AppLovin

Not enough evidence to support 30% growth forecast; Downgrade to Neutral

Rating Change: NEUTRAL | PO: 400.00 USD | Price: 339.00 USD

Baseline 3-5% Q/Q growth less clear than thought

We downgrade APP from Buy to Neutral. We believe the risks to APP's articulated 30% Y/Y LT Revenue growth trajectory (including "Consumer") have increased. Post Q2 print, Engineer-directed improvements to Gaming models appear to be the primary driver of Q/Q growth, while it has become unclear whether self-learning growth of 3-5% Q/Q still applies. The future trajectory of self-learning was not explicitly addressed on the recent print, Q3 guidance, or thereafter, and we think it plausible that given AppLovin's high relative market share (we think 2x its next largest competitor), 3% Q/Q growth LT, based on self-learning alone, may no longer apply. Leading up to results, most of the market had assumed self-learning growth was a given because it is accomplished by continuously retraining predictive models on live impression data – something that continued in Q2 independent of lighter-than normal Engineer-directed improvements.

Innovations in support of 30% growth also more risky

Although APP has proven itself as a technological powerhouse, out-innovating even Google & Meta in the in-app bidding market, the balance of go-forward risks has worsened somewhat relative to pre-Q2. Management articulated a plan to train larger and more complex recommender system models to unlock meaningfully larger gains over time. They believe their recommender system models (which are currently smaller than LLMs) can benefit from the same scaling laws seen in LLMs. Although this thesis sounds plausible, we have not seen evidence to support it. Moreover, we're unsure of the magnitude or durability of uplifts, or whether 3-5% self-learning growth will resume. Thus, we cut CY27 Revenue/EBITDA forecast to +23% Y/Y/$8.3bn from 31% Y/Y/$9bn. We now assume sequential growth of $70mn Q/Q in CY27 (Gaming Ads only), & leave EBITDA margins unchanged pending further investment. Our Q/Q Gaming forecast equates to ~4% Q/Q in CY27, implying some compounding of smaller uplifts. We lower our Q3 model to mid-guidance (from high), and reduce our CY27 Consumer revenue to $2bn from $2.3bn on more conservative mid-market onboarding.

Valuation not lowered because downside to ests limited

We lower our PO from $430 to $400 based on 16x CY27E EBITDA. We did not reduce our multiple because we think APP will not lose significant market share. Our new multiple is much closer to category leading, mature online advertising platforms. Barring a new innovation cycle, we think it more likely that APP becomes viewed as a mature adtech platform.

Estimates (Dec) (US$)	2024A	2025A	2026E	2027E	2028E
EPS	4.54	9.67	15.78	19.27	23.11
EPS Change (YoY)	358.6%	113.0%	63.2%	22.1%	19.9%
Consensus EPS (Bloomberg)			15.93	20.96	26.63
Consensus EPS (Visible Alpha)			15.99	21.21	27.03
Valuation (Dec)					
P/E	74.7x	35.1x	21.5x	17.6x	14.7x
EV / EBITDA*	46.6x	27.7x	18.5x	15.2x	12.7x
Free Cash Flow Yield*	1.7%	3.1%	3.9%	5.1%	6.0%

* For full definitions of iQmethod℠ measures, see page 6.

BofA Securities does and seeks to do business with issuers covered in its research reports. As a result, investors should be aware that the firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision.
Refer to important disclosures on page 7 to 9. Analyst Certification on page 5. Price Objective Basis/Risk on page 5.

11 August 2026

Equity

Key Changes

(US$)	Previous	Current
Inv. Opinion	C-1-9	C-2-9
Inv. Rating	BUY	NEUTRAL
Price Obj.	430.00	400.00
2026E Rev (m)	8,192.2	8,160.6
2027E Rev (m)	10,750.2	10,048.9
2028E Rev (m)	13,852.1	12,057.6
2026E EPS	15.85	15.78
2027E EPS	20.88	19.27
2028E EPS	27.25	23.11

Omar Dessouky, CFA
Research Analyst
BofAS
+1 646 855 0686
omar.dessouky@bofa.com

Arthur Chu, CFA
Research Analyst
BofAS
+1 646 855 1131
arthur.chu@bofa.com

Stock Data

Price	339.00 USD
Price Objective	400.00 USD
Date Established	10-Aug-2026
Investment Opinion	C-2-9
52-Week Range	332.19 USD - 745.61 USD
Mrkt Val (mn) / Shares Out (mn)	126,650 USD / 373.6
Free Float	94.5%
Average Daily Value (mn)	2207.75 USD
BofA Ticker / Exchange	APP / NAS
Bloomberg / Reuters	APP US / APP.OQ
ROE (2026E)	182.5%
Net Dbt to Eqty (Dec-2025A)	48.1%

GTM: Go-to-market

eCom: eCommerce

ROAS: Return on Ad Spend

LT: Long Term

LLM: large language model

*iQ*profile℠ AppLovin

iQmethod℠ **– Bus Performance***

(US$ Millions)	2024A	2025A	2026E	2027E	2028E
Return on Capital Employed	51.2%	73.5%	83.3%	79.3%	75.6%
Return on Equity	201.9%	238.2%	182.5%	134.9%	112.7%
Operating Margin	47.0%	74.7%	81.8%	81.5%	81.6%
Free Cash Flow	2,094	3,971	4,916	6,485	7,584

iQmethod℠ **– Quality of Earnings***

(US$ Millions)	2024A	2025A	2026E	2027E	2028E
Cash Realization Ratio	0.9x	1.0x	0.8x	0.9x	0.9x
Asset Replacement Ratio	0x	0x	0x	0x	0x
Tax Rate	NM	13.0%	14.3%	13.0%	13.0%
Net Debt-to-Equity Ratio	253.9%	48.1%	-6.9%	-28.1%	-37.9%
Interest Cover	8.4x	21.8x	32.7x	39.3x	47.1x

Income Statement Data (Dec)

(US$ Millions)	2024A	2025A	2026E	2027E	2028E
Sales	4,709	5,806	8,161	10,049	12,058
% Change	43.4%	23.3%	40.6%	23.1%	20.0%
Gross Profit	3,886	5,111	7,273	8,963	NA
% Change	48.8%	31.5%	42.3%	23.2%	NA
EBITDA	2,720	4,580	6,840	8,352	9,982
% Change	81.0%	68.4%	49.4%	22.1%	19.5%
Net Interest & Other Income	(297)	(185)	(208)	(212)	(212)
Net Income (Adjusted)	**2,369**	**3,840**	**5,816**	**7,142**	**8,592**
% Change	**102.5%**	**62.1%**	**51.5%**	**22.8%**	**20.3%**

Free Cash Flow Data (Dec)

(US$ Millions)	2024A	2025A	2026E	2027E	2028E
Net Income from Cont Operations (GAAP)	1,580	3,286	5,319	6,494	7,789
Depreciation & Amortization	449	195	132	130	130
Change in Working Capital	(350)	78	(888)	(684)	(1,021)
Deferred Taxation Charge	NA	NA	NA	NA	NA
Other Adjustments, Net	420	412	352	546	687
Capital Expenditure	(5)	0	0	(1)	(1)
Free Cash Flow	**2,094**	**3,971**	**4,916**	**6,485**	**7,584**
% Change	**98.1%**	**89.6%**	**23.8%**	**31.9%**	**16.9%**
Share / Issue Repurchase	(939)	(2,167)	(2,533)	(2,500)	(3,000)
Cost of Dividends Paid	0	0	0	0	0
Change in Debt	(4,225)	0	0	0	0

Balance Sheet Data (Dec)

(US$ Millions)	2024A	2025A	2026E	2027E	2028E
Cash & Equivalents	741	2,487	3,809	5,298	6,882
Trade Receivables	1,414	1,819	2,647	3,478	4,625
Other Current Assets	157	124	162	168	217
Property, Plant & Equipment	161	122	91	85	77
Other Non-Current Assets	3,397	2,706	2,723	2,665	2,614
Total Assets	**5,869**	**7,260**	**9,433**	**11,694**	**14,415**
Short-Term Debt	0	0	0	0	0
Other Current Liabilities	1,057	1,334	1,352	1,504	1,679
Long-Term Debt	3,509	3,513	3,515	3,515	3,515
Other Non-Current Liabilities	180	260	327	327	327
Total Liabilities	**4,779**	**5,125**	**5,194**	**5,346**	**5,521**
Total Equity	**1,090**	**2,135**	**4,239**	**6,348**	**8,894**
Total Equity & Liabilities	**5,869**	**7,260**	**9,433**	**11,694**	**14,415**

* For full definitions of ***iQ***method℠ measures, see page 6.

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 1Bn 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. Given APP's large size in the mobile gaming market, we need more evidence that it can grow 30% Y/Y, on a much higher base of revenue.

Stock Data

Average Daily Volume	6,512,535

Quarterly Earnings Estimates

	2025	2026
Q1	NAA	NAA
Q2	NAA	NAA
Q3	NAA	NAE
Q4	NAA	NAE

Exhibit 1: BofA Estimates vs. Street, 2025 to 2028E

We lower CY27 gaming estimates no longer assuming consistent 3-5% Q/Q growth

	2025	26Q1	26Q2	26Q3E	26Q4E	2026E	2027E	2028E
Revenue - Advertising								
BofA (After)	5,481	1,842	1,924	2,075	2,319	8,160	10,049	12,057
BofA (Before)				2,085	2,341	8,192	10,750	13,852
STREET				2,076	2,334	8,177	10,546	13,185
Delta vs. STREET				0%	-1%	0%	-5%	-9%
GUIDE (Midpoint)				2,070				
Revenue - Consumer								
BofA (After)	622	250	314	340	491	1,395	2,012	2,426
BofA (Before)				340	491	1,395	2,293	2,981
Revenue - Advertising YoY Growth %								
BofA (After)	70%	59%	53%	48%	40%	49%	23%	20%
BofA (Before)				48%	41%	49%	31%	29%
STREET				48%	41%	49%	29%	25%
Delta vs. STREET				0%	-1%	0%	-6%	-5%
GUIDE (Midpoint)				47.3%				
EBITDA - Advertising								
BofA (After)	4,518	1,557	1,614	1,732	1,938	6,840	8,352	9,982
BofA (Before)				1,740	1,958	6,868	8,978	11,586
STREET				-	-	6,861	8,840	11,107
Delta vs. STREET						0%	-6%	-10%
GUIDE (Midpoint)				1,725	-	-	-	-
EBITDA Margin % - Advertising								
BofA (After)	82%	85%	84%	83%	84%	83.9%	83.1%	82.8%
BofA (Before)				83%	84%	84%	83%	84%
STREET						84%	84%	84%
Delta vs. STREET						0%	-1%	-1%
GUIDE (Midpoint)				83.3%				
GAAP EPS								
BofA (After)	$9.67	$3.56	$3.76	$3.97	$4.48	$15.78	$19.27	$23.11
BofA (Before)				$3.99	$4.53	$8.52	$20.88	$27.25
STREET				$4.05	$4.59	$15.99	$21.21	$27.03
Delta vs. STREET				-2%	-3%	-1%	-9%	-15%

Source: BofA Global Research, Visible Alpha, Company Reports

BofA GLOBAL RESEARCH



Exhibit 2: AppLovin Segment Line of Business Build

We expect eCommerce to grow significantly in 2026 & 2027

	2025	1Q26	2Q26	3Q26E	4Q26E	2026E	1Q27E	2Q27E	3Q27E	4Q27E	2027E	2028E
	Dec-25	Mar-26	Jun-26	Sep-26	Dec-26	Dec-26	Mar-27	Jun-27	Sep-27	Dec-27	Dec-27	Dec-28
Advertising Net Revenue	**$5,481**	**$1,842**	**$1,924**	**$2,075**	**$2,319**	**$8,160**	**$2,303**	**$2,421**	**$2,524**	**$2,800**	**$10,049**	**$12,057**
of which AppDiscovery (BofA Est)	$4,995	$1,727	$1,801	$1,948	$2,184	$7,661	$2,174	$2,283	$2,381	$2,645	$9,484	$11,418
of which Mobile Apps Supply	$4,943	$1,714	$1,788	$1,935	$2,171	$7,609	$2,161	$2,270	$2,368	$2,632	$9,432	$11,366
of which Mobile Games Demand	$4,280	$1,454	$1,464	$1,586	$1,670	$6,174	$1,740	$1,810	$1,880	$1,950	$7,380	$8,900
of which Mobile App Demand	$41	$10	$10	$10	$10	$40	$10	$10	$10	$10	$40	$40
of which eCommerce Demand	$622	$250	$314	$340	$491	$1,395	$411	$450	$478	$672	$2,012	$2,426
of which CTV (Wurl) Supply	$40	$10	$10	$10	$10	$40	$10	$10	$10	$10	$40	$40
of which Array supply	$12	$3	$3	$3	$3	$12	$3	$3	$3	$3	$12	$12
of which Header Bidding Fees (BofA Est)	$197	$49	$49	$49	$49	$197	$52	$53	$55	$57	$217	$239
of which Other Lines of business	$288	$66	$74	$77	$86	$303	$76	$85	$89	$98	$348	$400

Source: Company Reports, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 3: Comparable Company Analysis - Large-Scale Online Advertising

Our comparator set includes large-scale online advertising & social media companies

				EV/Sales (Consensus)			Sales CAGR	EV/EBITDA Consensus			EBITDA CAGR	EBITDA Margin		
Company	Ticker	8/10/26 Price	Mkt Cap. (Mn)	2025E	2026E	2027E	CY25-CY27	2025E	2026E	2027E	CY25-CY27	2025E	2026E	2027E
Roku	ROKU US	$152.54	$23,843	4.5x	3.8x	3.4x	15%	50.6x	31.3x	23.0x	48%	9%	12%	15%
Netflix	NFLX US	$75.53	$313,191	7.0x	6.2x	5.6x	12%	22.7x	18.7x	15.9x	19%	31%	33%	35%
Zeta Global	ZETA US	$25.56	$7,521	5.7x	4.1x	3.5x	27%	26.6x	18.3x	15.0x	33%	21%	22%	23%
Alphabet	GOOGL US	$354.71	$4,433,020	10.6x	8.6x	7.1x	23%	24.4x	18.3x	14.5x	30%	44%	47%	49%
AppLovin	APP US	$343.69	$116,928	21.4x	14.3x	11.0x	39%	26.0x	17.0x	13.2x	40%	82%	84%	83%
Meta	META US	$600.25	$1,595,100	7.9x	6.2x	5.2x	23%	12.9x	10.9x	8.9x	20%	61%	57%	58%
Pinterest	PINS US	$24.14	$15,094	3.5x	3.0x	2.7x	15%	11.7x	10.0x	8.6x	16%	30%	30%	31%
HubSpot	HUBS US	$213.44	$10,804	3.0x	2.5x	2.2x	16%	13.1x	10.1x	8.3x	26%	23%	25%	27%
Trade Desk	TTD US	$12.93	$6,798	1.8x	1.9x	2.0x	(5%)	4.4x	6.7x	7.3x	(22%)	41%	29%	28%
Snap	SNAP US	$5.36	$10,106	1.9x	1.6x	1.5x	13%	15.9x	8.4x	6.9x	52%	12%	19%	21%
Median			$19,468	5.1x	4.0x	3.4x	15%	19.3x	14.0x	11.1x	28%	31%	29%	29%
Average			$653,241	6.7x	5.2x	4.4x	18%	20.8x	15.0x	12.2x	26%	35%	36%	37%
Index			$6,532,405	9.4x	7.6x	6.3x	22%	19.8x	15.6x	12.5x	26%	47%	49%	50%

Source: Visible Alpha, Factset, Bloomberg

BofA GLOBAL RESEARCH

Price objective basis & risk

AppLovin (APP)
Our $400 PO is based on a multiple of 16x EV/CY27 EBITDA, similar to large scale online advertising stocks.

Upside risks to our PO include a further proving out of AppLovin's eCommerce business, and the success of its larger Recommender System models. Downside risks to our PO include a loss of market share, or the cessation of model upgrades each quarter. Policies by mobile companies, 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 could also negatively affect APP stock.

Analyst Certification

I, Omar Dessouky, 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.

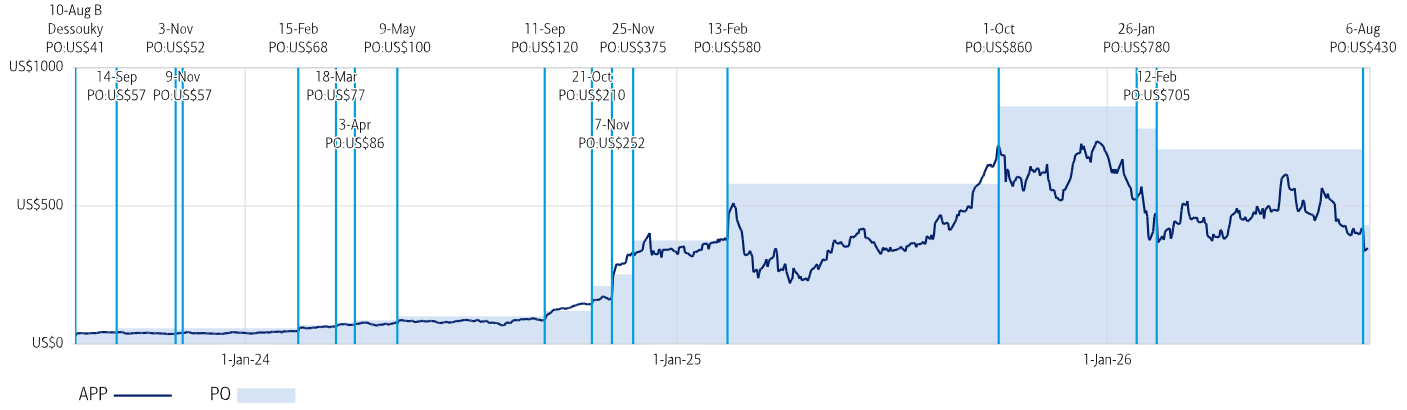
US - Internet Coverage Cluster

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
	Booking Holdings Inc	BKNG	BKNG US	Justin Post
	Chewy Inc	CHWY	CHWY US	Michael McGovern
	DoorDash	DASH	DASH US	Justin Post
	Ethos	LIFE	LIFE US	Michael McGovern
	Expedia	EXPE	EXPE US	Justin Post
	LegalZoom	LZ	LZ US	Michael McGovern
	Life360	LIF	LIF US	Nitin Bansal, CFA
	Magnite, Inc.	MGNI	MGNI US	Omar Dessouky, CFA
	Meta Platforms Inc	META	META US	Justin Post
	Navan, Inc.	NAVN	NAVN US	Nafeesa Gupta
	Peloton	PTON	PTON US	Nafeesa Gupta
	Take-Two Interactive	TTWO	TTWO US	Omar Dessouky, CFA
	Tripadvisor	TRIP	TRIP US	Nafeesa Gupta
	Uber	UBER	UBER US	Justin Post
	Unity	U	U US	Omar Dessouky, CFA
	Wayfair	W	W US	Michael McGovern
	Wix.com	WIX	WIX US	Michael McGovern
NEUTRAL				
	Airbnb	ABNB	ABNB US	Justin Post
	AppLovin	APP	APP US	Omar Dessouky, CFA
	Bending Spoons SpA	BSP	BSP US	Omar Dessouky, CFA
	Carvana	CVNA	CVNA US	Michael McGovern
	Coursera Inc.	COUR	COUR US	Nafeesa Gupta
	eBay	EBAY	EBAY US	Michael McGovern
	Etsy, Inc.	ETSY	ETSY US	Michael McGovern
	Instacart	CART	CART US	Justin Post
	Match Group	MTCH	MTCH US	Omar Dessouky, CFA
	Pinterest	PINS	PINS US	Justin Post
	Reddit	RDDT	RDDT US	Justin Post
	Roblox Corp. Class A	RBLX	RBLX US	Omar Dessouky, CFA
	Snap	SNAP	SNAP US	Justin Post
	StubHub Holdings	STUB	STUB US	Justin Post
	Zillow	Z	Z US	Omar Dessouky, CFA
	Zillow Group	ZG	ZG US	Omar Dessouky, CFA

Disclosures

Important Disclosures

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 30 Jun 2026)

Coverage Universe	Count	Percent	Inv. Banking Relationships [R1]	Count	Percent
Buy	243	60.60%	Buy	123	50.62%
Hold	87	21.70%	Hold	45	51.72%
Sell	71	17.71%	Sell	21	29.58%

Equity Investment Rating Distribution: Global Group (as of 30 Jun 2026)

Coverage Universe	Count	Percent	Inv. Banking Relationships [R1]	Count	Percent
Buy	1987	56.11%	Buy	1190	59.89%
Hold	797	22.51%	Hold	496	62.23%
Sell	757	21.38%	Sell	391	51.65%

[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%
Underperform	N/A	≥ 20%

[R2] 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.
BofAS or one of its affiliates acts as a market maker for the equity securities recommended in the report: AppLovin.
The issuer is or was, within the last 12 months, an investment banking client of BofAS and/or one or more of its affiliates: AppLovin.
BofAS or an affiliate has received compensation from the issuer for non-investment banking services or products within the past 12 months: AppLovin.
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: AppLovin.
BofAS or an affiliate expects to receive or intends to seek compensation for investment banking services from this issuer or an affiliate of the issuer within the next three months: AppLovin.
BofAS together with its affiliates beneficially owns one percent or more of the common stock of this issuer. If this report was issued on or after the 9th day of the month, it reflects the ownership position on the last day of the previous month. Reports issued before the 9th day of a month reflect the ownership position at the end of the second month preceding the date of the report: AppLovin.
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: AppLovin.

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: AppLovin.
BofA Global Research personnel (including the analyst(s) responsible for this report) receive compensation based upon, among other factors, the overall profitability of Bank of America Corporation, including profits derived from investment banking. The analyst(s) responsible for this report may also receive compensation based upon, among other factors, the overall profitability of the Bank's sales and trading businesses relating to the class of securities or financial instruments for which such analyst is responsible.

Other Important Disclosures

From time to time research analysts conduct site visits of covered issuers. BofA Global Research policies prohibit research analysts from accepting payment or reimbursement for travel expenses from the issuer for such visits.
Prices are indicative and for information purposes only. Except as otherwise stated in the report, for any recommendation in relation to an equity security, the price referenced is the publicly traded price of the security as of close of business on the day prior to the date of the report or, if the report is published during intraday trading, the price referenced is indicative of the traded price as of the date and time of the report and in relation to a debt security (including equity preferred and CDS), prices are indicative as of the date and time of the report and are from various sources including BofA Securities trading desks.
The date and time of completion of the production of any recommendation in this report shall be the date and time of dissemination of this report as recorded in the report timestamp.

Recipients who are not institutional investors or market professionals should seek the advice of their independent financial advisor before considering information in this report in connection with any investment decision, or for a necessary explanation of its contents.
Officers of BofAS or one or more of its affiliates (other than research analysts) may have a financial interest in securities of the issuer(s) or in related investments.
Refer to BofA Global Research policies relating to conflicts of interest.
"BofA Securities" includes BofA Securities, Inc. ("BofAS") and its affiliates. Investors should contact their BofA Securities representative or Merrill Global Wealth Management financial advisor if they have questions concerning this report or concerning the appropriateness of any investment idea described herein for such investor. "BofA Securities" is a global brand for BofA Global Research.
Information relating to Non-US affiliates of BofA Securities and Distribution of Affiliate Research Reports:
BofAS and/or Merrill Lynch, Pierce, Fenner & Smith Incorporated ("MLPF&S") may in the future distribute, information of the following non-US affiliates in the US (short name: legal name, regulator): Merrill Lynch (South Africa): Merrill Lynch South Africa (Pty) Ltd., regulated by the Financial Sector Conduct Authority; MLI (UK): Merrill Lynch International, regulated by the Financial Conduct Authority (FCA) and the Prudential Regulation Authority (PRA); BofASE (France): BofA Securities Europe SA is authorized by the Autorité de Contrôle Prudentiel et de Résolution (ACPR) and regulated by the ACPR and the Autorité des Marchés Financiers (AMF). BofA Securities Europe SA ("BofASE") with registered address at 51, rue La Boétie, 75008 Paris is registered under no 842 602 690 RCS Paris. In accordance with the provisions of French Code Monétaire et Financier (Monetary and Financial Code), BofASE is an établissement de crédit et d'investissement (credit and investment institution) that is authorised and supervised by the European Central Bank and the Autorité de Contrôle Prudentiel et de Résolution (ACPR) and regulated by the ACPR and the Autorité des Marchés Financiers. BofASE's share capital can be found at www.bofaml.com/BofASEdisclaimer; BofA Europe (Milan): Bank of America Europe Designated Activity Company, Milan Branch, regulated by the Bank of Italy, the European Central Bank (ECB) and the Central Bank of Ireland (CBI); BofA Europe (Frankfurt): Bank of America Europe Designated Activity Company, Frankfurt Branch regulated by BaFin, the ECB and the CBI; BofA Europe (Zurich): Bank of America Europe Designated Activity Company, Zurich Branch, regulated by the Swiss Financial Market Supervisory Authority FINMA, the ECB and CBI; BofA Europe (Madrid): Bank of America Europe Designated Activity Company, Sucursal en España, regulated by the Bank of Spain, the ECB and the CBI; Merrill Lynch (Australia): Merrill Lynch Equities (Australia) Limited, regulated by the Australian Securities and Investments Commission; Merrill Lynch (Hong Kong): Merrill Lynch (Asia Pacific) Limited, regulated by the Hong Kong Securities and Futures Commission (HKSFC); Merrill Lynch (Singapore): Merrill Lynch (Singapore) Pte Ltd, regulated by the Monetary Authority of Singapore (MAS); Merrill Lynch (Canada): Merrill Lynch Canada Inc, regulated by the Canadian Investment Regulatory Organization; Merrill Lynch (Mexico): Merrill Lynch Mexico, SA de CV, Casa de Bolsa, regulated by the Comisión Nacional Bancaria y de Valores; BofAS Japan: BofA Securities Japan Co., Ltd., regulated by the Financial Services Agency; Merrill Lynch (Seoul): Merrill Lynch International, LLC Seoul Branch, regulated by the Financial Supervisory Service; Merrill Lynch (Taiwan): Merrill Lynch Securities (Taiwan) Ltd., regulated by the Securities and Futures Bureau; BofAS India: BofA Securities India Limited, regulated by the Securities and Exchange Board of India (SEBI); Merrill Lynch (Israel): Merrill Lynch Israel Limited, regulated by Israel Securities Authority; Merrill Lynch (DIFC): Merrill Lynch International (DIFC Branch), regulated by the Dubai Financial Services Authority (DFSA); Merrill Lynch (Brazil): Merrill Lynch S.A. Corretora de Títulos e Valores Mobiliários, regulated by Comissão de Valores Mobiliários; Merrill Lynch KSA Company: Merrill Lynch Kingdom of Saudi Arabia Company, regulated by the Capital Market Authority.
This information: has been approved for publication and is distributed in the United Kingdom (UK) to professional clients and eligible counterparties (as each is defined in the rules of the FCA and the PRA) by MLI (UK), which is authorized by the PRA and regulated by the FCA and the PRA - details about the extent of our regulation by the FCA and PRA are available from us on request; has been approved for publication and is distributed in the European Economic Area (EEA) by BofASE (France), which is authorized by the ACPR and regulated by the ACPR and the AMF; has been considered and distributed in Japan by BofAS Japan, a registered securities dealer under the Financial Instruments and Exchange Act in Japan, or its permitted affiliates; is issued and distributed in Hong Kong by Merrill Lynch (Hong Kong) which is regulated by HKSFC; is issued and distributed in Taiwan by Merrill Lynch (Taiwan); is issued and distributed in India by BofAS India; and is issued and distributed in Singapore to institutional investors and/or accredited investors (each as defined under the Financial Advisers Regulations) by Merrill Lynch (Singapore) (Company Registration No 198602883D). Merrill Lynch (Singapore) is regulated by MAS. Merrill Lynch Equities (Australia) Limited (ABN 65 006 276 795), AFS License 235132 (MLEA) distributes this information in Australia only to 'Wholesale' clients as defined by s.761G of the Corporations Act 2001. With the exception of Bank of America N.A., Australia Branch, neither MLEA nor any of its affiliates involved in preparing this information is an Authorised Deposit-Taking Institution under the Banking Act 1959 nor regulated by the Australian Prudential Regulation Authority. No approval is required for publication or distribution of this information in Brazil and its local distribution is by Merrill Lynch (Brazil) in accordance with applicable regulations. Merrill Lynch (DIFC) is authorized and regulated by the DFSA. Information prepared and issued by Merrill Lynch (DIFC) is done so in accordance with the requirements of the DFSA conduct of business rules. BofA Europe (Frankfurt) distributes this information in Germany and is regulated by BaFin, the ECB and the CBI. BofA Securities entities, including BofA Europe and BofASE (France), may outsource/delegate the marketing and/or provision of certain research services or aspects of research services to other branches or members of the BofA Securities group. You may be contacted by a different BofA Securities entity acting for and on behalf of your service provider where permitted by applicable law. This does not change your service provider. Please refer to the Electronic Communications Disclaimers for further information.
This information has been prepared and issued by BofAS and/or one or more of its non-US affiliates. The author(s) of this information may not be licensed to carry on regulated activities in your jurisdiction and, if not licensed, do not hold themselves out as being able to do so. BofAS and/or MLPF&S is the distributor of this information in the US and accepts full responsibility for information distributed to BofAS and/or MLPF&S clients in the US by its non-US affiliates. Any US person receiving this information and wishing to effect any transaction in any security discussed herein should do so through BofAS and/or MLPF&S and not such foreign affiliates. Hong Kong recipients of this information should contact Merrill Lynch (Asia Pacific) Limited in respect of any matters relating to dealing in securities or provision of specific advice on securities or any other matters arising from, or in connection with, this information. Singapore recipients of this information should contact Merrill Lynch (Singapore) Pte Ltd in respect of any matters arising from, or in connection with, this information. For clients that are not accredited investors, expert investors or institutional investors Merrill Lynch (Singapore) Pte Ltd accepts full responsibility for the contents of this information distributed to such clients in Singapore.
General Investment Related Disclosures:
Taiwan Readers: Neither the information nor any opinion expressed herein constitutes an offer or a solicitation of an offer to transact in any securities or other financial instrument. No part of this report may be used or reproduced or quoted in any manner whatsoever in Taiwan by the press or any other person without the express written consent of BofA Securities.
This document provides general information only, and has been prepared for, and is intended for general distribution to, BofA Securities clients. Neither the information nor any opinion expressed constitutes an offer or an invitation to make an offer, to buy or sell any securities or other financial instrument or any derivative related to such securities or instruments (e.g., options, futures, warrants, and contracts for differences). This document is not intended to provide personal investment advice and it does not take into account the specific investment objectives, financial situation and the particular needs of, and is not directed to, any specific person(s). This document and its content do not constitute, and should not be considered to constitute, investment advice for purposes of ERISA, the US tax code, the Investment Advisers Act or otherwise. Investors should seek financial advice regarding the appropriateness of investing in financial instruments and implementing investment strategies discussed or recommended in this document and should understand that statements regarding future prospects may not be realized. Any decision to purchase or subscribe for securities in any offering must be based solely on existing public information on such security or the information in the prospectus or other offering document issued in connection with such offering, and not on this document.
Securities and other financial instruments referred to herein, or recommended, offered or sold by BofA Securities, are not insured by the Federal Deposit Insurance Corporation and are not

deposits or other obligations of any insured depository institution (including, Bank of America, N.A.). Investments in general and, derivatives, in particular, involve numerous risks, including, among others, market risk, counterparty default risk and liquidity risk. No security, financial instrument or derivative is suitable for all investors. Digital assets are extremely speculative, volatile and are largely unregulated. In some cases, securities and other financial instruments may be difficult to value or sell and reliable information about the value or risks related to the security or financial instrument may be difficult to obtain. Investors should note that income from such securities and other financial instruments, if any, may fluctuate and that price or value of such securities and instruments may rise or fall and, in some cases, investors may lose their entire principal investment. Past performance is not necessarily a guide to future performance. Levels and basis for taxation may change.

This report may contain a short-term trading idea or recommendation, which highlights a specific near-term catalyst or event impacting the issuer or the market that is anticipated to have a short-term price impact on the equity securities of the issuer. Short-term trading ideas and recommendations are different from and do not affect a stock's fundamental equity rating, which reflects both a longer term total return expectation and attractiveness for investment relative to other stocks within its Coverage Cluster. Short-term trading ideas and recommendations may be more or less positive than a stock's fundamental equity rating.

BofA Securities is aware that the implementation of the ideas expressed in this report may depend upon an investor's ability to "short" securities or other financial instruments and that such action may be limited by regulations prohibiting or restricting "shortselling" in many jurisdictions. Investors are urged to seek advice regarding the applicability of such regulations prior to executing any short idea contained in this report.

Foreign currency rates of exchange may adversely affect the value, price or income of any security or financial instrument mentioned herein. Investors in such securities and instruments, including ADRs, effectively assume currency risk.

BofAS or one of its affiliates is a regular issuer of traded financial instruments linked to securities that may have been recommended in this report. BofAS or one of its affiliates may, at any time, hold a trading position (long or short) in the securities and financial instruments discussed in this report.

BofA Securities, through business units other than BofA Global Research, may have issued and may in the future issue trading ideas or recommendations that are inconsistent with, and reach different conclusions from, the information presented herein. Such ideas or recommendations may reflect different time frames, assumptions, views and analytical methods of the persons who prepared them, and BofA Securities is under no obligation to ensure that such other trading ideas or recommendations are brought to the attention of any recipient of this information.

In the event that the recipient received this information pursuant to a contract between the recipient and BofAS for the provision of research services for a separate fee, and in connection therewith BofAS may be deemed to be acting as an investment adviser, such status relates, if at all, solely to the person with whom BofAS has contracted directly and does not extend beyond the delivery of this report (unless otherwise agreed specifically in writing by BofAS). If such recipient uses the services of BofAS in connection with the sale or purchase of a security referred to herein, BofAS may act as principal for its own account or as agent for another person. BofAS is and continues to act solely as a broker-dealer in connection with the execution of any transactions, including transactions in any securities referred to herein.

Copyright and General Information:

Copyright 2026 Bank of America Corporation. All rights reserved. iQdatabase® is a registered service mark of Bank of America Corporation. This information is prepared for the use of BofA Securities clients and may not be redistributed, retransmitted or disclosed, in whole or in part, or in any form or manner, without the express written consent of BofA Securities. This document and its content is provided solely for informational purposes and cannot be used for training or developing artificial intelligence (AI) models or as an input in any AI application (collectively, an AI tool). Any attempt to utilize this document or any of its content in connection with an AI tool without explicit written permission from BofA Global Research is strictly prohibited. BofA Global Research utilizes AI, including machine learning and other technologies, to enhance the services we provide to our clients. These technologies assist our analysts in various aspects of their work, including but not limited to data analysis, content extraction, content creation, data aggregation and summarization and identifying relevant information from diverse sources. All AI-driven processes are subject to review by BofA Global Research employees. BofA Global Research information is distributed simultaneously to internal and client websites and other portals by BofA Securities and is not publicly-available material. Any unauthorized use or disclosure is prohibited. Receipt and review of this information constitutes your agreement not to redistribute, retransmit, or disclose to others the contents, opinions, conclusion, or information contained herein (including any investment recommendations, estimates or price targets) without first obtaining express permission from an authorized officer of BofA Securities.

Materials prepared by BofA Global Research personnel are based on public information. Facts and views presented in this material have not been reviewed by, and may not reflect information known to, professionals in other business areas of BofA Securities, including investment banking personnel. BofA Securities has established information barriers between BofA Global Research and certain business groups. As a result, BofA Securities does not disclose certain client relationships with, or compensation received from, such issuers. To the extent this material discusses any legal proceeding or issues, it has not been prepared as nor is it intended to express any legal conclusion, opinion or advice. Investors should consult their own legal advisers as to issues of law relating to the subject matter of this material. BofA Global Research personnel's knowledge of legal proceedings in which any BofA Securities entity and/or its directors, officers and employees may be plaintiffs, defendants, co-defendants or co-plaintiffs with or involving issuers mentioned in this material is based on public information. Facts and views presented in this material that relate to any such proceedings have not been reviewed by, discussed with, and may not reflect information known to, professionals in other business areas of BofA Securities in connection with the legal proceedings or matters relevant to such proceedings.

This information has been prepared independently of any issuer of securities mentioned herein and not in connection with any proposed offering of securities or as agent of any issuer of any securities. None of BofAS any of its affiliates or their research analysts has any authority whatsoever to make any representation or warranty on behalf of the issuer(s). BofA Global Research policy prohibits research personnel from disclosing a recommendation, investment rating, or investment thesis for review by an issuer prior to the publication of a research report containing such rating, recommendation or investment thesis.

Any information relating to sustainability in this material is limited as discussed herein and is not intended to provide a comprehensive view on any sustainability claim with respect to any issuer or security.

Any information relating to the tax status of financial instruments discussed herein is not intended to provide tax advice or to be used by anyone to provide tax advice. Investors are urged to seek tax advice based on their particular circumstances from an independent tax professional.

The information herein (other than disclosure information relating to BofA Securities and its affiliates) was obtained from various sources and we do not guarantee its accuracy. This information may contain links to third-party websites. BofA Securities is not responsible for the content of any third-party website or any linked content contained in a third-party website. Content contained on such third-party websites is not part of this information and is not incorporated by reference. The inclusion of a link does not imply any endorsement by or any affiliation with BofA Securities. Access to any third-party website is at your own risk, and you should always review the terms and privacy policies at third-party websites before submitting any personal information to them. BofA Securities is not responsible for such terms and privacy policies and expressly disclaims any liability for them.

All opinions, projections and estimates constitute the judgment of the author as of the date of publication and are subject to change without notice. Prices also are subject to change without notice. BofA Securities is under no obligation to update this information and BofA Securities ability to publish information on the subject issuer(s) in the future is subject to applicable quiet periods. You should therefore assume that BofA Securities will not update any fact, circumstance or opinion contained herein.

Subject to the quiet period applicable under laws of the various jurisdictions in which we distribute research reports and other legal and BofA Securities policy-related restrictions on the publication of research reports, fundamental equity reports are produced on a regular basis as necessary to keep the investment recommendation current.

Certain outstanding reports or investment opinions relating to securities, financial instruments and/or issuers may no longer be current. Always refer to the most recent research report relating to an issuer prior to making an investment decision.

In some cases, an issuer may be classified as Restricted or may be Under Review or Extended Review. In each case, investors should consider any investment opinion relating to such issuer (or its security and/or financial instruments) to be suspended or withdrawn and should not rely on the analyses and investment opinion(s) pertaining to such issuer (or its securities and/or financial instruments) nor should the analyses or opinion(s) be considered a solicitation of any kind. Sales persons and financial advisors affiliated with BofAS or any of its affiliates may not solicit purchases of securities or financial instruments that are Restricted or Under Review and may only solicit securities under Extended Review in accordance with firm policies.

Neither BofA Securities nor any officer or employee of BofA Securities accepts any liability whatsoever for any direct, indirect or consequential damages or losses arising from any use of this information.