Goldman Sachs Asset Management

Market Know-How

Triannual Insights and Implementation

2020: Edition 2

Strategic Advisory Solutions

Riding the Storm Out

Macro and Market Digest

Sources of Market Volatility

We remain alert for warning flashes that may develop in the market. Here are our observations:

Coronavirus

2.3

Reproduction Number

estimated for COVID-19, reflecting the number of cases directly generated by one case.

US Election

270

Electoral College Votes

required to win presidency. Key toss-up states are AZ, FL, NC, MI, PA, and WI.

Regulation

19%

Five Largest Companies'

concentration in the S&P 500. These large tech companies are on Washington DC's radar.

Credit

10%

Energy Sector

representation in the US High Yield Index.

Liquidity

72%

US Equity Volume

is algorithmically traded, which could be limited during periods of market shocks.

Sources of Market Stability

Despite these pressure points, we still think the market could find stability for these reasons:

Monetary Policy

10 of 10

Major Central Banks

engaged in unprecedented stimulus.

Inflation

1.3%

US Core PCE

in 2020 allows ample room for policy support.

Refinancing

13MM

US Households

may refinance mortgages at lower rates.

Households

8.2%

US Savings Rate

indicates that consumer balance sheets have meaningfully deleveraged.

Fiscal

12%

US GDP

has been targeted in discretionary fiscal spending.

Source: Bloomberg, Federal Reserve, World Health Organization, Goldman Sachs Global Investment Research, and GSAM. As of March 31, 2020. 'AZ, FL, NC, MI, PA, and WI' refers to the state codes for Arizona, Florida, North Carolina, Michigan, Pennsylvania, and Wisconsin, respectively. 'Core PCE' refers to the core personal consumption expenditures price index, the Federal Reserve's measure of inflation. The economic and market forecasts presented herein are for informational purposes as of the date of this document. There can be no assurance that the forecasts will be achieved. Please see additional disclosures at the end of this document.

Riding the Storm Out

Stepping aside from economic and investment insight for a moment, our thoughts today are with you, your family, and our communities directly affected by these unprecedented events. Globally, the severe economic and health consequences of COVID-19 will not be equally distributed, but we trust that this moment too shall pass, creating increased awareness of our environment and each other.

At the time of this writing, our baseline economic forecast is for the sudden deceleration in economic activity to be most acute in the second quarter, followed by a resurgence in growth during the second half of 2020 and into 2021. Still, developments are fluid. To be sure, we are not including decimal points in our forecasts at this time.

The remainder of this edition of the Market Know-How will focus on summarizing our macro expectations and providing a framework for riding the storm out.

We emphasize ongoing strategic commitments to:

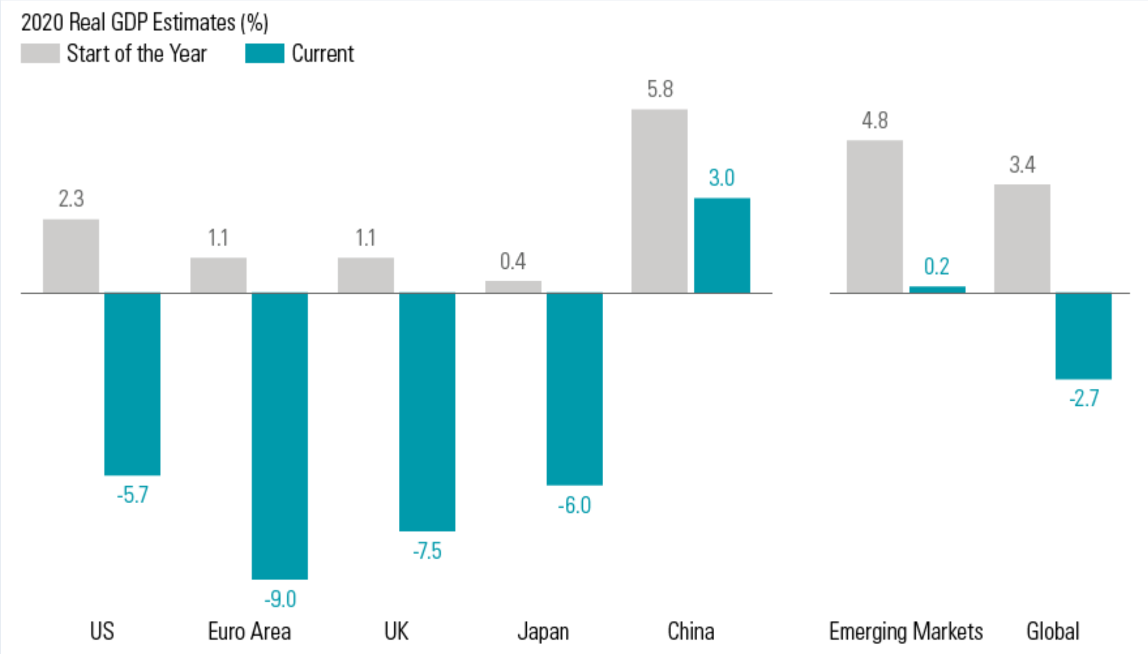
- Alpha-oriented, bottom-up strategies that can identify disruptions in the competitive landscape. We expect societal and consumer transitions that were underway prior to COVID-19 will be accelerated.
- Income-oriented investing, with a move up-in-quality. Many securities may reflect challenges to market liquidity, not solvency or sustainability, providing excellent entry points to cash flow.
- Diversified return streams that can buffer spikes in episodic volatility. This would include alternative and portfolio hedge investment strategies.
- Being patient and positioned for recovery.

Macro

COVID-19 has ushered in the swiftest macro and market recalibration on record. The physical constraints of healthcare policy suggest a sudden contraction in global real GDP of about -3% in 2020. For most developed markets, we believe we are in the deepest part of the downturn, but expect a relatively quicker recovery given the aggressive deployment of policy countermeasures.

GROWTH

Our latest global growth estimates reflect a combination of high-frequency anecdotes as well as the traditional flow of economic reporting. Aggressive physical distancing and shelter-in-place policies to "flatten the curve" have slammed the door on global activity, spiked unemployment rates, and, in only one quarter, likely increased the output gap by more than that experienced in the entirety of every post-war recession. In terms of speed, breadth, and magnitude, we believe the COVID-19 crisis has no corollary.



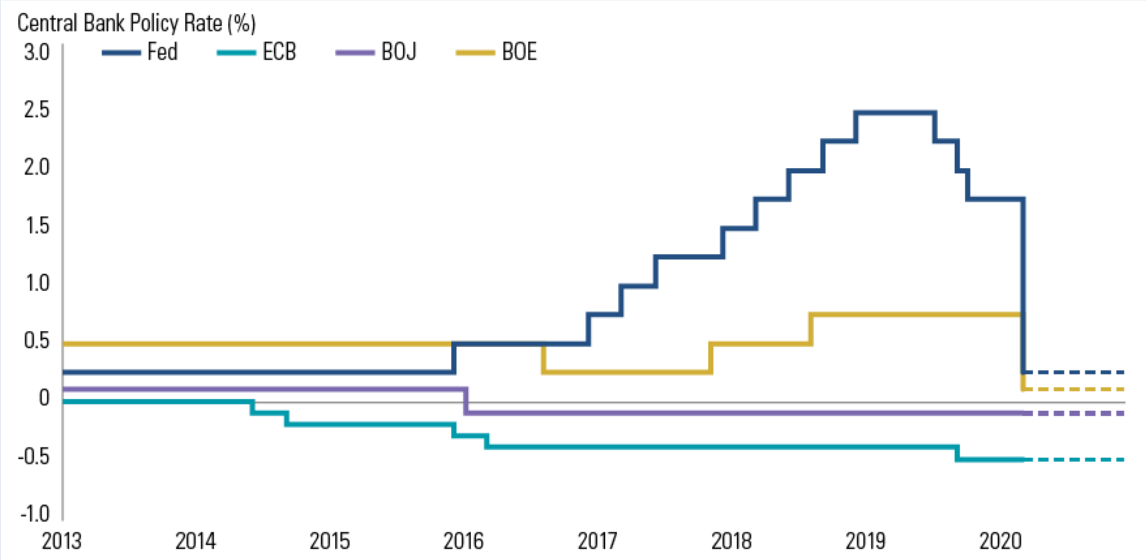
Section Notes: Goldman Sachs Global Investment Research and GSAM. As of April 23, 2020. 'Start of the Year' refers to the 2020 real GDP forecast on January 1, 2020. 'Current' refers to the 2020 real GDP forecast as of April 23, 2020. 'Flatten the curve' refers to public health measures taken to keep the daily number of disease cases at a manageable level for medical providers. 'Output gap' refers to the difference between the actual output of an economy and the maximum potential output of an economy expressed as a percentage of gross domestic product (GDP). The economic and market forecasts presented herein are for informational purposes as of the date of this document. There can be no assurance that the forecasts will be achieved. Please see additional disclosures at the end of this document. **Past performance does not guarantee future results, which may vary.**

INFLATION

Inflation risk has remained to the downside as noted by forward breakeven rates. This trend has been reinforced by the massive supply/demand imbalance impairing energy markets. The short-term takeaway from low inflation is that it permits central banks unbridled flexibility to address global deceleration and stressed market liquidity. The long-term takeaway of "kitchen sink" policy is less clear.

POLICY

With major central banks now at the lower bound, current policy targets broadening the reach of quantitative easing and providing industry-specific liquidity. Central banks will likely continue to aggressively support capital market functionality as fiscal measures filter into the economy. Ultimately, the magnitude of the COVID-19 downturn and the speed of recovery may hinge on the tradeoffs between medical containment and government support.

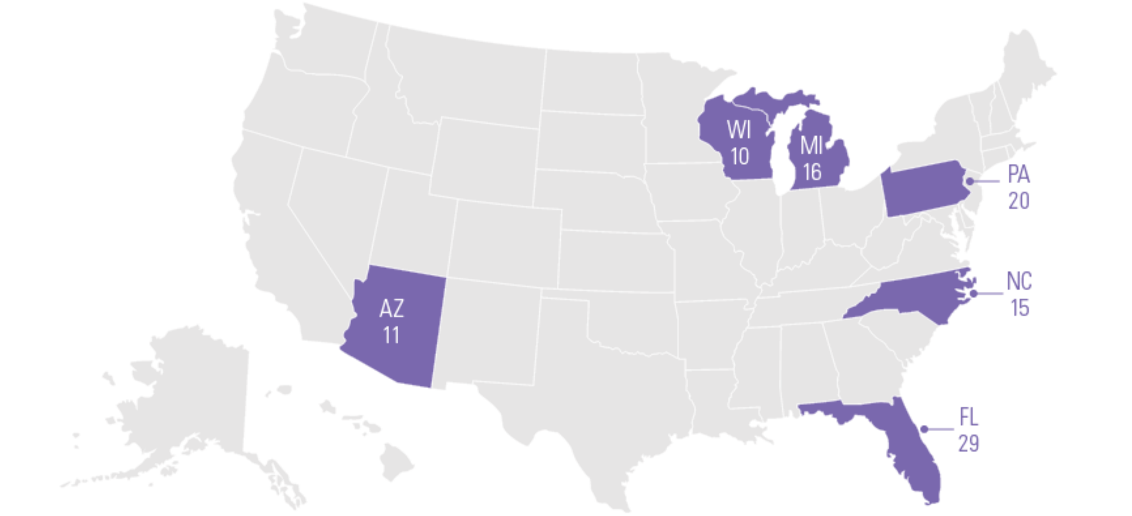


Top Section Notes: Bloomberg and GSAM. As of March 31, 2020. 'Breakeven Inflation' refers to the market-based measure of inflation expectations, which reflects the yield differential between a nominal bond and an inflation-linked bond. 'Kitchen sink' policy is an idiom referring to the wide ranging types of policy action in place. Bottom Section Notes: Bloomberg and GSAM. As of March 31, 2020. 'Fed' refers to the Federal Reserve. 'ECB' refers to the European Central Bank. 'BOJ' refers to the Bank of Japan. 'BOE' refers to the Bank of England. Dotted lines show GSAM policy rate forecasts. **Past performance does not guarantee future results, which may vary.**

POLITICS

The path to 270 electoral votes likely runs through six "toss-up" states comprising 101 votes in the Electoral College. Both presidential candidates poll competitively in these states, rendering any prediction today about the November outcome as purely speculative. What does seem clear is the likelihood that neither party achieves a filibuster-proof majority (60) in the Senate. In the end, that may be more important to the market.

Electoral College Path to 270 (Electoral Votes Available in Toss-Up States)



RISKS

2020 was expected to be a year of predictable uncertainty in the US election. However, US politics is now secondary to the larger cohort of risk factors driving bear market conditions: the scope of economic damage from COVID-19, the efficacy of countercyclical policy, market liquidity, and the battle for energy market share. On the plus side, we entered this period of uncertainty with limited structural imbalances.

Characteristics of a Bear Market ● Yes ○ No	Structural	Cyclical	Event-Driven
Pre-Bear			
Rising Rates	●	●	Maybe
Exogenous Shock	Maybe	Maybe	●
Speculative Rise in Equity Prices	●	○	○
Economic Imbalances	●	○	○
Rising Productivity	●	Maybe	-
Unusual Strength in the Economy	●	○	○
New Era Belief	●	○	○
Post-Peak			
Economic Recession / Downturn	Usually	Usually	Maybe
Profit Collapse	●	●	Maybe
Interest Rates Fall & Trigger Rise in Equity Prices / Fall in Bonds	○	●	Usually
Price Shock	●	○	○

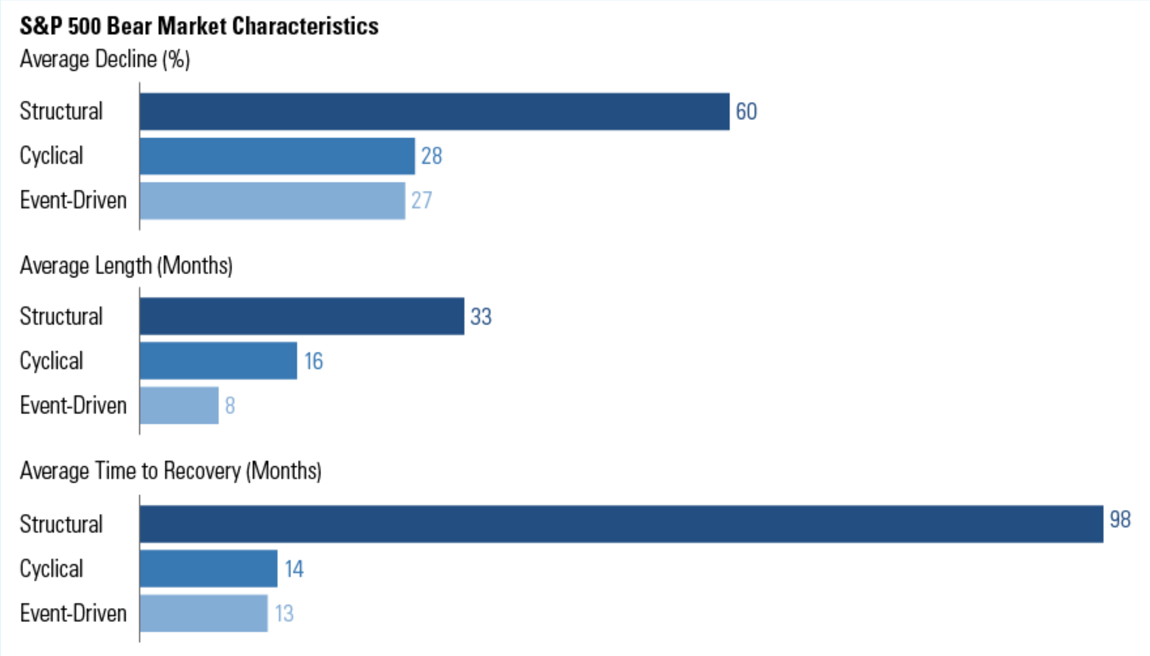
Top Section Notes: GSAM. As of March 31, 2020. Chart shows the number of electoral college votes available to each 'toss-up' state highlighted in purple. Bottom Section Notes: Goldman Sachs Global Investment Research and GSAM. As of March 31, 2020. 'Bear market' refers to a drawdown from peak to trough of 20% or greater. 'Pre-Bear' and 'Post-Peak' refer to the characteristics of each type of bear market, preceding and following market peaks, respectively.

Markets

Market levels and price discovery have become a balancing act between the three Fs: 1) Fundamentals as reflected by the sharp contraction in business and consumer activity, 2) Fear as captured by the record spike in volatility, and 3) challenged Functionality as demonstrated by gapping bid/ask spreads and shrinking "top of book" liquidity. For patient investors, we believe security-specific dislocations are pervasive and risk asset valuations have reset the forward opportunity set.

EQUITIES

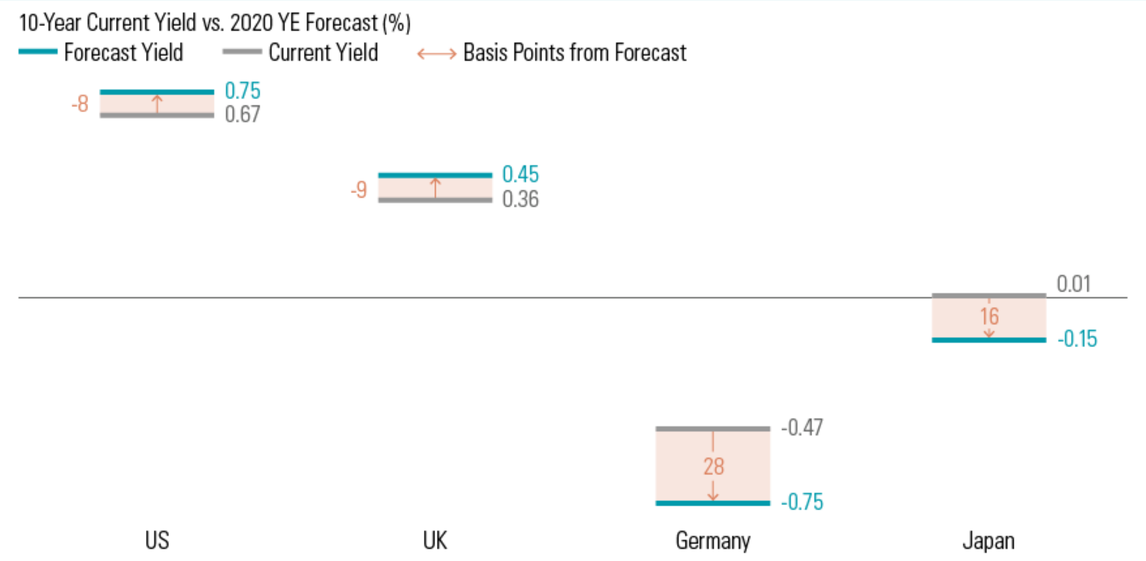
Understanding bear market DNA may influence how quickly one positions for recovery. Structural bears, which result from painful asset imbalances, tend to be deep and long. Cyclical bears are linked to the business cycle and tend to be intermediate in magnitude and in recovery. Event-driven bears are catalyzed by one-off shocks and are relatively quick to recover. While the essence of COVID-19 is event-driven, the economic devastation of virus containment transcends both cyclical and structural risk, suggesting a potential deep contraction but rapid recovery.



Section Notes: Goldman Sachs Global Investment Research and GSAM. As of March 31, 2020. 'Top of book' refers to the highest bid and the lowest ask prices for a transaction, a measure that demonstrates the degree of market depth or liquidity. 'Average Decline' refers to the average maximum drawdown from peak to trough. 'Average Length' refers to the average number of months from peak to trough. 'Average Time to Recovery' refers to the average number of months to return to the market peak. Analysis is based on the S&P 500 Index price returns from January 1928–March 2020. **Past performance does not guarantee future results, which may vary.**

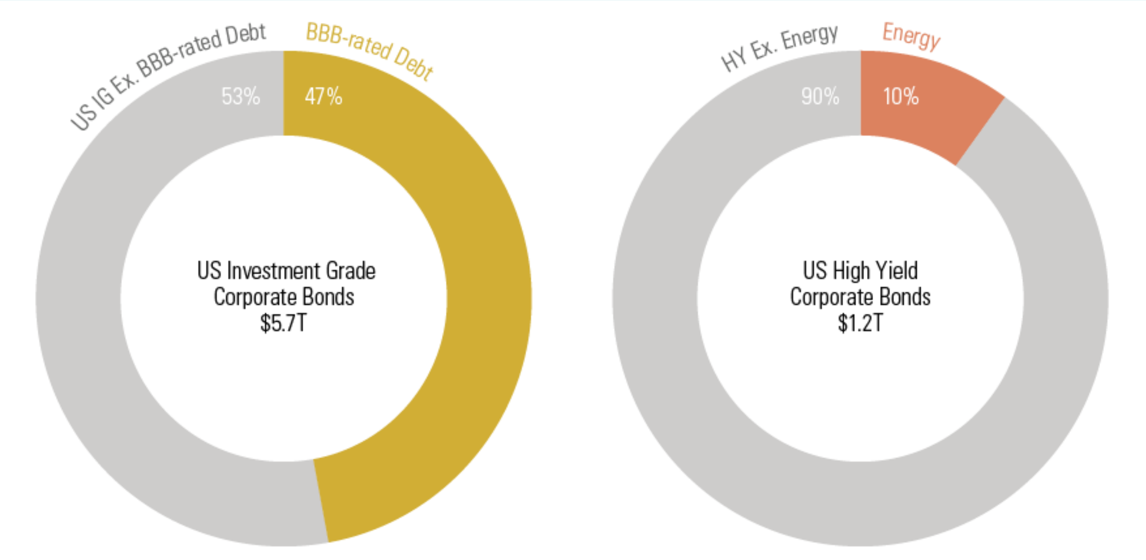
RATES

As central banks have moved to their effective lower bounds, we think the movement from rate cuts has largely played out for longer rates, too. Yields are likely locked into a lower-for-longer range until policy unwinds. Lower rates would also be consistent with historical evidence that risk assets respond more to early signs of growth bottoming, while major shifts in government bonds may require growth closer to trend.



CREDIT

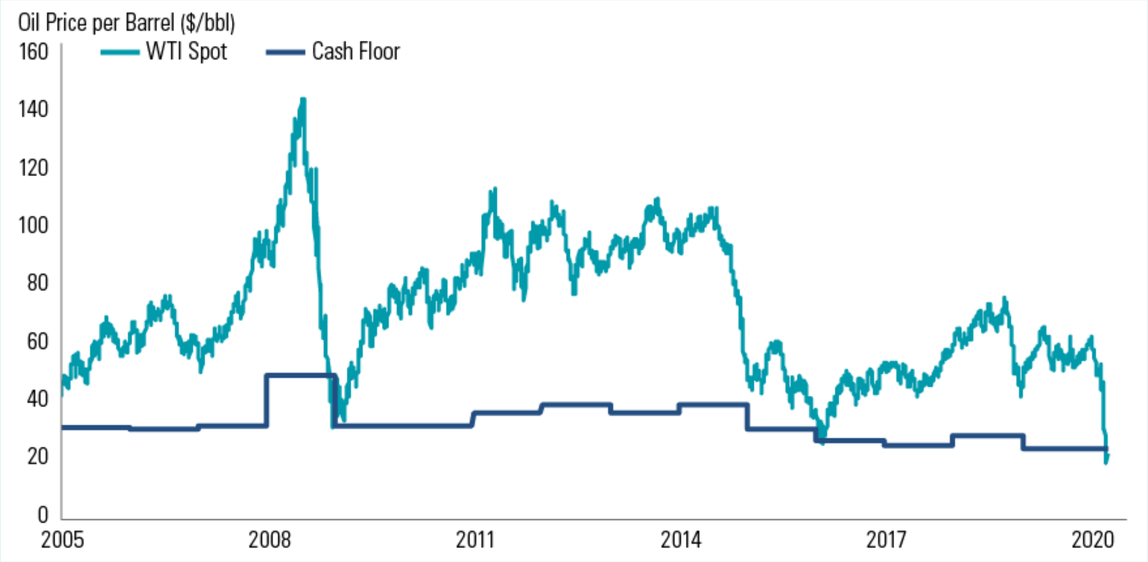
The speed of economic deceleration has broadened credit risk beyond the energy market. Our colleagues in GIR forecast that the 12-month trailing US high yield default rate may increase to 13% by year-end, with risk to the upside. The credit markets have moved swiftly to reflect these new risks, providing selective opportunities for up-in-quality positioning. In investment grade, strained liquidity has revealed structural challenges to price discovery, rewarding liquidity providers.



Top Section Notes: Goldman Sachs Global Investment Research and GSAM. As of March 31, 2020. Bottom Section Notes: Bloomberg and GSAM. As of March 31, 2020. 'US Investment Grade Corporate Bonds' refers to the Bloomberg Barclays US Investment Grade (IG) Corporate Bond Index. 'BBB- rated Debt' refers to the portion of the US IG market capitalization that is rated BBB. 'US High Yield Corporate Bonds' refers to the Bloomberg Barclays US High Yield (HY) Corporate Bond Index. 'Energy' refers to the market capitalization of debt within the US High Yield Index that is in the energy sector. The economic and market forecasts presented herein are for informational purposes as of the date of this document. There can be no assurance that the forecasts will be achieved. Please see additional disclosures at the end of this document. **Past performance does not guarantee future results, which may vary.**

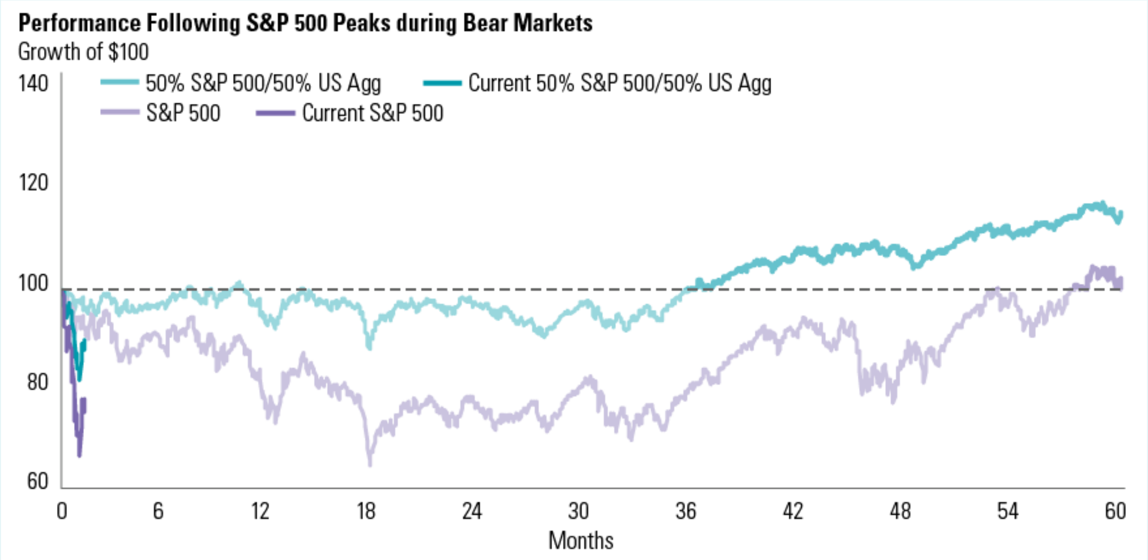
COMMODITIES

The shift by OPEC+ to defend market share above profitability should apply sustainable pressure to the global energy market. In periods of significant demand shock or significant oversupply, front-month oil prices have historically bottomed near cash costs, or roughly $20/bbl. In precious metals, gold has seen periods of weakness to fund periodic US dollar shortages, but it should now remain well-bid more broadly as the currency of last resort.



VOLATILITY

Market participants often associate the "cost" of volatility in terms of dollars and percent. In our view, the cost of volatility may be better quantified in terms of the most valuable asset, time. Today, we are in the midst of a living case study on the merits of portfolio diversification where the most important lesson is often missed: portfolio diversification has on average promoted a shallower drawdown and a faster time to recovery.



Top Section Notes: Bloomberg, Goldman Sachs Global Investment Research, and GSAM. As of March 31, 2020. 'Cash Floor' refers to the breakeven price level at which the price of oil covers the cost of extracting the oil. Bottom Section Notes: Bloomberg and GSAM. As of March 31, 2020. Analysis is since 1990, common index inception of the S&P 500 Index and the Bloomberg Barclays US Aggregate Bond Index. The median lines are based on the last three S&P 500 bear markets: July 1990–October 1990, March 2000–October 2002, and October 2007–March 2009. 'US Agg' refers to the Bloomberg Barclays US Aggregate Bond Index. The performance results are based on historical performance of the indices used. The result will vary based on market conditions and your allocation. Please see additional disclosures at the end of this document. **Past performance does not guarantee future results, which may vary.**

Macro and Markets Recap

Macro:
Sudden deceleration to global recession followed by policy-fueled recovery

Markets:
Indiscriminate repricing to slower growth creates opportunities for selectivity

Know-How

Core Fixed Income:
Actively against drift

Municipal Bonds:
Muni madness

International Developed:
Seeking selectivity

Alternatives:
Gimme shelter

Tax Loss Harvesting:
The upside of downside

Politics:
Mind the gap

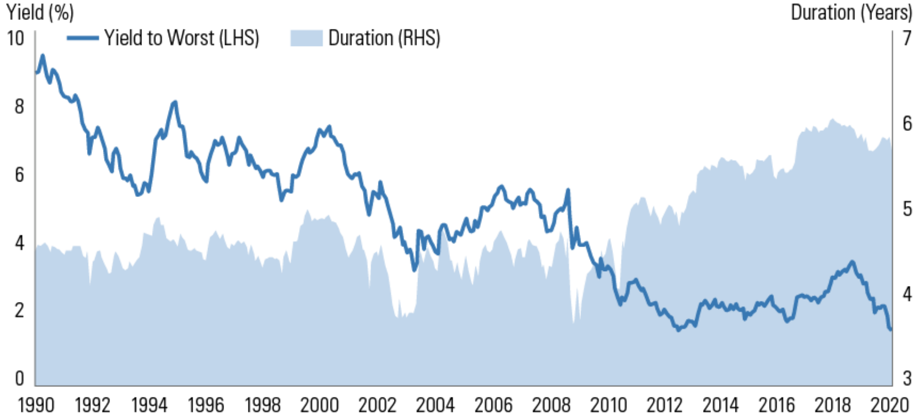
Views and opinions are current as of March 2020, and may be subject to change, they should not be construed as investment advice.

Economic and market forecasts presented herein reflect our judgment as of the date of this document and are subject to change without notice. These forecasts do not take into account the specific investment objectives, restrictions, tax and financial situation or other needs of any specific client. Actual data will vary and may not be reflected here. These forecasts are subject to high levels of uncertainty that may affect actual performance. Accordingly, these forecasts should be viewed as merely representative of a broad range of possible outcomes. These forecasts are estimated, based on assumptions, and are subject to significant revision and may change materially as economic and market conditions change. Goldman Sachs Asset Management has no obligation to provide updates or changes to these forecasts. Examples are for illustrative purposes only.

Passively drifting landscape. The composition of fixed income indices has shifted over time.

Changing Duration and Yield

Bloomberg Barclays US Aggregate Bond Index Yield and Duration



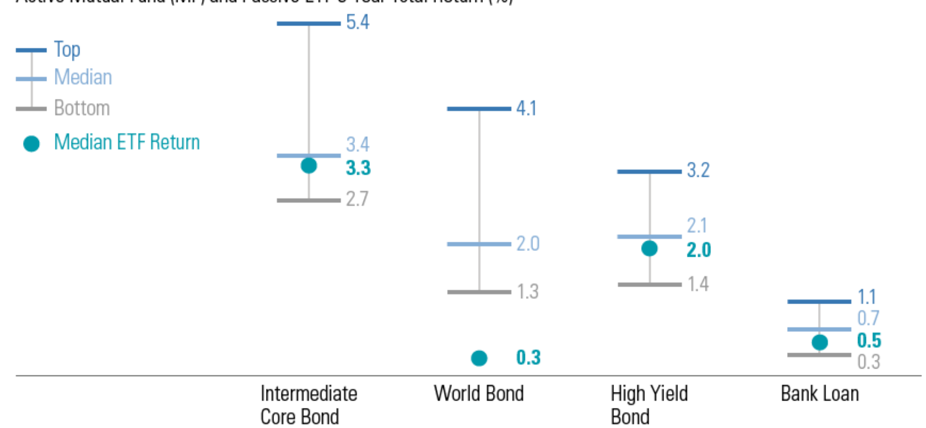
Source: Bloomberg and GSAM.

With structurally contained inflation and central bank intervention, the landscape of the fixed income market has changed. Portfolios that passively follow the US Aggregate Bond Index would have extended duration, lowered yields, and been more exposed to Treasuries over time. As such, passive core fixed income investment strategies may be missing out on opportunities for higher income and risk-adjusted returns in other parts of the markets such as investment grade corporates and mortgage-backed securities.

Getting active. Active fixed income managers have outperformed average passive managers across asset classes.

Be Proactive

Active Mutual Fund (MF) and Passive ETF 5-Year Total Return (%)



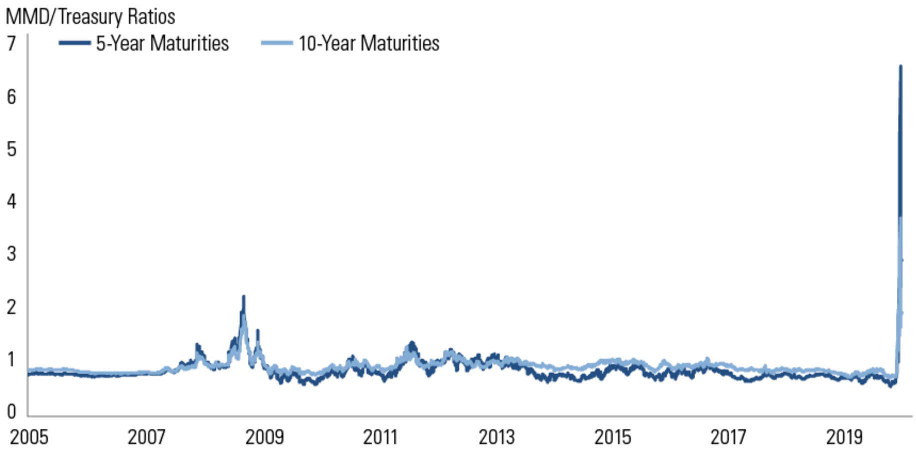
Source: Morningstar and GSAM.

While the changing backdrop has made fixed income a riskier investment with lower yields, active managers have been able to generate alpha by exploiting opportunities across different sectors, credit qualities, and term structures. The flexibility of active managers to deviate from their benchmark has generally led to outperformance versus passive managers on a net-of-fee basis across fixed income asset classes. In fact, across various Morningstar fixed income categories, the median ETF return was lower than that of the bottom-quartile active mutual fund managers.

Left Section Notes: As of March 31, 2020. 'Yield to Worst' refers to the lowest yield an investor can expect when investing in a callable bond. 'Duration' is an approximate measure of a bond's price sensitivity to changes in interest rates. Right Section Notes: As of March 31, 2020. The chart shows returns over the past 5 years (February 2015–March 2020) of various US domiciled managers. 'Intermediate Core Bond', 'World Bond', 'High Yield Bond', and 'Bank Loan' are represented by Intermediate Core Bond, World Bond, High Yield Bond, and Bank Loan Morningstar categories. **Past performance does not guarantee future results, which may vary.**

Short-term dislocation may present opportunities. Municipal bonds trade at attractive historic valuations.

Technical Dislocation

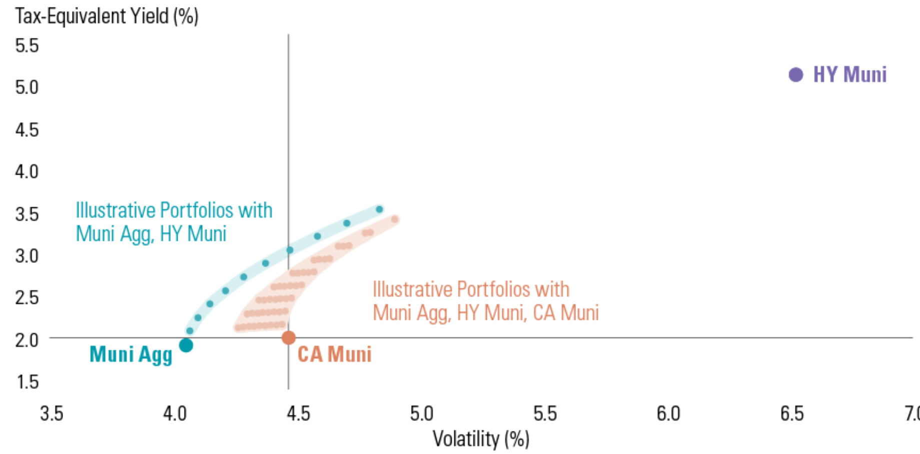


Source: Bloomberg and GSAM.

Short-term dislocation in the municipal (muni) market driven by the COVID-19 sell-off may present potential opportunities for muni investors. The muni-Treasury ratio normally trades below 100% across the curve. In March, we saw ratios hit a 15-year high, indicating that munis have been trading significantly cheaper than Treasuries. Resilient fundamentals and attractive yield pickup may make munis increasingly rewarding versus Treasuries in today's low rate environment.

A blend of options. Diversification across geography and credit may boost yield or reduce volatility.

National Diversification May Add Ample Possibilities



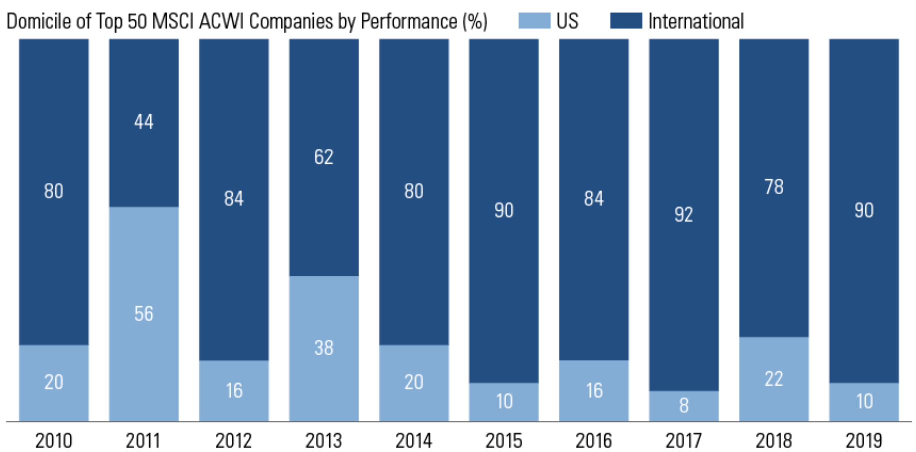
Source: Bloomberg Barclays and GSAM.

Investors can unlock the power of diversification in muni portfolios through national and credit exposure. There are an abundance of opportunities to boost risk-adjusted tax-equivalent yield by broadening muni exposure, in our view. This holds true even in a portfolio specific to a high-tax state such as California, where there are plentiful ways to enhance yield or reduce volatility by diversifying nationally across geography, sector, and credit quality.

Left Section Notes: As of March 31, 2020. 'MMD/Treasury Ratios' refers to the yield of AAA-rated municipal bonds versus US Treasury bonds of the same maturity. Right Section Notes: As of March 31, 2020. The marginal tax rate for California consists of a 12.3% state income tax and a 1.0% tax related to the Mental Health Services Act applied to individuals with more than $1 million in annual income. 'Muni Agg' refers to the Bloomberg Barclays Municipal Bond Index. 'HY Muni' refers to the Bloomberg Barclays High Yield Municipal Bond Index. 'CA Muni' refers to the Bloomberg Barclays California Municipal Bonds Index. 'Tax-equivalent yield' refers to the yield required on a taxable investment to equal the return on a tax-exempt municipal investment. Volatility is the annualized standard deviation of monthly returns from 1997 to 2020. Tax-equivalent yield and volatility are portfolio weighted averages of index data. These illustrative results do not reflect any GSAM product and are being shown for informational purposes only. No representation is made that an investor will achieve results similar to those shown. The performance results are based on historical performance of the indices used. The result will vary based on market conditions and your allocation. Diversification does not protect an investor from market risk and does not ensure a profit. Goldman Sachs does not provide accounting, tax or legal advice. Please see additional closures at the end of this document. **Past performance does not guarantee future results, which may vary.**

A land of opportunity. Investor returns need not be limited to the US.

Top Performers Have Been Concentrated Outside of the US

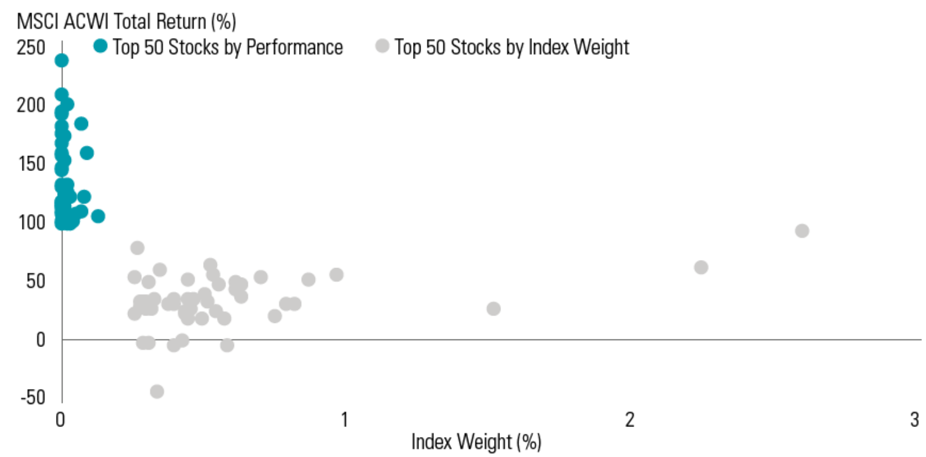


Source: Bloomberg and GSAM.

Since the post-crisis era, US equities have outperformed global peers across a number of metrics. Historical drivers of exceptional returns reflect both the US macro advantage (domestic GDP outpaced developed market GDP) and sector differentials (US equities tended to be more growth-tilted). Yet on average each year roughly 78% of the top performing 50 public companies are domiciled outside of the US. In 2019 alone, international companies represented 90% of these top performers. By broadening the opportunity set globally, we believe investors could unleash attractive return potential in their portfolios.

Concentrate on selectivity. International markets are less top heavy.

2019's Top Performing Stocks Comprised <2% of the MSCI ACWI Index



Source: Bloomberg and GSAM.

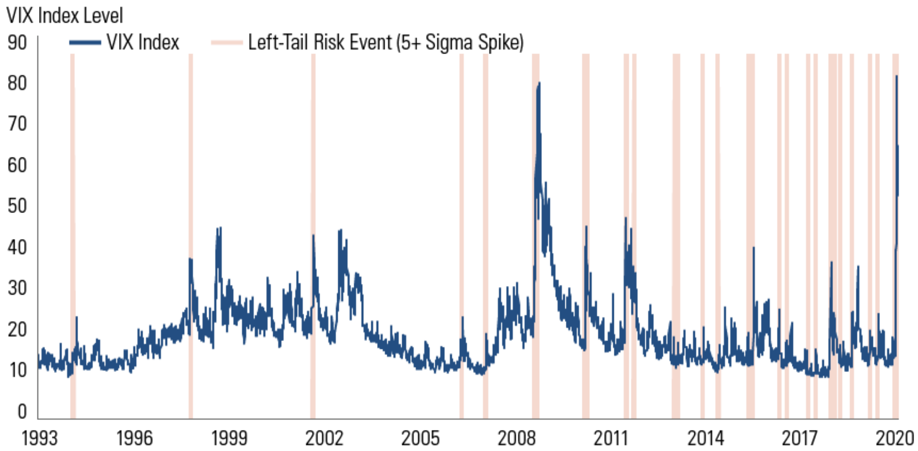
Taking advantage of the full global equity opportunity set requires investors to consider securities more actively. Top performing stocks in the MSCI ACWI made up less than 2% of the index in aggregate, but on average generated over four times the return of the index's largest stocks by market capitalization. This strong performance equated to an average return of 132% in 2019, even surpassing returns of top US technology names. In our view, investors should focus on identifying outperforming companies through careful stock selection.

Left Section Notes: As of December 31, 2019. Chart shows the proportion of the top performing 50 stocks in the MSCI ACWI Index based on domiciled region (US or international). Right Section Notes: As of December 31, 2019. Analysis is from January 1, 2019 to December 31, 2019. 'Top 50 Stocks by Performance' refers to the top 50 individual stocks in the MSCI ACWI Index with the highest total return in 2019. 'Top 50 Stocks by Index Weight' refer to the top 50 individual stocks in the MSCI ACWI Index with the largest index weight based on company market capitalization. International securities entail special risks such as currency, political, economic, and market risks. **Past performance does not guarantee future results, which may vary.**

Volatility erupting. Tail risk has increased over the last ten years, even as average volatility has been subdued.

Win by not losing. Alternatives may act as a buffer in volatile markets.

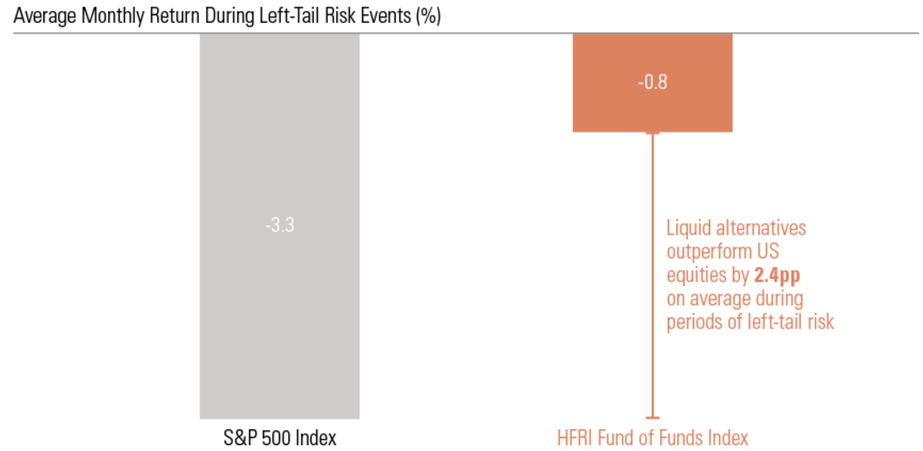
Increased Risk of Left-Tail Risk Events



Source: Bloomberg and GSAM.

Volatility has recently been elevated as markets digest the COVID-19 downturn. Yet since the financial crisis, the odds of seeing left-tail risk events—defined as where the VIX closes up by five standard deviations or more in one day—has increased substantially. From 1993–2007, there were left-tail risk events approximately once every two years. From 2008 onwards, left-tail risk events occurred twice every year, amounting to a four-fold increase. In light of this trend, we believe investors should focus on reducing left-tail risk.

Down but not Out



Source: Bloomberg and GSAM.

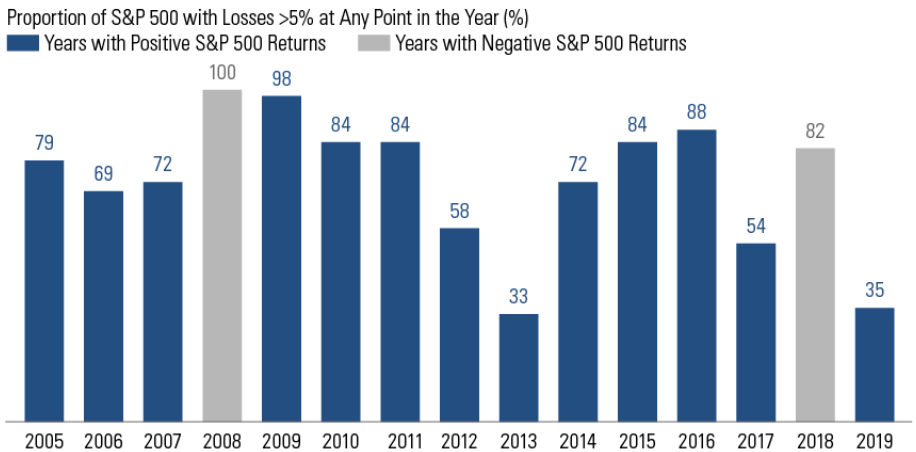
When left-tail risks are realized, it is important to have shock absorbers built into portfolios. Liquid alternative strategies may serve this purpose by reducing beta to equity markets. When equity volatility spikes, historically liquid alternatives have avoided 75% of US equity losses and outperformed equities by 2.4 percentage points (pp). In our view, alternatives may offer an effective and efficient solution for investors to lower portfolio risk while remaining invested.

Left Section Notes: As of March 31, 2020. Chart data from 1993, inception of VIX Index, to current. A 'left-tail event' refers to a 5 standard deviation or more increase in the VIX Index based on index levels at the close of every trading day. Right Section Notes: As of March 31, 2020. Chart shows monthly returns during periods of left-tail risk events, as defined by months where the VIX rises by 5 standard deviations or more from day to day. **Investments in Liquid Alternative Funds expose investors to risks that have the potential to result in losses. These strategies involve risks that may not be present in more traditional (e.g., equity or fixed income) mutual funds. Past performance does not guarantee future results, which may vary.**

Losses exist in all markets. The majority of stock prices may fall in good times and in bad.

Take advantage. Tax-aware equity strategies can bolster after-tax returns.

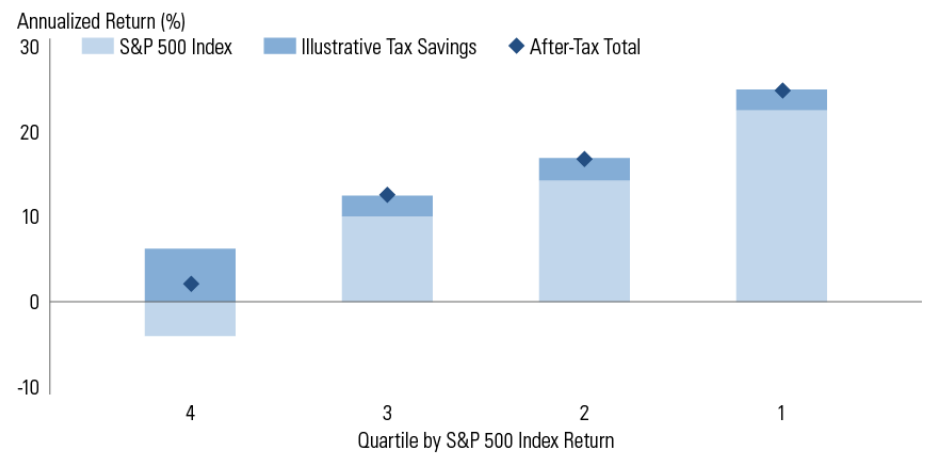
Most Everybody Hurts



Source: Bloomberg and GSAM.

More than 50% of stocks in the S&P 500 have had some level of negative returns in the last 15 years. In down years nearly every stock has experienced losses, but years of strong performance have offered ample loss-harvesting opportunities as well. On average, 75% of companies in the S&P 500 have seen their shares fall at least 5% at some point in any given year. Investors can exploit these moments of market volatility by strategically realizing losses to offset capital gains and reduce annual 1099 shock.

It's What you Keep that Counts



Source: Bloomberg and GSAM.

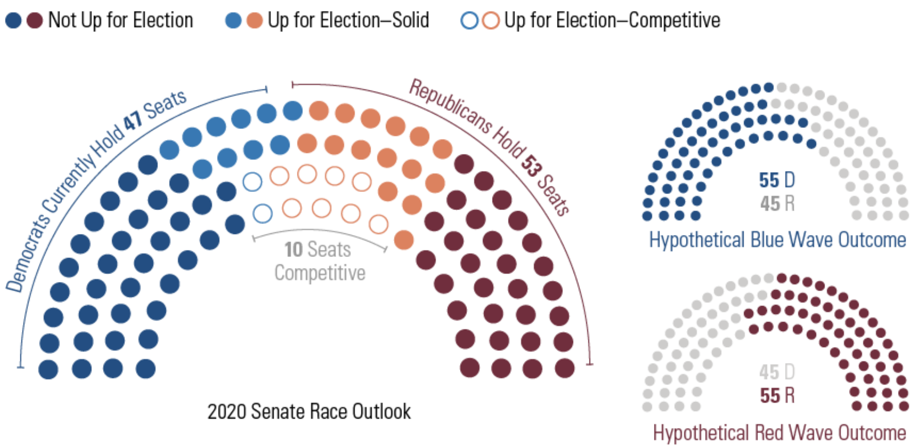
The after-tax experience of equity investors often underwhelms headline index returns, even when indexes are down. We believe the equity market volatility that investors have experienced this year provides an opportunity to improve after-tax returns through tax-loss harvesting: offsetting capital gains with realized losses. In down markets, tax savings from loss harvesting may add 6 percentage points (pp) to investor returns. In strong markets, loss harvesting may bolster returns by 2.3pp on average. In an environment where investors are fighting for income across markets, keeping more in their pocket may be especially attractive.

Left Section Notes: As of March 31, 2020. Chart shows the proportion of companies in the S&P 500 Index that have experienced losses greater than 5% at some point during the year based on daily data from local peaks. Right Section Notes: As of March 31, 2020. For illustrative purposes only. Chart shows bucketed returns of monthly rolling 3-year periods from January 31, 1990 to March 31, 2020. 'Illustrative tax savings' refers to the hypothetical capital gains saved by realizing monthly losses at the long-term tax rate of 23.8%. Index returns are used as a proxy for baskets of similar stocks. Analysis does not factor in wash sale rules. Actual results may vary. Goldman Sachs does not provide accounting, tax, or legal advice. Please see additional disclosures at the end of the document. **Past performance does not guarantee future results, which may vary.**

Did you Know…

Mind the gap. Ideological separation and thin party margins underscore legislative complexities.

Eyes on the Senate

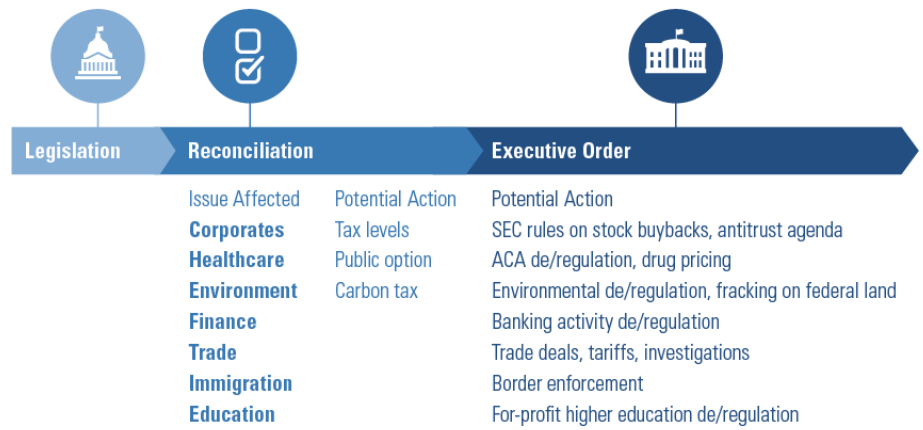


Source: Cook Political Report and GSAM.

The Presidential race remains a toss-up at this point. What seems certain is that the President-elect will inherit an ideologically disparate Congress challenged to advance major legislation outside of the reconciliation process. There are 35 Senate seats up for election in November with only 10 considered competitive. These seats will most likely split between parties, but even in the event of a hypothetical blue or red wave, the party in power would be operating without a filibuster-proof majority of 60 seats. As a result, policymaking may be dominated by reconciliation or executive order.

Order from the executive. Policy implementation will likely be dominated by executive authority.

Executive Action is Less Challenging than Congressional Action



Source: GSAM.

There are three paths to policy change in Washington: legislation, reconciliation, and executive action. Legislative risk would most likely be limited given the structure of the Senate. Reconciliation, which requires a simple majority, can only affect one aspect of 1) revenue, 2) spending, and 3) deficit each year. To be sure, the rules of reconciliation can be broadened. Consequently, while the legislative process remains challenged, policy risk is real in the form of potential reconciliation and executive action.

Left Section Notes: As of March 31, 2020. For illustrative purposes only. Right Section Notes: As of March 31, 2020. For illustrative purposes only.

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Source: GSAM.

Glossary

Equities

The **Chicago Board Options Exchange Volatility Index (VIX)** reflects a market estimate of future volatility, based on the weighted average of the implied volatilities for a wide range of strikes.

The **Dow Jones US Select Real Estate Securities Index** tracks companies that are both equity owners and operators of real estate in the US.

The **MSCI All Country World (ACWI) Index** is a market capitalization weighted index designed to provide a broad measure of equity-market performance throughout the world. It comprises of stocks from 23 developed countries and 24 emerging markets.

The unmanaged **MSCI EAFE Index** (unhedged) is a market capitalization weighted composite of securities in 21 developed markets.

The **MSCI Emerging Markets Equity Index** is a free float-adjusted market capitalization index that is designed to measure equity market performance of emerging markets.

The **Russell 2000 Index** measures the performance of the small-cap segment of the US equity universe. The Russell 2000 Index is a subset of the Russell 3000 Index representing approximately 10% of the total market capitalization of that index. It includes approximately 2000 of the smallest securities based on a combination of their market cap and current index membership.

The **S&P 500 Index** is the Standard & Poor's 500 Composite Stock Prices Index of 500 stocks, an unmanaged index of common stock prices. The index figures do not reflect any deduction for fees, expenses or taxes. It is not possible to invest directly in an unmanaged index.

The **S&P Developed ex-US Property Index** measures the performance of real estate companies domiciled in countries outside the United States.

The **S&P Developed ex-US Small Cap Index** covers the smallest 15% of companies from developed countries (excluding the US) ranked by total market capitalization.

Fixed Income

The **Bloomberg Barclays US Aggregate Bond Index** represents an unmanaged diversified portfolio of fixed income securities, including US Treasuries, investment grade corporate bonds, and mortgage backed and asset-backed securities.

The **Bloomberg Barclays EM USD Aggregate Index** is a flagship hard currency Emerging Markets debt benchmark that includes USD denominated debt from sovereign, quasi-sovereign, and corporate EM issuers.

The **Bloomberg Barclays Global High Yield Index** provides a broad-based measure of the global high-yield fixed income market.

The **Bloomberg Barclays Municipal Bond Index** covers the USD-denominated long-term tax-exempted bond market, including state and local general obligation bonds, revenue bonds, insured bonds, and prerefunded bonds.

The **Bloomberg Barclays 3 Year Municipal Bond Index** consists of a broad selection of investment grade general obligation and revenue bonds of maturities ranging from two to four years.

The **Bloomberg Barclays California Municipal Bond Index** is a market capitalization weighted index of California investment grade bonds with maturities of one year or more.

The **Bloomberg Barclays High Yield Municipal Bond Index** covers the high yield portion of the USD-denominated long-term tax exempt bond market. The index has four main sectors: state and local general obligation bonds, revenue bonds, insured bonds, and pre-refunded bonds.

The **Bloomberg Barclays US Corporate Investment Grade Index** includes publicly issued US corporate and specified foreign debentures and secured notes.

The **Bloomberg Barclays US High Yield Index** covers the universe of fixed rate, non-investment grade debt.

The **Credit Suisse Leveraged Loan Index** tracks the investable leveraged loan market by representing tradable, senior-secured, US-dollar denominated, non-investment grade loans.

The **J.P. Morgan 1-Month Cash Index** measures the total return of a rolling investment in a short-term fixed income instrument with a one-month maturity.

The **J.P. Morgan EMBI Global Composite Index** is an unmanaged index tracking dollar-denominated debt instruments issued in emerging markets.

The **S&P/LSTA US Leveraged Loan 100 Index** is designed to reflect the performance of the largest facilities in the leveraged loan market.

The **US Treasury Bond** is a debt obligation backed by the United States government and its interest payments are exempt from state and local taxes. However, interest payments are not exempt from federal taxes.

Other

Alpha refers to returns in excess of the benchmark return.

Basis points (bps) refers to a unit represented by one hundredth of one percent.

Cash floor refers to the breakeven price level at which the price of oil covers the cost of extracting the oil.

Cyclical bear market features late-cycle conditions including rising rates, impending recession, and falling profits.

Duration is a measure of the sensitivity of the price of a fixed income investment to a change in interest rates.

Electoral College is a body of 538 US electors formed every four years for the purpose of electing the president and vice president of the United States.

Event-driven bear market features one-off exogenous shocks.

Filibuster refers to a political procedure where one or more members of parliament or congress debate over a proposed piece of legislation so as to delay or entirely prevent a decision being made on the proposal.

Gross Domestic Product (GDP) is the value of finished goods and services produced within a country's borders over one year.

The **HFRI Fund of Funds Composite Index** is an equal weighted, net of fee, index composed of approximately 800 fund-of-funds which report to HFR.

Income-oriented investing refers to investments where returns are primarily realized through fixed payments such as coupons.

MMD refers to the Thomson Reuters Municipal Market Data AAA Curve, which is a proprietary yield curve that provides the offer-side of AAA-rated state general obligation bonds.

OPEC+ refers to the broader Organization of the Petroleum Exporting Countries, which is a group consisting of 14+ of the world's major oil-exporting nations.

Percentage points (pp) refers to the unit for the arithmetic difference of two percentages.

A **recession** is defined by the NBER as a significant decline in economic activity spread across the economy, lasting more than a few months, normally visible in real GDP, real income, employment, industrial production, and wholesale-retail sales.

Risk assets refers to assets that carry a degree of price volatility.

Standard deviation is defined as a measure of the dispersion of a set of data from its mean.

Structural bear market features asset imbalances and financial bubbles.

Yield refers to the earnings generated and realized on an investment over a particular period of time.

Volatility is a measure of variation of a financial instrument's price.

WTI stands for West Texas Intermediate crude oil, a common US benchmark for oil prices.

Risk Disclosures

Investors should also consider some of the potential risks of alternative investments: Alternative Strategies. Alternative strategies often engage in leverage and other investment practices that are speculative and involve a high degree of risk. Such practices may increase the volatility of performance and the risk of investment loss, including the entire amount that is invested. Manager experience. Manager risk includes those that exist within a manager's organization, investment process or supporting systems and infrastructure. There is also a potential for fund-level risks that arise from the way in which a manager constructs and manages the fund. Leverage. Leverage increases a fund's sensitivity to market movements. Funds that use leverage can be expected to be more "volatile" than other funds that do not use leverage. This means if the investments a fund buys decrease in market value, the value of the fund's shares will decrease by even more. Counterparty risk. Alternative strategies often make significant use of over-the-counter (OTC) derivatives and therefore are subject to the risk that counterparties will not perform their obligations under such contracts. Liquidity risk. Alternative strategies may make investments that are illiquid or that may become less liquid in response to market developments. At times, a fund may be unable to sell certain of its illiquid investments without a substantial drop in price, if at all. Valuation risk. There is risk that the values used by alternative strategies to price investments may be different from those used by other investors to price the same investments. The above are not an exhaustive list of potential risks. There may be additional risks that should be considered before any investment decision.

Equity securities are more volatile than fixed income securities and subject to greater risks. Small and mid-sized company stocks involve greater risks than those customarily associated with larger companies.

International securities entail special risks such as currency, political, economic, and market risks.

Emerging markets securities may be less liquid and more volatile and are subject to a number of additional risks, including but not limited to currency fluctuations and political instability.

An investment in real estate securities is subject to greater price volatility and the special risks associated with direct ownership of real estate.

Investments in fixed-income securities are subject to credit and interest rate risks. Bond prices fluctuate inversely to changes in interest rates. Therefore, a general rise in interest rates can result in the decline in the bond's price. Credit risk is the risk that an issuer will default on payments of interest and principal. This risk is higher when investing in high yield bonds, also known as junk bonds, which have lower ratings and are subject to greater volatility. All fixed income investments may be worth less than their original cost upon redemption or maturity.

Although Treasuries are considered free from credit risk, they are subject to interest rate risk, which may cause the underlying value of the security to fluctuate.

Income from municipal securities is generally free from federal taxes and state taxes for residents of the issuing state. While the interest income is tax-free, capital gains, if any, will be subject to taxes. Income for some investors may be subject to the federal Alternative Minimum Tax (AMT).

Concentration in infrastructure-related securities involves sector risk and concentration risk, particularly greater exposure to adverse economic, regulatory, political, legal, liquidity, and tax risks associated with MLPs and REITs.

Investments in master limited partnerships ("MLPs") are subject to certain risks, including risks related to limited control and limited rights to vote, potential conflicts of interest, cash flow risks, dilution risks, limited liquidity and risks related to the general partner's right to force sales at undesirable times or prices.

Investing in REITs involves certain unique risks in addition to those risks associated with investing in the real estate industry in general. REITs whose underlying properties are concentrated in a particular industry or geographic region are also subject to risks affecting such industries and regions. The securities of REITs involve greater risks than those associated with larger, more established companies and may be subject to more abrupt or erratic price movements because of interest rate changes, economic conditions and other factors.

There may be additional risks that are not currently foreseen or considered.

General Disclosures

Page 12 Right Section Notes: The illustrative muni portfolios represent all unique long-only combinations of portfolios, in 5% allocation increments, to various municipal bond indices. 'Illustrative portfolios with Muni Agg, HY Muni' refers to all portfolios with at least 50% allocated to Muni Agg (Bloomberg Barclays Municipal Aggregate Bond Index), with the remainder in HY Muni (Bloomberg Barclays Municipal High Yield Bond Index). 'Illustrative portfolios with Muni Agg, HY Muni, CA Muni' has at least 50% allocated to CA Muni (Bloomberg Barclays California Municipal Bond Index), with the remainder in HY Muni and Muni Agg.

Page 22 Relative Asset Class Calendar-Year Performance Notes: 'Bank Loans' are represented by the Credit Suisse Leveraged Loan Index. 'Commodities' are represented by the S&P GSCI Commodity Index. 'Emerging Market (EM) Debt' is represented by the JPM EMBI Global Composite Index. 'Emerging Market (EM) Equity' is represented by the MSCI Emerging Markets Index. 'Hedge Funds' are represented by the HFRI Fund of Funds Index. 'High Yield' is represented by the Bloomberg Barclays Global High Yield Index. 'International Equity' is represented by the MSCI EAFE Index. 'International Real Estate' is represented by the S&P Developed ex-US Property Index. 'International Small Cap' is represented by the S&P Developed ex-US Small Cap Index. 'US Aggregate Bonds' are represented by the Bloomberg Barclays US Aggregate Bond Index. 'US Large Cap' is represented by the S&P 500 Index. 'US Municipal' is represented by the Bloomberg Barclays Municipal Bond Index. 'US Real Estate' is represented by the Dow Jones US Select Real Estate Securities Index. 'US Small Cap' is represented by the Russell 2000 Index.

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Date of first use: March 31, 2020. 198771-OTU-1182011.

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Record High Layoffs

S&P 500 Index Recovery in Recession

Time in the Market

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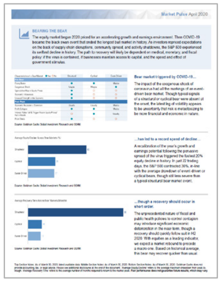
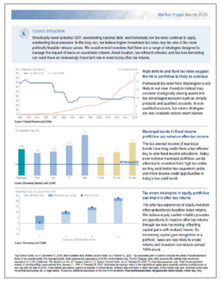
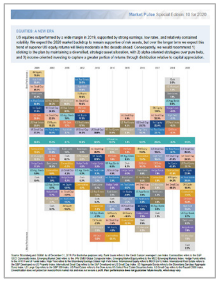


Bearing the Bear



Taxing Situation

Macro and Market Digest



Equities: A New Era

A Long-term Partnership

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For more information, contact us at StrategicAdvisorySolutions@gs.com.

Relative Asset Class Calendar-Year Performance

Best Performance

2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020 YTD
		Int. Real Estate 37.5%						Cash 2.0%		
		High Yield 19.6%						US Municipal 1.3%		US Agg. Bonds 3.1%
		EM Equity 18.6%						Bank Loans 1.1%		Cash 0.4%
US Real Estate 28.5%	US Municipal 10.7%	Int. Small Cap 18.6%						US Agg. Bonds 0.0%		US Municipal -0.6%
US Small Cap 26.9%	US Real Estate 8.9%	EM Debt 17.4%					EM Equity 37.8%	Hedge Funds -4.0%		Hedge Funds -6.0%
Int. Small Cap 22.0%	US Agg. Bonds 7.8%	Int. Equity 17.3%			Int. Small Cap 5.9%		Int. Small Cap 32.3%	High Yield -4.1%		Bank Loans -13.2%
EM Equity 19.2%	EM Debt 7.3%	US Real Estate 17.1%			US Real Estate 4.5%	US Small Cap 21.3%	Int. Equity 25.0%	US Real Estate -4.2%		EM Debt -13.4%
Int. Real Estate 17.4%	High Yield 3.1%	US Small Cap 16.3%	US Small Cap 38.8%	US Real Estate 31.9%	US Municipal 3.3%	High Yield 14.3%	Int. Real Estate 22.1%	EM Debt -4.3%		High Yield -15.0%
US Large Cap 15.1%	2.1%	16.0%	32.4%	13.7%	1.4%	12.0%	21.8%	-4.4%	31.5%	-19.6%
High Yield 14.8%	Bank Loans 1.8%	Bank Loans 9.4%	Int. Small Cap 26.1%	US Municipal 9.1%	EM Debt 1.2%	EM Equity 11.6%	US Small Cap 14.6%	Int. Real Estate -8.7%	US Small Cap 25.5%	Int. Equity -22.8%
EM Debt 12.2%	Cash 0.2%	US Municipal 6.8%	Int. Equity 22.8%	EM Debt 7.4%	US Agg. Bonds 0.5%	Commodities 11.4%	High Yield 10.4%	US Small Cap -11.0%	Int. Small Cap 24.5%	EM Equity -23.6%
Bank Loans 10.0%	Commodities -1.2%	Hedge Funds 4.8%	Hedge Funds 9.0%	US Agg. Bonds 6.0%	Cash 0.2%	EM Debt 10.2%	EM Debt 10.3%	Int. Equity -13.8%	US Real Estate 23.1%	Int. Real Estate -27.4%
Commodities 9.0%	US Small Cap -4.2%	US Agg. Bonds 4.2%	Int. Real Estate 7.7%	US Small Cap 4.9%	Hedge Funds -0.3%	Bank Loans 9.9%	Hedge Funds 7.8%	Commodities -13.8%	Int. Equity 22.0%	US Real Estate -28.5%
Int. Equity 7.8%	Hedge Funds -5.7%	Cash 0.2%	High Yield 7.3%	Int. Real Estate 3.4%	Bank Loans -0.4%	US Real Estate 6.6%	Commodities 5.8%	EM Equity -14.2%	Int. Real Estate 20.6%	Int. Small Cap -28.7%
US Agg. Bonds 6.5%	Int. Equity -12.1%	Commodities 0.1%	Bank Loans 6.2%	Hedge Funds 3.4%	Int. Equity -0.8%	Int. Small Cap 3.7%	US Municipal 5.4%	Int. Small Cap -18.5%	EM Equity 18.9%	US Small Cap -30.6%
Hedge Funds 5.7%	Int. Small Cap -14.5%		US Real Estate 1.3%	Bank Loans 2.1%	Int. Real Estate -1.2%	US Agg. Bonds 2.6%	Bank Loans 4.2%		Commodities 17.6%	Commodities -42.3%
US Municipal 2.4%	Int. Real Estate -15.3%		Cash 0.2%	Cash 0.2%	High Yield -2.7%	Int. Real Estate 1.6%	US Real Estate 3.8%		EM Debt 15.0%	
Cash 0.3%	EM Equity -18.2%		Commodities -1.2%	High Yield 0.0%	US Small Cap -4.4%	Int. Equity 1.0%	US Agg. Bonds 3.5%		High Yield 12.6%	
			US Agg. Bonds -2.0%	EM Equity -1.8%	EM Equity -14.6%	Hedge Funds 0.5%	Cash 1.1%		US Agg. Bonds 8.7%	
			EM Equity -2.3%	Int. Small Cap -3.4%	Commodities -32.9%	Cash 0.5%			Hedge Funds 8.4%	
			US Municipal -2.6%	Int. Equity -4.9%		US Municipal 0.2%			Bank Loans 8.2%	
			EM Debt -5.3%	Commodities -33.1%					US Municipal 7.5%	
									Cash 2.3%	

Worst Performance

Source: GSAM. As of March 31, 2020. This example is for illustrative purposes only to show the performance dispersion between various asset classes over time and the potential importance of diversification. Diversification is the process of allocating capital in a way that reduces the exposure to any one particular asset or risk. **Past performance does not guarantee future results, which may vary.** Diversification does not protect an investor from market risks and does not ensure a profit. Please see additional disclosures on page 20 of this document.

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