

# Best Buy Co., Inc.

# Bull vs. Bear: Anticipating a recovery vs. signs of continued sales weakness

Reiterate Rating: UNDERPERFORM | PO: 70.00 USD | Price: 73.86 USD

### CE spend remains depressed but could stabilize in 2H24

We maintain a cautious outlook on the consumer electronics (CE) industry given we expect discretionary spending pressures to persist through 1H24. Spending at CE & hobby retailers decelerated sequentially y/y (and on 4-yr basis) in December according to BAC aggregated credit and debit card data (see Exhibit 8). However, we see potential for the consumer electronics industry to stabilize in 2H24 as a post-pandemic replacement cycle returns and we begin to lap consumer spending headwinds including student loan repayments.

### Promotions and inventory levels remain elevated y/y

Data tracking promotions at Best Buy (BBY) from Thinknum showed that both the breadth of promos (% of products that are discounted) and the depth of promos (markdown % of discounted products) continued to exceed pre-pandemic levels through December (see Exhibit 12). Alternative data for the U.S. appliance market showed continued y/y declines in pricing, elevated promotions, and higher shipments/inventory levels keeping us cautious on near-term appliance demand (see Chore charts, December '23 – appliance pricing still under pressure on 10 January 2024).

### Bloomberg data points to F4Q sequential improvement

Bloomberg Second Measure credit and debit card data shows a sequential improvement in BBY observed sales to (13.9)% QTD (compared to (18.8)% observed in F3Q) driven by an improvement in average transaction value (ATV) while observed transactions remain depressed (see Exhibit 3). We are modeling an enterprise same-store sales decline of (6.0)% in F4Q vs. (6.9)% in F3Q given BBY expects improvement in home theater (inventory is better-positioned across price points vs. last year) and the gaming category.

# Reiterate Underperform and \$70 PO

We maintain our price objective of \$70 which is based on 10x our FY25E (next fiscal year). While we expect a return to modestly positive comps next year after two down years, we remain concerned about consumer electronics (CE) category deflation and BBY's longer-term market share trend. We view a P/E below the hardline retail 1-yr forward average (around 16x) as appropriate given larger tailwinds in other hardline categories. We reiterate our rating of Underperform given more potential upside in other stocks in our coverage universe. See Exhibit 1 for our detailed bull vs. bear case analysis.

Estimates (Jan) (US\$)	2022A	2023A	2024E	2025E	2026E
EPS	10.01	7.09	6.14	6.85	7.94
GAAP EPS	9.84	6.28	5.98	6.51	7.60
EPS Change (YoY)	26.5%	-29.2%	-13.4%	11.6%	15.9%
Consensus EPS (Bloomberg)			6.15	6.12	6.75
DPS	2.76	3.50	3.35	3.44	3.55
Valuation (Jan)					
P/E	7.4x	10.4x	12.0x	10.8x	9.3x
GAAP P/E	7.5x	11.8x	12.4x	11.3x	9.7x
Dividend Yield	3.7%	4.7%	4.5%	4.7%	4.8%
EV / EBITDA*	4.5x	6.1x	6.7x	6.1x	5.6x
Free Cash Flow Yield*	16.0%	7.7%	8.6%	9.8%	11.1%
* For full definitions of <i>iQ</i> method <sup>≤M</sup> measures, see page 14.					

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 15 to 17. Analyst Certification on page 13. Price
Objective Basis/Risk on page 13.

Timestamp: 16 January 2024 07:41AM EST

#### 16 January 2024

#### Equity

Key Changes		
(US\$)	Previous	Current
2024E Rev (m)	43,552.4	43,261.3
2025E Rev (m)	41,557.2	42,402.1
2026E Rev (m)	41,631.7	43,494.5
2024E DPS	3.68	3.35

Robert F. Ohmes, CFA Research Analyst BofAS +1 646 855 0078 robert.ohmes@bofa.com

Elizabeth L Suzuki Research Analyst BofAS +1 646 855 2547 elizabeth.suzuki@bofa.com

Madeline Cech Research Analyst BofAS +1 646 855 5219 madeline.cech@bofa.com

#### Stock Data

Price	73.86 USD
Price Objective	70.00 USD
Date Established	29-Aug-2023
Investment Opinion	B-3-7
52-Week Range	62.30 USD - 93.32 USD
Mrkt Val (mn) / Shares Out	15,909 USD / 215.4
(mn)	
Free Float	89.2%
Average Daily Value (mn)	206.09 USD
BofA Ticker / Exchange	BBY / NYS
Bloomberg / Reuters	BBY US / BBY.N
ROE (2024E)	43.8%
Net Dbt to Eqty (Jan-2023A)	-0.3%
ESGMeter™	High

ESGMeter is not indicative of a company's future stock price performance and is not an investment recommendation or rating. ESGMeter is independent of BofA Global Research's equity investment rating, volatility risk rating, income rating, and price objective for that company. For full details, refer to "BofA ESGMeter Methodology".

CE= consumer electronics

QTD= 4Q-to-date thru 12/31

# **iQ**profile<sup>™</sup> Best Buy Co., Inc.

iQmethod <sup>SM</sup> − Bus Performance*					
(US\$ Millions)	2022A	2023A	2024E	2025E	2026
Return on Capital Employed	30.0%	21.4%	17.2%	17.3%	18.3%
Return on Equity	65.6%	55.0%	43.8%	40.2%	38.9%
Operating Margin	6.0%	4.4%	4.0%	4.4%	4.9%
Free Cash Flow	2,542	1,222	1,376	1,554	1,770
<i>iQ</i> method <sup>™</sup> – <b>Quality of Earnings*</b>					
(US\$ Millions)	2022A	2023A	2024E	2025E	2026
Cash Realization Ratio	1.3x	1.3x	1.6x	1.6x	1.6
Asset Replacement Ratio	0.8x	1.0x	0.9x	0.8x	0.8
Tax Rate	18.9%	20.9%	22.9%	22.0%	22.0%
Net Debt-to-Equity Ratio	-39.3%	-0.3%	-23.5%	-39.2%	-53.0%
Interest Cover	NM	NM	NA	NA	N/
Income Statement Data (Jan)					
(US\$ Millions)	2022A	2023A	2024E	2025E	2026
Sales	51,761	46,298	43,261	42,402	43,495
% Change	9.5%	-10.6%	-6.6%	-2.0%	2.6%
Gross Profit	11,634	9,912	9,574	9,685	10,09
% Change	10.0%	-14.8%	-3.4%	1.2%	4.2%
EBITDA	3,961	2,946	2,655	2,914	3,190
% Change	11.1%	-25.6%	-9.9%	9.8%	9.5%
Net Interest & Other Income	(15)	(7)	17	17	17
Net Income (Adjusted)	2,496	1,600	1,341	1,455	1,67
% Change	20.0%	-35.9%	-16.2%	8.5%	14.8%
Free Cash Flow Data (Jan)					
(US\$ Millions)	2022A	2023A	2024E	2025E	2026
Net Income from Cont Operations (GAAP)	2,497	1,598	1,340	1,453	1,669
Depreciation & Amortization	869	918	933	1,068	1,068
Change in Working Capital	358	1,013	144	75	67
Deferred Taxation Charge	NA	NA	NA	NA	N/
Other Adjustments, Net	(445)	(1,377)	(216)	(217)	(209
Capital Expenditure	(737)	(930)	(825)	(825)	(825
Free Cash Flow	2,542	1,222	1,376	1,554	1,770
% Change	54.8%	-51.9%	12.6%	13.0%	13.8%
Share / Issue Repurchase	(3,289)	(670)	(722)	(721)	(7.47
Cost of Dividends Paid Change in Debt	(688) (199)	(789) 119	(732) 100	(731) 50	(747 48
	(199)	113	100	50	40
Balance Sheet Data (Jan)					
(US\$ Millions)	2022A	2023A	2024E	2025E	2026
Cash & Equivalents	2,936	1,874	2,748	3,597	4,653
Trade Receivables	1,042	1,141	1,066	1,045	1,072
Other Current Assets	6,561	5,787	5,890	5,995	6,155
Property, Plant & Equipment	2,250	2,352	1,969	1,726	1,483
Other Non-Current Assets	4,715	4,649	4,616	4,565	4,514
Total Assets	17,504	15,803	16,289	16,928	17,876
Short-Term Debt	0	0	0	0	0.220
Other Current Liabilities	10,013	8,325	8,209	8,217	8,338
Long-Term Debt	1,749	1,865	1,965	2,065	2,165
Other Non-Current Liabilities	2,722	2,818	2,785	2,734	2,683
Total Liabilities	14,484	13,008	12,958	13,017	13,185
Total Equity	3,020	2,795	3,330	3,911	4,691
Total Equity & Liabilities	17,504	15,803	16,289	16,928	17,876

#### **Company Sector**

Retailing-Hardlines

#### **Company Description**

Best Buy, with \$46.3bn in 2022 revenues (\*FY23\*), is the #1 specialty brick & mortar retailer of consumer electronics. The company operates about 1,000 stores in the US, primarily big box Best Buy locations, and over 160 stores in Canada. The company also offers a variety of high-margin services, through its Geek Squad and Magnolia home theater channels as well as a more recent expansion into connected health and emergency services for seniors through its purchase of GreatCall.

#### **Investment Rationale**

After a successful turnaround several years ago, BBY has transformed into a hardline retailer with staying power in an increasingly competitive consumer electronics category. We believe it is in a strong position in core products and should have opportunities to expand into new categories and services going forward, although a medium-term pullback on discretionary retail categories presents a headwind to both sales growth and valuation.

#### Stock Data

Average Daily Volume

2,790,268

#### **Quarterly Earnings Estimates**

	2023	2024
Q1	1.57A	1.15E
Q2	1.54A	1.22E
Q3	1.38A	1.29E
04	2.61A	2.49E

\* For full definitions of *IQ*method<sup>SM</sup> measures, see page 14.

#### **Exhibit 1: BBY Bull vs. Bear**

Key highlights of the bull and bear cases

#### **BBY-BULL**

#### **BBY - BEAR**

The consumer electronics industry could recover through 2024 (after two years of declines) as a post-pandemic replacement cycle returns and we begin to lap consumer spending headwinds (see Hardlines note). BBY expects to return to modestly positive same-store sales next **Same-Store** year and could see CE growth in 2H. BBY is growing its paid membership base (6.6mn members vs. 5.8mn at beginning of year) which shop more frequently than non-members. Demographics and "premium purchases" have remained consistent and while BBY is seeing some trade down in TV's it is not seeing trade down in other categories.

BBY continues to see sales pressure in the industry attributed in part to a pandemic pull-forward of tech purchases, inflation (crowding out spending on discretionary), and a shift to services outside the home. The outlook for consumer electronics remains cautious (spending is reverting to 2019 levelssee Exhibit 8) as the timeline for industry stabilization/improvement remains uncertain. BBY is operating in a price-competitive environment as consumers seek value/deals. Foot traffic to Best Buy stores remains depressed at -11.1% F4Q-to-date compared to -11.7% (according to Placer) and F3Q observed transactions (Second Measure) continue to trend below both 2019 and 2022 levels. Alternative data also shows % of products discounted at Best Buy (excluding movies & music) running ahead of both last year and 2019 in November and December.

### **Stores**

Sales

Stores remain integral to BBY's omnichannel strategy (Buy Online Pickup in Store represents ~40% of online sales) and BBY is focused on Higher online sales have resulted in a decline in physical store traffic and improving merchandise presentation (e.g. premium end caps) given are rightsizing traditional gaming to allow for expansion in growing categories like PC gaming). BBY still has one of the highest sales per square foot in our coverage (see Exhibit 9). Outlet stores (23 today vs. 5 in 2017) allow BBY to clear end-of-life or distressed inventory at a higher recovery rate and create room for better presentation of full priced merchandise in stores.

sales (& changed customer expectations/behavior). BBY has a large and shift to digital and less need to hold inventory on the store floor (stores expensive retail footprint, and more capex will be required to make store base more efficient. We saw a reversal in upward trend of sales per square foot in CY22 and expect sales/sq ft. to decrease further in CY23. BBY continues to evaluate stores as leases expire and expects to continue to close  $\sim$ 15-20 stores per year (we also note that BBY may lose some of the digital business around the area where stores are closed).

### Gross Margin

BBY expects benefits from membership program and services category expansion to offset some pressure to gross margin next year from credit card profit normalization. BBY has seen an increase in vendorfunded promotions across categories (higher mix of promos hasn't necessarily pressured product margin rate) and BBY expects product margins to have a neutral impact in 2024.

Product margin rates are expected to be flattish vs. last year in F4Q (vs. a benefit in F3Q) and supply chain costs should be a slight pressure in 4Q (vs. benefit in 3Q) given last year's comparisons. Credit card profit share (which has been a tailwind for BBY the last few years) has normalized to prepandemic levels and should pressure gross margin in CY24 as credit losses will likely be higher the next few quarters (see **BofA Consumer Finance** team's report). Greater-than-expected cost inflation in supply chain (e.g. ground transportation & warehousing) could also pressure margins.

#### **EBIT** Margin

Points change to My Best Buy program, growth in paid members (annual fees), return to paid installation (in appliances/home theater), and continued improvement in the health business could all contribute to EBIT in F25. Labor rates have remained steady as a % of revenue even as sales have declined in recent quarters. If F25 sales are flattish, BBY plans to maintain a flattish EBIT rate and BBY is on track for \$1bn in Total tech members may renew their membership). cost savings by F25.

BBY EBIT levels have reverted to F2017/F016 levels, and we could see EBIT margin deleverage next year if sales are lower than expected. We do not expect as large of a benefit from labor investments moving forward (i.e. 100bps vs. F20 from store labor investments). We also note that changes to membership program may be less of a benefit than expected (e.g. fewer

# Digital

Approximately one third of BBY domestic sales are online (through website or app) and BBY has invested in digital tools to optimize the pickup in store process. BBY has seen more customers using its app in stores and BBY's remote support services have the highest customer satisfaction scores.

Greater online penetration is more costly and BBY must continue to reallocate labor costs & reskill workers to assist customers in an increasingly digital landscape. BBY Health is signing up members but does not expect any sales benefit in F25.

## Valuation

BBY is currently trading at 12x P/E (using Bloomberg F25E consensus EPS), in-line with its 10-year historical average. Cash generation should remain strong as Capex spending is expected to be flat-to-down modestly in F25/C24 and share repurchases should continue to support earnings growth next year.

BBY shares are trading at 12x P/E, below hardlines retail average of 16x. Given challenging industry trends (spending at consumer electronics & hobby retailers declined (10.9)% y/y in Dec. vs. (4.2)% in Nov. per BAC Card data) and risk of lower-than-expected sales and EBIT margin downside in C2024, BBY could see P/E multiple compression from current levels.

Other

Innovation (including cloud, augmented reality, expansion of broadband access and generative AI) specifically in computing could drive replacement cycles. BBY is carrying an expanded assortment of new & growing categories including health/wellness, e-transportation, and outdoor living offerings.

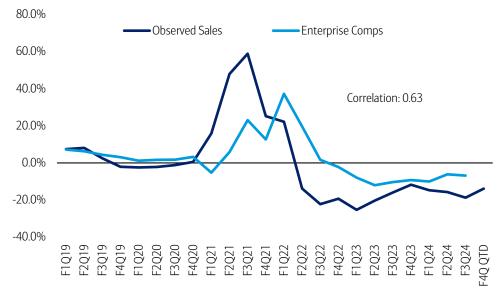
A lack of innovation has caused a pullback in CE demand. BBY over-indexes with higher income customers who may see increased pressure from the return of student loan repayments. Competitive capacity has arguably increased vs. pre-COVID levels in many of BBY's key categories, including Computing & Mobile (40%+ of U.S. sales), Consumer Electronics (30%+ of U.S. sales) and Appliances (~15% of U.S. sales).

Source: BofA Global Research, Company reports



Exhibit 2: BBY observed sales (Bloomberg Second Measure credit & debit card data) vs. BBY Enterprise Same-Store Sales

Observed sales improved sequentially to -13.9% F4Q to date vs. -18.8% observed in F3Q



**Source:** Bloomberg Financial LP- ALTD <GO>, Company filings F4Q to date through 12/31

BofA GLOBAL RESEARCH

Exhibit 3: BBY observed transactions (Bloomberg Second Measure credit and debit card data) vs. BBY Enterprise Same-Store Sales
Observed transactions declined -11.8% F4Q to date vs. -11.3% observed in F3O

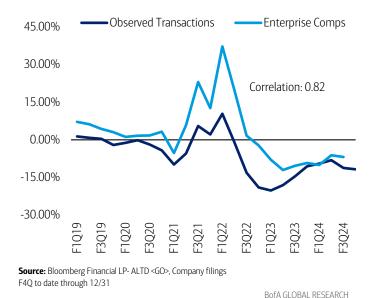
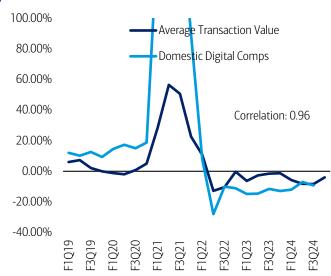


Exhibit 4: BBY average transaction value (Bloomberg Second Measure credit and debit card data) vs. BBY Domestic Digital Same-Store Sales Average transaction value declined -4.1% F4Q to date vs. -8.4% observed in F3Q



**Source:** Bloomberg Financial LP- ALTD <GO>, Company filings F4Q to date through 12/31

BofA GLOBAL RESEARCH

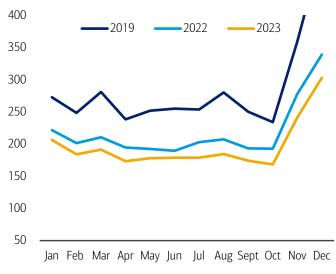
BBY's average transaction value (ATV) continues to track below 2022 levels in December (but remains well above 2019 levels). The structural increase in average selling price (ASP) is partially attributed to inflation (BBY selectively passed on price) but mostly driven by a more premium mix (higher ASP products including appliances, larger TV's) as well as fewer lower priced items (e.g. AMZN firesticks, phone cases etc.) that are more



price competitive. BBY observed transactions continue to lag last year's levels in December according to Bloomberg Second Measure credit and debit card data.

# Exhibit 5: BBY observed transactions according to Bloomberg Second Measure credit and debit card data (in thousands)

Observed transactions continue to trend below 2019 and 2022 levels

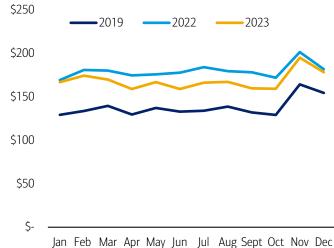


**Source:** Bloomberg Financial LP- ALTD <GO>

BofA GLOBAL RESEARCH

# Exhibit 6: BBY average transaction value according to Bloomberg Second Measure credit and debit card data

Average transaction value trends slightly below 2022 levels but remains elevated vs. 2019

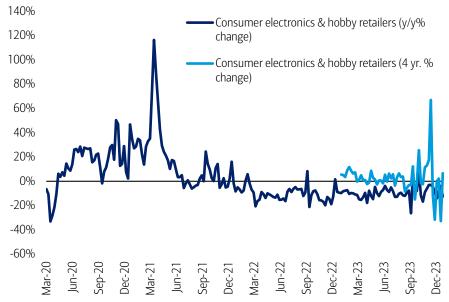


Source: Bloomberg Financial LP- ALTD <GO>

BofA GLOBAL RESEARCH

# Exhibit 7: Weekly spending at consumer electronics & hobby retailers according to BAC card data (y/y and 4 yr. % change)

Spending at consumer electronic & hobby retailers declined (10.9)% y/y in December, a deceleration from (4.2)% in November



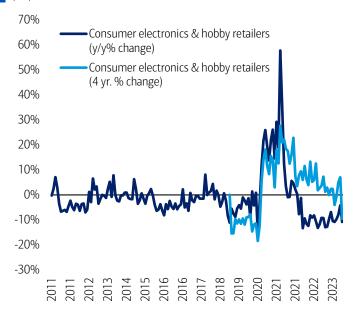
Source: BAC Internal data

Note: Consumer electronics & hobby retailers=Merchants that sell household appliances and electronic goods



# Exhibit 8: Monthly spending at consumer electronics & hobby retailers according to BAC card data

Spending at consumer electronic & hobby retailers on a 4 yr. basis declined (9.7)% in December vs. 7.0% in November



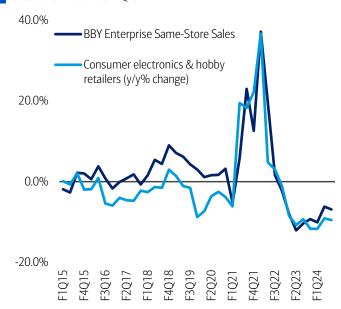
Source: BAC Internal data

Note: Consumer electronics & hobby retailers=Merchants that sell household appliances and electronic goods

BofA GLOBAL RESEARCH

# Exhibit 9: Quarterly Y/Y% change in spending at consumer electronics & hobby retailers according to BAC card data vs. BBY Enterprise Same-Store Sales

86% correlation since F1015



Source: BAC Internal data

Note: Consumer electronics & hobby retailers=Merchants that sell household appliances and electronic goods

BofA GLOBAL RESEARCH

See the latest <u>BofA on USA</u> note for an explanation of the methodology, disclaimers and limitations with BAC card data.

#### Exhibit 10: Sales per square foot for COST, BBY, Sam's Club, KR, BJ's, HD, WMT, LOW, and TGT (C2013-C2022)

After COST, BBY has the highest sales per square foot, however BBY is the only retailer to see a reversal in the upward trend

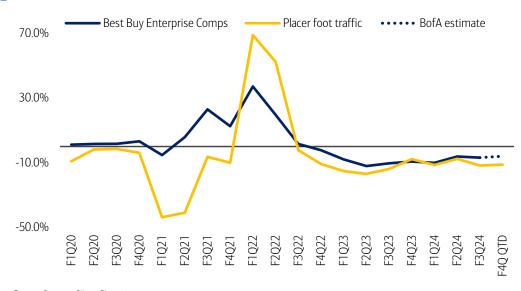


**Source:** BofA Global Research, Company filings
Note: COST, Sam's Club, KR, and BJ's are ex-fuel & MFI; Walmart does not provide detail on fuel
COST includes F23 (ended Aug. 2023) while remaining companies have not reported CY23



Exhibit 11: Best Buy Enterprise Same-Store sales vs. Y/Y% change in Foot Traffic according to Placer geolocation data

Foot traffic to Best Buy stores remains depressed at -11.1% F4Q-to-date compared to -11.7% in F3Q



Source: Company filings, Placer.ai

BofA GLOBAL RESEARCH

Data tracking promotions at bestbuy.com from Thinknum shows that both the breadth of promos (% of products that are discounted) and the depth of promos (markdown % of discounted products) on all Best Buy products (excl. movies & music) continue to exceed 2019 levels in December. We believe the increase in the % of discounted products in December was largely driven by Computers & Tablets (though the depth of markdowns in Computers & Tablets remains relatively consistent y/y).

Exhibit 12: % of products discounted at Best Buy- all products (excluding movies & music)

Discounts have been running at or above 2019 levels most of 2023



BofA GLOBAL RESEARCH

Exhibit 13: Markdown % of discounted products at Best Buy- all products (excluding movies & music)

The depth of promotions has been running above 2019 levels since May 2022



Source: Thinknum



# Exhibit 14: % of products discounted at Best Buy - Computers & Tablets

The breadth of promotions on Computers & Tablets spiked in December

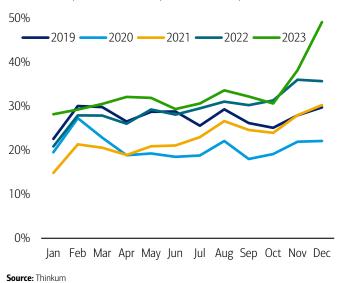
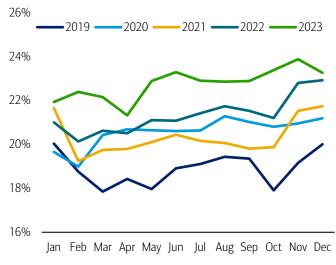


Exhibit 15: Markdown % of discounted products at Best Buy-Computers & Tablets

The depth of promotions on Computers & Tablets remains above prepandemic levels



Source: Thinknum

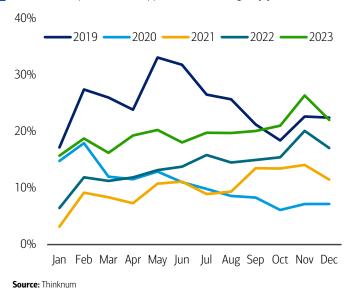
BofA GLOBAL RESEARCH

Alternative data for the U.S. appliance market showed continued y/y declines in pricing, elevated promotions, and higher shipments/inventory levels keeping us cautious on near-term appliance demand. Retailer management teams have cited an increase in vendor-funded incentives in the category implying original equipment manufacturers-OEMs-are paying for the promotions (i.e. extending promos over sales events periods) instead of retailers (see Chore Charts published January 10 2024).

BofA GLOBAL RESEARCH

#### Exhibit 16: % of products discounted at Best Buy - Appliances

The breadth of promotions in appliances remains higher y/y in December



BofA GLOBAL RESEARCH

#### Exhibit 17: Markdown % of discounted products at Best Buy-Appliances

The depth of promotions in appliances remains elevated but trends closer to 2022 levels

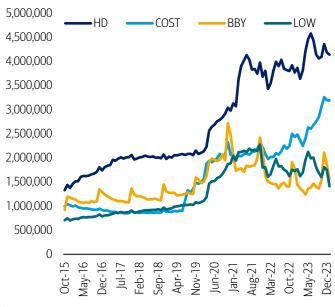


Source: Thinknum



We looked at mobile app engagement/usage trends (based on worldwide monthly active user data, or "MAU", from SensorTower). On a y/y basis, BBY's MAUs have gradually improved through 2023. BBY's mobile app represents over 20% of online revenue (or an estimated 7% of domestic revenue in FY23) and app customers engage more often than customers on other digital platforms. In Oct. 2023, BBY introduced Best Buy Drops (product releases, limited edition items/deals offered weekly) which helped to drive an increase in downloads & app visits.

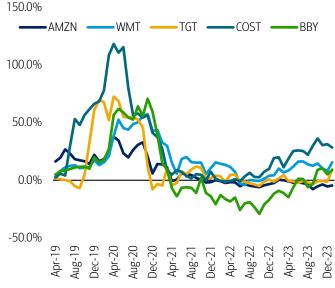
#### Exhibit 18: BBY Mobile App Worldwide Monthly Active Users (MAUs) BBY has seen MAUs decline since peak level in 2020



Source: SensorTower BofA GLOBAL RESEARCH

# BBY has seen a gradual improvement in y/y MAUs beginning Dec. 2022

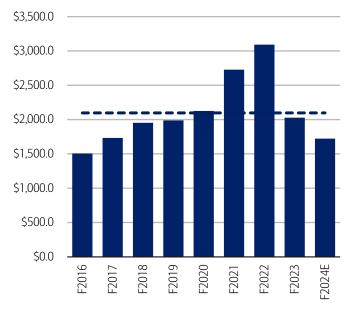
Exhibit 19: Mobile App Worldwide Monthly Active Users (MAUs) y/y%



Source: SensorTower

#### Exhibit 20: BBY EBIT (F2016-F2024E) in \$ millions

EBIT tracking to revert to FY16/FY17 levels in FY24



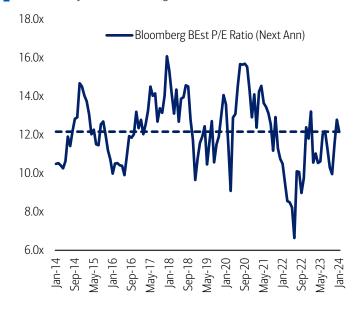
Source: BofA Global Research Estimates, Company filings

BofA GLOBAL RESEARCH



#### Exhibit 21: Bloomberg 2-yr consensus P/E (F2025/C2024)

At 12.1x P/E (using Bloomberg F25E consensus EPS), BBY is current trading around its 10-year historical average P/E of 12.2x

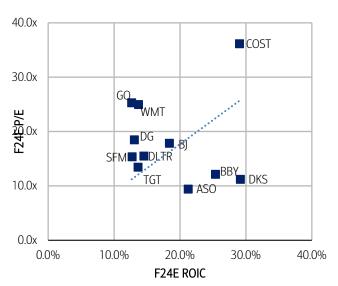


Source: Bloomberg

BofA GLOBAL RESEARCH

#### Exhibit 23: Fiscal 2024 (C23) P/E vs. ROIC comparison

BBY P/E could improve based on current ROIC forecast

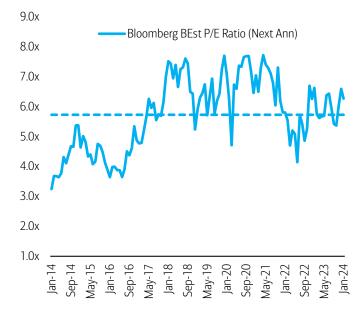


**Source:** Company filings, BofA Global Research estimates

BofA GLOBAL RESEARCH

#### Exhibit 22: Bloomberg 2-yr consensus EV/EBITDA (F2025/C2024)

At 6.1x (using Bloomberg F25E consensus EBITDA), BBY is current trading above its 10-year historical average EV/EBITDA of 5.7x

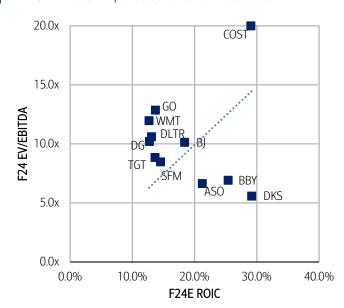


Source: Bloomberg

BofA GLOBAL RESEARCH

### Exhibit 24: Fiscal 2024 (C23) EV/EBITDA vs. ROIC comparison

BBY EV/EBITDA could improve based on current ROIC forecast



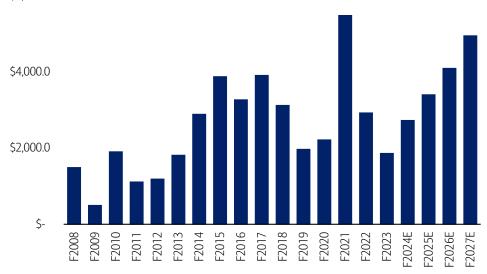
Source: Company filings, BofA Global Research estimates



#### Exhibit 25: BBY Cash and cash equivalents (F2008-F2027E)

The decrease in cash in F2023 was primarily driven by share repurchases, capex, and dividend payments offset by positive cash flows from operation (primarily driven by earnings)

\$6,000.0



**Source:** BofA Global Research estimates, Company filings



# **Exhibit 26: BBY quarterly earnings analysis** \$ millions, except per share data

			SG&A	Optg	Other Inc	P'tx		Minority	Net Inc	Extra Gain	GAAP	Operating	GAAP Reported	Adj. Sh O/S
	Revenue	COGS	Expense	Income	(Expense)	Inc	Inc Tax	Interest	Cont ops	(Loss)	Net Inc.	EPS	EPS	(MM)
, ,	\$10,647.0	\$8,294.0	\$1,868.0	\$485.0	(\$11.0)	\$474.0	\$115.0	\$0.0	\$359.0	(\$18.0)	\$341.0	\$1.57	\$1.49	228.4
	\$10,329.0	\$8,042.0	\$1,860.0	\$427.0	(\$4.0)	\$423.0	\$71.0	(\$3.0)	\$349.0	(\$43.0)	\$306.0	\$1.54	\$1.35	226.1
-	\$10,587.0	\$8,255.0	\$1,920.0	\$412.0	(\$6.0)	\$406.0	\$95.2	\$2.0	\$312.8	(\$35.8)	\$277.0	\$1.38	\$1.22	226.2
	\$14,735.0	\$11,795.0	\$2,236.0	<u>\$704.0</u>	<u>\$14.0</u>	<u>\$718.0</u>	<u>\$142.0</u>	<u>\$2.0</u>	\$578.0	(\$85.8)	\$495.0	<u>\$2.61</u>	<u>\$2.23</u>	<u>221.8</u>
	\$46,298.0	\$36,386.0	\$7,884.0	\$2,028.0	(\$7.0)	\$2,021.0	\$423.2	\$1.0	\$1,598.8	(\$182.6)	\$1,416.2	\$7.09	\$6.28	225.6
Apr-Q1	\$9,467.0	\$7,317.0	\$1,828.0	\$322.0	\$9.0	\$331.0	\$78.0	(\$1.0)	\$252.0	(\$8.0)	\$244.0	\$1.15	\$1.11	218.9
Jul-Q2	\$9,583.0	\$7,363.0	\$1,858.0	\$362.0	\$0.0	\$362.0	\$96.0	\$1.0	\$267.0	\$7.0	\$274.0	\$1.22	\$1.25	219.0
Oct-Q3	\$9,756.0	\$7,524.0	\$1,863.0	\$369.0	(\$6.0)	\$363.0	\$83.0	\$1.0	\$281.0	(\$18.0)	\$263.0	\$1.29	\$1.20	218.3
	\$14,455.3	\$11,483.3	\$2,303.4	<u>\$668.7</u>	<u>\$14.0</u>	\$682.7	\$142.0	\$1.0	<u>\$541.7</u>	(\$18.0)	\$523.7	\$2.49	<u>\$2.41</u>	<u>217.2</u>
	\$43,261.3	\$33,687.3	\$7,852.4	\$1,721.7	\$17.0	\$1,738.7	\$399.0	\$2.0	\$1,341.7	(\$37.0)	\$1,304.7	\$6.14	\$5.98	218.4
Apr-Q1E		\$7,267.5	\$1,855.4	\$315.4	\$9.0	\$324.4	\$71.4	(\$1.0)	\$252.0	(\$18.0)	\$234.0	\$1.17	\$1.09	215.2
Jul-Q2E		\$7,270.2	\$1,867.3	\$408.5	\$0.0	\$408.5	\$89.9	\$1.0	\$319.6	(\$18.0)	\$301.6	\$1.50	\$1.41	213.2
Oct-Q3E		\$7,409.3	\$1,890.9	\$423.3	(\$6.0)	\$417.3	\$91.8	\$1.0	\$326.5	(\$18.0)	\$308.5	\$1.54	\$1.45	212.2
	\$13,694.3	\$10,769.6	\$2,225.4	\$699.3	<u>\$14.0</u>	\$713.3	\$156.9	<u>\$1.0</u>	\$557.3	(\$18.0)	\$539.3	\$2.66	\$2.58	<u>209.2</u>
	\$42,402.12	\$32,716.7	\$7,839.0	\$1,846.4	\$17.0	\$1,863.4	\$409.9	\$2.0	\$1,455.4	(\$72.0)	\$1,383.4	\$6.85	\$6.51	212.5
	\$43,494.5	\$33,403.8	\$7,968.4	\$2,122.3	\$17.0	\$2,139.3	\$470.7	\$2.0	\$1,670.7	(\$72.0)	\$1,598.7	\$7.94	\$7.60	210.5
<u>Percentag</u>		Not	SG&A			Onevetina		Ratio Analysis						Oneretine
	Enterprise	Net Sales		Ontains	Ptx Inc	Operating EPS		Gr Mgn	Exp Ratio	On Man	Int	Tx Rate	Ptx Mgn	Operating Net Mgn
Apr O1	Comps -8.0%	-8.5%	Expense -5.1%	Optg Inc -34.5%	-35.8%	-29.6%	•	22.1%	17.5%	Op Mgn 4.6%	-0.1%	24.3%	4.5%	3.4%
Apr-Q1 Jul-Q2	-0.0% -12.1%	-6.5% -12.8%	-5.1% -6.5%	-34.5% -48.0%	-33.6% -48.3%	-29.0% -48.3%		22.1%	18.0%	4.0%	0.0%	16.8%	4.5%	3.4%
Oct-Q3	-12.1%	-12.0%	-8.9%	-40.6%	-40.5% -41.0%	-40.5%		22.1%	18.1%	3.9%	-0.1%	23.4%	3.8%	3.4%
Jan-Q3	-9.3%	-11.1%	-0.5% -9.7%	-40.0%	-13.8%	-33.7% -4.4%		20.0%	15.2%	4.8%	0.1%	19.8%	4.9%	3.9%
F2023	-9.9%	-10.6%	-7.7%	-34.4%	-34.3%	- <del>4.4.%</del> -29.2%		21.4%	17.0%	4.4%	0.0%	20.9%	4.4%	3.5%
Apr-Q1	-10.1%	-11.1%	-2.1%	-33.6%	-30.2%	-26.8%		22.7%	19.3%	3.4%	0.1%	23.6%	3.5%	2.7%
Jul-Q2	-6.2%	-7.2%	-0.1%	-15.2%	-14.4%	-20.8%		23.2%	19.4%	3.8%	0.0%	26.5%	3.8%	2.8%
Oct-Q3	-6.9%	-7.8%	-3.0%	-10.4%	-10.6%	-6.5%		22.9%	19.1%	3.8%	-0.1%	22.9%	3.7%	2.9%
Jan-Q4E	-6.0%	-1.9%	3.0%	-5.0%	-4.9%	-4.6%		20.6%	15.9%	4.6%	0.1%	20.8%	4.7%	3.7%
F2024	-7.1%	-6.6%	-0.4%	-15.1%	-14.0%	-13.4%		22.1%	18.2%	4.0%	0.0%	22.9%	4.0%	3.1%
Apr-Q1E	0.0%	-0.3%	1.5%	-2.1%	-2.0%	1.7%		23.0%	19.7%	3.3%	0.1%	22.0%	3.4%	2.7%
Jul-Q2E	0.0%	-0.4%	0.5%	12.8%	12.8%	23.0%		23.8%	19.6%	4.3%	0.0%	22.0%	4.3%	3.3%
Oct-Q3E	0.0%	-0.3%	1.5%	14.7%	14.9%	19.4%		23.8%	19.4%	4.4%	-0.1%	22.0%	4.3%	3.4%
Jan-Q4E	0.0%	-5.3%	-3.4%	4.6%	4.5%	6.8%		21.4%	16.3%	5.1%	0.1%	22.0%	5.2%	4.1%
F2025E	0.0%	-2.0%	-0.2%	7.2%	7.2%	11.6%		22.8%	18.5%	4.4%	0.0%	22.0%	4.4%	3.4%
F2026E	3.0%	2.6%	1.7%	14.9%	14.8%	15.9%		23.2%	18.3%	4.9%	0.0%	22.0%	4.9%	3.8%

**Source:** BofA Global Research Estimates, Company Filings

## Price objective basis & risk

#### Best Buy Co., Inc. (BBY)

Our 12-month PO of \$70 is based on 10x our FY25E EPS estimate, which is a discount to BBY's long-term average of 11x and the hardline retail average of 16x. We believe this discount is warranted given the pressure on consumer discretionary spending in light of inflation. However, growing long-term demand for consumer electronics as people stay, work and learn more at home more so than pre-pandemic mitigate the potential downside to the P/E multiples at the lower end of the hardline retail group (which are in single digits).

Downside risks to our PO are slower-than-expected industry headwinds, deteriorating ASPs, a slowdown in share gains, greater-than-expected cost inflation, and a slowdown in macro and consumer trends.

Upside risks to our PO are better-than-expected margin improvements, a pickup in product cycles, market share gains, and strong investor sentiment on the Consumer Discretionary sector.

## **Analyst Certification**

I, Robert F. Ohmes, 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 - Retail Hardline Coverage Cluster**

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
BUY				
	Arhaus, Inc	ARHS	ARHS US	Jason Haas, CFA
	Boot Barn	BOOT	BOOT US	Jason Haas, CFA
	Driven Brands	DRVN	DRVN US	Jason Haas, CFA
	Five Below Inc.	FIVE	FIVE US	Jason Haas, CFA
	Floor and Decor Holdings, Inc.	FND	FND US	Elizabeth L Suzuki
	Genuine Parts	GPC	GPC US	Jason Haas, CFA
	Lowe's Companies, Inc.	LOW	LOW US	Elizabeth L Suzuki
	Mattel	MAT	MAT US	Jason Haas, CFA
	Mister Car Wash	MCW	MCW US	Jason Haas, CFA
	Ollie's	OLLI	OLLI US	Jason Haas, CFA
	O'Reilly Automotive, Inc.	ORLY	ORLY US	Jason Haas, CFA
	Petco	WOOF	WOOF US	Jason Haas, CFA
	PROG Holdings Inc	PRG	PRG US	Jason Haas, CFA
	Rollins Inc.	ROL	ROL US	Jason Haas, CFA
	Tempur Sealy International Inc.	TPX	TPX US	Jason Haas, CFA
	The Home Depot, Inc.	HD	HD US	Elizabeth L Suzuki
	Upbound Group Inc.	UPBD	UPBD US	Jason Haas, CFA
NEUTRAL				
	AutoZone Inc.	AZO	AZO US	Jason Haas, CFA
	Hasbro	HAS	HAS US	Jason Haas, CFA
	Sonos, Inc.	SONO	SONO US	Jason Haas, CFA
	Williams-Sonoma	WSM	WSM US	Jason Haas, CFA
UNDERPERFORM				
	Advance Auto Parts, Inc.	AAP	AAP US	Jason Haas, CFA
	Best Buy Co., Inc.	BBY	BBY US	Robert F. Ohmes, CFA
	Snap-on	SNA	SNA US	Elizabeth L Suzuki
	Tractor Supply Company	TSCO	TSCO US	Jason Haas, CFA
	Whirlpool	WHR	WHR US	Jason Haas, CFA



# *IQ*method<sup>™</sup> Measures Definitions

<b>Business Performance</b>	Numerator	Denominator
Return On Capital Employed	NOPAT = (EBIT + Interest Income) $\times$ (1 - Tax Rate) + Goodwill Amortization	Total Assets - Current Liabilities + ST Debt + Accumulated Goodwill
		Amortization
Return On Equity	Net Income	Shareholders' Equity
Operating Margin	Operating Profit	Sales
Earnings Growth	Expected 5 Year CAGR From Latest Actual	N/A
Free Cash Flow	Cash Flow From Operations — Total Capex	N/A
Quality of Earnings	Numerator	Denominator
Cash Realization Ratio	Cash Flow From Operations	Net Income
Asset Replacement Ratio	Capex	Depreciation
Tax Rate	Tax Charge	Pre-Tax Income
Net Debt-To-Equity Ratio	Net Debt = Total Debt — Cash & Equivalents	Total Equity
Interest Cover	EBIT	Interest Expense
Valuation Toolkit	Numerator	Denominator
Price / Earnings Ratio	Current Share Price	Diluted Earnings Per Share (Basis As Specified)
Price / Book Value	Current Share Price	Shareholders' Equity / Current Basic Shares
Dividend Yield	Annualised Declared Cash Dividend	Current Share Price
Free Cash Flow Yield	Cash Flow From Operations – Total Capex	Market Cap = Current Share Price × Current Basic Shares
Enterprise Value / Sales	EV = Current Share Price × Current Shares + Minority Equity + Net Debt +	Sales
	Other LT Liabilities	

EV / EBITDA Enterprise Value Basic EBIT + Depreciation + Amortization

\*\*Menethod 3\*\*\*is the set of BofA Global Research standard measures that serve to maintain global consistency under three broad headings: Business Performance, Quality of Earnings, and validations. The key features of iQmethod are: A consistently structured, detailed, and transparent methodology. Guidelines to maximize the effectiveness of the comparative valuation process, and to identify some common pitfalls.

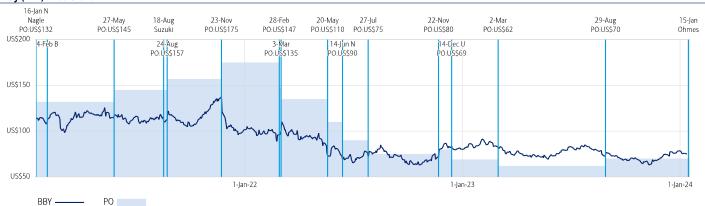
\*\*Redatabase\*\* is our real-time global research database that is sourced directly from our equity analysts' earnings models and includes forecasted as well as historical data for income statements, balance sheets, and cash flow statements for companies covered by BofA Global Research.

**IQ**profile<sup>≤M</sup>, **IQ**method<sup>≤M</sup> are service marks of Bank of America Corporation. **IQ**database® is a registered service mark of Bank of America Corporation.

# **Disclosures**

## **Important Disclosures**

#### Best Buy (BBY) 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: Retailing Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships R1	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: Global Group (as of 31 Dec 2023)

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

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

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

# Investment rating Total return expectation (within 12-month period of date of initial rating) Ratings dispersion guidelines for coverage cluster<sup>R2</sup>

Buy	≥ 10%	≤ 70%
Neutral	≥ 0%	≤ 30%
Inderperform	N/A	≥ 20%

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: Best Buy.

The issuer is or was, within the last 12 months, an investment banking client of BofAS and/or one or more of its affiliates: Best Buy.

BofAS or an affiliate has received compensation from the issuer for non-investment banking services or products within the past 12 months: Best Buy.

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: Best Buy.

BofAS or an affiliate has received compensation for investment banking services from this issuer within the past 12 months: Best Buy.

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: Best Buy. 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: Best Buy.

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: Best Buy.

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 Service Board; 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 Prudential 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 (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 (Hong Kong): Merrill (Hong Kong): Merr (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): Merrill Lynch (Canada): Merrill Lynch (Mexico): Merrill Ly de Bolsa, regulated by the Comisión Nacional Bancaría y de Valores; Merrill Lynch (Argentina): Merrill Lynch Argentina SA, regulated by Comisión Nacional 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): Merrill Lynch (Israel): Merrill Lynch (Israel) (Israel): Merrill Lynch (Israel): Merr 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 in Germany and is regulated by Merrill Lynch (DIFC) is done so in accor

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.

#### BofA ESGMeter Methodology:

ESGMeter is a proprietary metric based on quantitative analysis and fundamental analyst inputs that reflects our assessment of a company's Environmental, Social and Governance-related attributes. The ESGMeter is intended to indicate a company's likelihood of experiencing stronger financial stability (higher return on equity and lower earnings and price volatility) over the next three years relative to peer group. There are three ESGMeter levels - Low, Medium, and High - which indicate whether a company has attributes most likely to translate into superior financial stability (in the case of a High level) or weaker financial stability (in the case of a Low level) over the next three years relative to its peer group. A Medium level suggests that a company exhibits ESG characteristics that are likely associated with financial stability results in line with its peer group over the next three years. Full details of our methodology, financial stability definition and disclaimers are available at BofA ESGMeter methodology. ESGMeter is not indicative of a company's future stock price performance and is not an investment recommendation or rating. ESGMeter is independent of the BofA Global Research fundamental equity analyst's investment rating, volatility risk rating, income rating or price objective for that company.

#### Copyright and General Information:

Copyright 2024 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. 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 legal proceeding 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 in

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 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.

