

OIL ANALYST

Reducing Our Price Forecast on Deal to Reopen Hormuz

- **Reducing price forecast.** We reduce our oil price forecast following President Trump's announcement of an interim deal that would lift the US blockade, and reopen the Strait of Hormuz after a scheduled deal signing on Friday ([Exhibit 1](#)). While full details on the agreement are unclear, we now assume that Persian Gulf exports normalize to pre-war levels by the end of July (vs. end of August previously). We are reducing our 2026Q4 Brent forecast to \$80 (vs. \$90 previously) and to \$75 (vs. \$80 prior) for the 2027 average ([Exhibit 1](#), consistent with our [estimate](#) that moving the supply normalization process one month forward reduces the fair value of crude prices for 2026Q4/2027 by around \$10/\$5, respectively. We now expect WTI to average \$75 in 2026Q4 and \$70 in 2027.
- **Risks around Mideast supply.** The risks around our assumption that exports/production from the Persian Gulf recover to their pre-war levels by end-July and October ([Exhibit 2](#)), respectively, are two-sided.¹
 - The supply recovery might be stronger because:
 - This normalization in oil exports from Gulf producers to their pre-war level might be achieved with a 12mb/d increase in Hormuz flows from current levels to just 70% of pre-war levels ([Exhibit 3](#)). We estimate that Gulf flows have already risen to 11mb/d with increases in both Hormuz flows and redirections ([Exhibit 4](#)).
 - Producers such as Saudi Arabia and the UAE might respond more strongly to low OECD commercial stocks ([Exhibit 12](#)) this summer with even larger production increases than our above pre-war levels base case.
 - Iran production might rise above pre-war levels on potential sanctions relief ([Exhibit 5](#)).
 - The supply recovery might be weaker because:
 - A potential resumption in regional hostilities/strikes on ships might keep shippers risk-averse, and keep exports and production at low

Daan Struyven
+1(212)357-4172 |
daan.struyven@gs.com
Goldman Sachs & Co. LLC

Yulia Zhestkova Grigsby
+1(646)446-3905 |
yulia.grigsby@gs.com
Goldman Sachs & Co. LLC

Alexandra Paulus
+1(212)902-7111 |
alexandra.paulus@gs.com
Goldman Sachs & Co. LLC

Filippo Cuscito
+44(20)7051-9073 |
filippo.cuscito@gs.com
Goldman Sachs International

¹ Tanker capacity is unlikely to be a binding constraint with an estimated capacity of empty tankers within the Strait or within 5 days of navigation to load 860 million barrels, which corresponds to over 40 days of 20mb/d of normal Hormuz exports.

levels for longer.

- Clearing any potential mines might require significant time (although alternative routes can be used in the meantime).
- Iran might effectively close the Strait again even after re-opening, for instance if detailed nuclear talks don't succeed.

■ **Resilient 2027 prices vs. large surplus.** We now also forecast a somewhat firmer demand recovery ([Exhibit 6](#)) in 2026H2-2027 on improved affordability. We forecast resilient 2027 Brent/WTI prices in line with our long-term fair values of \$75/70 despite a large 3.2mb/d 2027 surplus because:

- OECD commercial oil stocks are unlikely to reach very high levels following large 2026H1 draws and a structural trend of global strategic stockpiling of over 1mb/d in 2027 ([Exhibit 7](#)).
- Some security premium compensating for disruption risk is likely to keep a floor under prices.
 - That said, managing the sharpest oil production shock ever of 14mb/d with a smaller-than-expected 5mb/d deficit in Q2 ([Exhibit 8](#)) on remarkable flexibility (especially from China demand) and without sustained extreme prices is also likely to cap this security premium (assuming Mideast exports recover fast).

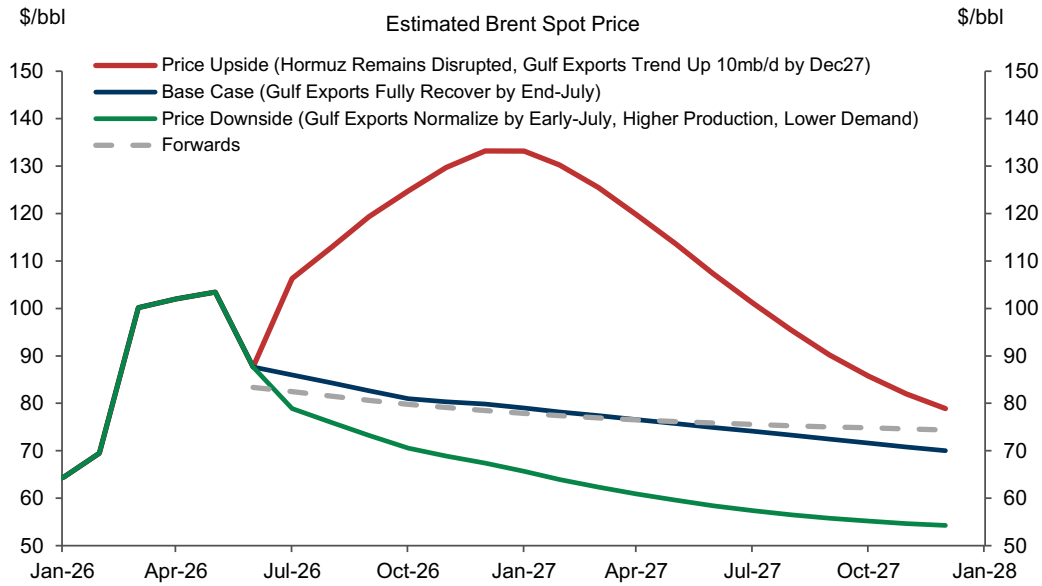
■ **Two-sided but still net upside price risks.**

- *Price upside scenario:* Brent might rise above \$130 in late 2026 and average \$105 in 2027 ([Exhibit 9](#)) assuming Hormuz remains disrupted through 2027 with Gulf countries' exports rising gradually by 10mb/d by Dec27 (with some expansion in allowed Hormuz flows and/or pipeline capacity).²
- *Price downside scenario:* Brent might average just under \$70 in 2026Q4 and just under \$60 in 2027 assuming exports normalize by early July, stickier demand losses, and stronger supply.³

² We see some upside risk to these price estimates (which rely on the historically linear relationship between total oil inventories and crude prices), and would expect even larger price increases for tight refined products such as diesel, where historical data show non-linear price increases when inventories fall from already low levels.

³ The price downside scenario assumes stickier demand losses (with 1.5mb/d or 30% of the peak nearly 5mb/d demand loss persisting in 2027 vs. just over 10% in the baseline), and stronger global supply (+1.4mb/d higher in 2027 than the baseline), for instance in the UAE, Brazil, and the US.

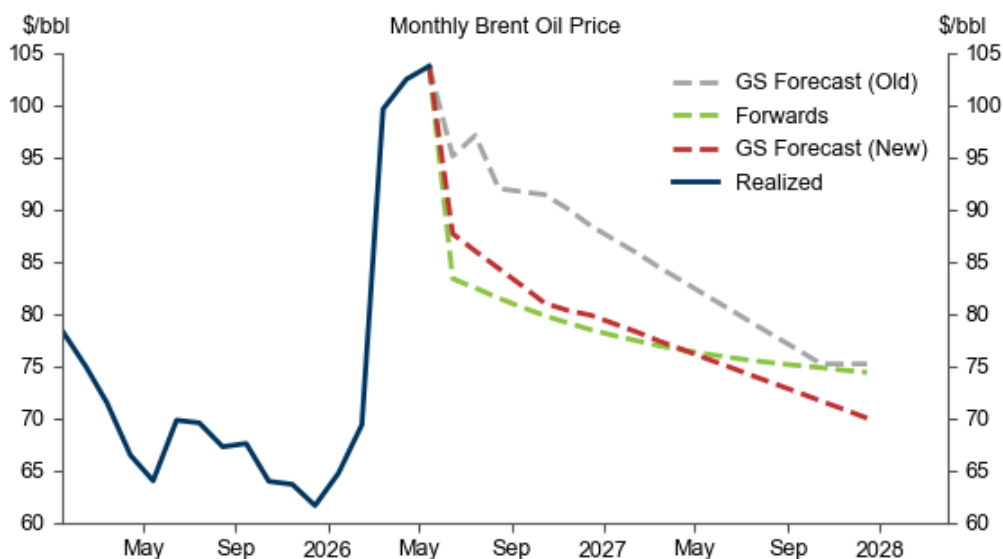
We See Risks to Our Brent Price Forecast as Two-Sided but Tilted to the Upside on Net



Source: Goldman Sachs Global Investment Research

Reducing Our Price Forecast on Deal to Reopen Hormuz

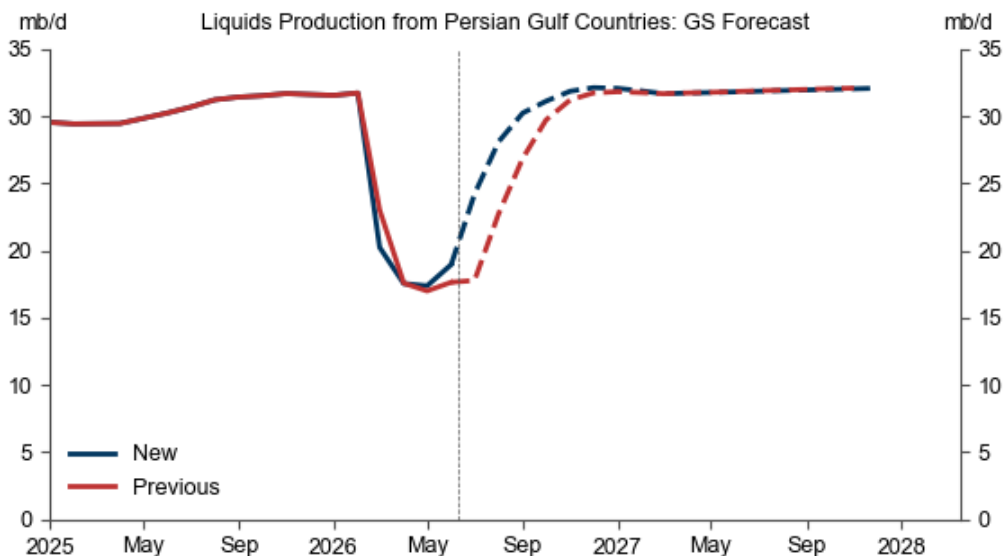
Exhibit 1: We Are Reducing Our 2026Q4 Brent Forecast to \$80 and to \$75 for the 2027 Average as We Now Assume an Earlier Recovery in Mideast Supply Following a Deal to Reopen Hormuz



Source: ICE, Goldman Sachs Global Investment Research

Assuming an Earlier Normalization of Gulf Exports by End of July

Exhibit 2: We Now Assume That Oil Exports/Production from Persian Gulf Countries Recovers by End of July/October, Respectively

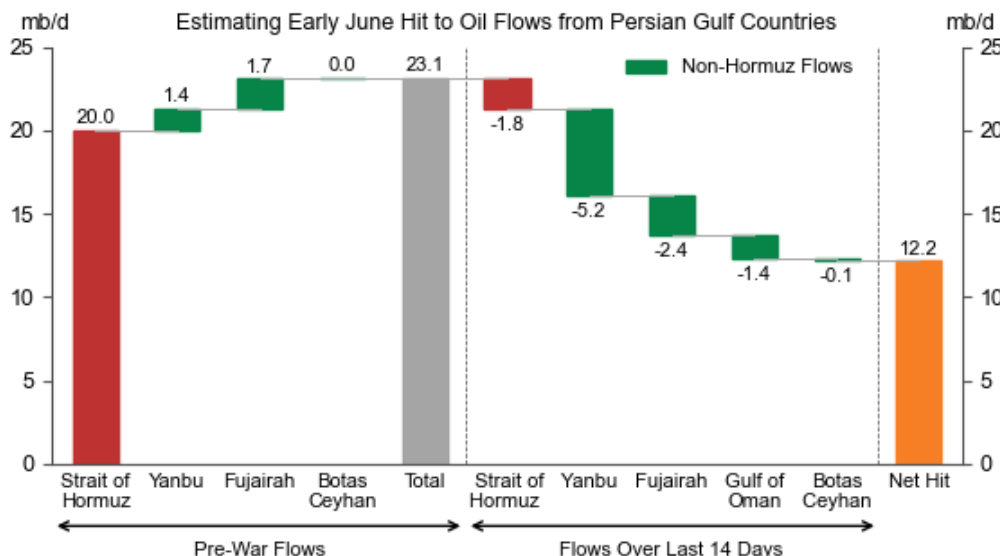


Included countries: Iran, Iraq, Kuwait, Qatar, Saudi Arabia, United Arab Emirates. Liquids include crude oil and natural gas liquids (NGLs).

Source: OPEC Secondary Sources, Goldman Sachs Global Investment Research

Two-Sided Risks to the Mideast Supply Recovery

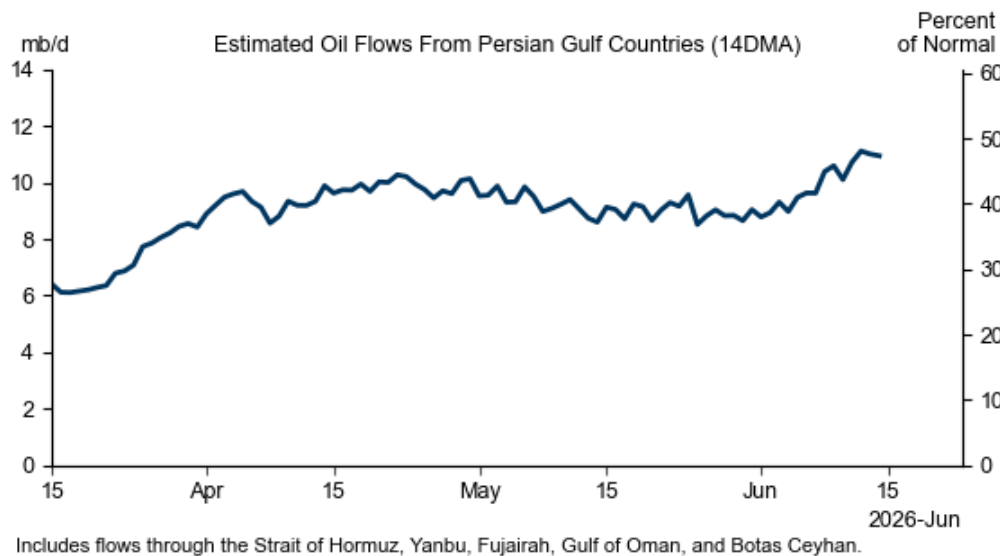
Exhibit 3: This Normalization in Oil Exports From Gulf Producers to Their Pre-War Level May Be Achieved With a 12mb/d Increase in Hormuz Flows From Current Levels



Yanbu is on the west coast of Saudi Arabia, bordering the Red Sea and connected to Saudi eastern oil fields via the East-West pipeline. Fujairah lies east (outside) of the Strait of Hormuz and is connected to Abu Dhabi's onshore fields via the Abu Dhabi Crude Oil Pipeline (ADCOP). The Gulf of Oman connects the Strait to the Arabian Sea (southeast). The Kirkuk-Ceyhan pipeline allows northern Iraqi crude to be pumped through Turkey to the Mediterranean sea.

Source: Kpler, S&P Global Commodities at Sea, Goldman Sachs Global Investment Research

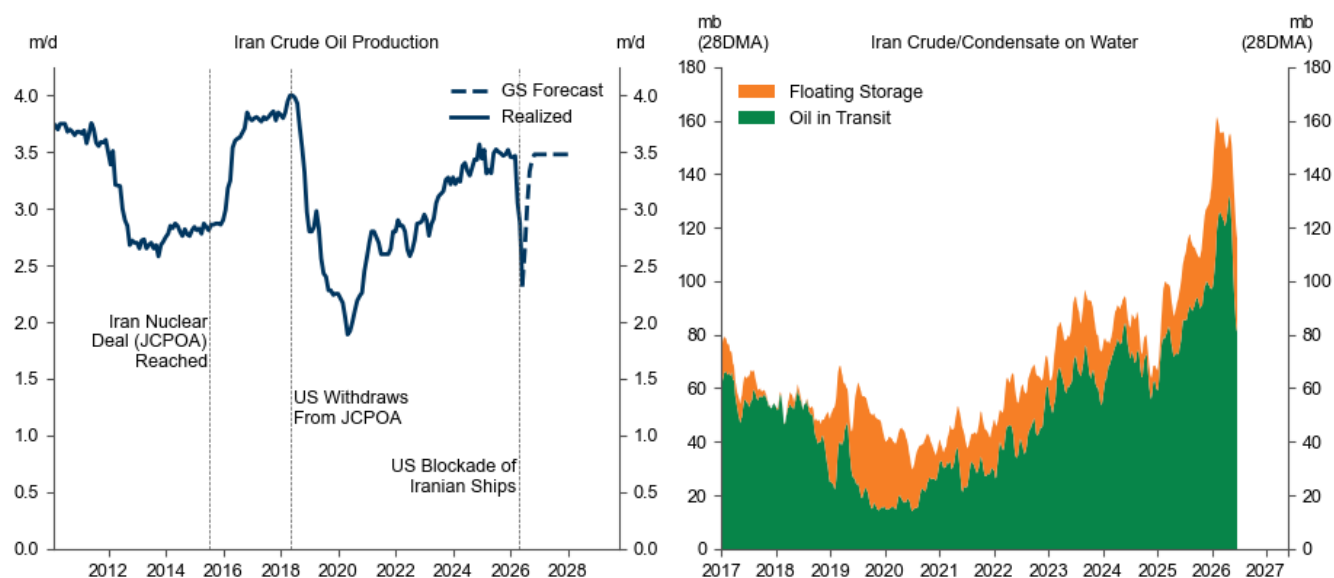
Exhibit 4: Estimated Oil Flows From Persian Gulf Countries Have Trended Up From Less Than 30% of Normal Levels in Early March to Nearly 50% of Normal in Mid-June



Yanbu is on the west coast of Saudi Arabia, bordering the Red Sea and connected to Saudi eastern oil fields via the East-West pipeline. Fujairah lies east (outside) of the Strait of Hormuz and is connected to Abu Dhabi's onshore fields via the Abu Dhabi Crude Oil Pipeline (ADCOP). The Gulf of Oman connects the Strait to the Arabian Sea (southeast). The Kirkuk-Ceyhan pipeline allows northern Iraqi crude to be pumped through Turkey to the Mediterranean sea.

Source: Kpler, S&P Global Commodities at Sea, Goldman Sachs Global Investment Research

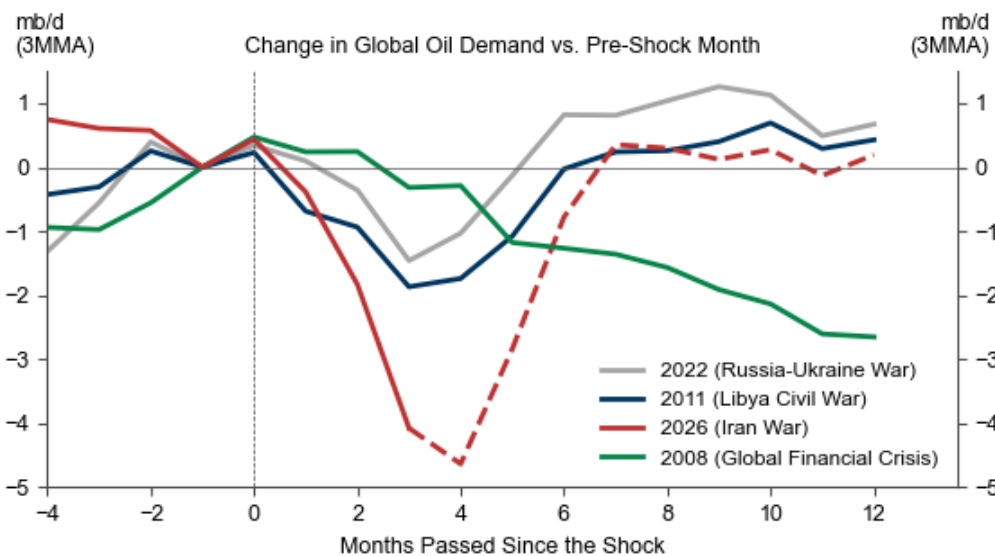
Exhibit 5: Potential Sanctions Relief May Raise Iran Production Above Pre-War Levels and Reduce Oil on Water, Which Remains High at Nearly 120mb



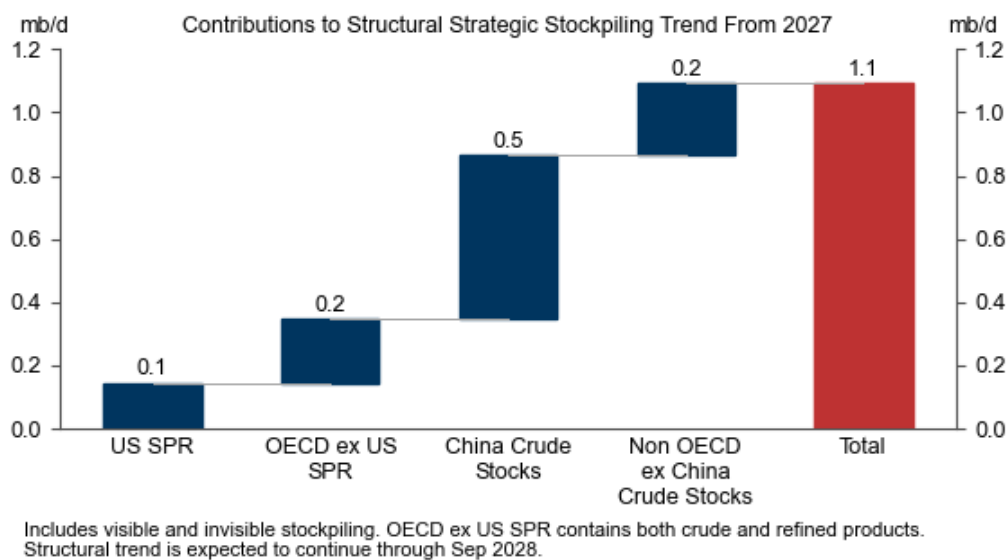
Source: Kpler, IEA, Goldman Sachs Global Investment Research

A Large 2027 Surplus

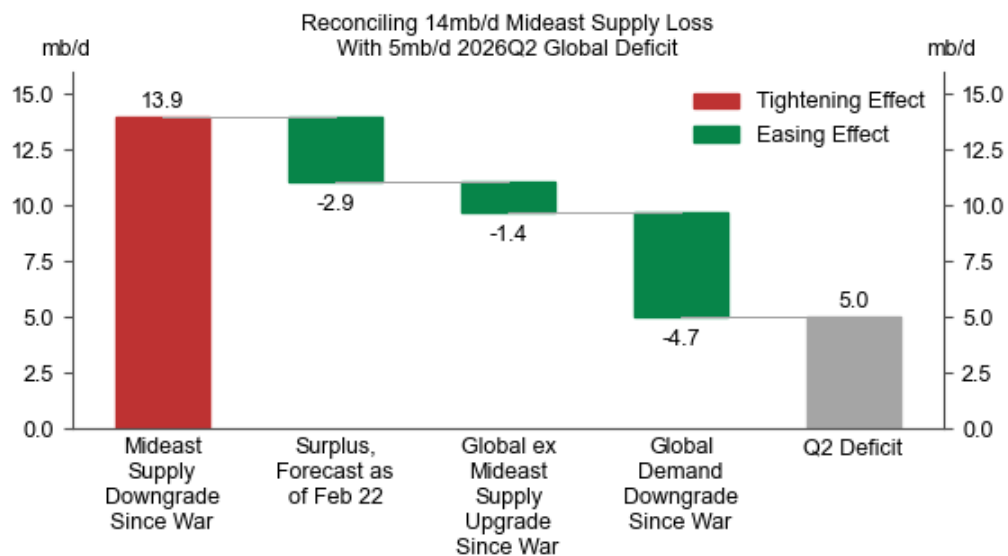
Exhibit 6: Global Oil Demand Tends to Recover Swiftly Following Oil Supply Shocks But Remain Weak Following Recessions



Source: IEA, Goldman Sachs Global Investment Research

Exhibit 7: We Assume a Structural Trend of Global Strategic Stockpiling of Over 1mb/d in 2027


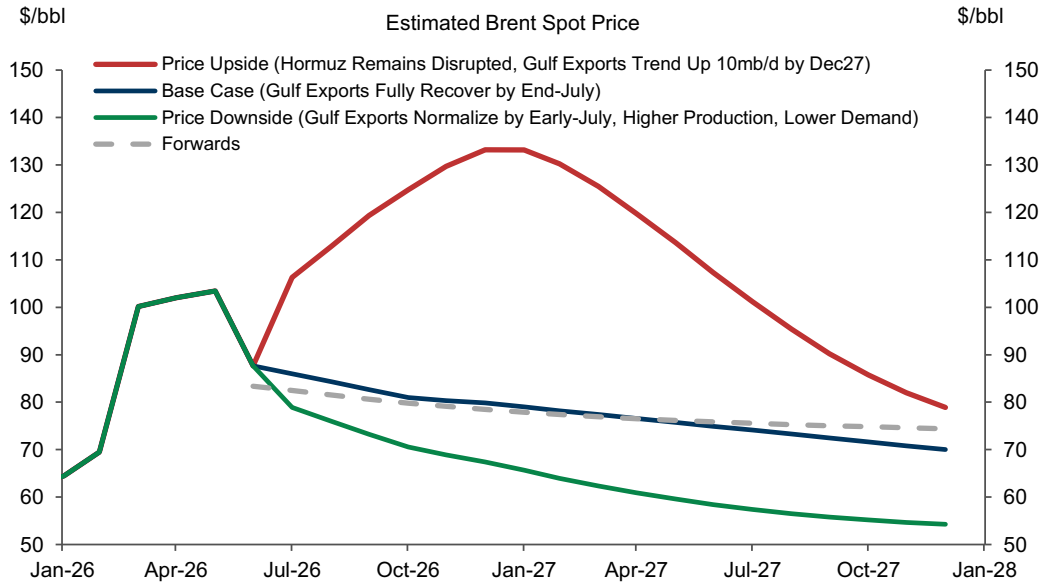
Source: Goldman Sachs Global Investment Research

Exhibit 8: We Estimate a 5mb/d Q2 Deficit, Which is Smaller Than the 14mb/d Hit to Mideast Liquids Production


Source: Goldman Sachs Global Investment Research

Two Sided Risks But Still Net Upside

Exhibit 9: We See Risks to Our Brent Price Forecast as Two-Sided but Tilted to the Upside on Net



Source: Goldman Sachs Global Investment Research

Appendix

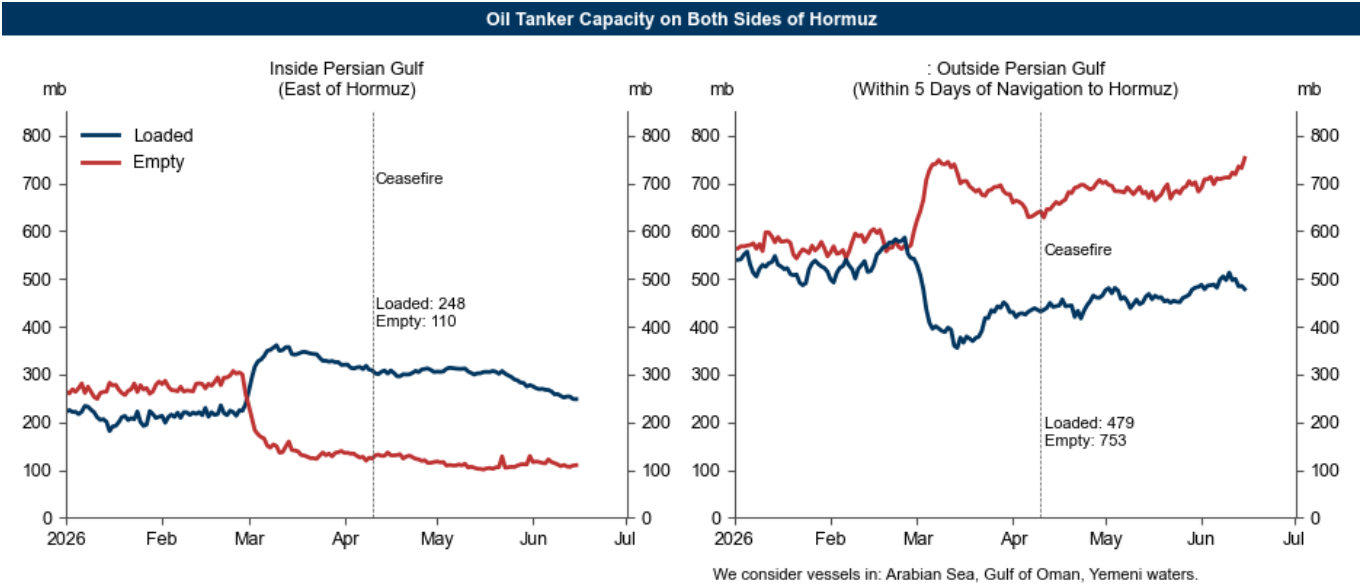
Exhibit 10: We Reduce Our 2026Q4 Brent Forecast to \$80 (vs. \$90 Prior) and Our 2027 Average Forecast to \$75 (vs. \$80 Prior)

	Brent (\$/bbl)			WTI (\$/bbl)		
	New GS Forecast	Old GS Forecast	Forwards (Nearby Contract Traded That Month)	New GS Forecast	Old GS Forecast	Forwards (Nearby Contract Traded That Month)
2025	68	68		65	65	
2026	85	90	83	80	85	78
2027	75	80	75	70	75	71
2028	71	75	74	66	70	69
2029	74	75	72	69	70	67
2030	75	75	71	70	70	66
2031-2035	75	75	68	70	70	61
1Q25	75	75	75	71	71	71
2Q25	67	67	67	64	64	64
3Q25	68	68	68	65	65	65
4Q25	63	63	63	59	59	59
1Q26	78	78	76	72	72	72
2Q26	98	100	96	93	95	92
3Q26	84	94	80	79	88	76
4Q26	80	90	78	75	85	74
1Q27	78	86	77	74	81	72
2Q27	76	82	76	71	77	71
3Q27	73	78	75	69	73	71
4Q27	71	75	74	66	70	70
Jan-26	65	65		60	60	
Feb-26	69	69		65	65	
Mar-26	100	100		91	91	
Apr-26	102	102		98	98	
May-26	104	104		99	99	
Jun-26	88	95	81	82	90	79
Jul-26	86	97	81	81	92	77
Aug-26	84	92	80	79	87	76
Sep-26	83	92	79	77	86	75
Oct-26	81	91	78	76	86	74
Nov-26	80	90	78	75	85	74
Dec-26	80	88	77	75	83	73
Jan-27	79	87	77	74	82	73
Feb-27	78	86	77	74	81	72
Mar-27	77	84	76	73	79	72
Apr-27	77	83	76	72	78	72
May-27	76	82	76	71	77	71
Jun-27	75	80	75	70	75	71
Jul-27	74	79	75	70	74	71
Aug-27	73	78	75	69	73	71
Sep-27	72	77	75	68	71	71
Oct-27	72	75	74	67	70	70
Nov-27	71	75	74	66	70	70
Dec-27	70	75	74	65	70	70

Source: ICE, Goldman Sachs Global Investment Research

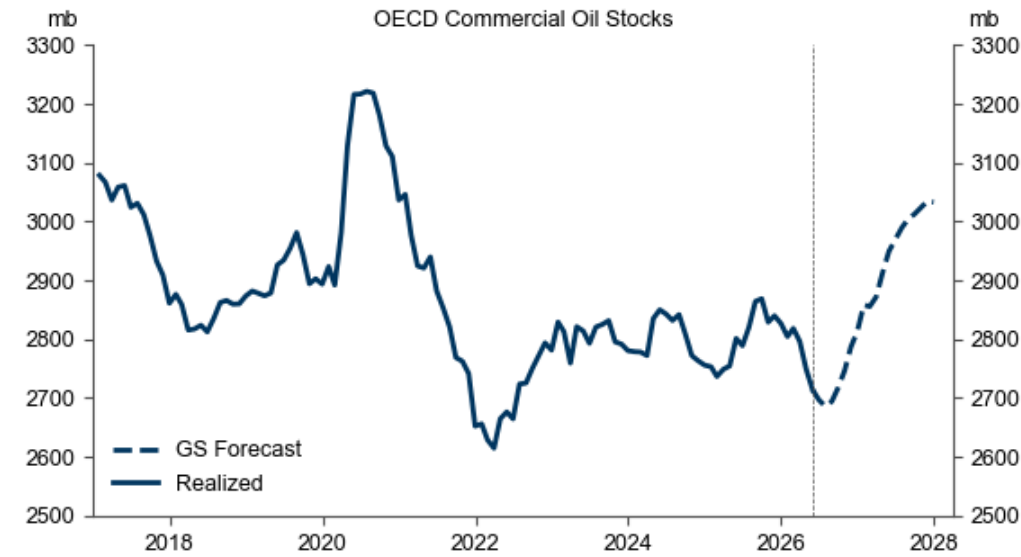


Exhibit 11: We Estimate That Empty Oil Tankers Within the Strait or Within 5 Days of Navigation Have the Capacity to Load 860 Million Barrels



Source: Kpler, Goldman Sachs Global Investment Research

Exhibit 12: We Estimate That OECD Commercial Oil Stocks Will Bottom Out in July at 2,686mb



Source: Goldman Sachs Global Investment Research

Exhibit 13: We Estimate a Large 5mb/d Deficit in 2026Q2 But a Large 3.2mb/d Surplus in 2027

GS 2025-2027 Oil Supply and Demand Outlook (mb/d)								Quarterly Levels							
	2025		2026		2027			2026				2027			
	Level	YoY	Level	YoY	Level	YoY		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
World Supply	105.8	3.1	103.4	-2.4	108.9	5.5		103.2	95.1	105.6	109.8	109.2	109.0	108.9	108.6
Non-OPEC ex. Russia Supply	65.8	2.1	66.3	0.5	68.1	1.8		65.2	64.3	67.4	68.3	67.9	68.1	68.2	68.0
Total US	22.3	0.8	23.1	0.7	23.4	0.3		22.4	23.2	23.3	23.3	23.1	23.5	23.5	23.4
Canada	6.4	0.3	6.6	0.2	6.6	0.1		6.5	6.3	6.6	6.8	6.8	6.4	6.6	6.7
Non-OPEC Latam	7.0	0.6	7.9	0.9	8.2	0.3		7.6	8.0	8.0	8.1	8.1	8.1	8.2	8.4
Russia	10.4	-0.2	10.5	0.1	10.1	-0.4		10.4	10.5	10.6	10.5	10.3	10.2	10.0	9.9
OPEC Supply	29.6	1.2	26.6	-3.0	30.8	4.2		27.6	20.2	27.6	31.0	30.9	30.7	30.7	30.7
Saudi crude	9.5	0.5	9.1	-0.4	10.4	1.3		9.2	7.0	9.3	10.8	10.5	10.3	10.3	10.3
OPEC liq. ex. Saudi crude	20.1	0.7	17.5	-2.6	20.4	2.8		18.4	13.3	18.3	20.2	20.4	20.4	20.4	20.4
World Demand	104.4	0.8	103.7	-0.7	105.7	2.1		104.4	100.1	105.1	105.0	105.0	104.9	106.4	106.5
OECD Demand	45.9	0.0	45.8	-0.1	45.7	0.0		45.7	44.6	46.6	46.2	45.8	45.0	46.3	45.9
US	20.7	0.2	20.9	0.2	20.9	0.0		20.9	20.8	21.1	21.0	20.8	20.8	21.1	20.9
OECD Europe	13.4	0.0	13.2	-0.2	13.1	-0.1		12.9	13.0	13.9	13.3	12.9	13.0	13.6	13.0
Non-OECD Demand	58.5	0.8	57.9	-0.6	60.0	2.1		58.7	55.5	58.5	58.8	59.2	59.9	60.1	60.6
China	16.9	0.2	16.3	-0.6	16.7	0.4		17.1	15.2	16.2	16.6	16.7	16.7	16.6	16.7
India	5.9	0.1	5.9	0.0	6.4	0.5		6.1	5.6	5.8	6.1	6.5	6.5	6.1	6.5
Other non-OECD Asia	9.4	0.2	9.4	0.0	9.9	0.4		9.5	9.0	9.5	9.6	9.8	9.8	9.8	10.0
Imbalance (=Supply-Demand)	1.4	2.3	-0.3	-1.7	3.2	3.5		-1.2	-5.0	0.4	4.8	4.2	4.0	2.5	2.1
Change in OECD Comm. Stocks	0.2	-	0.0	-	0.6	-		-0.3	-1.1	0.2	1.1	0.6	1.1	0.5	0.2

Source: Goldman Sachs Global Investment Research

Disclosure Appendix

Reg AC

We, Daan Struyven, Yulia Zhestkova Grigsby, Alexandra Paulus and Filippo Cuscito, 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.

Contributing Authors: Daan Struyven Goldman Sachs & Co. LLC, Yulia Zhestkova Grigsby Goldman Sachs & Co. LLC, Alexandra Paulus Goldman Sachs & Co. LLC, Filippo Cuscito Goldman Sachs International.

Unless otherwise stated, the individuals listed in the Contributing Authors disclosure of this report are analysts in Goldman Sachs' Global Investment Research division.

Disclosures

Other disclosure

Iran is subject to comprehensive sanctions by the United States

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 a subject company, public appearances and trading in securities covered 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 Global Investment Research 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:** This information is being provided to you for information purposes only and is not, and under no circumstances should be construed as, an advertisement, offering or solicitation by Goldman Sachs & Co. LLC for purchasers of securities in Canada to trade in any Canadian security. Goldman Sachs & Co. LLC is not registered as a dealer in any jurisdiction in Canada under applicable Canadian securities laws and generally is not permitted to trade in Canadian securities and may be prohibited from selling certain securities and products in certain jurisdictions in Canada. If you wish to trade in any Canadian securities or other products in Canada please contact Goldman Sachs Canada Inc., an affiliate of The Goldman Sachs Group Inc., or another registered Canadian dealer. **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, 10th Floor, Ascent-Worli, Sudam Kalu Ahire Marg, Worli, 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. Investment in securities market are subject to market risks. Read all the related documents carefully before investing. Registration granted by SEBI and certification from NISM in no way guarantee performance of the intermediary or provide any assurance of returns to investors. Goldman Sachs (India) Securities Private Limited compliance officer and investor grievance contact details can be found at: <https://www.goldmansachs.com/worldwide/india/documents/Grievance-Redressal-and-Escalation-Matrix.pdf>, and a copy of the annual audit compliance report can be found at this link: <https://publishing.gs.com/content/site/india-annual-compliance-report.html>. **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 Type II Financial Instruments Firms Association, and Investment Management Association of Japan. 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

Goldman Sachs Global Investment Research 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 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.

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: 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 within the European Economic Area.

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 Global Investment Research. 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 <https://www.theocc.com/about/publications/character-risks.jsp> and https://www.goldmansachs.com/disclosures/cftc_fcm_disclosures. 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 Goldman Sachs Global Investment Research 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.

© 2026 Goldman Sachs.

You are permitted to store, display, analyze, modify, reformat, and print the information made available to you via this service only for your own use. You may not resell or reverse engineer this information to calculate or develop any index for disclosure and/or marketing or create any other derivative works or commercial product(s), data or offering(s) without the express written consent of Goldman Sachs. You are not permitted to publish, transmit, or otherwise reproduce this information, in whole or in part, in any format to any third party without the express written consent of Goldman Sachs. This foregoing restriction includes, without limitation, using, extracting, downloading or retrieving this information, in whole or in part, to train or finetune a machine learning or artificial intelligence system, or to provide or reproduce this information, in whole or in part, as a prompt or input to any such system.