

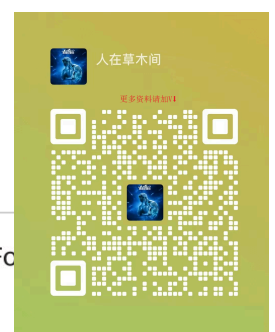
CHINA MATTERS

Stability Premium

- **Stable growth:** Chinese Q1 real GDP growth was reported at 5.0% yoy, the same pace as that for 2025 and better than the market expected. Despite steady headline growth, sectoral disparities widened. Export value jumped 14.7% yoy in Q1, while property and auto sales experienced double-digit declines. With the Strait of Hormuz still closed and energy prices elevated, we expect sequential real GDP growth to slow from 5.3% qoq annualized in Q1 to 4.0% in Q2.
- **Stable markets:** Chinese financial markets have demonstrated notable resilience amid external shocks. Since late February, the CNY has appreciated against both the USD and on a trade-weighted basis, while China's interest rates have declined. Favorable initial conditions—such as substantial energy stockpiles, an undervalued currency, and very low inflation—supported this stability. Active management by policymakers via daily FX fixing and liquidity tools also helped reduce market volatility.
- **Stable policy:** With growth on track but uncertainty high, we expect the PBOC to maintain ample liquidity in Q2 for risk management. We do not anticipate a policy rate cut this year and think fiscal and property policies are likely to remain on their current paths. If needed, policy banks may be directed to boost lending for infrastructure. Property easing measures are incremental and carried out at the city level based on local conditions. China's shift from construction and real estate toward manufacturing and business services will persist, supporting a positive outlook for the CNY. However, with policymakers placing a high premium on growth and market stability, they will carefully manage the pace of appreciation to prevent one-sided capital flows and undue pressures on exporters.

Hui Shan

+852-2978-6634 | hui.shan@gs.com
Goldman Sachs (Asia) L.L.C.

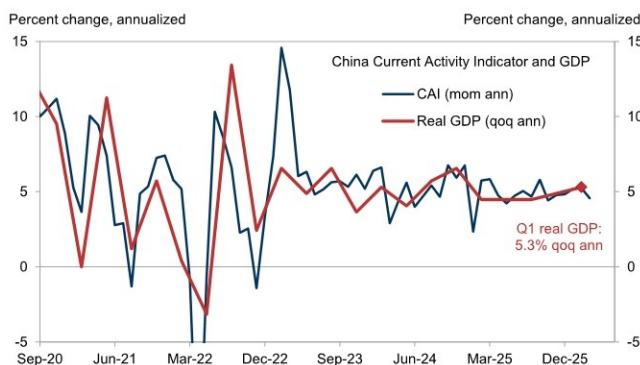


Stability Premium

Stable growth

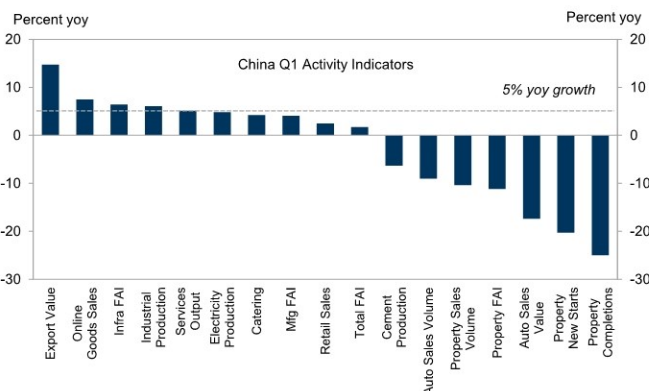
Chinese official real GDP posted another 5.0% yoy increase in Q1 2026, above consensus expectations and the same pace as that for 2025 (Exhibit 1). However, this stable headline growth masks notable disparities across the economy. Exports were exceptionally strong, surging 14.7% yoy in nominal USD terms in Q1 and far outpacing other sectors (Exhibit 2). By preliminary estimates, exports alone contributed roughly 3pp to the 5.0% headline GDP growth.¹ In contrast, domestic activity indicators—including fixed asset investment (FAI), retail sales, and property construction—remained weak in Q1. The “strong exports and weak domestic demand” pattern that we identified two years ago not only persisted but became more extreme into early 2026.

Exhibit 1: China’s official real GDP grew 5.3% qoq annualized and 5.0% yoy in Q1



Source: NBS, Goldman Sachs Global Investment Research

Exhibit 2: Exports surged 14.7% yoy in Q1 while domestic activity indicators remained weak



Source: CEIC, Goldman Sachs Global Investment Research

Stable headline growth does not mean that the Chinese economy is immune to the ongoing Middle East conflict and sharply higher global energy prices. Domestic fuel prices have risen about 20% since the Iran war began. Flight cancellations have increased in recent weeks. Chinese exports to the Middle East plunged 45% yoy in March, reducing China’s total exports by nearly 3pp (Exhibit 3). Unemployment rates ticked up in March. On April 20, President Xi Jinping stated that the Strait of Hormuz “should maintain normal passage” in his call with Saudi Arabia’s Crown Prince Mohammed bin Salman. In the near term, continued trade disruptions in the Middle East, lower demand from low-income oil-importing trading partners, and reduced real household income will likely weigh on activity in the coming months. We expect sequential real GDP growth to slow from 5.3% qoq annualized in Q1 to 4.0% in Q2.

However, there are offsetting factors and policy tools the Chinese government can use to keep growth within its 4.5-5% target range for the remainder of 2026.

First, China’s dominance in new-energy products should support exports following the global energy supply shock. News articles report that Chinese EV sales overseas jumped in March. Exports of “new three” products, namely solar cell, lithium battery and EV,

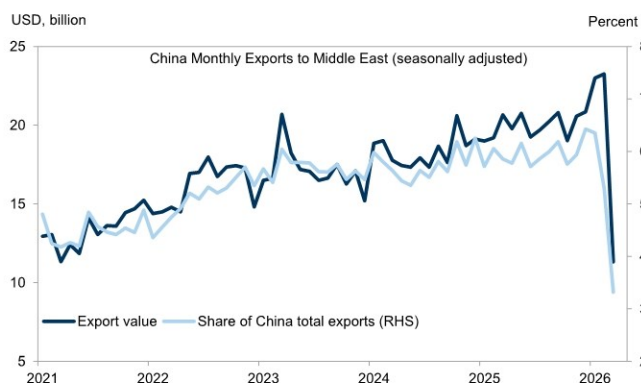
¹ We await the March trade volume and price breakdown data to be released by China Customs on April 27 to fine-tune the estimate.

grew 72% yoy in March (vs. 55% yoy in January-February).

Second, resilient supply chains in China may allow producers to gain market share in sectors facing ex-China supply disruptions. For example, Middle East aluminum producers have initiated shutdowns due to missile and drone attacks, pushing aluminum prices higher, and Chinese aluminum exports may increase in the coming months. Shutdowns of petrochemical plants in other countries due to feedstock shortages could also lead to higher Chinese exports of chemical products.

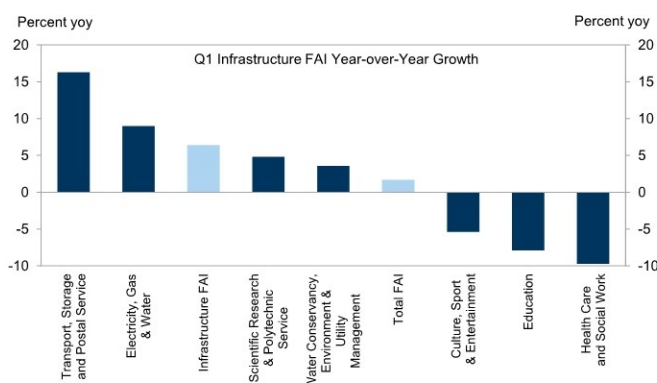
Third, if exports weaken substantially, Chinese policymakers can accelerate infrastructure investment to support growth. As outlined by speakers at our recent China macro CIO tour, the March “Two Sessions” approved both funding (e.g., a “new financing instrument” and bank recapitalization) and projects (e.g., 109 major projects in the 15th Five-Year Plan), paving the way for more infrastructure investment this year. Exhibit 4 shows that transportation and electricity-related infrastructure investment outperformed in Q1.

Exhibit 3: Chinese exports to the Middle East plunged in March



Source: China Customs, Goldman Sachs Global Investment Research

Exhibit 4: Transportation and electricity-related infrastructure investment outperformed in Q1

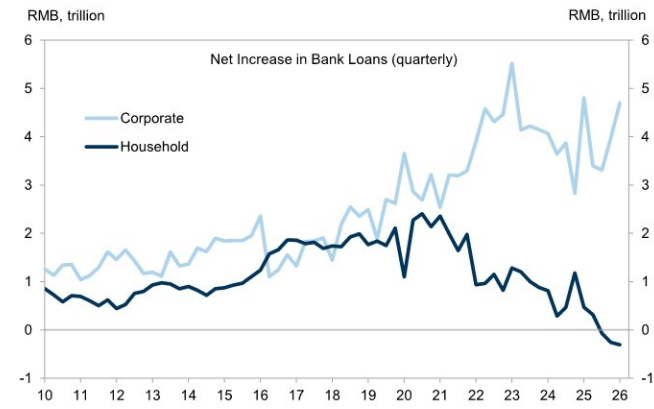


Source: CEIC, Goldman Sachs Global Investment Research

Meanwhile, progress in consumption recovery and the impact of policy measures to boost consumption have been limited. Bank lending data show that household loan balances continued to contract in Q1, despite the government’s interest rate subsidy program for consumption loans rolled out in 2025 and expanded in January 2026 (Exhibit 5). The government-subsidized consumer goods trade-in program is no longer a significant driver of retail sales growth, due to reduced subsidies (RMB250bn in 2026 vs. RMB300bn in 2025) and diminishing effects (Exhibit 6).

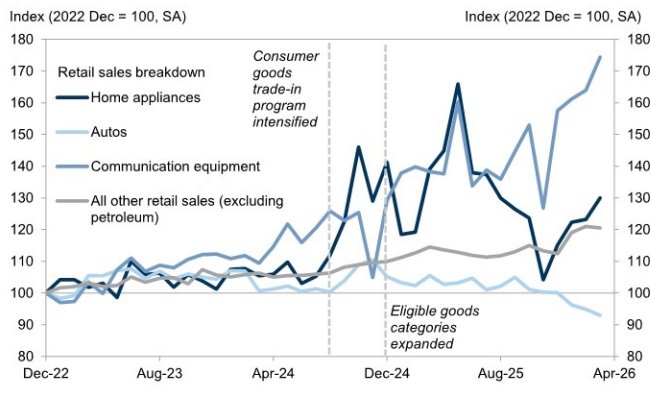
In our view, stronger consumption growth depends on higher income growth and stabilization of the property market. Policymakers have begun drafting the “urban and rural residents’ income increase plan” (城乡居民增收计划), and Shanghai and Shenzhen property prices may lead other top-tier cities in finding a bottom. However, it will take time to see substantial effects. If export growth remains as robust for the rest of the year as it was in Q1, there will be even less urgency for additional consumption-boosting measures in the near term, given the government’s 4.5-5% real GDP growth target.

Exhibit 5: Household loans contracting and corporate loans growing



Source: Haver Analytics, Goldman Sachs Global Investment Research

Exhibit 6: The impact of the consumer goods trade-in program may have peaked for auto and home appliances

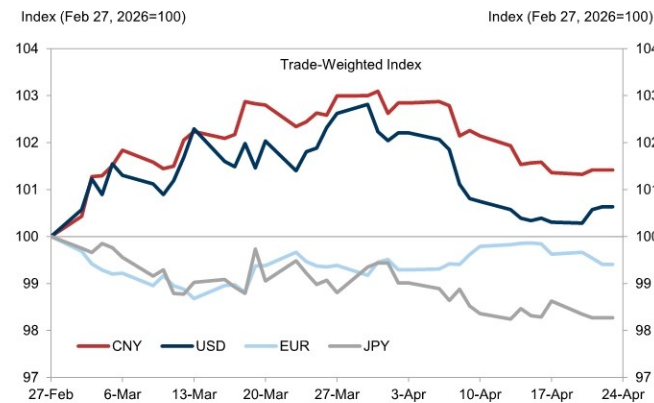


Source: CEIC, Goldman Sachs Global Investment Research

Stable markets

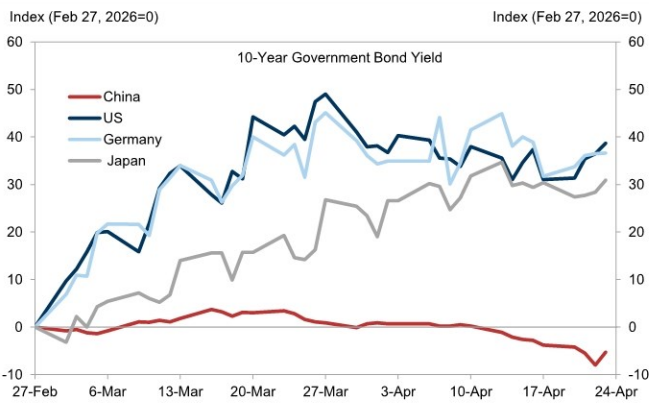
Although China is the world’s largest oil importer and nearly half its oil imports come from the Middle East, Chinese FX and interest rates showed remarkable resilience in the weeks following the onset of the Iran war. In March, while many oil-importing EM countries in Asia and Europe saw their currencies weaken significantly against the US Dollar due to worsening terms of trade, the CNY actually appreciated notably on a trade-weighted basis, outperforming even the US Dollar (Exhibit 7). Since late February, 10-year government bond yields in the US, Germany, and Japan have risen by about 30bp, but the 10-year Chinese government bond (CGB) yield has declined by 5bp (Exhibit 8).

Exhibit 7: CNY appreciated on a trade-weighted basis after the onset of the Iran war



Source: Bloomberg, Goldman Sachs Global Investment Research

Exhibit 8: 10-year CGB yield has declined since late February



Source: Bloomberg, Goldman Sachs Global Investment Research

Part of the resilience stemmed from favorable initial conditions. First, the Chinese government not only built up oil reserves before the Middle East conflict, but also prioritized security in recent years—from food supply to trade diversification—which has strengthened the economy’s ability to withstand external shocks such as a potential closure of the Strait of Hormuz.

Second, the CNY had been appreciating against the USD before the Iran war. The Chinese economy endured higher US tariffs last year, and market consensus shifted from

expecting CNY depreciation to anticipating appreciation, prompting exporters to convert more USD into CNY and causing USDCNY to fall ([Exhibit 9](#)). On February 27, just before the Iran war began, the PBOC cut FX forward sales RRR to slow the pace of CNY appreciation against the USD.

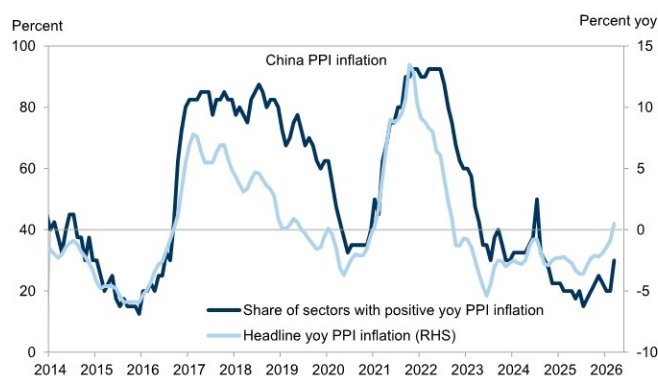
Third, [Chinese inflation](#) has been very low over the past three years. Slightly higher inflation right now—even if supply-driven—is more welcomed in China than in many other countries. [Exhibit 10](#) shows that year-over-year PPI inflation turned positive in March 2026 for the first time since 2022, thanks to higher energy prices. However, with only 30% of PPI sub-categories showing positive year-over-year inflation in March, there is still room for inflation to rise before it becomes a concern for policymakers.

Exhibit 9: CNY had been appreciating against the USD before the onset of the Iran war



Source: Haver Analytics, Goldman Sachs Global Investment Research

Exhibit 10: PPI inflation turned positive in March, but the increase was driven by a small set of sectors



Source: Haver Analytics, Goldman Sachs Global Investment Research

Policymakers' preference for low volatility and their broad set of tools to limit volatility also contributed to asset price resilience. Cross-market correlations—including equities, credit, FX, and rates—show that Chinese asset markets priced higher inflation risks in mid-March and lower growth risks in late-March, mirroring [patterns](#) seen outside China. However, the magnitude of market moves in China is much smaller, as the PBOC manages FX with daily fixings and rates with liquidity tools. This is not a new phenomenon: in 2025, the standard deviation of daily USDCNY moves was just 0.16% (vs. 0.49% for EURUSD), and the standard deviation of daily 10-year CGB yield changes was under 2bp (compared to 5bp for the 10-year US Treasury).

Stable policy

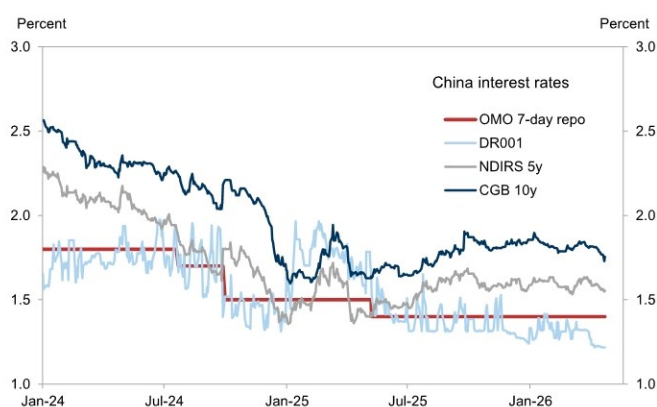
Stability is a top priority for Chinese policymakers during uncertain times. Although Q1 GDP growth surpassed market expectations and inflation is rising, the PBOC has kept interbank liquidity abundant and allowed front-end repo rates to drift lower since late March ([Exhibit 11](#)). With various liquidity management tools, including OMO reverse repos, outright reverse repos, and CGB purchases, the decision to let the overnight interbank repo rate approach the lower end of its corridor reflects a deliberate policy choice.² In our view, interbank liquidity will likely remain ample in Q2 to help manage risks as the Middle East conflict continues and its effects on China's economy unfold. We do not expect the PBOC to cut the policy rate this year, given the significant increase in

² The PBoC manages the overnight repo rate among depository institutions (DR001) within a corridor of -20bp to +50bp relative to the policy rate (OMO 7-day reverse repo rate, currently 1.4%).

inflation. We believe the threshold for raising rates is very high due to weak domestic demand.

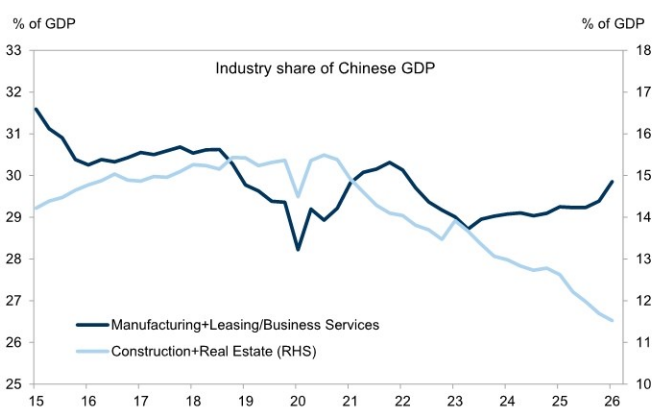
Fiscal and property policies are also expected to remain on their current paths. Unless growth slows sharply, policymakers are unlikely to increase fiscal easing beyond what was planned at the March “Two Sessions.” If necessary, policy banks may be instructed to boost lending for infrastructure, and SOEs may accelerate investment to support headline growth. At this stage of the property market downturn, local conditions differ widely across cities. The government has encouraged cities to adopt tailored property easing measures. Recent examples include Nanjing and Zhengzhou relaxing rules for housing provident fund use, and Wuxi introducing a home purchase subsidy for qualified talent.

Exhibit 11: China rates have declined since late March on increased interbank liquidity



Source: Bloomberg, Goldman Sachs Global Investment Research

Exhibit 12: Manufacturing and business services share of GDP increases while construction and real estate share of GDP falls



Source: Haver Analytics, Goldman Sachs Global Investment Research

The structural shift from property toward high-tech sectors will continue. In the 15th Five-Year Plan, policymakers called for the deep integration of technological and industrial innovation, aiming to further strengthen China’s manufacturing competitiveness. Policy plans to boost the service sector emphasize producer services—such as science and technology, logistics, and software and information services—as much as consumer services. Over the past two years, the share of manufacturing and leasing/business services in GDP has increased, while the share of construction and real estate services has declined (see Exhibit 12). We expect this trend to persist. Technological progress and greater industrial competitiveness support our positive outlook on China’s trade surplus and the CNY, despite the latest terms-of-trade shock driven by higher oil prices. Policymakers will manage the pace of CNY appreciation to prevent one-sided expectations that could create financial market risks, and to avoid putting excessive pressure on exporters that could threaten growth. While the exact path will depend on unpredictable events, as evidenced by the recent USD strengthening on days of Middle East tensions escalating and oil prices increasing, the overall direction is clear.

Hui Shan

The China Economics Team

Andrew Tilton

+852-2978-1802
andrew.tilton@gs.com
Goldman Sachs (Asia) L.L.C.

Hui Shan

+852-2978-6634
hui.shan@gs.com
Goldman Sachs (Asia) L.L.C.

Lisheng Wang

+852-3966-4004
lisheng.wang@gs.com
Goldman Sachs (Asia) L.L.C.

Xinquan Chen

+852-2978-2418
xinquan.chen@gs.com
Goldman Sachs (Asia) L.L.C.

Yuting Yang

+852-2978-7283
yuting.yyang@gs.com
Goldman Sachs (Asia) L.L.C.

Chelsea Song

+852-2978-0106
chelsea.song@gs.com
Goldman Sachs (Asia) L.L.C.

Disclosure Appendix

Reg AC

I, Hui Shan, hereby certify that all of the views expressed in this report accurately reflect my 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: Hui Shan Goldman Sachs (Asia) L.L.C..

Unless otherwise stated, the individuals listed in the Contributing Authors disclosure 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 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 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.