

US Daily: June FOMC Recap: Pulling Forward Liftoff to 2023 on Hawkish News About Fed's Interpretation of Average Inflation

- The June FOMC meeting delivered a hawkish surprise with a shift up in the median dot in 2023 to two hikes, from none in March and against our expectation of an unchanged flat path.
- The discussion of tapering was largely in line with our expectations. Chair Powell acknowledged committee discussion but made clear that "reaching the standard of substantial further progress is still a ways off." We continue to expect the first hint about tapering in August or September, followed by a formal announcement in December that would begin the tapering process at the start of next year, though the risks lean toward an earlier start.
- The rise in the median dot to show two hikes was particularly striking because the 2023 core PCE inflation forecast remained steady at 2.1%. Our preferred explanation is that the FOMC takes a more firmly backward-looking interpretation of average inflation targeting than we had assumed. With average inflation over the cycle already on track to exceed 2% by this year, this interpretation appears to lower the future inflation bar for liftoff. We had previously assumed that the Fed leadership would instead desire a larger sustained overshoot of 2% to hammer home its commitment to the new framework in the very first cycle where it is in place.
- In light of what we learned today, we have changed our forecast of the timing of the first hike to 2023Q3, from 2024Q1 previously. However, we see the odds of a hike by the end of 2023 as only modestly better than 50% because liftoff could easily be derailed by lower-than-expected inflation or a sharper deceleration in growth as fiscal support fades.

Jan Hatzius

+1(212)902-0394 | jan.hatzius@gs.com Goldman Sachs & Co. LLC

Alec Phillips +1(202)637-3746 | alec.phillips@gs.com Goldman Sachs & Co. LLC

David Mericle

david.mericle@gs.com Goldman Sachs & Co. LLC

Spencer Hill, CFA +1(212)357-7621 | spencer.hill@gs.com Goldman Sachs & Co. LLC

Joseph Briggs

joseph.briggs@gs.com Goldman Sachs & Co. LLC

Ronnie Walker

ronnie.walker@gs.com Goldman Sachs & Co. LLC

Laura Nicolae

+1(917)343-6594 | laura.nicolae@gs.com Goldman Sachs & Co. LLC

June FOMC Recap: Pulling Forward Liftoff to 2023 on Hawkish News About Fed's Interpretation of Average Inflation Targeting

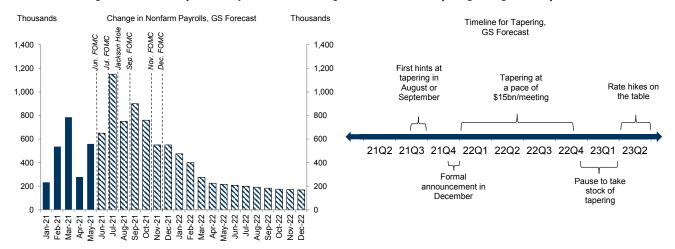
The FOMC delivered a hawkish surprise at its June meeting today. The meeting offered little new information about the tapering timeline, but did provide new insight into how Fed officials interpret average inflation targeting. Their interpretation appears to be more firmly focused on the backward-looking average level of inflation this cycle than we expected, which implies that the 2021 inflation spike has more hawkish implications than we anticipated. We have therefore pulled forward our forecast of liftoff to 2023.

The discussion of tapering was largely consistent with our expectations. Chair Powell acknowledged that the FOMC had been "talking about talking about" tapering at its June meeting, but made clear that "reaching the standard of substantial further progress is still a ways off." He added that the FOMC will continue to assess the economy's progress "in coming meetings."

We continue to expect the first hint about tapering to come in August or September, followed by details about issues such as the pace in November, and then a formal announcement at the December meeting that would begin the taper process in January. This appeared to be the consensus expectation prior to the meeting, and we see little reason for the FOMC to surprise markets in a hawkish direction on tapering. But the risks lean toward an earlier start, both because the first hint could come sooner and because the "advance notice" the FOMC plans to provide could consist of one meeting rather than two.

The main reason that we do not expect the first decisive hint to come in July is that there will only be one additional employment report between now and then, the June report, and we think that job gains in June are likely to be unspectacular because they should face a moderate <u>seasonal headwind</u> and are unlikely to benefit meaningfully from the expiration of unemployment benefits. Exhibit 1 shows our forecast for upcoming payroll gains based on these considerations. If the July report is as strong as we expect, a first hint in August or September would seem natural.

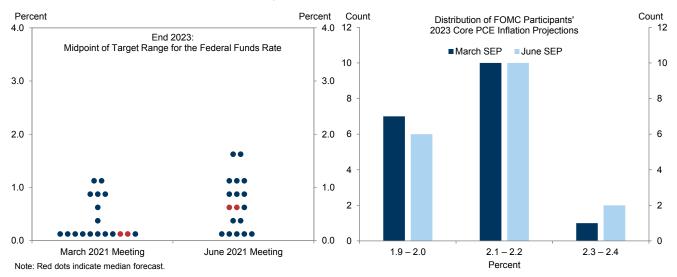
Exhibit 1: The Strong Job Gains We Expect in July Would Set the Stage for a First Hint at Tapering in August or September



Source: Goldman Sachs Global Investment Research

The key surprise at the June meeting was that the median dot now shows two hikes in 2023, up from none in March and against our expectation of an unchanged flat path. This is particularly striking in light of the extremely minimal changes to the 2023 core PCE inflation forecasts, as shown in Exhibit 2.

Exhibit 2: The Median Dot Added Two Hikes in 2023, Despite Almost No Change in the Inflation Forecasts

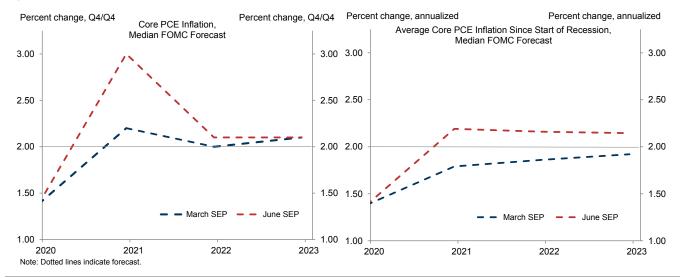


Source: Federal Reserve Board, Goldman Sachs Global Investment Research

Our best explanation is that the FOMC takes a more firmly backward-looking interpretation of its new average inflation targeting (AIT) framework than we had assumed. We highlighted in our <u>preview</u> of the meeting that core PCE inflation is on track to end 2021 having already averaged more than 2% since the recession began, as the FOMC's forecast also implies (Exhibit 3). We noted that Fed officials would have to decide whether this means that the AIT objective would therefore be effectively accomplished, reducing the need to further exceed 2% and lowering the inflation bar for liftoff. Both the FOMC statement and the Fed's Statement on Longer-Run Goals and Monetary Policy Strategy use backward-looking language to describe AIT, and we did expect more hawkish participants to hold this view.

But we are surprised that most FOMC participants, seemingly including at least part of the leadership, also appear to interpret AIT in this way. We would have thought that the leadership would instead have wanted to err on the side of overdoing it in the first cycle with the new framework in place, hammering home its commitment to its new framework and its comfort with running above 2% by achieving a larger sustained overshoot of 2% at liftoff and thereafter. We see today's outcome as a hawkish revelation about how most of the FOMC is interpreting AIT.

Exhibit 3: The FOMC's Forecasts Now Imply That Inflation Will Have Already Averaged More Than 2% by 2021, Which We See As the Best Explanation for the Hawkish Shift in the Dots



Source: Federal Reserve Board, Goldman Sachs Global Investment Research

We see two implications for future interest rate policy decisions. First, the liftoff threshold appears to be modestly lower than we previously thought, though the FOMC did maintain the liftoff requirement that inflation must be "on track to moderately exceed 2 percent for some time," which presumably implies that some buffer above 2% is still needed. Second, the median projection of two hikes with core PCE at just 2.1% suggests to us that most of the FOMC would support proceeding steadily with normalization after the liftoff goals are met even if inflation is only running a bit above 2%.

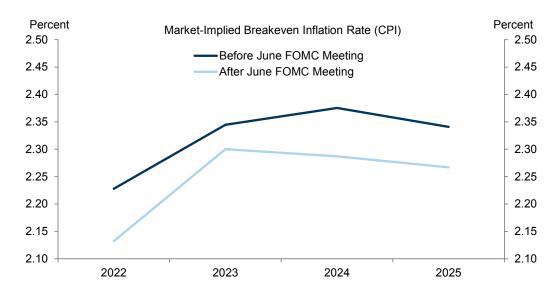
In light of our takeaways from the June meeting, especially the lower inflation bar for liftoff, we have changed our forecast of the timing of the first hike to 2023Q3, from 2024Q1 previously. We continue to forecast two additional rates hikes in 2024.

However, we see the odds of a hike by the end of 2023 as only modestly better than 50%. We can imagine three plausible scenarios in which the Fed would not hike in 2023: inflation simply does not clear the bar for liftoff, the pullback in fiscal support causes the economy to decelerate enough naturally to make a hike seem excessive, or financial conditions tighten enough on their own to make a hike unnecessary. We see the odds of at least one of these scenarios playing out as close to 50%.

The market also took the June meeting as hawkish. Market pricing of total tightening by the end of 2023 (including at the December meeting) rose by 18bp, or about ¾ of a hike, from just before the FOMC meeting to the end of the day. Breakeven CPI inflation

expectations for the next several years also fell by 5-10bps, as shown in Exhibit 4, to a level that now implies PCE inflation of roughly 2%.

Exhibit 4: Market-Implied Inflation Expectations Shifted Lower to a Level Consistent with 2% PCE Inflation



Source: Bloomberg, Goldman Sachs Global Investment Research

David Mericle

Spencer Hill

Disclosure Appendix

Reg AC

We, Jan Hatzius, Alec Phillips, David Mericle, Spencer Hill, CFA, Joseph Briggs, Ronnie Walker and Laura Nicolae, hereby certify that all of the views expressed in this report accurately reflect our personal views, which have not been influenced by considerations of the firm's business or client relationships.

Unless otherwise stated, the individuals listed on the cover page of this report are analysts in Goldman Sachs' Global Investment Research division.

Disclosures

Regulatory disclosures

Disclosures required by United States laws and regulations

See company-specific regulatory disclosures above for any of the following disclosures required as to companies referred to in this report: manager or co-manager in a pending transaction; 1% or other ownership; compensation for certain services; types of client relationships; managed/co-managed public offerings in prior periods; directorships; for equity securities, market making and/or specialist role. Goldman Sachs trades or may trade as a principal in debt securities (or in related derivatives) of issuers discussed in this report.

The following are additional required disclosures: **Ownership and material conflicts of interest:** Goldman Sachs policy prohibits its analysts, professionals reporting to analysts and members of their households from owning securities of any company in the analyst's area of coverage. **Analyst compensation:** Analysts are paid in part based on the profitability of Goldman Sachs, which includes investment banking revenues. **Analyst as officer or director:** Goldman Sachs policy generally prohibits its analysts, persons reporting to analysts or members of their households from serving as an officer, director or advisor of any company in the analyst's area of coverage. **Non-U.S. Analysts:** Non-U.S. analysts may not be associated persons of Goldman Sachs & Co. LLC and therefore may not be subject to FINRA Rule 2241 or FINRA Rule 2242 restrictions on communications with subject company, public appearances and trading securities held by the analysts.

Additional disclosures required under the laws and regulations of jurisdictions other than the United States

The following disclosures are those required by the jurisdiction indicated, except to the extent already made above pursuant to United States laws and regulations. Australia: Goldman Sachs Australia Pty Ltd and its affiliates are not authorised deposit-taking institutions (as that term is defined in the Banking Act 1959 (Cth)) in Australia and do not provide banking services, nor carry on a banking business, in Australia. This research, and any access to it, is intended only for "wholesale clients" within the meaning of the Australian Corporations Act, unless otherwise agreed by Goldman Sachs. In producing research reports, members of the Global Investment Research Division of Goldman Sachs Australia may attend site visits and other meetings hosted by the companies and other entities which are the subject of its research reports. In some instances the costs of such site visits or meetings may be met in part or in whole by the issuers concerned if Goldman Sachs Australia considers it is appropriate and reasonable in the specific circumstances relating to the site visit or meeting. To the extent that the contents of this document contains any financial product advice, it is general advice only and has been prepared by Goldman Sachs without taking into account a client's objectives, financial situation or needs. A client should, before acting on any such advice, consider the appropriateness of the advice having regard to the client's own objectives, financial situation and needs. A copy of certain Goldman Sachs Australia and New Zealand disclosure of interests and a copy of Goldman Sachs' Australian Sell-Side Research Independence Policy Statement are available at: https://www.goldmansachs.com/disclosures/australia-new-zealand/index.html. Brazil: Disclosure information in relation to CVM Resolution n. 20 is available at https://www.gs.com/worldwide/brazil/area/gir/index.html. Where applicable, the Brazil-registered analyst primarily responsible for the content of this research report, as defined in Article 20 of CVM Resolution n. 20, is the first author named at the beginning of this report, unless indicated otherwise at the end of the text. Canada: Goldman Sachs Canada Inc. is an affiliate of The Goldman Sachs Group Inc. and therefore is included in the company specific disclosures relating to Goldman Sachs (as defined above). Goldman Sachs Canada Inc. has approved of, and agreed to take responsibility for, this research report in Canada if and to the extent that Goldman Sachs Canada Inc. disseminates this research report to its clients. Hong Kong: Further information on the securities of covered companies referred to in this research may be obtained on request from Goldman Sachs (Asia) L.L.C. India: Further information on the subject company or companies referred to in this research may be obtained from Goldman Sachs (India) Securities Private Limited, Research Analyst - SEBI Registration Number INH000001493, 951-A, Rational House, Appasaheb Marathe Marg, Prabhadevi, Mumbai 400 025, India, Corporate Identity Number U74140MH2006FTC160634, Phone +91 22 6616 9000, Fax +91 22 6616 9001. Goldman Sachs may beneficially own 1% or more of the securities (as such term is defined in clause 2 (h) the Indian Securities Contracts (Regulation) Act, 1956) of the subject company or companies referred to in this research report. Japan: See below. Korea: This research, and any access to it, is intended only for "professional investors" within the meaning of the Financial Services and Capital Markets Act, unless otherwise agreed by Goldman Sachs. Further information on the subject company or companies referred to in this research may be obtained from Goldman Sachs (Asia) L.L.C., Seoul Branch. New Zealand: Goldman Sachs New Zealand Limited and its affiliates are neither "registered banks" nor "deposit takers" (as defined in the Reserve Bank of New Zealand Act 1989) in New Zealand. This research, and any access to it, is intended for "wholesale clients" (as defined in the Financial Advisers Act 2008) unless otherwise agreed by Goldman Sachs. A copy of certain Goldman Sachs Australia and New Zealand disclosure of interests is available at: https://www.goldmansachs.com/disclosures/australia-new-zealand/index.html. Russia: Research reports distributed in the Russian Federation are not advertising as defined in the Russian legislation, but are information and analysis not having product promotion as their main purpose and do not provide appraisal within the meaning of the Russian legislation on appraisal activity. Research reports do not constitute a personalized investment recommendation as defined in Russian laws and regulations, are not addressed to a specific client, and are prepared without analyzing the financial circumstances, investment profiles or risk profiles of clients. Goldman Sachs assumes no responsibility for any investment decisions that may be taken by a client or any other person based on this research report. Singapore: Goldman Sachs (Singapore) Pte. (Company Number: 198602165W), which is regulated by the Monetary Authority of Singapore, accepts legal responsibility for this research, and should be contacted with respect to any matters arising from, or in connection with, this research. **Taiwan:** This material is for reference only and must not be reprinted without permission. Investors should carefully consider their own investment risk. Investment results are the responsibility of the individual investor. United Kingdom: Persons who would be categorized as retail clients in the United Kingdom, as such term is defined in the rules of the Financial Conduct Authority, should read this research in conjunction with prior Goldman Sachs research on the covered companies referred to herein and should refer to the risk warnings that have been sent to them by Goldman Sachs International. A copy of these risks warnings, and a glossary of certain financial terms used in this report, are available from Goldman Sachs International on request.

European Union and United Kingdom: Disclosure information in relation to Article 6 (2) of the European Commission Delegated Regulation (EU) (2016/958) supplementing Regulation (EU) No 596/2014 of the European Parliament and of the Council (including as that Delegated Regulation is implemented into United Kingdom domestic law and regulation following the United Kingdom's departure from the European Union and the European Economic Area) with regard to regulatory technical standards for the technical arrangements for objective presentation of investment recommendations or other information recommending or suggesting an investment strategy and for disclosure of particular interests or indications of conflicts of interest is available at https://www.gs.com/disclosures/europeanpolicy.html which states the European Policy for Managing Conflicts of Interest in Connection with Investment Research.

Japan: Goldman Sachs Japan Co., Ltd. is a Financial Instrument Dealer registered with the Kanto Financial Bureau under registration number Kinsho 69, and a member of Japan Securities Dealers Association, Financial Futures Association of Japan and Type II Financial Instruments Firms Association. Sales and purchase of equities are subject to commission pre-determined with clients plus consumption tax. See company-specific disclosures as to any applicable disclosures required by Japanese stock exchanges, the Japanese Securities Dealers Association or the Japanese Securities Finance Company.

Global product; distributing entities

The Global Investment Research Division of Goldman Sachs produces and distributes research products for clients of Goldman Sachs on a global basis. Analysts based in Goldman Sachs offices around the world produce research on industries and companies, and research on macroeconomics, currencies, commodities and portfolio strategy. This research is disseminated in Australia by Goldman Sachs Australia Pty Ltd (ABN 21 006 797 897); in Brazil by Goldman Sachs do Brasil Corretora de Títulos e Valores Mobiliários S.A.; Public Communication Channel Goldman Sachs Brazil: 0800 727 5764 and / or contatogoldmanbrasil@gs.com. Available Weekdays (except holidays), from 9am to 6pm. Canal de Comunicação com o Público Goldman Sachs Brasil: 0800 727 5764 e/ou contatogoldmanbrasil@gs.com. Horário de funcionamento: segunda-feira à sexta-feira (exceto feriados), das 9h às 18h; in Canada by either Goldman Sachs Canada Inc. or Goldman Sachs & Co. LLC; in Hong Kong by Goldman Sachs (Asia) L.L.C.; in India by Goldman Sachs (India) Securities Private Ltd.; in Japan by Goldman Sachs Japan Co., Ltd.; in the Republic of Korea by Goldman Sachs (Asia) L.L.C., Seoul Branch; in New Zealand by Goldman Sachs New Zealand Limited; in Russia by OOO Goldman Sachs; in Singapore by Goldman Sachs (Singapore) Pte. (Company Number: 198602165W); and in the United States of America by Goldman Sachs & Co. LLC. Goldman Sachs International has approved this research in connection with its distribution in the United Kingdom.

Effective from the date of the United Kingdom's departure from the European Union and the European Economic Area ("Brexit Day") the following information with respect to distributing entities will apply:

Goldman Sachs International ("GSI"), authorised by the Prudential Regulation Authority ("PRA") and regulated by the Financial Conduct Authority ("FCA") and the PRA, has approved this research in connection with its distribution in the United Kingdom.

European Economic Area: GSI, authorised by the PRA and regulated by the FCA and the PRA, disseminates research in the following jurisdictions within the European Economic Area: the Grand Duchy of Luxembourg, Italy, the Kingdom of Belgium, the Kingdom of Denmark, the Kingdom of Norway, the Republic of Finland, Portugal, the Republic of Cyprus and the Republic of Ireland; GS -Succursale de Paris (Paris branch) which, from Brexit Day, will be authorised by the French Autorité de contrôle prudentiel et de resolution ("ACPR") and regulated by the Autorité de contrôle prudentiel et de resolution and the Autorité des marches financiers ("AMF") disseminates research in France; GSI - Succursal en España (Madrid branch) authorized in Spain by the Comisión Nacional del Mercado de Valores disseminates research in the Kingdom of Spain; GSI - Sweden Bankfilial (Stockholm branch) is authorized by the SFSA as a "third country branch" in accordance with Chapter 4, Section 4 of the Swedish Securities and Market Act (Sw. lag (2007:528) om värdepappersmarknaden) disseminates research in the Kingdom of Sweden; Goldman Sachs Bank Europe SE ("GSBE") is a credit institution incorporated in Germany and, within the Single Supervisory Mechanism, subject to direct prudential supervision by the European Central Bank and in other respects supervised by German Federal Financial Supervisory Authority (Bundesanstalt für Finanzdienstleistungsaufsicht, BaFin) and Deutsche Bundesbank and disseminates research in the Federal Republic of Germany and those jurisdictions within the European Economic Area where GSI is not authorised to disseminate research and additionally, GSBE, Copenhagen Branch filial af GSBE, Tyskland, supervised by the Danish Financial Authority disseminates research in the Kingdom of Spain; GSBE - Succursale Italia (Milan branch) to the relevant applicable extent, subject to local supervision by the Bank of Italy (Banca d'Italia) and the Italian Companies and Exchange Commission (Commissione Nazionale per le Società e la Borsa "

General disclosures

This research is for our clients only. Other than disclosures relating to Goldman Sachs, this research is based on current public information that we consider reliable, but we do not represent it is accurate or complete, and it should not be relied on as such. The information, opinions, estimates and forecasts contained herein are as of the date hereof and are subject to change without prior notification. We seek to update our research as appropriate, but various regulations may prevent us from doing so. Other than certain industry reports published on a periodic basis, the large majority of reports are published at irregular intervals as appropriate in the analyst's judgment.

Goldman Sachs conducts a global full-service, integrated investment banking, investment management, and brokerage business. We have investment banking and other business relationships with a substantial percentage of the companies covered by our Global Investment Research Division. Goldman Sachs & Co. LLC, the United States broker dealer, is a member of SIPC (https://www.sipc.org).

Our salespeople, traders, and other professionals may provide oral or written market commentary or trading strategies to our clients and principal trading desks that reflect opinions that are contrary to the opinions expressed in this research. Our asset management area, principal trading desks and investing businesses may make investment decisions that are inconsistent with the recommendations or views expressed in this research.

We and our affiliates, officers, directors, and employees, will from time to time have long or short positions in, act as principal in, and buy or sell, the securities or derivatives, if any, referred to in this research, unless otherwise prohibited by regulation or Goldman Sachs policy.

The views attributed to third party presenters at Goldman Sachs arranged conferences, including individuals from other parts of Goldman Sachs, do not necessarily reflect those of Global Investment Research and are not an official view of Goldman Sachs.

Any third party referenced herein, including any salespeople, traders and other professionals or members of their household, may have positions in the products mentioned that are inconsistent with the views expressed by analysts named in this report.

This research is focused on investment themes across markets, industries and sectors. It does not attempt to distinguish between the prospects or performance of, or provide analysis of, individual companies within any industry or sector we describe.

Any trading recommendation in this research relating to an equity or credit security or securities within an industry or sector is reflective of the investment theme being discussed and is not a recommendation of any such security in isolation.

This research is not an offer to sell or the solicitation of an offer to buy any security in any jurisdiction where such an offer or solicitation would be illegal. It does not constitute a personal recommendation or take into account the particular investment objectives, financial situations, or needs of individual clients. Clients should consider whether any advice or recommendation in this research is suitable for their particular circumstances and, if appropriate, seek professional advice, including tax advice. The price and value of investments referred to in this research and the income from them may fluctuate. Past performance is not a guide to future performance, future returns are not guaranteed, and a loss of original capital may occur. Fluctuations in exchange rates could have adverse effects on the value or price of, or income derived from, certain investments.

Certain transactions, including those involving futures, options, and other derivatives, give rise to substantial risk and are not suitable for all investors. Investors should review current options and futures disclosure documents which are available from Goldman Sachs sales representatives or at

 $\underline{\text{https://www.theocc.com/about/publications/character-risks.jsp}} \text{ and } \\$

https://www.fiadocumentation.org/fia/regulatory-disclosures_1/fia-uniform-futures-and-options-on-futures-risk-disclosures-booklet-pdf-version-2018.

Transaction costs may be significant in option strategies calling for multiple purchase and sales of options such as spreads. Supporting documentation will be supplied upon request.

Differing Levels of Service provided by Global Investment Research: The level and types of services provided to you by the Global Investment Research division of GS may vary as compared to that provided to internal and other external clients of GS, depending on various factors including your individual preferences as to the frequency and manner of receiving communication, your risk profile and investment focus and perspective (e.g., marketwide, sector specific, long term, short term), the size and scope of your overall client relationship with GS, and legal and regulatory constraints. As an example, certain clients may request to receive notifications when research on specific securities is published, and certain clients may request that specific data underlying analysts' fundamental analysis available on our internal client websites be delivered to them electronically through data feeds or otherwise. No change to an analyst's fundamental research views (e.g., ratings, price targets, or material changes to earnings estimates for equity securities), will be communicated to any client prior to inclusion of such information in a research report broadly disseminated through electronic publication to our internal client websites or through other means, as necessary, to all clients who are entitled to receive such reports.

All research reports are disseminated and available to all clients simultaneously through electronic publication to our internal client websites. Not all research content is redistributed to our clients or available to third-party aggregators, nor is Goldman Sachs responsible for the redistribution of our research by third party aggregators. For research, models or other data related to one or more securities, markets or asset classes (including related services) that may be available to you, please contact your GS representative or go to https://research.gs.com.

Disclosure information is also available at https://www.gs.com/research/hedge.html or from Research Compliance, 200 West Street, New York, NY 10282.

© 2021 Goldman Sachs.

No part of this material may be (i) copied, photocopied or duplicated in any form by any means or (ii) redistributed without the prior written consent of The Goldman Sachs Group, Inc.