Goldman Sachs Asset Management

Market Pulse

Special Edition: 10 for 2021

Perspectives from GSAM Strategic Advisory Solutions

MACRO & MARKET VIEWS

1 **ECONOMIC GROWTH:** Policy expansion, vaccine availability, and geopolitical clarity should set the foundation for a ~6% global recovery and 5% US recovery in 2021. While virus seasonality may pose a risk, we believe an absence of financial imbalances may unlock a quick cyclical rebound upon mass immunization by 2021 year end (YE).

2 **LABOR:** We believe a multi-year growth acceleration is required to normalize unemployment rates. By 2021 YE, we estimate unemployment rates to decline to 5.4% and 9.9% for the US and the Euro area. Business re-opening may gradually reduce labor market slack, though lingering structural unemployment may cap wage and price inflation.

3 **INFLATION:** Cyclical recovery has replaced a large US fiscal package as the primary driver of US reflation. Prices may firm up significantly in COVID-sensitive sectors, but are unlikely to sustain central bank inflation targets across DM markets. Our Q4 2021 forecasts for US and Euro area core inflation are 1.6% and 0.8%, respectively.

4 **MONETARY POLICY:** Fed guidance has made >2% inflation a prerequisite for policy liftoff. Given this greater appetite for an inflation overshoot under the average inflation targeting framework, we expect the funds rate to remain at the zero-bound through 2024. Other DM policymakers will likely stay accommodative to help aid the recovery.

5 **GEOPOLITICS:** The composition of US government will be known in January. We expect a divided Congress to limit the President-elect's legislative flexibility. In Europe, we anticipate a "thin" Brexit deal, but also believe that the EU-UK relationship may be subject to the evolving preferences of future administrations.

6 **EQUITIES:** The early stages of the next bull market expansion are likely to see equity returns pulled forward given policy support, vaccine prospects, and economic re-opening. We believe secular trends will continue to reinforce growth themes, but the recovery may promote tactical outperformance from value and non-US equities.

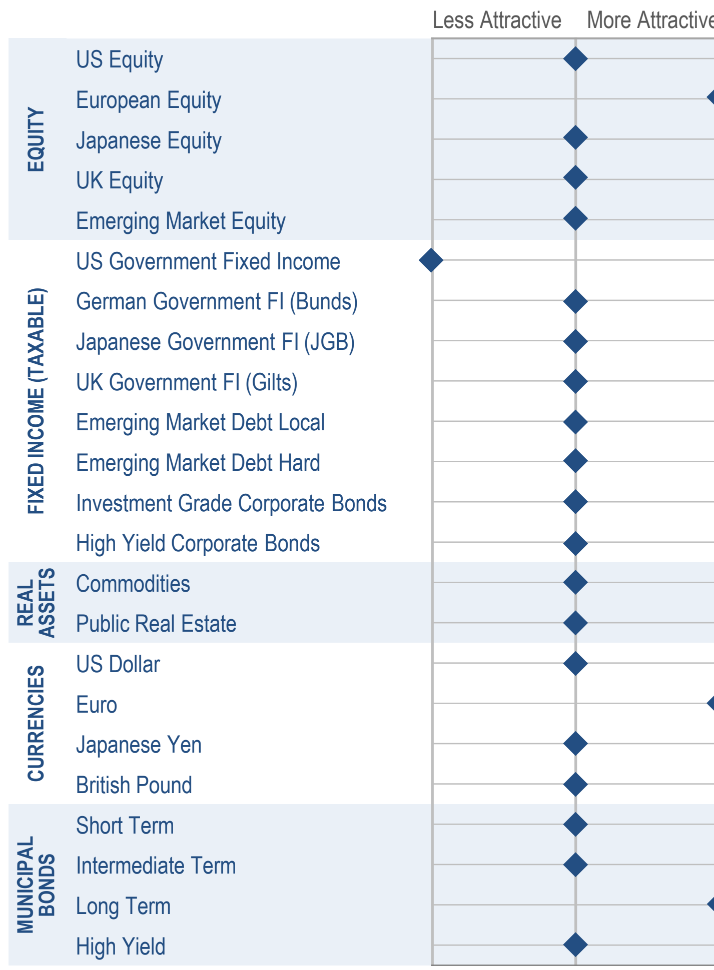
7 **RATES:** We expect steeper yield curves as policymakers commit to keeping front-end rates low, but improving growth and inflation outlooks drive long-end rates higher. Weak inflation may limit upside internationally, but more negative policy rates are less likely.

8 **CREDIT:** Strong growth and continued policy support will allow defaults and spreads to further normalize in 2021 (US IG: 100 bps, US HY: 340 bps). The combination of anchored yields and easing volatility premium should also reinforce "down-in-quality" themes, particularly if more bullish cyclical and commodity trends extend.

9 **CURRENCY:** The US dollar may continue to weaken given high valuations, deeply negative US real rates, and a recovery of global growth. We expect US dollar downside to broaden, with potential underperformance versus G10 and EM FX.

10 **VOLATILITY:** We expect episodic market volatility to continue as we navigate the recovery. We believe that moments of tactical uncertainty are best addressed with strategic design and discipline.

ASSET CLASS VIEWS[1]



ASSET CLASS FORECASTS[2]

	Current	3m	12m	% Δ to 12m
S&P 500 ($)	3638	3700	4300	18.2
STOXX Europe (€)	393	405	430	9.4
MSCI Asia-Pacific Ex-Japan ($)	635	650	700	10.2
TOPIX (¥)	1787	1750	1875	5.0
10-Year Treasury	0.8	0.8	1.2	38.6 bp
10-Year Bund	(0.6)	(0.6)	(0.4)	18.5
10-Year JGB	0.0	0.0	0.1	7.7
Euro (€/$)	1.19	1.17	1.25	4.6
Pound (£/$)	1.33	1.34	1.44	7.9
Yen ($/¥)	104	103	100	(3.9)
Brent Crude Oil ($/bbl)	48.2	47.0	63.0	30.8
London Gold ($/troy oz)	1779	2300	2300	29.3

Source: Goldman Sachs Global Investment Research and GSAM as of December 2020. The economic and market forecasts presented herein are for informational purposes as of the date of this presentation. There can be no assurance that the forecasts will be achieved. Please see additional disclosures a t the end of this presentation. **Past performance does not guarantee future results, which may vary.**

CLIMATE OF CHANGE

COVID-19 has led economies to their deepest recessions and quickest recoveries. We believe 2021 will be a year dedicated to repairing businesses and households. A COVID-19 vaccine should accelerate the growth rebound, while ongoing fiscal and monetary policy intervention should stabilize corporate earnings and personal income. As the backdrop improves, we believe investor focus on strategic discipline, risk management, and quality should still prove important in the year ahead.

Sources of Market Volatility

Coronavirus

191

Countries/Regions

reported COVID-19 outbreaks and containment remains a challenge.

Vaccines

60–70%

Immunized Population

in order to achieve herd immunity.

Reopening

67%

US Activity

from pre-COVID levels as recovery has stalled.

Regulation

22%

Five Largest Companies

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

Liquidity

72%

US Equity Volume

is algorithmically traded, which could limit liquidity during periods of market shocks.

Sources of Market Stability

Monetary Policy

100%

Major Central Banks

engaged in unprecedented stimulus.

Fiscal Policy

~18%

US GDP

reflects the total US discretionary fiscal spending expected through 2021.

Inflation

1.6%

US Core PCE

in 2021 allows ample room for policy support.

Refinancing

$3.4 tn

Mortgage Origination

reflects low interest rates and housing strength.

Household

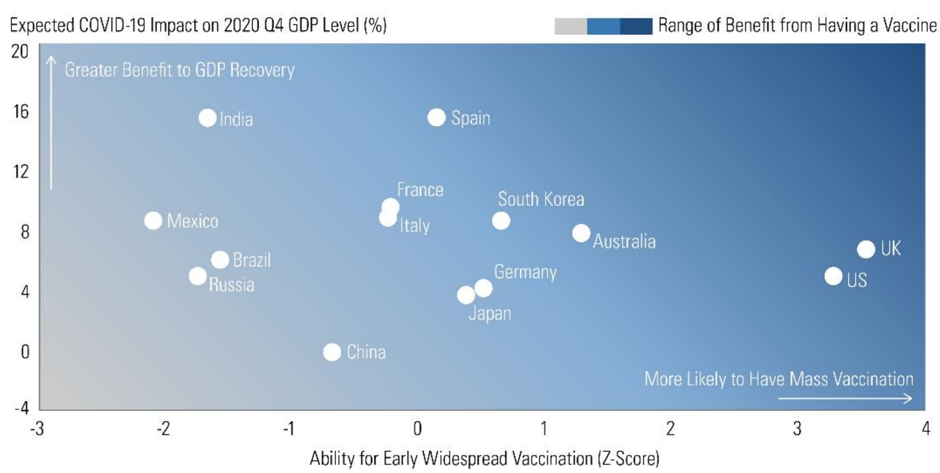
14%

US Savings Rate

sets the stage for potential consumer rebound.

Featured Chart: Vaccine Multiplier

The direction of the economic and market recovery has undoubtedly been shaped by the path of COVID-19 and the prospect of a vaccine. Countries with appropriate medical infrastructure, higher adoption rate, and a larger GDP gap, are likely to benefit the most, while those without may realize a smaller boost. In either case, we believe the return to normal is likely to be non-linear as service industries catch-up to the rest of the recovery.



Top section notes: Bloomberg, Federal Reserve, Johns Hopkins University, Goldman Sachs Global Investment Research, and GSAM. As of December 2, 2020. Middle section notes: 'Core PCE' refers to the core personal consumption expenditures price index, the Federal Reserve's measure of inflation. 'Mortgage origination' refers to the expected 2020 annual volume of new US mortgages. Bottom section notes: World Health Organization, World Economic Forum, Goldman Sachs Global Investment Research, and GSAM. As of November 30, 2020. 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.

Important Information

1. Asset Class Views are provided by GSAM Global Portfolio Solutions.
2. Growth forecasts for Emerging Markets and World are provided by Goldman Sachs Global Investment Research while other growth forecasts are provided by GSAM. Price targets of major asset classes are provided by Goldman Sachs Global Investment Research. Source: "Global equities up 2.3%; Cyclicals continue to rally" – 11/30/2020.

Page 1 Definitions:

Brent Crude refers to Brent Crude Oil, a popular global benchmark for oil prices.

Brexit refers to the process of the UK exiting the European Union.

Bull market refers to a period of time in financial markets when the price of an asset or security rises continuously.

Core inflation refers to the change in the prices of goods and services, excluding food and energy items given their higher degree of price volatility.

"Down-in-quality" refers to credit assets with credit ratings lower than BBB- and Baa3 on S&P's and Moody's rating scale, respectively.

Funds rate, also known as the Fed funds rate, refers to the Federal Reserve's policy rate.

G10 currencies refer to the ten most liquid and heavily traded currencies in the world. They are comprised of the following: AUD, CAD, EUR, JPY, NZD, NOK, GBP, SEK, CHF, and USD.

GDP refers to Gross Domestic Product.

US HY refers to US High Yield.

US IG refers to US Investment Grade.

JGB refers to Japanese Government Bond.

Reflation is a fiscal or monetary policy designed to expand output, stimulate spending, and curb the effects of deflation, which usually occurs after a period of economic uncertainty or a recession.

Volatility premium refers to the additional compensation required by investors for taking on unexpected market volatility risk.

Zero-bound is an expansionary monetary policy tool where a central bank lowers short-term interest rates to zero to stimulate the economy.

Page 2 Notes:

Top Section Notes: Liquidity refers to the extent to which a market allows assets to be quickly transacted at stable, transparent prices.

Bottom Section Notes: Chart illustrates the COVID-19 vaccine boost to GDP across various countries. 'Ability for early widespread vaccination' refers to a composite index of data on supply contracts, a demand index using COVID-19 vaccine surveys and actual vaccination rates, and GDP per capita. 'Expected COVID-19 impact on 2020 Q4 GDP level' refers to the virus' hit to expected trend GDP levels. 'Z-score' refers to a standardized number of standard deviations by which the value of a raw score is above or below the average.

Glossary

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

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

The Credit Suisse Leveraged Loan Index mirrors the investable universe of the USD denominated leveraged loan market.

The Dow Jones US Select Real Estate Securities Index is a float-weighted index that measures US publicly traded real estate securities.

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

The J.P. Morgan EMBI Global Composite Index tracks dollar-denominated debt instruments in emerging markets.

The MSCI AC Asia Pacific ex Japan Index captures large and mid cap representation across 4 of 5 Developed Markets countries and 8 Emerging Markets countries in the Asia Pacific region.

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

The MSCI Emerging Markets 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 U.S. 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 20% of companies from developed countries (excluding the US) ranked by total market capitalization.

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.

The STOXX Europe 600 Index is derived from the STOXX Europe Total Market Index (TMI) and is a subset of the STOXX Global 1800 Index.

The Tokyo Price Index (TOPIX) is a metric for stock prices on the Tokyo Stock Exchange (TSE). A capitalization-weighted index, TOPIX lists all firms that have been determined to be part of the "first section" of the TSE.

Important Information

Risk Considerations

Equity securities are more volatile than bonds and subject to greater risks. Foreign and emerging markets investments may be more volatile and less liquid than investments in U.S. securities and are subject to the risks of currency fluctuations and adverse economic or political developments. Investments in commodities may be affected by changes in overall market movements, commodity index volatility, changes in interest rates or factors affecting a particular industry or commodity. The currency market affords investors a substantial degree of leverage. This leverage presents the potential for substantial profits but also entails a high degree of risk including the risk that losses may be similarly substantial. Currency fluctuations will also affect the value of an investment.

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.

A 10-Year Treasury 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.

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

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

Economic and market forecasts presented herein reflect our judgment as of the date of this presentation 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.

Past performance does not guarantee future results, which may vary. The value of investments and the income derived from investments will fluctuate and can go down as well as up. A loss of principal may occur.

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