

## AppLovin

# 4Q23 Result: Sequential growth in core business to continue, driven by AI Engine

Reiterate Rating: BUY | PO: 68.00 USD | Price: 46.87 USD

## Software +88% YY well above Street, in line with BofA

APP's AI engine drove a Software beat, exceeding the high end of revenue guidance (implied) by ~3-5%. The tech continues to improve as more data feeds models for more accurate predictions, we estimate +15% 4Q/3Q (+\$61mn) in AppDiscovery vs. +30% 3Q/2Q (+\$92mn). At 73%, EBITDA margin was a full 330 bps above Street/BofA, representing ~77% incremental margin flow through. We believe the magnitude of the beat still exceeded buy-side expectations. APP also cited a strong holiday season, real-time bidding, early contributions from Array on-device advertising, an expansion of the advertiser base, and growth in advertiser budgets as additional factors driving growth.

## 1Q24 guide > Street; see sequential growth through CY24

1Q24 Revenue guidance (+2% Q/Q) was above Street (+0% Q/Q), and likely buy-side, in the context of what is usually a seasonally down Q. Embedded in guidance is seasonally weaker gaming revenue (down 1-3% Q/Q). EBITDA margin of 80% on incremental revenue implies 51% EBITDA margin at high end of Q1 guidance, a notable step up in profitability, which management views as sustainable in CY24. Without guiding CY24, management prudently guided to sequential growth through 4Q24 based on continued AI-engine improvements and new initiatives, the timing and magnitude of which are difficult to estimate given the novelty of the technology. FCF/EBITDA conversation guidance improved considerably to 70%, and APP is likely to apply the new \$1.25bn repurchase authorization to direct purchases before going to the open market.

## Sequential growth guidance likely surprised markets

We doubt the buy-side modeled continued sequential quarterly growth in AppDiscovery for the entirety of CY24. We thus raise our CY24 bookings. The guidance forecast is driven by strength in the core gaming advertiser base on further AI-engine improvements, and secondarily by expanding reach through CTV, on-device advertising, and new advertiser verticals. Management emphasized an already deep moat around its AI engine, and alluded to more healthy mobile gaming market aided by real time bidding.

## Raise PO to \$68; multi-year growth runway emerging

We base our valuation on an SOTP that values the Software segment at 13x FY24E EBITDA, in line with Meta/Alphabet, and the Gaming segment at 5x FY24E EBITDA. We raise our Software valuation multiple (12x prior) as the path for multi-year growth has become more visible.

Estimates (Dec) (US\$)	2022A	2023A	2024E	2025E	2026E
EPS	(0.52)	0.99	2.74	4.28	4.98
EPS Change (YoY)	NM	NM	176.8%	56.2%	16.4%
Consensus EPS (Bloomberg)			1.68	2.08	2.59
DPS	0	0	0	0	0
Valuation (Dec)					
P/E	NM	47.3x	17.1x	11.0x	9.4x
EV / EBITDA*	18.8x	13.3x	8.8x	7.7x	6.9x
Free Cash Flow Yield*	2.4%	6.0%	9.4%	12.0%	13.1%

\* For full definitions of *IQmethod*<sup>SM</sup> measures, see page 9.

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Timestamp: 15 February 2024 05:00AM EST

16 February 2024

### Equity

#### Key Changes

(US\$)	Previous	Current
Price Obj.	57.00	68.00
2024E Rev (m)	4,186.6	4,245.1
2025E Rev (m)	4,607.2	4,671.7
2026E Rev (m)	NA	5,141.0
2024E EPS	1.72	2.74
2025E EPS	2.13	4.28
2026E EPS	NA	4.98

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### Stock Data

Price	46.87 USD
Price Objective	68.00 USD
Date Established	16-Feb-2024
Investment Opinion	C-1-9
52-Week Range	11.69 USD - 48.77 USD
Mrkt Val (mn) / Shares Out (mn)	17,511 USD / 373.6
Free Float	62.0%
Average Daily Value (mn)	156.87 USD
BofA Ticker / Exchange	APP / NAS
Bloomberg / Reuters	APP US / APP.OQ
ROE (2024E)	132.0%
Net Dbt to Eqty (Dec-2023A)	208.4%

#### ESGMeter<sup>TM</sup>

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".**

### Glossary

APP: AppLovin  
CTV: Connected TV

SOTP: Sum of the Parts

# iQprofile<sup>SM</sup> AppLovin

## iQmethod<sup>SM</sup> – Bus Performance\*

(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Return on Capital Employed	14.5%	26.8%	44.0%	49.6%	49.2%
Return on Equity	35.3%	74.5%	132.0%	117.0%	83.8%
Operating Margin	2.9%	29.8%	40.8%	43.8%	44.7%
Free Cash Flow	412	1,057	1,643	2,103	2,295

## iQmethod<sup>SM</sup> – Quality of Earnings\*

(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Cash Realization Ratio	0.6x	0.9x	0.9x	0.9x	0.9x
Asset Replacement Ratio	0x	0x	0x	0x	0x
Tax Rate	6.0%	6.3%	13.0%	13.0%	13.0%
Net Debt-to-Equity Ratio	112.0%	208.4%	147.3%	54.9%	12.1%
Interest Cover	5.0x	5.3x	7.9x	NA	NA

## Income Statement Data (Dec)

(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Sales	2,817	3,283	4,245	4,672	5,141
% Change	0.9%	16.5%	29.3%	10.0%	10.0%
Gross Profit	2,016	2,616	3,437	3,845	4,241
% Change	-7.6%	29.8%	31.4%	11.9%	10.3%
EBITDA	1,063	1,503	2,258	2,584	2,878
% Change	46.2%	41.3%	50.3%	14.4%	11.4%
Net Interest & Other Income	(157)	(268)	(286)	0	0
<b>Net Income (Adjusted)</b>	<b>714</b>	<b>1,178</b>	<b>1,831</b>	<b>2,370</b>	<b>2,637</b>
<b>% Change</b>	<b>20.9%</b>	<b>65.0%</b>	<b>55.5%</b>	<b>29.4%</b>	<b>11.2%</b>

## Free Cash Flow Data (Dec)

(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Net Income from Cont Operations (GAAP)	(193)	357	939	1,431	1,615
Depreciation & Amortization	547	489	525	537	582
Change in Working Capital	(293)	(209)	(297)	(375)	(449)
Deferred Taxation Charge	NA	NA	NA	NA	NA
Other Adjustments, Net	351	424	477	512	549
Capital Expenditure	(1)	(4)	0	(1)	(1)
<b>Free Cash Flow</b>	<b>412</b>	<b>1,057</b>	<b>1,643</b>	<b>2,103</b>	<b>2,295</b>
<b>% Change</b>	<b>14.3%</b>	<b>156.5%</b>	<b>55.4%</b>	<b>28.0%</b>	<b>9.1%</b>
Share / Issue Repurchase	(333)	(1,149)	(1,200)	(1,200)	(1,300)
Cost of Dividends Paid	0	0	0	0	0
Change in Debt	(26)	(103)	(600)	(600)	(600)

## Balance Sheet Data (Dec)

(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Cash & Equivalents	1,080	502	323	604	978
Trade Receivables	703	954	1,097	1,344	1,690
Other Current Assets	156	160	144	146	181
Property, Plant & Equipment	79	173	114	114	114
Other Non-Current Assets	3,830	3,570	3,298	3,096	2,935
<b>Total Assets</b>	<b>5,848</b>	<b>5,359</b>	<b>4,976</b>	<b>5,305</b>	<b>5,898</b>
Short-Term Debt	33	215	215	215	215
Other Current Liabilities	546	729	667	542	474
Long-Term Debt	3,178	2,906	2,343	1,781	1,218
Other Non-Current Liabilities	134	210	190	190	190
<b>Total Liabilities</b>	<b>3,945</b>	<b>4,103</b>	<b>3,458</b>	<b>2,770</b>	<b>2,140</b>
<b>Total Equity</b>	<b>1,903</b>	<b>1,256</b>	<b>1,518</b>	<b>2,535</b>	<b>3,758</b>
<b>Total Equity &amp; Liabilities</b>	<b>5,848</b>	<b>5,359</b>	<b>4,976</b>	<b>5,305</b>	<b>5,898</b>

\* For full definitions of iQmethod<sup>SM</sup> measures, see page 9.

## Company Sector

Server & Enterprise Software

## Company Description

AppLovin is a leading provider of software to meet the demand of app developers for app discovery and app monetization. Its network includes ad engagement data from over 8K developers and reaches more than 400mn daily active users (DAUs). AppLovin generates revenue from fees charged to advertisers for using its software, as well as from in-app purchases of content within its first-party apps. The company is based in Palo Alto, California with offices around the world.

## Investment Rationale

APP is a market leader among mobile ad networks operating in the mobile gaming app install market, where its Axon machine learning engine helps app advertisers identify high paying users and offers superior Return on Ad Spend. We view APP as well positioned to grow and retain share in the App Install Ad market over the long term, with the staged rollout of its new generation ML engine Axon 2.0 driving both accelerated revenue growth and margin accretion in 2023.

## Stock Data

Average Daily Volume 3,347,009

## Quarterly Earnings Estimates

	2023	2024
Q1	-0.01A	0.54E
Q2	0.22A	0.66E
Q3	0.30A	0.73E
Q4	0.50A	0.81E

# Analysis of Results & Forecasts

## Exhibit 1: APP 4Q23 Results vs. BofA Estimates

Results vs. BofA Estimates

(\$Mn)	4Q23A	4Q23E	Variance (Abs.)	Variance %	Y/Y Growth		Variance %	Q/Q Growth		Variance %
					Actual	Estimate		Actual	Estimate	
Non-GAAP Income Statement										
Total Revenue	953.3	944.6	8.7	0.9%	35.7%	34.5%	1.2%	10.3%	9.3%	1.0%
Cost of Revenue	174.0	177.6	(3.6)	-2.0%	-33.5%	-32.1%	-1.4%	2.1%	4.3%	-2.1%
Gross Profit	779.3	767.0	12.3	1.6%	76.9%	74.1%	2.8%	12.3%	10.5%	1.8%
S&M	182.6	188.9	(6.3)	-3.4%	5.7%	9.4%	-3.7%	7.7%	11.5%	-3.7%
R&D	106.8	96.3	10.4	10.8%	16.1%	4.8%	11.4%	20.2%	8.5%	11.8%
G&A	13.3	29.6	(16.4)	-55.2%	-60.7%	-12.2%	-48.5%	-53.0%	5.0%	-58.0%
EBIT	476.7	452.1	24.6	5.4%	250.2%	232.2%	18.0%	17.0%	11.0%	6.0%
Adj. EBITDA	476.2	453.6	22.5	5.0%	83.4%	74.7%	8.7%	13.6%	8.2%	5.4%
Segments										
Software Revenue	576.5	574.6	1.9	0.3%	88.4%	87.8%	0.6%	14.3%	13.9%	0.4%
Apps Revenue	376.8	370.0	6.8	1.8%	-4.9%	-6.6%	1.7%	4.7%	2.8%	1.9%
% of Revenue										
Cost of Revenue	18.2%	18.8%		-55 bps	-19.0%	-18.5%	-6 bps	-1.5%	-0.9%	-6 bps
S&M	19.2%	20.0%		-85 bps	-5.4%	-4.6%	-8 bps	-0.5%	0.4%	-8 bps
R&D	11.2%	10.2%		100 bps	-1.9%	-2.9%	10 bps	0.9%	-0.1%	10 bps
G&A	1.4%	3.1%		-174 bps	-3.4%	-1.7%	-17 bps	-1.9%	-0.1%	-17 bps
EBIT	50.0%	47.9%		214 bps	30.6%	28.5%	21 bps	2.9%	0.7%	21 bps
% EBITDA Margin	50.0%	48.0%		193 bps	13.0%	11.1%	19 bps	1.4%	-0.5%	19 bps

Source: BofA Global Research, Company Reports

BofA GLOBAL RESEARCH

**Exhibit 2: Sum-of-the-Parts Valuation for \$68 Price Objective**

AppLovin's valuation is driven by its Software segment, which we value at 13x FY24 EBITDA

(\$ Mn)	Target Valuation			Current SOTP		
	PO	Software	Gaming	Stock Price	Software	Gaming
\$Value/Share	\$68	\$66	\$2	\$55	\$52	\$2
FDSO (Mn)	380	380	380	380	380	380
Market Cap	\$25,750	\$24,885	\$864	\$20,745	\$19,881	\$864
Net Cash	(\$2,619)	(\$2,358)	(\$261)	(\$2,619)	(\$2,358)	(\$261)
EV	\$28,368	\$27,243	\$1,125	\$23,364	\$22,239	\$1,125
FY24 Revenue	\$4,245	\$2,768	\$1,477	\$4,245	\$2,768	\$1,477
FY24 EBITDA	\$2,258	\$2,033	\$225	\$2,258	\$2,033	\$225
EV/Revenue	7x	10x	1x	6x	8x	1x
EV/EBITDA	13x	13x	5x	10x	11x	5x

Source: BofA Global Research, Company Reports

BofA GLOBAL RESEARCH

**Exhibit 3: BofA APP Software Segment Line of Business (LOB) Build**

We expect AppDiscovery to remain the key growth driver in FY24, while MAX and CTV should also contribute

	2022 Dec-22	1Q23 Mar-23	2Q23 Jun-23	3Q23 Sep-23	4Q23 Dec-23	2023 Dec-23	1Q24E Mar-24	2Q24E Jun-24	3Q24E Sep-24	4Q24E Dec-24	2024E Dec-24
<b>Software Revenue</b>	<b>\$1,049</b>	<b>\$355</b>	<b>\$406</b>	<b>\$504</b>	<b>\$576</b>	<b>\$1,842</b>	<b>\$615</b>	<b>\$680</b>	<b>\$715</b>	<b>\$757</b>	<b>\$2,768</b>
of which AppDiscovery (BofA Est)	\$946	\$274	\$312	\$404	\$465	\$1,455	\$495	\$522	\$543	\$558	\$2,118
of which ALX DSPs Clients (BofA Est)	\$100	\$15	\$20	\$20	\$20	\$75	\$20	\$21	\$24	\$27	\$92
of which Header Bidding (BofA Est)	\$80	\$30	\$35	\$40	\$50	\$155	\$65	\$95	\$105	\$120	\$385
of which Adjust (BofA Est)	\$111	\$29	\$29	\$29	\$29	\$116	\$25	\$30	\$30	\$35	\$121
of which Wurl SSP/CDN only (BofA Est)	\$21	\$7	\$10	\$11	\$12	\$40	\$10	\$12	\$13	\$17	\$52
of which publisher bonus adjustment	(\$210)										
<b>Software Revenue Y/Y Growth</b>	<b>56%</b>	<b>8%</b>	<b>28%</b>	<b>65%</b>	<b>88%</b>	<b>46%</b>	<b>73%</b>	<b>68%</b>	<b>42%</b>	<b>31%</b>	<b>50%</b>
of which AppDiscovery (BofA Est)	77%	14%	29%	75%	101%	54%	81%	67%	34%	20%	46%
of which ALX DSPs Clients (BofA Est)	69%	-63%	0%	0%	0%	-25%	33%	5%	20%	35%	23%
of which Header Bidding (BofA Est)							117%	171%	163%	140%	148%
of which Adjust (BofA Est)	40%	4%	4%	4%	7%	5%	-14%	5%	5%	21%	4%
of which Wurl SSP/CDN only (BofA Est)			43%	57%	71%	90%	43%	20%	18%	42%	30%
of which publisher bonus adjustment											

Source: BofA Global Research

BofA GLOBAL RESEARCH

**Exhibit 4: BofA Estimates vs. Street, 2022 to 2025E**

We raise FY24 Revenue & EBITDA estimates assuming sequential growth in the core AppDiscovery business as the year unfolds and higher flow-through to EBITDA

	2022	23Q1	23Q2	23Q3	23Q4	2023	24Q1E	24Q2E	24Q3E	24Q4E	2024E	2025E
<b>Revenue - Consolidated</b>												
B of A (After)	2,817	715	750	864	953	3,283	980	1,047	1,084	1,134	4,245	4,672
B of A (Before)					945	3,274	976	1,023	1,061	1,126	4,187	4,607
STREET					928	3,258	928	952	985	1,030	3,859	4,283
Delta vs. STREET					2.7%	0.8%	5.6%	10.0%	10.1%	10.0%	10.0%	9.1%
GUIDE (Midpoint)					920.0		965.0	-	-	-		
<b>Revenue - Consolidated YoY Growth %</b>												
B of A (After)	0.9%	14.4%	-3.4%	21.2%	35.7%	16.5%	37.0%	39.6%	25.5%	18.9%	29.3%	10.0%
B of A (Before)					34.5%	16.2%	36.5%	36.4%	22.8%	19.2%	27.9%	10.0%
STREET					32.2%	15.7%	0.3%	26.9%	13.9%	11.0%	18.4%	11.0%
Delta vs. STREET					3.6%	0.9%	36.6%	12.7%	11.5%	7.9%	10.9%	-0.9%
GUIDE (Midpoint)					31.0%		34.9%					
<b>Revenue - Software</b>												
B of A (After)	1,049	355	406	504	576	1,842	615	680	715	757	2,768	3,167
B of A (Before)					575	1,840	611	656	692	749	2,709	3,098
STREET					558	1,823	562	584	609	644	2,372	2,742
Delta vs. STREET					3.4%	1.0%	9.5%	16.5%	17.4%	17.6%	16.7%	15.5%
GUIDE (Midpoint)												
<b>Revenue - Apps</b>												
B of A (After)	1,768	360	344	360	377	1,441	365	367	369	377	1,477	1,505
B of A (Before)					370	1,434	365	367	369	377	1,477	1,509
STREET (IMPLIED)					371	1,435	366	368	375	387	1,487	1,540
Delta vs. STREET					1.7%	0.4%	-0.4%	-0.3%	-1.7%	-2.5%	-0.6%	-2.3%
GUIDE (Midpoint)												
<b>Revenue - Software YoY Growth %</b>												
B of A (After)	55.5%	8.1%	27.9%	64.5%	88.4%	46.4%	73.2%	67.6%	41.8%	31.3%	50.3%	14.4%
B of A (Before)					87.8%	46.2%	72.2%	61.7%	37.3%	30.4%	47.2%	14.3%
STREET					82.1%	73.7%	-0.4%	43.8%	20.8%	15.5%	30.1%	15.6%
Delta vs. STREET					6.3%	-27.4%	73.7%	23.8%	21.0%	15.9%	20.1%	-1.2%
GUIDE (Midpoint)												
<b>Revenue - Apps YoY Growth %</b>												
B of A (After)	-16.6%	-28.9%	-25.0%	-11.5%	-4.9%	-18.5%	1.2%	6.6%	2.5%	0.0%	2.5%	1.9%
B of A (Before)					-6.6%	-18.9%	1.2%	6.6%	2.5%	1.8%	3.0%	2.2%
STREET					-6.4%	-18.8%	1.5%	6.9%	4.3%	4.3%	3.6%	3.6%
Delta vs. STREET					1.6%	0.3%	-0.3%	-0.3%	-1.8%	-4.3%	-1.1%	-1.7%
GUIDE (Midpoint)												
<b>EBITDA Non-GAAP</b>												
B of A (After)	1,063	274	334	419	476	1,503	500	555	583	621	2,258	2,584
B of A (Before)					454	1,480	475	502	527	570	2,074	2,329
STREET					440	1,467	436	454	473	496	1,841	2,084
Delta vs. STREET					8.1%	2.5%	14.6%	22.1%	23.2%	25.0%	22.7%	24.0%
GUIDE (Midpoint)					430.0		485.0					
<b>EBITDA Margin Non-GAAP %</b>												
B of A (After)	35.1%	38.3%	44.5%	48.5%	50.0%	45.8%	51.0%	53.0%	53.7%	54.7%	53.2%	55.3%
B of A (Before)					48.0%	45.2%	48.7%	49.0%	49.6%	50.6%	49.5%	50.5%
STREET					47.4%	45.0%	47.0%	47.7%	48.0%	48.2%	47.7%	48.7%
Delta vs. STREET					2.5%	0.8%	4.0%	5.2%	5.7%	6.6%	5.5%	6.7%
GUIDE (Midpoint)					46.7%		50.3%	0.0%	0.0%	0.0%		
<b>EBITDA - Software</b>												
B of A (After)	809	219	273	364	420	1,276	449	498	526	560	2,033	2,343
B of A (Before)					400	1,255	428	460	485	524	1,897	2,169
STREET					387	1,243	377	392	420	441	1,607	1,847
Delta vs. STREET					8.5%	2.6%	19.2%	27.2%	25.1%	27.0%	26.5%	26.9%

**Exhibit 4: BofA Estimates vs. Street, 2022 to 2025E**

We raise FY24 Revenue & EBITDA estimates assuming sequential growth in the core AppDiscovery business as the year unfolds and higher flow-through to EBITDA

	2022	23Q1	23Q2	23Q3	23Q4	2023	24Q1E	24Q2E	24Q3E	24Q4E	2024E	2025E
GUIDE (Midpoint)												
<b>EBITDA - Apps</b>												
B of A (After)	255	55	61	55	56	227	51	57	57	61	225	241
B of A (Before)					54	225	47	42	42	46	177	160
STREET					52	223	51	53	55	54	215	218
Delta vs. STREET					8.4%	2.0%	1.1%	6.6%	3.9%	11.6%	4.9%	10.5%
GUIDE (Midpoint)												
<b>EBITDA Margin % - Software</b>												
B of A (After)	64.2%	61.6%	67.1%	72.2%	72.9%	68.4%	73.0%	73.2%	73.5%	74.0%	73.4%	74.0%
B of A (Before)					69.6%	67.6%	70.0%	70.0%	70.0%	70.0%	70.0%	70.0%
STREET					69.4%	68.2%	67.0%	67.1%	69.0%	68.5%	67.7%	67.4%
Delta vs. STREET					3.4%	0.3%	6.0%	6.1%	4.5%	5.5%	5.7%	6.6%
GUIDE (Midpoint)												
<b>EBITDA Margin % - Apps</b>												
B of A (After)	14.4%	15.3%	17.7%	15.3%	14.9%	15.8%	14.0%	15.4%	15.4%	16.1%	15.2%	16.0%
B of A (Before)					14.5%	15.7%	12.9%	11.5%	11.4%	12.1%	12.0%	10.6%
STREET					14.0%	15.5%	13.8%	14.4%	14.6%	14.0%	14.4%	14.2%
Delta vs. STREET					0.9%	0.3%	0.2%	1.0%	0.8%	2.0%	0.8%	1.8%
GUIDE (Midpoint)												

Source: BofA Global Research, Visible Alpha, Company Reports

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**Exhibit 5: Comparable Company Analysis - Global AdTech & Self Attributing Networks**

Our comparator set includes AdTech companies and Self Attributing Networks

			EV/Sales			Sales	EV/EBITDA			EBITDA		
Company	Ticker	2/14/24 Price	(Consensus)			CAGR CY23-CY25	Consensus			CAGR CY23-CY25	EBITDA Margin	
			2023E	2024E	2025E		2023E	2024E	2025E		2023E	2024E
Advertising Technology												
Unity Software, Inc.	U US	\$34.91	7.3x	6.7x	5.8x	12%	40.8x	24.7x	18.9x	47%	18%	27%
AppLovin Corp.	APP US	\$46.87	6.2x	5.2x	4.7x	15%	13.8x	11.0x	9.7x	19%	45%	48%
Digital Turbine, Inc.	APPS US	\$3.58	1.3x	1.3x	1.2x	4%	7.6x	7.3x	6.2x	10%	17%	17%
Roku	ROKU US	\$91.24	3.4x	3.0x	2.7x	12%	NA	107.7x	42.9x	NA	(1%)	3%
Trade Desk	TTD US	\$74.31	19.3x	15.9x	13.2x	21%	48.6x	40.3x	32.6x	22%	40%	39%
DoubleVerify	DV US	\$41.50	12.3x	9.9x	8.1x	23%	38.8x	32.2x	25.6x	23%	32%	31%
Live Ramp	RAMP US	\$37.07	3.6x	3.3x	3.0x	9%	32.6x	20.2x	15.9x	43%	11%	16%
Integral Ad Sciences	IAS US	\$16.12	5.9x	5.1x	4.4x	16%	17.6x	14.9x	12.5x	19%	34%	34%
Zeta Global	ZETA US	\$10.20	3.0x	2.6x	2.2x	17%	17.4x	13.9x	11.0x	26%	17%	19%
Viant	DSP US	\$8.68	1.6x	1.4x	1.3x	13%	13.1x	10.6x	8.1x	27%	12%	13%
Adtheorant	ADTH US	\$2.80	1.2x	1.1x	1.0x	10%	10.6x	9.2x	7.6x	18%	12%	12%
Magnite	MGNI US	\$9.37	2.9x	2.7x	2.4x	9%	9.8x	8.8x	7.4x	15%	29%	30%
Taboola	TBLA US	\$4.82	1.2x	0.9x	0.7x	28%	21.0x	8.3x	6.2x	84%	5%	11%
PubMatic	PUBM US	\$15.65	2.6x	2.4x	2.1x	11%	9.2x	8.0x	6.3x	21%	28%	30%
Criteo	CRTO US	\$31.88	1.5x	1.4x	1.4x	4%	5.1x	4.8x	4.5x	6%	30%	30%
Median			3.0x	2.7x	2.4x	12%	15.6x	11.0x	9.7x	21%	18%	27%
Average			4.9x	4.2x	3.6x	14%	20.4x	21.5x	14.4x	27%	22%	24%
Index			6.1x	5.3x	4.6x	15%	27.3x	20.6x	16.8x	27%	22%	26%
Self-Attributing Networks												
Snap	SNAP US	\$11.40	4.4x	3.8x	3.4x	14%	124.4x	61.3x	29.2x	106%	4%	6%
Pinterest	PINS US	\$35.82	7.7x	6.5x	5.6x	17%	34.2x	25.5x	19.3x	33%	22%	26%
Meta Platforms	META US	\$473.28	8.9x	7.5x	6.7x	15%	15.9x	13.0x	11.3x	19%	56%	58%
Alphabet	GOOGL US	\$145.94	5.7x	5.2x	4.7x	11%	14.6x	12.6x	11.1x	15%	39%	41%
Yelp	YELP US	\$43.77	2.3x	2.1x	1.9x	9%	9.5x	8.7x	7.8x	10%	24%	24%
Median			5.7x	5.2x	4.7x	14%	15.9x	13.0x	11.3x	19%	24%	26%
Average			5.8x	5.0x	4.4x	13%	39.7x	24.2x	15.8x	37%	29%	31%
Index			6.7x	5.9x	5.3x	12%	15.3x	12.9x	11.3x	16%	44%	46%

Source: Visible Alpha, Factset, Bloomberg

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## Price objective basis & risk

### AppLovin (APP)

Our \$68 PO is based on our SOTP framework valuing APP's Software segment at \$66 and the Gaming Segment, including both in-game advertising and in-game consumer spend, at \$2/share. Our Software valuation is 13x FY24 EBITDA, inline with META , which we view as the key barometer of the overall health of the mobile ad ecosystem and an important valuation anchor. Our Gaming segment valuation is based on an enterprise value that is 5x FY24 Gaming Segment EBITDA , inline with Casual Mobile Game Publisher peers.

Upside risks to our PO are new dovish monetary policy and regulation that would reduce Apple's or Google's control over their own mobile ecosystems. Downside risks to our PO include a recession, and a tightening of financial conditions brought about by the Fed. Policies by Google and Apple, pertaining to their mobile platforms, that would debase broker ad networks' value proposition are also downside risks, and a major resurgence of Facebook on iOS would also negatively affect APP stock.

## Analyst Certification

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### US - Internet Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
<b>BUY</b>				
	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
<b>NEUTRAL</b>				
	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



**US - Internet Coverage Cluster**

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
	Magnite, Inc.	MGNI	MGNI US	Omar Dessouky, CFA
	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

**iQmethod<sup>SM</sup> Measures Definitions****Business Performance**

Return On Capital Employed

Return On Equity  
Operating Margin  
Earnings Growth  
Free Cash Flow

**Quality of Earnings**

Cash Realization Ratio  
Asset Replacement Ratio  
Tax Rate  
Net Debt-To-Equity Ratio  
Interest Cover

**Valuation Toolkit**

Price / Earnings Ratio  
Price / Book Value  
Dividend Yield  
Free Cash Flow Yield  
Enterprise Value / Sales

EV / EBITDA

**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

**Numerator**

Cash Flow From Operations  
Capex  
Tax Charge  
Net Debt = Total Debt – Cash & Equivalents  
EBIT

**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**

Total Assets – Current Liabilities + ST Debt + Accumulated Goodwill  
Amortization  
Shareholders' Equity  
Sales  
N/A  
N/A

**Denominator**

Net Income  
Depreciation  
Pre-Tax Income  
Total Equity  
Interest Expense

**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

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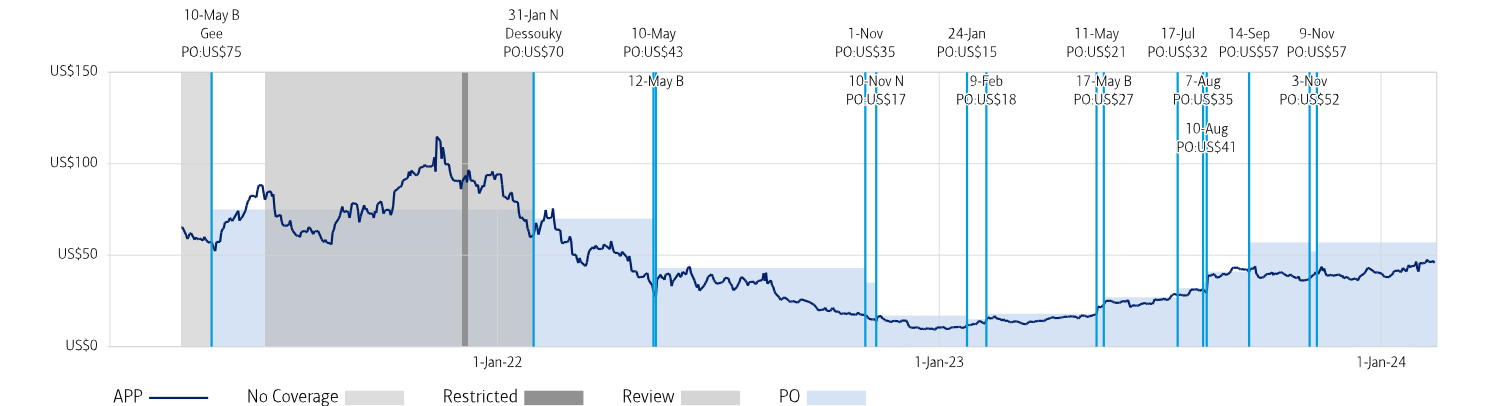
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### AppLovin (APP) Price Chart



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 <sup>R1</sup>	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 <sup>R1</sup>	Count	Percent
Buy	1895	53.62%	Buy	1083	57.15%
Hold	832	23.54%	Hold	454	54.57%
Sell	807	22.84%	Sell	383	47.46%

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

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

<sup>R2</sup>Ratings dispersions may vary from time to time where BofA Global Research believes it better reflects the investment prospects of stocks in a Coverage Cluster.

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