

Hims & Hers

February data: Alternative data tracking above guidance

Reiterate Rating: BUY | PO: 17.25 USD | Price: 14.88 USD

Revenue growth appears strong through February

We have begun tracking Bloomberg Second Measure data, Sensor Tower, and Similar Web data to gauge HIMS' online revenue growth trends. HIMS' Bloomberg Second Measure data indicates HIMS is tracking toward 1Q'24 sales of 11% growth q/q, slightly above the Street's estimate of 10%. Importantly, Bloomberg's Second Measure data has generally tracked ~2%+ below HIMS reported revenue growth, which may be driven by the data's focus on debit cards and over-indexing to the Midwest region where growth may be slower. Additionally, Sensor Tower Monthly Active User (MAU) data is pointing to aggregate February MAUs at an all-time high, another positive, though we note that Sensor Tower's growth rates are not representative of HIMS' actual growth rate because the mobile app was only released a few years ago. Web traffic visit trends also point to potential conservatism in consensus revenue estimates with 1Q'24 run-rate web visits tracking 9.1% q/q. Historically, web traffic visits have trended on average 10.7% lower than HIMS reported revenue growth likely due to the exclusion of mobile app activity as the data tracks site visits only. All together, HIMS could exceed 1Q'24 total revenue guidance of \$267-\$272MM, representing growth of 8-10% q/q. We note that while MAU and web traffic growth saw a strong start to 2024, February m/m MAU growth decelerated and web traffic declined which will be an important trend to monitor. We continue to track observed sales, MAU, and web traffic trends through the remainder of the quarter and view HIMS as differentiated from other digital health peers. We remain optimistic on HIMS' growth story due to its brand value, strong product portfolio, and ability to drive operating leverage. In the past quarter, the company provided substantial line of sight into intermediate-to-long-term margin expansion and our new \$17.25 PO (was \$14.50) represents 11x 2027E EBITDA and 3x EV/2024E revenue (vs. 2.5x prior).

Catalysts going forward

Going forward, we look for further momentum in newer categories as the company continues to track towards emerging specialties delivering +\$100MM of revenues in 2025. We also look for greater line of sight into 2025 targets of \$1.2Bn in revenue and \$100MM of adj. EBITDA as execution in FY24 will be key. We also look for broader script trends and progress on driving ongoing operating leverage. We do note that February MAU growth was just 0.4% while combined web traffic visits declined 14.8% m/m, highlighting that this type of growth is worth monitoring.

Estimates (Dec) (US\$)	2022A	2023A	2024E	2025E	2026E
EPS	(0.31)	(0.10)	0.13	0.26	0.45
GAAP EPS	(0.40)	(0.11)	(0.11)	0.02	0.21
EPS Change (YoY)	43.6%	67.7%	NM	100.0%	73.1%
Consensus EPS (Bloomberg)			0.21	0.36	0.81
DPS	0	0	0	0	0
Valuation (Dec)					
P/E	NM	NM	114.5x	57.2x	33.1x
GAAP P/E	NM	NM	NM	744.0x	70.9x
EV / EBITDA*	NM	58.7x	26.6x	18.1x	12.7x
Free Cash Flow Yield*	-1.1%	1.5%	3.1%	4.5%	6.3%
* For full definitions of <i>iQ</i> method SM measures, see page 9.					

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 10 to 12. Analyst Certification on page 8. Price Objective Basis/Risk on page 8. 12671927

18 March 2024

Equity

Ke	y Changes		
(US	\$)	Previous	Current
Pric	e Obj.	14.50	17.25

Allen Lutz, CFA Research Analyst +1 646 855 4380 allen.lutz@bofa.com

Hanna Lee Research Analyst +1 646 855 3682 hanna.y.lee@bofa.com

Dev Weerasuriya Research Analyst **BofAS** +1 646 855 5707 dev.weerasuriya@bofa.com

Stock Data

Price	14.88 USD
Price Objective	17.25 USD
Date Established	18-Mar-2024
Investment Opinion	C-1-9
52-Week Range	5.65 USD - 15.38 USD
Mrkt Val (mn) / Shares Out	3,063 USD / 205.9
(mn)	
Free Float	67.2%
Average Daily Value (mn)	89.34 USD
BofA Ticker / Exchange	HIMS / NYS
Bloomberg / Reuters	HIMS US / HIMS.N
ROE (2024E)	7.3%
Net Dbt to Eqty (Dec-2023A)	-28.1%

Timestamp: 18 March 2024 11:44AM EDT

iQprofile[™] Hims & Hers

iQmethod [™] – Bus Performance*					
(US\$ Millions)	2022A	2023A	2024E	2025E	2026
Return on Capital Employed	-18.0%	-7.3%	5.2%	10.3%	14.59
Return on Equity	-19.5%	-6.4%	7.3%	11.9%	15.99
Operating Margin	-12.5%	-3.1%	2.3%	4.8%	7.29
Free Cash Flow	(34)	47	96	136	19
<i>iQ</i> method [™] – Quality of Earnings*					
(US\$ Millions)	2022A	2023A	2024E	2025E	2026
Cash Realization Ratio	NM	NM	4.6x	2.9x	2.2
Asset Replacement Ratio	1.0x	2.8x	2.8x	2.3x	1.8
Tax Rate	0.1%	NM	22.5%	25.0%	25.09
Net Debt-to-Equity Ratio	-15.0%	-28.1%	-38.0%	-46.9%	-54.79
Interest Cover	NA	NA	NA	NA	N
Income Statement Data (Dec)					
(US\$ Millions)	2022A	2023A	2024E	2025E	2026
Sales	527	872	1,196	1,496	1,83
% Change	93.8%	65.5%	37.2%	25.0%	23.0
Gross Profit	409	715	980	1,199	1,44
% Change	99.9%	74.9%	37.1%	22.4%	20.39
EBITDA	(16)	50	109	161	22
% Change	47.5%	NM	120.4%	47.4%	41.99
Net Interest & Other Income	3	8	10	9	
Net Income (Adjusted)	(63)	(21)	29	60	10
% Change	38.5%	66.7%	NM	110.6%	75.39
Free Cash Flow Data (Dec)					
(US\$ Millions)	2022A	2023A	2024E	2025E	2026
Net Income from Cont Operations (GAAP)	(63)	(21)	29	60	10
Depreciation & Amortization	7	10	13	16	2
Change in Working Capital	(14)	21	22	24	2
Deferred Taxation Charge	NA	NA	NA	NA	N
Other Adjustments, Net	43	64	69	73	7
Capital Expenditure	(7)	(26)	(36)	(37)	(3
Free Cash Flow	-34	47	96	136	19
% Change	14.3%	NM	105.1%	41.6%	42.39
Share / Issue Repurchase	1	(11)	0	0	12.5
Cost of Dividends Paid	0	0	0	0	
Change in Debt	0	0	0	0	
	-	-	-	-	
Palanca Chast Data (Das)					
Balance Sheet Data (Dec)					
(US\$ Millions)	2022A	2023A	2024E	2025E	2026
(US\$ Millions) Cash & Equivalents	47	97	168	270	41
(US\$ Millions) Cash & Equivalents Trade Receivables	47 0	97 0	168 0	270 0	41
(US\$ Millions) Cash & Equivalents Trade Receivables Other Current Assets	47 0 170	97 0 168	168 0 184	270 0 201	41
(US\$ Millions) Cash & Equivalents Trade Receivables Other Current Assets Property, Plant & Equipment	47 0 170 11	97 0 168 36	168 0 184 62	270 0 201 86	41 22 10
(US\$ Millions) Cash & Equivalents Trade Receivables Other Current Assets Property, Plant & Equipment Other Non-Current Assets	47 0 170 11 139	97 0 168 36 140	168 0 184 62 162	270 0 201 86 194	22 10 23
(US\$ Millions) Cash & Equivalents Trade Receivables Other Current Assets Property, Plant & Equipment	47 0 170 11	97 0 168 36	168 0 184 62	270 0 201 86	41 22

Company Sector

Healthcare Technology & Distribution

Company Description

Hims & Hers is a technology-enabled pharmacy designed to primarily address various chronic conditions with a heavy focus on a younger "millennial" patient population. The company pursues targeted direct marketing for drug classes that have a high degree of generic drug prevalence, using a tele-pharmacy model to prescribe and ship drugs directly to a member's home.

Investment Rationale

We see an opportunity for HIMS to capitalize on its core market, targeting primarily cash-pay/generic drugs. We also see the ramp in categories such as hair loss, erectile dysfunction, and dermatology as strong places to start, while primary care serves as a sizable opportunity. Given the scale in these core markets, the breakeven EBITDA is impressive and should set HIMS up for ongoing profitable growth.

Stock Data

Average Daily Volume 6,003,986

Quarterly Earnings Estimates

	2023	2024
Q1	-0.05A	NA
Q2	-0.03A	NA
Q3	-0.03A	NA
Q4	0.01A	NA

Other Current Liabilities

Other Non-Current Liabilities

Total Equity & Liabilities

Long-Term Debt

Total Equity

Total Liabilities

^{*} For full definitions of $\emph{\textbf{\textit{IQ}}}\textit{method}^{\text{SM}}$ measures, see page 9.

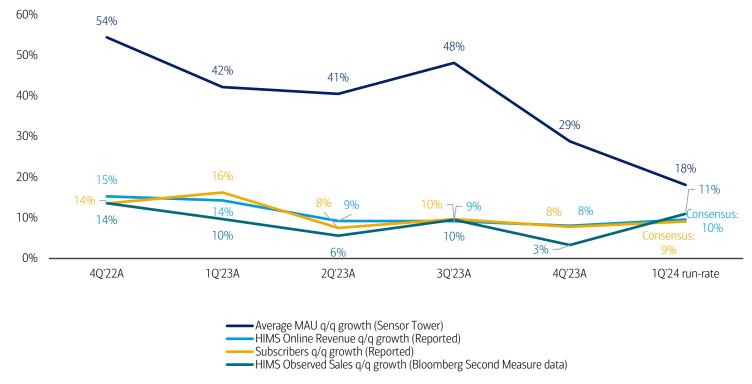
Updating PO on February data trends

We have begun tracking Sensor Tower Monthly Active User (MAU) trends and Bloomberg Second Measure credit and debit card data to gauge online revenue growth trends. We believe these trends provide a valuable metric for intra-quarter analysis given the vast majority of revenues (online revenues represented 97% of total revenues in FY23) are derived from sales on HIMS' websites and mobile applications. It is important to note that the underlying Bloomberg Second Measure data aggregates analytics from a consumer panel that is normalized to broadly represent consumer spending in the U.S., but skews towards debit cards and concentrations in specific regions (i.e. the Midwest). Thus, we look to February data trends for directional color rather than representative of actual revenue growth.

Quarterly MAUs have grown faster than online rev growth

In February, aggregate HIMS MAUs were at an all-time high growing 219% y/y (Exhibit 5) and 0.4% m/m. February run-rate MAUs are tracking 18% above the 4Q'23 average. However, we have observed that Sensor Tower MAUs tend to track much higher than reported HIMS Online Revenue growth. Meanwhile, Bloomberg Second Measure data shows an R-squared value of 0.78 with observed sales tracking on average ~2% below reported HIMS quarterly Online Revenue growth from 4Q'22 to 4Q'23 (Exhibit 1). For example, in 4Q'23 HIMS reported Online Revenue grew 8% q/q well below Sensor Tower MAUs growth of 29% q/q and above Bloomberg Second Measure data sales growth of 3% q/q. While Bloomberg Second Measure data has generally shown a stronger correlation to HIMS reported metrics compared to Sensor Tower MAUs, we believe Bloomberg data may be understating revenue growth due to the underlying data skew to debit cards and regional concentration in the Midwest. For 1Q'24, consensus is estimating \$260.1MM in Online Revenues representing growth of 10% q/q while the Bloomberg Second Measure data run-rate is tracking 11% q/q. This could indicate that the Street's 1Q'24 Online Revenue estimates may be conservative.

Exhibit 1: Comparison of quarterly HIMS reported metrics (online revenue and subscribers), Sensor Tower MAUs, and Bloomberg Second Measure data We have observed a stronger correlation with HIMS reported metrics and observed sales (Bloomberg Second Measure data) compared to Sensor Tower MAUs

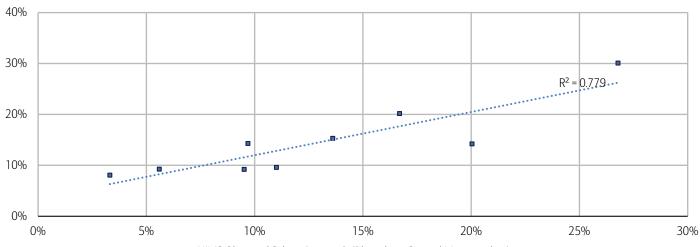


Source: Company reports, Sensor Tower, Visible Alpha, Bloomberg Financial LP – ALTD <GO>



Exhibit 2: Bloomberg Second Measure data regression analysis

A regression on Bloomberg Second Measure data shows an R-squared value of 0.78



HIMS Observed Sales q/q growth (Bloomberg Second Measure data)

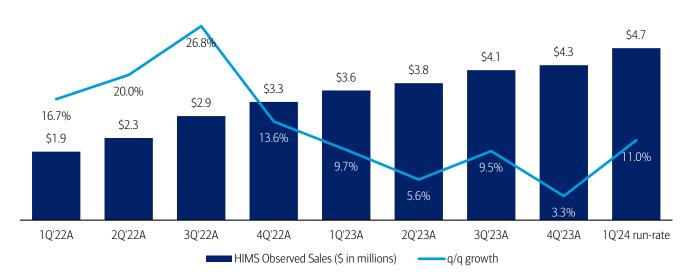
..... Linear (HIMS Observed Sales q/q growth (Bloomberg Second Measure data))

Source: Bloomberg Financial LP - ALTD <GO>

BofA GLOBAL RESEARCH

Exhibit 3: HIMS quarterly observed sales (Bloomberg Second Measure Data), 2022-1Q'24 run-rate

1Q'24 run-rate observed sales are trending 11% above 4Q'23



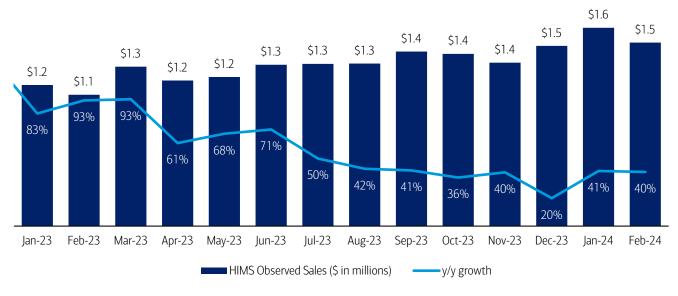
Source: Bloomberg Financial LP – ALTD <GO>

HIMS observed sales grow 40% y/y in February

Observed sales (per Bloomberg Second Measure data) grew 40% y/y reflecting a 7% decline m/m.

Exhibit 4: HIMS monthly observed sales (Bloomberg Second Measure data), 2023-2024

In February, observed sales grew 40% y/y representing a decline of 7% m/m



Source: Bloomberg Financial LP - ALTD <GO>

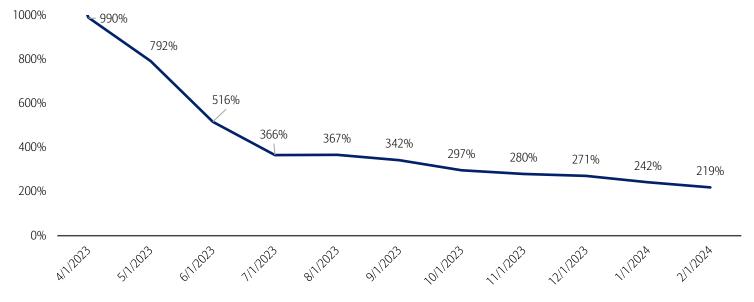
BofA GLOBAL RESEARCH

Aggregate HIMS MAUs at all-time high

In February, aggregate HIMS MAUs reach an all-time high growing 219% y/y and 0.4% m/m. February run-rate MAUs are trending 18% above average MAUs in 4Q'23.

Exhibit 5: U.S. HIMS Monthly Active User growth trends, 2023-2024

In February, aggregate MAUs were at an all-time high growing 219% y/y, representing 0.4% m/m growth

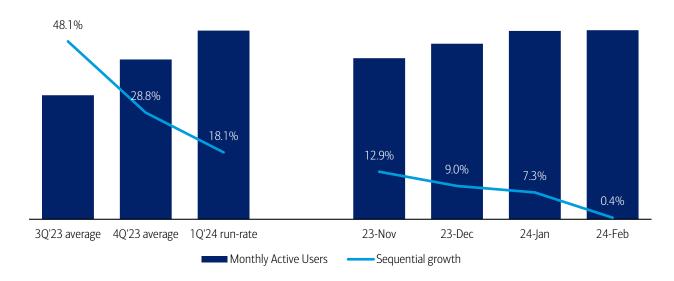


Source: Sensor Tower



Exhibit 6: U.S. HIMS Monthly Active Users (3Q'23 to 1Q'24 run-rate)

February MAUs grew 0.4% m/m with 1Q'24 run-rate MAUs trending 18.1% above average 4Q'23 levels



Source: Sensor Tower

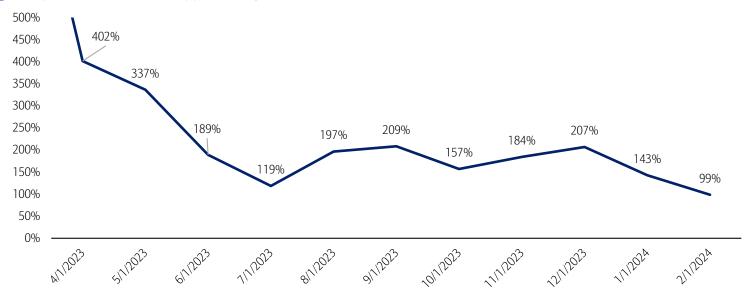
BofA GLOBAL RESEARCH

HIMS app downloads decline 19% m/m in February

HIMS' app downloads in February declined 19% m/m representing a 99% y/y increase. February run-rate app downloads are trending 3.1% above the 4Q'23 average.

Exhibit 7: U.S. HIMS app downloads, 2023-2024

February app downloads increased 99% y/y, representing a decline of 18.9% m/m



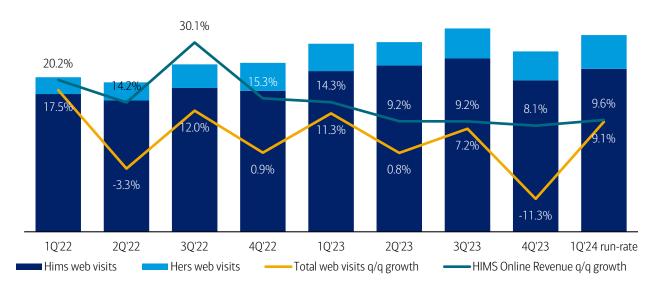
Source: Sensor Tower

BofA GLOBAL RESEARCH

Feb. combined web traffic visits decline 14.8% m/m

We also tracked web traffic visits for forhims.com and forhers.com for directional trends. We have observed that combined web traffic visit growth across both websites (forhims.com and forhers.com) trended well below HIMS' reported Online Revenue growth (Exhibit 8). Historically, total web visit growth has tracked on average 10.7% lower than reported revenue growth from 1Q'22 through 4Q'23. For 1Q'24, run-rate total web visits are tracking 9.1% above the 4Q'23 average while consensus is estimating 9.6% q/q growth for HIMS' Online Revenue. This datapoint could indicate some conservatism in 1Q'24 consensus revenue estimates. For February, combined web traffic visits grew 6.3% y/y reflecting a 14.8% decline m/m. More specifically, February forhims.com web traffic visits grew 5.6% y/y reflecting a 12.1% decline while forhers.com grew 10.4% y/y reflecting a 26.9% decline. We continue to monitor web traffic visit trends for directional color and note that the delta between web traffic and reported revenue growth likely reflects the exclusion of mobile app activity as the underlying data tracks site visits only.

Exhibit 8: Total web traffic visit growth for combined forhims.com and forhers.com vs. reported HIMS Online Revenue growthTotal web visits have trended significantly below HIMS reported Online Revenue growth



Source: Similar Web, Company reports



Price objective basis & risk

Hims & Hers (HIMS)

Our \$17.25 price objective is based on about 3.0x our CY24 revenue estimate. We use a range of health IT companies, both newer digital health as well as more traditional software for comparison, comparing relative growth and relative margin rates, with the digital health side being more representative. Given relative growth rates, spend levels, and margin characteristics, our target multiple is in-line with some of the other digital health companies that are currently unprofitable.

Downside risks are lack of differentiation vs. more traditional pharmacy providers, a limited number of disease categories serviced, the need to continue to spend on both R&D and sales & marketing to remain competitive, and a slower return of overall market script growth post-COVID. Upside risks are increased demand from consumer-oriented disease categories, faster growth from targeted marketing spend (leading to stronger LTV/CAC), and potential upside from moving into new disease categories.

Analyst Certification

I, Allen Lutz, CFA, 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 - Healthcare Technology & Distribution Coverage Cluster

	-			
Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
BUY				
	Accolade	ACCD	ACCD US	Allen Lutz, CFA
	American Well Corp	AMWL	AMWL US	Allen Lutz, CFA
	Cencora Inc	COR	COR US	Allen Lutz, CFA
	CVS Health	CVS	CVS US	Allen Lutz, CFA
	Definitive Healthcare Corp	DH	DH US	Allen Lutz, CFA
	dentalcorp	YDNTL	DNTL CN	Allen Lutz, CFA
	Envista	NVST	NVST US	Allen Lutz, CFA
	HealthEquity Inc	HQY	HQY US	Allen Lutz, CFA
	Hims & Hers	HIMS	HIMS US	Allen Lutz, CFA
	McKesson	MCK	MCK US	Allen Lutz, CFA
	Omnicell Inc.	OMCL	OMCL US	Allen Lutz, CFA
	Patterson Companies	PDCO	PDCO US	Allen Lutz, CFA
	Progyny	PGNY	PGNY US	Allen Lutz, CFA
NEUTRAL				
	Cardinal Health	CAH	CAH US	Allen Lutz, CFA
	Dentsply Sirona, Inc.	XRAY	XRAY US	Allen Lutz, CFA
	Doximity Inc	DOCS	DOCS US	Allen Lutz, CFA
	Teladoc Health	TDOC	TDOC US	Allen Lutz, CFA
UNDERPERFORM				
	GoodRx	GDRX	GDRX US	Allen Lutz, CFA
	Henry Schein	HSIC	HSIC US	Allen Lutz, CFA
	Owens & Minor	OMI	OMI US	Allen Lutz, CFA
	Premier, Inc.	PINC	PINC US	Allen Lutz, CFA
	Walgreens Boots Alliance	WBA	WBA US	Allen Lutz, CFA



IQmethod[™] Measures Definitions

Business Performance	Numerator	Denominator
Return On Capital Employed	NOPAT = (EBIT + Interest Income) \times (1 - Tax Rate) + Goodwill Amortization	Total Assets — Current Liabilities + ST Debt + Accumulated Goodwill
		Amortization
Return On Equity	Net Income	Shareholders' Equity
Operating Margin	Operating Profit	Sales
Earnings Growth	Expected 5 Year CAGR From Latest Actual	N/A
Free Cash Flow	Cash Flow From Operations — Total Capex	N/A
Quality of Earnings	Numerator	Denominator
Cash Realization Ratio	Cash Flow From Operations	Net Income
Asset Replacement Ratio	Capex	Depreciation
Tax Rate	Tax Charge	Pre-Tax Income
Net Debt-To-Equity Ratio	Net Debt = Total Debt - Cash & Equivalents	Total Equity
Interest Cover	EBIT	Interest Expense
Valuation Toolkit	Numerator	Denominator
Price / Earnings Ratio	Current Share Price	Diluted Earnings Per Share (Basis As Specified)
Price / Book Value	Current Share Price	Shareholders' Equity / Current Basic Shares
Dividend Yield	Annualised Declared Cash Dividend	Current Share Price
Free Cash Flow Yield	Cash Flow From Operations – Total Capex	Market Cap = Current Share Price × Current Basic Shares
Enterprise Value / Sales	EV = Current Share Price × Current Shares + Minority Equity + Net Debt +	Sales
	Other LT Liabilities	

EV / EBITDA Enterprise Value Basic EBIT + Depreciation + Amortization

Menethod 3*is the set of BofA Global Research standard measures that serve to maintain global consistency under three broad headings: Business Performance, Quality of Earnings, and validations. The key features of iQmethod are: A consistently structured, detailed, and transparent methodology. Guidelines to maximize the effectiveness of the comparative valuation process, and to identify some common pitfalls.

Ratachase is our real-time global research database that is sourced directly from our equity analysts' earnings models and includes forecasted as well as historical data for income statements, balance sheets, and cash flow statements for companies covered by BofA Global Research.

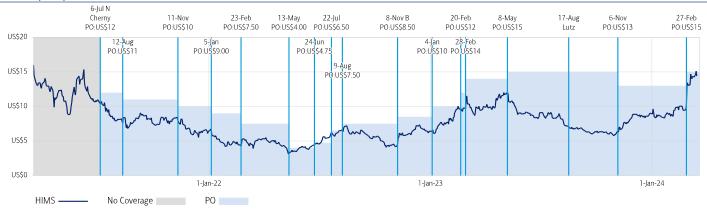
IQprofile^{≤M}, **IQ**method^{≤M} are service marks of Bank of America Corporation. **IQ**database® is a registered service mark of Bank of America Corporation.



Disclosures

Important Disclosures

Hims & Hers (HIMS) Price Chart



B: Buy, N: Neutral, U: Underperform, PO: Price Objective, NA: No longer valid, NR: No Rating

The Investment Opinion System is contained at the end of the report under the heading "Fundamental Equity Opinion Key". Dark grey shading indicates the security is restricted with the opinion suspended. Medium grey shading indicates the security is under review with the opinion withdrawn. Light grey shading indicates the security is not covered. Chart is current as of a date no more than one trading day prior to the date of the report.

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

Coverage Universe	Count	Percent	Inv. Banking Relationships R1	Count	Percent
Buy	234	60.94%	Buy	115	49.15%
Hold	80	20.83%	Hold	36	45.00%
Sell	70	18.23%	Sell	29	41.43%

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%	≤ /0%
Neutral	≥ 0%	≤ 30%
Underperform	N/A	≥ 20%

R2Ratings 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.

 $BofAS \ or \ one \ of \ its \ affiliates \ acts \ as \ a \ market \ maker \ for \ the \ equity \ securities \ recommended \ in \ the \ report: Hims \ \& \ Hers.$

BofAS or an affiliate has received compensation from the issuer for non-investment banking services or products within the past 12 months: Hims & Hers.

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: Hims & Hers.

 $Bof AS \ or \ one \ of \ its \ affiliates \ is \ willing \ to \ sell \ to, \ or \ buy \ from, \ clients \ the \ common \ equity \ of \ the \ issuer \ on \ a \ principal \ basis: \ Hims \ \& \ Hers.$

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: Hims & Hers.

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 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 Prudential Regulation Authority (PRA); BofASE (France): BofA Securities Europe SA is authorized by the Autorité de Contrôle Prudential Regulation Authority (PRA); BofASE (France): BofA Securities Europe SA is authorized by the Autorité de Contrôle Prudential Regulation Authority (PRA); BofASE (France): BofA Securities Europe SA is authorized by the Autorité de Contrôle Prudential Regulation Authority (PRA); BofASE (France): BofA Securities Europe SA is authorized by the Autorité de Contrôle Prudential Regulation Authority (PRA); BofASE (France): Bof 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.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 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 (Australia): Merrill Lynch (Hong Kong): Merrill Lynch (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): Merrill Lynch (Canada): Merrill Lynch (Mexico): Merrill Ly de Bolsa, regulated by the Comisión Nacional Bancaria y 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 (DIFC): Merrill Lynch (DIFC): Merrill Lynch (Brazil): Merrill Lynch (DIFC) Sranch), regulated by the Dubai Financial Services Authority (DFSA); Merrill Lynch (Brazil): Merrill Lynch (DIFC) Sranch), regulated by the Dubai Financial Services Authority (DIFC): Merrill Lynch (Brazil): Merrill Lynch (DIFC) Sranch), regulated by the Dubai Financial Services Authority (DIFC): Merrill Lynch (Brazil): Merrill 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 HKSFC; 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 \$.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 <u>Electronic Communications Disclaimers</u> 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 in any securities referred to herein.

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.

