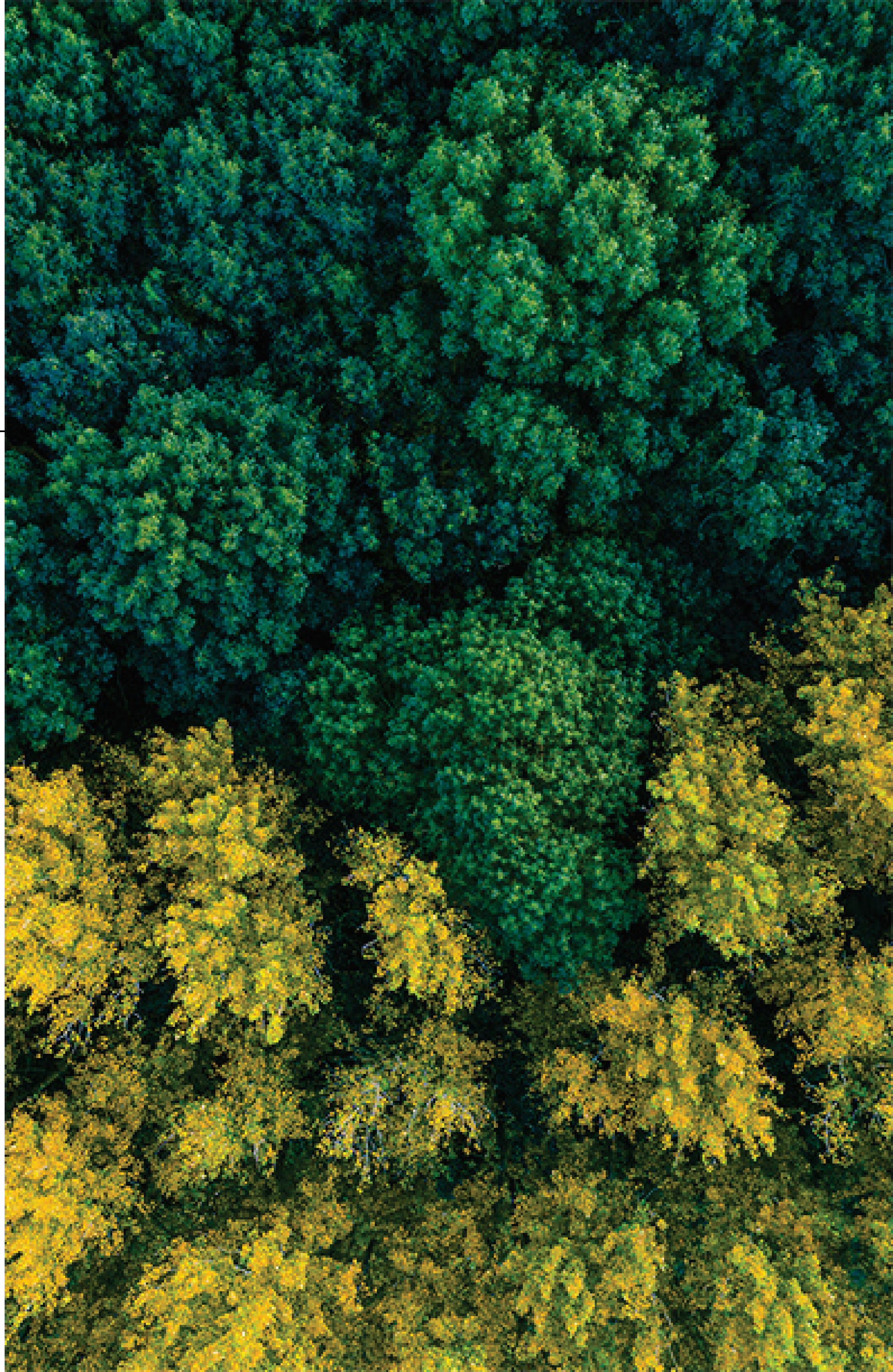
Goldman Sachs | Asset Management

Market Know-How | 2021: Edition 3

AND NOW FOR SOMETHING COMPLETELY DIFFERENT

Triannual Insights and Implementation

Strategic Advisory Solutions



MACRO AND MARKET DIGEST

Sources of Market Volatility

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

LABOR

5.4%

US Headline Unemployment Rate in July

expected decline in labor market slack as unemployment benefits expire.

INFLATION

3.75%

US Core PCE YE 2021 Forecast

elevated inflation in 2021 may advance Fed liftoff.

REGULATION

23%

Five Largest Companies

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

POLICY

60

Number of Senate Votes

needed to invoke cloture and pass laws.

Sources of Market Stability

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

BANKING

53.9%

US Bank Loan-to-Deposit Ratio

at its lowest level on record.

CORPORATES

60%

New US High Yield Issuance

earmarked for refinancing and debt pay down.

CONSUMER

711

Average FICO Score

remains highest on record.

HOUSEHOLDS

9.4%

US Savings Rate

sets stage for potential consumer rebound.

Source: Bloomberg, Federal Reserve Bank of New York, US Bureau of Labor Statistics, Goldman Sachs Global Investment Research, and Goldman Sachs Asset Management. As of August 27, 2021. "US Core PCE" refers to the US core Personal Consumption Expenditures (PCE) price index, which measures the prices paid by consumers for goods and services, without the volatility caused by movements in food and energy prices, to reveal underlying inflation trends. Any reference to a specific company or security does not constitute a recommendation to buy, sell, hold or directly invest in the company or its securities. 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.

AND NOW FOR SOMETHING COMPLETELY DIFFERENT

It was exactly fifty years ago that Monty Python's Flying Circus proclaimed "And now for something completely different." It was also precisely fifty years ago that the US withdrew from the gold standard, thus ushering in a "completely different" era of monetary policy arrangements, inflation dynamics, and market relationships. Paradigm shifts may be infrequent but, when they occur, they can have profound consequences.

This edition of the Market Know-How coincides with another moment where the future could potentially look "completely different" from the recent past. As the global economy begins to reopen we will discover over the next few months what the new post-COVID-19 "normal" looks like: will inflation prove to be sticky in a way we haven't seen for decades, and will central banks have an increased tolerance for that? Will taxes have to rise to recoup the costs of the fiscal largesse? Should we be recalibrating valuation models to reflect structural changes to cross-market relationships?

The next phase of the recovery may prove to be a paradigm shift: a move into a world of "completely different" macro and market relationships to those which we have been accustomed to in recent years. Hence, the last decade's successful portfolio allocation may require adjustments for the years ahead.

In this Market Know-How we explore how some of those factors may shape the investment landscape.

We emphasize:

- Elevating the importance of income and broadening out to non-traditional investments.
- Focusing on strategies seeking to increase portfolio resilience and capitalize on normalizing rates and inflation.
- Evaluating risk and return characteristics for digital assets, and staying on top of transformative trends impacting the investing landscape.

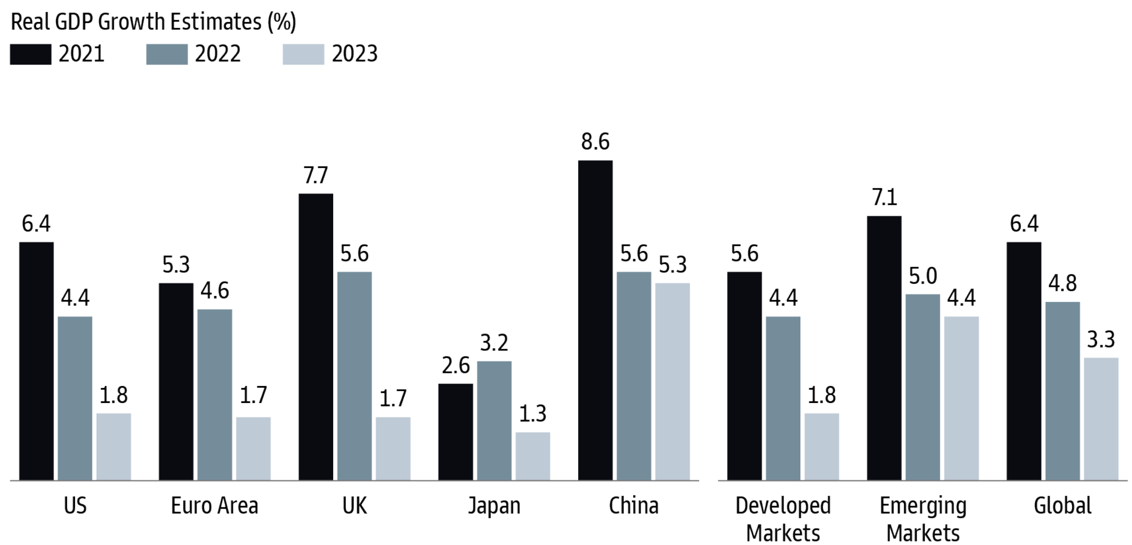
Source: Goldman Sachs Asset Management. Views and opinions expressed are for informational purposes only and do not constitute are recommendation by Goldman Sachs Asset Management to buy, sell, or hold any security. Views and opinions are current as of August 2021 and may be subject to change, they should not be construed as investment advice. 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.

MACRO

The global economy is firing on all cylinders. Activity levels in the US and China are back above pre-pandemic levels and, although Europe still has much ground to make up, our near-term growth outlook is solid across all of the world's major economies. An inflation surfeit, not a growth deficit, is now a primary challenge confronting investors and policymakers. We expect the current elevated inflation rates to be transitory, though they may have policy implications.

Global Growth

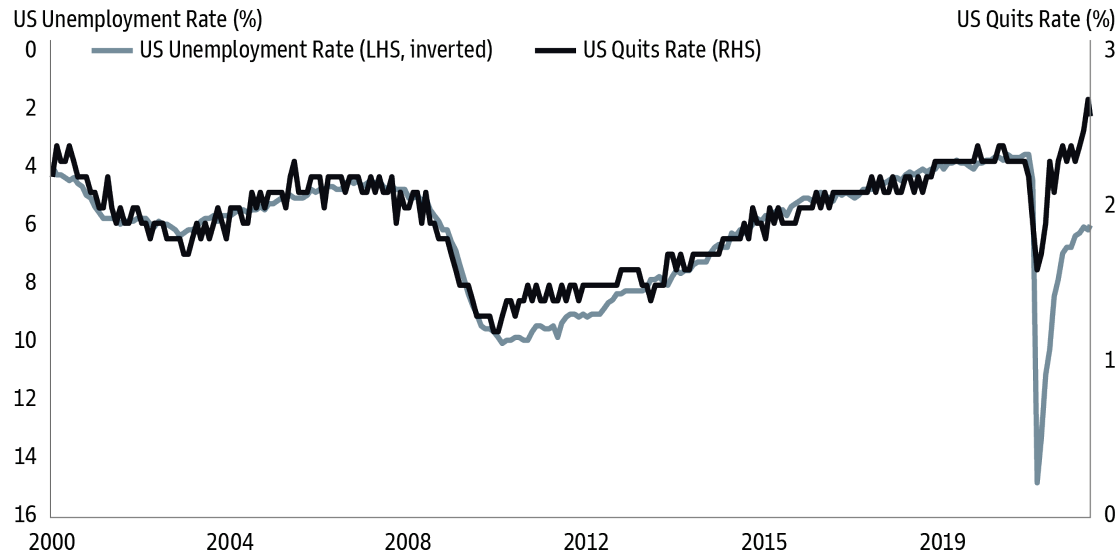
The combination of strongly pro-cyclical fiscal and monetary policies in most major economies, in conjunction with households' pent-up consumption, means that the global economy is currently enjoying its strongest period of growth in decades. Although momentum should inevitably fade as the reopening restores some semblance of normality, the global outlook for 2022 is one of continued above-potential activity. Thereafter, we expect 2023 will return to a lower but more sustainable and historically normal pace of expansion.



Source: Goldman Sachs Global Investment Research and Goldman Sachs Asset Management. As of August 2, 2021. "Real GDP" refers to Gross Domestic Product adjusted for inflation. Estimates reflect year-over-year (YoY) changes. 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.

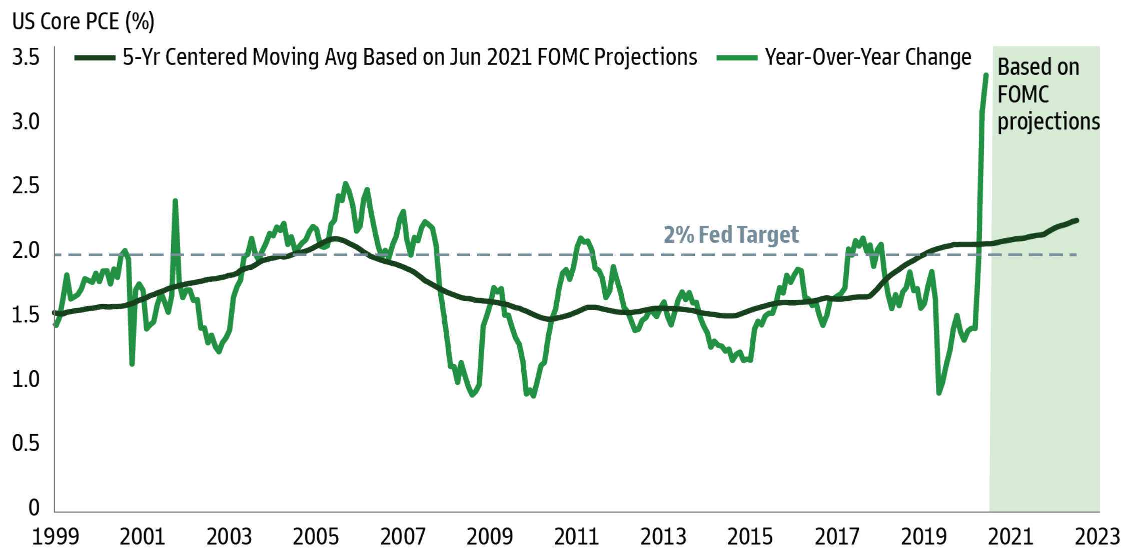
Labor

Labor markets remain in a state of unprecedented flux as firms reassess their headcount and skills needed in the COVID-19 environment. This process is likely to result in continued churn–quits and hires–in the months ahead, although the overall direction of travel is likely to be toward an improvement in overall global labor market conditions.



Inflation

Base effects, bottlenecks, and buoyant demand have combined to drive inflation rates up to levels not seen in decades. However, while some elements of that surge may prove to be sticky, the main contributors appear to be transitory and related to economic reopening. Even so, from a policy perspective the current spike cannot be ignored: for those central banks operating inflation averaging regimes, past prints may weigh on future policy.

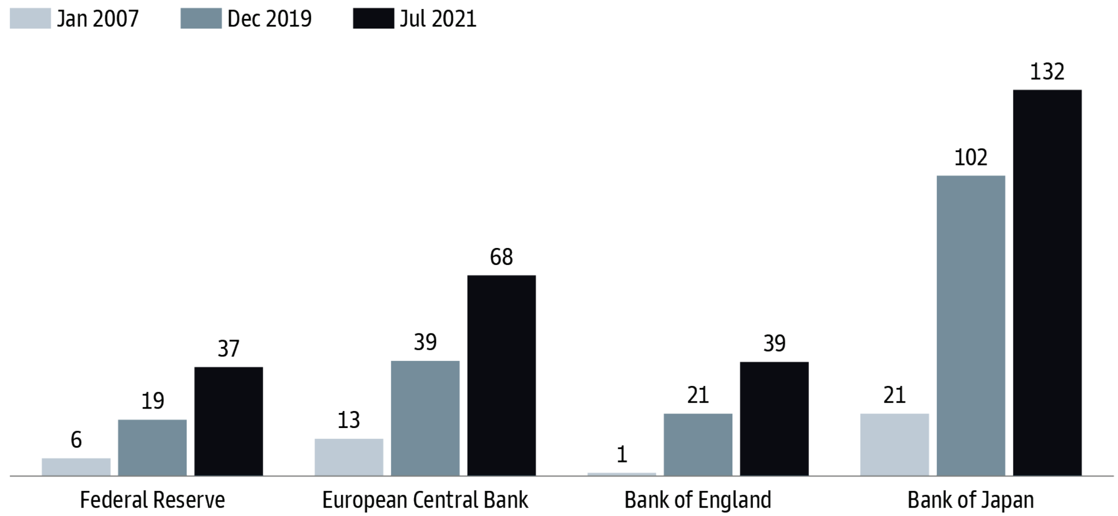


Top Section Notes: Bureau of Labor Statistics and Goldman Sachs Asset Management. As of June 30, 2021, latest available. The "Unemployment Rate" is a ratio of the number of unemployed people as a percent of the total labor force, as defined by the Bureau of Labor Statistics (BLS). The "Quits Rate" is the monthly percentage of employees that quit as defined by the BLS. Bottom Section Notes: Federal Open Market Committee (FOMC), Bloomberg, and Goldman Sachs Asset Management. As of June 30, 2021, latest available. "FOMC Projection" refers to Core PCE inflation forecasts released by the FOMC, as of June 2021. The 5-Year Centered Moving Average is calculated as the average core PCE print for the 2.5 years before, after, and inclusive of, each date. Future centered moving averages are estimated using a linear interpolation of FOMC projections through 2023. These averages are used as an approximation of inflation that the Federal Reserve may be monitoring as part of its flexible average inflation targeting framework. 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.

Policy

Most major central banks remain in accommodative mode, although some degree of policy divergence is beginning to emerge. In China, the PBoC has cut its RRR to ease financing conditions. In contrast, the Fed has brought forward its anticipated liftoff date. In the euro area and Japan, policy rates appear set to be on hold for a prolonged period. All major central banks look likely to maintain an abundance of liquidity, with balance sheets remaining elevated.

Central Bank Balance Sheet (% of Domestic GDP)



Risks

Globalization has rapidly mitigated transnational social and economic boundaries, increasing global interconnectedness in a way that is likely irreversible. However, the resulting interdependence between entities may allow for shocks to ripple through the world quicker and further than ever before. Global markets have consequently become vulnerable to systemic risks which may have previously remained localized.

Risk Themes	Examples	
Environment	Climate change	Natural disasters
Health	Human pandemics	Anti-microbial resistance
Technology	Cyber security risk	Data privacy
Geopolitics	Ineffective global governance	Trade tensions
Economy	Global financial crisis	Global economic crisis

Top Section Notes: Bloomberg and Goldman Sachs Asset Management. As of July 31, 2021. **Past performance does not guarantee future results, which may vary.** The chart shows each central bank's balance sheet assets as a percentage of their respective domestic GDP. "PBoC" refers to the People's Bank of China. "RRR" refers to the Required Reserve Ratio. Bottom Section Notes: Citi and Goldman Sachs Asset Management. As of July 31, 2021. For illustrative purposes only. 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.

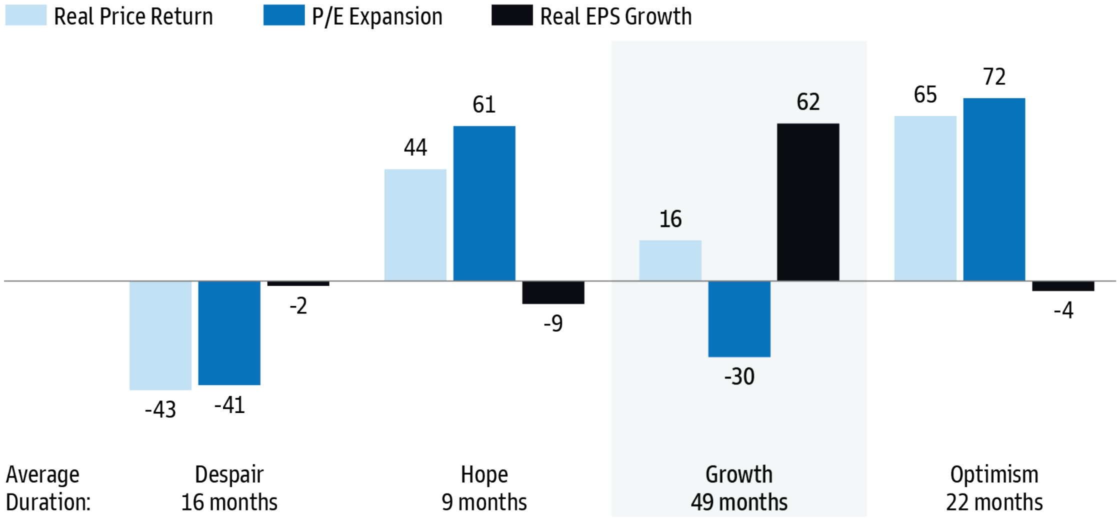
MARKETS

Global equities have continued their rally in 2021, particularly in developed markets. While we see earnings-driven upside, valuations require careful monitoring, particularly in the US. Emerging markets may offer interesting opportunities on a selective basis. Rate markets could become more volatile as central bank positioning potentially diverges in the months ahead, although we expect strong economic growth to sustain tight spreads in credit markets.

US Equities

Following an impressive policy-fueled, vaccine-led recovery, we believe the US equity cycle is transitioning back to fundamentals. While full valuations and a moderating forward-return environment may temper our optimism, equities remain our preferred asset class. As we enter the longest phase of the equity cycle – the growth phase – corporate earnings, positive investor sentiment, and increased confidence around the sustainability of the recovery may continue to drive returns.

S&P 500 Averages During Market Phases (%)

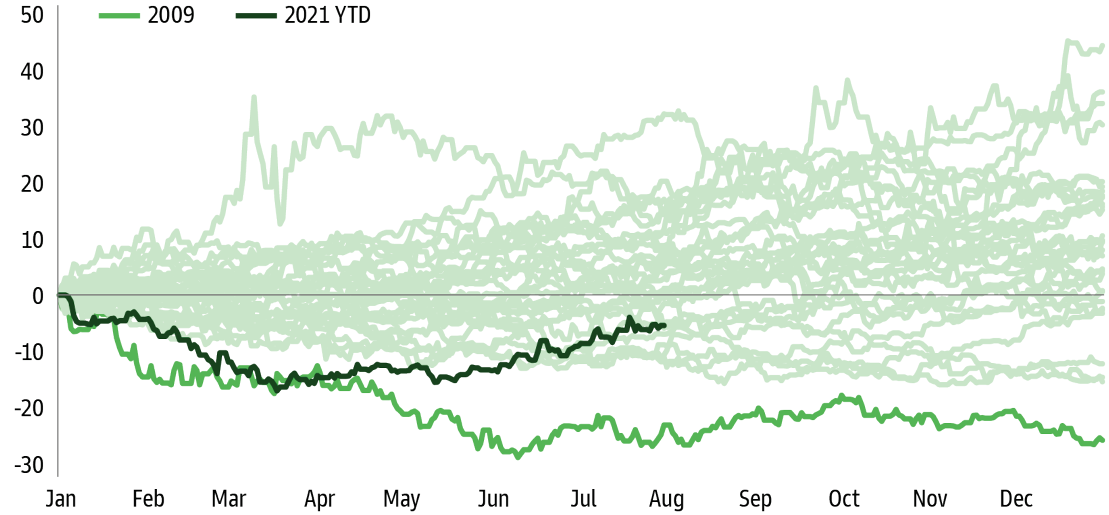


Source: Robert Shiller, Haver, Datastream, Goldman Sachs Global Investment Research, and Goldman Sachs Asset Management. As of July 31, 2021. Data from 1973 onward, non-annualized. Excludes the current equity cycle. Chart shows the S&P 500 averages across each phase of the equity cycle: Despair, Hope, Growth, and Optimism. "Despair" refers to the first period where the market moves from peak to trough. "Hope" refers to the following period where the market rebounds from its trough through P/E expansion. "Growth" refers to the following period when earnings growth drives returns. "Optimism" refers to the final period where returns are driven more by P/E multiple expansion than earnings growth. The number of months in parentheses is the average historical duration of each phase of the cycle. **Past performance does not guarantee future results, which may vary.**

Rates

The whipsaw action in Treasury markets has seen the Q1 sell-off largely reversed by a strong rally on the back of Fed rhetoric, moderating US macro conditions, and an array of technical factors. Despite the rally, the net effect is to leave DM government bonds meaningfully underperforming credit and equities. In our view, the bear flattening has taken yields down to levels that leave the belly of the curve vulnerable to potential re-steepening over the coming months.

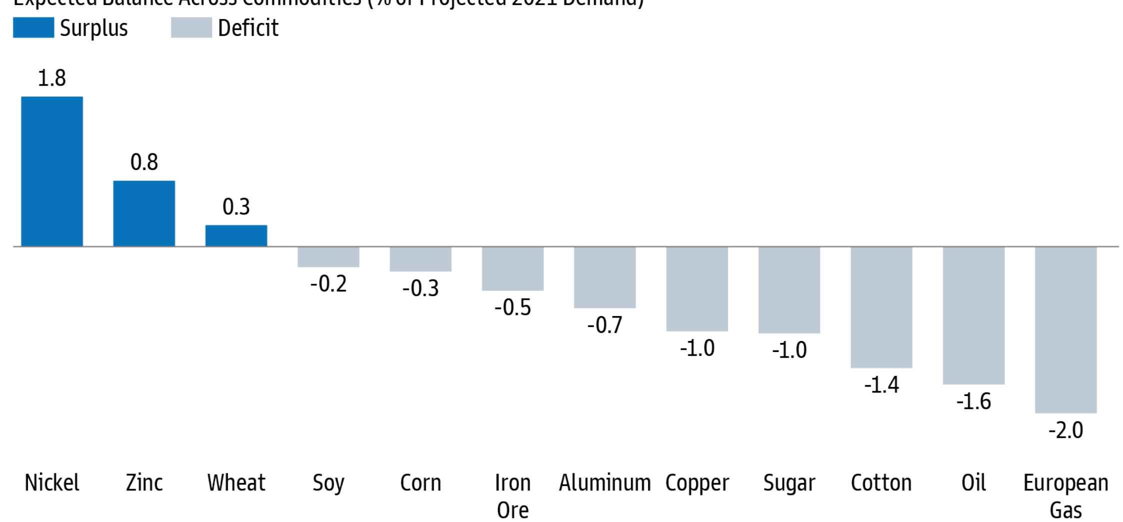
US 30-Yr Treasury Cumulative Total Return (%)



Commodities

Commodity prices have experienced a sharp rally this year driven by a strong rebound in demand and various localized supply challenges. With most commodity markets still expected to remain in deficit this year, we believe the rally has further room to run. Easing fears on monetary tightening, above-trend global growth, and historically low bond yields should continue to support commodity valuations.

Expected Balance Across Commodities (% of Projected 2021 Demand)

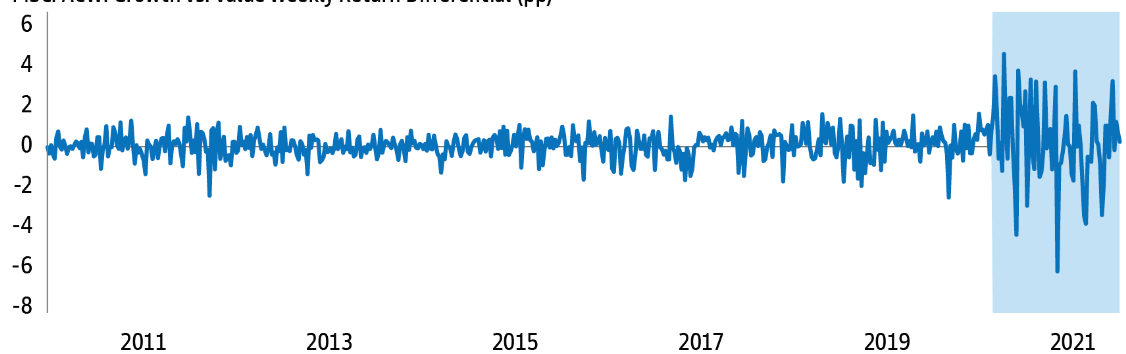


Top Section Notes: Bloomberg and Goldman Sachs Asset Management. As of July 31, 2021. Data from January 1990 to July 2021. "Fed" refers to the US Federal Reserve. "DM" refers to Developed Markets. "Bear flattening" refers to a shift in the government yield curve such that the front end yields rise more so than the long end yields. **Past performance does not guarantee future results, which may vary.** Bottom Section Notes: USDA, Woodmac, Kpler, and Goldman Sachs Global Investment Research (GIR). As of July 31, 2021. "Expected balance" refers to the difference between the supply and demand balance in a specific commodity market. Balances are calculated using GIR bottom up supply and demand estimates for each commodity, normalized by demand to compare across commodities. 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.

Growth vs. Value

Since the March 2020 market bottom, both equity styles have demonstrated powerful but episodic leadership. Although correctly timing style rotations may enhance returns, lower correlations between styles means that mistiming rotations can be costly. With investors having to be right ~60% of the time in the US market to achieve returns in-line with the S&P 500, we suggest a balanced implementation of both growth and value style equities.

MSCI ACWI Growth vs. Value Weekly Return Differential (pp)



Correlation between MSCI ACWI Growth and Value Weekly Returns

0.91	0.91	0.88	0.66	0.57
Since Inception	10Y	5Y	1Y	YTD

Volatility

The potential emergence of vaccine-resistant virus mutations remains a significant risk to the macro outlook. However, the list of risks extends far beyond the largely unquantifiable concerns around public health factors. Market risks, while generally moderate and localized, include the potential for a build-up of leverage and dilution of credit standards. On the geopolitics front, US-China tensions, European elections, and global populism may continue to drive episodic volatility.

Assessment of Market Characteristics and Risks

Common Characteristics	Any Signs?	Risks
Increased market concentration	Yes	Moderate / High
"New Era" narrative and technology innovations	Yes	Moderate / High
Excessive price appreciation and extreme valuations	Yes / Selective	Moderate
Frantic speculation and investor flows	Yes	Moderate / From low base
Booming corporate activity	Yes	Moderate / From low base
Easy credit, low rates, and rising leverage	Yes	Limited in private sector
New valuation approaches justified	Yes / Selective	Limited / Moderate
Late cycle economic boom	No	Limited
Emergence of accounting scandals and irregularities	No	Limited

Top Section Notes: Bloomberg and Goldman Sachs Asset Management. As of July 31, 2021. Analysis assumes that mistiming of style rotations occurred on a weekly basis where half of the time, style return differentials are the smallest and in the remaining half of the time, style return differentials are the largest. The "60%" scenario uses cumulative returns reflecting weekly returns since the week ending March 27, 2020 through week ending July 31, 2021, based on Russell 1000 Value and Russell 1000 Growth performances. The analysis assumes that mistiming of style rotations occurred during weeks where 50% of the differentials are the smallest and 50% of the differentials are the greatest. Past correlations are not indicative of future correlations, which may vary. **Past performance does not guarantee future results, which may vary.** Bottom Section Notes: Goldman Sachs Global Investment Research. As of July 31, 2021. For illustrative purposes only.

MACRO AND MARKETS RECAP

MACRO

Reopening momentum continues with solid gains in growth and employment, despite variant uncertainty, inflation trends, and policy transition.

MARKETS

Global equities move higher on improving fundamentals while yield curves re-steepen on cyclical strength.

OUTLOOK AND SOLUTIONS

Tax:
Max the After-Tax

Rates:
On the Up and Up

Inflation:
Expect the Unexpected

Valuation:
Realistic and Relative

Digital Assets:
No Free Lunch

Source: Goldman Sachs Asset Management. Views and opinions are current as of August 2021, 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. Goldman Sachs does not provide accounting, tax or legal advice. Please see additional disclosures at the end of this document.

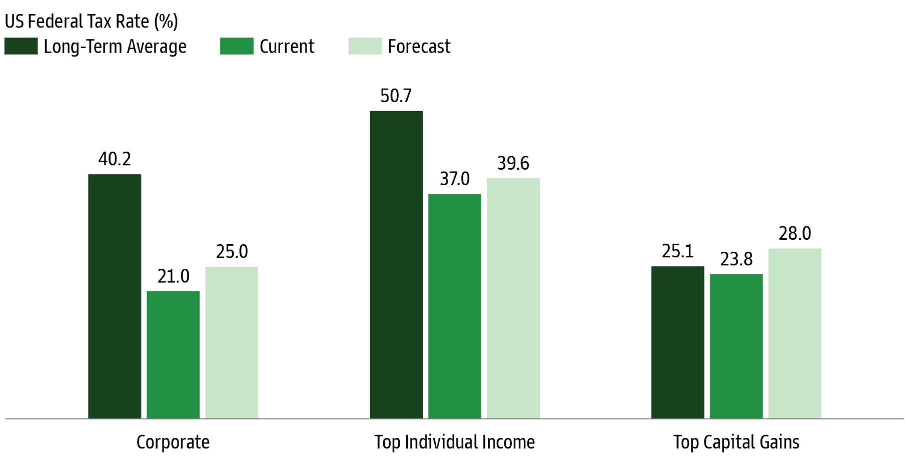
TAX

OUTLOOK

Rates may move back to long-term averages

With public spending at record highs, and tax rates at historically low levels, tax rates are likely moving higher in the future. The Biden administration has proposed to revert the top individual income rate to 39.6%, which we think could be achieved, and to raise the top capital gains rate to 43.4%, which may get negotiated down to 28%. Importantly, higher taxes should not materially change capital market opportunities. However, investors may be able to enhance their after-tax total return experience through prescriptive investment decisions.

Expectations vs. Reality



Source: Economic Policy Institute, Tax Foundation, GIR, and Goldman Sachs Asset Management.

SOLUTIONS

A Wealth of Solutions

Tax-Efficient Vehicles	Tax Loss Harvesting	Asset Location	Gain Acceleration
Municipal Bonds	Lot Management	Qualified Accounts	Time Horizon
Exchange Funds	Long-Term versus Short-Term	Trust and Estate Planning	Return Expectation
Insurance		Insurance	Cost Basis

Source: Goldman Sachs Asset Management.

- **Tax-efficient vehicles** such as municipal bonds, SMAs, and ETFs, that minimize taxable distributions by taking advantage of tax-free or tax-deferred returns
- **Tax-loss harvesting** strategies that improve after-tax returns by offsetting capital gains with realized losses
- **Asset location** approaches that strategically place investments more subject to taxable events or have high turnover inside tax-advantaged accounts
- **Gain acceleration** plans if it makes sense for investors to realize gains ahead of a higher tax regime

Top Right Section Notes: As of July 31, 2021. "Gain Acceleration" refers to investors choosing to realize capital gains sooner in order to reduce total tax liability. For illustrative purposes only. "ETFs" refer to Exchange Traded Funds. 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. Goldman Sachs does not provide accounting, tax or legal advice. Please see additional disclosures at the end of this document. Bottom Left Section Notes: As of July 31, 2021. "Long-Term Average" is calculated from January 1961 to December 2020. "Forecast" refers to Goldman Sachs Global Investment Research (GIR) forecast of tax rates that are expected to be implemented.

RATES

OUTLOOK

Interpreting Rising Rates

We anticipate improving macro fundamentals will drive global rates higher, with some choppiness likely in the path forward. The economic rebound should push long-end rates higher while key dynamics such as unemployment and inflation may shift central bank reaction functions on front-end curves. Still, we expect risk assets to grind higher should rate increases remain measured and gradual, enriching the alpha opportunities across markets. Investment solutions emphasizing 1) sensitivity to global growth, 2) lower duration, and 3) income have traditionally outperformed in rising rate environments.

Low Yields Across G7 Economies

Source: Bloomberg, Goldman Sachs Global Investment Research, and Goldman Sachs Asset Management.

SOLUTIONS

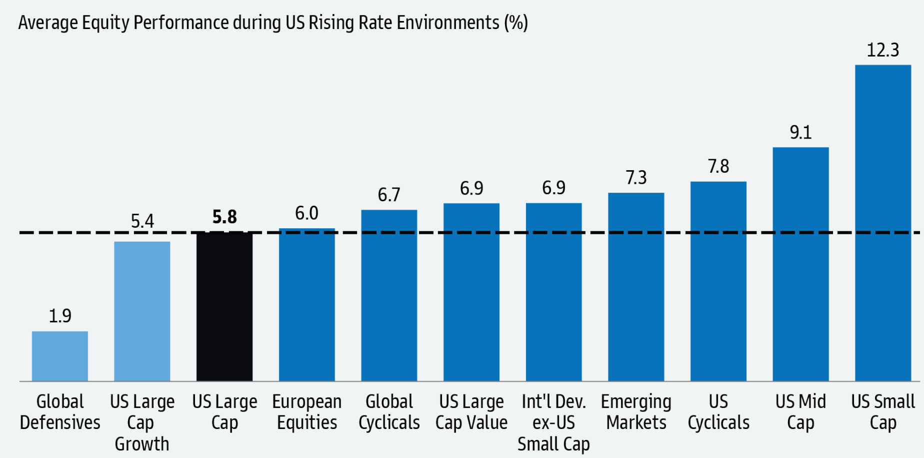
Rising Rate Investment Preferences

Asset Class Styles/Segments

Market Characteristics	Global Equities: Non-US	Global Equities: Value	Global Equities: Cyclicals	Global Equities: Small- and Mid-Cap	US Bonds: Short Duration
Cyclical Bias	●		●	●	
Lower Rate Sensitivity					●
Income Potential	●	●			●
Higher Beta to Rising Rates	●	●	●	●	
Active Selection	●	●	●	●	●

Source: Goldman Sachs Asset Management.

Performance During US Rising Rate Periods



Source: Bloomberg and Goldman Sachs Asset Management.

Top Right Section Notes: "Small- and mid-cap" equities refer to global firms with a maximum market cap of 48.4 million as of July 31, 2021. "Active selection" refers to the selection of securities expected to outperform a broad index. Bottom Left Section Notes: As of July 31, 2021. "10-Year Government Yield" refers to yield to worst of the Bloomberg Global G7 Total Return Index Value Unhedged USD. "Forecast" reflects year-end market-cap weighted 10-year yield estimates by Goldman Sachs Global Investment Research for the US, Germany, Japan, UK, Canada, and Bloomberg consensus estimates for France and Italy. Bottom Right Section Notes: As of July 31, 2021. "Rising Rate Environments" refer to periods where the US 10-Year Treasury yield increases by 75 basis points or more within a three-month time frame. Please see additional disclosures at the end of this document. **Past performance does not guarantee future results, which may vary.**

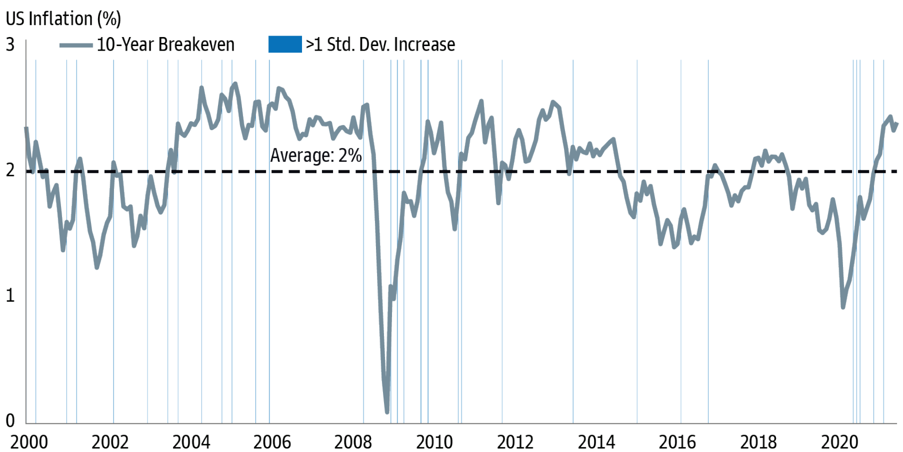
INFLATION

OUTLOOK

Transitory or Sustained?

Higher inflation prints have raised concern over how long price pressures will last, despite the Federal Reserve's assertion that this surge in inflation is transitory, driven by base effects and COVID-19 disruptions. Although we believe these temporary pressures will soon roll off, investors may see benefit in owning assets that display strong performance during periods of rapidly rising inflation expectations. Equities and real assets have historically delivered solid performance in periods of rising breakevens, with the potential to provide reliable protection when most needed.

Inflation Expectations Are Elevated



Source: Bloomberg and Goldman Sachs Asset Management.

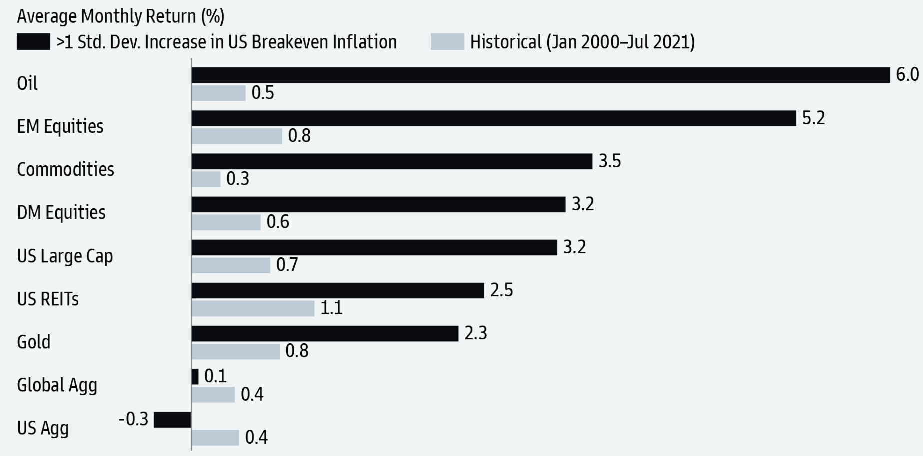
SOLUTIONS

Reflation Strategies

Asset Class	Strategy	What to Expect
Equities	US	Recovering earnings Sustainably elevated valuations
	Non-US	Discounted valuations High beta to global growth
Real Assets	Commodities	Favorable social and environmental policy Supportive technicals
	Real Estate and Infrastructure	Inflation-linked revenue streams Higher yields and diversification potential

Source: Goldman Sachs Asset Management.

Performance During Rising Breakeven Periods



Source: Bloomberg and Goldman Sachs Asset Management.

Top Right Section Notes: As of July 31, 2021. For illustrative purposes only. Bottom Left Section Notes: As of July 31, 2021. "10-Year Breakeven" is the difference between the nominal yield on the 10-Year Treasury and the real yield on the 10-Year Treasury Inflation-Protected Security (TIPS). A ">1 Std. Dev. Increase" occurs when breakeven inflation exceeds 17.4 basis points month-over-month. "Std. Dev." is Standard Deviation. Bottom Right Section Notes: Bloomberg and Goldman Sachs Asset Management. As of July 31, 2021. Data from January 2000 to July 2021. "EM" refers to Emerging Markets. "DM" refers to Developed Markets. "REITs" refers to Real Estate Investment Trusts. Please see additional disclosures at the end of this document. **Past performance does not guarantee future results, which may vary.**

VALUATION

OUTLOOK

Sustainably higher valuations, realistically lower returns

Today's elevated equity valuations may diminish return potential in the longer term, even if they do not portend a correction per se. We do not expect any imminent re-pricing of risk assets, absent renewed recessionary factors, and would be buyers of any short-term weakness. Even so, we see greater opportunities in more affordable pockets of the global equity market, particularly in a security-specific approach. Additionally, diversifying assets, or those that can secure returns through dividend income rather than capital appreciation, may benefit portfolios in a lower return environment.

US Equity Valuations

Source: Robert Shiller, Bloomberg, and Goldman Sachs Asset Management.

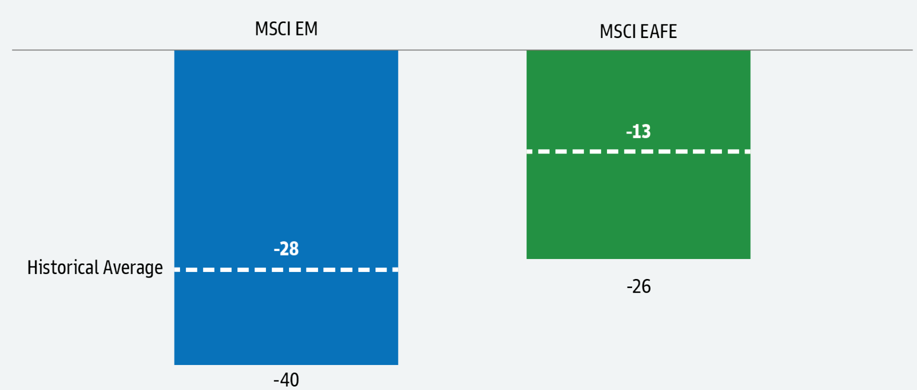
SOLUTIONS

Investment Adjustments

Approach	Strategy	What to Expect
Be Realistic about Forward Returns	**Income-Oriented Strategies**	Capturing more total return through yield
	Private Assets	Differentiated market access Additional built-in premiums
Find Relative Value	**Emerging Market Equities**	Significant discount to US equities
	Developed Market ex-US Equities	Historically attractive valuation levels
Source Alpha Idiosyncratically	**Active Equity Management**	Expect market breadth to decline Identify security-specific opportunities at attractive prices

Source: Goldman Sachs Asset Management.

Global Equity Solutions



Source: Bloomberg and Goldman Sachs Asset Management.

Top Right Section Notes: As of July 31, 2021. For illustrative purposes only. Bottom Left Section Notes: As of July 31, 2021. "CAPE" refers to the Cyclically-Adjusted Price-to-Earnings ratio. Chart shows historical percentile of the CAPE ratio and the 10-year average subsequent return. Bottom Right Section Notes: As of July 31, 2021. The chart shows the discount of the forward price-to-earnings (P/E) ratio of the MSCI Emerging Markets (EM) and MSCI EAFE indices relative to the S&P 500 Index. "Historical Average" measures data from May 2005, earliest available, to July 2021. **Past performance does not guarantee future results, which may vary.**

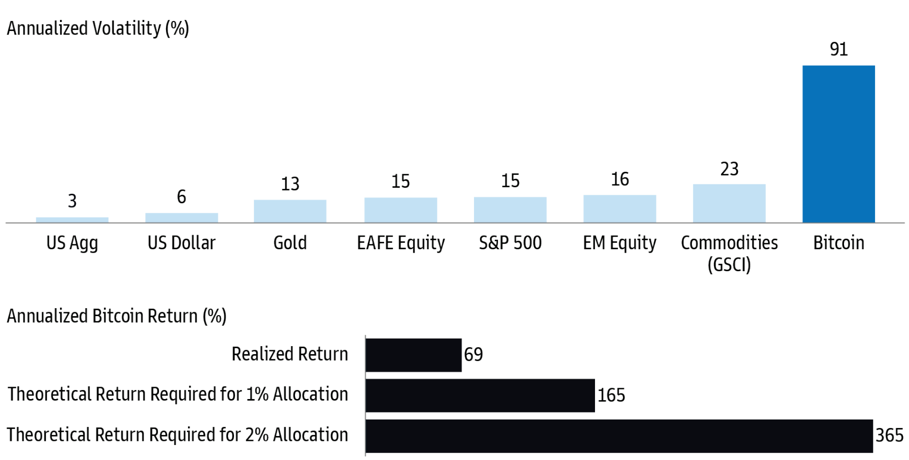
DIGITAL ASSETS

OUTLOOK

A Growing But Speculative Market

Since the creation of Bitcoin in 2009, over 11,000 cryptocurrencies have been established and the market has grown to more than $1.6tn. Interest has been driven by speculative sentiment, potential equity and inflation hedging capabilities, and the development of blockchain applications and digital assets. However, given extreme volatility, our analysis suggests a 1% portfolio allocation to Bitcoin would require a 165% long-term annualized return. As such, while the high idiosyncratic risk may be appealing to risk-seeking traders such as hedge funds, they do not merit a strategic allocation in our view.

The Good, the Bad, and the Volatility



Source: Bloomberg, Goldman Sachs Investment Strategy Group, and Goldman Sachs Asset Management.

DID YOU KNOW?

Stats and Facts

Portfolio Construction: Cryptocurrencies have exhibited inconsistent relationships with traditional asset classes and have a higher one-year probability of drawdowns. Bitcoin has had a 72% probability of a 60% or more drawdown per year since inception.

Alt-Coins: Alt-coins are cryptocurrencies that have been developed to improve upon the original characteristics of Bitcoin. These alt-coins include Ethereum, Tether, and Cardano, and now comprise more than half (51%) of the crypto market cap. They may challenge Bitcoin dominance.

Regulatory Risk: Regulatory risk remains significant and complex for digital assets. Countries such as China are prohibiting financial institutions from providing any services related to cryptocurrencies, while El Salvador is adopting Bitcoin as legal tender. Many regulations are not clear and are still in development.

ESG: Bitcoin mining consumes ~110 Terawatt Hours per year, which is 0.55% of global electricity production, or roughly equivalent to the annual energy consumption of Malaysia or Sweden. Alt-coins add another 50% to cryptocurrency's energy consumption.

CBDCs: More than 60% of global central banks are experimenting with Central Bank Digital Currencies (CDBCs), a digital form of a country's fiat currency that is regulated by the central bank. In October 2020, the Bahamas launched the world's first CBDC, the Sand Dollar.

Blockchain: Digital assets are still in nascent stages of development. In our view, the underlying technology, blockchain—shared databases that are decentralized and encrypted—may be transformative, impacting industries from finance to insurance to healthcare.

Source: Goldman Sachs Investment Strategy Group, Coinmetrics, Cambridge Center for Alternative Finance (CCAF), and Goldman Sachs Asset Management.

Top Left Section Notes: Size of crypto market is as of July 31, 2021. Right Section Notes: The probability of a 60% more drawdown per year is calculated based on Bitcoin price data since its inception (July 2010) through July 2021. "Alt-coins" refer to any cryptocurrency that is not Bitcoin. Bitcoin mining energy consumption data is from Cambridge Center for Alternative Finance (CCAF) as of May 2021, latest available. Percent of global central banks experimenting with CBDCs is as of June 2021, latest available. Bottom Left Section Notes: Realized Return based on Bitcoin spot price from since its inception (July 2010) through July 2021. Top chart's annualized volatility refers to standard deviation of Bitcoin price movements compared with those of several major asset classes. Bottom chart's theoretical return required for 1% and 2% allocation to Bitcoin shows the expected long-term annualized Bitcoin return required for a 1% or 2% allocation within a moderate-risk portfolio using Goldman Sachs Investment Strategy Group's robust optimization model. Please see additional disclosures at the end of this document. **Past performance does not guarantee future results, which may vary.**

CONTRIBUTORS

John Tousley, CFA
Global Head of Market Strategy

John leads the Market Strategy team, focusing on global capital markets, macro strategy, and implementation. He specializes in developing tactical and strategic investment insights within a risk-aware framework.

Candice Tse
Global Head of Strategic Advisory Solutions

Candice is the global head of Strategic Advisory Solutions, which delivers Goldman Sachs Asset Management's perspectives on global markets, strategic asset allocation, and innovative business practices.

James Ashley
International Head of Strategic Advisory Solutions

James is the head of the International Market Strategy team, with responsibility for providing actionable investment ideas and perspectives on the latest international market developments.

Davide Andaloro, CFA
Senior Market and Portfolio Strategist

Davide is responsible for analyzing macroeconomic dynamics and developing timely market views across different asset classes.

Maria Li, CFA
Senior Market Strategist

Maria is responsible for analyzing macroeconomic trends and financial market data to develop strategic asset class views. She delivers market insights to clients, guiding effective and informed investment decisions.

Wendy Lin, CFA
Senior Market Strategist

Wendy is responsible for helping clients contextualize the macro and market environment, and offering timely implementation ideas. Her areas of expertise include analyzing equity styles, valuation, and US pension trends.

Romain Duvergé
Senior Market and Portfolio Strategist

Romain is part of the International Market Strategy team, responsible for delivering market and macroeconomic insights, as well as strategic asset allocation.

Izabella Goldenberg, CFA
US Head of Portfolio Strategy

Izabella leads our US Portfolio Strategy team, responsible for helping clients construct portfolios with a specific emphasis on asset allocation and implementation strategies.

Kate Ju
Market and Portfolio Strategist

Jennifer Prosser
Market Strategist

Shagun Varma
Market Strategist

Adrien Forrest
Market and Portfolio Strategist

Source: Goldman Sachs Asset Management.

GLOSSARY

Equities

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 **MSCI All Country World (ACWI) Growth Index** captures large and mid cap securities exhibiting overall growth style characteristics across 23 developed markets countries and 27 emerging markets countries.

The **MSCI All Country World Investable Market Index (ACWI IMI)** is a market capitalization weighted index designed to provide a broad measure of equity-market performance throughout the world, including large, mid and small cap stocks across 23 developed markets and 27 emerging markets countries.

The **MSCI All Country World (ACWI) Value Index** captures large and mid cap securities exhibiting overall value style characteristics across 23 developed markets countries and 27 emerging markets countries.

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 **MSCI USA Cyclical Sectors Index** is based on MSCI USA Index, its parent index and captures large and mid-cap segments of the US market. The index is designed to reflect the performance of the opportunity set of global cyclical companies across various GICS® sectors.

The **Russell 1000 Index** is an unmanaged index of common stock prices that measures the performance of the large cap value segment of the US equity universe.

The **Russell 1000 Growth Index** is an unmanaged index that measures the performance of the large cap growth segment of the US equity universe.

The **Russell 1000 Value Index** is an unmanaged index of common stock prices that measures the performance of the large cap value segment of the US equity universe.

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 **Russell Mid Cap Index** is an index that measures the performance of the mid-capitalization segment of the US equity market.

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 G7 Total Return Index** measures investment grade debt from G7 countries (Canada, France, Germany, Italy, Japan, the United Kingdom and the United States).

The **Bloomberg Global Aggregate Bond Index** measures global investment grade debt from 24 local currency markets, including treasury, government-related, corporate, and securitized fixed-rated bonds from both developed and merging market issuers.

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

The **Bloomberg 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 pre-refunded bonds.

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

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 **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.

Bitcoin is the first cryptocurrency that may be transacted on the peer-to-peer bitcoin network using blockchain technology.

The **Bloomberg Commodity Index** offers liquid exposure to physical commodities via futures contracts. The diversified composition of the Index aims to produce an attractive risk-return profile over time while ensuring that no single commodity or sector dictates the investment.

The **Bloomberg Gold Subindex**, or formerly known as Dow Jones-UBS Gold Subindex, reflects the returns on fully collateralized gold future positions.

The **Bloomberg WTI Crude Oil Subindex** is a single commodity subindex of the Bloomberg Commodity Index, composed of futures contracts on crude oil, and reflects the return of underlying commodity futures price movements only in USD.

Cyclical bias refers to securities whose stock price and business performance have high sensitivity to overall macroeconomic conditions.

The **Cyclically Adjusted Price-to-Earnings (CAPE) ratio** is a valuation measure usually applied to the broad equity market, that uses real per-share earnings over a 10-year period, smoothing out real earnings to eliminate fluctuations in net income cause by variations in profit margins over a typical business cycle.

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

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

Earnings per share (EPS) is the portion of a company's profit allocated to each outstanding share of common stock. Earnings per share serves as an indicator of a company's profitability.

ESG stands for Environmental, Social, and Governance.

Gold spot price measures the current market price at which gold is bought or sold for immediate payment and delivery, quoted as US dollars per Troy Ounce.

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.

The **loan-to-deposit ratio (LDR)** measures a bank's liquidity by comparing a bank's total loan to its total deposits for the same period.

GLOSSARY

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

The **price-to-earnings ratio (P/E ratio)** is the ratio for valuing a company that measures its current share price relative to its per-share earnings (EPS).

Private assets refers to equity or debt investments that are not accessible via public markets, including private equity, private credit, and private real estate.

The **quits rate** is the monthly percentage of employees that quit as defined by the US Bureau of Labor Statistics.

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

The **Reserve Requirement Ratio (RRR)** refers to the central bank regulation that sets the minimum amount a commercial bank must hold in reserves as a specified percentage of the amount of deposit liabilities.

The **S&P GSCI Commodity Index** is a composite index of commodity sector returns, representing an unleveraged, long-only investment in commodity futures that is broadly diversified across the spectrum of commodities.

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

Treasury Inflation-Protected Securities (TIPS) is a US Treasury bond that is indexed to an inflationary gauge to protect investors from the decline in the purchasing power of their money.

The **US headline unemployment rate (U3)** is a ratio of the number of unemployed people as a percent of the total labor force, as defined by the US Bureau of Labor Statistics.

A **US recession** is defined by the National Bureau of Economic Research (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.

The **US Personal Consumption Expenditure (PCE)** refers to the measure of prices that people in the US, or those buying on their behalf, pay for goods and services.

The **US Core Personal Consumption Expenditure (PCE) Price Index** provides a measure of the prices paid by people for domestic purchases of goods and services, excluding the prices of food and energy. The core PCE is the Federal Reserve's preferred inflation measure.

The **US dollar index** is a measure of the value of the US dollar relative to the value of a basket of currencies (the euro, Japanese Yen, British Pound, Canadian Dollar, Swedish Krona, and Swiss Franc).

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.

Buying, selling and using cryptocurrencies carry numerous risks. Digital currency is not legal tender. No law requires companies or individuals to accept cryptocurrencies as a form of payment. Instead, cryptocurrencies use is limited to businesses and individuals that are willing to accept them. If no one accepts them, cryptocurrencies will become worthless. Cryptocurrency payments are irreversible.

Platforms that buy and sell cryptocurrencies can be hacked, and some have failed. In addition, like the platforms themselves, digital wallets can be hacked. As a result, consumers can—and have—lost money.

Cryptocurrency transactions can be subject to fraud and theft. Unlike US banks and credit unions that provide certain guarantees of safety to depositors, there are no such safeguards provided to digital wallets.

The above are not an exhaustive list of potential risks. There may be additional risks that should be considered before any investment decision.

Index Benchmarks

Indices are unmanaged. The figures for the index reflect the reinvestment of all income or dividends, as applicable, but do not reflect the deduction of any fees or expenses which would reduce returns. Investors cannot invest directly in indices.

The indices referenced herein have been selected because they are well known, easily recognized by investors, and reflect those indices that the Investment Manager believes, in part based on industry practice, provide a suitable benchmark against which to evaluate the investment or broader market described herein.

GENERAL DISCLOSURES

Page 12 Top Right Section Notes: Chart shows global asset class styles or segments and market characteristics that tend to perform well under US rising interest rate environments. Bottom Right Section Notes: "Global Defensives" refers to Goldman Sachs Global Investment Research proprietary basket GSSBGDEF. "US Large Cap Growth" refers to the Russell 1000 Growth Index. "US Large Cap" refers to the S&P 500 Index. "European Equities" refers to Euro Stoxx 600 Index. "Global Cyclicals" refers to Goldman Sachs Global Investment Research proprietary basket GSSBGCYC. "US Large Cap Value" refers to the Russell 1000 Value Index. "Int'l Dev. ex-US Small Cap" refers to the S&P Developed ex-US Small Cap Index. "Emerging Markets" refers to the MSCI Emerging Markets Index. "US Cyclicals" refers to the MSCI USA Cyclical Gross Returns. "US Mid Cap" refers to the Russell Mid Cap Index. "US Small Cap" refers to the Russell 2000 Index.

Page 13 Bottom Right Section Notes: "Oil" refers to the Bloomberg WTI Crude Oil Subindex . "EM Equities" refers to the MSCI Emerging Markets Index. "Commodities" refers to the Bloomberg Commodity Index. "DM Equities" refers to the MSCI World Index. "US Large Cap" refers to the S&P 500 Index. "US REITs" refers to the Dow Jones US Select Real Estate Securities Index. "Gold" refers to the Bloomberg Gold Subindex. "Global Agg" refers to the Bloomberg Global Aggregate Index. "US Agg" refers to the Bloomberg US Aggregate Bond Index.

Page 15 Bottom Left Section Notes: "US Agg" refers to the Bloomberg US Aggregate Bond Index. "US Dollar" refers to the US Dollar Index. "Gold" refers to Gold spot price. "EAFE Equity" refers to the MSCI EAFE Index. "S&P 500" refers to the S&P 500 Index. "EM Equity" refers to the MSCI Emerging Markets Index. "Commodities (GSCI)" refers to the S&P GSCI Commodity Index. "Bitcoin" refers to Bitcoin spot price.

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 Global High Yield Index. "Int. Equity" is represented by the MSCI EAFE Index. "Int. Real Estate" is represented by the S&P Developed ex-US Property Index. "Int. Small Cap" is represented by the S&P Developed ex-US Small Cap Index. "US Agg. Bonds" are represented by the Bloomberg US Aggregate Bond Index. "US Large Cap" is represented by the S&P 500 Index. "US Municipal" is represented by the Bloomberg 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.

This material is provided for informational purposes only and should not be construed as investment advice or an offer or solicitation to buy or sell securities.

This information discusses general market activity, industry or sector trends, or other broad-based economic, market or political conditions and should not be construed as research or investment advice. This material has been prepared by GSAM and is not financial research nor a product of Goldman Sachs Global Investment Research (GIR). It was not prepared in compliance with applicable provisions of law designed to promote the independence of financial analysis and is not subject to a prohibition on trading following the distribution of financial research. The views and opinions expressed may differ from those of Goldman Sachs Global Investment Research or other departments or divisions of Goldman Sachs and its affiliates. Investors are urged to consult with their financial advisors before buying or selling any securities. This information may not be current and GSAM has no obligation to provide any updates or changes.

Economic and market forecasts presented herein reflect a series of assumptions and judgments 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 has no obligation to provide updates or changes to these forecasts. Case studies and examples are for illustrative purposes only.

The opinions expressed in this paper are those of the authors, and not necessarily of GSAM. The investments and returns discussed in this paper do not represent any Goldman Sachs product.

This paper makes no implied or express recommendations concerning how a client's account should be managed and is not intended to be used as a general guide to investing or as a source of any specific investment recommendations.

Although certain information has been obtained from sources believed to be reliable, we do not guarantee its accuracy, completeness or fairness. We have relied upon and assumed without independent verification, the accuracy and completeness of all information available from public sources.

Views and opinions expressed are for informational purposes only and do not constitute a recommendation by GSAM to buy, sell, or hold any security. Views and opinions are current as of the date of this document and may be subject to change, they should not be construed as investment advice.

Goldman Sachs does not provide legal, tax or accounting advice, unless explicitly agreed between you and Goldman Sachs (generally through certain services offered only to clients of Private Wealth Management). Any statement contained in this document concerning U.S. tax matters is not intended or written to be used and cannot be used for the purpose of avoiding penalties imposed on the relevant taxpayer. Notwithstanding anything in this document to the contrary, and except as required to enable compliance with applicable securities law, you may disclose to any person the US federal and state income tax treatment and tax structure of the transaction and all materials of any kind (including tax opinions and other tax analyses) that are provided to you relating to such tax treatment and tax structure, without Goldman Sachs imposing any limitation of any kind. Investors should be aware that a determination of the tax consequences to them should take into account their specific circumstances and that the tax law is subject to change in the future or retroactively and investors are strongly urged to consult with their own tax advisor regarding any potential strategy, investment or transaction.

Compliance Code: 249030-OTU-1470126. Date of first use: September 7, 2021.

In addition to the Market Know-How, we offer timely market updates and implementation on asset classes. For additional content, please visit us at gsam.com.

MARKET MONITOR: WEEKLY MARKET UPDATES


Keep Your Win Up


Help Wanted


Taper, no Tantrum


A Flattening Curve

MARKET PULSE: MONTHLY MARKET AND THEME UPDATES


Back to School ABCs


In-and-out of style


Going Global


Tax Charge

A Long-term Partnership

Strategic Advisory Solutions provides a comprehensive suite of integrated solutions designed to help our clients grow and enhance their businesses. Our global team of experienced strategists aims to deliver in-depth expertise to help clients understand dynamic markets, design well-diversified strategic portfolios, and implement industry best practices through programs tailored to each organization. We partner with our clients to develop actionable solutions to help them achieve their goals.

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

RELATIVE ASSET CLASS CALENDAR-YEAR PERFORMANCE

Best Performance

2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021 YTD
	Int. Real Estate 37.5%						Cash 2.0%			
	High Yield 19.6%						US Municipal 1.3%			
	EM Equity 18.6%						Bank Loans 1.1%			
US Municipal 10.7%	Int. Small Cap 18.6%						US Agg. Bonds 0.0%			
US Real Estate 8.9%	EM Debt 17.4%					EM Equity 37.8%	Hedge Funds -4.0%			
US Agg. Bonds 7.8%	Int. Equity 17.3%			Int. Small Cap 5.9%		Int. Small Cap 32.3%	High Yield -4.1%			Commodities 31.4%
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%		US Small Cap 20.0%	US Real Estate 22.9%
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%		EM Equity 18.7%	US Small Cap 17.5%
2.1%	16.0%	32.4%	13.7%	1.4%	US Large Cap 12.0%	21.8%	-4.4%	31.5%	18.4%	15.3%
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. Small Cap 14.2%	Int. Small Cap 10.3%
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%	Hedge Funds 10.9%	Int. Real Estate 9.2%
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. Equity 7.8%	Int. Equity 8.8%
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 Agg. Bonds 7.5%	EM Equity 7.6%
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%	High Yield 7.0%	Hedge Funds 4.8%
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%	EM Debt 5.3%	Bank Loans 3.5%
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%	US Municipal 5.2%	High Yield 2.1%
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%	Bank Loans 2.8%	US Municipal 1.1%
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%	Cash 0.7%	Cash 0.1%
		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%	Int. Real Estate -5.3%	EM Debt -0.7%
		EM Equity -2.3%	Int. Small Cap -3.4%	Commodities -32.9%	Cash 0.5%			Hedge Funds 8.4%	US Real Estate -11.2%	US Agg. Bonds -1.6%
		US Municipal -2.6%	Int. Equity -4.9%		US Municipal 0.2%			Bank Loans 8.2%	Commodities -23.7%	
		EM Debt -5.3%	Commodities -33.1%					US Municipal 7.5%		
								Cash 2.3%		

Worst Performance

Source: Goldman Sachs Asset Management. As of June 30, 2021. 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.

For additional content, please visit us at gsam.com.

SASMARKET_T3/21