

## Internet/e-Commerce

# 2024 Year Ahead: Ecommerce looks like a winner with Wayfair leading the pack

Rating Change

## A more constructive setup for '24 but baked into valuation

Compared to the start of 2023, the setup for SMID cap Internet stocks in 2024 is more constructive. Rate expectations shifted from higher-for-longer to cuts by the Fed and concerns over a recession shifted to a possible soft landing in 2024. However, following a 48% avg. increase in SMID cap shares in 2023, valuation now only 8% below historic median, and consensus revenue growth of 8% vs. a 25% historic avg., we see risk/reward as largely fair for the group. By subsector, we prefer eCommerce (and rate W/RH/SEAT Buy within the group) over subscription services given our expectation for an acceleration in overall eCommerce growth as the last of reopening and travel headwinds fade and discretionary spend normalizes after 2yrs of high inflation. Online real estate is most levered to lower rates, but we expect a gradual recovery in home sales in 2024.

## Top picks are Wayfair, Vivid Seats

We think Wayfair (W) is well positioned to accelerate revenues over the next 2yrs through continued share gains and category improvement. We also continue to see Wayfair as a compelling margin story that could see outsized OPEX leverage, on top of continued GM expansion. We see Vivid Seats (SEAT) as one of the most attractively valued companies in SMID cap Internet with shares trading at 7x '25 EV/EBTIDA vs. EBITDA growth of 28/18% in 2024/25. Two secondary stock sales pressured valuation in '23, but we expect rerating in '24 on resilient industry demand (including MSD organic growth for SEAT), and better than expected results vs. Street (revs beat by 14% for past 9qtrs, we are 2% above for '24).

## Downgrading Zillow to Neutral

We downgrade Zillow to Neutral as we believe the stock is pricing a steady recovery in housing in 2024 (shares are up over 40% y/y), near record low home affordability could limit volume upside (even w/ lower rates) and real estate commission lawsuits are an overhang on ZG's buy side agent lead generation segment (nearly 50% of revs). We expect a beat in 4Q23 on improved home vols and are inline with the Street for '24 revs but see risk to EBITDA (we are 8% below Street) on what could be optimistic OPEX ests.

## Raising POs as we move basis forward to 2025

We raise estimates on select companies (DUOL, UDMY, RDFN & ZG) and increase POs for most of our coverage as we move our basis to '25. On average our POs increase by 15% including 6% for eCommerce, 11% for subscription services and 51% for online real estate. For the latter, the magnitude is driven by a large increase in subsector valuation on lower rates as well as our expectation for a return to home volume growth in 2025.

## Top themes for 2024

Top SMID cap sector themes for SMID cap Internet include: 1) AI as an increasing opportunity to unlock incremental sales and drive positive margins; 2) Possible advertising headwinds from Google privacy changes and higher ad costs; 3) Slowing consumer spending as BofA Global Research economists expect real GDP growth to decelerate and; 4) the cost and/or dilution for refinancing convertible debt for companies with high near-term maturities and negative/low cash flow including PTON, W, OPEN and RDFN.

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### Exhibit 1: Price objective changes

Summary of our PO changes

Ticker	PO (\$)	PO (\$)
<b>eCommerce</b>		
ACVA	17	16
CHWY	15	17
ETSY	89	90
BYON	25	27
RH	309	360
SSTK	40	40
SEAT	10	10.5
W	72	79

### Subscription Services

BMBL	16.5	17
DUOL	193	230
MTCH	54	54
PTON	4.6	4.6
UDMY	14	16

### Online Real estate

OPEN	1.8	3
RDFN	4.25	6.75
ZG	47	60

Source: BofA Global Research

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OPEX – operating expenses

GM – gross margin

MSD – mid-single digit

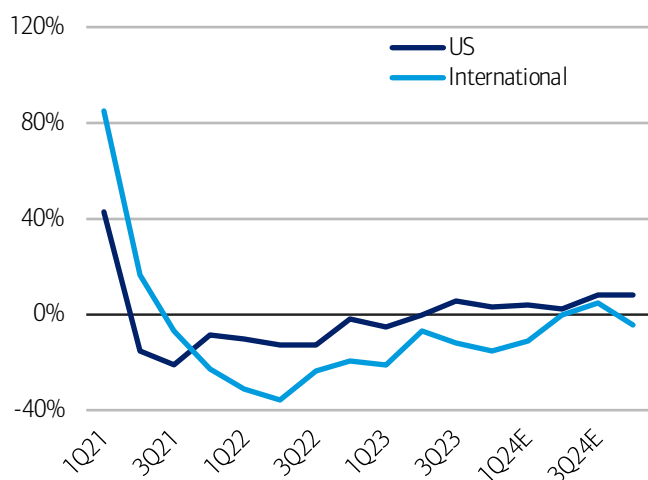
# Top picks W & SEAT; D/G ZG to Neutral

## Wayfair: An all-weather margin story for 2024

Wayfair is well positioned to accelerate revenues over the next two years through a combination of share gains and category improvement led by a rebound in housing and discretionary spending. After nearly two years of recessionary trends, furnishings are steadily improving and we think the category should return to modest growth by 2H'24, followed by 3-4% growth in 2025. Online furnishings are also now outperforming the category as whole again, averaging 3ppts YoY above total furnishings in 2H'23 (through Nov) vs. inline in 1H'23, according to BAC aggregated credit & debit card data. We think this likely continues into 2024 based on our view that the overall eCommerce penetration rate will expand (see our 2024 eCommerce Outlook). See the latest [BofA on USA](#) note for an explanation of the methodology, disclaimers, and limitations related to BAC card data.

### Exhibit 2: YoY change in Wayfair revenue.

We project revenue to continue accelerating throughout 2024

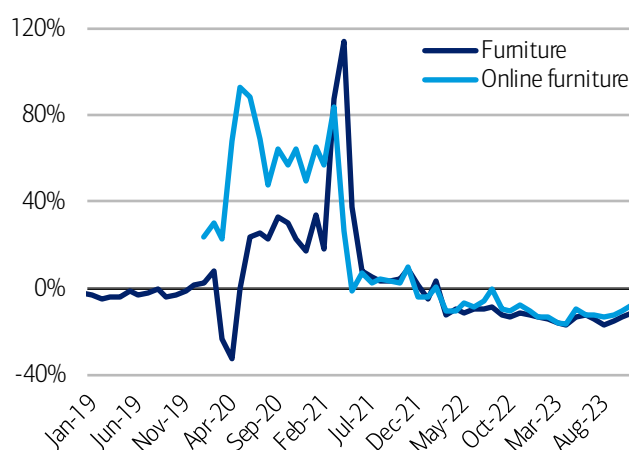


Source: Company reports, BofA Global Research

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### Exhibit 3: Monthly furniture spending growth, YoY % change according to BAC aggregated credit and debit card data

Online share gains have accelerated in recent months



Note: "Online" reflects "card not present" transactions, which are largely online but could include purchases made over the phone  
Source: BAC internal data

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## Expect revenue acceleration on cont. share gains, category improvement

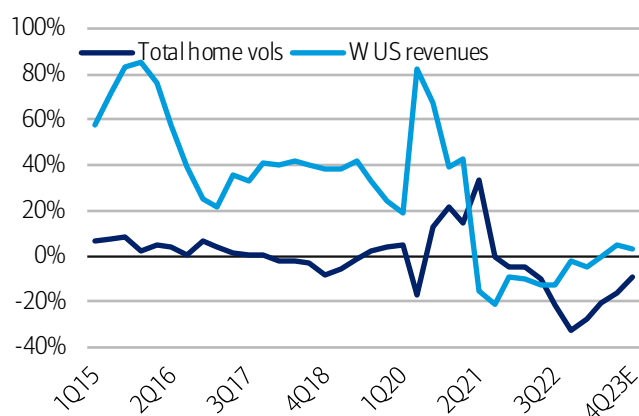
We continue to see a strong case for Wayfair share gains to extend into 2024 (mgmt. estimates the furniture category declined mid-to-high teens in 3Q while W topline growth accel'd 7ppts to 4% YoY). Wayfair's relative performance materially improved from trailing the market by an avg. of 6ppts in 2022 to out-competing the market by 13ppts in 2023 on significantly improved execution, pricing, and a normalization of industry-wide inventory levels. Incremental share gains could also come from expanding eCommerce penetration, B2B growth, International growth, price optimization, new AI features, and quicker fulfillment.

Finally, we expect housing to turn from a consistent drag on furnishings demand in '22/'23 to neutral in '24, and a growth driver in '25. Over the past two years, existing home volumes have declined by 1mn per year (roughly 20% YoY). In total, we est. that housing was a 3ppt drag on furnishings demand based on several years of BofA home furnishings surveys that suggest housing accounts for about 1/3 of furniture demand (see [most recent survey report](#)) and estimates by homefinder.com indicate that people spend \$16k on furniture per move. Going forward, we expect existing home volumes to be flat in '24 and up 300-600k in '25, which would translate to flat and +1-2ppts of furniture demand from housing in 2024-25, respectively. We note that our housing

forecasts are also well below the National Association of Realtors and the Mortgage Brokers Association. If we used their forecasts, this would be another 2ppts of growth.

#### Exhibit 4: Home volumes recovering in 2024

Over the past two years, existing home volumes have declined by 1mn a year or roughly 20% YoY

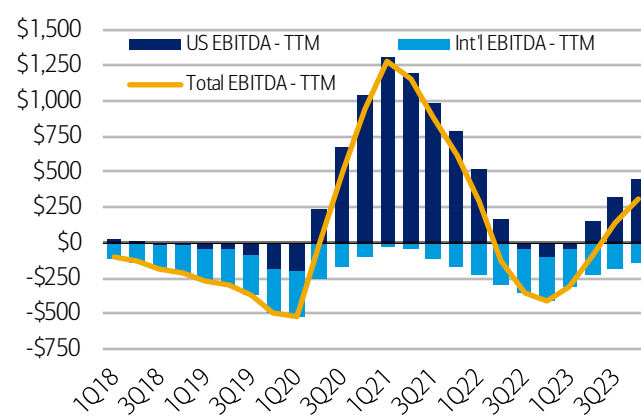


Source: Bloomberg, company reports, BofA Global Research

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#### Exhibit 5: Trailing-twelve months EBITDA (\$mn)

We project EBITDA momentum will likely continue into 2024 to \$500mn (4% margin, up from 3% in 2023E)



Source: Company reports, BofA Global Research

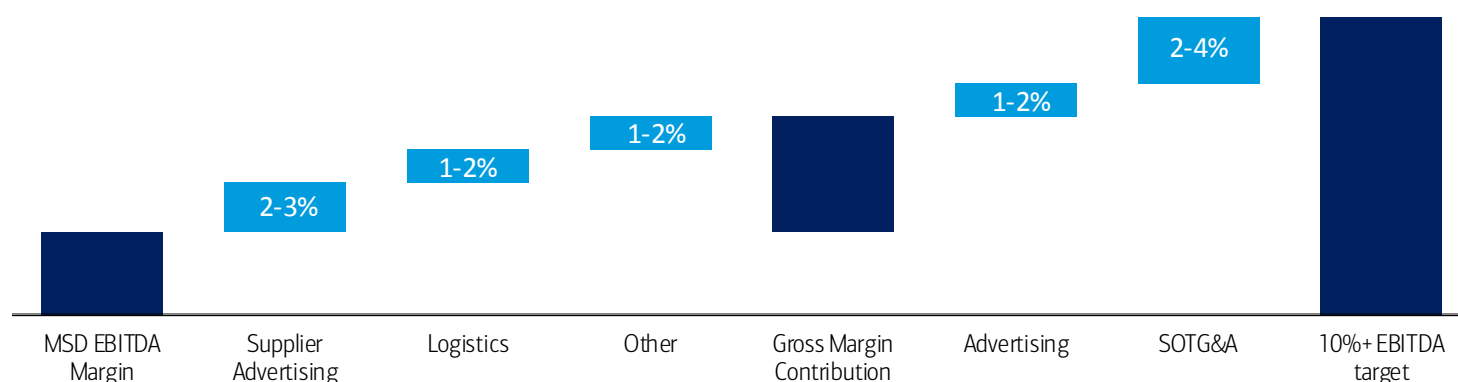
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#### Long-term EBITDA margins to grow to MSD-HSD

We still think there is a lot to like in what has been one of the best margin recovery stories in US SMID cap Internet in 2023. Over the past year, EBITDA margins expanded 600bps through nearly \$450mn in OPEX take out and several hundred basis points of COGS efficiencies (W has also improved product margins during an increasingly promotional environment given its marketplace model). We think W still has plenty of levers to get EBITDA from approx. 3% in 2023E to MSD-HSD over the next few years, including 1-3ppts from scaling ads, 1-2ppts from supply chain leverage, and a spring-loaded OPEX base that could provide 3-6ppts of margin depending on revenue growth.

#### Exhibit 6: Wayfair EBITDA bridge to 10%+ margins

Wayfair's long-term EBITDA target assumes another 4-7ppts of gross margin leverage



Source: Company reports, BofA Global Research

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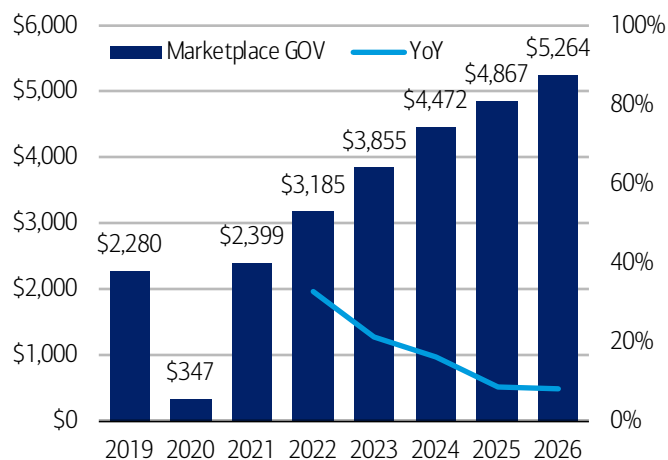
Wayfair's management team also recently suggested a \$450mn floor for EBITDA next year if revenue does not grow. This is 3.5% below Street EBITDA but does not include additional cost cuts that management indicated would be implemented.

## Vivid Seats; leading eComm growth at a large discount

We expect resilient topline trends for the secondary ticketing market to extend into 2024, supported by easier annual comparisons and Vivid's strong preliminary guidance of high-single digit organic revenue growth. Expectations for strong growth are also inline with commentary by Live Nation, the industry leader for primary tickets. Vivid expects 2024 revenue growth of 19% YoY at the midpoint including contribution from the recent acquisitions of Wavedash and Vegas.com.

### Exhibit 7: Marketplace GOV (\$mn)

We project Vivid to generate \$4.5bn in Marketplace GOV in 2024 (+16% YoY)

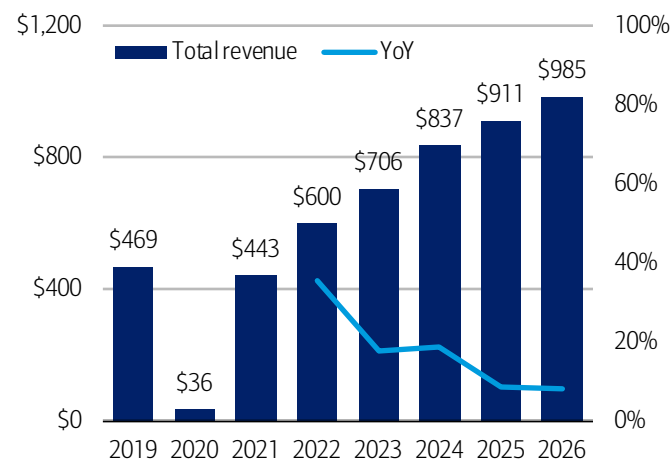


Source: Company reports, BofA Global Research estimates

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### Exhibit 8: Total revenue (\$mn)

We project Vivid to generate \$837mn in revenue in 2024 (+19% YoY)



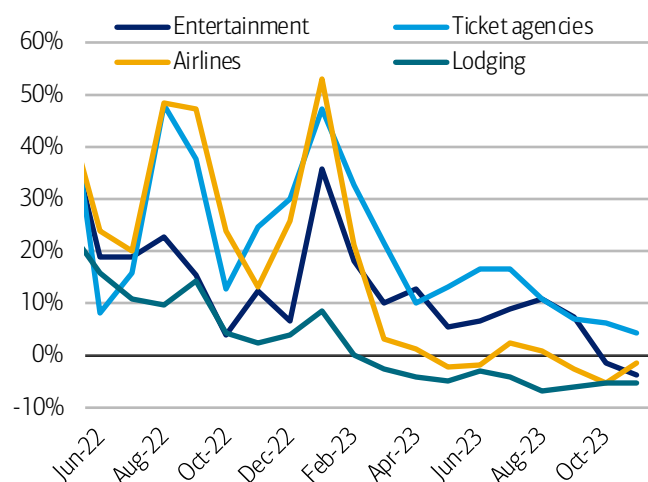
Source: Company reports, BofA Global Research estimates

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In 2023, spending on ticketing remained resilient despite tough comps, and we expect trends to continue into 2024 supported a continuation of strong demand for live entertainment and what we believe will be another strong slate of events. BAC aggregated credit and debit card data shows spend on ticketing agencies increased 4.4% YoY in Nov, a 1.7pt deceleration vs. Oct., but still outperformed entertainment at -4% and leisure categories like airlines and lodging at -1% and -5%, respectively.

### Exhibit 9: Monthly entertainment vs. travel spending growth, YoY % change according to BAC aggregated credit and debit card data

Ticketing held in better than travel and other entertainment through Nov

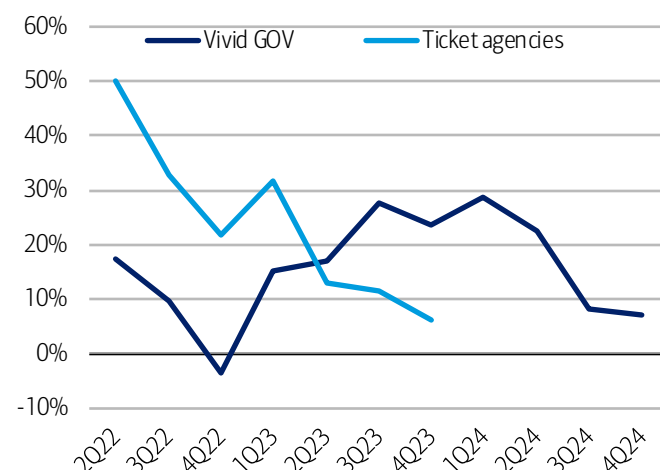


Source: BAC internal data

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### Exhibit 10: Quarterly ticket agency spending according to BAC aggregated credit and debit card data vs. Vivid GOV\* (YoY %)

Vivid GOV has accelerated despite slowing spend on ticketing, implying growing share gains



Source: BAC internal data, company reports, BofA Global Research | 4Q23 data through Nov

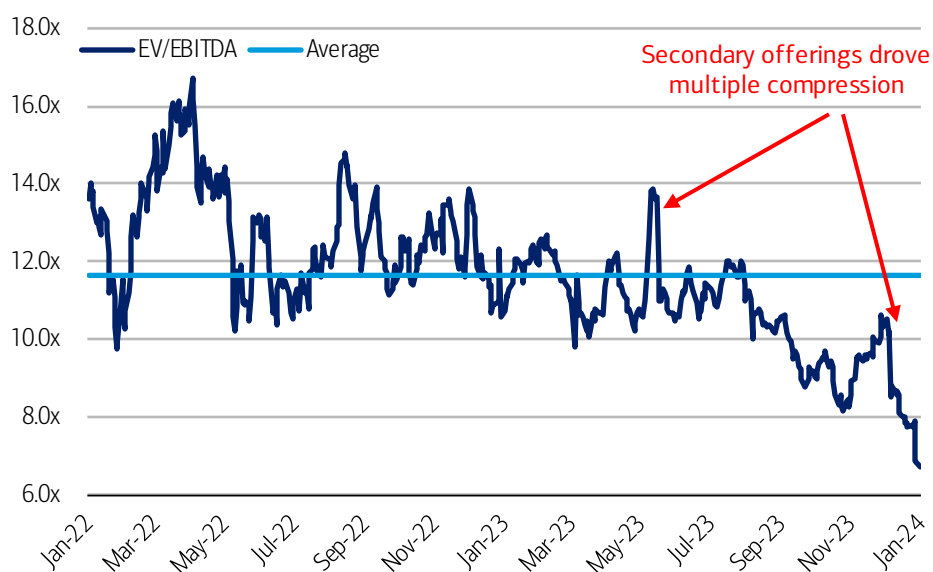
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We are also constructive on Vivid's purchase of Vegas.com in November, a two-sided marketplace for live events, entertainment, and travel. Events in Las Vegas alone is estimated at a ~\$6bn TAM ex-travel/hotels, with a solid entertainment calendar in 2024 including the Super Bowl and the Sphere. We are positive on the acquisition for several reasons, including (1) accretive margins; (2) complementary inventory given Vegas.com is focused on primary ticket vs. secondary for Vivid; and (3) opportunities to grow Vivid awareness.

SEAT stock's price declined 14.5% in 2023 (vs. NASDAQ increasing 43%) and, in our view, was largely pressured by two sizable secondaries by private equity sponsors in May and December. The two sales totaled 42mn shares representing 18% of total float. Long-term, increased liquidity should be positive for valuation, which we see as very attractive relative to growth at 7x 2025 EV/EBITDA (vs. 16x eComm avg.) and EBITDA growth of 28/18% in 2024/25.

#### Exhibit 11: Forward EV/EBITDA (update)

Vivid Seats is trading at 6.7x 2025 EV/EBITDA, well below the stock's 11.6x average and at the bottom of its historic range



Source: Bloomberg, BofA Global Research

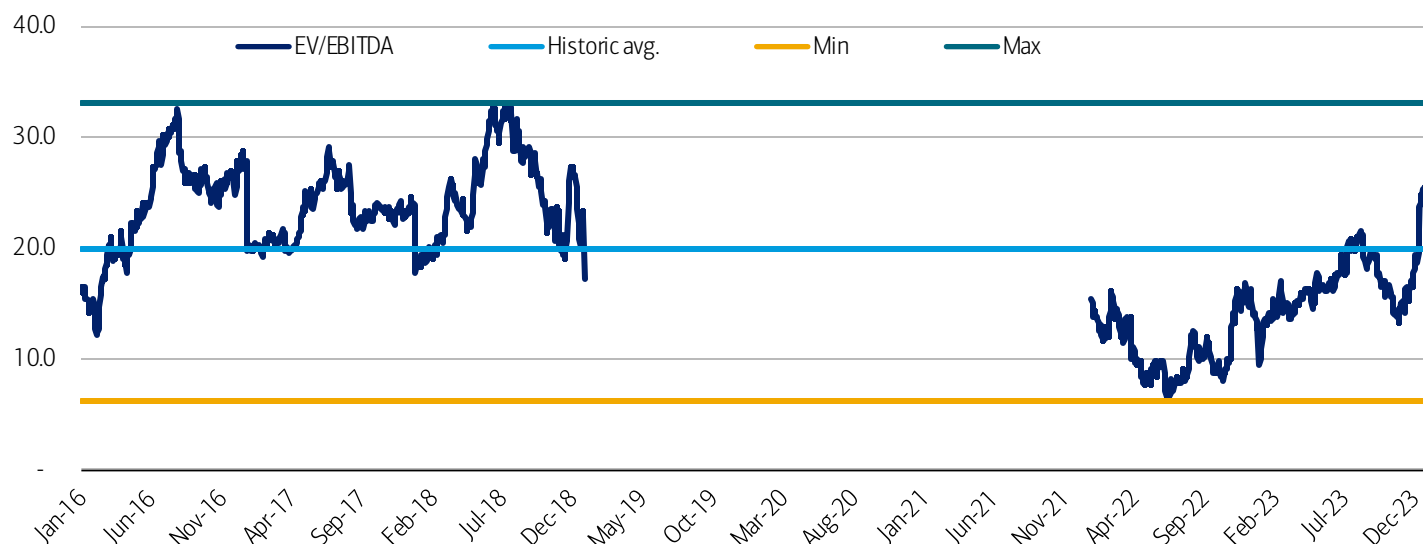
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## Downgrading Zillow to Neutral

We downgrade Zillow to Neutral as we believe the stock is pricing a steady recovery in housing in 2024 (shares are up over 40% y/y), near record low home affordability could limit volume upside (even w/ lower rates) and real estate commission lawsuits are an overhang on ZG's buy side agent lead generation segment (nearly 50% of revs). We also expect growth initiatives to gradually build in 2024 after material share gains in 2023. Resolution/appeal of the suits or minimal changes to agent commission structure would be a positive for ZG shares. Please see our [full Zillow downgrade note](#) published 1/10/24.

### Exhibit 12: 2yr EV/EBITDA trend

Zillow is trading inline with its historic valuation range



Source: Bloomberg, BofA Global Research | \*excludes period for discontinued Zillow Homes Segment

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### Commission lawsuits drive uncertainty for buyside revenues

We think the outcome of the Sitzer case and other commission lawsuits could be a headwind to Zillow's lead generation segment for buyside agents. Risks are: 1) a reduction in total agents on lower earning potential, particularly as transactions per agent are now 50% below 24yr avg and 2) Lower commission dollars on increased fee transparency and uncertainty on who will bear the buyside commission. We do not expect a banning of commission sharing from the lawsuits (which could be a major headwind to ZG revs and burden to homebuyers) and expect ZG to successfully adapt to changes on revenue diversification. However, we expect uncertainty to be an overhang on valuation until more clarity is brought on the issue, starting with a final verdict for Sitzer in April.

### Growth initiatives likely more impactful in 2025/26

The past year and a half marked strong execution and renewed share gains for Zillow. As comps get more difficult in 2024, we believe outperformance will be increasingly dependent on initiatives under the housing "super app" and rollout of enhanced markets that incorporate super app features. We remain confident that these initiatives will drive growth but expect more contribution in 2025/26 as rollout continues through 2024.

## Estimate and PO changes

### Raise 2024/25 estimates on select SMID cap companies

We are raising our revenue and EBITDA estimates for DUOL, UDMY, RDFN and ZG and lowering for ACVA, which we detail below:

**ACVA:** We lower our estimates largely to reflect a slower than previously assumed recovery in used vehicle volumes in 2024 on ongoing supply constraints (we est. +1% YoY from +8%) followed by a strong recovery in 2025 (we still est. +10%). We assume a continuation of solid unit share gains for ACVA, averaging 16ppts in 2024 vs. 17ppts over the past year.

**DUOL:** We raise our estimates on accelerating Sensor Tower DAU (daily avg. user) trends through 4Q (see our [monthly Internet sector note](#)) which have a 95% correlation with reported Duolingo DAU's. Sensor Tower data appears to show a pickup in international users (and cont. US strength) which is consistent with Duolingo mgmt commentary that the company was having greater success converting international users to paying subscribers. We expect international strength to continue into 2024 with possible upside to users from new music/math verticals and higher revenues per user from the rollout of Duolingo Max.

**UDMY:** We maintain our revenue estimates, which are slightly below the Street, but adjust our EBITDA estimates (we raise 2024 from \$17mn to \$22mn and lower 2025 to \$76mn from \$80mn) to better align Udemy's OPEX structure with the recent decision to increase enterprise take rates and a reinvest a portion in growth initiatives.

**RDFN:** We raise our revenue and EBITDA estimates to reflect lower mortgage rates (now ~7% from a recent peak at 8%) and higher industry volumes in 2024. Our estimates remain well below the Street as we continue to believe the Street may be overestimating the extent of a real estate recovery this year given affordability challenges and/or Redfin's ability to resume market share gains after two years of declines.

**ZG:** We also raise our Zillow revenue and EBITDA estimates on higher industry volumes in 2024. We expect outperformance to the market to continue in 2024 on ramping growth initiatives (expanding enhanced markets, Zillow Home Loans, seller solutions and rentals), albeit at a lower rate than 2023. Our estimates do not include any direct impact from potential changes to buyside commissions due to several pending lawsuits.

#### Exhibit 13: SMID cap internet estimate changes (\$mn)

We raise 2024/25 estimates for select companies and lower for ACVA

	2024						2025					
	Revenue			EBITDA			Revenue			EBITDA		
	New	Old	Variance	New	Old	Variance	New	Old	Variance	New	Old	Variance
ACVA	591	622	-5.0%	21	26	-20.9%	774	779	-0.6%	86	92	-7.0%
DUOL	725	699	3.6%	158	151	5.0%	895	874	2.3%	234	228	2.9%
UDMY	819	819	0.0%	22	17	30.4%	948	948	0.0%	76	80	-5.3%
RDFN	1,019	988	3.1%	(5)	(9)	38.2%	1,103	1,086	1.6%	17	9	89.5%
ZG	2,106	2,044	3.1%	456	435	5.0%	2,423	2,351	3.1%	663	636	4.3%

Source: BofA Global Research

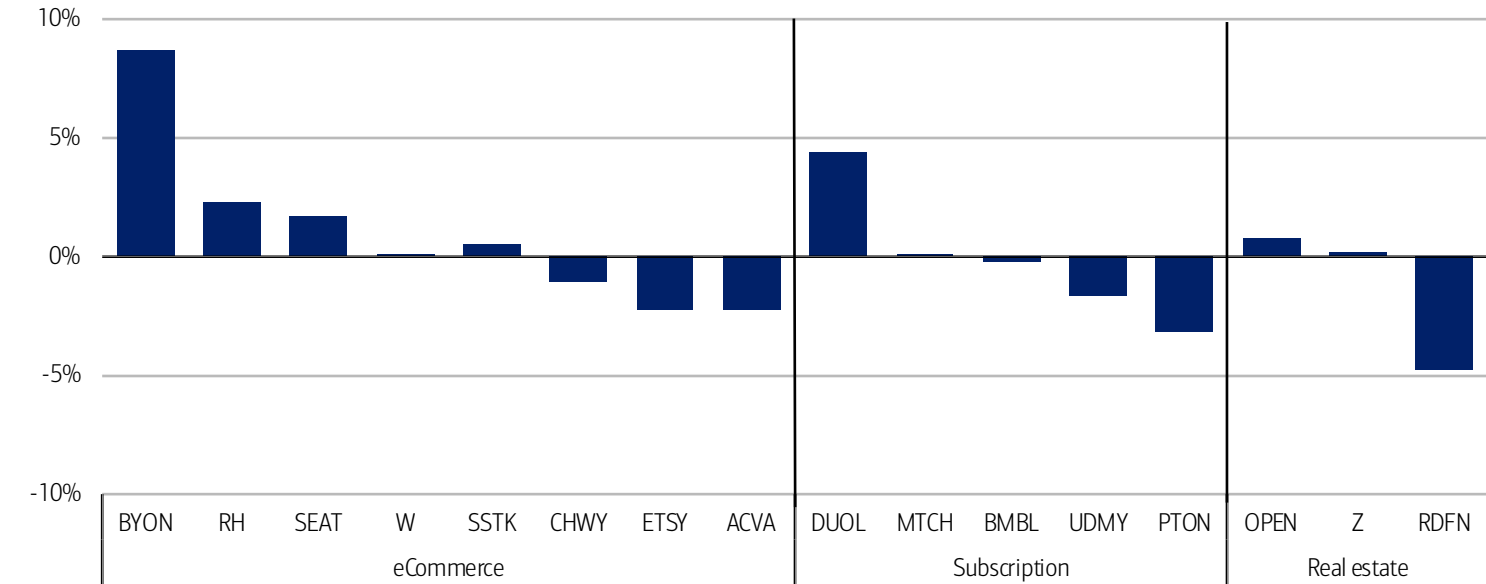
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Relative to the Street, our estimates are highest on average for eCommerce (1% for revenues, 5% for EBITDA), with the largest positive variance for BYON (possibly due to not all consensus estimates fully incorporating Bed Bath & Beyond post the Aug. 1 launch) and the largest negative variance for ACVA. On average our subscription service revenues are inline with the Street and EBITDA is slightly below (ex. a large variance for PTON). Our estimates are highest for DUOL (factoring our recently raised estimates on



accelerating DAU trends) and lowest for Peloton (we remain cautious on connected sub adds and churn). Our online real estate revenue estimates are -1% below the Street and attributable to RDFN (-5% vs. consensus) where we remain cautious on share trends and the extent of volumes gains for the market as a whole.

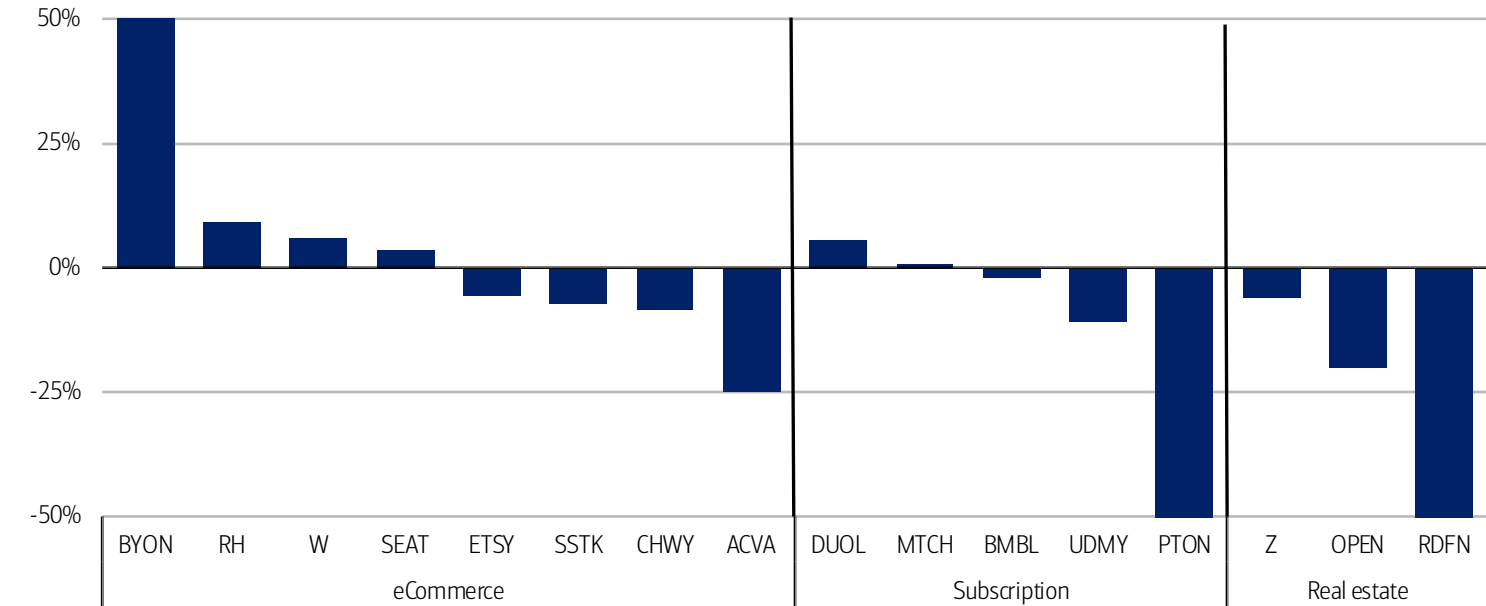
**Exhibit 14: 2024 SMID Internet revenue estimates; BofA vs. consensus**  
On average, BofA estimates have the most upside to the Street within eCommerce



Source: Bloomberg, BofA Global Research estimates

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**Exhibit 15: 2024 SMID Internet EBITDA estimates; BofA vs. consensus\***  
On average, BofA estimates have the most downside to the Street within real estate



Source: Bloomberg, BofA Global Research estimates | \* scale capped at 50/-50%. BYON BofA est of -\$22mn vs. -\$73mn for Street. PTON BofA est of -\$32mn vs. \$10mn for Street. RDFN BofA est of -\$5mn vs. \$15mn for Street.

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## Moving PO basis forward to 2025

We are moving our price objective basis from 2024 to 2025 and increasing POs for nearly all SMID cap Internet stocks under coverage (we lower our ACVA PO). On average our POs increase by 15% including 6% within eCommerce, 11% in subscription services (including MTCH PO increase to \$54 on 1/9/24) and 51% for online real estate. For the latter group, the magnitude is largely driven a significant increase in subsector valuation on lower interest rates as well as our expectation for a return to home volume growth in 2025. Please see below for a detailed summary of PO changes:

### Exhibit 16: SMID cap internet price objective changes

We raise PO's for the majority of our coverage as we move our basis from 2024 to 2025

	Price (\$)	Prior	New	Pot'l Up/ downsid			
Ticker	9-Jan	PO (\$)	PO (\$)	e	Prior multiple	New multiple	Rationale for multiple change
<b>eCommerce</b>							
ACVA	13.48	17	16	19%	2024 4x EV/revenue	2025 3x revenue	Lower multiple on lower ests and cont. wholesale volume weakness into 2024
CHWY	21.15	15	17	-20%	2024 0.5x EV/revenue	2025 0.5x revenue	No change to multiple
ETSY	76.81	89	90	17%	2024 15x EV/EBITDA	2025 14x EV/EBITDA	Lower multiple on GMS risk following late '23 labor cuts & competitive headwinds
BYON	25.44	25	27	6%	2025 14x EV/EBITDA	2025 14x EV/EBITDA	No change to multiple, PO higher on lower assumed share price for buybacks
RH	271.90	309	360	32%	2024 21x P/E	2025 15x P/E	Lower multiple as growth rates for forward multiple are lower
SSTK	48.40	40	40	-17%	2024 6x EV/EBITDA	2025 6x EV/EBITDA	No change to multiple
SEAT	6.11	10.00	10.50	72%	2024 12x EV/EBITDA	2025 10x EV/EBITDA	Lower multiple as growth rates for forward multiple are lower
W	55.75	72	79	42%	2024 0.8x EV/revenue	2025 0.8x EV/revenue	No change to multiple
<b>Subscription Services</b>							
BMBL	14.41	16.50	17.00	18%	2024 10x EV/EBITDA	2025 9x EV/EBITDA	Lower on lower forward growth and decelerating user trends
DUOL	210.69	193	230	9%	2024 12x EV/revenue	2025 12x EV/revenue	No change to multiple, PO increased on higher estimates
MTCH	39.04	54	54	38%	2025 11x EV/EBITDA	2025 11x EV/EBITDA	No Change
PTON	6.12	4.60	4.60	-25%	2024 2.25x EV/subs GP	2025 2.25x EV/subs GP	No change to multiple
UDMY	13.09	14	16	22%	24 1x/3x EV consumer/UB revs	25 1x/3x EV consumer/UB revs	No change to multiple
<b>Online Real estate</b>							
OPEN	3.70	1.80	3.00	-19%	2024 1.25x EV/gross profit	2025 1.5x EV/gross profit	Increase on higher sector multiples
RDFN	9.62	4.25	6.75	-30%	2024 1.1x EV/revenue	2025 1.25x EV/revenue	Increase on higher estimates and sector multiples
ZG	54.35	47	60	10%	2024 22x EV/EBITDA	2025 20x EV/EBITDA	Decrease on valuation overhang from buy side commission suits

Source: Bloomberg, BofA Global Research estimates

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## SMID cap themes for 2024

### AI trickle down to SMID cap eCommerce and sub services

Though hard to quantify at an early stage, we see AI technology as an opportunity to unlock incremental sales and drive positive margins. Potential AI benefits to eCommerce and subscription sales include improved product and content recommendations, better search experience, higher profits through refined pricing, new advertising tools, and enhanced customer service. Potential cost efficiencies could come from automation (Duolingo recently announced cut 10% of contractors, in part due to AI), predictive trends, better inventory and logistics management, as well as fraud detection and content moderation. We note that within online real estate, ChatGPT plugins for Zillow and Redfin were removed at OpenAI's direction due to concerns over query requests and fair housing.

Within eCommerce, Etsy is leveraging AI to improve product search and ultimately GMS growth through more accurate results for open-ended queries such as "back-to-school" and other events while Wayfair's Decorify tool lets users create shoppable, photo-realistic images of rooms. Within subscription services, Duolingo is rolling out a new AI-enhanced premium priced tier while Match and Bumble are aiming to launch AI content, recommendation and content moderation tools. In our view, companies that have the



most opportunity with AI have large data sets, scale advantages, and access to skilled labor pools. We see companies including Duolingo and Etsy, who have been building AI capabilities for years, as the most likely beneficiaries for AI, though we also expect partnerships with the Cloud hyperscalers (or OpenAI) to unlock incremental advantages for smaller players that may not have the capital to build large 1P models. Below are select AI efforts that eCommerce and subscription service companies have announced thus far:

### Exhibit 17: AI initiatives by SMID cap internet companies

Select initiatives by eCommerce companies to increase sales and reduce expenses

Subsector	Company	Initiative	Description
eCommerce	Chewy	Fulfillment center automation	As part of Chewy's initiative to automate a large portion of the company's distribution network, AI and robotics are being used to improve safety, speed and costs of product delivery. Chewy expects to increase automated fulfillment from 40% currently to 70-80% over the long term.
		Visual-based search	Paired with human-curated listings, Etsy is also leveraging AI/ML models that determine the visual appeal of items and incorporating that information as parameters into search algorithms. As such, Etsy is aiming to return the top products based off perceived quality, thus driving incremental sales.
	ETSY	Machine Learning for policy violations	On the 3Q23 call, CEO Josh Silverman disclosed that Etsy is investing approx. \$50mn this year on policy enforcement. Per Mr. Silverman, AI/ML is helping identify \$120mn worth of listings that may not conform with policy, with takedowns up 140% y/y.
		Broadening search results	Etsy is focused on expanding head query results, in which search will return more relevant items for an open-ended query, such as "back-to-school" or "holiday gifts". By using AI/ML, Etsy is able to map related key words and return a broad array of items.
	W	Decorify	Decorify is a virtual room designer that uses generative-AI tools to create shoppable, photo-realistic images of users' rooms. Decorify is an extension of previous products, which suggests sufficient usage and the possibility of driving incremental sales from directly monetizable recommendations.
		ChatGPT plug-in	Vivid Seats introduced a ChatGPT plugin with the target of improving discoverability and search. The plugin is able to provide recommendations based on Vivid's real-time data of events and availability, and links to Vivid Seat's website for purchasing. A ChatGPT plugin may help increase discoverability of events, which can lead to increased conversions.
	SSTK	Generative AI content tools	Shutterstock has released several generative AI content tools including an image creation tool in partnership with OpenAI, Shutterstock Essentials, \$9.99 monthly image creation tool for small business customers/casual creators and an AI indemnification offering for enterprise clients.
		Computer Vision	Shutterstock has signed several large multiyear deals to provide content for training generative AI models including OpenAI, Meta, NVIDIA and Amazon, among others. For 2023, Shutterstock expects to generate over \$100mn in data training revenue and has booked \$60mn so far for 2024.
	BMBL	AI content, recommendation and moderation tools	Bumble envisions a broad set of applications where AI can enhance the customer experience on its apps. This includes improvements to content moderation, match recommendations through Best Bees and reducing frictions between the app download process and onboarding or when a user receives a match. On the latter, Bumble believes that helping users with profile bios, picture selection or conversational prompts can significantly lower drop-off rates for new or inexperienced users.
		AI content, recommendation and moderation tools	Match has the largest global online dating database spread globally across multiple brands. We see this as a distinct advantage in creating and integrating AI tools to improve the usability, effectiveness, safety and enjoyment of Match's dating apps. Match will provide a more detailed AI product roadmap with 4Q23 earnings in February
Subscription Services	MTCH	AI content, recommendation and moderation tools	
	DUOL	Duolingo Max	Duolingo Max which is a higher-priced AI-driven subscription tier that includes two new AI features: 1) Explain my answer- context-specific explanations to learner mistakes generated by AI; and 2) Roleplay- practice conversations using an interactive AI chatbot experience. The service will be fully rolled out in 2024 and could be both an important driver of higher monetization as well as provide a halo on lower priced and free tiers
	UDMY	AI tools for instructors	Following a increase in Udemy Business segment take rates, Udemy is investing in AI-powered capabilities including skills-mapping tools to create bespoke curricula for users and tools that allow instructors to create content more efficiently

Source: Company reports, BofA Global Research

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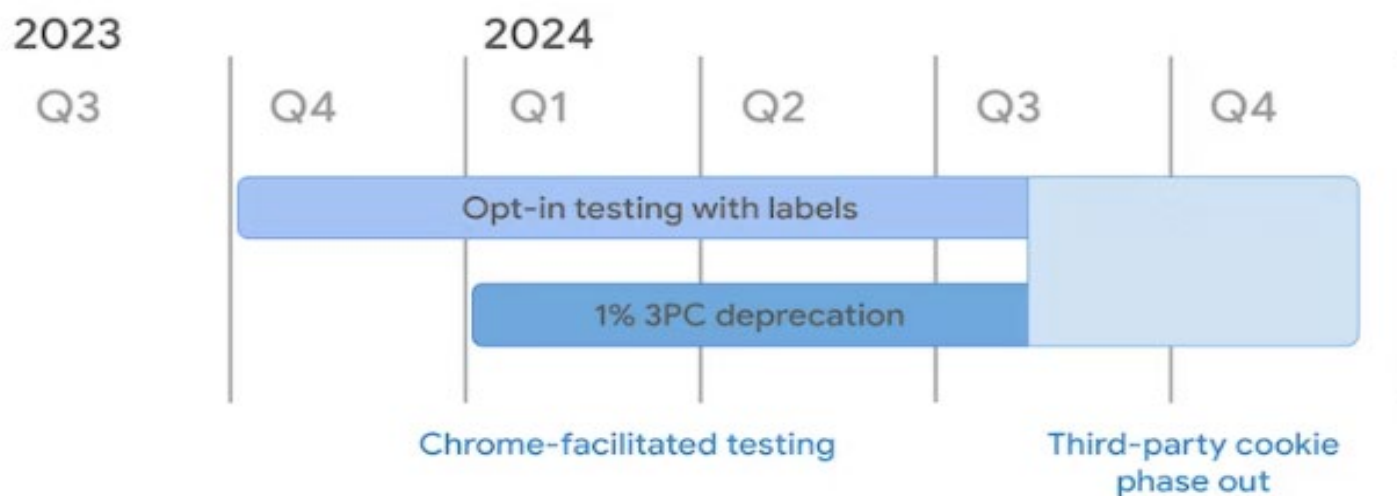
## Advertising

### Expecting the cookie to crumble in 2024, Android app tracking may see changes

Google announced plans to replace cookies on Google Chrome with the Privacy Sandbox by 2H'24 and may also make changes to limit cross-site and cross-app tracking with Android's AAID (equivalent of Apple's IDFA). Like Apple's IDFA changes in 2020, we anticipate that the loss of signal could lead to reduced advertising efficiency across the Internet given Chrome's ~65% browser market share, according to Statcounter, and Android's global 70% operating system share. However, note that, with cookie degradation that theoretically makes 3P advertising less attractive on an ROI basis, we could see eCommerce companies shifting more budget to on-site advertising (likely a benefit for larger eCommerce platforms) or subscription services allocating more dollar to brand advertising or social media.

#### Exhibit 18: Timeline for phasing out Third-Party cookies on Chrome

Starting in 3Q'24, Google plans to expand the third-party cookie deprecation to 100% of Chrome users globally.



Source: Alphabet Website

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We do expect changes by Google to be less disruptive than Apple's prior changes. According to PYMTS, Adweek, and Qualitest (digital marketing firm) potential workarounds to the loss of cookies and mobile identifiers could include: 1) increasing cross-site partnerships ([see Amazon Shopping comes to Facebook and Instagram](#)); 2) leveraging AI for predictive analytics; 3) applying new measurement tools like permission-based marketing or contextual targeting and 4) tapping customer databases to reengage lapsed customers or drive more repeat purchase from existing ones. Within eCommerce, we see cookie degradation in 2024 being a bigger risk smaller eCommerce sites such as eBay, Etsy, Chewy, and Wayfair who have less customer data and rely more on marketing for customer acquisition compared to Amazon. Within subscription services, we see the least risk to Duolingo given a high degree of app traffic is generated organically. Peloton also has a new partnership with TikTok as well as several other brand partnerships give could offset pressure from Google privacy changes.

### Events that could drive higher ad costs in 2024

We also see the Paris Olympics in July/August and the US Election in November as two potential drivers of higher ad costs in 2024. Reuters reports that NBCUniversal has already booked \$1bn in gross ad sales for 2024, higher on a YTD basis vs. 2020 with the Tokyo Olympics and election. Also, while we would expect political ad spend to be just 1% of total US Online ad sales in 2024, strong demand in September/October could cause an increase in CPMs ahead of the important holiday period.

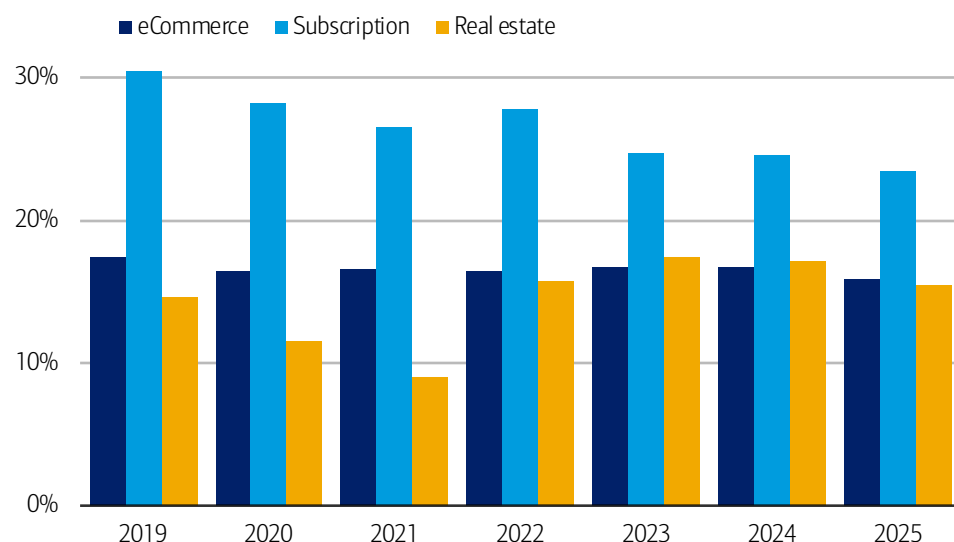
For 2024, Street projects the average Sales & Marketing expense for SMID cap eCommerce/subscription services/online real estate to be 16.7/24.6/17.0% vs.



16.7/24.8/17.4% in 2023. Higher ad pricing after a period of post-pandemic pricing declines in 2023 could add risk to estimates.

### Exhibit 19: SMID cap internet sales & marketing expense as % of revenue

2024 Street estimates factor S&M equal to last year as a % of revenue



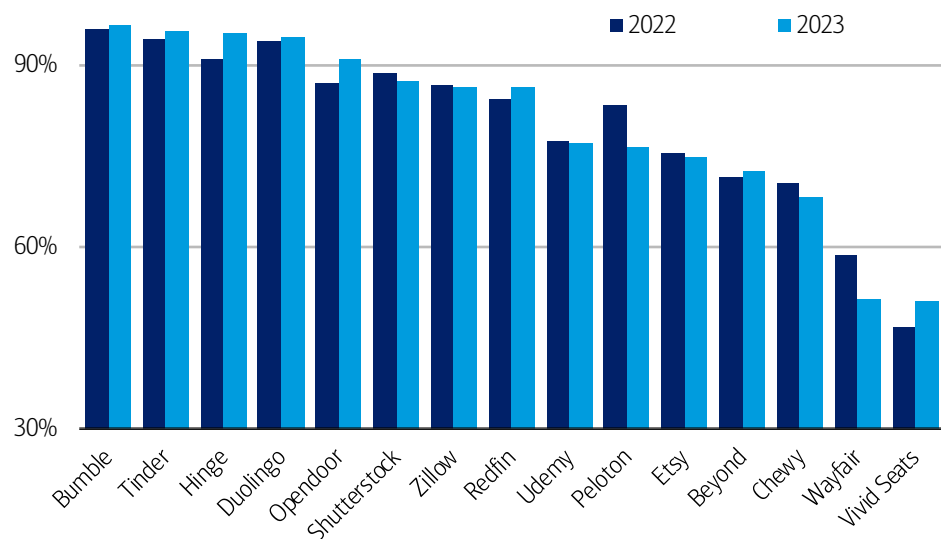
Source: Company reports, Bloomberg, Visible Alpha

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The companies with the highest organic and direct search web traffic (and all else equal, less risk from Google changes and higher online ad costs) are online dating apps (led by Bumble with 97% direct/organic traffic) while eCommerce companies had the lowest (with Wayfair and Vivid at the bottom at 51% organic).

### Exhibit 20: Organic and direct web traffic as a % of total

Dating apps and Duolingo have the largest portion of non-paid web traffic



Source: SimilarWeb, BofA Global Research

BofA GLOBAL RESEARCH

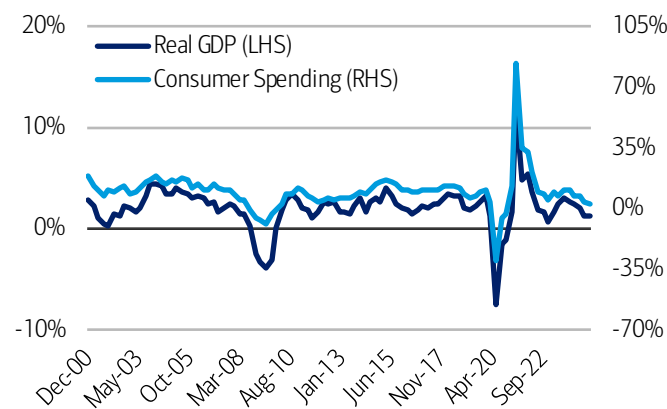
## Slowing consumer spending in 2024

BofA Global Research economists forecast Real GDP growth to decelerate substantially throughout the year, to +1.2% y/y in 4Q'24 from 2.7%E in 4Q'23. This should drive slowing consumer spending growth as GDP and consumer spending have a 90% correlation since 2000. Headwinds to consumer spending in 2024 could include: 1) elevated consumer financing costs; 2) resumption of student loan payments; 3) elevated rent costs; 4) higher insurance costs; 5) lower consumer savings; and 6) elevated unemployment. Tailwinds could be from lower inflation, and lower gas prices on a 2-year basis.

Several companies provided somewhat cautious commentary on 2024 macro/consumer trends including Match and Bumble when preliminary guidance for the year was given in early November (both were below Street expectations). Etsy has consistently called out a challenging macro environment as a headwind to GMS growth and in our view a headcount reduction in mid-December could be an indicator of management's caution on GMS trends into 2024. We also note a recent Wall Street Journal article highlighting increased cancellations with video streaming subscriptions over the past year. While this may be attributable to a proliferation in streaming services and prices increases, it could also signal consumers being more selective with discretionary spend that spill over into other subscription services including dating (MTCH and BMBL), education/language (DUOL/UDMY) and fitness (PTON).

### Exhibit 21: Y/Y change in Real GDP and Consumer Spending

BofA economists forecast Real GDP growth of 1.2% y/y in 4Q'24

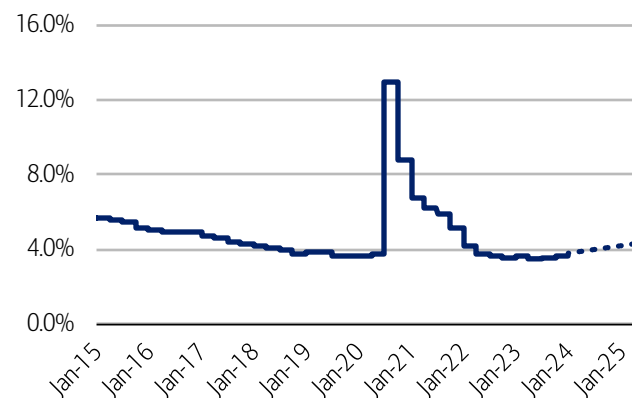


Source: Bloomberg, BofA Global Research

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### Exhibit 23: Unemployment rate

BofA economists forecast unemployment to rise to 4.2% by the end of 2024

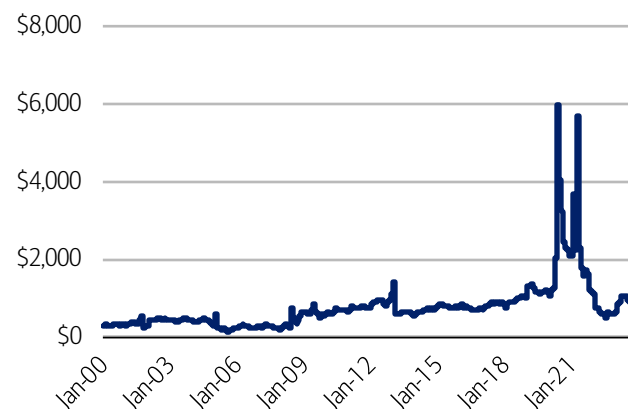


Source: Bloomberg, Bureau of Labor Statistics, BofA Global Research

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### Exhibit 22: Personal savings (\$bn)

Personal savings is now in line with pre-pandemic levels

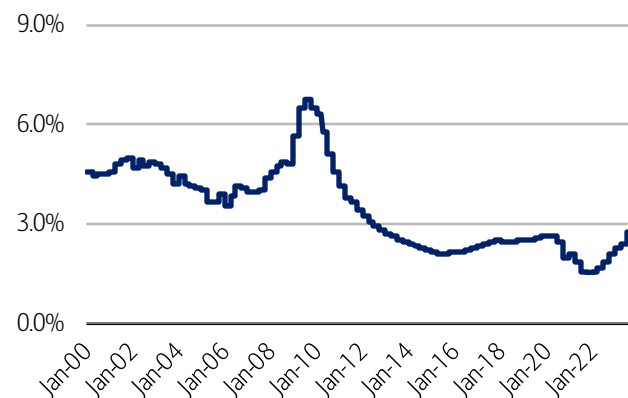


Source: Bloomberg

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### Exhibit 24: Delinquency rates for credit cards (all banks)

Credit card delinquencies are at highest level since 2012



Source: Federal Reserve, Bloomberg

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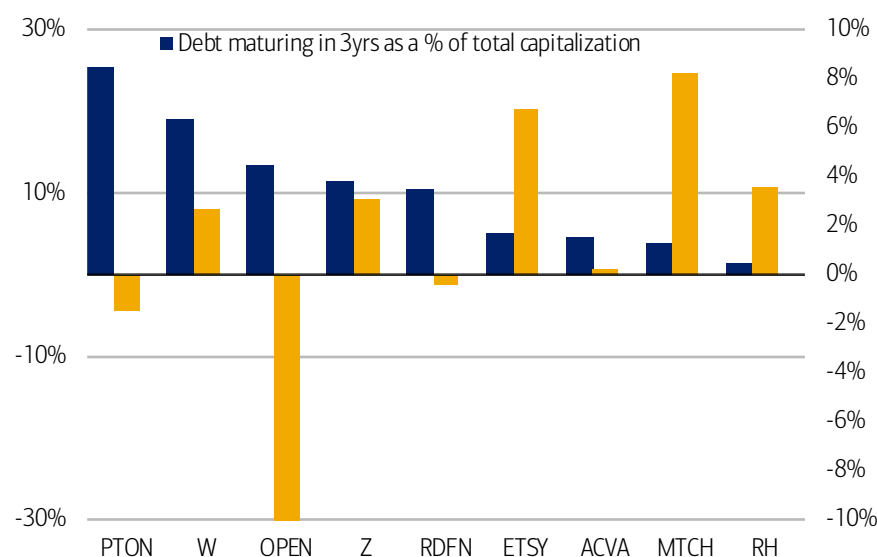
## The tab for inexpensive convertible debt is coming due

We expect leverage and debt refinancing to continue to be a focus for investors, particularly for companies with nearer term maturities and negative free cash flow. The companies with the largest amount of debt due within the next three years relative to total capitalization include Peloton, Wayfair, Opendoor, Zillow and Redfin. Much of this debt is in the form of convertible bonds that were issued when share prices were significantly higher and interest rates far lower than now. As an example, Peloton issued a \$1bn convertible note in 2021 at a stock issue price of \$100 (vs. ~\$6 now) and at a zero coupon. The note is due in 2026 and Peloton management is highly focused on improving margins and cash flow. The company has made material progress in narrowing losses through cut costs and efficiencies, but we think further progress will require a reacceleration in subscriber growth which has been elusive to-date.

Several other companies with high near-term debt maturities and low/negative margins have made some progress in refinancing debt. Wayfair refinanced \$600mn in converts in mid-2023 and plans to settle \$117mn of 2024 notes in cash but continued success with refinancing (including nearly \$800mn of notes due in Oct. 2025) will likely require additional margin and revenue expansion. Opendoor was very opportunistic in repurchasing convertible debt at a discount in 2023, reducing the total by 60%. However, we expect a continuation of negative earnings through at least 2025 and highly volatile working capital to remain risks for future refinancing. Redfin has also been opportunistic through repurchases and a new debt deal with Apollo (though adding high cash interest costs) but we also see risk weak margins and free cash flow.

### Exhibit 25: Debt maturing within 3yrs as a % of total capital vs. FCF yield

Peloton has the largest refinancing burden over the next three years



Source: Bloomberg, BofA Global Research | scale for FCF capped at -10%, OPEN FCF is -47%

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**Exhibit 26: Stocks mentioned**

Prices and ratings for stocks mentioned in this report

<b>BofA Ticker</b>	<b>Bloomberg ticker</b>	<b>Company name</b>	<b>Price</b>	<b>Rating</b>
ACVA	ACVA US	ACV Auctions	US\$ 13.48	C-2-9
BYON	BYON US	Beyond Inc	US\$ 25.44	C-2-9
BMBL	BMBL US	Bumble	US\$ 14.41	C-2-9
CHWY	CHWY US	Chewy	US\$ 21.15	C-3-9
DUOL	DUOL US	Duolingo	US\$ 210.69	C-2-9
ETSY	ETSY US	Etsy, Inc.	US\$ 76.81	C-2-9
MTCH	MTCH US	Match Group	US\$ 39.04	C-1-9
OPEN	OPEN US	Opendoor	US\$ 3.7	C-3-9
PTON	PTON US	Peloton	US\$ 6.12	C-3-9
RDFN	RDFN US	Redfin Corp	US\$ 9.62	C-3-9
RH	RH US	RH	US\$ 271.9	C-1-9
SSTK	SSTK US	Shutterstock	US\$ 48.4	C-3-7
UDMY	UDMY US	Udemy Inc	US\$ 13.09	C-1-9
SEAT	SEAT US	Vivid Seats	US\$ 6.11	C-1-9
W	W US	Wayfair	US\$ 55.75	C-1-9
ZG	ZG US	Zillow A	US\$ 54.35	C-2-9
Z	Z US	Zillow C	US\$ 55.44	C-2-9

Source: BofA Global Research

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**Investment Rationale****Zillow**

Given Zillow's sizable real estate-focused audience, we are positive on its ability to expand share in home-related markets such as real estate, rentals, and mortgage and through several initiatives that should increase agent productivity. However, in the near-to medium-term, we believe uncertainty over mounting real estate commission lawsuits could be disruptive to ZG's buy side revs (nearly 50% of total) and weigh on investor sentiment.

**Price objective basis & risk****ACV Auctions (ACVA)**

Our PO of \$16 is based on 3x 2025E EV/Sales, a premium to our eCommerce & Marketplace and Automotive Commerce comp groups trading at roughly 2.3x. We believe a premium is warranted given significantly higher projected revenue growth and margin expansion relative to comp peers.

Upside risks include: 1) marketplace unit growth acceleration 2) stronger than expected share gains from new and existing franchise dealers' partners and 3) a quicker than expected recovery in wholesale vehicle supply.

Downside risks include: 1) slower than expected scaling of territories 2) wholesale vehicle supply disruptions 3) increased competition from larger rivals and 4) uncertain consumer discretionary spend impacting wholesale volumes.

**Beyond Inc (BYON)**

Our \$27 PO is based on 14x 2025E EV/EBITDA, which compares to a e-commerce median of approx. 15x. We believe that a lower multiple is justified given growth and margins that are below the e-commerce group average.

Downside risks to our PO are that secular tailwinds may fade with slower growth in home furnishings sales, lower than expected gains from the Bed Bath & Beyond acquisition, a greater focus on value and promotions vs. Wayfair, which limit the pace of margin expansion near term, significantly smaller logistical and distribution scale, customer base, and supplier network versus Wayfair, which are competitive



disadvantages.

Upside risks to our PO are greater-than-expected home furnishings industry growth in the US, larger than expected gains from Bed Bath & Beyond, a continued shift of offline sales to online retailers, and upside from company-specific initiatives to improve customer count, order frequency, and average order value.

### **Bumble (BMBL)**

Our PO of \$17 is based on 9x 2025E EV/EBITDA, a discount to subscription service comps which trade at 17x 2025 EV/EBITDA. While Bumble has higher margins and projected revenue growth but we believe the discount is warranted on soft industry trends, slowing Bumble user/payer trends and an overhang from high private equity sponsor ownership

Upside risks to our PO are: 1) a greater than expected acceleration in global online dating trends 2) stronger revenue contribution from new products and monetization efforts and 3) higher capital return following the initiation of a share repurchase program in early 2023.

Downside risks to our PO are: 1) a continued slowdown in user growth which was decelerated through 2023 2) sluggish global online dating trends which have yet to inflect post a 2020/21 peak and 3) somewhat opaque reporting on EBITDA and FX which may weigh on valuation during a period of slowing growth

### **Chewy Inc (CHWY)**

Our PO of \$17 is based on 0.5x 2025E EV/Sales, discount to our eCommerce and Pet Specialty comp group at 1.1x. We believe a discount is warranted given lower forecast revenue growth to peers and significantly lower margins.

Upside risks: 1) room for long-term margin expansion driven by adjacent services, advertising, shifting product mix, and building out automated fulfillment centers 2) Chewy's Autoship driving durable and higher-growth sales and 3) expansion of adjacent service such as private brands, pharmacy, and insurance increasing NSPAC headroom, with mgmt. noting NSPAC lift of \$200-\$300/yr by adding pharmaceuticals.

Downside risks: 1) pet spend growth has dramatically slowed on a weak macro and low pet adoption rates which we expect to pressure Chewy growth through 2024, 2) Chewy's expansion into Canada is a distraction from margin improvement and is may not be a material revenue given a much smaller pet market and 3) moderating inflation and promotions decelerating pricing gains of the past 18 months.

### **Duolingo (DUOL)**

Our PO of \$230 is based on 12x 2025E EV/Sales, a premium to subscription service and education tech comps which trade at 3x and 2x, respectively. 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 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



**Etsy, Inc. (ETSY)**

Our \$90 price objective is based on 14x 2025E EV/EBITDA. This is a discount to Etsy's 5-year average of 25x (ranging from 11x to 50x). We believe a discount is warranted given lower gross merchandise sales and total revenue growth relative to Etsy's historic average and less potential upside for EBITDA margins. We believe that Etsy should trade at a slight discount to overall eCommerce and marketplaces due to lower revenue growth, offset partially by higher margins and competitive barriers.

Upside risks to our PO are higher-than-expected order frequency and average order value due to improvements in search functionality, greater than expected shares gains across underpenetrated customer demographics, regions, and products and increase take rates from new services and higher fees.

Downside risks to our PO are that weakness in discretionary spending or a recession would likely have an outsized impact on the discretionary products sold on Etsy's marketplaces, continued pressure on GMS growth from lapping tough-COVID related comparisons over the next several quarters and softer-than-anticipated performance from non-Etsy marketplaces.

**Match Group (MTCH)**

Our PO of \$54 is based on 11x 2025E EV/EBITDA, a discount to subscription service comps which trade at 17x 2025 EV/EBITDA. While Match has higher margins and slightly higher projected revenue growth, we believe the discount is warranted on soft industry trends and uncertainty on when Tinder user/payer growth rebounds.

Upside risks are: 1) a greater than expected acceleration in global online dating trends, 2) stronger revenue contribution from monetization efforts and new AI based features, and 3) better than expected Tinder payer trends post platform improvements and the lapping of price increases in 1H23.

Downside risks are: 1) sluggish global online dating trends which have yet to inflect post a 2020/21 peak, 2) a continuation of weak Tinder trends and share loss to Bumble and Hinge (owned by Match), and 3) revenue pressure from a recent appreciation of the dollar given over 50% non-US exposure.

**Opendoor Technologies (OPEN)**

Our \$3 price objective is based on 1.5x 2025E EV/gross profit. This is below other low margin online companies including real estate fintech peers. We believe a discount is warranted given much lower gross margins which limits long-term profit potential and the high cyclicity of OPEN's underlying industry.

Downside risks to our PO are: slower than expected conversion of home inventory, weaker gross margins on slowing home price appreciation and limited home service attachment and a softer than expected recovery in the housing market.

Upside risks to our PO are: greater than expected shares gains as OPEN expands into new markets, better than expected pricing spreads as OPEN improves its pricing models and higher than expected leverage from a recovery in existing home sales.

**Peloton (PTON)**

Our \$4.60 price objective is based on 2.25x 2025 subscriber gross profit/EV. We do not include Peloton's hardware segment (40% of revenues) in our valuation given immaterial gross margins. This represents a discount to subscriber comps which trade at 5.3x gross profit/EV which we believe is warranted given lower EBITDA margins & FCF generation and revenue growth.

Upside risk to our PO are: 1) stabilization in monthly churn trends, 2) better than

expected subscriber growth from growth initiatives including FaaS, new app strategy and expanded partnerships, 3) positive hardware gross margins from manufacturing and supply chain efficiencies, and 4) achieving breakeven to positive EBITDA if Peloton is able to reaccelerate connected subscriber revenue.

Downside risks to our PO are: 1) higher subscriber churn as COVID cohorts mature, 2) lower than expected revenue from growth initiatives, 3) limited traction in new international markets, 4) reopening and shift back to in-person fitness, and 5) uncertain TAM given high upfront costs.

### **Redfin Corp (RDFN)**

Our \$6.75 price objective is based on a 1.25x 2025E EV/sales multiple. This is below a historic average multiple of 2.0x. We believe a 1.25x sales multiple is warranted given significantly lower revenue growth than prior years and ongoing challenges to achieving sustainable EBITDA profitability.

Upside risks: 1) faster than expected new product uptake expanding long term margins, 2) faster market share growth in core markets, 3) new product announcements driving stronger automation, and 4) better than expected housing market recovery.

Downside risks: 1) a slower than expected housing recovery, 2) stronger price competition from traditional brokers, and 3) slower market share growth in core markets.

### **RH (RH)**

Our price objective on RH is \$360, which is based on 15x 2025E P/E. Our valuation is below the average multiple of 17x on lower margins relative to the past five years but several large and long-term revenue opportunities that could deliver upside.

The upside risks to our price objective are continued upside potential from RH's gallery conversion strategy, international growth, operating leverage on sales growth, and supply-chain cost reductions and greater-than-expected share repurchases.

Downside risks to our price objective are weakness in discretionary spending or a recession, which would likely have an outsized impact on RH's luxury brand as well as a slower than expected recovery in luxury home sales.

### **Shutterstock (SSTK)**

Our \$40 PO is based on a 6x 2025E EV/EBITDA multiple. Our valuation reflects a discount to peers, given Shutterstock's 1) lower growth and margin profile, 2) smaller (and low growth) addressable market, 3) uncertainty over the trajectory of AI data training revenues, 4) risk of disintermediation from image Gen-AI competitors, and 5) Negative growth and outlook for the eCommerce segment.

Upside risks to our PO are: 1) inexpensive valuation reflecting major headwinds, 2) significant turnaround in eCommerce segment and growth outlook, 3) topline acceleration aided by new and larger data deal, and 4) optimism on new digital ad business from Giphy acquisition.

Downside risks to our PO are: 1) uncertainty over the trajectory of AI data training revenues, 2) risk of disintermediation from image Gen-AI competitors, and 3) negative growth and outlook for the eCommerce segment.

### **Udemy Inc (UDMY)**

Our \$16 price objective is based on the sum of a 1.0x 2025E EV/consumer revenue and 3x 2025E EV/Udemy business revenue. This compares to Ed-tech comps at a median of 2.6x, and enterprise/subscription peers at 3.5x 2024E revenue. We believe a discount is

warranted given challenges in the consumer segment, a recent slowdown in enterprise growth, and lower gross and EBITDA margins vs peers.

Upside risks are: 1) multiple avenues for better than expected UB growth including international expansion, larger multi-year deals with existing customers and a recovery in small enterprise spending 2) stabilization in the consumer segment from continued content growth and increased marketing in and 3) capital return from a cash position that equals one-third of Udemy's market capitalization

Downside risks are: 1) slowing UB growth due to macro headwinds which has elongated deal cycles and pressured small enterprise growth 2) continued softness in the Consumer segment and possible deleverage from higher marketing and 3) competition from existing online players and traditional offline learning options.

### **Vivid Seats (SEAT)**

Our \$10.50 price objective is based on 10x our 2025E EV/EBITDA. This is below Vivid's historical average and a discount to a median of 13x for comparable entertainment and marketplace companies. We believe a discount to comps is warranted given lower revenue growth, lower EBITDA margins and a smaller total addressable market. Our 12x EV/EBITDA multiple also represents a discount relative to expected growth (we forecast 21% compounded EBITDA growth from 2023-26), which we also believe is warranted given high industry competition, the inclusion of acquisitions in 2024 and uncertainty over normalized growth through 2024 post a release of pent-up COVID demand.

Upside risks to our PO are: higher than expected ticketing industry growth, a reduction in elevated competition, higher-than-expected adoption of Vivid's loyalty program and Skybox Drive system and increased regulation, particularly ticket price transparency.

Downside risks to our PO are: a pullback in ticketing and general entertainment spend post two years of COVID catch-up demand, increased marketing spend or lower pricing from competitors, a reduction in concert events, an increase in exclusive ticket distribution deals from competitors and lower-than-expected adoption of Vivid's loyalty program and high private equity and SPAC sponsor ownership.

### **Wayfair (W)**

Our PO of \$79 is based on 0.8x 2025E EV/sales, which is below with the historical average multiple of approx. 1x. We believe this is warranted given a significant improvement in EBITDA and a return to revenue YoY growth, though below prior periods of expansion. If Wayfair were to achieve its target of mid-single digit EBITDA margins over the next few years, this would likely drive additional multiple expansion in our view.

Upside risks are 1) a larger-than-expected acceleration in sales post tough COVID compares in 2022, 2) better inventory availability as supply chain disruptions eases, 3) higher-than-forecast online growth for the industry as a whole, 4) stronger growth from newer initiatives including Wayfair Professional and, 5) EBITDA margin upside from COGS efficiencies, OPEX reductions and fixed cost leverage.

Downside risks are 1) High industry competition which could drive higher than expected investment in marketing or promotions, 2) brand complexity (five brands), 3) weaker than expected international segment performance, and 4) A softer than anticipated recovery in US furnishings in 2024/25.

### **Zillow (ZG / Z)**

Our \$60 price objective for both Class A (ticker ZG) and Class C (ticker Z) shares is based on a 20x EV/EBITDA estimate, in line with ZG's average historic EBITDA multiple. Our 20x multiple is above the peer lead generation average of 14x given our forecast for double EBITDA margins and growth in 2024-25.

Downside risks are: 1) a slower than expected recovery in the US housing market, 2) potential disruption to buy side revenues from several agent commission lawsuits and 3) execution risk around new growth initiatives and 4) increased competition from Costar's new residential advertising marketplace.

Upside risks are: 1) faster-than-expected growth and S&M leverage, 2) better than expected trends in the US existing home market on lower rates, and 3) faster than expected progress in ZG hitting its long term targets.

### **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
<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
	Electronic Arts	EA	EA US	Omar Dessouky, CFA
	Expedia	EXPE	EXPE US	Justin Post
	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
	Instacart	CART	CART US	Justin Post
	Playtika	PLTK	PLTK 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
<b>UNDERPERFORM</b>				
	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
	Redfin Corp	RDFN	RDFN US	Curtis Nagle, CFA
	Shutterstock	SSTK	SSTK US	Curtis Nagle, CFA

## Disclosures

## Important Disclosures

## Equity Investment Rating Distribution: Education &amp; Training Services Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships <sup>R1</sup>	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: Media &amp; Entertainment Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships <sup>R1</sup>	Count	Percent
Buy	35	53.85%	Buy	15	42.86%
Hold	15	23.08%	Hold	8	53.33%
Sell	15	23.08%	Sell	7	46.67%



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

Coverage Universe	Count	Percent	Inv. Banking Relationships <sup>R1</sup>	Count	Percent
Buy	96	57.83%	Buy	39	40.63%
Hold	32	19.28%	Hold	12	37.50%
Sell	38	22.89%	Sell	18	47.37%

**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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