#### **BofA GLOBAL RESEARCH**



# Boeing

# A slowly rising phoenix – turning around Boeing to take longer than expected

Reiterate Rating: BUY | PO: 255.00 USD | Price: 217.70 USD

# Quality control could pressure production ramp & margins

Increased FAA scrutiny into Boeing's (NYSE: BA) quality control processes, an increased number of inspections, and the implementation of recommendations by an outside party to Boeing's quality program could further pressure the pace of production increases. We are honestly astonished, given the company's legacy and heritage, that an outside party is required to make recommendations. The recovery path to historical 25% cash margins on the 737 program would not only be impacted by lower production levels, but also be hit by the incremental costs of adding increased quality control.

# BofAe production unchanged, but risks to consensus

Consensus remains significantly more bullish than both our production and FCF estimates (see inside). We have maintained a strong degree of conservativism, understanding that further production, supply chain, and labor hiccups were likely. Even prior to the MAX 9 grounding, we saw significant risk to Boeing's plans to ramp 737 production to 47.2/month by June 2024 and 52.5/month by December 2024 (see our report). BA came into the new year still only rolling 737s at low-20s/month. We believe this ramp is even less likely now, as we anticipate further resources and time will have to be allocated toward oversight, which could be a drag on already depressed production levels. We continue to anticipate average monthly 737 production of ~36 through 2024.

# Mgmt credibility, capability in question after MAX 9 issue

We believe the MAX 9 issue will only put further pressure on Boeing management, as these incidents reflect less than expected progress on improving execution in the wake of the initial MAX grounding and COVID slowdown. Aside from results of the NTSB and FAA investigations, regulators will likely look for more change from within Boeing. We would not be surprised to see regulators, investors and customers push for a turnover in the ranks of senior management and the Board of Directors.

# Remaining cautiously optimistic, PO to \$255

Boeing is one of two players in a global duopoly for commercial aircraft which are in short supply. Despite the recent issues, we believe BA has been making steady, if not slow, progress in addressing some of the internal shortfalls that led to its current situation. Investors should not expect things to change quickly, but more progress can and will be made. While we maintain our Buy rating, we lower our PO to \$255 from \$275 on increased near-term risks and waning investor appetite.

Estimates (Dec) (US\$)	2021A	2022A	2023E	2024E	2025E
EPS	(9.44)	(11.05)	(6.20)	2.70	7.45
GAAP EPS	(7.15)	(8.29)	(3.91)	4.58	9.15
EPS Change (YoY)	59.4%	-17.1%	43.9%	NM	175.9%
Consensus EPS (Bloomberg)			(6.11)	4.03	9.05
DPS	0	0	0	0	0
Valuation (Dec)					
P/E	NM	NM	NM	80.6x	29.2x
GAAP P/E	NM	NM	NM	47.5x	23.8x
EV / EBITDA*	NM	NM	207.8x	30.7x	20.3x
Free Cash Flow Yield*	-3.3%	1.7%	2.5%	3.3%	4.9%
* For full definitions of <i>IQ</i> method <sup>≤M</sup> measures, see page 7.					

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Refer to important disclosures on page 8 to 10. Analyst Certification on page 6. Price
Objective Basis/Risk on page 6.

Timestamp: 16 January 2024 07:13AM EST

#### 16 January 2024

#### Equity

Key Changes		
(US\$)	Previous	Current
Price Obj.	275.00	255.00
2023E Rev (m)	75,339.0	76,540.6
2024E Rev (m)	84,780.5	84,397.5
2025E Rev (m)	93,384.8	93,000.8

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#### Stock Data

Price	217.70 USD
Price Objective	255.00 USD
Date Established	15-Jan-2024
Investment Opinion	B-1-9
52-Week Range	176.25 USD - 267.54 USD
Mrkt Val (mn) / Shares Out	131,703 USD / 605.0
(mn)	
Free Float	99.9%
Average Daily Value (mn)	1802.74 USD
BofA Ticker / Exchange	BA / NYS
Bloomberg / Reuters	BA US / BA.N
ROE (2023E)	NA
Net Dbt to Eqty (Dec-2022A)	NA
ESGMeter™	High

ESGMeter is not indicative of a company's future stock price performance and is not an investment recommendation or rating. ESGMeter is independent of BofA Global Research's equity investment rating, volatility risk rating, income rating, and price objective for that company. For full details, refer to "BofA ESGMeter Methodology".

# **iQ**profile<sup>™</sup> Boeing

iQmethod <sup>™</sup> – Bus Performance*					
(US\$ Millions)	2021A	2022A	2023E	2024E	20251
Return on Capital Employed	-4.0%	-5.8%	-1.7%	9.6%	16.7%
Return on Equity	NM	NM	NM	NM	NM
Operating Margin	-4.7%	-5.3%	-1.2%	5.6%	8.8%
Free Cash Flow	(4,396)	2,290	3,336	4,283	6,417
iQmethod <sup>SM</sup> − Quality of Earnings*					
(US\$ Millions)	2021A	2022A	2023E	2024E	20251
Cash Realization Ratio	NM	NM	NM	3.6x	1.8>
Asset Replacement Ratio	0.5x	0.6x	0.8x	0.8x	0.9
Tax Rate	14.5%	NM	NM	4.1%	13.1%
Net Debt-to-Equity Ratio	NM	NM	NM	NM	NM
Interest Cover	-1.1x	-1.5x	-0.5x	2.1x	3.8x
Income Statement Data (Dec)					
(US\$ Millions)	2021A	2022A	2023E	2024E	20251
Sales	62,286	66,608	76,541	84,398	93,001
% Change	7.1%	6.9%	14.9%	10.3%	10.2%
Gross Profit	3,049	3,530	7,134	12,863	16,512
% Change	NM	15.8%	102.1%	80.3%	28.4%
EBITDA	(758)	(1,568)	979	6,626	10,006
% Change	92.8%	-106.9%	NM	576.7%	51.0%
Net Interest & Other Income	(2,131)	(1,475)	(1,231)	(1,804)	(1,668)
Net Income (Adjusted)	(5,551)	(6,577)	(3,755)	1,643	4,557
% Change	58.0%	-18.5%	42.9%	NM	177.3%
Free Cash Flow Data (Dec)					
(US\$ Millions)	2021A	2022A	2023E	2024E	2025
Net Income from Cont Operations (GAAP)	(4,378)	(5,171)	(2,453)	2,787	5,599
Depreciation & Amortization	2,144	1,979	1,908	1,874	1,852
Change in Working Capital	(6,977)	4,139	4,324	162	(382)
Deferred Taxation Charge	NA	NA	NA	NA	NA.
Other Adjustments, Net	5,795	2,565	1,050	1,021	1,021
Capital Expenditure	(980)	(1,222)	(1,493)	(1,561)	(1,674)
Free Cash Flow	-4,396	2,290	3,336	4,283	6,417
% Change	77.7%	NM	45.7%	28.4%	49.8%
Share / Issue Repurchase	42	50	45	0	C
Cost of Dividends Paid	0	0	0	0	C
Change in Debt	(5,576)	(1,276)	(4,848)	(5,000)	(6,000)
Balance Sheet Data (Dec)					
(US\$ Millions)	2021A	2022A	2023E	2024E	20251
Cash & Equivalents	8,052	14,614	8,942	8,225	8,642
Trade Receivables	2,641	2,517	2,958	3,146	3,467
Other Current Assets	97,973	92,392	92,390	87,574	84,318
Property, Plant & Equipment	10,918	10,550	10,420	10,364	10,429
Other Non-Current Assets	18,968	17,027	16,795	16,538	16,295
Total Assets	138,552	137,100	131,506	125,848	123,150
Short-Term Debt	1,296	5,190	4,891	4,891	4,891
Other Current Liabilities	80,696	84,862	85,672	82,796	81,126
Long-Term Debt	56,806	51,811	47,659	42,659	36,659
Other Non-Current Liabilities	14,600	11,085	10,198	9,629	9,002
Total Liabilities	153,398	152,948	148,421	139,975	•
		152,948 (15,848) 137,100	148,421 (16,915) 131,506	139,975 (14,128) 125,848	131,679 (8,528) 123,150

# **Company Sector**

Aerospace

### **Company Description**

Boeing (BA) is the world's leading aerospace company and the largest manufacturer of commercial jetliners and military aircraft combined. The different segments in the company are Commercial Airplanes, Boeing Defense, Space & Security (BDS), Boeing Global Services, and Boeing Capital Corporation, which provide financial solutions facilitating sale and delivery of Boeing commercial and military aircraft, satellites, and launch vehicles. BA is based in Chicago, Illinois.

#### **Investment Rationale**

Boeing is participating in the commercial aerospace recovery, as part of the global duopoly in large commercial aircraft manufacturing, with some company-specific challenges. Boeing is confronted with losing market share in the narrowbody jet market, refocusing it on engineering excellence and execution, and deleveraging its balance sheet. That said, we expect aircraft deliveries to return to pre-Covid levels by the mid-2020s which in turn should drive cash flow generation and the stock higher.

### Stock Data

Average Daily Volume

8,280,849

### **Quarterly Earnings Estimates**

	2022	2023
Q1	-2.75A	-1.27A
Q2	-0.37A	-0.82A
Q3	-6.18A	-3.26A
04	-1 75A	-0.86F

\* For full definitions of  $\emph{IQ}$  method  $^{\text{SM}}$  measures, see page 7.

<sup>-85</sup> 

## **MAX-9 Incident Timeline**

# **Exhibit 1: Boeing MAX-9 Incident Timeline**

Timeline of events and perspectives from Airlines, Regulators, and the OEMs

	"The incident" Friday, Jan 5 <sup>th</sup>	"The investigation" Saturday, Jan 6th	"Market Reaction" Monday, Jan 8th	"Admitting mistakes" Tuesday, Jan 9 <sup>th</sup>	"SPR joins the Party" Wednesday, Jan 10 <sup>th</sup>	"Inspecting Boeing" Thursday, Jan 11 <sup>th</sup>	"Increased Oversight Friday, Jan 12 <sup>th</sup>
Airlines	A panel of a Boeing 737 MAX-9 airplane rips off during an Alaska Airlines flight from Portland International Airport to Ontario, California at 16,000 feet	Alaska Airlines temporarily grounds its Boeing 737 MAX-9 fleet, will return to service 'only after completion of full maintenance and safety inspections.'	737 MAX-9 fleet.				
Regulators	FAA & NTSB launch investigation into the incident	FAA issues an emergency airworthiness directive, temporarily grounding certain Boeing 737 MAX-9's while operators conduct inspections before returning the aircraft to service	- Both guide tracks on		FAA & Secretary of Transportation announce - 'Public safety, not speed will determine the timeline for returning the 737-9 to service'	investigated for failing	- Increasing oversight on Boeing production & Manufacturing, conducts audit on production line & suppliers - Exploring using 3rd party to overse inspection & quality systems at Boeing Considering
OEMs	Boeing announces they are investigating the incident and cooperating with FAA/NTSB		Both Boeing & Spirit shares are down, AAR releases Statement they did not work near or on the plug  Boeing provides airlines with inspection guidance, trying to return MAX-9 to service  Spirit formally invited to joined investigation party	Calhoun says Boeing must "Admit mistakes" and "Can never happen again"	Spirit AeroSystems formally announces they're supporting the NTSB's investigation	Air Current reports plug-exit opposite the blow out plug has six loose fasteners which were tightened by Boeing Calhoun says accident was a quality escape	

Source: BofA Global Research

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## **BofA estimates vs consensus**

# Exhibit 2: BofA delivery estimates vs. consensus

We remain cautious on deliveries, w/ a ramp to 50/month in 2025 vs. VA consensus of 51.9/month vs. BBG consensus of 52.2/month

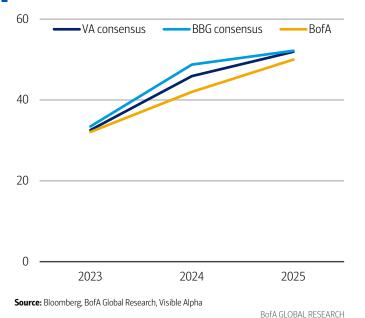
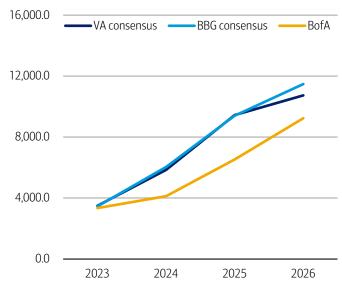


Exhibit 3: BofA FCF estimates vs consensus

Fewer deliveries translate into softer FCF, and we anticipate FCF of \$9.2bn in 2025 vs. VA consensus of \$10.7bn vs. BBG consensus of \$11.5bn

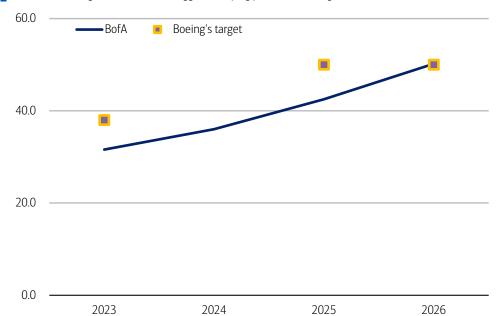


**Source:** Bloomberg, BofA Global Research, Visible Alpha

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## Exhibit 4: BofA production estimates vs. Boeing estimates

We believe Boeing will continue to struggle in ramping production through 2025



**Source:** Boeing, BofA Global Research

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# MAX 9 and 10 by the numbers

# Exhibit 5: MAX 9 exposure by country

US carriers are the most nominally exposed to the MAX 9, with 166 aircraft in-service, parked, or on order

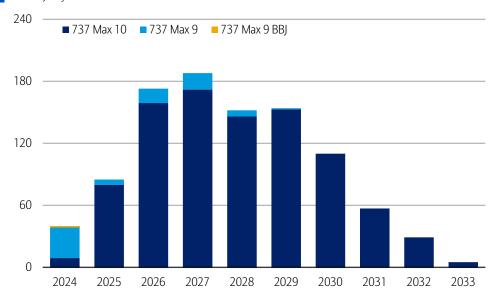
Country	NB Fleet	737 MAX-9	% of Fleet	
United States		3535	166	4.70%
Panama		74	32	43.24%
Mexico		219	12	5.48%
Turkiye		356	8	2.25%
China		2915	6	0.21%
Iceland		23	4	17.39%
Thailand		88	4	4.55%
United Arab Emirates		117	3	2.56%
Tanzania		3	2	66.67%
Kazakhstan		41	1	2.44%

Source: BofA Global Research, Cirium

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# Exhibit 6: MAX 9 and 10 orders by scheduled delivery year

The majority of MAX 9/10 orders are scheduled for the late 2020s

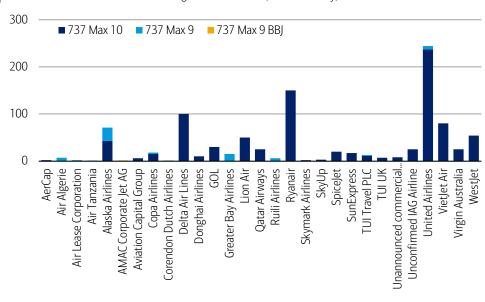


Source: BofA Global Research, Cirium

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#### Exhibit 7: MAX 9 and 10 orders by customer

United Airlines has the most outstanding MAX 9/10 orders (244 collectively)



**Source:** BofA Global Research, Cirium

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# Reiterate Buy, Lower PO to \$255

While we reiterate our Buy rating, we lower our PO to \$255 from \$275 on increased near-term risks and waning investor appetite considering recent events. We are updating our model to reflect the lower than expected final 787 deliveries in 2023, offset by higher than expected 737 deliveries. We maintain our EPS estimates unchanged.



# Price objective basis & risk

#### **Boeing (BA)**

Our PO of \$255 is based on the near-term average FCF of \$15/share and relative discount to the S&P500 of 0.8x (about half standard deviation above historical average). In our view, a multiple roughly in line with the historical average fairly reflects the looming aerospace recovery, strong demand for commercial jets, defense opportunities, and the lack of dividend.

Upside risks to our PO are the possible involvement of an activist shareholder, better-than-expected cash margins at 787 and/or MAX programs, the company's ability to sustain 777 delivery rates through the bridge to 777X, lower-than-expected 777X, future single-aisle and middle-of-the-market aircraft development costs.

Downside risks to our PO are as follows: Tight competition for engineering talent in the current labor market could make new product development more challenging. Execution risk on new programs and production ramp-ups (737MAX, 777X, KC-46) could result in cost overruns and margin contractions. Changes in trade policy that end in a trade war. A sharp and prolonged surge in oil prices to above \$100/bbl would be negative to aircraft demand. A downturn in commercial aviation, due to an exogenous factor, could adversely affect financial results. As aircraft are priced in USD, an unexpected rapid revaluation in the dollar could significantly affect order activity. Also, a strong dollar could improve Airbus' competitive advantage. 787 fixes could take longer than expected.

# **Analyst Certification**

I, Ronald J. Epstein, 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 - Aerospace and Defense Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
BUY				•
DUT	AerCap Holdings N.V.	AER	AER US	Ronald J. Epstein
	Air Lease Corporation	AL	AL US	Ronald J. Epstein
	Boeing	BA	BA US	Ronald J. Epstein
	Booz Allen Hamilton	BAH	BAH US	Mariana Perez Mora
	BWX Technologies, Inc.	BWXT	BWXT US	Ronald J. Epstein
	CACI International	CACI	CACLUS	Mariana Perez Mora
	Cadre Holdings Inc	CDRE	CDRE US	Ronald J. Epstein
	Crane Co.	CR	CR US	Ronald J. Epstein
	Embraer	ERJ	ERJ US	Ronald J. Epstein
	General Dynamics	GD	GD US	Ronald J. Epstein
	Howmet Aerospace Inc.	HWM	HWM US	Ronald J. Epstein
	KBR	KBR	KBR US	Mariana Perez Mora
	Leidos Holdings	LDOS	LDOS US	Mariana Perez Mora
	Leonardo DRS, Inc.	DRS	DRS US	Ronald J. Epstein
	Northrop Grumman	NOC	NOC US	Ronald J. Epstein
	Palantir Technologies	PLTR	PLTR US	Mariana Perez Mora
	Parsons Corporation	PSN	PSN US	Mariana Perez Mora
	RBC Bearings Inc	RBC	RBC US	Ronald J. Epstein
	Rocket Lab	RKLB	RKLB US	Ronald J. Epstein
	Teledyne Technologies Inc	TDY	TDY US	Ronald J. Epstein
	TransDigm Group Inc.	TDG	TDG US	Ronald J. Epstein
	Hansbigin Gloup inc.	100	100 03	Koriaiu j. Epsteiri
NEUTRAL				
	Albany International	AIN	AIN US	Ronald J. Epstein
	Garmin	GRMN	GRMN US	Ronald J. Epstein
	HEICO Corporation	HEI	HEIUS	Ronald J. Epstein
	Hexcel Corporation	HXL	HXL US	Ronald J. Epstein

### **US - Aerospace and Defense Coverage Cluster**

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
	L3Harris	LHX	LHX US	Ronald J. Epstein
	Lockheed Martin	LMT	LMT US	Ronald J. Epstein
	Textron	TXT	TXT US	Ronald J. Epstein
UNDERPERFORM				
	Bombardier	BDRBF	BDRBF US	Ronald J. Epstein
	Bombardier Inc.	YBBD B	BBD/B CN	Ronald J. Epstein
	CAE Inc.	YCAE	CAE CN	Ronald J. Epstein
	CAE Inc.	CAE	CAE US	Ronald J. Epstein
	Huntington Ingalls Industries	HII	HII US	Ronald J. Epstein
	Mercury Systems	MRCY	MRCY US	Ronald J. Epstein
	Raytheon Tech	RTX	RTX US	Ronald J. Epstein
	Spirit AeroSys-A	SPR	SPR US	Ronald J. Epstein
RVW				
	Triumph Group	TGI	TGI US	Ronald J. Epstein

# **IQ**method<sup>™</sup> Measures Definitions

<b>Business Performance</b>	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

\*\*Monthods\*\*\* 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.

\*\*Montphose\*\* 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 can

\*\*Redatabase\*\* 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.

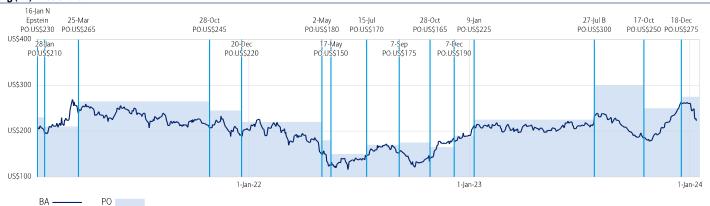
\*\*Deprofile SM\*\*, \*\*Department\*\* are service marks of Bank of America Corporation. \*\*Department\*\* are service mark of Bank of America Corporation.



# **Disclosures**

# **Important Disclosures**

#### **Boeing (BA) 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: Aerospace/Defense Electronics Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships R1	Count	Percent
Buy	31	62.00%	Buy	23	74.19%
Hold	11	22.00%	Hold	9	81.82%
Sell	8	16.00%	Sell	6	75.00%

#### **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<sup>R2</sup>

Buy	≥ 10%	≤ 70%
Neutral	≥ 0%	≤ 30%
Inderperform	N/A	≥ 20%

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.

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

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. Boeing,

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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: Boeing.



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: Boeing.

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