets, spreads on investment grade and better quality high yield debt have narrowed following the Fed's intervention. However, the debt of middle market borrowers, overleveraged companies, and those in more vulnerable industries remains at distressed levels. As the Fed steps back in 2021 and beyond, we think additional opportunities are likely.

In these most unusual and trying times, investors should consider the benefits of longer duration investing. Potential returns over the coming decade - see [Major changes to our Strategic Return Estimates](#) - offer some of the reasons why. Our Alternatives research teams' role is to identify the managers with the skills to capture the opportunities and execute upon them. Qualified investors' role is to establish a core allocation in private equity, real estate, and hedge funds including late-stage venture capital (VC). This diversified set of investments can serve as a stabilizer in times of turmoil and an alpha generator when we look back on this period.

Stefan Backhus, Megan Malone, and Michael Yannell also contributed to this article.





2.6 What smart families are doing in capital markets

IAIN ARMITAGE,
GLOBAL HEAD OF CAPITAL MARKETS

With market volatility likely to persist, families are using strategies that seek to generate income from such conditions as well as the potential to buy equities at lower levels.

KEY MESSAGES

- While heightened market volatility is psychologically testing, we also believe it represents a time of opportunity
- For qualified investors, we have long recommended strategies that seek income from equity market volatility and simultaneously offer potential exposure to equities at lower levels
- With volatility still elevated, such strategies have the potential to pay investors at the moment

Warren Buffett famously said that a wise investor should be “fearful when others are greedy, and greedy when others are fearful.” We see a lot of families doing just that.

Heightened volatility is one of the most reliable indicators of fear in equity markets. Spikes in equity volatility typically trigger investors’ instincts to “fight or flee.” The VIX Index - which measures implied market volatility by way of S&P 500 options pricing - hit an all-time high of 82.69 in March, driven by the extreme uncertainty over the COVID-19 pandemic. While such turbulence is psychologically testing, we also believe it represents a time of opportunity.

Getting paid to wait

Citi Private Bank has long recommended strategies for qualified investors that seek income from equity market volatility and simultaneously offer potential exposure to equities at lower levels. While we do not advocate market timing by waiting for lower equity prices, we do believe investors can “get paid to wait” through structures that give investors a return based on prevailing volatility or a lower entry point in the event markets do fall. And with volatility still elevated, such strategies have the potential to pay investors at the moment.

For many, the daily consumption of COVID-related news stories fires our amygdala, heightens our fight or flight response and obscures the longer-term play. Many investors would like to invest in equities at today’s attractive levels. On the other hand, they believe another leg down in the markets might create an even better entry point. Torn between “FOMO” - fear of missing out - on potential upside in the near term and the fear of missing out on a better buying opportunity later on - they end up doing nothing - see [The wisdom of lump-sum investing: Why you should get fully invested.](#)

For some, this has been the impetus to act to capture yields and better position their portfolios.

Consider what we have actually seen in the first four months of this year. For illustration purposes, say an investment in the S&P was made every day between 2 January and 30 April 2020 - **figure 1**. That’s 197 separate purchases. Eighty-three of those (42%) would never have seen the market fall by 20%. By contrast, the other 114 investments (58%) would have experienced a market that fell by 20% or more. But now, as we look back, not a single one of the 197 investments was underwater by more than 20% by the end of April.

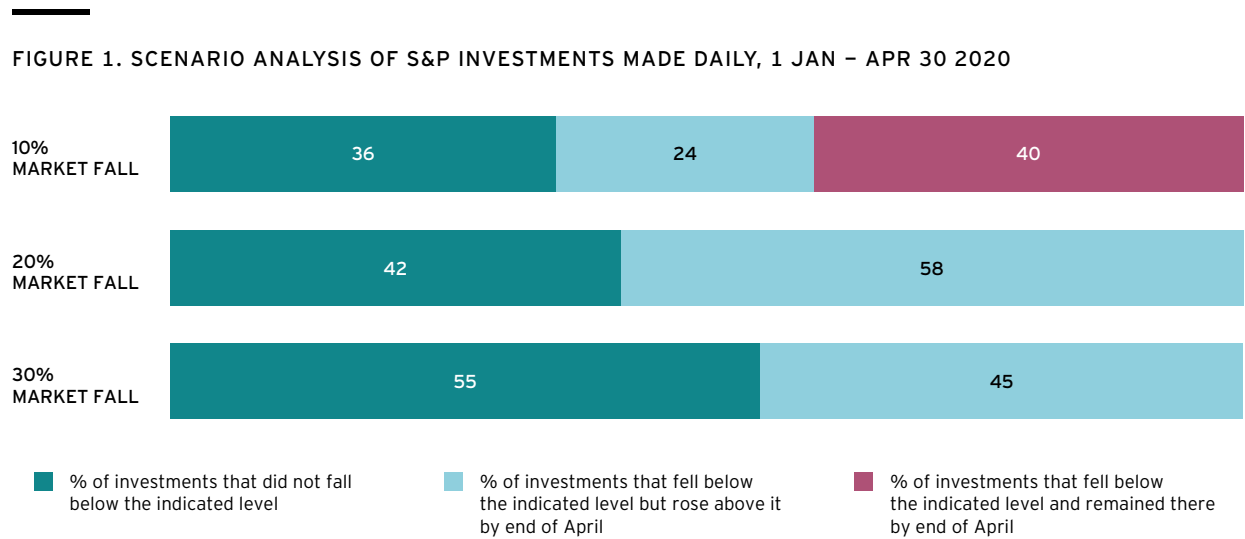
This means that if you can accept that your investment might experience volatility and are also on holding for the longer term, there is an opportunity to extract value from the market. We therefore recommend considering strategies that

can turn volatility into income or provide you a better entry point. Both are good outcomes.

As of mid-May, equity volatility has pulled back from March’s record highs. That said, the VIX Index¹ is still 60% above its 2019 average level. Volatility-based strategies are thus attractively priced for suitable investors. For the rest of 2020, our view is that volatility will remain elevated and subject to sharp moves in reaction to pandemic developments.

For suitable investors of this type, an approach that pays some return today, plus the potential to buy equities over the next year at lower levels may provide diversification and profit potential.

¹ The VIX Index is a real-time market index representing investors’ expectation of 30-day forward-looking volatility. Based on S&P 500 Index options, it is often known as the “fear gauge.”



Source: Bloomberg, as of 18 May 2020. 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. Past performance is no guarantee of future results. Real results may vary.

2.7 The power of Investing with Purpose

HARLIN SINGH, HEAD OF SUSTAINABLE INVESTING

We expect to see continued, compelling performance from top-performing ESG companies not only as the pandemic plays out but for generations to come.

KEY MESSAGES

- Rather than returning to our prior normality after COVID-19, we believe many investors wish to "build back better"
- The goal of building back better includes stepping up efforts to combat climate change, use natural resources more widely, and expand vulnerable communities' access to employment, education, and healthcare
- We believe such investors can, indeed, effect positive change with private capital
- We note strong performance from many ESG-focused managers in the first quarter of 2020, which we believe could continue longer term

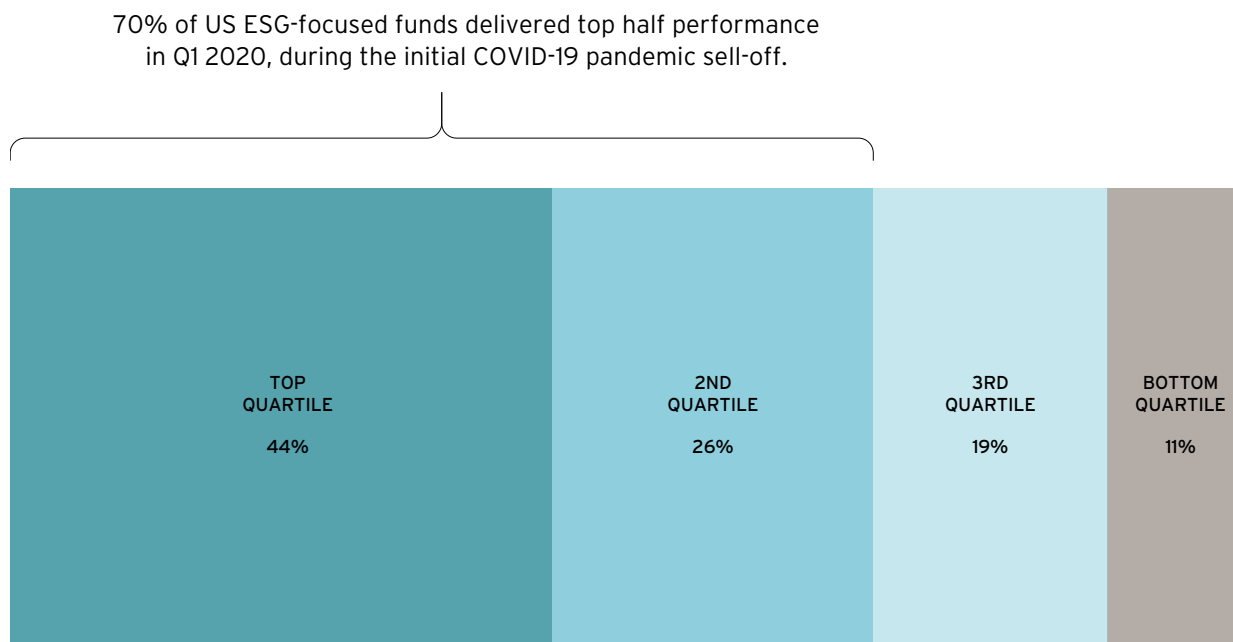


The harsh realities and increasing realization of the interconnected factors underpinning COVID-19's impact have, in our experience, driven investors to aspire not to return to their former "normal" but, rather, to "build back better." For investors who choose to build back, this takes many forms. Some want to double down on their efforts to combat climate change, develop clean energy, or drive adoption of wiser natural resources use. Some have a fierce resolve to expand vulnerable communities' access to education, employment, and basic needs such as clean water, food and healthcare. Many seek all of the above.

At Citi Private Bank, we believe such investors can, indeed, effect positive change with private capital. We established Investing with Purpose (IwP), our open-architecture platform of sustainable investments with a dual mandate of achieving competitive financial returns and driving positive societal change with vehicles that integrate Environmental, Social and Governance (ESG) criteria. Our reasons for this are many. In our experience, high ESG standards are a mark of a higher-quality investment, with lower levels of material risks that can include regulatory fines and legal action from unethical or unfair business practices, along with "pre-financial" risks including headline and reputational risk. Many have stricter oversight of their supply chains - a critical strength in an outsourcing world.

The growth of sustainable investing reflects this appeal of ESG as an additional lens alongside traditional fundamentals. It also provides investors

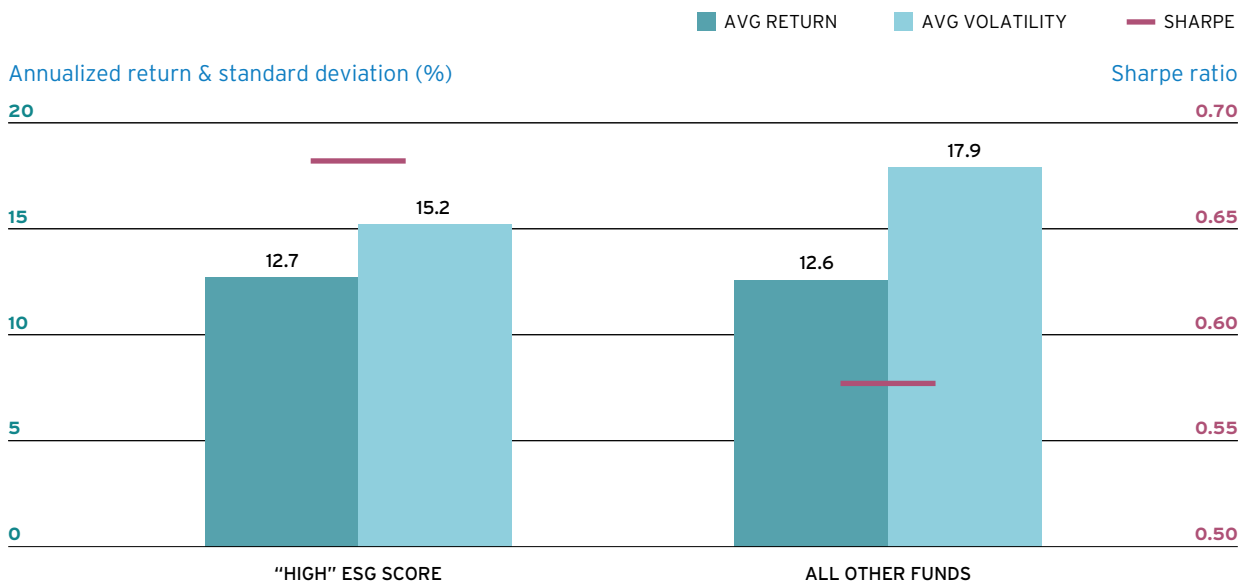
FIGURE 1. US ESG-FOCUSED FUNDS YTD RETURN IN THE CONTEXT OF THE BROADER US EQUITY MARKET



Sustainable equity funds (N=206)

¹ Source: Morningstar Direct 1 Jan 2020 - 31 Mar 2020. Note: Oldest share class used for mutual funds. We compared the returns of all 206 sustainable equity open-end and exchange-traded funds available in the US with their peer groups. Peer groups per Morningstar categories: buckets funds based on region, market cap, and style, and contains both sustainable and conventional funds. Past performance is not indicative of future results. Environmental, social and governance (ESG) principles should not be the only consideration when making an investment decision. Selecting investments based on ESG principles will not guarantee positive future returns. There can be no assurance that any Socially Responsible Investing (SRI) screening process will achieve its goals or that an investment will not incur losses.

FIGURE 2. THE HISTORICAL CASE FOR ESG INVESTING



When compared to traditional managers, ESG-focused managers had comparable returns with lower risk, resulting in superior risk-adjusted returns between January 2010 through December 2019

² Source: Morningstar; 1 Jan 2010–31 Dec 2019. Past performance is not indicative of future results. Office of the Chief Investment Strategist, Citi Private Bank. We used data on 528 US equity funds with data back to 2010 from the Morningstar database. Of these, 58 were assigned to the high ESG score universe based on Morningstar’s methodology; all others totaled 470 funds. We compared the high ESG funds and all others on an equal-weighted basis for return and standard deviation. The Sharpe ratios shown were calculated on the aggregated returns and standard deviations. Sharpe ratio is the measure of risk-adjusted return of a financial portfolio. A portfolio with a higher Sharpe ratio is considered superior relative to its peers. **Environmental, social and governance (ESG) principles should not be the only consideration when making an investment decision. Selecting investments based on ESG principles will not guarantee positive future returns. There can be no assurance that any Socially Responsible Investing (SRI) screening process will achieve its goals or that an investment will not incur losses.**

an opportunity to invest in alignment of the changes they want to see in business practices, the environment or society. Choices frequently cited include health care, biotech, clean energy and affordable housing.

Vis-à-vis a pandemic such as COVID-19, ESG considerations are thick on the ground. If one had to select just one criterion each for E, S, and G, needs for the clean water that allows for hygienic manufacture of medicine and vaccines, mechanisms that determine and deliver the vaccines to those at greatest risk, and safety protocols that enable fast-tracking trials and production spring to mind.

It is worth noting that in the first quarter of 2020, 70% of US ESG-focused funds delivered top half performance.¹ This is consistent with ESG-focused ESG managers’ superior risk-adjusted returns relative to traditional managers from 2010 through 2019.² ESG is still, to a degree, a developing approach to investing, with growing metrics, frameworks and standardized reporting requirements. As it matures we expect to see continued, performance from top-performing ESG companies, not only as the pandemic plays out but for generations to come.

3 Asset allocation

CONTENTS

- 3.1 Towards a new asset allocation
- 3.2 The wisdom of lump-sum investing
- 3.3 Major changes to our Strategic Return Estimates



3.1 Towards a new asset allocation

STEVEN WIETING, CHIEF INVESTMENT STRATEGIST AND CHIEF ECONOMIST

Achieving diversification by combining equity and fixed income has become much harder. This requires us to consider additional opportunities for building globally diversified portfolios.

KEY MESSAGES

- Ever lower yielding government bonds have lost their ability to provide both diversification and returns
- Other investment grade bonds such as high quality corporates are not always an effective substitute
- This implies a major change to asset allocation that must be taken very seriously
- As we contemplate a new asset allocation, gold is likely to play a role, although it doesn't have a coupon either
- We expect much more attention on capital market strategies that can change the risk-return profile of portfolios and provide risk hedging
- For potential long-term return enhancement, we are attracted to private equity and late-stage venture capital in particular, asset classes likely to be more prominent in diversified portfolios going forward

FIGURE 1. GLOBAL DIVERSIFICATION'S RISK-ADJUSTED RETURNS

1950s	1960s	1970s	1980s	1990s	2000s	2010s	Avg 10-year return	Risk-adjusted return
World ex-US Equities 20.8%	US Small Caps 15.5%	EM Govt USD Bond 14.4%	World ex-US Equities 22.8%	US Equities 18.2%	EM Govt USD Bond 12.9%	US Equities 13.6%	US Small Caps 12.0%	Asset Allocation 0.53
US Equities 19.3%	US Equities 7.8%	US Small Caps 11.5%	US Equities 17.5%	US Small Caps 11.6%	G7 Govt Bond 6.4%	US Small Caps 10.5%	US Equities 11.6%	US Equities 0.49
US Small Caps 16.9%	Asset Allocation 5.4%	World ex-US Equities 10.1%	Asset Allocation 17.4%	Asset Allocation 11.0%	US Investment Grade 6.4%	Asset Allocation 7.7%	World ex-US Equities 10.5%	EM Govt USD Bond 0.43
Asset Allocation 12.1%	World ex-US Equities 5.1%	Asset Allocation 8.0%	US Small Caps 15.8%	G7 Govt Bond 8.0%	Asset Allocation 3.4%	EM Govt USD Bond 6.3%	Asset Allocation 9.3%	US Small Caps 0.38
EM Govt USD Bond 5.3%	Cash 4.1%	Cash 6.5%	US Investment Grade 12.8%	US Investment Grade 8.0%	Cash 2.7%	World ex-US Equities 6.0%	EM Govt USD Bond 8.1%	World ex-US Equities 0.37
Cash 2.0%	EM Govt USD Bond 3.5%	US Investment Grade 6.1%	G7 Govt Bond 12.8%	EM Govt USD Bond 7.7%	US Small Caps 2.2%	US Investment Grade 4.3%	US Investment Grade 5.8%	US Investment Grade 0.18
G7 Govt Bond 0.4%	US Investment Grade 2.4%	G7 Govt Bond 6.1%	Cash 9.1%	World ex-US Equities 7.3%	World ex-US Equities 1.6%	G7 Govt Bond 3.7%	G7 Govt Bond 5.7%	G7 Govt Bond 0.17
US Investment Grade 0.4%	G7 Govt Bond 2.4%	US Equities 5.8%	EM Govt USD Bond 6.4%	Cash 5.0%	US Equities -0.9%	Cash 0.6%	Cash 4.3%	

Source: FactSet and Citi Private Bank, Global Asset Allocation team as of 20 Apr 2020. Adaptive Valuation Strategies (AVS) is the Private Bank's proprietary strategic asset allocation methodology. 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. "Asset allocation" in this diagram represents an AVS Risk Level 3 allocation, which includes 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. The returns shown were calculated at an asset class level using indices and do not reflect fees, which would have reduced the performance shown. Risk-adjusted return is defined here as the Sharpe ratio. See Glossary for definition of terms.

Build a globally diversified core portfolio and keep it fully invested for the long term. There is perhaps no more important piece of investment advice that we could offer you as your trusted partners - see [Our Investment Philosophy and Process](#) in [Outlook 2020](#). Over time, this advice has helped to protect and grow wealth more effectively than any other single approach. We believe that it will continue to do so. At the same time, changes in the returns and greater risks associated with certain asset classes make achieving diversification more challenging than ever before. We therefore need to rethink aspects of our asset allocation.

Less risk takes more effort

In investment, there is no such thing as an entirely free lunch. Diversification is perhaps the next best thing to it. A globally diversified asset allocation has produced superior risk-adjusted returns relative to every individual asset class between 1950 and 2020 - **figure 1**.

Combining equities and fixed income, as well as other asset classes, in the appropriate proportions, dampens portfolio volatility over time. When equities have fallen sharply, high quality fixed income assets have typically risen. The strongest rationale for those gains is the assured income that those bonds provide. However, as yields have fallen and bond income has become scarce, the short-term and long-term diversification properties of bonds fade.

The global yield for all developed and emerging market bonds of all qualities - including sub-investment grade - is now just 1.4%. Looking out several years, we believe the vast majority of fixed income assets will become "non-investments." What we mean is that owning most bonds will be little different than holding cash. And, as we have said repeatedly, holding too much cash is a feature of market timing. It is thus likely that a portfolio

FIGURE 2. ONLY LONG-DURATION US TREASURIES SUBSTANTIALLY OFFSET EQUITY DECLINES

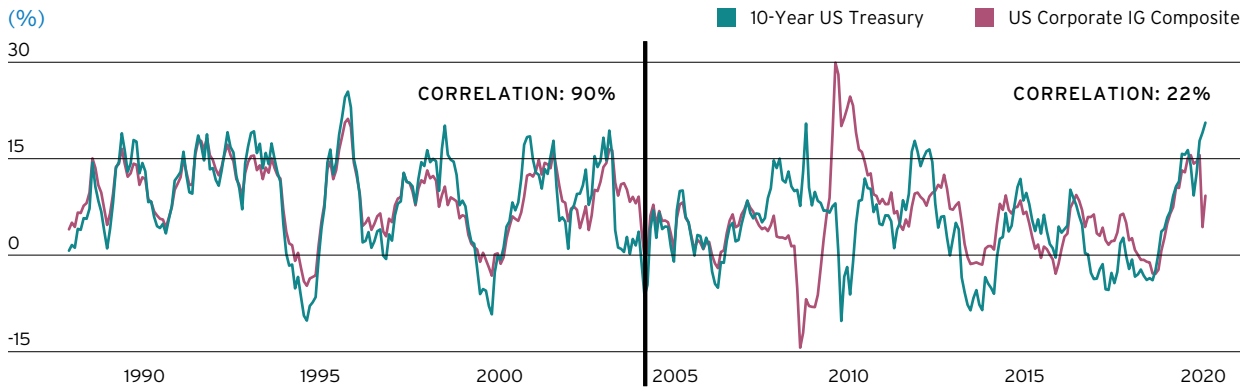
	S&P TOTAL RETURN INDEX (%)	BLOOMBERG BARCLAYS US TREASURY INDEX (%) Index duration: 7.2 years	BLOOMBERG BARCLAYS US CORPORATE INDEX (%) Index duration: 8.3 years
1974	-26.5	7.1	-5.9
1977	-7.2	2.7	3.2
1981	-4.9	9.2	3.0
1990	-3.1	8.5	7.1
2000	-9.1	13.5	9.1
2001	-11.9	6.7	10.3
2002	-22.1	11.8	10.1
2008	-37.0	13.7	-4.9
2018	-4.4	0.9	-2.5
YTD 2020	-12.0	8.8	1.1
CORRELATION TO EQUITIES IN DECLINE YEARS		-0.50	0.44

Source: Haver Analytics, Bloomberg through 1 May 2020. Past performance is not indicative of future returns. Real results may vary. Indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only. See Glossary for definitions.

with cash and a slew of extremely low yielding bonds will create a huge drag on returns over time - see [The wisdom of lump-sum investing: Why you should get fully invested now](#).

To be sure, high quality fixed income will still have a role to play in core portfolios. On the nine previous occasions when the S&P 500 Index fell over an entire calendar year, US Treasuries delivered a positive return. The correlation between Treasuries and US equities in such years was negative 0.51. In 2020 so far, this pattern has held up, with Treasuries rising as equities have fallen - **figure 2**. However, with 10- to 30-year Treasuries yielding only 0.65% to 1.30%, we now see them solely as a risk hedge rather than also a source of income.

FIGURE 3. TREASURY AND IG CREDIT'S WEAKENING RELATIONSHIP



Source: Haver Analytics, Bloomberg through May 2020. Past performance is not indicative of future returns.

FIGURE 4. SOVEREIGNS AND CORPORATES: IMPERFECT SUBSTITUTES

	Bloomberg Barclays US Corporate Investment Grade (%)	Bloomberg Barclays US High Yield - Corporate (%)	Bloomberg Barclays US Aggregate Government Treasury (20+ Y) (%)
SINCE 2003	0.39	0.73	-0.40
SINCE 2001	0.24	0.72	-0.39
SINCE 1995	0.23		-0.22
SINCE 1990	0.23		-0.13
	higher correlation		lower correlation
FIRST GULF WAR / RECESSION Aug-Oct 1990	0.62		-0.21
ASIAN FINANCIAL CRISIS Aug-Sep 1998	0.03		-0.66
TECH BUST/RECESSION Sep 2000-Sep 2001	-0.20		-0.22
US ACCOUNTING SCANDAL Apr-Oct 2002	-0.51		-0.56
GLOBAL FINANCIAL CRISIS Sep 2008-Mar 2009	-0.19		-0.33
EURO SOVEREIGN DEBT CRISIS Aug-Sep 2011	-0.57		-0.68
OIL COLLAPSE Dec 2015 - Feb 2016	-0.23		-0.39
COVID 19 Feb-Mar 2020	0.16		-0.40

↑ RISING CORRELATION ↓ FALLING CORRELATION

Source: Haver Analytics, Bloomberg through May 2020. Past performance is not indicative of future returns. See Glossary for definitions. Indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only.

Turns out that IG credit is no substitute

What about using investment grade (IG) corporate credit as an income-bearing portfolio substitute for Treasuries and other sovereign debt? Previously, IG corporates and US Treasuries tended to move together strongly. In the fifteen years to 2005, the correlation between their twelve-month returns was an almost perfect 0.90 - **figure 3**. In the last fifteen years, however, the correlation has been a much weaker 0.22. This means that IG credit is a poor risk hedge. Notably, IG credit fell during the 2008 and 2020 bouts of economic turmoil, while US Treasuries rose. Amid such severe uncertainty, investors clearly felt comfortable only with the highest quality debt of all.

In fact, US Investment Grade credit has become increasingly correlated to equities - **figure 4**. Unfortunately, this is especially true during times of stress. In the calendar years when US equities have declined, the correlation between US IG corporate bonds and equities has risen to 0.45, while US Treasuries and equities were negatively correlated. Looking forward, we expect that IG credit will not deliver sufficient diversification at the times when it is needed most. One reason for this is that corporate debt and equities are typically a trade on the same entities. Corporate debt is higher in the capital structure, relatively safer than equity, but with a much more limited potential return.

A second important reason for the rising equity-credit correlation is the growing indebtedness of the US corporate sector. Average credit ratings have declined through the last economic expansions. One symptom of this is the rise in the proportion of US debt rated at BBB - the lowest IG rating - and below - **figure 5**. Developed market corporates outside the US do have relatively stronger balance sheets. However, these generally come with lower yields.

Looking abroad, we see that emerging markets corporates are no substitute for large sovereign borrowers. While still a worthwhile asset class on their own, neither foreign companies nor their home governments have access to a printing press in US dollars or other reserve currencies. They cannot therefore substitute for IG Credit in US dollars.

IG debt, therefore, cannot provide the income and diversification we have previously received through its inclusion.

This is a major change to asset allocation and one that must be taken very seriously.

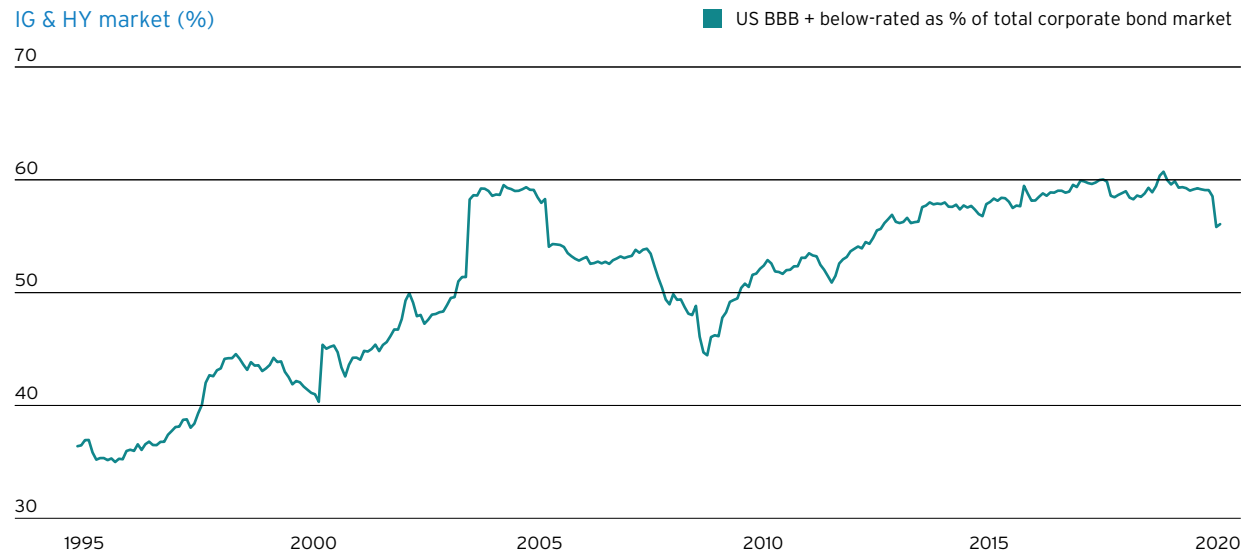
A new asset allocation

In today's uncertain world of record low interest rates and yield, the quest for core portfolio diversification is both more vital and more challenging than ever. We must look for substitutes for some traditional holdings in the quest to create better long-term risk-adjusted returns.

One consideration is gold. Over the past three decades, the yellow metal's annual returns have shown little correlation with developed market equities. Crucially, it can provide diversification during times of equity stress. Despite broad-based liquidations during the worst of the pandemic-driven sell off of 2020, its spot price dipped just to where it started the year while US equities were down 35%. That said, of course, gold's disadvantage is that it pays no income whatsoever. While gold can help hedge core portfolios, therefore, it plainly cannot substitute for income-bearing diversifiers.

Other considerations include dividend equities. However, these still have correlations with other equities that are too high to provide meaningfully greater diversification. Preferred equities also

FIGURE 5. THE DETERIORATION OF US CREDIT QUALITY



Source: Haver Analytics, Bloomberg through May 2020. Past performance is not indicative of future returns.

provide small portfolio benefits. Alternative investments are, therefore, likely to become increasingly important to diversified long-term portfolios. Private equity will be a beneficiary of low interest rates for years to come. Similarly, late-stage venture capital strategies take on less equity risk by gaining exposure to companies at lower valuations, before they are public. In all of these cases, though, the historical benefits of Treasuries cannot be replicated.

Looking ahead, we would highlight the potential of capital markets strategies. For suitable clients, these may represent an opportunity to create elements of equity and fixed income allocations. Implied volatility has two basic regimes, one high and low. When volatility surges, strategies exist that seek to generate income - see [What smart families are doing in capital markets](#). When volatility is low, hedging costs are low, enabling

diversification to be added cheaply to core portfolios. In time, we believe hedges and income strategies in place of some bonds will become critical elements in the "new asset allocation."

To see how well your core portfolio is currently diversified, ask us for your own personalized Outlook Watchlist report. We can then suggest customized opportunities to help enhance your asset allocation.

Joe Fiorica and Joe Kaplan also contributed to this article.

¹ See Glossary for definition.



3.2 The wisdom of lump-sum investing: Why you should get fully invested now

PHIL WATSON,
HEAD OF THE GLOBAL INVESTMENT LAB

Our rigorous analysis shows that investing immediately has produced better results four-fifths of the time. Less cash and less waiting is a potent portfolio booster.

KEY MESSAGES

- Some clients routinely hold as much as 35% cash in their core portfolios
- However, the clear lesson of history is that staying out of the market is costly
- We compare three approaches for committing excess cash
- If you are holding excess cash, we advise you to invest it in a globally diversified core portfolio as soon as possible

Despite our advice, there has been a recent increase in many clients' cash levels. Some routinely hold as much as 35% cash in their core portfolios.

If you are currently holding excess cash, you may well be wondering when and how to invest it. With so much uncertainty over the post-pandemic economic outlook, you may feel tempted to await the next market correction before making your move. Likewise, you might be split over whether to invest all your cash in one go or in stages. Fear of experiencing regret later on is likely a powerful influence on your thought process. However, we recommend that you base your decision on certain key lessons drawn from decades of financial market history.

Staying out of the market is costly. We compared the performance of a fully invested globally diversified portfolio and a cash-heavy portfolio between 1955 and 2020.¹ Breaking this era down into rolling five-year periods, we note that globally diversified portfolios outperformed cash-heavy portfolios 97% of the time. Over that 65-year period, there was no five-year window during which the globally diversified portfolio lost money.

The market's best and worst days cluster tightly. Some of the stock market's best days often follow its worst days closely. Between 24 February and 1 April 2020, the S&P 500 registered eight of its worst ten days in the last decade. But it also experienced seven of its ten best days for the same period. Without those best days, the last four months' total return would have been -42%, instead of -9%. This is the typical pattern around periods of market stress. Between 2000 and 2020, 70% of the S&P's top twenty best days occurred within a month of one of its worst days. Being out of the market at times like this can do lasting damage to your wealth.

Having decided to invest, the next question is whether to commit all your cash all at once or in stages. We compared core developed equity

FIGURE 1: LUMP SUM INVESTING WORKS BEST

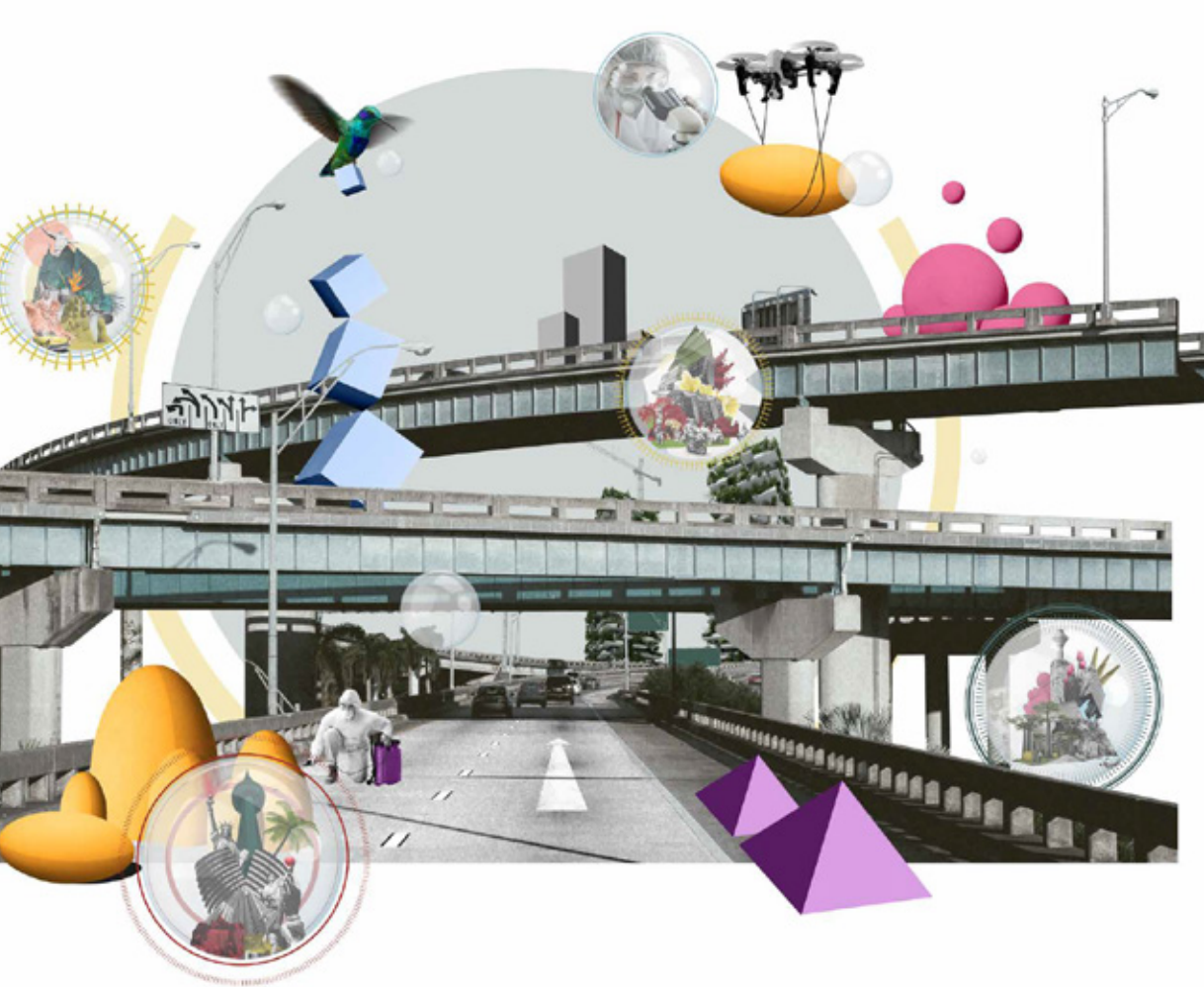
Annualized Returns (3-year investment periods) Historical Performance, Jan 1955 - March 2020	LUMP SUM INVESTING	DOLLAR COST AVERAGING	BUY DIP
AVERAGE ANNUALIZED RETURN (%)	11.56	10.45	6.39
AVERAGE ANNUALIZED VOLATILITY (%)	8.55	7.69	4.23
SHARPE RATIO	0.81	0.75	0.41
BEST CUMULATIVE RETURN OVER 3 YEARS (%)	179.98	151.50	61.60
WORST CUMULATIVE RETURN OVER 3 YEARS (%)	-39.37	-41.72	-28.60
MAXIMUM DRAWDOWN OVER 12 MONTHS (%)	-47.32	-30.98	-34.60
% POSITIVE (36-MONTH PERIOD)	90.2	90.6	97.6
BEST RETURN (% OUT OF 747 OBSERVATIONS)	60	18	23

Source: Global Investment Lab, Citi Private Bank, as of 1 May 2020. Asset classes analyzed are Developed Equities and Cash. Dollar cost averaging and "buy the dips" strategies include interest from cash. Lump sum investing: assumes entire amount invested at the outset. Dollar cost averaging: the investments are made over a horizon of twelve months, in five equal investments. Buy the dips starts with 100% cash. Throughout the three-year investment periods, one-third of the available amount is invested whenever the market drops by 7.5%, otherwise stay in cash. Past performance is no guarantee of future returns. This analysis does not include commissions and/or fees that would have reduced the performance shown. See Glossary for definitions.

portfolios following three entry strategies: investing all at once ("lump sum investing"), investing in five equal installments ("dollar cost averaging"), and buying only when the market drops by a certain amount ("dip buying.") Exploring three- and five-year holding periods from 1955, we found lump sum investing achieved higher absolute and risk-adjusted returns than the other two strategies - **figure 1**. Investing immediately produced higher subsequent returns 80% of the time, even during bear markets.

We believe the evidence of history is clear. If you are holding excess cash, you should put it to work in a globally diversified core portfolio as soon as possible. You should then keep it fully invested for the long term. Let us help you do so.

¹ Global allocation: AVS Level III + Hedge Funds. Simulated historical returns are based on asset class returns using indices as a proxy and should not be considered a guarantee of future performance. Global allocation: using AVS time series Global USD Level 3: Global Developed Equities 47%, Global Emerging Equities 7%, Global Developed Investment Grade Fixed Income 27%, Global Developed Corporate High Yield Fixed Income 2%, Emerging Market Fixed Income 2.2%, Cash 2%, Hedge Funds 12%. Allocation is rebalanced annually. Performance of an index is not an exact representation of any particular investment, as you cannot invest directly in an index. The aforementioned illustration does not reflect the deduction of any fees or expenses. The illustrations use data from 1 Jan 1950 to 20 Mar 2020.



3.3 Major changes to our Strategic Return Estimates

GREG VAN INWEGEN, GLOBAL HEAD OF
QUANTITATIVE RESEARCH AND ASSET
ALLOCATION, CITI INVESTMENT MANAGEMENT

Portfolio asset allocations must be revisited when the assumptions that drive them change, as they have in 2020. Our updated Strategic Return Estimates reflect new realities that long-term investors cannot ignore.

KEY MESSAGES

- The monetary and fiscal response to the pandemic's fallout have profoundly impacted many asset classes' future return potential
- Rather than waiting till year-end as usual, we are thus updating our annualized asset class return estimates for the next decade - Strategic Return Estimates (SREs) - now
- SREs for Cash and IG fixed income have fallen
- The SREs changes require that portfolios be re-allocated over the coming months

The monetary and fiscal measures to combat the global economic shutdown's devastating effects have helped avert a second Great Depression. But these measures' consequences have profoundly impacted many asset classes' future return potential, especially fixed income and cash. We have therefore decided to update our annualized asset class return estimates for the next decade - Strategic Return Estimates (SREs) - at the mid-year stage, rather than waiting until our normal year-end review.

The changes in our SREs are material. They have risen for developed market equities, especially for small- and medium-sized equities - **figure 1**. High yield fixed income's SRE has also risen along with that of emerging market debt. Changes like these are rare and have been instigated by large declines in expected returns from sovereign bonds and cash.

Based on SREs, our strategic asset allocation methodology - Adaptive Valuation Strategies (AVS) - recommends allocations to multiple asset classes. AVS tends to recommend larger allocations to asset classes with higher SREs. However, some asset classes with more modest SREs can provide valuable downside protection in stress environments and will also receive allocations.

The material recent SREs changes thus require some portfolio adjustment to reflect the changes. As such, our discretionary programs will undergo reallocations over the coming months.

FIGURE 1. OUR UPDATED SREs

	2020 (%)	2020 MID-YEAR* (%)
GLOBAL DEVELOPED MARKET EQUITY	5.1	6.2
GLOBAL LARGE CAP EQUITY	4.4	5.5
GLOBAL SMALL/MID CAP EQUITY	9.2	11.6
GLOBAL EMERGING MARKET EQUITY	10.9	11.7
GLOBAL DEVELOPED IG FIXED INCOME	2.1	1.1
DEVELOPED GOVERNMENT BONDS	1.9	0.7
DEVELOPED CORPORATE BONDS	2.7	2.6
HIGH YIELD	3.5	5.9
GLOBAL EMERGING FIXED INCOME	4.7	6.2
US CASH	1.8	0.6
HEDGE FUND	5.3	4.4

*Preliminary SRE changes based on returns through 30 Apr 2020.

Source: Citi Private Bank Global Asset Allocation team. 2020 SREs based on data through 31 Oct 2019. Strategic return estimates are no guarantee of actual results. Past performance is not indicative of future results. See Glossary for definitions. Strategic Return Estimates (SRE) based on indices are Citi Private Bank's forecast of returns for specific asset classes (to which the index belongs) over a 10-year time horizon. The forecast for each specific asset class is made using a proprietary methodology that is appropriate for that asset class. Equity asset classes utilize a proprietary forecasting methodology based on the assumption that equity valuations revert to their long-term trend over time. The methodology is built around specific valuation measures that require several stages of calculation. Assumptions on the projected growth of earnings and dividends are additionally applied to calculate the SRE of the equity asset class. Fixed Income asset class forecasts use a proprietary forecasting methodology that is based on current yield levels. Other asset classes utilize other specific forecasting methodologies.





Why so many changes?

US Cash's SRE has dropped significantly this year, as the US Federal Reserve cut interest rates effectively to 0% in March.

In **Global Developed Fixed Income**, central bank asset buying is driving Government Bond SREs materially lower. SREs for Investment Grade (IG) Corporate's SREs, however, are determined not only by changes in rates, but also by credit spreads. Since rates and credit spreads have pulled in opposite directions, the SRE is little changed. Combining Developed Government Bonds with Developed IG Corporate Bonds, the net effect is lower overall Developed IG Fixed Income SREs.

Conversely, **High Yield Fixed Income's** (HY) SRE has increased. HY is heavily driven by its credit exposure, rather than rates sensitivity. Similar to Corporate IG, pandemic risks have widened HY's spread significantly. Energy sector bonds have been especially hard hit.

Emerging Market Debt SREs have also increased. Asian debt market volatility has been muted relative to Latin American markets, which have been heavily punished by investors. This effect has pushed up overall EM Debt SREs.

Developed Market Equity's SRE has risen. While cyclically-adjusted earnings have fallen somewhat amid the economic shutdown, current equity market prices are down by more. As result, the cyclically-adjusted price earnings ratio has dropped since year-end 2019, which boosts the SRE. **Developed Small Cap Equity's** SREs has also increased. The turmoil has hit small-cap equities hard, given concerns about their less diversified revenues and greater distress risk.

Hedge Funds have characteristics of both equities and fixed income. As of mid-year, the latter component had been the more influential, with early 2020's declining yields and interest rates lowering Hedge Fund SREs.

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

To read about more about our methodology, see Adaptive Valuation Strategies – A New Approach to Strategic Asset Allocation: 2020 Annual Update <https://www.privatebank.citibank.com/home/fresh-insight/adaptive-valuation-strategies.html>

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 Bloomberg 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 Bloomberg 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 Bloomberg 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:

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.

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.

MSCI AC Asia ex-Japan Index captures large and mid-cap representation across two of three 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 EMEA Index captures large and mid cap representation across 11 Emerging Markets (EM) countries* in Europe, the Middle East and Africa (EMEA). With 173 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.

MSCI Europe Index captures large- and mid- cap representation across 15 Developed Markets (DM) countries in Europe*. With 437 constituents, the index covers approximately 85% of the free float-adjusted market capitalization across the European Developed Markets equity universe.

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.

LIBOR or London interbank offered rate is the rate of interest at which banks offer to lend funds to each other. It is used as a reference rate for large amounts of financial contracts.

Sharpe ratio is a measure of risk-adjusted return, expressed as excess return per unit of deviation, typically referred to as risk.



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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 ¹	Standard and Poor's ²	Fitch Ratings ²
Investment grade			
Highest quality	Aaa	AAA	AAA
High quality (very strong)	Aa	AA	AA
Upper medium grade (strong)	A	A	A
Medium grade	Baa	BBB	BBB
Not Investment grade			
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 filled	C	D	C
In default	C	D	D

¹ 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.

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