Leisure Brands & Retailers

Evaluating potential implications of Red Sea disruption

Industry Overview

Red Sea situation could be a negative

In light of disruption in the Red Sea, we assess potential impacts to our Leisure Brands & Retailers coverage universe. We expect the most direct impact to our coverage that has exposure to the Asia-Europe shipping route including incremental profit margin headwinds as a blend of Asia-Europe Container Spot rates are up significantly since Nov. 30th (see Exhibit 1). We also see potential for added transit times for Asia to Europe bound goods including an extra 10-15 days of travelling time using the Cape of Good Hope vs. the Red Sea (see BofA Analyst Ken Hoexter's Year Ahead). We also see potential spillover effect to others as we move through 2024 if global shipping pricing continues to rise and capacity shortages occur.

COLM & HOG have the most risk, in our view

We believe COLM has exposure to Red Sea disruptions given that COLM sources 85% of its apparel, accessories and equipment from Asia, and 90% of its footwear product. COLM's Europe Direct & EMEA Distributor business accounted for 13% of year-to-date sales, and we see risk of added transit times and we believe spillover disruption from the Red Sea could translate into potential gross margin pressures in 2024. For HOG, we believe the company produces most of its European motorcycles at its manufacturing facility in Rayong, Thailand so see risk of added transit times and profit margin headwinds if disruption continues. HOG unit retail sales in its EMEA region accounted for 16.5% of its worldwide sales.

See less risk for GOOS, HIBB, MODG, & FOXF

We see less direct risk for MODG, FOXF, HIBB, & GOOS given little direct exposure to Asia-Europe shipping routes. For MODG, we believe there is exposure for its Jack Wolfskin business, but the consolidated impact would be more minimal (see our PGA Show note). FOXF also faces less risk as we believe its OEM partners for its bike business would absorb a majority of the impact. HIBB is not directly exposed given its U.S. footprint & as it sources products from vendor partners with a majority purchased from Nike (69% of sales). GOOS has a primarily vertically integrated supply chain with most manufacturing in Canada. We do see potential spillover effect given a potential global rise in freight rates (see Exhibit 2).

See little risk for fitness stocks incl. PLNT, XPOF, LTH

We see fitness companies including PLNT, LTH, & XPOF relatively insulated from disruption in the Red Sea given their store footprints are predominantly in the US. We believe a significant of exercise equipment is sourced in Asia, so we could see some spillover effects from a rise in global freight rates.

30 January 2024

Equity United States Leisure

Alexander Perry Research Analyst BofAS +1 646 855 1365 aperry3@bofa.com

Robert F. Ohmes, CFA Research Analyst BofAS robert.ohmes@bofa.com

EMEA = Europe, Middle East, and Africa

BofA Securities does and seeks to do business with issuers covered in its research reports. As a result, investors should be aware that the firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision.

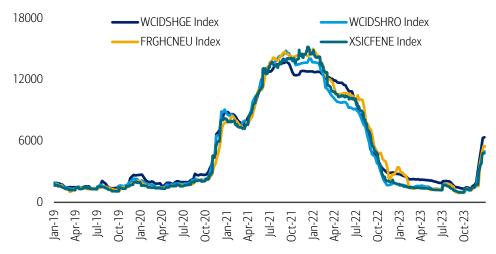
Refer to important disclosures on page 6 to 9. Analyst Certification on page 5. Price
Objective Basis/Risk on page 3.

Red Sea situation could be a negative

In light of disruption in the Red Sea, we assess potential impacts to our Leisure Brands & Retailers coverage universe. We expect the most direct impact to our coverage that has exposure to the Asia-Europe shipping route including incremental profit margin headwinds as a blend of Asia-Europe Container Spot rates are up significantly from Nov. 30 (see exhibit 1). We also see potential for added transit times for Asia to Europe bound goods including an extra 10-15 days of travelling time using the Cape of Good Hope vs. the Red Sea. We also see potential spillover effect to others as we move through 2024 if global shipping pricing continues to rise and capacity shortages occur.

Exhibit 1: Popular Asia-Europe Shipping Indexes

The average of a blend of commonly used Asia to Europe container sport rates are up 330% vs. Nov. 30, but down 63% vs. peak rates during COVID



Source: Bloomberg

Notes: WCIDSHGE Index - WCI Shanghai to Genoa Container Freight Benchmark Rate per 40 Foot Box WCIDSHRO Index - WCI Shanghai to Rotterdam Container Freight Benchmark Rate per 40 Foot Box FRGHCNEU Index - Freightos Index China to Europe

XSICFENE Index - Xenata Shipping Index by Compass - Far East to North Europe

BofA GLOBAL RESEARCH

Exhibit 2: Shanghai Shipping Exchange Shanghai (Export) Containerized Freight Index

A blended average of 15 Asia outbound routes is up 116% since Dec. 1 but down 57% from peak rates in Jan. 2022 as the Red Sea disruption is having a spillover effect to the broader freight market



Source: Bloomberg

BofA GLOBAL RESEARCH

Stocks mentioned

Prices and ratings for stocks mentioned in this report

BofA Ticker	Bloomberg ticker	Company name	Price	Rating
GOOS	GOOS US	Canada Goose	US\$ 12.24	C-3-9
YGOOS	GOOS CN	Canada Goose	C\$ 16.39	C-3-9
COLM	COLM US	Columbia Sportswear	US\$ 81.24	B-3-7
FOXF	FOXF US	Fox Factory Holding	US\$ 66.19	C-1-9
HOG	HOG US	Harley-Davidson	US\$ 33.44	B-1-7
HIBB	HIBB US	Hibbett Sports, Inc.	US\$ 68.97	C-3-7
LTH	LTH US	Life Time	US\$ 13.97	C-1-9
PLNT	PLNT US	Planet Fitness, Inc.	US\$ 70.25	B-1-9
MODG	MODG US	Topgolf Callaway	US\$ 14.01	C-1-9
XPOF	XPOF US	Xponential Fitness	US\$ 12.07	C-2-9

Source: BofA Global Research

Price objective basis & risk

Canada Goose Holdings Inc (YGOOS / GOOS)

Our C\$14 PO (\$10.08 PO for GOOS US shares) is based on 11x our F2025E EPS of C\$1.25. This P/E is below GOOS' historical historical multiple of 30-70X given a potential outlook for slowing Canada momentum alongside COVID-19 headwinds, including an outlook for significant reductions in international tourism traffic.

Upside risks to our PO are 1) Direct to Consumer, which could significantly exceed revenue forecasts driven by successful expansion in China, 2) a material improvement in the global macroeconomic environment for luxury purchases, and 3) successful expansion into new categories including footwear.

Downside risks to our PO are 1) the very competitive outerwear/jackets/boots categories, 2) strengthening of CAD vs. foreign currencies (especially USD, EUR, and GBP), which would pressure reported revenue and margins, 3) risks associated with owned manufacturing, 4) current highly dependence on a narrow group of styles, 5) highly seasonal revenue and earnings, with some products weather dependent, 6) limited replacement cycle because of durability of products, 7) limited incremental wholesale door opportunity in North America, 8) execution risks associated with rapidly growing business, 9) challenging global apparel and luxury retail environment, and 10) fashion/knock-off risks.

Columbia Sportswear (COLM)

Our \$60 PO is based on 12-13X our 2024E EPS of \$4.75 below COLM's historical multiple over the past five years (15-30x) given risk from elevated inventory levels.

Downside risks to our price objective are: an unseasonable warm winter could dampen demand for cold weather apparel and boots, labor costs continue to rise, international macro headwinds in LatAm, Europe and Asia continue, higher-than-expected cost pressures related to investment spend and marketing, and a promotional US retail environment could pressure gross margins.

Upside risks are: Input cost pressures moderate, DTC growth accelerates especially if China business reaccelerates, & Sorel driven upside given strong momentum.

Fox Factory Holding Corp (FOXF)

Our \$95 price objective is based on 18-19x our 2025E EPS estimate of \$5.10. We believe a multiple at high end of range for other comparable bicycle, powersports and active lifestyle companies (trading at 15-20x) is warranted given FOXF's premium brand positioning, consistent history of product development, market share leadership position



in the growing mountain bike suspension market, high return on invested capital (ROIC), supporting solid free cash flow generation, and highly defensible customer-focused business model.

Upside risks are accretive M&A, acceleration in end markets and better-than-expected share gains.

Downside risks are a slowdown in cycling or recreational vehicles demand could hurt demand for new components including suspension, key customer risk, and investments in R&D will likely mute SGA leverage, foreign currency translation risks, competition could pressure sales and margins, execution risks associated with manufacturing transition to Taiwan, integration of M&A could take longer than expected, acquisition opportunities might not materialize, and entry into new geographies or categories could be challenging.

Harley-Davidson (HOG)

Our \$40 PO is based on 8-9x our F24 adj. EPS of \$4.60 (including Livewire), slightly below its historical multiple of 10-15x given: (1) potential EPS upside on new model launches, (2) accelerating brand momentum, supported by a reset to a "Pull" market strategy (under new CEO Jochen Zeitz), (3) newly established leadership in Electric motorcycles and the creation of a dedicated EV division, and (4) the long-term opportunities for motorcycle division EBIT margin recovery to peak 15%+ and stronger International growth (incl. China).

Risks to the downside are (1) Aggregate on-highway new motorcycle units have been challenged historically, (2) The timing of a launch of a premium low displacement motorcycle for China remains uncertain, (3) Rider safety remains a top concern for new joiners, and (4) HOG global dealerships are declining.

Hibbett Sports, Inc. (HIBB)

Our \$50 price objective is based on 5-6x our F2025E EPS estimate, below peers as HIBB has increased headwinds from a slowdown in core customer from inflation, softness in secondary franchises, and outlook for elevated promotional environment.

Downside risks to our PO are: margin pressure from e-commerce investment spend and incremental shipping costs, promotional athletic retail environment, market share pressure from sporting goods players.

Upside risks are: consumer momentum accelerates as HIBB moves further away from tax refund headwinds, and benefits from brands downsizing allocations to key competitors.

Life Time (LTH)

Our \$20 PO is based on an enterprise value of 9-10X our F24 adj. EBITDA estimate of \$594.0mn, a valuation more in line with other Best-in-Class Experience Membership Models.

Risks to the downside are: 1) Life Time operates in a highly competitive U.S. market with other luxury fitness providers including Equinox, high-end boutique fitness studios including F45 & Xponential Fitness, and other fitness/experience based membership models incl. country clubs, (2) rise in COVID-19 case counts could pressure Life Time recovery trends especially if case counts continue to pressure consumer sentiment, (3) strong momentum during the peak new member sign up period of mid-December/January is important for Centers to achieve strong results for the full new year, (4) Continued rise of at home fitness, including Peloton, could pressure demand for in-center fitness models, and (5) New Center construction/opening delays could push off timing of contribution from new Centers vs. current model expectations.



Planet Fitness, Inc. (PLNT)

Our \$90 price objective is based on an EV of 17-18x our 2025E EBITDA estimate, at the high-end of a broader group of highly franchised companies (10-20x EV/EBITDA). We believe a multiple at the high-end of the average for franchise peers is justified for Planet Fitness, given: (1) significant club growth opportunity and rising royalty rate, (2) differentiated business model that should continue to gain share and grow the market by targeting underserved consumers, and (3) growth in its equipment segment.

Downside risks to our PO are: 1) the fitness club industry is competitive, 2) execution risks related to club growth, 3) risks associated with franchise model, 4) PLNT's brand image is key to retaining and attracting new members, 5) high financial leverage, 6) a challenging macroeconomic environment could pressure membership growth, & 7) same-store sales growth is largely dependent on expanding membership base.

Topgolf Callaway Brands Corp (MODG)

Our \$18 price objective is based on an enterprise value of 8-9x our C2024 adj. EBITDA estimate of \$620MM, a premium to other Leisure Brands & Experience models (trading at 7x) reflecting stickiness in new customer acquisition and pricing opportunity across both golf equipment and Topgolf.

Risks to the downside are: 1) tough comparisons as MODG laps surge in demand for golf equipment, (2) slowdown in golf participation as consumers return to other forms of entertainment in a post-COVID environment, (3) resurgence in COVID-19 cases could pressure recovery trends for Topgolf, and (4) risk from increasing supply chain headwinds including from Vietnam Factory shutdowns, elevated freight costs, & rising raw material input costs.

Xponential Fitness (XPOF)

Our \$16 PO is based on an enterprise value of 6-7X our 2025E EBITDA estimate, in-line to slightly below other high quality franchise peers given risk of slowing unit growth.

Risks to the downside are: (1) Xponential operates in a highly competitive U.S. boutique fitness market with other high growth competitors including F45 & Orangetheory, (2) resurgence of of at home fitness, including Peloton, could pressure demand for boutique fitness, (3) Xponential has a relatively high membership turnover rate (HSD%) with a low customer lifespan (11 month), and (4) more challenging macroeconomic environment could pressure overall fitness discretionary spend.

Risks to the upside are: (1) momentum at Club Pilates & StretchLab could help offset more challenging trends at other key brands, (2) Rumble & BFT could begin to drive strong average unit volumes as they scale, and (3) continued consolidation in the boutique fitness market could lead to share gains for XPOF.

Analyst Certification

I, Alexander Perry, hereby certify that the views expressed in this research report accurately reflect my personal views about the subject securities and issuers. I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or view expressed in this research report.



US - Broadlines, Hardlines, Food Retailers & Leisure Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
BUY				
	Academy Sports + Outdoors	ASO	ASO US	Robert F. Ohmes, CFA
	BJ's Wholesale Club Holdings	ВЈ	BJ US	Robert F. Ohmes, CFA
	Costco Wholesale Corporation	COST	COST US	Robert F. Ohmes, CFA
	Fox Factory Holding Corp	FOXF	FOXF US	Alexander Perry
	Grocery Outlet Holding Corp.	GO	GO US	Robert F. Ohmes, CFA
	Harley-Davidson	HOG	HOG US	Alexander Perry
	Life Time	LTH	LTH US	Alexander Perry
	Planet Fitness, Inc.	PLNT	PLNT US	Alexander Perry
	Sysco Corporation	SYY	SYY US	Kendall Toscano
	Target Corp.	TGT	TGT US	Robert F. Ohmes, CFA
	The Kroger Co.	KR	KR US	Robert F. Ohmes, CFA
	Topgolf Callaway Brands Corp	MODG	MODG US	Alexander Perry
	Walmart Inc	WMT	WMT US	Robert F. Ohmes, CFA
NEUTRAL				
	Dick's Sporting Goods	DKS	DKS US	Robert F. Ohmes, CFA
	Xponential Fitness	XPOF	XPOF US	Alexander Perry
	YETI Holdings, Inc.	YETI	YETI US	Robert F. Ohmes, CFA
UNDERPERFORM				
	Canada Goose Holdings Inc	YGOOS	GOOS CN	Alexander Perry
	Canada Goose Holdings Inc	GOOS	GOOS US	Alexander Perry
	Columbia Sportswear	COLM	COLM US	Alexander Perry
	Dollar General Corporation	DG	DG US	Robert F. Ohmes, CFA
	Dollar Tree, Inc.	DLTR	DLTR US	Robert F. Ohmes, CFA
	Hibbett Sports, Inc.	HIBB	HIBB US	Alexander Perry
	National Vision	EYE	EYE US	Robert F. Ohmes, CFA
	Sprouts Farmers Market, Inc.	SFM	SFM US	Robert F. Ohmes, CFA

Disclosures

Important Disclosures

Equity Investment Rating Distribution: Leisure Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships R1	Count	Percent
Buy	16	55.17%	Buy	9	56.25%
Hold	7	24.14%	Hold	5	71.43%
Sell	6	20.69%	Sell	4	66.67%

Equity Investment Rating Distribution: Global Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships R1	Count	Percent
Buy	1895	53.62%	Buy	1083	57.15%
Hold	832	23.54%	Hold	454	54.57%
Sell	807	22.84%	Sell	383	47.46%

R1 Issuers that were investment banking clients of BofA Securities or one of its affiliates within the past 12 months. For purposes of this Investment Rating Distribution, the coverage universe includes only stocks. A stock rated Neutral is included as a Hold, and a stock rated Underperform is included as a Sell.



FUNDAMENTAL EQUITY OPINION KEY: Opinions include a Volatility Risk Rating, an Investment Rating and an Income Rating. VOLATILITY RISK RATINGS, indicators of potential price fluctuation, are: A - Low, B - Medium and C - High. INVESTMENT RATINGS reflect the analyst's assessment of both a stock's absolute total return potential as well as its attractiveness for investment relative to other stocks within its Coverage Cluster (defined below). Our investment ratings are: 1 - Buy stocks are expected to have a total return of at least 10% and are the most attractive stocks in the coverage cluster; 2 - Neutral stocks are expected to remain flat or increase in value and are less attractive than Buy rated stocks and 3 - Underperform stocks are the least attractive stocks in a coverage cluster. An investment rating of 6 (No Rating) indicates that a stock is no longer trading on the basis of fundamentals. Analysts assign investment ratings considering, among other things, the 0-12 month total return expectation for a stock and the firm's guidelines for ratings dispersions (shown in the table below). The current price objective for a stock should be referenced to better understand the total return expectation at any given time. The price objective reflects the analyst's view of the potential price appreciation (depreciation).

Investment rating Total return expectation (within 12-month period of date of initial rating) Ratings dispersion guidelines for coverage cluster^{R2}

 Buy
 ≥ 10%
 ≤ 70%

 Neutral
 ≥ 0%
 ≤ 30%

 Underperform
 N/A
 ≥ 20%

INCOME RATINGS, indicators of potential cash dividends, are: 7 - same/higher (dividend considered to be secure), 8 - same/lower (dividend not considered to be secure) and 9 - pays no cash dividend. Coverage Cluster is comprised of stocks covered by a single analyst or two or more analysts sharing a common industry, sector, region or other classification(s). A stock's coverage cluster is included in the most recent BofA Global Research report referencing the stock.

Price Charts for the securities referenced in this research report are available on the Price Charts website, or call 1-800-MERRILL to have them mailed.

BofAS or one of its affiliates acts as a market maker for the equity securities recommended in the report: Canada Goose, Columbia Sportswear, Fox Factory Holding, Harley-Davidson, Hibbett Sports, Inc., Life Time, Planet Fitness, Inc., Topgolf Callaway, Xponential Fitness.

BofAS or an affiliate was a manager of a public offering of securities of this issuer within the last 12 months: Xponential Fitness.

The issuer is or was, within the last 12 months, an investment banking client of BofAS and/or one or more of its affiliates: Columbia Sportswear, Fox Factory Holding, Harley-Davidson, Life Time, Topgolf Callaway, Xponential Fitness.

BofÅS or an affiliate has received compensation from the issuer for non-investment banking services or products within the past 12 months: Canada Goose, Columbia Sportswear, Fox Factory Holding, Harley-Davidson, Hibbett Sports, Inc., Life Time, Topgolf Callaway, Xponential Fitness.

The issuer is or was, within the last 12 months, a non-securities business client of BofAS and/or one or more of its affiliates: Canada Goose, Columbia Sportswear, Fox Factory Holding, Harley-Davidson, Hibbett Sports, Inc., Life Time, Topgolf Callaway.

BofAS or an affiliate has received compensation for investment banking services from this issuer within the past 12 months: Fox Factory Holding, Harley-Davidson, Life Time, Topgolf Callaway, Xponential Fitness.

BofAS or an affiliate expects to receive or intends to seek compensation for investment banking services from this issuer or an affiliate of the issuer within the next three months: Columbia Sportswear, Harley-Davidson, Life Time.

BofAS together with its affiliates beneficially owns one percent or more of the common stock of this issuer. If this report was issued on or after the 9th day of the month, it reflects the ownership position on the last day of the previous month. Reports issued before the 9th day of a month reflect the ownership position at the end of the second month preceding the date of the report: Canada Goose, Topgolf Callaway.

BofAS or one of its affiliates is willing to sell to, or buy from, clients the common equity of the issuer on a principal basis: Canada Goose, Columbia Sportswear, Fox Factory Holding, Harley-Davidson, Hibbett Sports, Inc., Life Time, Planet Fitness, Inc., Topgolf Callaway, Xponential Fitness.

The issuer is or was, within the last 12 months, a securities business client (non-investment banking) of BofAS and/or one or more of its affiliates: Canada Goose, Columbia Sportswear, Fox Factory Holding, Harley-Davidson, Topgolf Callaway, Xponential Fitness.

BofA Global Research personnel (including the analyst(s) responsible for this report) receive compensation based upon, among other factors, the overall profitability of Bank of America Corporation, including profits derived from investment banking. The analyst(s) responsible for this report may also receive compensation based upon, among other factors, the overall profitability of the Bank's sales and trading businesses relating to the class of securities or financial instruments for which such analyst is responsible.

Other Important Disclosures

Common shares are subordinate voting: Canada Goose.

From time to time research analysts conduct site visits of covered issuers. BofA Global Research policies prohibit research analysts from accepting payment or reimbursement for travel expenses from the issuer for such visits.

Prices are indicative and for information purposes only. Except as otherwise stated in the report, for any recommendation in relation to an equity security, the price referenced is the publicly traded price of the security as of close of business on the day prior to the date of the report or, if the report is published during intraday trading, the price referenced is indicative of the traded price as of the date and time of the report and in relation to a debt security (including equity preferred and CDS), prices are indicative as of the date and time of the report and are from various sources including BofA Securities trading desks.

The date and time of completion of the production of any recommendation in this report shall be the date and time of dissemination of this report as recorded in the report timestamp.

Recipients who are not institutional investors or market professionals should seek the advice of their independent financial advisor before considering information in this report in connection with any investment decision, or for a necessary explanation of its contents.

Officers of BofAS or one or more of its affiliates (other than research analysts) may have a financial interest in securities of the issuer(s) or in related investments. Refer to BofA Global Research policies relating to conflicts of interest.

'BofA Securities' includes BofA Securities, Inc. ('BofAS') and its affiliates. Investors should contact their BofA Securities representative or Merrill Global Wealth Management financial advisor if they have questions concerning this report or concerning the appropriateness of any investment idea described herein for such investor. 'BofA Securities' is a global brand for BofA Global Research.

Information relating to Non-US affiliates of BofA Securities and Distribution of Affiliate Research Reports:

BofAS and/or Merrill Lynch, Pierce, Fenner & Smith Incorporated ("MLPF&S") may in the future distribute, information of the following non-US affiliates in the US (short name: legal name, regulator): Merrill Lynch (South Africa): Merrill Lynch South Africa (Pty) Ltd., regulated by The Financial Service Board; MLI (UK): Merrill Lynch International, regulated by the Financial Conduct Authority (FCA) and the Prudential Regulation Authority (PRA); BofASE (France): BofA Securities Europe SA is authorized by the Autorité de Contrôle Prudentiel et de Résolution (ACPR) and regulated by the ACPR and the Autorité des Marchés Financiers (AMF). BofA Securities Europe SA ("BofASE") with registered address at 51, rue La Boétie, 75008 Paris is registered under no 842 602 690 RCS Paris. In accordance with the provisions of French Code Monétaire et Financier (Monetary and Financial Code), BofASE is an établissement de crédit et d'investissement (credit and investment institution) that is authorised and supervised by the European Central Bank and the Autorité des Contrôle Prudentiel et de Résolution (ACPR) and regulated by the ACPR and the Autorité des Marchés Financiers. BofASE's share capital can be found at www.bofaml.com/BofASEdisclaimer; BofA Europe (Milan): Bank of America Europe Designated Activity Company, Milan Branch, regulated by the Bank of Italy, the European Central Bank (ECB) and the Central Bank of Italy (CBI); BofA Europe (Frankfurt): Bank of America Europe Designated Activity Company, Frankfurt Branch regulated by BaFin, the ECB and the CBI; BofA Europe (Madrid): Bank of America Europe Designated Activity Company, Sucursal en España, regulated by the Bank of Spain, the ECB and the CBI; Merrill Lynch (Hong Kong): Merrill



R2 Ratings dispersions may vary from time to time where BofA Global Research believes it better reflects the investment prospects of stocks in a Coverage Cluster.

(Asia Pacific) Limited, regulated by the Hong Kong Securities and Futures Commission (HKSFC); Merrill Lynch (Singapore): Merrill Lynch (Singapore) Pte Ltd, regulated by the Monetary Authority of Singapore (MAS); Merrill Lynch (Canada): Merrill Lynch Canada Inc, regulated by the Canadian Investment Regulatory Organization; Merrill Lynch (Mexico): Merrill Lynch Mexico, SA de CV, Casa de Bolsa, regulated by the Comisión Nacional Bancaria y de Valores; Merrill Lynch (Argentina): Merrill Lynch Argentina SA, regulated by Comisión Nacional de Valores; BofAS Japan: BofA Securities Japan Co., Ltd., regulated by the Financial Services Agency; Merrill Lynch (Seoul): Merrill Lynch (Seoul): Branch, regulated by the Financial Supervisory Service; Merrill Lynch (Taiwan): Merrill Lynch (Securities India Limited, regulated by the Securities and Exchange Board of India (SEBI); Merrill Lynch (Israel): Merrill Lynch Israel Limited, regulated by Israel Securities Authority; Merrill Lynch (DIFC): Merrill Lynch International (DIFC Branch), regulated by the Dubai Financial Services Authority (DFSA); Merrill Lynch (Brazil): Merrill Lynch KSA Company: Merrill Lynch Kingdom of Saudi Arabia Company, regulated by the Capital Market Authority.

This information: has been approved for publication and is distributed in the United Kingdom (UK) to professional clients and eligible counterparties (as each is defined in the rules of the FCA and the PRA) by MLI (UK), which is authorized by the PRA and regulated by the FCA and the PRA - details about the extent of our regulation by the FCA and PRA are available from us on request; has been approved for publication and is distributed in the European Economic Area (EEA) by BofASE (France), which is authorized by the ACPR and regulated by the ACPR and the AMF; has been considered and distributed in Japan by BofAS Japan, a registered securities dealer under the Financial Instruments and Exchange Act in Japan, or its permitted affiliates; is issued and distributed in Hong Kong by Merrill Lynch (Hong Kong) which is regulated by HKSFC; is issued and distributed in Taiwan by Merrill Lynch (Taiwan); is issued and distributed in Iniqual proposed in Iniqual proposed in Taiwan by Merrill Lynch (Taiwan); is issued and distributed in Iniqual proposed in Taiwan by Merrill Lynch (Iniqual); is issued and distributed in Iniqual proposed in Taiwan by Merrill Lynch (Iniqual); is issued and distributed in Iniqual proposed in Taiwan by Merrill Lynch (Iniqual); is issued and distributed in Taiwan by Merrill Lynch (Iniqual); is issued and distributed in Taiwan by Merrill Lynch (Iniqual); is issued and distributed in Taiwan by Merrill Lynch (Iniqual); is issued and distributed in Taiwan by Merrill Lynch (Singapore) (Company Registration No 198602883D). Merrill Lynch (Singapore) is regulated by MAS. Merrill Lynch Equities (Australia) Limited (ABN 65 006 276 795), AFS License 235132 (MLEA) distributes this information in Australia only to "Wholesale' clients as defined by S.761G of the Corporations Act 2001. With the exception of Bank of America N.A., Australia Branch, neither MLEA nor any of its affiliates involved in preparing this information is an Authorised Deposit-Taking Institution under the Banking Act 1959 nor regulated by the

This information has been prepared and issued by BofAS and/or one or more of its non-US affiliates. The author(s) of this information may not be licensed to carry on regulated activities in your jurisdiction and, if not licensed, do not hold themselves out as being able to do so. BofAS and/or MLPF&S is the distributor of this information in the US and accepts full responsibility for information distributed to BofAS and/or MLPF&S clients in the US by its non-US affiliates. Any US person receiving this information and wishing to effect any transaction in any security discussed herein should do so through BofAS and/or MLPF&S and not such foreign affiliates. Hong Kong recipients of this information should contact Merrill Lynch (Asia Pacific) Limited in respect of any matters relating to dealing in securities or provision of specific advice on securities or any other matters arising from, or in connection with, this information. Singapore recipients of this information should contact Merrill Lynch (Singapore) Pte Ltd in respect of any matters arising from, or in connection with, this information. For clients that are not accredited investors, expert investors or institutional investors Merrill Lynch (Singapore) Pte Ltd accepts full responsibility for the contents of this information distributed to such clients in Singapore.

General Investment Related Disclosures:

Taiwan Readers: Neither the information nor any opinion expressed herein constitutes an offer or a solicitation of an offer to transact in any securities or other financial instrument. No part of this report may be used or reproduced or quoted in any manner whatsoever in Taiwan by the press or any other person without the express written consent of BofA Securities. This document provides general information only, and has been prepared for, and is intended for general distribution to, BofA Securities clients. Neither the information nor any opinion expressed constitutes an offer or an invitation to make an offer, to buy or sell any securities or other financial instrument or any derivative related to such securities or instruments (e.g., options, futures, warrants, and contracts for differences). This document is not intended to provide personal investment advice and it does not take into account the specific investment objectives, financial situation and the particular needs of, and is not directed to, any specific person(s). This document and its content do not constitute, and should not be considered to constitute, investment advice for purposes of ERISA, the US tax code, the Investment Advisers Act or otherwise. Investors should seek financial advice regarding the appropriateness of investing in financial instruments and implementing investment strategies discussed or recommended in this document and should understand that statements regarding future prospects may not be realized. Any decision to purchase or subscribe for securities in any offering must be based solely on existing public information on such security or the information in the prospectus or other offering document issued in connection with such offering, and not on this document.

Securities and other financial instruments referred to herein, or recommended, offered or sold by BofA Securities, are not insured by the Federal Deposit Insurance Corporation and are not deposits or other obligations of any insured depository institution (including, Bank of America, N.A.). Investments in general and, derivatives, in particular, involve numerous risks, including, among others, market risk, counterparty default risk and liquidity risk. No security, financial instrument or derivative is suitable for all investors. Digital assets are extremely speculative, volatile and are largely unregulated. In some cases, securities and other financial instruments may be difficult to value or sell and reliable information about the value or risks related to the security or financial instrument may be difficult to obtain. Investors should note that income from such securities and other financial instruments, if any, may fluctuate and that price or value of such securities and instruments may rise or fall and, in some cases, investors may lose their entire principal investment. Past performance is not necessarily a guide to future performance. Levels and basis for taxation may change.

This report may contain a short-term trading idea or recommendation, which highlights a specific near-term catalyst or event impacting the issuer or the market that is anticipated to have a short-term price impact on the equity securities of the issuer. Short-term trading ideas and recommendations are different from and do not affect a stock's fundamental equity rating, which reflects both a longer term total return expectation and attractiveness for investment relative to other stocks within its Coverage Cluster. Short-term trading ideas and recommendations may be more or less positive than a stock's fundamental equity rating.

BofA Securities is aware that the implementation of the ideas expressed in this report may depend upon an investor's ability to "short" securities or other financial instruments and that such action may be limited by regulations prohibiting or restricting "shortselling" in many jurisdictions. Investors are urged to seek advice regarding the applicability of such regulations prior to executing any short idea contained in this report.

Foreign currency rates of exchange may adversely affect the value, price or income of any security or financial instrument mentioned herein. Investors in such securities and instruments, including ADRs, effectively assume currency risk.

BofAS or one of its affiliates is a regular issuer of traded financial instruments linked to securities that may have been recommended in this report. BofAS or one of its affiliates may, at any time, hold a trading position (long or short) in the securities and financial instruments discussed in this report.

BofA Securities, through business units other than BofA Global Research, may have issued and may in the future issue trading ideas or recommendations that are inconsistent with, and reach different conclusions from, the information presented herein. Such ideas or recommendations may reflect different time frames, assumptions, views and analytical methods of the persons who prepared them, and BofA Securities is under no obligation to ensure that such other trading ideas or recommendations are brought to the attention of any recipient of this information. In the event that the recipient received this information pursuant to a contract between the recipient and BofAS for the provision of research services for a separate fee, and in connection therewith BofAS may be deemed to be acting as an investment adviser, such status relates, if at all, solely to the person with whom BofAS has contracted directly and does not extend beyond the delivery of this report (unless otherwise agreed specifically in writing by BofAS). If such recipient uses the services of BofAS in connection with the sale or purchase of a security referred to herein, BofAS may act as principal for its own account or as agent for another person. BofAS is and continues to act solely as a broker-dealer in connection with the execution of any transactions, including transactions in any securities referred to herein.

BofA ESGMeter Methodology:

ESGMeter is a proprietary metric based on quantitative analysis and fundamental analyst inputs that reflects our assessment of a company's Environmental, Social and Governance-related attributes. The ESGMeter is intended to indicate a company's likelihood of experiencing stronger financial stability (higher return on equity and lower earnings and price volatility) over the next three years relative to peer group. There are three ESGMeter levels - Low, Medium, and High - which indicate whether a company has attributes most likely to translate into superior financial stability (in the case of a High level) or weaker financial stability (in the case of a Low level) over the next three years relative to its peer group. A Medium level suggests that a company exhibits ESG characteristics that are likely associated with financial stability results in line with its peer group over the next three years. Full details of our methodology, financial stability definition and disclaimers are available at BofA ESGMeter methodology. ESGMeter is not indicative of a company's future stock price performance and is not an investment recommendation or rating. ESGMeter is independent of the BofA Global Research fundamental equity analyst's investment rating, volatility risk rating, income rating or price objective for that company.



Copyright and General Information:

Copyright 2024 Bank of America Corporation. All rights reserved. iQdatabase® is a registered service mark of Bank of America Corporation. This information is prepared for the use of BofA Securities clients and may not be redistributed, retransmitted or disclosed, in whole or in part, or in any form or manner, without the express written consent of BofA Securities. BofA Global Research information is distributed simultaneously to internal and client websites and other portals by BofA Securities and is not publicly-available material. Any unauthorized use or disclosure is prohibited. Receipt and review of this information constitutes your agreement not to redistribute, retransmit, or disclose to others the contents, opinions, conclusion, or information contained herein (including any investment recommendations, estimates or price targets) without first obtaining express permission from an authorized officer of BofA Securities. Materials prepared by BofA Global Research personnel are based on public information. Facts and views presented in this material have not been reviewed by, and may not reflect information known to, professionals in other business areas of BofA Securities, including investment banking personnel. BofA Securities has established information barriers between BofA Global Research and certain business groups. As a result, BofA Securities does not disclose certain client relationships with, or compensation received from, such issuers. To the extent this material discusses any legal proceeding or issues, it has not been prepared as nor is it intended to express any legal conclusion, opinion or advice. Investors should consult their own legal advisers as to issues of law relating to the subject matter of this material. BofA Global Research personnel's knowledge of legal proceedings in which any BofA Securities entity and/or its directors, officers and employees may be plaintiffs, defendants, co-defendants or co-plaintiffs with or involving issuers mentioned in this material is based on public inform

This information has been prepared independently of any issuer of securities mentioned herein and not in connection with any proposed offering of securities or as agent of any issuer of any securities. None of BofAS any of its affiliates or their research analysts has any authority whatsoever to make any representation or warranty on behalf of the issuer(s). BofA Global Research policy prohibits research personnel from disclosing a recommendation, investment rating, or investment thesis for review by an issuer prior to the publication of a research report containing such rating, recommendation or investment thesis.

Any information relating to the tax status of financial instruments discussed herein is not intended to provide tax advice or to be used by anyone to provide tax advice. Investors are urged to seek tax advice based on their particular circumstances from an independent tax professional.

The information herein (other than disclosure information relating to BofA Securities and its affiliates) was obtained from various sources and we do not guarantee its accuracy. This information may contain links to third-party websites. BofA Securities is not responsible for the content of any third-party website or any linked content contained in a third-party website. Content contained on such third-party websites is not part of this information and is not incorporated by reference. The inclusion of a link does not imply any endorsement by or any affiliation with BofA Securities. Access to any third-party website is at your own risk, and you should always review the terms and privacy policies at third-party websites before submitting any personal information to them. BofA Securities is not responsible for such terms and privacy policies and expressly disclaims any liability for them.

All opinions, projections and estimates constitute the judgment of the author as of the date of publication and are subject to change without notice. Prices also are subject to change without notice. BofA Securities is under no obligation to update this information and BofA Securities ability to publish information on the subject issuer(s) in the future is subject to applicable quiet periods. You should therefore assume that BofA Securities will not update any fact, circumstance or opinion contained herein.

Subject to the quiet period applicable under laws of the various jurisdictions in which we distribute research reports and other legal and BofA Securities policy-related restrictions on the publication of research reports, fundamental equity reports are produced on a regular basis as necessary to keep the investment recommendation current.

Certain outstanding reports or investment opinions relating to securities, financial instruments and/or issuers may no longer be current. Always refer to the most recent research report relating to an issuer prior to making an investment decision.

In some cases, an issuer may be classified as Restricted or may be Under Review or Extended Review. In each case, investors should consider any investment opinion relating to such issuer (or its security and/or financial instruments) to be suspended or withdrawn and should not rely on the analyses and investment opinion(s) pertaining to such issuer (or its securities and/or financial instruments) nor should the analyses or opinion(s) be considered a solicitation of any kind. Sales persons and financial advisors affiliated with BofAS or any of its affiliates may not solicit purchases of securities or financial instruments that are Restricted or Under Review and may only solicit securities under Extended Review in accordance with firm policies.

Neither BofA Securities nor any officer or employee of BofA Securities accepts any liability whatsoever for any direct, indirect or consequential damages or losses arising from any use of this information.

