

Duolingo

Solid 4Q and outlook beats Street despite expected deceleration; Neutral

Reiterate Rating: NEUTRAL | PO: 260.00 USD | Price: 195.51 USD

Another beat & raise Q on accelerating bookings growth

Duolingo posted a solid 4Q beat with Rev/EBITDA of \$151mn/\$35mn above Street est. of \$148mn/\$31mn on higher subscription bookings (up 57% y/y) and increase in paid users (up 57% y/y) to 6.6mn, representing 8.3% of LTM MAUs (vs 8.0% in 3Q23). MAUs grew 46% y/y to 88.4mn (vs Street at 83.6mn). Total bookings growth accelerated to 51% y/y (ex-FX 49%) vs 50% in 3Q23, with Other bookings growing 27% y/y (vs 35% in 3Q). While we agree with the company mgmt. that this pace can't continue forever (also 2024 guidance suggests bookings growth decelerating ~17ppts at midpoint), we think the company's ability to continue developing user engagement that converts into bookings and retention remains a valuable asset and continued upside is possible.

1Q and 2024 guide above Street

For 1Q, the company guided to revenue in the range of \$164-167mn vs current Street est. at \$159.1mn and EBITDA margin outlook of 21.5%-22.5% vs current Street est. of 19.7%. 2024 mgmt. outlook also suggests revenue upside of 350bps to current Street and 100bps upside on EBITDA margin at midpoint on further S&M and R&D leverage. DUOL is finetuning the feature set between their three pricing tiers (free, Super and Max) and costs coming down, and Max we think could be an important driver of monetization and ARPU. Mgmt. also suggested increasing focus on their family plan offering, which has higher retention and increases platform LTV (lifetime value).

Increase estimates on strong bookings and lower R&D

We increase our 1Q revenue/EBITDA est. to \$167.5mn/\$38.1mn from \$164mn/\$34.8mn, on higher paid subscribers and opex leverage. For 2024E, we increase our revenue/EBITDA estimates to \$740mn/\$174mn from \$725mn/\$158mn. We also increase 2025E revenue/EBITDA est. to \$918mn/\$252.5mn from \$895mn/\$234mn.

Growth likely priced-in already; Reiterate Neutral

DUOL stock at the AH price of \$240 is trading at 12x 2025E EV/Sales, and is trading above its average forward EV/Sales multiple of 9x (since August 2021) and much above peer subscription comps currently trading at a median of 3.0x. We increase our PO to \$260 on 13x 2025E EV/Sales (from \$230 on 12x) on higher revenue growth. We are positive on Duolingo's category leadership, differentiated (gamified) offering, strong execution and sticky and growing user base with strong social media presence). We reiterate our Neutral rating as we see sector leading growth priced into shares.

Estimates (Dec) (US\$)	2022A	2023A	2024E	2025E	2026E
EPS	(1.51)	0.35	1.32	2.13	3.33
EPS Change (YoY)	31.1%	NM	277.1%	61.4%	56.3%
Consensus EPS (Bloomberg)			0.86	1.94	2.81
DPS	0	0	0	0	0
Valuation (Dec)					
P/E	NM	558.6x	148.1x	91.8x	58.7x
EV / EBITDA*	529.0x	87.2x	47.0x	32.3x	23.3x
Free Cash Flow Yield*	0.5%	1.6%	2.6%	3.5%	4.7%

* For full definitions of *IQmethod™* measures, see page 7.

29 February 2024

Equity

Key Changes

(US\$)	Previous	Current
Price Obj.	230.00	260.00
2024E Rev (m)	724.6	739.6
2025E Rev (m)	894.7	917.7
2026E Rev (m)	NA	1,127.2
2024E EPS	0.95	1.32
2025E EPS	1.84	2.13
2026E EPS	NA	3.33

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Stock Data

Price	195.51 USD
Price Objective	260.00 USD
Date Established	29-Feb-2024
Investment Opinion	C-2-9
52-Week Range	88.37 USD - 245.87 USD
Mkt Val (mn) / Shares Out (mn)	9,150 USD / 46.8
Free Float	96.8%
Average Daily Value (mn)	121.60 USD
BofA Ticker / Exchange	DUOL / NAS
Bloomberg / Reuters	DUOL US / DUOLOQ
ROE (2024E)	8.8%
Net Dbt to Eqty (Dec-2023A)	-110.8%
ESGMeter™	NLA

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"](#).

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Timestamp: 29 February 2024 12:06AM EST

LTM: Last 12 Months

DAU / MAU: Daily / Monthly Active Users

iQprofileSM Duolingo

iQmethodSM – Bus Performance*

(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Return on Capital Employed	-9.5%	2.6%	7.7%	9.8%	11.7%
Return on Equity	-11.3%	2.7%	8.8%	11.1%	13.2%
Operating Margin	-17.7%	-2.5%	3.9%	7.8%	11.4%
Free Cash Flow	48	150	238	318	432

iQmethodSM – Quality of Earnings*

(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Cash Realization Ratio	NM	9.6x	3.8x	3.0x	2.6x
Asset Replacement Ratio	1.1x	0.4x	1.0x	1.0x	1.0x
Tax Rate	1.6%	NM	NM	NM	NM
Net Debt-to-Equity Ratio	-107.9%	-110.8%	-118.6%	-117.1%	-115.9%
Interest Cover	NA	NA	NA	NA	NA

Income Statement Data (Dec)

(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Sales	369	531	740	918	1,127
% Change	47.3%	43.7%	39.3%	24.1%	22.8%
Gross Profit	270	389	541	673	827
% Change	48.8%	44.1%	39.0%	24.4%	23.0%
EBITDA	15	94	174	253	350
% Change	NM	506.5%	85.5%	45.4%	38.7%
Net Interest & Other Income	7	31	37	37	45
Net Income (Adjusted)	(60)	16	65	108	174
% Change	11.1%	NM	307.2%	65.5%	60.3%

Free Cash Flow Data (Dec)

(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Net Income from Cont Operations (GAAP)	(58)	19	65	108	174
Depreciation & Amortization	5	7	8	11	13
Change in Working Capital	33	33	36	39	49
Deferred Taxation Charge	NA	NA	NA	NA	NA
Other Adjustments, Net	73	94	137	170	209
Capital Expenditure	(6)	(3)	(9)	(11)	(13)
Free Cash Flow	48	150	238	318	432
% Change	761.3%	212.8%	58.1%	33.6%	36.0%
Share / Issue Repurchase	0	(1)	20	25	25
Cost of Dividends Paid	0	0	0	0	0
Change in Debt	0	0	0	0	0

Balance Sheet Data (Dec)

(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Cash & Equivalents	608	748	1,002	1,334	1,780
Trade Receivables	47	89	84	96	118
Other Current Assets	42	61	82	59	72
Property, Plant & Equipment	50	56	9	9	9
Other Non-Current Assets	0	0	0	0	0
Total Assets	747	954	1,177	1,498	1,979
Short-Term Debt	NA	NA	NA	NA	NA
Other Current Liabilities	182	277	329	356	441
Long-Term Debt	24	21	20	21	21
Other Non-Current Liabilities	NA	NA	NA	NA	NA
Total Liabilities	205	298	350	377	461
Total Equity	542	656	827	1,121	1,518
Total Equity & Liabilities	747	954	1,177	1,498	1,979

* For full definitions of iQmethodSM measures, see page 7.

Company Sector

Education & Training Services

Company Description

Duolingo is the market leader in online language learning. Founded in 2011, the freemium digital education platform currently offers 40+ languages with 74million monthly active users. Duolingo leverages machine learning and data analytics to deliver superior language learning experience and constantly improves through real time testing. Duolingo generated \$531mn of revenue in 2023 with paying subscribers making up 8.3% of Monthly Active Users (MAUs).

Investment Rationale

We are positive on Duolingo's category leadership, differentiated (gamified) offering, strong execution and sticky and rapidly growing user base. We believe Duolingo is in the early stages of monetization and initiatives such as regionalized pricing more course content and continued AI integration will drive better paid conversion and increase LTV/user. However, with shares trading well above Duolingo's historic average and a substantial premium to subscription comps, we see shares as fairly valued

Stock Data

Average Daily Volume 621,978

Quarterly Earnings Estimates

	2023	2024
Q1	-0.06A	0.29E
Q2	0.08A	0.28E
Q3	0.06A	0.33E
Q4	0.25A	0.41E

4Q23 earnings: Positives vs Negatives

Positives

- **Strong DAU trends and paid subscriber conversion:** Duolingo reported DAU growth for 10 straight quarters. DAUs grew 65% y/y in 4Q vs 62% in 3Q. Paid subscriber conversion was highest ever at around 8.3% of average LTM MAUs, growing 57% YoY, resulting in subscription bookings growth of 57% (3ppt sequential improvement).
- **Another beat and raise quarter:** Duolingo's 4Q revenue/EBITDA of \$151mn/\$35mn beat Street estimates of \$148.4mn/\$31mn on higher subscription bookings with stronger paid subscriber conversion. For 1Q, the company guided to revenue in the range of \$164-167mn vs current Street est. at \$159.1mn and EBITDA margin outlook of 21.5%-22.5% vs current Street est. of 19.7%.
- **Pricing experiments and demand for Max (higher-priced subscription):** DUOL is finetuning the feature set between their three pricing tiers (free, Super and Max) and costs coming down, and Max we think could be an important driver of monetization and ARPU. Mgmt. also suggested increasing focus on their family plan offering, which has higher retention and increases platform LTV (lifetime value).

Negatives

- **Valuation is elevated:** DUOL stock at the AH price of \$240 is trading at 12x 2025E EV/Sales and is trading above its average forward EV/Sales multiple of 9x (since August 2021) and much above peer subscription comps currently trading at a median of 3.0x. In our view the biggest risks to Duolingo's premium valuation are; 1) a slowdown or reversal in DUOL's strong beat and raise track record; 2) softer subscriber conversion rates and; 3) potentially higher interest rates for longer into 2024 (although this does not currently appear to impacting valuation).
- **Bookings growth slowdown ahead:** Given solid and accelerating bookings growth in 2023, we do expect growth to slowdown on tough comps in 2024. Duolingo mgmt. has also highlighted that some of the user growth in 2023 was also attributable to things like meme stock phenomenon and unpaid marketing/celeb mentions, which are difficult to predict and replicate. Mgmt.'s 2024 outlook suggests bookings growth of 28% (at range midpoint) vs 45% growth in 2023.



Actuals vs Estimates

Exhibit 1: Actuals vs BofA est.

4Q23 Bookings/EBITDA beat our estimates

	4Q'2023		
	Actual	BofA Ests	Difference
DAU	26.9	26.9	0.0
y/y (%)	65%	65%	0%
MAU	88.4	89.2	(0.8)
y/y (%)	46%	47%	(1%)
Paid Subscribers	6.6	6.3	0.3
y/y (%)	57%	51%	6%
Subscription Bookings	\$157.8	\$147.4	\$10.4
y/y (%)	57%	47%	10%
Total Bookings	\$191.0	\$181.6	\$9.4
y/y (%)	51%	44%	7%
Subscription Revenue	\$117.5	\$120.0	(\$2.5)
y/y (%)	50%	54%	(3%)
Other Revenue	33.5	34.2	-0.7
y/y (%)	31%	33%	(3%)
Total Revenue	\$151.0	\$154.2	(\$3.2)
y/y (%)	45%	49%	(3%)
Gross Profit	\$110.4	\$113.3	(\$2.9)
% of Revenue	73.1%	73.5%	-0.4%
Opex (Non-GAAP)			
R&D	\$36.5	\$38.2	(\$1.6)
% of Revenue	24%	25%	-1%
S&M	\$17.8	\$20.8	(\$3.0)
% of Revenue	12%	14%	-2%
G&A	\$22.7	\$21.6	\$1.1
% of Revenue	15%	14%	1%
Stock based compensation	\$27.3	\$28.5	(\$1.3)
Total Operating Expense (GAAP)	\$105.6	\$110.6	(\$5.0)
% of Revenue	70%	72%	-2%
Operating Income (GAAP)	\$4.8	\$2.7	\$2.1
% of Revenue	3%	2%	1%
Net Income (GAAP)	\$12.1	\$10.4	\$1.7
GAAP EPS (diluted)	\$0.26	\$0.21	\$0.05
Adjusted EBITDA	\$35.2	\$33.2	\$2.0
% of Revenue	23%	22%	2%

Source: BofA Global Research estimates, company report

BofA GLOBAL RESEARCH

Estimate changes

Exhibit 2: BofA estimate changes

We increase our estimates on expectations of robust subscriber growth and opex leverage

	1Q'24			2024			2025		
	New	Old	Difference	New	Old	Difference	New	Old	Difference
DAU	31.5	27.4	4.1	32.3	30.4	1.9	40.9	35.6	5.3
y/y (%)	55%	35%	20%	39%	31%	8%	30%	30%	0%
MAU	95.5	92.2	3.3	102.5	101.4	1.1	122.0	120.7	1.3
y/y (%)	32%	27%	5%	29%	27%	2%	19%	19%	0%
Paid Subscribers	7.1	6.9	0.2	8.7	8.4	0.3	10.5	10.4	0.1
y/y (%)	46%	42%	5%	32%	33%	(1%)	20%	23%	(3%)
Subscription Bookings	\$153.5	\$146.8	\$6.7	\$660.8	\$636.9	\$23.9	\$825.7	\$795.8	\$29.9
y/y (%)	39%	33%	6%	33%	31%	2%	25%	25%	0%
Total Bookings	\$188.8	\$183.1	\$5.6	\$804.0	\$790.1	\$13.9	\$992.1	\$974.3	\$17.8
y/y (%)	35%	31%	4%	29%	29%	0%	23%	23%	0%
Subscription Revenue	\$132.3	\$127.6	\$4.7	\$596.4	\$571.3	\$25.1	\$751.4	\$716.2	\$35.2
y/y (%)	53%	48%	5%	47%	40%	7%	26%	25%	1%
Other Revenue	35.3	36.3	-1.0	143.2	153.3	-10.0	166.4	178.5	-12.1
y/y (%)	20%	23%	(3%)	13%	21%	(7%)	16%	16%	(0%)
Total Revenue	\$167.5	\$163.9	\$3.7	\$739.6	\$724.6	\$15.1	\$917.7	\$894.7	\$23.1
y/y (%)	45%	42%	3%	39%	36%	4%	24%	23%	1%
Gross Profit	\$122.3	\$120.4	\$1.9	\$540.6	\$532.5	\$8.0	\$672.7	\$659.4	\$13.3
Gross Margin %	73.0%	73.5%	-0.5%	73.1%	73.5%	-0.4%	73.3%	73.7%	-0.4%
Opex (Non-GAAP)									
R&D	\$39.4	\$41.8	(\$2.4)	\$175.2	\$184.8	(\$9.6)	\$201.9	\$210.3	(\$8.3)
% of Revenue	24%	26%	-2%	24%	26%	-2%	22%	24%	-2%
S&M	\$20.9	\$21.3	(\$0.4)	\$90.8	\$92.3	(\$1.4)	\$101.0	\$105.1	(\$4.2)
% of Revenue	13%	13%	-1%	12%	13%	0%	11%	12%	-1%
G&A	\$24.3	\$22.9	\$1.4	\$102.5	\$99.1	\$3.4	\$119.3	\$111.8	\$7.5
% of Revenue	15%	14%	0%	14%	14%	0%	13%	13%	1%
Stock based compensation									
Total Operating Expense (GAAP)	\$117.1	\$118.0	(\$0.9)	\$512.0	\$517.4	(\$5.4)	\$601.1	\$601.7	(\$0.6)
% of Revenue	70%	72%	-2%	69%	71%	-2%	66%	67%	-2%
Operating Income (GAAP)	\$5.2	\$2.5	\$2.7	\$28.6	\$15.1	\$13.5	\$71.6	\$57.7	\$13.9
% of Revenue	3%	2%	2%	4%	2%	2%	8%	6%	1%
Net Income (GAAP)	\$14.4	\$9.8	\$4.6	\$65.4	\$47.7	\$17.7	\$108.3	\$93.5	\$14.8
GAAP EPS (diluted)	\$0.29	\$0.20	\$0.09	\$1.32	\$0.95	\$0.36	\$2.13	\$1.82	\$0.31
Adjusted EBITDA	\$38.1	\$34.8	\$3.3	\$173.7	\$158.0	\$15.7	\$252.5	\$234.2	\$18.4
% of Revenue	23%	21%	1%	23%	22%	2%	28%	26%	1%

Source: BofA Global Research estimates

BofA GLOBAL RESEARCH

Price objective basis & risk

Duolingo (DUOL)

Our PO of \$260 is based on 13x 2025E EV/Sales, a premium to subscription service comps which trade at 3x. We believe this premium is justified given significantly higher projected revenue growth as well as higher gross and EBITDA margins.

Upside risk to our PO are 1) better-than-expected user and payer growth as DUOL is still in early stages for monetization, 2) higher conversion from new AI features as well as a new higher priced tier Duolingo Max, and 3) the potential for 30-35% LT EBITDA margins vs. 17% in 2023.

Downside risks to our PO are 1) a pullback in consumer discretionary spend as well as a slowdown in travel next year, 2) low barriers to entry for language learning, 3) competition from other-AI-based language learning platforms, and 4) our view that DUOL will have to continue its stellar beat and raise track record (every quarter since IPO) in order to maintain current valuation

Analyst Certification

I, Curtis Nagle, 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 - Internet Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
BUY				
	Alphabet	GOOGL	GOOGL US	Justin Post
	Alphabet	GOOG	GOOG US	Justin Post
	Amazon.com	AMZN	AMZN US	Justin Post
	AppLovin	APP	APP US	Omar Dessouky, CFA
	DoorDash	DASH	DASH US	Michael McGovern
	DoubleVerify Holdings, Inc.	DV	DV US	Omar Dessouky, CFA
	Electronic Arts	EA	EA US	Omar Dessouky, CFA
	Integral Ad Science Holding Corp.	IAS	IAS US	Omar Dessouky, CFA
	LegalZoom	LZ	LZ US	Michael McGovern
	Match Group	MTCH	MTCH US	Curtis Nagle, CFA
	Meta Platforms Inc	META	META US	Justin Post
	Pinterest	PINS	PINS US	Justin Post
	RH	RH	RH US	Curtis Nagle, CFA
	Roblox Corp. Class A	RBLX	RBLX US	Omar Dessouky, CFA
	Squarespace, Inc.	SQSP	SQSP US	Michael McGovern
	Uber	UBER	UBER US	Justin Post
	Udemy Inc	UDMY	UDMY US	Curtis Nagle, CFA
	Vivid Seats	SEAT	SEAT US	Curtis Nagle, CFA
	Wayfair	W	W US	Curtis Nagle, CFA
	Wix.com	WIX	WIX US	Michael McGovern
NEUTRAL				
	ACV Auctions	ACVA	ACVA US	Curtis Nagle, CFA
	Airbnb	ABNB	ABNB US	Justin Post
	Beyond Inc	BYON	BYON US	Curtis Nagle, CFA
	Booking Holdings Inc	BKNG	BKNG US	Justin Post
	Bumble	BMBL	BMBL US	Curtis Nagle, CFA
	Digital Turbine, Inc	APPS	APPS US	Omar Dessouky, CFA
	Duolingo	DUOL	DUOL US	Curtis Nagle, CFA
	eBay	EBAY	EBAY US	Justin Post
	Etsy, Inc.	ETSY	ETSY US	Curtis Nagle, CFA
	Expedia	EXPE	EXPE US	Justin Post
	Instacart	CART	CART US	Justin Post
	Magnite, Inc.	MGNI	MGNI US	Omar Dessouky, CFA

US - Internet Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
	Snap	SNAP	SNAP US	Justin Post
	Take-Two Interactive	TTWO	TTWO US	Omar Dessouky, CFA
	Zillow	ZG	ZG US	Curtis Nagle, CFA
	Zillow	Z	Z US	Curtis Nagle, CFA
UNDERPERFORM				
	Chewy Inc	CHWY	CHWY US	Curtis Nagle, CFA
	Lyft, Inc.	LYFT	LYFT US	Michael McGovern
	Opendoor Technologies	OPEN	OPEN US	Curtis Nagle, CFA
	Peloton	PTON	PTON US	Curtis Nagle, CFA
	Playtika	PLTK	PLTK US	Omar Dessouky, CFA
	Redfin Corp	RDFN	RDFN US	Curtis Nagle, CFA
	Shutterstock	SSTK	SSTK US	Curtis Nagle, CFA

iQmethodSM Measures Definitions**Business Performance**

Return On Capital Employed

Return On Equity

Operating Margin

Earnings Growth

Free Cash Flow

Numerator

NOPAT = (EBIT + Interest Income) × (1 – Tax Rate) + Goodwill Amortization

Net Income

Operating Profit

Expected 5 Year CAGR From Latest Actual

Cash Flow From Operations – Total Capex

Denominator

Total Assets – Current Liabilities + ST Debt + Accumulated Goodwill Amortization

Shareholders' Equity

Sales

N/A

N/A

Quality of Earnings

Cash Realization Ratio

Asset Replacement Ratio

Tax Rate

Net Debt-To-Equity Ratio

Interest Cover

Numerator

Cash Flow From Operations

Capex

Tax Charge

Net Debt = Total Debt – Cash & Equivalents

EBIT

Denominator

Net Income

Depreciation

Pre-Tax Income

Total Equity

Interest Expense

Valuation Toolkit

Price / Earnings Ratio

Price / Book Value

Dividend Yield

Free Cash Flow Yield

Enterprise Value / Sales

Numerator

Current Share Price

Current Share Price

Annualised Declared Cash Dividend

Cash Flow From Operations – Total Capex

EV = Current Share Price × Current Shares + Minority Equity + Net Debt +

Other LT Liabilities

Enterprise Value

Denominator

Diluted Earnings Per Share (Basis As Specified)

Shareholders' Equity / Current Basic Shares

Current Share Price

Market Cap = Current Share Price × Current Basic Shares

Sales

Basic EBIT + Depreciation + Amortization

iQmethodSM 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 valuations. 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.

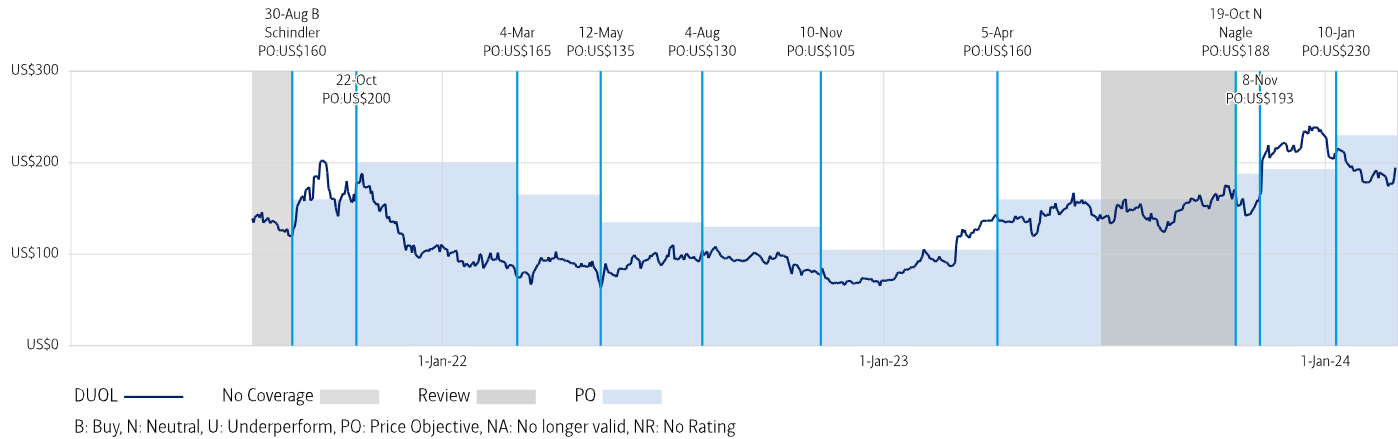
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Disclosures

Important Disclosures

Duolingo (DUOL) Price Chart



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: Education & Training Services Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships ^{R1}	Count	Percent
Buy	8	53.33%	Buy	2	25.00%
Hold	4	26.67%	Hold	1	25.00%
Sell	3	20.00%	Sell	0	0.00%

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.

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Investment rating	Total return expectation (within 12-month period of date of initial rating)	Ratings dispersion guidelines for coverage cluster ^{R2}
Buy	≥ 10%	≤ 70%
Neutral	≥ 0%	≤ 30%
Underperform	N/A	≥ 20%

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