

BlackLine, Inc.

2024 rev outlook below Street; though NRR may have stabilized; Reit. U/P

Reiterate Rating: UNDERPERFORM | PO: 50.00 USD | Price: 58.30 USD

Soft guide masks good execution in the midmarket

Reiterate Underperform and lower PO to \$50 (from \$52), as we lower our forecast for a soft 2024 revenue outlook. The below Street revenue outlook (\$643mn mid-point vs. \$657mn Street) is driven by conservatism due to the macro and ongoing operational transformations to drive long-term durable revenue growth. Mid-market execution was positive, suggesting strategy execution. We are constructive on the ability to execute its transformation plan, but see limited upside until a visible path to its MT 20-25% revenue growth targets appears. \$50 PO is 5.7x EV/CY24E revs (was 5.1x) for soft guidance, but higher diluted outstanding shares. Update forecast for 4Q results/guidance.

Accounting Studio is coming...could be good growth driver

Later this year, Accounting Studio is slated to become generally available, which the company has been working on over the past several years. We view the new product as a potential differentiator in the back-office software category, as it re-envisions back-office operations with orchestration automation of workflows. While final packaging and pricing is yet to be finalized, the 10-12 early adopters are exhibiting high satisfaction levels, suggesting the product could be disruptive once it becomes generally available.

Positives: NRR showing signs of stabilization

1) NRR expanded 1pt sequentially to 106%, suggesting stabilization has occurred with the potential to expand in the future; 2) added 9 net-new \$1mn+ ARR customers, the highest quarterly net-new on record; 3) SAP partner revenue grew faster than total revenue at 16% y/y, although that was a slight deceleration from +17% last quarter; and 4) introduced new guidance metric, PF op income, providing better model visibility.

Negatives: Soft net-new cust adds, could continue

1) Added 30 net-new total customers, the lowest on record (next lowest is 32 in 1Q20), bringing the total to 4,398 (+5% y/y) which could mean future growth will need to come more from expand versus new; 2) RPO grew 9% y/y to \$843mn, a 3pt growth deceleration from +12% last quarter; 3) smaller customer segment remains under pressure, which could weight on new customer growth and revenue growth near-term; and 4) less focus on pro services results in a 1pt growth headwind in 2024.

Estimates (Dec) (US\$)	2022A	2023A	2024E	2025E	2026E
EPS	0.63	1.95	2.04	2.16	2.29
GAAP EPS	(0.49)	0.87	0.82	0.97	1.04
EPS Change (YoY)	8.6%	209.5%	4.6%	5.9%	6.0%
Consensus EPS (Bloomberg)			1.99	2.13	2.54
DPS	0	0	0	5.00	5.00
Valuation (Dec)					
P/E	92.5x	29.9x	28.6x	27.0x	25.5x
GAAP P/E	NM	67.0x	71.1x	60.1x	56.1x
Dividend Yield	0%	0%	0%	8.6%	8.6%
EV / EBITDA*	150.4x	39.4x	31.6x	28.4x	25.7x
Free Cash Flow Yield*	1.3%	3.4%	3.8%	4.4%	4.8%
* For full definitions of <i>iQ</i> method SM measures, see page 5.					

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Refer to important disclosures on page 6 to 8. Analyst Certification on page 4. Price
Objective Basis/Risk on page 4.

Timestamp: 13 February 2024 08:14PM EST

13 February 2024

Equity

Key Changes		
(US\$)	Previous	Current
Price Obj.	52.00	50.00
2024E Rev (m)	652.8	643.0
2025E Rev (m)	725.1	697.9
2026E Rev (m)	NA	753.9
2024E EPS	1.97	2.04
2025E EPS	2.15	2.16
2026E EPS	NA	2.29

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Stock Data

Price	58.30 USD
Price Objective	50.00 USD
Date Established	13-Feb-2024
Investment Opinion	C-3-9
52-Week Range	47.27 USD - 77.00 USD
Mrkt Val (mn) / Shares Out	3,572 USD / 61.3
(mn)	
Free Float	91.1%
Average Daily Value (mn)	29.70 USD
BofA Ticker / Exchange	BL / NAS
Bloomberg / Reuters	BL US / BL.OQ
ROE (2024E)	46.1%
Net Dbt to Eqty (Dec-2023A)	298.9%
ESGMeter™	Medium

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".

Acronym definitions on p. 3

iQprofile[™] BlackLine, Inc.

<i>iQ</i> method [™] – Bus Performance*					
(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Return on Capital Employed	1.9%	8.5%	8.9%	8.8%	8.6%
Return on Equity	21.2%	77.9%	46.1%	34.0%	27.1%
Operating Margin	6.1%	16.5%	17.5%	18.0%	18.5%
Free Cash Flow	45	121	137	157	173
<i>iQ</i> method [™] – Quality of Earnings*					
(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Cash Realization Ratio	1.2x	0.9x	0.9x	1.0x	1.0x
Asset Replacement Ratio	0.3x	0.1x	0.2x	0.3x	0.2x
Tax Rate	28.5%	2.4%	NM	NM	NM
Net Debt-to-Equity Ratio	NM	298.9%	171.1%	102.2%	60.2%
Interest Cover	NA	NA	NA	NA	NA
Income Statement Data (Dec)					
(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Sales	523	590	643	698	754
% Change	22.8%	12.8%	9.0%	8.5%	8.0%
Gross Profit	415	469	507	558	603
% Change	22.4%	13.0%	8.2%	10.1%	8.0%
EBITDA	29	111	138	154	170
% Change	-45.3%	281.6%	24.7%	11.2%	10.5%
Net Interest & Other Income	9	46	40	40	40
Net Income (Adjusted)	46	145	155	168	182
% Change	26.6%	214.0%	6.7%	8.5%	8.1%
Free Cash Flow Data (Dec)					
(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Net Income from Cont Operations (GAAP)	(34)	58	51	62	67
Depreciation & Amortization	43	50	39	42	45
Change in Working Capital	15	(4)	(38)	(32)	(32)
Deferred Taxation Charge	(14)	(2)	Ó	Ó	Ó
Other Adjustments, Net	47	24	96	96	104
Capital Expenditure	(11)	(6)	(10)	(10)	(11)
Free Cash Flow	45	121	137	157	173
% Change	-36.9%	167.9%	13.9%	14.3%	10.3%
Share / Issue Repurchase	2	13	0	0	0
Cost of Dividends Paid	0	0	0	0	0
Change in Debt	(1)	0	0	0	0
Balance Sheet Data (Dec)					
(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Cash & Equivalents	201	271	385	518	665
	151	172	208	243	262
Trade Receivables		OCE	972	989	1,021
Other Current Assets	898	965			
Other Current Assets Property, Plant & Equipment	20	15	13	11	10
Other Current Assets Property, Plant & Equipment Other Non-Current Assets	20 642	15 641	13 652	11 677	694
Other Current Assets Property, Plant & Equipment Other Non-Current Assets Total Assets	20 642 1,944	15 641 2,101	13 652 2,272	11 677 2,487	694 2,705
Other Current Assets Property, Plant & Equipment Other Non-Current Assets Total Assets Short-Term Debt	20 642 1,944 0	15 641 2,101 0	13 652 2,272 0	11 677 2,487 0	694 2,705 0
Other Current Assets Property, Plant & Equipment Other Non-Current Assets Total Assets Short-Term Debt Other Current Liabilities	20 642 1,944 0 368	15 641 2,101 0 643	13 652 2,272 0 658	11 677 2,487 0 704	694 2,705 0 739
Other Current Assets Property, Plant & Equipment Other Non-Current Assets Total Assets Short-Term Debt Other Current Liabilities Long-Term Debt	20 642 1,944 0 368 1,384	15 641 2,101 0 643 1,141	13 652 2,272 0 658 1,141	11 677 2,487 0 704 1,141	694 2,705 0 739 1,141
Other Current Assets Property, Plant & Equipment Other Non-Current Assets Total Assets Short-Term Debt Other Current Liabilities Long-Term Debt Other Non-Current Liabilities	20 642 1,944 0 368 1,384 46	15 641 2,101 0 643 1,141	13 652 2,272 0 658 1,141	11 677 2,487 0 704 1,141	694 2,705 0 739 1,141
Other Current Assets Property, Plant & Equipment Other Non-Current Assets Total Assets Short-Term Debt Other Current Liabilities Long-Term Debt Other Non-Current Liabilities Total Liabilities	20 642 1,944 0 368 1,384 46 1,808	15 641 2,101 0 643 1,141 11 1,810	13 652 2,272 0 658 1,141 16 1,831	11 677 2,487 0 704 1,141 17 1,878	694 2,705 0 739 1,141 19 1,914
Other Current Assets Property, Plant & Equipment Other Non-Current Assets Total Assets Short-Term Debt Other Current Liabilities Long-Term Debt Other Non-Current Liabilities	20 642 1,944 0 368 1,384 46	15 641 2,101 0 643 1,141	13 652 2,272 0 658 1,141	11 677 2,487 0 704 1,141	694 2,705 0 739 1,141

Company Sector

Server & Enterprise Software

Company Description

BlackLine (NASDAQ: BL) is a cloud provider of accounting automation products and services. BlackLine was founded in 2001 by Therese Tucker (Executive Chairperson of the Board), and completed its IPO in October 2016. The company headquarters is in Woodland Hills, CA, and there are over 1,325 employees. BlackLine has offices around the world including, but not limited to, the United Kingdom, Japan, Australia, Canada, Hong Kong, and others.

Investment Rationale

We believe that BlackLine has a good competitive positioning in its \$21.9bn TAM opportunity from: 1) an enterprise class end-to-end accounting automation platform, 2) a large and growing partner network, and 3) a referenceable customer base of 3,400+ global enterprises and midmarket organizations. However, given its group average valuation, we believe the good news for the next twelve months is priced in and risk could be to the downside.

Stock Data

Average Daily Volume

509,515

Quarterly Earnings Estimates

	2023	2024
Q1	0.34A	0.46E
Q2	0.41A	0.47E
Q3	0.51A	0.52E
04	0.69A	0.58E



Exhibit 1: Variance

Total revenue was 1% above our forecast

		4Q23A	
	BofA Est.	Actual	Variance
Total Revenue	154,031	155,730	1.1%
Y/Y change %	10.1%	11.3%	121bps
Guidance (mn)	153-155		
Billings	190,236	198,266	4.2%
Y/Y change %	9.3%	13.9%	461bps
PF Operating Income	27,340	38,562	41.0%
PF Operating Margin Guidance	17.8%	24.8%	701bps
Adjusted EBITDA	32,881	43,741	33.0%
Adjusted EBITDA margin	21.3%	28.1%	674bps
PF EPS	\$0.55	\$0.69	20.5%
Guidance	\$0.52-0.58		
Cash from operations (CFO)	31,123	42,169	26.2%
OCF margin	20.2%	27.1%	687bps
Free cash flow	22,651	35,336	35.9%
FCF margin	14.7%	22.7%	799bps

Source: Company filings, BofA Global Research estimates

BofA GLOBAL RESEARCH

Exhibit 2: Estimate revisions

We forecast 2024 total revenue of \$643mn

		1Q24E			FY24E			FY25E			FY26E	
	New Estimate	Old Estimate	Change %	New Estimate	Old Estimate	Change %	New Estimate	Old Estimate	Change %	New Estimate	Old Estimate	Change %
Total Revenue	155,114	156,100	(0.6%)	643,029	652,779	(1.5%)	697,852	725,136	(3.8%)	753,852	N/A	N/A
Y/Y change %	11.6%	12.3%	(71bps)	9.0%	11.0%	(197bps)	8.5%	11.1%	(256bps)	8.0%	N/A	N/A
Guidance (mn)	154-156			637.5-649.5								
Billings	151,904	149,806	1.4%	695,645	685,223	1.5%	756,099	751,436	0.6%	802,537	N/A	N/A
Y/Y change %	10.7%	9.2%	153bps	10.2%	9.9%	25bps	8.7%	9.7%	(97bps)	6.1%	N/A	N/A
T/ T dridings /s	10.770	3.270	133003	10.2 70	3.3 70	23003	0.7 70	3.7 70	(3, 003)	0.170	.,,,,	
PF Operating Income	24,043	18,342	31.1%	112,438	104,302	7.8%	125,859	123,099	2.2%	139,750	N/A	N/A
PF Operating Margin	15.5%	11.8%	375bps	17.5%	16.0%	151bps	18.0%	17.0%	106bps	18.5%	N/A	N/A
Guidance	15-16%			17-18%								
Adjusted EBITDA	30,296	24,635	23.0%	138,339	130,597	5.9%	153,773	152,104	1.1%	169,904	N/A	N/A
Adjusted EBITDA margin	19.5%	15.8%	23.0% 375bps	21.5%	20.0%	5.9% 151bps	22.0%	21.0%	1.1% 106bps	22.5%	N/A	N/A N/A
Adjusted EDITOA Maigin	1 2.2 /0	15.0 /0	3730ps	21.570	20.0 /0	тэторз	22.0 /0	21.070	тооорз	22.5 /0	IN/A	IN/A
PF EPS	\$0.46	\$0.40	13.8%	\$2.04	\$1.97	3.6%	\$2.16	\$2.15	0.3%	\$2.29	N/A	N/A
Guidance	\$0.45-0.48			\$2.01-2.14								
Cash from operations (CFO)	27,152	14,781	45.6%	147,051	140,263	4.6%	167,515	170,554	(1.8%)	184,457	N/A	N/A
OCF margin	17.5%	9.5%	804bps	22.9%	21.5%	138bps	24.0%	23.5%	48bps	24.5%	N/A	N/A
Free cash flow	19,396	6,195	68.1%	114,899	104,360	9.2%	132,623	130,671	1.5%	146,764	N/A	N/A
FCF margin	19,590	4.0%	854bps	17.9%	16.0%	9.2% 188bps	19.0%	18.0%	98bps	19.5%	N/A	N/A N/A
i ci iliui6ili	12.5/0	T.U /U	OD-JOP3	17.370	10.070	10000	15.070	10.070	Joops	1 5.5 /0	13/74	14/74

Source: Company filings, BofA Global Research estimates

BofA GLOBAL RESEARCH

MT = medium term

ARR = annual recurring revenue

RPO = remaining performance obligation

NRR = net revenue retention



Price objective basis & risk

BlackLine, Inc. (BL)

Our \$50 PO is 5.7x EV/C24E revenue, representing a growth adjusted multiple of 0.6x our 9% growth rate. The multiple we use is discount to the horizontal SaaS group average (7.5x / 0.6x), warranted for decelerating billings growth and compressing NRR trends, balanced against its category leadership in accounting automation. We note we now use higher diluted shares $(74.6mn \ vs. 64.5mn \ prior)$ to account for an accounting change that takes into consideration the equity exposure to its convertible debt.

Risks to our PO are: 1) Pace of enterprise finance department digital transformations accelerates, 2) competition decreases, 3) better than expected margin expansion, 4) net revenue retention expands faster than expected, and 5) adoption of SaaS Financials platforms slow, increasing the need for multi-ERP visibility tools.

Analyst Certification

I, Koji Ikeda, 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 - Enterprise Software Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
BUY				
	8x8	EGHT	EGHT US	Michael J. Funk
	Adobe	ADBE	ADBE US	Brad Sills
	Alarm.com	ALRM	ALRM US	Michael J. Funk
	Amplitude, Inc.	AMPL	AMPL US	Koji Ikeda, CFA
	BILL	BILL	BILL US	Brad Sills
	CCC Intelligent Solutions	CCCS	CCCS US	Michael J. Funk
	Dropbox	DBX	DBX US	Michael J. Funk
	Dynatrace	DT	DT US	Koji Ikeda, CFA
	Elastic NV	ESTC	ESTC US	Koji Ikeda, CFA
	GitLab Inc.	GTLB	GTLB US	Koji Ikeda, CFA
	Global-e Online Ltd.	GLBE	GLBE US	Koji Ikeda, CFA
	HubSpot	HUBS	HUBS US	Brad Sills
	Informatica Inc.	INFA	INFA US	Koji Ikeda, CFA
	Intapp Inc.	INTA	INTA US	Koji Ikeda, CFA
	Intuit	INTU	INTU US	Brad Sills
	JFrog Ltd	FROG	FROG US	Koji Ikeda, CFA
	MeridianLink, Inc.	MLNK	MLNK US	Koji Ikeda, CFA
	Microsoft Corporation	MSFT	MSFT US	Brad Sills
	MongoDB Inc	MDB	MDB US	Brad Sills
	nCino, Inc.	NCNO	NCNO US	Adam Bergere
	NICE Ltd.	NICE	NICE US	Michael J. Funk
	NICE Ltd.	NCSYF	NICE IT	Michael J. Funk
	PagerDuty	PD	PD US	Koji Ikeda, CFA
	PowerSchool Holdings, Inc.	PWSC	PWSC US	Koji Ikeda, CFA
	RingCentral	RNG	RNG US	Michael J. Funk
	Salesforce.com	CRM	CRM US	Brad Sills
	ServiceNow	NOW	NOW US	Brad Sills
	UiPath	PATH	PATH US	Brad Sills
	Unity	U	U US	Michael J. Funk
	Weave	WEAV	WEAV US	Michael J. Funk
	Workday Inc.	WDAY	WDAY US	Brad Sills
	Zeta Global	ZETA	ZETA US	Koji Ikeda, CFA
	ZoomInfo	ZI	ZIUS	Koji Ikeda, CFA
NEUTRAL				
	Autodesk	ADSK	ADSK US	Michael J. Funk
	Bentley Systems	BSY	BSY US	Michael J. Funk
	BigCommerce Holdings, Inc.	BIGC	BIGC US	Koji Ikeda, CFA

US - Enterprise Software Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
	Coveo	YCVO	CVO CN	Koji Ikeda, CFA
	Datadog Inc	DDOG	DDOG US	Koji Ikeda, CFA
	DocuSign	DOCU	DOCU US	Brad Sills
	Freshworks, Inc.	FRSH	FRSH US	Adam Bergere
	HashiCorp	HCP	HCP US	Brad Sills
	Jamf	JAMF	JAMF US	Koji Ikeda, CFA
	Lightspeed Commerce Inc.	LSPD	LSPD US	Koji Ikeda, CFA
	Lightspeed Commerce Inc.	YLSPD	LSPD CN	Koji Ikeda, CFA
	Oracle Corporation	ORCL	ORCL US	Brad Sills
	Paycom	PAYC	PAYC US	Adam Bergere
	Paylocity	PCTY	PCTY US	Adam Bergere
	Shopify, Inc.	SHOP	SHOP US	Brad Sills
	Snowflake	SNOW	SNOW US	Brad Sills
	Veeva Systems, Inc.	VEEV	VEEV US	Brad Sills
	Zoom Video Communications	ZM	ZM US	Michael J. Funk
UNDERPERFORM				
	AvidXchange, Inc.	AVDX	AVDX US	Brad Sills
	Blackbaud, Inc.	BLKB	BLKB US	Koji Ikeda, CFA
	BlackLine, Inc.	BL	BL US	Koji Ikeda, CFA
	C3.ai	Al	AI US	Brad Sills
	Confluent	CFLT	CFLT US	Brad Sills
	CS Disco, Inc.	LAW	LAW US	Koji Ikeda, CFA
	Enfusion, Inc.	ENFN	ENFN US	Koji Ikeda, CFA
	Five9	FIVN	FIVN US	Michael J. Funk
	Guidewire Software, Inc.	GWRE	GWRE US	Michael J. Funk
	Twilio	TWLO	TWLO US	Michael J. Funk
	Vertex, Inc.	VERX	VERX US	Brad Sills
RSTR				
	Splunk	SPLK	SPLK US	Brad Sills

IQmethodSM 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

Momethod Suis 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.

Related base 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.

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Disclosures

Important Disclosures

BlackLine, Inc. (BL) 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: Technology Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships R1	Count	Percent
Buy	215	53.09%	Buy	111	51.63%
Hold	97	23.95%	Hold	45	46.39%
Sell	93	22.96%	Sell	24	25.81%

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

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

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

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

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

Buy	≥ 10%	≤ 70%
Neutral	≥ 0%	≤ 30%
Indernerform	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.

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