

## Household &amp; Personal Care

2024 Household, Personal Care & Beauty  
Primer Picks

Industry Overview

## US HPC Primer Picks; continue to see upside for ELF

On January 19, 2024 we published an update to our Household & Personal Care (HPC) primer. We see further upside potential for Buy-rated ELF Beauty amid continued market share gains, raising our price objective to \$190 from \$160 prior ([see ELF report here](#)). Elsewhere, we are Buy-rated on: Colgate (CL, \$90 PO), Coty (COTY, \$15 PO), Kenvue (KVUE \$26 PO), and Procter & Gamble (PG, Buy \$175 PO). We are Neutral-rated on Church & Dwight (CHD, \$100 PO), Clorox (CLX, \$150 PO), and Estee Lauder (EL, \$150 PO). We are Underperform-rated on Kimberly-Clark (KMB, \$115 PO).

## Key themes into 2024: volume recovery, M&amp;A potential

While organic sales growth was driven by pricing increases in recent years, we expect HPC companies to revert to volume growth as incremental pricing slows. We look for HPC companies to return to long-term growth targets and we see the landscape generally favoring multi-nationals with exposure to emerging markets growth and with mix benefits in 2024. We see potential for slower sales growth to be offset by M&A to increase growth, with CHD and KVUE most likely to execute, in our view. Meanwhile, we expect greater investment spend on marketing to continue in 2024 across the space as brands face threats from trade-down and private label gaining share.

## Category expands in Consumer Health, Beauty sub-sectors

Global consumer health sales grew +8% in 2022 and +5% over the last 5 years. We see a variety of factors driving growth in consumer health, including: 1) increasing consumer focus on health/wellbeing, 2) an aging global population, 3) expanding middle classes in emerging markets, and 4) innovation and marketing in developed markets. Global beauty and personal care grew +7% y/y in 2022, in-line with 2021, and at a +5% CAGR over the last 5 years. Consumers continue to spend on higher-quality premium products which has bolstered fragrance and makeup growth, continuing to prioritize self-care while placing a high value on clean beauty.

## Risks to growth: China sales, Red Sea conflict on margins

HPC companies' China sales have rebounded more slowly than expected, with multi-nationals PG and KVUE more notably impacted by Chinese consumers personally eschewing Japanese skin health & beauty brands. Meanwhile, EL has seen a more tepid recovery due to challenges in its Hainan travel retail business, which had a steep rise, peaking in 2021, before a sharp fall. Elsewhere, we see broader shipping risk due to the Red Sea conflict most affecting multi-nationals with greater geographic risk, while this may also impact product for companies with manufacturing primarily in China (ELF). Higher oil prices may impact domestic-focused companies' raw material inputs if the issue persists, although higher costs will take time to work through the P&L.

19 January 2024

Equity  
United States  
Consumer Staples

**Bryan D. Spillane**  
Research Analyst  
BofAS  
+1 646 855 1979  
[bryan.spillane@bofa.com](mailto:bryan.spillane@bofa.com)

**Anna Lizzul**  
Research Analyst  
BofAS  
+1 646 855 2569  
[anna.lizzul@bofa.com](mailto:anna.lizzul@bofa.com)

**Jonathan Keypour**  
Research Analyst  
BofAS  
+1 646 855 4345  
[jonathan.keypour@bofa.com](mailto:jonathan.keypour@bofa.com)

[2024 Household, Personal Care & Beauty Primer](#)

[e.l.f. Beauty: ELF continues to shine; raising estimates and PO on anticipated outperformance](#)

[EL: Just Asking: What are sales and margin for Travel Retail and Hainan?](#)

[PG: Shaving Organic Sales Estimates](#)

[CL: Ride the Whitening: sales, margin inflections reassure on EPS delivery](#)

[CHD: Give it the Hammer: upgrading to Neutral as value portfolio resonates](#)

[CLX: Upgrading to Neutral as recovery from cybersecurity attack takes hold](#)

[KMB: Downgrading to Underperform and Lowering PO to \\$115](#)

[US Consumer Staples: Year Ahead 2024: Running in Place](#)

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 8. Analyst Certification on page 4. Price Objective Basis/Risk on page 2.

12647911

Timestamp: 19 January 2024 05:00AM EST

**Stocks mentioned**

Prices and ratings for stocks mentioned in this report

<b>BofA Ticker</b>	<b>Bloomberg ticker</b>	<b>Company name</b>	<b>Price</b>	<b>Rating</b>
CHD	CHD US	Church & Dwight	US\$ 97.83	B-2-7
CLX	CLX US	Clorox	US\$ 143.35	B-2-7
CL	CL US	Colgate-Palmolive	US\$ 80.83	A-1-7
COTY	COTY US	Coty Inc.	US\$ 12.1	C-1-9
ELF	ELF US	e.l.f. Beauty	US\$ 156.38	C-1-9
EL	EL US	Estee Lauder	US\$ 127.66	B-2-7
KVUE	KVUE US	Kenvue	US\$ 20.94	C-1-7
KMB	KMB US	Kimberly-Clark	US\$ 123.04	B-3-7
PG	PG US	Procter & Gamble	US\$ 148.14	A-1-7

**Source:** BofA Global Research

## Price objective basis & risk

### Church & Dwight (CHD)

Our \$100 PO for CHD shares is based on a CY25e P/E ratio of 26x, a premium to the company's 10-year average P/E multiple of 24x. We believe this multiple appropriately balances organic sales growth, partially offset by investment spending to aid distribution growth and volume recovery.

Upside risks to our price objective are: 1) greater capture of value sales supported by investment spend, 2) little or no market share gains by private label exposure (only 5 of CHD's 18 categories), 3) e-commerce as a percent of sales continues to grow, helping to diversify distribution outlets, 4) strong free cash flow conversion, enabling CHD to return capital to shareholders or pursue M&A.

Downside risks to our price objective are: 1) a weakening consumer environment leading to lower volume demand elasticities, 2) increased cost inflation and limited pricing power near-term, 3) supply chain issues leading to lower fill rates and an inability to change mix/packaging sizes, 4) retailer inventory reductions amid a shift in demand to lower cost products, 5) a pullback in marketing spend leading to market share declines.

### Clorox (CLX)

Our \$150 PO for CLX is based on 21x our CY25e EPS. We believe a 21x multiple reflects a balanced risk/reward of volume/margin recovery, and inflation more in-line with the historical average, amid a potentially challenging consumer environment.

Upside risks to our price objective are: 1) success of the IGNITE strategy lifts volumes and sales, 2) a better than expected consumer environment leads to healthy pricing implementation, 3) strong innovation leads to better than expected sales of more premium products, 4) the international portfolio stabilizes with consistent sales growth and expansion, 5) robust demand in CLX's portfolio of products due to a resurgence in COVID-19 or other global health conditions.

Downside risks to our price objective are: 1) demand falling with higher pricing amid an uncertain economic outlook, 2) persistent cost inflation and inability to take further pricing, 3) shifting retailer inventory to private label and lower cost products, and 4) low visibility into margin recovery which is farther out than F24.

### Colgate-Palmolive Company (CL)

Our \$90 price objective is based on a CY25e P/E of 24.5x, up 4x from prior CY25 valuation basis and rolled forward one year from our prior 22x CY24e basis. Our higher multiple factors in US sales inflection, stability in margin and earnings delivery that has

taken hold over the last 4-5yrs, and strong volume/pricing power in emerging markets. This target now implies a 15% premium to relative HPC peer average (prior basis implied a +5% premium), still more than a standard deviation above CL's 2yr average relative multiple but within a standard deviation above relative multiple to peers like PG and CHD. This premium reflects CL's defensive portfolio and strong, improving US and international market share, with top and bottom line support from pricing and new cost savings initiatives as unfavorable commodity costs abate and turnaround in developed markets Oral Care share takes hold.

Risks to the downside are increased price competition, particularly from private label, a stronger US\$ in light of hyperinflationary currency pressure in Latam, Asia, and Africa, and macro volatility, particularly in emerging markets. Risks to the upside are stronger EM performance, significantly lower commodity costs, and growth ahead of category.

#### **Coty Inc. (COTY)**

Our PO of \$15 is based on a SOTP valuation for the Prestige and Consumer Beauty segments. We value the Prestige segment at 15x our CY25e EBITDA (down from 17x prior) and Consumer Beauty at 9x our CY25e EBITDA down from 10x prior), given the superior growth profile and margins for Prestige, compared to more limited expansion for Consumer Beauty. Overall, this implies a blended 13x multiple on our CY25e EBITDA, given expected outperformance in multiple growing categories.

Downside risks to our price objective are: 1) Coty relies on exclusive license agreements to provide the majority of revenues, 2) the beauty industry is highly competitive, with significant brand and reputational risk, 3) leverage remains high and limits strategic M&A, 4) COTY is a "controlled" company, with JAB Cosmetics owning more than 50% of total voting power.

#### **e.l.f. Beauty (ELF)**

Our PO of \$190 is based on a DCF analysis and implies a 30x CY25e EV/EBITDA multiple. Our DCF is predicated on a WACC of 9.9% and terminal growth rate of 4%. This is a premium to publicly traded beauty and HPC peers given stronger volume growth, price/mix gains, and market share momentum. We believe this multiple is warranted as the company is still in a high growth phase and continues to diversify its portfolio and customer base.

Downside risks to our price objective are: 1) changing consumer preferences, particularly among younger consumers, 2) difficulty diversifying sales into older demographic groups, 3) operational and geopolitical risk from third-party manufacturing in China. ELF uses several third party suppliers and manufacturers in China to source and manufacture nearly all of its products. Any disruption to their relationships may be detrimental to the company's sales.

#### **Estee Lauder Companies Inc. (EL)**

Our \$150 PO is based on a target P/E multiple of 25x our CY25e EPS. Our multiple implies a +5% relative premium vs. a group of EL's beauty peers, up from a -7% implied discount previously but still below EL's 3yr average premium of 14% as they retool their cost structure and channel exposure in light of what now appears to be a more muted Chinese consumption environment.

Downside risks to our price objective are persistent weakness in developed markets over the long term, a slowdown in EL's faster-growth channels and geographies, higher brand investment needs, recession, prolonged impact of the COVID-19 pandemic, a deceleration in organic sales, subsequent erosion of EL's valuation premium and acquisition of TOM FORD does not materialize. Risks to the upside are faster-than-expected recovery in Makeup, particularly in the US, an accelerated return to global international travel, and middle-class consumption in burgeoning developing markets.

**Kenvue Inc. (KVUE)**

Our price objective of \$26 for Kenvue (KVUE) shares is based on a CY25e EV/EBITDA multiple of 13.5x. This is a slight discount to the average of publicly traded household and personal care peers. In our view, this multiple is warranted as the company has best-in-class assets and we expect to see steady growth in sales and margin expansion, while taking into account separation and execution risk as a standalone entity.

Downside risks to our price objective are: 1) separation risk as KVUE has no history of operating as a standalone publicly traded company, 2) brand reputation risk and related litigation, 3) challenges associated with distribution and volume recovery, 4) geographic exposure with 50% of sales outside of North America.

**Kimberly-Clark (KMB)**

Our \$115 price objective is based on a CY25e P/E ratio of 16x, a discount to the company's 10-year average P/E multiple, due to a longer-term recovery in volumes and market share. On an absolute and relative basis vs. HPC peers, KMB trades below its 2-year forward P/E average of appx. 18x. We see a potentially difficult setup ahead, with current valuation justified by limited organic sales growth on weak volumes as pricing benefits wane, and tempered expectations on gross margin expansion ahead due to input volatility, partially offset by cost savings.

Upside risks to our price objective are: 1) global rising birth rates, 2) continued elevation of brands with accelerated market share gains in developing and D&E markets, 3) a better than expected consumer environment leading to higher mix of premium products, 4) pricing actions and cost savings more than offset cost inflation, 5) key commodity costs abate.

Downside risks to our price objective are: 1) global declines in birth rates accelerate, 2) erosion in market share due to a challenging consumer environment, 3) difficulty implementing pricing and cost savings initiatives, 4) cost inflation continues to rise in key commodity costs, hampering gross margins.

**The Procter & Gamble Company (PG)**

Our \$175 PO is based on a P/E ratio of 24x our CY25e EPS, unchanged on a 2025 basis but shifted one year out from our 26x CY24e basis previously. Our target multiple still implies a 25% premium compared to HPC (Household and Personal Care) peers, above PG's 2yr historical average multiple in line with the index on a fwd 2yr basis. We think this relative valuation vs historical valuation is reasonable given PG's recent multi-year efforts to reaccelerate the business as the company sheds non-core categories and brands, and successfully drove balanced top- and bottom-line growth which has led to resilient market share gains that have held throughout the pandemic.

Risks to our price objective are a slowing in recent sales momentum, adverse competitive responses namely from private label in the coming months, and a return to "risk-on" which would make PG's defensive qualities less attractive

**Analyst Certification**

We, Anna Lizzul and Bryan D. Spillane, hereby certify that the views each of us has expressed in this research report accurately reflect each of our respective personal views about the subject securities and issuers. We also certify that no part of our respective compensation was, is, or will be, directly or indirectly, related to the specific recommendations or view expressed in this research report.

**US - Consumables Coverage Cluster**

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
<b>BUY</b>				
	BellRing Brands Inc	BRBR	BRBR US	Bryan D. Spillane
	Celsius Holdings Inc	CELH	CELH US	Jonathan Keypour
	Coca-Cola Europacific Partners plc	CCEP	CCEP US	Bryan D. Spillane
	Colgate-Palmolive Company	CL	CL US	Bryan D. Spillane
	Constellation Brands	STZ	STZ US	Bryan D. Spillane
	Coty Inc.	COTY	COTY US	Anna Lizzul
	e.l.f. Beauty	ELF	ELF US	Anna Lizzul
	Freshpet, Inc.	FRPT	FRPT US	Bryan D. Spillane
	Kenvue Inc.	KVUE	KVUE US	Anna Lizzul
	Keurig Dr Pepper	KDP	KDP US	Bryan D. Spillane
	Kraft Heinz Company	KHC	KHC US	Bryan D. Spillane
	Lamb Weston Holdings Inc	LW	LW US	Peter T. Galbo, CFA
	McCormick & Co.	MKC	MKC US	Peter T. Galbo, CFA
	Mondelez International	MDLZ	MDLZ US	Bryan D. Spillane
	Monster Beverage Corporation	MNST	MNST US	Peter T. Galbo, CFA
	PepsiCo	PEP	PEP US	Bryan D. Spillane
	Philip Morris International	PM	PM US	Lisa K. Lewandowski
	Pilgrim's Pride Corp.	PPC	PPC US	Peter T. Galbo, CFA
	The Coca Cola Company	KO	KO US	Bryan D. Spillane
	The Procter & Gamble Company	PG	PG US	Bryan D. Spillane
<b>NEUTRAL</b>				
	Altria Group	MO	MO US	Lisa K. Lewandowski
	Church & Dwight	CHD	CHD US	Anna Lizzul
	Clorox	CLX	CLX US	Anna Lizzul
	Conagra Brands, Inc.	CAG	CAG US	Peter T. Galbo, CFA
	Estee Lauder Companies Inc.	EL	EL US	Bryan D. Spillane
	General Mills	GIS	GIS US	Bryan D. Spillane
	JM Smucker Company	SJM	SJM US	Peter T. Galbo, CFA
	Kellanova	K	K US	Peter T. Galbo, CFA
	Molson Coors Beverage Company	TAP	TAP US	Bryan D. Spillane
	The Duckhorn Portfolio, Inc.	NAPA	NAPA US	Peter T. Galbo, CFA
	The Hershey Company	HSY	HSY US	Bryan D. Spillane
	Utz Brands	UTZ	UTZ US	Peter T. Galbo, CFA
	WK Kellogg Co	KLG	KLG US	Peter T. Galbo, CFA
<b>UNDERPERFORM</b>				
	Brown-Forman Corporation	BFB	BF/B US	Bryan D. Spillane
	Campbell Soup Company	CPB	CPB US	Peter T. Galbo, CFA
	Canopy Growth	YWEED	WEED CN	Lisa K. Lewandowski
	Canopy Growth	CGC	CGC US	Lisa K. Lewandowski
	Cronos Group	YCRON	CRON CN	Lisa K. Lewandowski
	Cronos Group	CRON	CRON US	Lisa K. Lewandowski
	Dole plc	DOLE	DOLE US	Bryan D. Spillane
	Herbalife Nutrition Ltd	HLF	HLF US	Anna Lizzul
	Hormel Foods Corp.	HRL	HRL US	Peter T. Galbo, CFA
	Kimberly-Clark	KMB	KMB US	Anna Lizzul
	Tyson Foods, Inc.	TSN	TSN US	Peter T. Galbo, CFA
<b>RSTR</b>				
	The Vita Coco Company, Inc.	COCO	COCO US	Bryan D. Spillane

# Disclosures

## Important Disclosures

### Equity Investment Rating Distribution: Consumer Products Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships <sup>R1</sup>	Count	Percent
Buy	32	50.00%	Buy	16	50.00%
Hold	19	29.69%	Hold	8	42.11%
Sell	13	20.31%	Sell	7	53.85%

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

Coverage Universe	Count	Percent	Inv. Banking Relationships <sup>R1</sup>	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%

<sup>R1</sup> 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 <sup>R2</sup>
Buy	≥ 10%	≤ 70%
Neutral	≥ 0%	≤ 30%
Underperform	N/A	≥ 20%

<sup>R2</sup> 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.

**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: Church & Dwight, Colgate, Colgate-Palmolive, Coty Inc., e.l.f. Beauty, Estee Lauder, Kenvue, Kimberly-Clark, Procter & Gamble.

BofAS or an affiliate was a manager of a public offering of securities of this issuer within the last 12 months: Colgate-Palmolive, Estee Lauder, Kenvue, Procter & Gamble.

The issuer is or was, within the last 12 months, an investment banking client of BofAS and/or one or more of its affiliates: Church & Dwight, Colgate-Palmolive, Coty Inc., Estee Lauder, Kenvue, Kimberly-Clark, Procter & Gamble.

BofAS or an affiliate has received compensation from the issuer for non-investment banking services or products within the past 12 months: Church & Dwight, Colgate-Palmolive, Coty Inc., e.l.f. Beauty, Estee Lauder, Kenvue, Kimberly-Clark, Procter & Gamble.

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: Church & Dwight, Colgate-Palmolive, Coty Inc., e.l.f. Beauty, Estee Lauder, Kenvue, Procter & Gamble, The Clorox.

An officer, director or employee of BofAS or one of its affiliates is an officer or director of this issuer: Kimberly-Clark.

BofAS or an affiliate has received compensation for investment banking services from this issuer within the past 12 months: Church & Dwight, Colgate-Palmolive, Coty Inc., Estee Lauder, Kenvue, Procter & Gamble.

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: Church & Dwight, Colgate-Palmolive, Coty Inc., Estee Lauder, Kenvue, Kimberly-Clark, Procter & Gamble.

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: Kenvue, Kimberly-Clark, Procter & Gamble.

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: Church & Dwight, Colgate-Palmolive, Coty Inc., e.l.f. Beauty, Estee Lauder, Kenvue, Kimberly-Clark, Procter & Gamble.

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: Church & Dwight, Colgate-Palmolive, Coty Inc., Estee Lauder, Kenvue, Kimberly-Clark, Procter & Gamble.

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

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 BofA 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 de 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.bofam.com/BofASEdisclaimer](http://www.bofam.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 Ireland (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 (Australia): Merrill Lynch Equities (Australia) Limited, regulated by the Australian Securities and Investments Commission; Merrill Lynch (Hong Kong): Merrill Lynch (Asia Pacific) Limited, regulated by the Hong Kong Securities and Futures Commission (HKSF); 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 International, LLC Seoul Branch, regulated by the Financial Supervisory Service; Merrill Lynch (Taiwan): Merrill Lynch Securities (Taiwan) Ltd., regulated by the Securities and Futures Bureau; BofAS India: BofA 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 S.A. Corretora de Títulos e Valores Mobiliários, regulated by Comissão de Valores Mobiliários; 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 HKSF; is issued and distributed in Taiwan by Merrill Lynch (Taiwan); is issued and distributed in India by BofAS India; and is issued and distributed in Singapore to institutional investors and/or accredited investors (each as defined under the Financial Advisers Regulations) 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 Australian Prudential Regulation Authority. No approval is required for publication or distribution of this information in Brazil and its local distribution is by Merrill Lynch (Brazil) in accordance with applicable regulations. Merrill Lynch (DIFC) is authorized and regulated by the DFSA. Information prepared and issued by Merrill Lynch (DIFC) is done so in accordance with the requirements of the DFSA conduct of business rules. BofA Europe (Frankfurt) distributes this information in Germany and is regulated by BaFin, the ECB and the CBI. BofA Securities entities, including BofA Europe and BofASE (France), may outsource/delegate the marketing and/or provision of certain research services or aspects of research services to other branches or members of the BofA Securities group. You may be contacted by a different BofA Securities entity acting for and on behalf of your service provider where permitted by applicable law. This does not change your service provider. Please refer to the [Electronic Communications Disclaimers](#) for further information.

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 information. Facts and views presented in this material that relate to any such proceedings have not been reviewed by, discussed with, and may not reflect information known to, professionals in other business areas of BofA Securities in connection with the legal proceedings or matters relevant to such proceedings.

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 or 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.