Goldman Sachs | Asset Management

Fixed Income Outlook | Q4 2021

BUSINESS AS (UN)USUAL

CIO PERSPECTIVES

Almost 20 months since the onset of the pandemic, economic activity and the investment backdrop is anything but usual. Delta spread, shifting demand dynamics and logistical glitches have elongated and broadened issues on the supply side of the economy. Supply bottlenecks have contributed to growth downgrades and major upside inflation surprises. For now, global activity is expansionary, financial conditions are easy, the growth impulse from fiscal spending is still positive and the private sector is sitting on a mountain of excess savings – a highly unusual seat on the way out of a recession. But the backdrop is shifting. A withdrawal of Covid-era easy policies is raising questions about implications for the economy and financial assets – all the more so given asset valuations are at the higher end of their historical range. Overall, the near term environment has turned more challenging and we have moved to a more cautious investment stance.

Sam Finkelstein

Co-head of Fixed Income and Liquidity Solutions

"A resolution of supply side bottlenecks could change the economic narrative in the coming months but the current macro mix of moderating growth, particularly in China, accelerating inflation and a rollback of easy Covid-era policies creates a challenged investment environment."

Ashish Shah

Co-head of Fixed Income and Liquidity Solutions

"As the global liquidity tide goes out, idiosyncratic risks will go up. From a starting point of high valuations, this outlook favors a moderate allocation to fixed income spread sectors, with greater investment room reserved for security selection."

MACRO AT A GLANCE

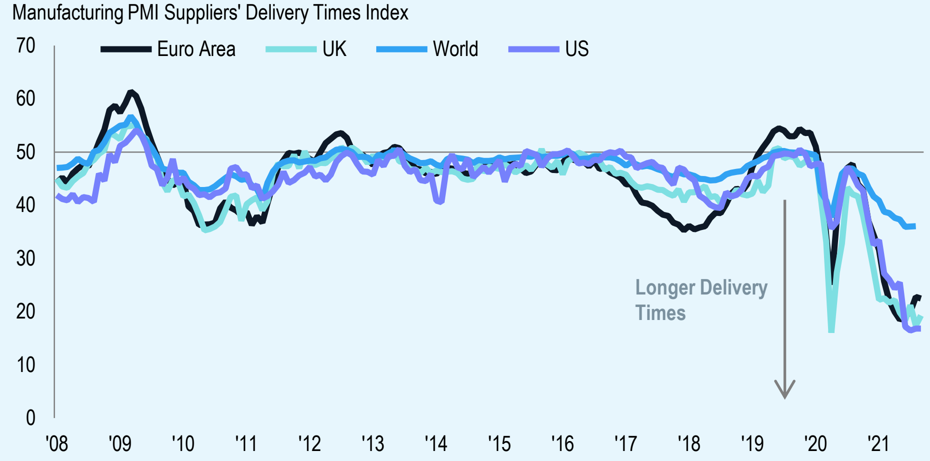
GROWTH – OVERHEATING CONCERNS COOL DOWN

In economies with high vaccination rates, the bulk of the immediate reopening effects are behind us. Supply chain issues have weighed on manufacturing activity, particularly in Asia, while worries about the Delta virus variant have led to a moderate—rather than "roaring-20s-style"—rebound in consumer spending on services. That said, virus-sensitive services have room to recover given high (or rising) vaccination rates and elevated savings rates. Overall, we expect above-trend growth to continue into 2022, though we are mindful of slowing growth in China alongside virus and vaccine efficacy uncertainties.

INFLATION – TRANSITORY ACCELERATION, GRADUAL UNDERLYING PROGRESS

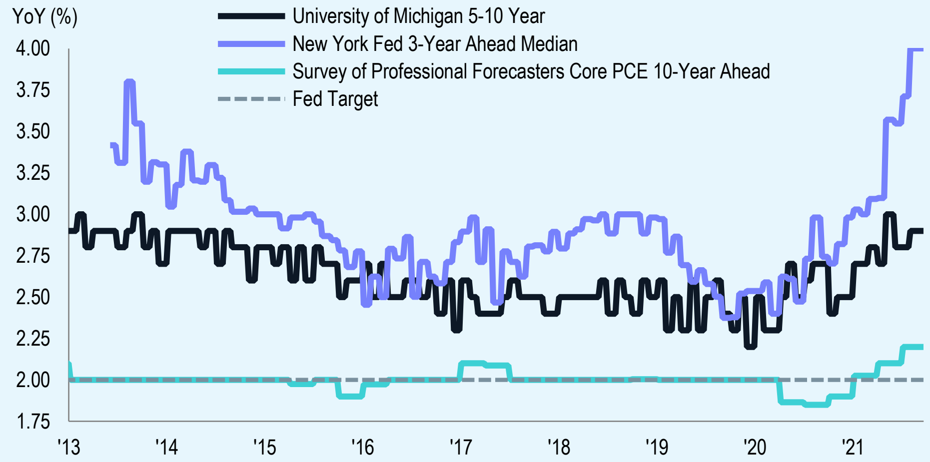
Inflation continues to move higher in major advanced economies, driven by reopening effects and technical factors. A sharp rise in energy prices and supply bottlenecks present near term upside risks. In 2022, as reopening effects fade, inflation will likely moderate. That said, looking beyond transitory pressures, we see some firming of the broader inflation environment with progress in long-term inflation expectations and labor market slack. Overall, we expect to enter a higher inflation regime relative to the last cycle but we do not expect inflation to deviate significantly above central bank targets. Europe and Japan are notable exceptions where we foresee a prolonged period of below target inflation.

Supply Chain Issues – Pain in the (Bottle) Neck



Source: Goldman Sachs Asset Management, Macrobond. As of September 2021.

Broad-based Increases in US Inflation Expectations



Source: Goldman Sachs Asset Management, Macrobond. As of September 2021.

POLICY PICTURE

MONETARY POLICY – A NEGATIVE DELTA

The flow of global liquidity is positive but slowing down, meaning the delta is turning negative, as major central banks taper or conclude asset purchases. In addition, several G10 central banks are planning or already engaged in rate hikes. At the same time, China—previously a major contributor to global liquidity—is prioritizing financial stability. The US Federal Reserve (Fed) has signaled a conclusion of asset purchases around mid-2022, though rate lift-off criteria have yet to be met. We expect gradual normalization in major advanced economies over the coming year. Consistent with their inflation prospects, Europe and Japan are notable exceptions, with easy policies set to continue well into the recovery.

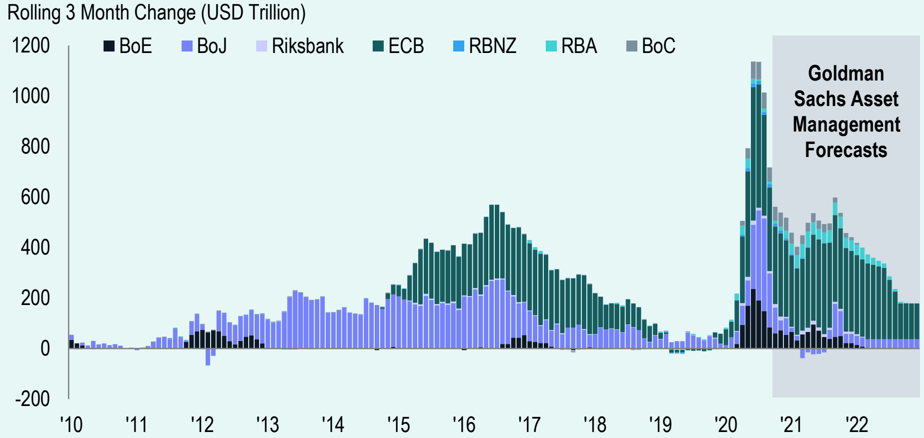
FISCAL POLICY – A NEW ERA

Governments are dismantling temporary measures such as furlough schemes and official projections for most developed market (DM) economies suggest that government spending will fall back to pre-virus paths. Nonetheless, the need for public spending to support the transition to net zero carbon emissions, digitization of the economy and more inclusive growth suggests countries will run larger countercyclical structural deficits relative to the last cycle.

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 at the end of this presentation.

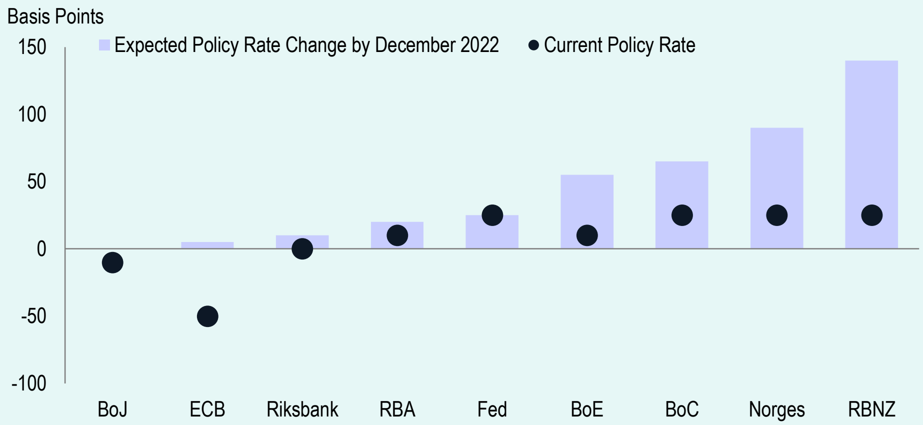
Liquidity Rollback

Flow of Global Central Bank Purchases including Goldman Sachs Asset Management Forecasts



Source: Goldman Sachs Asset Management, Macrobond. As of September 20, 2021. October 2021 onwards reflects Goldman Sachs Asset Management forecasts. Central bank abbreviations: Bank of England (BoE), Bank of Japan (BoJ), European Central Bank (ECB), Reserve Bank of New Zealand (RBNZ), Bank of Canada (BoC).

DM Policy Rate Lift-off on the Horizon



Source: Goldman Sachs Asset Management, Bloomberg. As of September 29, 2021.

FIXED INCOME NAVIGATOR

Interest rates: We are modestly positioned in global interest rates given near term potential for a growing cohort of central banks to respond to the persistence of upside inflation pressures. On a cross-market basis, we are overweight European and Canadian rates.

Currencies: We are broadly neutral on the US dollar and see value in commodity-oriented currencies such as the Norwegian krona, while we are selectively overweight emerging market (EM) currencies including Central Eastern European currencies.

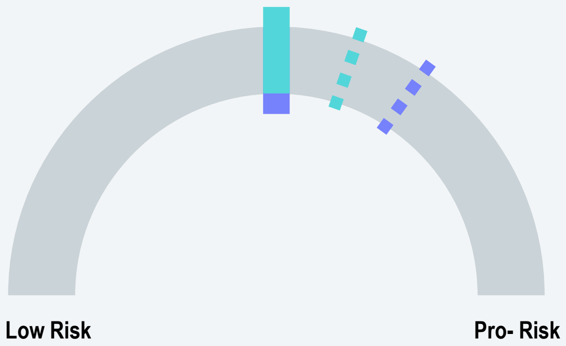
Spread sector asset allocation:

Strategic Asset Allocation (SAA): **Dynamic** long-term allocation to fixed income spread sectors that seeks to achieve a portfolios target return over a market cycle. Our SAA output informs overall spread sector exposure and the composition of that exposure.

Tactical Asset Allocation (TAA): **Opportunistic** deviations from SAA in the short- to medium-term. Our TAA can deviate from SAA both in terms of overall spread sector exposure and the composition of that exposure.

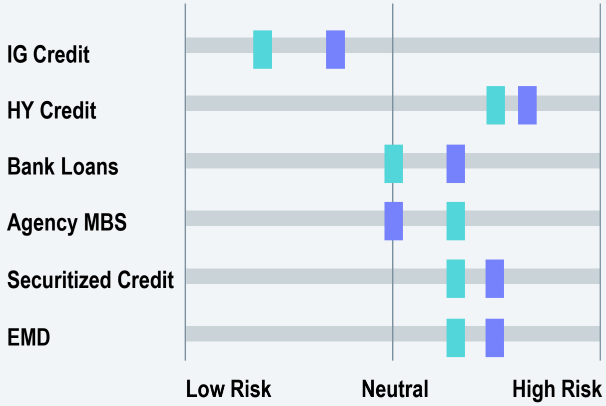
Asset Allocation Balance (AAB): The extent to which spread sector exposures are **balanced** with assets that can provide diversification benefits such as certain interest rates and currencies.

OVERALL SPREAD SECTOR EXPOSURE



The dashed markers reflect our SAA and TAA risk exposures last quarter. Over the third quarter, we moderated our overall exposure to spread sectors and we enter the final quarter of the year with modest exposure to fixed income spread sectors, with our TAA in line with our SAA.

SPREAD SECTOR COMPOSITION



We are overweight corporate credit, with a preference for high yield over investment grade. We are modestly overweight bank loans, neutral agency mortgage backed securities, and overweight both securitized credit and emerging market debt. The deviation of our TAA from our SAA is depicted above.

OVERALL BALANCE AND COMPOSITION

Interest rates and certain currencies can balance underperformance in spread sectors during risk-off market episodes. As illustrated, we are not currently balancing spread sector exposures with interest rates or currencies due to their diminished balance properties.

Source: Goldman Sachs Asset Management. As of September 30, 2021. The strategic (SAA) and tactical asset allocations (TAA), and portfolio balance illustrated is for a representative multi-sector fixed income portfolio. Each SAA is unique to a fixed income portfolio and TAA views are subject to portfolio guidelines.

SUSTAINABILITY SPOTLIGHT

RACIAL ECONOMIC GAPS ARE STARK

Racial gaps in America, particularly between Black and white Americans but also between Hispanic or Latino and white Americans, are stark and in many cases haven't improved in decades. Where an average Black man would rank in the earnings distribution of white men has barely moved in more than 70 years and as Goldman Sachs Black Womenomics research highlights, racial gaps exist on dimensions beyond earnings including education, access to capital, housing and health. The pandemic has widened racial disparities and marked a pivotal moment of clear rejection of this unacceptable status quo.

MUNIS HAVE AN INHERENT SOCIAL LINK WITH SOCIETY

Municipal bonds[1] ("munis") are debt securities issued by US states, cities, counties, and other governmental entities to fund day-to-day obligations and to finance projects in many of the areas that are critical to closing racial gaps such as education, housing and healthcare. Consider education: Goldman Sachs research finds compelling evidence that early childhood education policy would help move the needle in overcoming adverse economic trends for Black Americans[2]. In short, munis have an inherent social link with society given the proceeds from muni bond issuance, or tax revenue associated with the use of proceeds, have long been used for social purposes, albeit without official Green, Social or Sustainability labels. Examples include special tax bonds to alleviate homelessness and mental illness, revenue bonds to fund upgrades to non-profit hospitals, and sustainability bonds to support affordable housing projects.

DRIVING INCLUSIVE GROWTH THROUGH THE POWER OF TRANSPARENCY

As a firm focused on inclusive growth, we are channeling the power of capital to drive economic prosperity for more people. In the muni space, we have partnered with industry peers and two minority-owned underwriters to establish **The Municipal Issuer Racial Equity & Inclusion Engagement Framework**. Through an associated disclosure questionnaire, we are seeking to fill important data gaps on social issues that are critical for environmental, social and governance (ESG) analysis. This can enhance our ability to identify muni bonds that drive social impact. We also hope to incentivize increased disclosure and engagement on racial equity and inclusion considerations relating to a range of social issues from law enforcement to community development and food security to healthcare.

A MORAL AND ECONOMIC IMPERATIVE

We believe this **Framework** is an important step towards building an inclusive economy, though we recognize that closing racial economic gaps will require a holistic approach from both public and private realms of society[3]. Overcoming the economic inequities is not only a moral imperative – it would also make for an inclusive, more prosperous society: the reduction of labor market disadvantages for Black Americans could boost the level of US GDP by roughly 2%, or just over $400 billion per year[4].

1. For recent muni insights, see GSAM Connect | Back to School: A Lesson Plan for Municipal Bond Investors.
2. Early childhood education programs are generally not race-specific, but Black children are likely to benefit most from them. See Sneha Elango, Jorge Luis Garcia, James J. Heckman, and Andrew Hojman, "Early Childhood Education," in Moffit, Robert A. (ed.), Economics of Means-Tested Transfer Programs in the United States, Vol. 1, 2016.
3. Last August, the Fed adopted a "broad based and inclusive" labor market mandate that takes into consideration racial unemployment gap, and the twelve district banks of the Fed have also launched a Racism and the Economy series to understand the implications of structural racism and advance actions to improve economic outcomes for all.
4. See Investing in Racial Economic Equality.

OVERHEARD AT GOLDMAN SACHS ASSET MANAGEMENT

SORTING OUT SUPPLY ISSUES

“Many of the supply side issues will likely self-correct, as spending rotates towards services or as supply expands, though in the near term they present upside risks to inflation expectations, wage demands, and policy rates.”

“Conceptually, ending labor income support should deliver faster employment growth, lower unemployment and weaker wage rises through an increase in the labor supply – but moving from concept to reality may take time.”

THE GREAT INFLATION DEBATE

“Energy price appreciation adds fuel to an already heated near-term inflation outlook owing to reopening effects and supply side issues.”

“Longer term, adoption of new technologies – from QR codes to robotics – have potential to expand productive capacity of the economy and tame inflation.”

“Underlying inflation pressures are building, with our Inflation Pressures Indicator rising to high levels that pre-date the global financial crisis given gradual progress in wage pressures and inflation expectations.”

“Central banks in the US and Europe adopted new frameworks this past year but – like G10 peers – neither has a playbook for virus-induced inflation spikes and recent commentary indicates policy divergence is opening up.”

CLIMATE TRANSITION AND INCLUSIVE GROWTH

“China has been tightening property regulations for half a decade in pursuit for “common prosperity.” The latest regulatory tightening extends beyond the property market and is unparalleled in terms of its duration, intensity, scope and velocity of new regulation announcements.”

“Green investment to achieve the climate transition in Europe has the potential to lift growth by 0.3-0.4% per annum – this may exert upward pressure on neutral rates into the next decade and presents a tailwind for European baking profitability following years of downside pressure on net interest margins.“

“The protests that gripped the US in the summer of 2020 underscored the need for investors to know what cities are doing to promote racial equity. There may be a time where we look to invest in certain issuers because they are willing to engage with us.”

THE BLACK, GREEN AND UNKNOWN SWAN

“Financial markets do not function with clock-work precision that can be predicted—and invested against—with certainty. The pandemic and “green swan” risks from climate change[1], underscore to importance of diversified, balanced fixed income exposures.”

1. See Box A of “The green swan: central banking and financial stability in the age of climate change” (BIS, January 2020). The “green swan” concept finds its inspiration in the concept of black swan events that are unexpected and rare, with wide-ranging or extreme impacts that can only be explained after the fact. Black swan events can take many shapes, from a terrorist attack to a disruptive technology or a natural catastrophe.

FIXED INCOME INSIGHT HIGHLIGHTS

Exchanges at Goldman Sachs

How Are Investors Navigating China's Regulatory Uncertainty?

17 AUG 2021 TOPICS: CHINA | MARKETS

[View now]

Briefly…

What's Pushing Gas Prices So High

30 SEP 2021

The article below is from our BRIEFINGS *newsletter of 30 September 2021*

[View now]

[View now]

"The China government bond market has been relatively resilient to recent volatility and we think certain offshore corporate bonds in the Asia high yield market offer attractive risk-adjusted return potential."

Prakriti Sofat, China Economist

"With current [power and gas] forward prices, [household utility] bills are expected to jump at least 25% further for the summer of 2022, which will hurt households' disposable income and boost inflation expectations for next year."

Joanna Saw, Corporate Credit Research Analyst

"While supply-chain issues and rising input costs are challenges, it's important to note that more industries have high levels of pricing power, which should keep [corporate profit] margins healthy. This is sufficient to keep the spread-sector ship sailing in a mid-cycle environment."

Ben Johnson, Global Head of Corporate Credit

DISCLOSURES

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 presentation and may be subject to change, they should not be construed as investment advice.

Investment grade refers to the quality of a company's credit and to be considered investment grade issue, a company must be rated at 'BBB' or higher. Anything below this 'BBB' rating is considered non-investment grade or high yield.

This material is provided at your request for informational purposes only. It is not an offer or solicitation to buy or sell any securities.

THIS MATERIAL DOES NOT CONSTITUTE AN OFFER OR SOLICITATION IN ANY JURISDICTION WHERE OR TO ANY PERSON TO WHOM IT WOULD BE UNAUTHORIZED OR UNLAWFUL TO DO SO.

Prospective investors should inform themselves as to any applicable legal requirements and taxation and exchange control regulations in the countries of their citizenship, residence or domicile which might be relevant.

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 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. Case studies and examples are for illustrative purposes only.

United Kingdom: In the United Kingdom, this material is a financial promotion and has been approved by Goldman Sachs Asset Management International, which is authorized and regulated in the United Kingdom by the Financial Conduct Authority.

European Economic Area (EEA): This material is a financial promotion disseminated by Goldman Sachs Bank Europe SE, including through its authorised branches ("GSBE"). GSBE is a credit institution incorporated in Germany and, within the Single Supervisory Mechanism established between those Member States of the European Union whose official currency is the Euro, subject to direct prudential supervision by the European Central Bank and in other respects supervised by German Federal Financial Supervisory Authority (Bundesanstalt für Finanzdienstleistungsaufischt, BaFin) and Deutsche Bundesbank.

Switzerland: For Qualified Investor use only - Not for distribution to general public. This is marketing material. This document is provided to you by Goldman Sachs Bank AG, Zürich. Any future contractual relationships will be entered into with affiliates of Goldman Sachs Bank AG, which are domiciled outside of Switzerland. We would like to remind you that foreign (Non-Swiss) legal and regulatory systems may not provide the same level of protection in relation to client confidentiality and data protection as offered to you by Swiss law.

Asia Pacific: Please note that neither Goldman Sachs Asset Management International nor any other entities involved in the Goldman Sachs Asset Management (GSAM) business maintain any licenses, authorizations or registrations in Asia (other than Japan), except that it conducts businesses (subject to applicable local regulations) in and from the following jurisdictions: Hong Kong, Singapore and Malaysia. This material has been issued for use in or from Hong Kong by Goldman Sachs Asset Management (Hong Kong) Limited, in or from Singapore by Goldman Sachs Asset Management (Singapore) Pte. Ltd. (Company Number: 201329851H) and in or from Malaysia by Goldman Sachs (Malaysia) Sdn Berhad (880767W).

DISCLOSURES

Australia: This material is distributed by Goldman Sachs Asset Management Australia Pty Ltd ABN 41 006 09 9 681, AFSL 2 28948 (‘GSAMA’) and is intended for viewing only by wholesale clients for the purposes of section 761G of the Corporations Act 2001 (Cth). This document may not be distributed to retail clients in Australia (as that term is defined in the Corporations Act 2001 (Cth)) or to the general public. This document may not be reproduced or distributed to any person without the prior consent of GSAMA. To the extent that this document contains any statement which may be considered to be financial product advice in Australia under the Corporations Act 2001 (Cth), that advice is intended to be given to the intended recipient of this document only, being a wholesale client for the purposes of the Corporations Act 2001 (Cth). Any advice provided in this document is provided by either Goldman Sachs Asset Management International (GSAMI), Goldman Sachs International (GSI), Goldman Sachs Asset Management, LP (GSAMLP) or Goldman Sachs & Co. LLC (GSCo). Both GSCo and GSAMLP are regulated by the US Securities and Exchange Commission under US laws, which differ from Australian laws. Both GSI and GSAMI are regulated by the Financial Conduct Authority and GSI is authorized by the Prudential Regulation Authority under UK laws, which differ from Australian laws. GSI, GSAMI, GSCo, and GSAMLP are all exempt from the requirement to hold an Australian financial services licence under the Corporations Act of Australia and therefore do not hold any Australian Financial Services Licences. Any financial services given to any person by GSI, GSAMI, GSCo or GSAMLP by distributing this document in Australia are provided to such persons pursuant to ASIC Class Orders 03/1099 and 03/1100. No offer to acquire any interest in a fund or a financial product is being made to you in this document. If the interests or financial products do become available in the future, the offer may be arranged by GSAMA in accordance with section 911A(2)(b) of the Corporations Act. GSAMA holds Australian Financial Services Licence No. 228948. Any offer will only be made in circumstances where disclosure is not required under Part 6D.2 of the Corporations Act or a product disclosure statement is not required to be given under Part 7.9 of the Corporations Act (as relevant).

Canada: This presentation has been communicated in Canada by GSAM LP, which is registered as a portfolio manager under securities legislation in all provinces of Canada and as a commodity trading manager under the commodity futures legislation of Ontario and as a derivatives adviser under the derivatives legislation of Quebec. GSAM LP is not registered to provide investment advisory or portfolio management services in respect of exchange-traded futures or options contracts in Manitoba and is not offering to provide such investment advisory or portfolio management services in Manitoba by delivery of this material.

Japan: This material has been issued or approved in Japan for the use of professional investors defined in Article 2 paragraph (31) of the Financial Instruments and Exchange Law by Goldman Sachs Asset Management Co., Ltd.

Confidentiality

No part of this material may, without GSAM’s prior written consent, be (i) copied, photocopied or duplicated in any form, by any means, or (ii) distributed to any person that is not an employee, officer, director, or authorized agent of the recipient.

255039-OTU-1487043