

Consumer & Retail

Rates ruffle Consumer

Industry Overview

Outlook remains cloudy entering earnings

Rates reached new highs (10Y touching 5%) on the back of continued strong economic data while Fed speaker commentary last week indicated a likely pause in November. Given the rate volatility and uncertainty entering the depths of earnings season, the **ICE BofA IG Corp Bond Index** widened +6bps w/w and returned -1.94%. Non-Cyclicals and Cyclicals were in-line on spreads but returns of -2.30% & -2.36% respectively lagged. Most notably, September retail sales beat (headline sales rose +0.7% vs consensus +0.3%) driven by autos, e-commerce, restaurants & bars and prior months were also revised higher. Looking to October, BofA card data in the week ending Oct 14th indicated that total spend per household (ex-autos) fell -1.1% y/y. New issuance totaled \$26bn with AutoZone issuing \$1bn to repay commercial paper, prefund a \$300mn maturity in April, and fund share buybacks in our view. Estimates are for light issuance this week (\$10bn ex-self-funders).

In **Packaged Food (+7bps)**, we attended a meeting with General Mills (GIS) where the company expressed confidence in their current strategy despite an uncertain environment and reiterated interest in M&A given strength of the balance sheet (pet, snacks, away from home, baking highlighted as areas of interest). We think GIS execution is above average within the group but valuation is stretched, we remain Marketweight. The WSJ reported that WH Group is reportedly working on a potential 2024 IPO of Smithfield Foods (SFD). This could be positive for SFD spreads moving back into public markets and potentially diluting the overhang of Chinese ownership but seems like an unusual timing within the protein cycle. Elsewhere in protein, Moody's revised its outlook on JBS S.A. from Baa3/Stable to Baa3/Negative on weaker than anticipated segment results and the need for adjustments in the capital structure for JBS to achieve credit metrics consistent with a Baa3 rating. Moody's anticipates that weak market fundamentals in the US beef market and a competitive environment in the US and Brazil will weigh on earnings and the leverage trajectory. In **Beverages (+6bps)**, the latest Nielsen data indicated that Bud Light volumes fell -30.2% in the last 4 weeks (similar to prior periods) but volume share marginally improved (declined -562bps). Additionally, AB InBev said they would extend incentive payments to wholesalers into 1Q24, extend credit through 2Q24 and implement a market share bonus recovery incentive once they begin lapping the Bud Light controversy indicating US profit headwinds into 2024. In **Consumer Products (+6bps)**, CVS Health announced that it will pull some oral decongestant products that contain phenylephrine as the only active ingredient from its shelves. We estimate phenylephrine accounts for 2% or less of sales for Haleon and Kenvue and 1% or less of sales for Reckitt Benckiser and Procter & Gamble. P&G reported a 1Q beat with pricing and productivity offsetting China softness; FY24 guidance reaffirmed with the company now expecting to deliver towards the upper-end of the range. Bloomberg also reported they are evaluating options for the Chinese operations of its haircare brand VS Sassoon and is seeking a valuation around \$1bn. In **Tobacco (+6bps)**, CNN reported that the FDA submitted the final rule for the ban of menthol in cigarettes and flavored cigars to the White House Office...continued on next page...

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 20 to 23. Analyst Certification on page 19.

Valuation & Risk on page 19.

12615356

Timestamp: 23 October 2023 01:28PM EDT

23 October 2023

High Grade Credit
United States
Retailing & Consumer

Brian Callen, CFA
Research Analyst
BofAS
+1 646 855 8987
brian.callen@bofa.com

Divya Kumaresan
Research Analyst
BofAS
+1 646 855 6636
divyakumaresan@bofa.com

Exhibit 1: Market week ended 10/20/23

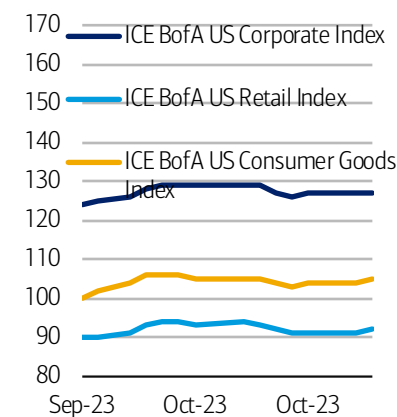
Last week's market performance

Market	Value	WoW
IG ICE BofA Index	133	+6
IG ICE BofA Index (yld)	6.40	+26
HY ICE BofA Index	463	+22
HY ICE BofA Index (yld)	9.53	+34
CDX IG 5yr	81	+4
CDX HY 5yr	526	+27
Consumer Cyclicals	97	+6
Consumer Non-Cyclicals	110	+6
5yr Treasury (yld)	4.86	+22
10yr Treasury (yld)	4.91	+30
30yr Treasury (yld)	5.08	+32
S&P 500 (index)	4,224	-2.4%

Source: ICE Data Indices, LLC, Bloomberg
BofA GLOBAL RESEARCH

Exhibit 2: Consumer/Retail Spreads

1mo spreads range-bound



Source: ICE Data Indices, LLC, Bloomberg
BofA GLOBAL RESEARCH



The move is the final step before issuing a regulation (estimated by year-end). Philip Morris International 3Q's top-line beat on strong volumes & pricing but heated tobacco units were soft. FY23's EPS guidance was nudged up slightly, in-line with consensus.

In **Retail (+5bps)**, activist investor Engaged Capital has built a large stake in VF Corp and is pushing for operational changes at the company. Specifically, they are calling for cost reductions and a strategic review of the company's non-core assets and real estate. Engaged wants VFC to publicly commit to no further acquisitions and to allocate excess free cash flow and divestiture proceeds towards accelerated leverage reduction (i.e. credit positive). Lastly, Genuine Parts (GPC) reported weaker than consensus sales in 3Q. Auto comps (NAPA) rose +0.6% vs. +3.5% consensus estimate and Industrial comps increased +0.3% vs. +2.1%. GPC followed this morning with new issuance to repay private placements and borrowings under its revolver.

Exhibit 3: Notable Weekly Movers

KSS tightened the most last week

Active Cash Trading				Active CDS				
Issuer		Chg (G-spread)	Issuer	Chg (G-spread)	Entity	5y	Chg	
PVH	4.625% 7/10/2025	+21	KSS	5.550% 7/17/2045	-27	Best Buy	100	8
RKTLN	3.000% 6/26/2027	+19	KSS	4.625% 5/1/2031	-21	AutoZone	54	8
TPR	4.125% 7/15/2027	+18	JWN	5.000% 1/15/2044	-6	Tyson Foods	86	5
DRI	3.850% 5/1/2027	+18	MDLZ	2.250% 9/19/2024	-5	Target	58	4
BATSLN	2.726% 3/25/2031	+17	VFC	2.950% 4/23/2030	-3	Lowe's	57	4

Source: ICE Data Indices, LLC, Bloomberg

BofA GLOBAL RESEARCH

Exhibit 4: Upcoming Consumer/Retail Events Calendar

2-week calendar of events, subject to change

October 2023				
Mon, Oct-23	Tue, Oct-24	Wed, Oct-25	Thu, Oct-26	Fri, Oct-27
	ADM 3Q23 earnings KMB 3Q23 earnings KO 3Q23 earnings	RKTLN 3Q23 earnings HEIANA 3Q23 earnings MAT 3Q23 earnings ORLY 3Q23 earnings WHR 3Q23 earnings PPC 3Q23 earnings	BNFP 3Q23 earnings BG 3Q23 earnings KVUE 3Q23 earnings KDP 3Q23 earnings TSCO 3Q23 earnings BC 3Q23 earnings HSY 3Q23 earnings HAS 3Q23 earnings MO 3Q23 earnings UNANA 3Q23 earnings WHR 3Q23 earnings	CL 3Q23 earnings
Mon, Oct-30	Tue, Oct-31	Wed, Nov-01	Thu, Nov-02	Fri, Nov-03
MCD 3Q23 earnings VFC 2Q24 earnings	ABIBB 3Q23 earnings SYN 1Q24 earnings	KHC 3Q23 earnings EL 1Q24 earnings MDLZ 3Q23 earnings	HLNLN 3Q23 earnings TAP 3Q23 earnings SBUX 4Q23 earnings STZ investor day	CHD 3Q23 earnings

Source: Company filings, Bloomberg

BofA GLOBAL RESEARCH

Notable Consumer & Retail credit news**Retail**

According to the *WSJ*, activist Engaged Capital has built a large stake in VF Corp (**VFC**, **Baa2/BBB/--**) and is pushing for operational changes including steep cost cuts, a review of VFC's noncore assets and real estate, and for board changes (they are supportive of CEO Bracken Darrell). The size of the stake is not known but Engaged Capital is expected to currently be among the top 10 shareholders. The strategic review of VFC's portfolio would include all brands and assets excluding Vans and the North Face brands which it views as core. Engaged reportedly believes VFC can eliminate unnecessary costs that can lead to over \$300mn cost savings annually which can be reinvested in the Vans brand to improve performance.

- Engaged Capital has been involved in activist campaigns with HAIN, SHAK, Rent-A-Center, QUOT

Packaged Food

We attended a CAGNY-sponsored lunch with **General Mills (GIS, Baa2/BBB/--)** in New York, NY where management expressed confidence in its existing “Accelerate” strategy, achievability of guidance (FY24 and LT) despite an uncertain environment, and flexibility offered by a restructured organization and <3x leveraged balance sheet. Growth in the core business (+2-3% LT) remains the top priority with the expectation for M&A activity or portfolio reshaping, to the extent it becomes available, to be additive by +50bps (pet, snacks, away from home, baking all called out as potential areas of interest) or to use any excess cash flow to step up share repurchases.

Operational highlights

- **NA Retail (NAR):** Focused on execution; brand building, continuous innovation, and improved capabilities (marketing and strategic revenue management or SRM). Restructuring allowed for better agility and faster reaction to trend changes. On shelf availability and service levels improved, but also seeing private label rebound (+10% y/y on shelf in grains/cereal for example) and noted retailers are still highlighting SNAP (food stamp) headwinds to their business.
- Indicated they are seeing market share recover QTD as they lap pricing and NAR volumes are approx. flat vs. '19 levels (elasticities remain below historical levels), GIS expects further volume normalization in calendar 2024
- On promotional intensity, frequency is +MSD% y/y but still only 90% of pre-COVID levels and that's against pricing in GIS categories that are +40% vs. pre-COVID implying there is headroom to expand activity that is still return accretive.
- **Foodservice:** Seeking growth from (1) K-12 schools in cereal & yogurt categories (advantage of reformulation in accordance with regulation changes), (2) accelerate frozen goods (leverage TNT Crust acquisition and capacity additions), (3) margin recovery to pre-COVID levels (ex-convenience), couple hundred bps over ~18mo. In restaurants (commercial foodservice), trips have declined from +2% to around flat (YTD +0.5%) and even consumers >\$100k income are tightening spend or shifting toward food at home consumption
- **Pet:** Still pressured due to spend and increased mobility leading to fewer treat occasions. Adjusting go-to-market strategy with new pack sizes and deeper push into value channel while continuing to focus on brand building + innovation (humanization of pet, using familiar packaging tactics) while leveraging the GIS toolkit (SRM, HMM savings). Capacity build out is focus on dry food vs. wet/treats not within internal network and the majority of international growth will be sourced via U.S. Reiterated that guidance does not assume a rebound in growth in FY24.
- **International:** Noted Brazil market is seeing the most pressure due to consumer macro. Very recently received regulatory approval to sell Blue Buffalo products across all of China and tests were very encouraging
- GLP-1 obesity drugs: Not currently affecting the business, if there is an impact it will build over time and innovation will be key to adaption (similar to other dieting trends or fears of grocery consolidation historically)

Capital allocation

- Priorities: 1) organic investment in the business, including capex ~4% sales; 2) Dividends with the goal to increase in-line with earnings growth LT; 3) Net leverage <3x offers flexibility for portfolio reshaping and adding growth; 4) Share repurchases which are expected to play a bigger role in years absent M&A (CFO Bruce implied GIS may repurchase >2% of shares in FY24 given share price and balance sheet capacity)



- M&A: Commented on their desire to do more and it being a “good environment” where the balance of availability is higher (driven by interest rates boxing non-strategic buyers out) but also cautioned that GIS has passed on certain opportunities or been outbid because of too high valuations (i.e. won’t lower their return hurdle rate). Target areas (not necessarily large scale in nature) include pet (internationally), snacking, away-from-home eating occasions, and baking.
- GLP-1 hysteria has not altered their M&A strategy or consideration targets

According to the *WSJ*, the Chinese parent of **Smithfield Foods (SFD, Ba1/BBB-/BBB)**, WH Group (288 HK), has discussed with banks ways to improve its valuation including exploring a potential U.S. IPO of SFD as early as next year.

- During an interview with CEO Smith earlier this year, he noted relisting discussions were frequent but had no timeline and that expanding into other meat categories in the U.S. through M&A was also an option.

Consumer Products

Procter & Gamble (PG, Aa3/AA-/--) 1Q beat led by pricing upside even despite market softness in China and strong gross margins which were well ahead of expectations on declining commodity prices + productivity initiatives. Management highlighted that US promotions remain below pre-COVID levels and Europe is even seeing a sequential decline, all despite private label share expanding +80bps m/m. FY24 guidance was reaffirmed but the company now expects to deliver towards the higher-end of the guide even with an incremental FX and tax headwind.

Exhibit 5: Procter & Gamble 1Q24

PG financial summary

	1Q24	Consensus
Revenue	+6.1%	+5.2%
Organic sales	+7.0%	+6.2%
EBITDA	+15.0%	+8.7%
EBITDA margin	30.2%	28.8%
EPS	\$1.83	\$1.72

	1Q24	Q/Q
Debt	\$35,880	\$1,273
Gross leverage	1.6x	Flat
Net leverage	1.2x	Flat

Source: Company filings, Visible Alpha

BofA GLOBAL RESEARCH

Revenue & segment-related commentary

- +7% org. sales (vs. +6.2% Visible Alpha consensus estimate) composed of -1% volume, +7% price, mix +1%. All segments beat except beauty. Focus markets +6%, Enterprise markets +13%
- Global aggregate value share +40bps y/y with 32 of top 50 category/country combinations holding or growing share
- US org sales +7% with 3% volume growth – consumer resilient and US consumption levels are stable
- Promotions continue to be below pre-COVID levels in U.S.; Promos down and decreasing in Europe
- China org sales -6% on soft & choppy underlying market growth and consumer confidence

- Continue to expect market to return to growth around ~4%: +1-2% pricing, +2% volume, +1% mix

Profit & margin-related commentary

- EBITDA margins expanded +232bps y/y vs. +95bps consensus estimate due to strong gross margin partially offset by marketing investment; gross margins expanded +461bps (vs. +200bps estimate)
- Gross margins expansion led by increased pricing (+330bps), favorable commodity costs (+160bps), gross productivity savings (+150bps) and partially offset by negative product mix (-60bps) and product reinvestments and other impacts (-60bps)
- SG&A deleveraged +220bps driven by marketing investments (+260bps), wage inflation & other impacts (+140bps), partially offset by sales leverage (-160bps) and productivity savings (-60bps)

FY24 Guidance reaffirmed, now expect to deliver towards higher-end of range

- Organic sales +4-5% vs. +5.0% est. (FX now -100-200bps headwind); (b) Core EPS +6-9% y/y or implied \$6.25-6.43 (vs \$6.36 est.); (c) tax rate ~21% (+100bps); (d) Capex ~4.5% of sales (-50bps); (e) FCF productivity ~90%; (f) Dividends >\$9bn and share repurchases \$5-6bn
- Expect 3-4% less pricing benefit over the next two quarters (vs 1Q) as lap last year so +3-4% total & volume inflection on the right path
- Expect less commodity benefit over the year + additional FX headwinds impacting gross margins (vs. 1Q's big upside)

Tobacco

Philip Morris International (PM, A2/A-/A) 3Q23 contained a mixture of tailwinds and headwinds. Top-line beat consensus expectations due to stronger volume performance (notably cigarettes better than est.), impressive ZYN trends, and sustained pricing momentum but the outlook for heated tobacco units (HTU) is a bit slower due to a delayed launch (Taiwan) and inventory volatility related to the impending HTU flavor ban in Europe. Gross margins were strong on easing comparisons and ILUMA improvement which also offset greater than expected SG&A deleverage. FY23 guidance was reshuffled again (surprising given the investor day was only 3 weeks ago) – Org. sales outlook was narrowed, volume was increased despite a weakening international backdrop, and adj EPS (ex FX) was nudged up slightly, in-line with consensus, while the FX headwind rose another -20c and operating cash flow dropped to the low-end of the range (in-line with expectations given recent issuance). PM spreads are largely unchanged.

Exhibit 6: Philip Morris International 3Q23

PM financial summary

	3Q23	Consensus
Revenue (y/y)	+13.8%	+13.4%
Volumes (cigs/HTUs)	+2.2%	+0.6%
Adj. EBITDA (y/y)	+7.3%	+15.3%
Adj. EBITDA margin	43.20%	44.80%
Adj. EPS	\$1.66	\$1.62
	3Q23	Q/Q
Debt	\$48,329	(\$178)
Adj gross leverage	3.5x	-0.1x
Adj net leverage	3.3x	-0.1x

Source: Company filings, Visible Alpha

BofA GLOBAL RESEARCH



Revenue & segment-related commentary

- Organic revenue +9.3% driven by shipment growth +18.0% for HTUs partially offset by cigarettes declining only -0.5% against combustible pricing 9%
- Total volumes increased +2.2% y/y (vs. +0.6% VA est.), driven by heated tobacco units (HTUs) +18.0% (vs +17.8% VA est.) and cigarettes -0.5% (vs -2.3% VA est.)
- By region (cigarettes): (a) Europe -4.3% (miss); (b) SSEA, CIS & MEA +3.4% (beat); (c) EA, AU & PMI DF -4.1% (miss); (d) Americas -7.4% (miss)
- Marlboro -1.6%, primarily driven by the Philippines
- Smoke-free revenue mix = 35.6%

Profit & margin-related commentary

- Adj. EBITDA margins declined -262bps, missing consensus expectations, but this may be tied to noise in the consensus figure around a prior impairment or below-the-line items given operating margins beat by +20bps. Gross margins +52bps beat -90bps est. on lower shipping costs, ILUMA margin improvement, and lower device sales y/y. SG&A deleveraged +113bps despite cost management & timing phasing.

Capital allocation

- PM-reported leverage was 3.4x gross (-0.1x q/q) and 3.2x net leverage (-0.1x q/q)
- Reiterated expectation to de-lever to ~2.0x net leverage in FY26

FY23 Guidance

- FY23 guidance: (a) adj. organic net revenue ~+8% from prior +7.5-8.5% y/y; (b) adj. organic operating margin to decline -50 to -150bps, likely closer to -150bps (unchg'd); (c) adj. EPS now \$6.05-\$6.08 from prior \$6.13-\$6.22 or \$6.58-6.61 ex-FX from prior \$6.46-6.55 vs. \$6.61 est.; (e) FX now -\$0.53 headwind (previously \$0.33 EPS headwind); (f) OCF now ~\$10bn (was \$10-11bn) and capex ~\$1.3bn unchanged; and (g) effective tax rate ~20.5-21.5%
- Total int'l volumes (ex-China & U.S.) est. to decline -1.5% to -2.0% y/y (prior -0.5% to -1.5%) but PMI total volumes now up to +1-1.5% y/y (prior up to +1%)
- HTU volumes est. within lower half of 125-130bn units (prior was "around middle")
- Continue to expect organic operating margin expansion in 2H, ~+10%
- Surpassed target pro-forma \$2bn in gross cost savings over 2021-2023

Recent New Issuance

AutoZone (AZO, Baa1/BBB) issued a total of \$1,000mn across 500mn 5yr Notes (6.250% '28) and \$500mn 10yr Notes (6.550% '33). The use of proceeds is for general corporate purposes.

BofA Current Recommendations

Exhibit 7: Cash & CDS ratings

BofA cash & CDS ratings

Name	Ticker	Cash			CDS		
		Overweight	Marketweight	Underweight	Buy Protection	Neutral	Sell Protection
O'Reilly Automotive	ORLY	✓					
The Home Depot	HD		✓			✓	
Advance Auto Parts	AAP	✓					
McCormick & Co	MKC	✓					
Campbell Soup Co.	CPB	✓				✓	
Sysco Corp.	SYU	✓					
Keurig Dr. Pepper	KDP	✓					
Kohl's	KSS		✓		✓		
Lowe's	LOW	✓				✓	
Tyson Foods	TSN		✓			✓	
Conagra Brands	CAG		✓			✓	
Kellogg	K		✓				
Kraft Heinz	KHC	✓					✓
General Mills Inc.	GIS		✓			✓	
AutoZone	AZO		✓			✓	
Kroger	KR		✓				✓
Nordstrom	JWN		✓				✓
Dollar General Corp.	DG		✓				
Mondelez International	MDLZ		✓				✓
Mondelez Int'l Holdings Netherlands	MDLZ		✓				
J.M. Smucker	SJM		✓				
The Coca-Cola Company	KO		✓				
PepsiCo	PEP		✓				
The Hershey Co.	HSY		✓			✓	

Source: BofA Global Research;

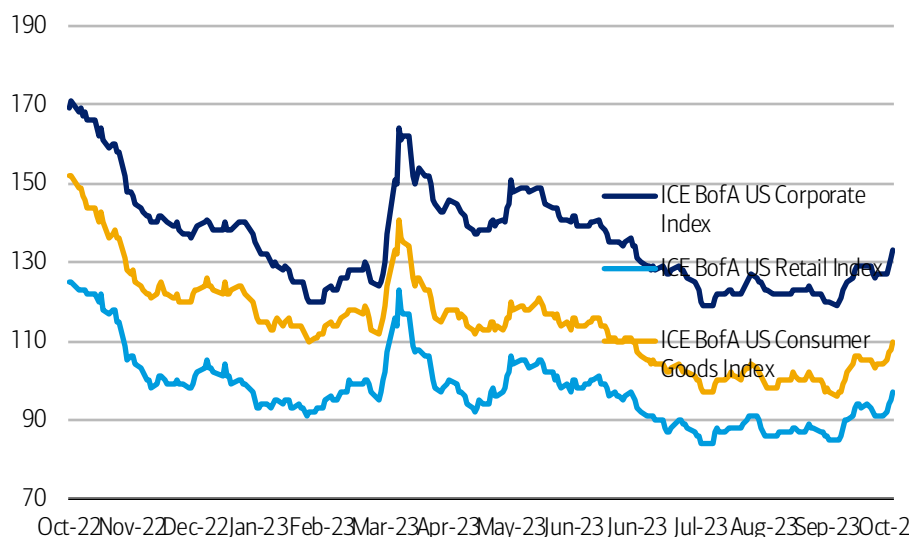
Notes (*): Underweight K long-end

BofA GLOBAL RESEARCH

Market Snapshot

Exhibit 8: BofA HG Index vs. Consumer/Retail Sectors

Consumer/Retail 1-year spread performance tightens after rate volatility, inflation pressure



Source: ICE Data indices, LLC

BofA GLOBAL RESEARCH





**Exhibit 9: ICE Data Indices Investment Grade Index**

Benchmark spread and credit metrics by issuer

	Num of Issues	% of Index	Spreads (OAS)					Price	YTW	Modified Duration	Average Rating	Total Returns					Excess Returns				
			OAS	1 week	MTD	QTD	YTD					1 week	MTD	QTD	YTD	12 month	1 week	MTD	QTD	YTD	12 month
US Corporate Index	10,109	100.0%	133 bps	6 bps	8 bps	8 bps	-5 bps	\$85.2	6.40%	6.3	A3	-1.94%	-2.18%	-2.18%	-1.74%	4.30%	-37 bps	-47 bps	-47 bps	220 bps	516 bps
Rating Categories																					
AAA US Corporate Index	114	1.1%	50 bps	4 bps	3 bps	3 bps	-8 bps	\$79.5	5.59%	8.5	AAA	-2.70%	-2.96%	-2.96%	-4.69%	0.86%	-35 bps	-29 bps	-29 bps	222 bps	433 bps
AA US Corporate Index	792	8.2%	69 bps	3 bps	4 bps	4 bps	-8 bps	\$83.7	5.77%	6.8	AA3	-2.03%	-2.27%	-2.27%	-2.84%	2.55%	-28 bps	-32 bps	-32 bps	187 bps	399 bps
Single-A US Corporate Index	4,128	43.8%	115 bps	6 bps	8 bps	8 bps	1 bps	\$85.7	6.23%	6.2	A2	-1.92%	-2.14%	-2.14%	-2.20%	3.50%	-37 bps	-46 bps	-46 bps	171 bps	440 bps
BBB US Corporate Index	5,075	46.9%	163 bps	6 bps	10 bps	10 bps	-9 bps	\$85.1	6.68%	6.2	BBB2	-1.93%	-2.19%	-2.19%	-1.09%	5.37%	-39 bps	-53 bps	-53 bps	267 bps	604 bps
Maturity																					
1-3 Year US Corporate Index	2,077	24.2%	99 bps	6 bps	9 bps	9 bps	11 bps	\$95.0	6.15%	1.8	A3	-0.09%	0.05%	0.05%	2.55%	4.66%	-11 bps	-14 bps	-14 bps	63 bps	139 bps
3-5 Year US Corporate Index	1,771	19.1%	130 bps	9 bps	13 bps	13 bps	10 bps	\$92.0	6.26%	3.5	A3	-0.77%	-0.82%	-0.82%	1.03%	5.10%	-33 bps	-47 bps	-47 bps	111 bps	288 bps
5-7 Year US Corporate Index	1,188	12.2%	144 bps	7 bps	10 bps	10 bps	-4 bps	\$86.6	6.34%	5.2	BBB1	-1.48%	-1.63%	-1.63%	-0.58%	4.81%	-39 bps	-54 bps	-54 bps	157 bps	388 bps
7-10 Year US Corporate Index	1,458	14.7%	165 bps	6 bps	8 bps	8 bps	-7 bps	\$83.9	6.60%	6.8	A3	-2.28%	-2.55%	-2.55%	-2.29%	4.48%	-49 bps	-61 bps	-61 bps	214 bps	547 bps
10-15 Year US Corporate Index	556	5.0%	152 bps	2 bps	3 bps	3 bps	-26 bps	\$90.7	6.58%	8.5	A3	-2.73%	-3.15%	-3.15%	-3.19%	5.08%	-23 bps	-35 bps	-35 bps	362 bps	811 bps
15+ Year US Corporate Index	3,059	24.8%	141 bps	5 bps	6 bps	6 bps	-19 bps	\$72.8	6.62%	12.7	A3	-4.40%	-5.13%	-5.13%	-7.75%	1.95%	-61 bps	-71 bps	-71 bps	380 bps	902 bps
Industry																					
US Corporate Index																					
Industrials	6,011	58.4%	123 bps	5 bps	7 bps	7 bps	-10 bps	\$84.0	6.29%	7.0	A3	-2.19%	-2.46%	-2.46%	-2.30%	4.03%	-39 bps	-47 bps	-47 bps	248 bps	554 bps
Consumer Cyclical	354	3.6%	97 bps	6 bps	7 bps	7 bps	-2 bps	\$82.9	6.02%	7.2	A2	-2.36%	-2.63%	-2.63%	-3.48%	2.66%	-48 bps	-54 bps	-54 bps	160 bps	439 bps
US Corp Retail	262	2.9%	91 bps	5 bps	6 bps	6 bps	-3 bps	\$82.8	5.95%	7.2	A2	-2.34%	-2.61%	-2.61%	-3.49%	2.65%	-46 bps	-52 bps	-52 bps	159 bps	437 bps
US Corp Food & Drug Retail	45	0.3%	156 bps	11 bps	12 bps	12 bps	15 bps	\$81.0	6.63%	6.9	BBB2	-2.32%	-2.51%	-2.51%	-3.35%	2.38%	-56 bps	-55 bps	-55 bps	129 bps	387 bps
US Corp Restaurants	47	0.4%	95 bps	7 bps	8 bps	8 bps	-5 bps	\$84.7	6.03%	7.5	BBB1	-2.54%	-2.86%	-2.86%	-3.57%	3.00%	-55 bps	-64 bps	-64 bps	182 bps	487 bps
Consumer Non-Cyclical	589	5.5%	110 bps	6 bps	8 bps	8 bps	-13 bps	\$85.0	6.15%	7.0	A3	-2.30%	-2.61%	-2.61%	-2.21%	4.36%	-49 bps	-60 bps	-60 bps	250 bps	573 bps
US Corp Beverage	163	1.8%	88 bps	6 bps	7 bps	7 bps	-18 bps	\$84.1	5.96%	8.0	A3	-2.76%	-3.13%	-3.13%	-3.34%	3.65%	-57 bps	-66 bps	-66 bps	278 bps	612 bps
US Corp Food Wholesale	227	1.8%	116 bps	7 bps	9 bps	9 bps	-5 bps	\$84.7	6.19%	6.7	BBB1	-2.18%	-2.55%	-2.55%	-2.54%	3.27%	-48 bps	-68 bps	-68 bps	172 bps	431 bps
US Corp Tobacco	80	1.0%	158 bps	6 bps	6 bps	6 bps	-25 bps	\$85.4	6.65%	6.5	BBB1	-2.13%	-2.34%	-2.34%	-0.16%	8.45%	-48 bps	-51 bps	-51 bps	383 bps	931 bps
US Corp Consumer Products	119	0.9%	86 bps	6 bps	8 bps	8 bps	-10 bps	\$86.7	5.89%	6.0	A2	-1.82%	-2.00%	-2.00%	-1.56%	3.59%	-38 bps	-44 bps	-44 bps	193 bps	402 bps

Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH

Exhibit 10: Recent Sector New Issuance

Consumer/Retail new issuance tracker in reverse chronological order

Issue Date	Ticker	Issuer	Rating (Moody's/S&P)	Size	Coupon	Maturity	New Issue Spread
10/19/2023	AZO	AUTOZONE	Baa1/BBB	\$500	6.250%	11/01/2028	132
10/19/2023	AZO	AUTOZONE	Baa1/BBB	\$500	6.550%	11/01/2033	162
10/11/2023	SJM	JM SMUCKER	Baa2/BBB	\$750	5.900%	11/15/2028	130
10/11/2023	SJM	JM SMUCKER	Baa2/BBB	\$1,000	6.200%	11/15/2033	160
10/11/2023	SJM	JM SMUCKER	Baa2/BBB	\$750	6.500%	11/15/2043	163
10/11/2023	SJM	JM SMUCKER	Baa2/BBB	\$1,000	6.500%	11/15/2053	180
10/10/2023	GIS	GENERAL MILLS	Baa2/BBB	\$500	5.500%	10/17/2028	103
10/04/2023	DRI	DARDEN RESTAURANTS	Baa2/BBB	\$500	6.300%	10/10/2033	165
10/02/2023	DGELN	DIAGEO CAPITAL	A3/A-	\$800	5.375%	10/05/2026	60
10/02/2023	DGELN	DIAGEO CAPITAL	A3/A-	\$900	5.625%	10/05/2034	100
09/27/2023	PPC	PILGRIM'S PRIDE CORP	Ba2/BBB-	\$500	6.875%	05/15/2034	250
09/06/2023	NESNVX	NESTLE HOLDINGS	A3/AA-	\$500	5.000%	09/12/2028	57
09/06/2023	NESNVX	NESTLE HOLDINGS	A3/AA-	\$500	5.000%	09/12/2030	67
09/06/2023	NESNVX	NESTLE HOLDINGS	A3/AA-	\$500	5.000%	09/12/2033	77
09/05/2023	UNANA	UNILEVER CAPITAL CORP	A1/A+	\$700	4.875%	09/08/2028	55
09/05/2023	UNANA	UNILEVER CAPITAL CORP	A1/A+	\$800	5.000%	12/08/2033	85
09/05/2023	JBSSBZ	JBS USA	Baa3/BBB-	\$1,600	6.750%	03/15/2034	250
09/05/2023	JBSSBZ	JBS USA	Baa3/BBB-	\$900	7.250%	11/15/2053	290
09/05/2023	PM	PHILIP MORRIS INTERNATIONAL	A2/A-	\$650	5.250%	09/07/2028	105
09/05/2023	PM	PHILIP MORRIS INTERNATIONAL	A2/A-	\$700	5.500%	09/07/2030	135
09/05/2023	PM	PHILIP MORRIS INTERNATIONAL	A2/A-	\$1,000	5.625%	09/07/2033	160
08/14/2023	MCD	MCDONALD'S CORP	Baa1/BBB+	\$600	4.800%	08/14/2028	68
08/14/2023	MCD	MCDONALD'S CORP	Baa1/BBB+	\$600	4.950%	08/14/2033	98
08/14/2023	MCD	MCDONALD'S CORP	Baa1/BBB+	\$800	5.450%	08/14/2053	128
07/31/2023	BATSLN	BRITISH AMERICAN TOBACCO	Baa2/BBB+	\$1,000	5.931%	02/02/2029	175
07/31/2023	BATSLN	BRITISH AMERICAN TOBACCO	Baa2/BBB+	\$1,000	6.343%	08/02/2030	225
07/31/2023	BATSLN	BRITISH AMERICAN TOBACCO	Baa2/BBB+	\$1,250	6.421%	08/02/2033	245
07/31/2023	BATSLN	BRITISH AMERICAN TOBACCO	Baa2/BBB+	\$750	7.079%	08/02/2043	285
07/31/2023	BATSLN	BRITISH AMERICAN TOBACCO	Baa2/BBB+	\$1,000	7.081%	08/02/2053	305
07/18/2023	AZO	AUTOZONE	Baa1/BBB	\$450	5.050%	07/15/2026	75
07/18/2023	AZO	AUTOZONE	Baa1/BBB	\$300	5.200%	08/01/2033	143
07/17/2023	CAG	CONAGRA BRANDS	Baa3/BBB-	\$500	5.300%	10/01/2026	100
06/06/2023	BACARD	BACARDI	Baa3/BBB-	\$400	5.250%	01/15/2029	140
06/06/2023	BACARD	BACARDI	Baa3/BBB-	\$700	5.400%	06/15/2033	175
06/06/2023	BACARD	BACARDI	Baa3/BBB-	\$400	5.900%	06/15/2043	190
06/05/2023	DG	DOLLAR GENERAL	Baa2/BBB	\$500	5.200%	07/05/2028	137
06/05/2023	DG	DOLLAR GENERAL	Baa2/BBB	\$1,000	5.450%	07/05/2033	177
05/09/2023	EL	ESTEE LAUDER	A1/A+	\$700	4.375%	05/15/2028	90
05/09/2023	EL	ESTEE LAUDER	A1/A+	\$700	4.650%	05/15/2033	115
05/09/2023	EL	ESTEE LAUDER	A1/A+	\$600	5.150%	05/15/2053	135
05/01/2023	HSY	HERSHEY	A1/A	\$350	4.250%	05/04/2028	67
05/01/2023	HSY	HERSHEY	A1/A	\$400	4.500%	05/04/2033	97
05/01/2023	TSCO	TRACTOR SUPPLY	Baa1/BBB	\$750	5.250%	05/15/2033	175
04/27/2023	STZ	CONSTELLATION BRANDS	Baa3/BBB	\$750	4.900%	05/01/2033	147
04/17/2023	MARS	MARS	A1/A	\$1000	4.550%	04/20/2028	87
04/17/2023	MARS	MARS	A1/A	\$500	4.650%	04/20/2031	105
04/17/2023	MARS	MARS	A1/A	\$1000	4.750%	04/20/2033	117
04/17/2023	CARGIL	CARGILL	A2/A	\$600	4.500%	06/24/2026	65
04/17/2023	CARGIL	CARGILL	A2/A	\$500	4.750%	04/24/2033	120
04/12/2023	WMT	WALMART	Aa2/AA	\$750	4.000%	04/15/2026	30
04/12/2023	WMT	WALMART	Aa2/AA	\$750	3.900%	04/15/2028	47
04/12/2023	WMT	WALMART	Aa2/AA	\$500	4.000%	04/15/2030	60
04/12/2023	WMT	WALMART	Aa2/AA	\$1500	4.100%	04/15/2033	70
04/12/2023	WMT	WALMART	Aa2/AA	\$1500	4.500%	04/15/2053	90
04/04/2023	PPC	PILGRIM'S PRIDE	Ba3/BBB-	\$1,000	6.250%	07/01/2033	300
04/03/2023	MKC	MCCORMICK & CO	Baa2/BBB	\$500	4.950%	04/15/2033	153
03/29/2023	ADM	ARCHER-DANIELS-MIDLAND	A2/A	\$500	4.500%	08/15/2033	105
03/28/2023	LOW	LOWE'S	Baa1/BBB+	\$1000	4.800%	04/01/2026	95
03/28/2023	LOW	LOWE'S	Baa1/BBB+	\$1000	5.150%	07/01/2033	160
03/28/2023	LOW	LOWE'S	Baa1/BBB+	\$500	5.750%	07/01/2053	200
03/28/2023	LOW	LOWE'S	Baa1/BBB+	\$500	5.850%	04/01/2063	210
03/27/2023	GIS	GENERAL MILLS	Baa2/BBB	\$1000	4.950%	03/29/2033	145
03/21/2023	BFB	BROWN FORMAN	A1/A-	\$650	4.750%	04/15/2033	120
03/08/2023	KVUE	KENVUE	A1/A	\$750	5.500%	03/22/2025	45
03/08/2023	KVUE	KENVUE	A1/A	\$750	5.350%	03/22/2026	60
03/08/2023	KVUE	KENVUE	A1/A	\$1000	5.050%	03/22/2028	75
03/08/2023	KVUE	KENVUE	A1/A	\$1000	5.000%	03/22/2030	85

Source: BofA Global Research, Bloomberg Data excludes FRN

BoFA GLOBAL RESEARCH



**Exhibit 11: Retail Historical Spread & Return Monitor**

Benchmark spreads and credit metrics by issuer

Issuer	Coupon	Maturity	Outstanding (\$mil)	Ratings Mdy/S&P/Fit	Outlook	Current Pricing				5-yr CDS	LTM Revenue	LTM EBITDAR	Debt	Cash	Net FCF	Credit Metrics			
						Bid	YTW	G-spd	T-spd							Total Debt/ EBITDAR	Net Debt/ EBITDAR	EV / EBITDAR	
Walmart Inc (WMT)	4.100%	4/15/2033	\$1,500	Aa2 / AA / AA	S / S / S	\$89.0	5.61%	73	69	36	\$630,794	\$39,701	\$64,801	\$13,888	\$8,032	1.6x	1.3x	\$487,930	11.8x
Walmart Inc (WMT)	4.500%	4/15/2053	\$1,500	Aa2 / AA / AA	S / S / S	\$79.3	6.01%	94	92										
Costco Wholesale Corp (COST)	1.600%	4/20/2030	\$1,750	Aa3 / A+ / --	S / S / --	\$78.7	5.55%	62	64	50	\$233,371	\$10,379	\$9,004	\$12,493	\$3,506	0.9x	-0.3x	\$238,691	21.6x
Costco Wholesale Corp (COST)	1.750%	4/20/2032	\$1,000	Aa3 / A+ / --	S / S / --	\$74.6	5.54%	62	62										
Nike Inc (NKE)	2.850%	3/27/2030	\$1,500	A1 / AA- / --	S / S / --	\$85.0	5.66%	74	75	74	\$51,217	\$7,359	\$12,144	\$7,441	(\$1,969)	2.1x	1.1x	\$160,311	22.6x
Nike Inc (NKE)	3.375%	3/27/2050	\$1,500	A1 / AA- / --	S / S / --	\$66.6	5.88%	74	73										
Target Corp (TGT)	4.400%	1/15/2033	\$500	A2 / A / A	S / S / S	\$89.4	5.90%	102	98	41	\$107,638	\$7,413	\$18,366	\$1,617	(\$481)	2.5x	2.3x	\$67,384	13.3x
Target Corp (TGT)	4.800%	1/15/2053	\$1,150	A2 / A / A	S / S / S	\$80.7	6.24%	123	115										
TJX Companies Inc (TJX)	1.600%	5/15/2031	\$500	A2 / A / --	S / S / --	\$74.6	5.81%	85	89	57	\$51,227	\$8,126	\$2,861	\$4,550	\$1,535	1.5x	1.0x	\$108,892	13.2x
TJX Companies Inc (TJX)	4.500%	4/15/2050	\$385	A2 / A / --	S / S / --	\$78.1	6.20%	105	105										
Ralph Lauren Corp (RL)	2.950%	6/15/2030	\$750	A3 / A- / --	S / S / --	\$83.2	6.06%	111	115	--	\$6,450	\$919	\$2,882	\$1,607	(\$493)	3.1x	1.4x	\$8,402	7.0x
Amazon.com Inc (AMZN)	3.600%	4/13/2032	\$2,500	A1 / AA / AA-	S / S / S	\$86.4	5.64%	72	72										
Amazon.com Inc (AMZN)	3.950%	4/13/2052	\$2,500	A1 / AA / AA-	S / S / S	\$73.0	5.93%	85	82										
Ross Stores Inc (ROST)	1.875%	4/15/2031	\$500	A2 / BBB+ / --	S / S / --	\$73.7	6.36%	140	143	--	\$19,209	\$3,323	\$5,780	\$4,584	\$681	1.7x	0.4x	\$40,061	13.6x
Best Buy Co Inc (BBY)	1.950%	10/1/2030	\$650	A3 / BBB+ / --	S / S / --	\$75.4	6.41%	146	148	96	\$44,372	\$3,518	\$4,029	\$1,093	\$345	1.1x	0.8x	\$17,944	5.7x
Home Depot Inc (HD)	4.500%	9/15/2032	\$1,250	A2 / A / A	S / S / S	\$91.4	5.74%	82	82	35	\$154,876	\$27,354	\$49,493	\$2,814	\$784	1.9x	1.8x	\$334,248	13.1x
Home Depot Inc (HD)	4.950%	9/15/2052	\$1,000	A2 / A / A	S / S / S	\$82.6	6.26%	118	116										
Lowe's Companies Inc (LOW)	5.000%	4/15/2033	\$1,250	Baa1 / BBB+ / --	S / S / --	\$90.7	6.31%	138	140	56	\$93,227	\$15,064	\$40,576	\$3,868	(\$6,125)	2.7x	2.5x	\$147,015	10.8x
Lowe's Companies Inc (LOW)	5.625%	4/15/2053	\$1,500	Baa1 / BBB+ / --	S / S / --	\$85.7	6.75%	169	166										
VF Corp (VFC)	2.950%	4/23/2030	\$750	Baa2 / BBB / --	N / S / --	\$77.1	7.46%	257	255	178	\$11,437	\$1,048	\$8,151	\$807	(\$1,527)	7.8x	7.0x	\$13,965	9.0x
Tractor Supply (TSCO)	1.750%	11/1/2030	\$650	Baa1 / BBB+ / --	S / S / --	\$73.7	6.47%	154	155	--	\$14,761	\$2,285	\$4,844	\$620	(\$346)	2.1x	1.8x	\$25,932	13.0x
AutoZone Inc (AZO)	4.750%	8/1/2032	\$750	Baa1 / BBB / BBB	S / S / S	\$88.8	6.44%	152	152	52	\$17,115	\$4,323	\$7,340	\$275	(\$1,162)	2.3x	2.3x	\$52,169	11.7x
AutoZone Inc (AZO)	4.750%	2/1/2033	\$550	Baa1 / BBB / BBB	S / S / S	\$88.1	6.48%	156	156										
O' Reilly Automotive (ORLY)	1.750%	3/15/2031	\$500	Baa1 / BBB / --	S / S / --	\$73.5	6.29%	133	137	--	\$15,220	\$3,894	\$7,125	\$58	(\$217)	1.9x	1.9x	\$60,801	16.1x
O' Reilly Automotive (ORLY)	4.700%	6/15/2032	\$850	Baa1 / BBB / --	S / S / --	\$88.5	6.46%	153	154										
Genuine Parts Co. (GPC)	2.750%	2/1/2032	\$500	Baa1 / BBB / --	S / S / --	\$75.5	6.65%	173	173	--	\$22,879	\$2,395	\$4,266	\$530	(\$141)	2.3x	2.1x	\$21,459	12.4x
Advance Auto Parts (AAP)	3.900%	4/15/2030	\$500	Baa2 / BB+ / --	N / S / --	\$81.0	7.69%	276	278	--	\$11,219	\$1,494	\$4,585	\$277	(\$545)	3.1x	2.8x	\$6,805	7.8x
Advance Auto Parts (AAP)	3.500%	3/15/2032	\$501	Baa2 / BB+ / --	N / S / --	\$73.0	7.97%	298	305										
Dollar General Corp (DG)	5.450%	7/5/2033	\$1,000	Baa2 / BBB / --	S / S / --	\$90.4	6.82%	195	190	--	\$38,807	\$5,563	\$18,036	\$353	(\$2,062)	3.2x	3.2x	\$43,236	11.9x
Dollar General Corp (DG)	5.500%	11/1/2052	\$300	Baa2 / BBB / --	S / S / --	\$79.4	7.20%	210	210										
Dollar Tree Inc (DLTR)	2.650%	12/1/2031	\$800	Baa2 / BBB / --	S / S / --	\$75.5	6.60%	169	168	--	\$29,310	\$3,907	\$10,350	\$513	(\$115)	2.6x	2.5x	\$34,062	9.2x
Dollar Tree Inc (DLTR)	3.375%	12/1/2051	\$400	Baa2 / BBB / --	S / S / --	\$56.0	6.96%	186	184										
Tapestry Inc (TPR)	3.050%	3/15/2032	\$500	Baa2 *- / BBB / --	UR / N / --	\$70.8	7.87%	290	295	--	\$6,661	\$1,678	\$3,292	\$726	(\$196)	2.0x	1.5x	\$8,892	7.4x
PVH Corp. (PVH)	4.625%	7/10/2025	\$499	Baa3 / BBB- / --	S / P / --	\$96.1	7.09%	179	194	--	\$9,134	\$1,429	\$3,789	\$373	(\$304)	2.7x	2.4x	\$7,853	5.7x
Dick's Sporting Goods (DKS)	3.150%	1/15/2032	\$750	Baa3 / BBB / --	S / S / --	\$74.9	7.25%	233	233	--	\$12,621	\$1,644	\$4,205	\$1,902	(\$64)	2.6x	1.4x	\$11,533	5.2x
Dick's Sporting Goods (DKS)	4.100%	1/15/2052	\$750	Baa3 / BBB / --	S / S / --	\$57.3	7.90%	280	279										
Nordstrom Inc (JWN)	4.250%	8/1/2031	\$425	Ba1 / BB+ / BB+	N / N / S	\$70.8	9.69%	470	477	258	\$14,818	\$1,471	\$4,474	\$885	\$440	3.0x	2.4x	\$5,801	4.8x
Nordstrom Inc (JWN)	5.000%	1/15/2044	\$966	Ba1 / BB+ / BB+	N / N / S	\$56.8	10.03%	472	475										
Kohl's Corporation (KSS)	4.625%	5/1/2031	\$500	Ba3 / BB / BBB-	N / N / N	\$64.3	11.97%	693	705	258	\$17,762	\$1,199	\$7,992	\$204	(\$282)	6.7x	6.5x	\$10,109	8.3x
Kohl's Corporation (KSS)	5.550%	7/17/2045	\$427	Ba3 / BB / BBB-	N / N / N	\$53.5	11.35%	601	610										

Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH

Exhibit 12: Restaurant, Food & Drug Retail Historical Spread & Return Monitor

Benchmark spread and credit metrics by issuer

																Credit Metrics				
			Outstanding	Ratings	Current Pricing				5-yr	LTM			Net	Total Debt/	Net Debt/	EV /				
Issuer	Coupon	Maturity	(\$mil)	Mdy/S&P/Fit	Outlook	Bid	YTW	G- spd	T- spd	CDS	Revenue	EBITDAR	Debt	Cash	FCF	EBITDAR	EBITDAR	EV	EBITDAR	
Starbucks Corp (SBUX)	2.250%	3/12/2030	\$750	Baa1 / BBB+ / --	S / S / --	\$79.9	6.10%	113	120	--	\$35,016	\$8,314	\$24,371	\$3,620	\$73	2.9x	2.5x	\$128,649	14.8x	
Starbucks Corp (SBUX)	2.550%	11/15/2030	\$1,250	Baa1 / BBB+ / --	S / S / --	\$79.8	6.11%	118	119											
Starbucks Corp (SBUX)	3.000%	2/14/2032	\$1,000	Baa1 / BBB+ / --	S / S / --	\$80.0	6.11%	118	119											
Starbucks Corp (SBUX)	4.800%	2/15/2033	\$500	Baa1 / BBB+ / --	S / S / --	\$91.3	6.03%	115	111											
Starbucks Corp (SBUX)	3.350%	3/12/2050	\$500	Baa1 / BBB+ / --	S / S / --	\$60.8	6.46%	131	131											
Starbucks Corp (SBUX)	3.500%	11/15/2050	\$1,250	Baa1 / BBB+ / --	S / S / --	\$62.6	6.43%	132	129											
McDonald's Corp (MCD)	3.600%	7/1/2030	\$1,000	Baa1 / BBB+ / --	S / S / --	\$86.7	6.05%	112	113	38	\$24,194	\$14,653	\$47,784	\$1,626	\$78	3.3x	3.2x	\$233,256	17.3x	
McDonald's Corp (MCD)	4.600%	9/9/2032	\$750	Baa1 / BBB+ / --	S / S / --	\$91.2	5.89%	102	97											
McDonald's Corp (MCD)	4.950%	8/14/2033	\$600	Baa1 / BBB+ / --	S / S / --	\$91.6	6.11%	119	119											
McDonald's Corp (MCD)	4.200%	4/1/2050	\$750	Baa1 / BBB+ / --	S / S / --	\$72.7	6.34%	120	119											
McDonald's Corp (MCD)	5.150%	9/9/2052	\$750	Baa1 / BBB+ / --	S / S / --	\$84.2	6.35%	127	125											
McDonald's Corp (MCD)	5.450%	8/14/2053	\$800	Baa1 / BBB+ / --	S / S / --	\$88.0	6.35%	129	127											
Kroger Co (KR)	1.700%	1/15/2031	\$500	Baa1 / BBB / --	N / N / --	\$72.9	6.45%	149	153	74	\$148,039	\$7,946	\$19,829	\$2,420	\$1,881	2.5x	2.2x	\$48,943	6.2x	
Kroger Co (KR)	5.400%	1/15/2049	\$600	Baa1 / BBB / --	N / N / --	\$83.6	6.77%	159	159											
Kroger Co (KR)	3.950%	1/15/2050	\$750	Baa1 / BBB / --	N / N / --	\$66.6	6.66%	151	150											
7-Eleven Inc. (SVELEV)	1.800%	2/10/2031	\$1,700	Baa2 / A / --	S / S / --	\$74.4	6.22%	130	130	--	--	--	--	--	--	--	--	--	--	
7-Eleven Inc. (SVELEV)	2.800%	2/10/2051	\$1,250	Baa2 / A / --	S / S / --	\$53.1	6.49%	137	135											
Alimentation Couche-Tard (ATDBCN)	2.950%	1/25/2030	\$750	Baa1 / BBB+ / --	S / S / --	\$82.5	6.40%	148	151	--	\$68,822	\$5,771	\$9,466	\$1,957	(\$229)	1.6x	1.3x	\$59,914	10.1x	
Alimentation Couche-Tard (ATDBCN)	3.625%	5/13/2051	\$350	Baa1 / BBB+ / --	S / S / --	\$59.4	6.96%	184	183											
Darden Restaurant Inc (DRI)	3.850%	5/1/2027	\$500	Baa2 / BBB / BBB	S / S / S	\$92.6	6.23%	130	133	60	\$10,488	\$3,907	\$8,872	\$368	(\$32)	3.0x	2.8x	\$22,290	12.8x	
Darden Restaurant Inc (DRI)	6.300%	10/10/2033	\$500	Baa2 / BBB / BBB	S / S / S	\$96.4	6.81%	188	188											
Darden Restaurant Inc (DRI)	4.550%	2/15/2048	\$300	Baa2 / BBB / BBB	S / S / S	\$71.6	6.99%	180	180											
Albertson Cos Inc (ACI)	4.875%	2/15/2030	\$1,000	Ba3 *+ / BB+ *+ / --	-- / -- / --	\$87.5	7.39%	244	248	116	\$78,761	\$3,885	\$15,036	\$266	(\$3,537)	3.9x	3.8x	\$27,180	5.5x	

Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH





Exhibit 13: Consumer Products Historical Spread & Return Monitor

Benchmark spread and credit metrics by issuer

Issuer	Coupon	Maturity	Outstanding (\$mil)	Ratings Mdy/S&P/Fit	Outlook	Current Pricing				5-yr CDS	Revenue	LTM EBITDA	Debt	Cash	Net FCF	Credit Metrics			
						Bid	YTW	G-spd	T-spd							Total Debt/ EBITDA	Net Debt/ EBITDA	EV	EV / EBITDA
Procter & Gamble (PG)	2.300%	2/1/2032	\$850	Aa3 / AA- / --	S / S / --	\$79.5	5.41%	48	49	32	\$82,006	\$21,516	\$34,607	\$8,246	(\$1,297)	1.6x	1.2x	\$378,220	18.1x
Procter & Gamble (PG)	4.050%	1/26/2033	\$850	Aa3 / AA- / --	S / S / --	\$90.2	5.42%	49	50										
Procter & Gamble (PG)	3.600%	3/25/2050	\$491	Aa3 / AA- / --	S / S / --	\$70.9	5.76%	60	60										
Colgate-Palmolive Co (CL)	3.250%	8/15/2032	\$500	Aa3 / AA- / --	S / N / --	\$84.7	5.45%	52	53	35	\$18,676	\$4,334	\$8,989	\$819	\$10	2.2x	2.0x	\$68,296	16.8x
Colgate-Palmolive Co (CL)	4.600%	3/1/2033	\$500	Aa3 / AA- / --	S / N / --	\$93.8	5.45%	53	54										
Colgate-Palmolive Co (CL)	3.700%	8/1/2047	\$500	Aa3 / AA- / --	S / N / --	\$72.7	5.84%	63	63										
Unilever Capital Corp (UNANA)	1.750%	8/12/2031	\$850	A1 / A+ / Au	S / S / S	\$74.8	5.81%	86	89	20	\$60,878	\$10,350	\$29,386	\$4,994	(\$284)	2.8x	2.4x	\$141,761	12.7x
Unilever Capital Corp (UNANA)	5.000%	12/8/2033	\$800	A1 / A+ / Au	S / S / S	\$93.3	5.88%	95	95										
Unilever Capital Corp (UNANA)	2.625%	8/12/2051	\$650	A1 / A+ / Au	S / S / S	\$55.7	5.88%	75	75										
Kimberly-Clark Corp (KMB)	2.000%	11/2/2031	\$600	A2 / A / --	S / S / --	\$76.1	5.76%	81	84	58	\$20,346	\$3,632	\$8,135	\$580	\$822	2.3x	2.1x	\$49,323	15.4x
Kimberly-Clark Corp (KMB)	4.500%	2/16/2033	\$350	A2 / A / --	S / S / --	\$90.9	5.78%	84	86										
Kimberly-Clark Corp (KMB)	2.875%	2/7/2050	\$500	A2 / A / --	S / S / --	\$59.8	5.90%	79	75										
SC Johnson & Son Inc (SCJOHN)	4.750%	10/15/2046	\$850	Baa1 / BBB+ / --	S / S / --	\$80.2	6.41%	120	119	--	--	--	--	--	--	--	--	--	--
Estee Lauder Co Inc (EL)	4.650%	5/15/2033	\$700	A1 / A+ / --	N / N / --	\$90.4	5.98%	111	106	--	\$15,937	\$2,567	\$8,114	\$4,029	(\$468)	3.4x	2.1x	\$56,628	25.6x
Estee Lauder Co Inc (EL)	5.150%	5/15/2053	\$600	A1 / A+ / --	N / N / --	\$85.3	6.25%	118	116										
Kenvue (KVUE)	5.000%	3/22/2030	\$27	A1 / A / --	S / S / --	\$95.2	5.90%	84	100	--	\$14,950	\$3,606	\$8,955	\$1,231	-	2.5x	2.1x	-	-
Kenvue (KVUE)	4.900%	3/22/2033	\$26	A1 / A / --	S / S / --	\$93.4	5.82%	89	90										
Kenvue (KVUE)	5.050%	3/22/2053	\$0	A1 / A / --	S / S / --	\$85.3	6.14%	105	105										
Reckitt Benckiser TSY (RKTILN)	3.000%	6/26/2027	\$2,500	A3 / A- / --	S / S / --	\$90.8	5.81%	86	91	--	\$13,234	\$3,239	\$9,637	\$1,259	\$1,258	3.0x	2.6x	\$53,852	16.6x
Church & Dwight Co Inc (CHD)	5.600%	11/15/2032	\$500	A3 / BBB+ / --	S / S / --	\$96.7	6.08%	115	116	--	\$5,637	\$1,295	\$2,405	\$397	\$718	1.9x	1.6x	\$24,631	17.7x
Church & Dwight Co Inc (CHD)	3.950%	8/1/2047	\$400	A3 / BBB+ / --	S / S / --	\$71.5	6.27%	107	107										
Church & Dwight Co Inc (CHD)	5.000%	6/15/2052	\$500	A3 / BBB+ / --	S / S / --	\$82.1	6.37%	126	126										
Clorox Company (CLX)	1.800%	5/15/2030	\$500	Baa1 / BBB+ / --	S / S / --	\$75.8	6.37%	138	146	84	\$7,389	\$1,153	\$2,614	\$367	\$380	2.5x	2.2x	\$18,011	14.7x
Clorox Company (CLX)	4.600%	5/1/2032	\$600	Baa1 / BBB+ / --	S / S / --	\$89.3	6.24%	130	132										
Haleon Plc (HLNLN)	3.625%	3/24/2032	\$1,998	Baa1 / BBB / --	S / -- / --	\$82.96	6.26%	133	134	--	\$9,545	\$2,413	\$9,782	\$405	\$25	4.1x	3.9x	\$40,631	16.8x
Haleon Plc (HLNLN)	4.000%	3/24/2052	\$1,000	Baa1 / BBB / --	S / -- / --	\$69.6	6.31%	121	120										
Whirlpool Corp (WHR)	4.700%	5/14/2032	\$300	Baa1 / BBB / BBB	S / N / N	\$88.3	6.51%	156	159	155	\$19,148	\$1,466	\$7,720	\$1,309	\$182	5.4x	4.4x	\$14,267	7.4x
Whirlpool Corp (WHR)	5.500%	3/1/2033	\$300	Baa1 / BBB / BBB	S / N / N	\$92.6	6.57%	163	165										
Whirlpool Corp (WHR)	4.600%	5/15/2050	\$500	Baa1 / BBB / BBB	S / N / N	\$72.1	6.91%	177	176										
Hasbro Inc (HAS)	3.900%	11/19/2029	\$900	Baa2 / BBB / BBB-	S / S / S	\$86.7	6.59%	168	169	182	\$5,565	\$970	\$3,886	\$217	(\$253)	4.0x	3.8x	\$11,442	7.7x
Hasbro Inc (HAS)	5.100%	5/15/2044	\$300	Baa2 / BBB / BBB-	S / S / S	\$77.5	7.22%	197	194										
Brunswick Corp (BC)	2.400%	8/18/2031	\$550	Baa2 / BBB- / BBB	S / S / S	\$70.5	7.45%	252	253	258	\$6,727	\$1,117	\$2,635	\$478	(\$361)	2.4x	1.9x	\$7,152	5.7x
Brunswick Corp (BC)	4.400%	9/15/2032	\$450	Baa2 / BBB- / BBB	S / S / S	\$78.1	7.88%	294	296										
Brunswick Corp (BC)	5.100%	4/1/2052	\$300	Baa2 / BBB- / BBB	S / S / S	\$65.2	8.31%	321	320										
Mattel Inc (MAT)	3.750%	4/1/2029	\$600	Baa3 / BBB- / BB+	S / P / P	\$86.6	6.73%	186	185	328	\$5,059	\$597	\$2,672	\$300	\$256	4.5x	4.0x	\$9,449	7.8x
Newell Brands Inc (NWL)	6.625%	9/15/2029	\$500	Ba2 / BB / BB	N / N / N	\$91.0	8.60%	361	371	531	\$8,546	\$1,226	\$6,010	\$317	(\$1,294)	4.9x	4.6x	\$8,369	9.1x
Newell Brands Inc (NWL)	6.500%	4/1/2046	\$666	Ba2 / BB / BB	N / N / N	\$68.5	10.06%	481	483										

Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH

Exhibit 14: Packaged Food Spread & Return Monitor

Benchmark spread and credit metrics by issuer

Issuer	Coupon	Maturity	Outstanding (\$mil)	Ratings	Mdy/S&P/Fit	Outlook	Current Pricing				5-yr CDS	LTM				Net FCF	Credit Metrics			
							Bid	YTW	spd	T- spd		Revenue	EBITDA	Debt	Cash		Total Debt/	Net Debt/	EV /	
EBITDA	EBITDA	EV	EBITDA																	
Nestle Holdings Inc. (NESNVX)	4.850%	3/14/2033	\$650	Aa3 / AA- / A+	S / S / S		\$93.7	5.72%	78	80	34	CHF 95,498	CHF 16,476	CHF 53,501	CHF 3,667	(CHF 11,485)	3.2x	3.0x	\$317,758	18.5x
Nestle Holdings Inc. (NESNVX)	4.700%	1/15/2053	\$1,000	Aa3 / AA- / A+	S / S / S		\$84.3	5.83%	76	73										
Hershey Company (HSY)	4.500%	5/4/2033	\$400	A1 / A / --	S / S / --		\$91.9	5.61%	70	70	41	\$10,858	\$2,966	\$4,954	\$446	\$588	1.8x	1.7x	\$44,010	18.4x
Hershey Company (HSY)	2.650%	6/1/2050	\$350	A1 / A / --	S / S / --		\$56.0	5.97%	83	82										
Mars Inc. (MARS)	1.625%	7/16/2032	\$700	A1 / A+ / --	S / S / --		\$71.5	5.83%	90	91	--	--	--	--	--	--	--	--	--	--
Mars Inc. (MARS)	2.450%	7/16/2050	\$400	A1 / A+ / --	S / S / --		\$51.1	6.23%	110	108										
Hormel Foods (HRL)	1.800%	6/11/2030	\$1,000	A1 / A- / --	S / S / --		\$79.6	5.52%	62	61	--	\$12,267	\$1,457	\$3,421	\$669	\$298	2.3x	1.9x	\$19,676	18.1x
Hormel Foods (HRL)	3.050%	6/3/2051	\$600	A1 / A- / --	S / S / --		\$60.0	6.05%	94	92										
Archer-Daniels-Midland Co (ADM)	4.500%	8/15/2033	\$500	A2 / A / A	S / S / S		\$89.9	5.86%	97	95	65	\$100,176	\$3,306	\$10,288	\$1,426	(\$190)	3.1x	2.7x	\$47,815	10.9x
Archer-Daniels-Midland Co (ADM)	2.700%	9/15/2051	\$750	A2 / A / A	S / S / S		\$56.1	5.94%	83	81										
Cargill Inc (CARGIL)	4.750%	4/24/2033	\$500	A2 / A / A	S / S / S		\$91.8	5.89%	100	98	57	--	--	--	--	--	--	--	--	--
Cargill Inc (CARGIL)	4.375%	4/22/2052	\$500	A2 / A / A	S / S / S		\$76.4	6.14%	103	103										
Danone SA (BNFP)	0.395%	6/10/2029	\$800	Baa1 / BBB+ / --	S / S / --		\$82.6	3.90%	109	112	51	\$28,503	\$4,787	\$14,799	\$1,880	\$853	3.1x	2.7x	\$48,246	10.1x
Mondelez International Holdings Netherlands BV (MIHN)	1.250%	9/24/2026	\$350	A3 / BBB / --	S / S / --		\$88.0	5.80%	83	86										
Mondelez International (MDLZ)	3.000%	3/17/2032	\$750	Baa1 / BBB / --	S / S / --		\$79.3	6.21%	126	129	58	\$34,130	\$6,518	\$21,226	\$1,482	(\$272)	3.5x	3.3x	\$108,103	17.8x
Mondelez International (MDLZ)	2.625%	9/4/2050	\$1,125	Baa1 / BBB / WD	S / S / --		\$52.4	6.34%	120	120										
Ingredion Inc (INGR)	2.900%	6/1/2030	\$600	Baa1 / BBB / BBB	S / S / S		\$82.2	6.23%	130	131	--	\$8,216	\$1,114	\$2,461	\$257	(\$65)	2.3x	2.1x	\$8,210	8.4x
Ingredion Inc (INGR)	3.900%	6/1/2050	\$400	Baa1 / BBB / BBB	S / S / S		\$63.1	6.96%	181	181										
Sysco Corporation (SY)	2.450%	12/14/2031	\$450	Baa1 / BBB / BBB	S / S / S		\$75.5	6.35%	140	143	64	\$76,325	\$3,846	\$11,166	\$745	\$657	2.9x	2.7x	\$43,597	11.4x
Sysco Corporation (SY)	3.150%	12/14/2051	\$800	Baa1 / BBB / BBB	S / S / S		\$56.6	6.54%	143	143										
McCormick & Co (MKC)	4.950%	4/15/2033	\$500	Baa2 / BBB / --	S / N / --		\$89.5	6.44%	155	153	--	\$6,516	\$1,314	\$4,864	\$127	\$177	3.7x	3.7x	\$20,810	24.0x
McCormick & Co (MKC)	4.200%	8/15/2047	\$300	Baa2 / BBB / --	S / N / --		\$71.8	6.56%	137	135										
General Mills Inc (GIS)	4.950%	3/29/2033	\$1,000	Baa2 / BBB / --	S / S / --		\$90.0	6.38%	145	146	55	\$20,094	\$4,093	\$11,706	\$586	(\$370)	3.0x	2.9x	\$49,072	14.8x
General Mills Inc (GIS)	3.000%	2/1/2051	\$605	Baa2 / BBB / --	S / S / --		\$56.3	6.42%	128	128										
Kellogg Co (K)	5.250%	3/1/2033	\$400	Baa2 / BBB / BBB	S / N / S		\$91.0	6.55%	162	163	73	\$15,873	\$2,486	\$7,330	\$308	\$212	3.6x	3.5x	\$24,337	12.7x
Kellogg Co (K)	4.500%	4/1/2046	\$650	Baa2 / BBB / BBB	S / N / S		\$74.0	6.77%	154	153										
Flowers Foods Inc (FLO)	2.400%	3/15/2031	\$500	Baa2 / BBB / BBB	S / S / S		\$76.6	6.42%	147	150	--	\$5,003	\$571	\$1,175	\$12	(\$29)	2.1x	2.0x	\$5,754	12.5x
JM Smucker Co (SJM)	2.125%	3/15/2032	\$500	Baa2 / BBB / --	S / N / --		\$72.3	6.46%	151	154	--	\$8,529	\$1,599	\$4,428	\$656	(\$59)	2.7x	2.3x	\$15,327	11.5x
JM Smucker Co (SJM)	3.550%	3/15/2050	\$300	Baa2 / BBB / --	S / N / --		\$59.9	6.86%	171	171										
Tyson Foods Inc (TSN)	4.350%	3/1/2029	\$1,000	Baa2 / BBB+ / BBB	S / N / S		\$91.8	6.17%	130	130	84	\$53,270	\$2,730	\$9,320	\$699	(\$908)	3.4x	3.2x	\$25,963	5.5x
Tyson Foods Inc (TSN)	5.100%	9/28/2048	\$1,500	Baa2 / BBB+ / BBB	S / N / S		\$76.0	7.18%	197	200										
Campbell Soup Co (CPB)	2.375%	4/24/2030	\$500	Baa2 / BBB- / BBB*	S / S / --		\$78.5	6.48%	155	157	68	\$9,276	\$1,763	\$4,759	\$223	\$63	2.9x	2.8x	\$16,680	10.1x
Campbell Soup Co (CPB)	3.125%	4/24/2050	\$500	Baa2 / BBB- / BBB*	S / S / --		\$55.9	6.71%	157	156										
Conagra Brands Inc (CAG)	7.000%	10/1/2028	\$382	Baa3 / BBB- / BBB-	S / S / S		\$104.0	6.05%	114	119	58	\$12,277	\$2,520	\$9,239	\$94	(\$138)	3.7x	3.7x	\$22,173	11.1x
Conagra Brands Inc (CAG)	5.400%	11/1/2048	\$1,000	Baa3 / BBB- / BBB-	S / S / S		\$79.0	7.22%	207	204										
Kraft Heinz Foods Co (KHC)	3.750%	4/1/2030	\$741	Baa2 / BBB / BBB	S / P / S		\$86.63	6.31%	138	140	67	\$27,096	\$6,233	\$19,997	\$948	\$314	3.2x	3.1x	\$57,861	9.3x
Kraft Heinz Foods Co (KHC)	4.375%	6/1/2046	\$2,786	Baa2 / BBB / BBB	S / P / S		\$72.92	6.72%	152	149										
Kraft Heinz Foods Co (KHC)	4.875%	10/1/2049	\$1,450	Baa2 / BBB / BBB	S / P / S		\$76.75	6.79%	166	163										
JBS USA (JBSSBZ)	6.750%	3/15/2034	\$1,600	Baa3 / BBB- / BBB-	S / S / S		\$92.6	7.80%	287	286	--	R\$ 367,860	R\$ 20,700	R\$ 101,338	R\$ 12,739	-R\$ 5,989	4.9x	4.3x	R\$ 135,757	4.0x
JBS USA (JBSSBZ)	7.250%	11/15/2053	\$900	Baa3 / BBB- / BBB-	S / S / S		\$88.4	8.30%	325	322										
Pilgrim's Pride (PPC)	6.250%	7/1/2033	\$1,000	Ba2 / BBB- / BBB-	S / N / S		\$90.9	7.59%	267	267	--	\$17,070	\$798	\$3,596	\$731	(\$17)	4.5x	3.6x	\$9,019	5.2x
Pilgrim's Pride (PPC)	3.500%	3/1/2032	\$889	Ba2 / BBB- / BBB-	S / N / S		\$74.5	7.70%	273	278										
Smithfield Foods Inc (SFD)	2.625%	9/13/2031	\$500	Ba1 / BBB- / BBB	S / S / S		\$70.7	7.64%	271	272	58	--	--	--	--	--	--	--	--	--

Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH





Exhibit 15: Beverages Historical Spread & Return Monitor

Benchmark spread and credit metrics by issuer

Issuer	Coupon	Maturity	Outstanding (\$mil)	Ratings Mdy/S&P/Fit	Outlook	Current Pricing				5-yr CDS	LTM				Net FCF	Credit Metrics			
						Bid	YTW	G- spd	T- spd		Revenue	EBITDA	Debt	Cash		Total Debt/	Net Debt/	EV /	
The Coca-Cola Co. (KO)	2.250%	1/5/2032	\$2,000	A1 / A+ / Au	S / S / S	\$78.1	5.62%	63	70	58	\$44,167	\$15,746	\$41,625	\$12,564	\$2,846	2.6x	1.6x	\$264,466	21.5x
The Coca-Cola Co. (KO)	3.000%	3/5/2051	\$1,700	A1 / A+ / Au	S / S / S	\$61.8	5.80%	69	67										
Coca-Cola European Partners (CCEP)	1.500%	1/15/2027	\$500	Baa1 / -- / BBB+	S / -- / S	\$86.9	6.02%	106	110	--	\$18,017	\$3,096	\$11,907	\$1,112	\$1,539	3.8x	3.5x	\$34,824	11.1x
PepsiCo Inc (PEP)	4.450%	2/15/2033	\$1,000	A1 / A+ / --	S / S / --	\$92.1	5.54%	63	62	58	\$90,135	\$16,500	\$43,621	\$6,454	(\$1,765)	3.0x	2.6x	\$256,311	18.2x
PepsiCo Inc (PEP)	2.750%	10/21/2051	\$1,000	A1 / A+ / --	S / S / --	\$57.5	5.86%	74	74										
PepsiCo Inc (PEP)	4.650%	2/15/2053	\$500	A1 / A+ / --	S / S / --	\$82.1	5.94%	88	85										
Brown-Forman Corp (BFB)	4.500%	7/15/2045	\$500	A1 / A- / WD	S / S / --	\$80.1	6.18%	95	93	--	\$4,259	\$1,329	\$3,076	\$426	\$78	2.4x	2.1x	\$29,274	25.2x
Brown-Forman Corp (BFB)	4.750%	4/15/2033	\$650	A1 / A- / --	S / S / --	\$92.7	5.76%	84	85										
Diageo Investment Corp (DGELN)	5.500%	1/24/2033	\$750	A3 / A- / A-u	S / S / S	\$96.5	6.00%	107	108	36	£17,113	£6,120	£16,502	£1,439	-£1,382	2.7x	2.5x	£77,061	12.6x
Diageo Investment Corp (DGELN)	3.875%	4/29/2043	\$500	A3 / A- / A-u	S / S / S	\$72.0	6.41%	114	113										
Anheuser-Busch InBev Fin (ABIBB)	4.900%	1/23/2031	\$750	A3 / A- / --	S / S / --	\$94.0	5.93%	98	101	114	\$59,091	\$19,928	\$80,900	\$6,848	\$4,662	4.1x	3.7x	\$192,319	9.7x
Anheuser-Busch InBev Fin (ABIBB)	4.900%	2/1/2046	\$9,519	A3 / A- / --	S / S / --	\$83.0	6.33%	113	109										
Anheuser-Busch InBev Fin (ABIBB)	4.500%	6/1/2050	\$1,567	A3 / A- / --	S / S / --	\$76.8	6.32%	118	117										
Heineken NV (HEIANA)	1.750%	3/17/2031	\$750	A3 / BBB+ / --	S / S / --	\$85.5	4.05%	124	126	40	€ 29,725	€ 5,824	€ 19,857	€ 2,168	-€ 1,560	3.4x	3.0x	€ 68,332	11.1x
Heineken NV (HEIANA)	4.350%	3/29/2047	\$650	A3 / BBB+ / --	S / S / --	\$75.0	6.43%	124	127										
Pernod Ricard SA (RIFP)	1.625%	4/1/2031	\$900	Baa1 / BBB+ / BBB+	S / S / S	\$74.1	5.99%	105	106	114	€ 12,136	€ 3,765	€ 10,741	€ 1,624	(€ 427)	2.9x	2.4x	€ 53,951	16.7x
Pernod Ricard SA (RIFP)	2.750%	10/1/2050	\$500	Baa1 / BBB+ / BBB+	S / S / S	\$55.6	6.14%	100	100										
Suntory Holdings LTD (SUNTOR)	6.625%	7/15/2028	\$184	Baa1 / BBB+ / WD	S / S / --	\$102.3	6.04%	115	118	--	¥2,819	¥416	¥1,468	¥253	¥95	3.5x	2.9x		
JAB Holdings BV (JABHOL)	1.000%	7/14/2031	\$306	Baa1 / BBB+ / --	S / S / --	\$76.2	4.75%	194	197	--	--	--	--	--	--	--	--	--	--
JAB Holdings BV (JABHOL)	3.750%	5/28/2051	\$500	Baa1 / BBB+ / --	S / S / --	\$57.8	7.34%	222	226										
JAB Holdings BV (JABHOL)	4.500%	4/8/2052	\$500	Baa1 / BBB+ / --	S / S / --	\$66.7	7.29%	220	223										
Keurig Dr Pepper (KDP)	4.050%	4/15/2032	\$850	Baa1 / BBB / --	S / S / --	\$85.3	6.33%	139	141	--	\$14,567	\$4,080	\$12,695	\$278	\$231	3.1x	3.1x	\$53,814	15.5x
Keurig Dr Pepper (KDP)	3.350%	3/15/2051	\$500	Baa1 / BBB / --	S / S / --	\$59.4	6.56%	146	143										
Keurig Dr Pepper (KDP)	4.500%	4/15/2052	\$1,150	Baa1 / BBB / --	S / S / --	\$73.0	6.62%	153	151										
Constellation Brands Inc (STZ)	4.750%	5/9/2032	\$700	Baa3 / BBB / --	S / S / --	\$89.4	6.38%	145	146	96	\$9,604	\$3,363	\$12,357	\$193	\$263	3.5x	3.5x	\$54,504	15.8x
Constellation Brands Inc (STZ)	4.900%	5/1/2033	\$750	Baa3 / BBB / --	S / S / --	\$89.4	6.41%	149	149										
Constellation Brands Inc (STZ)	3.750%	5/1/2050	\$600	Baa3 / BBB / --	S / S / --	\$65.1	6.54%	140	139										
Molson Coors Brewing Co (TAP)	3.000%	7/15/2026	\$2,000	Baa3 *+ / BBB / WD	-- / S / --	\$92.6	5.99%	97	103	124	\$11,178	\$2,263	\$6,615	\$961	\$736	3.0x	2.6x	\$18,729	8.4x
Molson Coors Brewing Co (TAP)	4.200%	7/15/2046	\$1,800	Baa3 *+ / BBB / WD	-- / S / --	\$70.8	6.72%	152	149										
Bacardi LTD (BACARD)	5.400%	6/15/2033	\$700	Baa3 / BBB- / BBB-	-- / -- / --	\$91.3	6.64%	173	172	--	--	--	--	--	--	--	--	--	--
Bacardi LTD (BACARD)	5.900%	6/15/2043	\$400	Baa3 / BBB- / BBB-	-- / -- / --	\$88.4	7.00%	174	171										
Bacardi LTD (BACARD)	5.300%	5/15/2048	\$700	Baa3 / BBB- / BBB-	S / S / S	\$81.6	6.86%	169	172										
JDE Peet's NV (JDEPNA)	2.250%	9/24/2031	\$500	Baa3 / BBB- / BBB	S / S / S	\$73.0	6.71%	177	180	--	€ 8,243	€ 1,360	€ 4,967	€ 755	€ 522	3.7x	3.1x	€ 16,742	11.3x

Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH

Exhibit 16: Tobacco Historical Return & Spread Monitor

Benchmark spread and credit metrics by issuer

Issuer	Coupon	Maturity	Outstanding (\$mil)	Ratings Mdy/S&P/Fit	Outlook	Current Pricing				5-yr CDS	Revenue	LTM EBITDA	Debt	Cash	Net FCF	Credit Metrics			
						Bid	YTW	G-spd	T-spd							Total Debt/ EBITDA	Net Debt/ EBITDA	EV	EV / EBITDA
Japan Tobacco (JAPTOB)	2.250%	9/14/2031	\$625	A2 / A+ / --	S / -- / --	\$75.2	6.29%	136	137		¥2,783,816	¥865,155	¥1,018,639	¥827,220	¥136,212	1.2x	0.2x	¥317,758	0.4x
Japan Tobacco (JAPTOB)	3.300%	9/14/2051	\$400	A2 / A+ / --	S / -- / --	\$55.6	6.91%	179	179										
Philip Morris Intl Inc (PM)	1.750%	11/1/2030	\$750	A2 / A- / A	S / S / S	\$73.9	6.44%	149	151	58	\$33,250	\$13,703	\$47,893	\$3,492	(\$469)	3.6x	3.4x	\$187,541	13.7x
Philip Morris Intl Inc (PM)	5.750%	11/17/2032	\$1,500	A2 / A- / A	S / S / S	\$95.1	6.47%	155	155										
Philip Morris Intl Inc (PM)	5.375%	2/15/2033	\$2,250	A2 / A- / A	S / S / S	\$92.0	6.53%	161	162										
Philip Morris Intl Inc (PM)	4.250%	11/10/2044	\$1,250	A2 / A- / A	S / S / S	\$70.8	6.91%	166	164										
Altria Group (MO)	3.125%	6/15/2031	\$1,250	A3 / BBB / BBB	S / P / S	\$83.8	5.80%	300	302	58	\$20,696	\$12,139	\$27,195	\$874	\$679	2.3x	2.2x	\$101,881	8.4x
Altria Group (MO)	2.450%	2/4/2032	\$1,750	A3 / BBB / BBB	S / P / S	\$73.2	6.72%	178	180										
Altria Group (MO)	5.375%	1/31/2044	\$1,800	A3 / BBB / BBB	S / P / S	\$82.4	7.02%	158	174										
Altria Group (MO)	3.700%	2/4/2051	\$1,250	A3 / BBB / BBB	S / P / S	\$58.6	7.18%	214	205										
British American Tobacco (BATSLN)	2.726%	3/25/2031	\$1,250	Baa2 / BBB+ / BBB	P / N / P	\$75.01	7.12%	226	220	101	£28,227	£13,906	£42,169	£3,681	£2,318	3.0x	2.8x	\$93,360	6.7x
British American Tobacco (BATSLN)	7.750%	10/19/2032	\$600	Baa2 / BBB+ / BBB	P / N / P	\$101.8	7.47%	253	255										
British American Tobacco (BATSLN)	4.742%	3/16/2032	\$900	Baa2 / BBB+ / BBB	P / N / P	\$83.9	7.35%	240	243										
British American Tobacco (BATSLN)	6.421%	8/2/2033	\$1,250	Baa2 / BBB+ / BBB	P / N / P	\$93.1	7.42%	251	250										
British American Tobacco (BATSLN)	5.282%	4/2/2050	\$500	Baa2 / BBB+ / BBB	P / N / P	\$70.4	7.99%	285	284										
British American Tobacco (BATSLN)	3.984%	9/25/2050	\$1,000	Baa2 / BBB+ / BBB	P / N / P	\$57.5	7.77%	264	263										
British American Tobacco (BATSLN)	5.650%	3/16/2052	\$600	Baa2 / BBB+ / BBB	P / N / P	\$73.9	7.99%	289	288										
British American Tobacco (BATSLN)	7.081%	8/2/2053	\$1,000	Baa2 / BBB+ / BBB	P / N / P	\$88.5	8.11%	305	303										
Imperial Brands Fin Plc (IMBLN)	3.875%	7/26/2029	\$1,000	Baa3 / BBB / BBB	S / S / S	\$87.1	6.61%	172	174	91	£7,961	£4,073	£10,249	£596	(£186)	2.5x	2.4x	£26,060	6.4x

Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH



Valuation & risk

AutoZone Inc. (AZO)

While AZO represents the industry benchmark in terms of profitability, capital efficiency, and balance sheet consistency, we believe they face incremental challenges with distribution and lower DIFM (do it for me) exposure. Valuation appears fair in both cash and CDS and we would expect returns in line with the market, with little catalyst for spreads to trade materially better or worse. Upside risks: reaccelerating comps, improved supply chain logistics as well as faster than expected uplift from transition to DIFM (incrementally faster growth). Downside risks: challenges with distribution, continued overexposure to DIY segments, tariffs, or a raised leverage/debt issuance profile. On an issuer level, we rate AZO's cash a Marketweight.

General Mills, Inc. (GIS)

General Mills Inc. (GIS) operates a large, diverse portfolio of market-leading and well-known brands across a wide range of packaged food categories. Credit strengths include GIS's historically conservative management team and capital allocation strategy despite ongoing bolt-on M&A, cost savings opportunities, and commitment to maintaining a balance sheet in-line with BBB+. Upside risks are reaccelerating category growth rates or reduced promotional activity in conjunction with cautious approach to portfolio reshaping. Free cash flow conversion above 95% and working capital benefits create additional cash flexibility to manage shareholder returns and debt maturities. Downside risks are aggressive pricing actions as a result of inflation that decelerates volumes more quickly, any aggressive growth agenda (inorganically) or event risk given lack of takeover defenses, a deceleration in the Pet segment and general issuance needs near term. As a result, we see balanced risk/reward with little room for spread upside or excess return at current levels. On an issuer level, we rate GIS's cash a Marketweight. Our Neutral rating on CDS is reflective of management's disciplined financial policies and commitment to a high-IG ratings offset by the need for portfolio enhancements via acquisition, event risk, and highly competitive categories.

Analyst Certification

I, Brian Callen, 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.

Security/Loan pricing

AutoZone Inc. / AZO

	Amt		Ratings			Yield	Spread
Security		Maturity date	Moody's/S&P/Fitch	Price	Price date	(%)	(bps)
3.25, Senior, USD, 2025:B	400	15-APR-2025	Baa1/BBB/BBB	96.29	20-Oct-2023	5.90	70
3.125, Senior, USD, 2026:B	400	21-APR-2026	Baa1/BBB/BBB	93.60	20-Oct-2023	5.92	89
Senior Unsecured, USD, Y5, CDS					21-Oct-2023		55

For pricing information refer to "Other Important Disclosures" below.

B=Bond; L=Loan; CS=Capital Security (Not including Equity Preferred); CDS=Credit Default Swap; EP=Equity Preferred

General Mills, Inc. / GIS

	Amt		Ratings			Yield	Spread
Security		Maturity date	Moody's/S&P/Fitch	Price	Price date	(%)	(bps)
3.65, Senior, USD, 2024:B	500	15-FEB-2024	Baa2/BBB/WD	99.23	20-Oct-2023	6.08	69
4.15, Senior, USD, 2043:B	500	15-FEB-2043	Baa2/BBB/WD	72.97	20-Oct-2023	6.66	137
4.55, Senior, USD, 2038:B	282	17-APR-2038	Baa2/BBB/WD	79.89	20-Oct-2023	6.75	160
4.7, Senior, USD, 2048:B	446	17-APR-2048	Baa2/BBB/WD	79.37	20-Oct-2023	6.38	109
.45, Senior, EUR, 2026:B	600	15-JAN-2026	Baa2/BBB/WD	92.28	20-Oct-2023	4.13	106



General Mills, Inc. / GIS

	Amt		Ratings			Yield	Spread
Security		Maturity date	Moody's/S&P/Fitch	Price	Price date	(%)	(bps)
2.875, Senior, USD, 2030:B	750	15-APR-2030	Baa2/BBB/WD	82.68	20-Oct-2023	6.16	126
2.25, Senior, USD, 2031:B	500	14-OCT-2031	Baa2/BBB/NR	75.49	20-Oct-2023	6.19	127
.125, Senior, EUR, 2025:B	500	15-NOV-2025	Baa2/BBB/NR	92.42	20-Oct-2023	4.02	91
3, Senior, USD, 2051:B	605	01-FEB-2051	Baa2/BBB/NR	57.30	20-Oct-2023	6.30	111
5.241, Senior, USD, 2025:B	500	18-NOV-2025	Baa2/BBB/NR	98.91	20-Oct-2023	5.80	71
Senior Unsecured, USD, Y5:CDS					21-Oct-2023		57

For pricing information refer to "Other Important Disclosures" below.

B=Bond; L=Loan; CS=Capital Security (Not including Equity Preferred); CDS=Credit Default Swap; EP=Equity Preferred

Disclosures

Important Disclosures

Credit opinion history

AutoZone Inc. / AZO

Company	Date ^{R1}	Action	Recommendation	
AutoZone Inc. / AZO	30-Sep-2020		Marketweight	
Security	Date ^{R1}	Action	Recommendation	Price
3.25, Senior, USD, 2025:B	30-Sep-2022		Marketweight	
3.125, Senior, USD, 2026:B	30-Sep-2022		Marketweight	
Senior Unsecured, USD, Y5, CDS	30-Sep-2022		Neutral	

Table reflects credit opinion history as of previous business day's close.^{R1}First date of recommendation within the last 36 months, if for an issuer or within the last 12 months, if for a security or loan. The investment opinion system is contained at the end of the report under the heading "BofA Global Research Credit Opinion Key."

Pricing information in the table is provided for each action where available. In the case of bonds, loans, capital securities and equity preferreds, the price shown reflects the nominal cash price for the security; and in the case of CDS, the price shown reflects the spread, on the date of the relevant action.

B=Bond; L=Loan; CS=Capital Security (Not including Equity Preferred); EP=Equity Preferred; CDS=Credit Default Swap

General Mills, Inc. / GIS

Company	Date ^{R2}	Action	Recommendation	
General Mills, Inc. / GIS	30-Sep-2020		Marketweight	
	14-May-2021	Restricted	NA	
	17-May-2021	Coverage Resumed	Marketweight	
Security	Date ^{R2}	Action	Recommendation	Price
3.65, Senior, USD, 2024:B	30-Sep-2022		Marketweight	
4.15, Senior, USD, 2043:B	30-Sep-2022		Marketweight	
4.55, Senior, USD, 2038:B	30-Sep-2022		Marketweight	
	21-Dec-2022	Added to iQ Model	Marketweight	90.25
4.7, Senior, USD, 2048:B	30-Sep-2022		Marketweight	
	21-Dec-2022	Added to iQ Model	Marketweight	91.88
.45, Senior, EUR, 2026:B	30-Sep-2022		Marketweight	
	21-Dec-2022	Added to iQ Model	Marketweight	91.40
2.875, Senior, USD, 2030:B	30-Sep-2022		Marketweight	
	21-Dec-2022	Added to iQ Model	Marketweight	87.31
2.25, Senior, USD, 2031:B	30-Sep-2022		Marketweight	
	21-Dec-2022	Added to iQ Model	Marketweight	81.33
.125, Senior, EUR, 2025:B	30-Sep-2022		Marketweight	
	21-Dec-2022	Added to iQ Model	Marketweight	91.03
3, Senior, USD, 2051:B	30-Sep-2022		Marketweight	
	21-Dec-2022	Added to iQ Model	Marketweight	70.37
5.241, Senior, USD, 2025:B	18-Nov-2022	New Issue	Marketweight	
	21-Dec-2022	Added to iQ Model	Marketweight	100.43
Senior Unsecured, USD, Y5:CDS	30-Sep-2022		Neutral	

Table reflects credit opinion history as of previous business day's close.^{R2}First date of recommendation within the last 36 months, if for an issuer or within the last 12 months, if for a security or loan. The investment opinion system is contained at the end of the report under the heading "BofA Global Research Credit Opinion Key."

Pricing information in the table is provided for each action where available. In the case of bonds, loans, capital securities and equity preferreds, the price shown reflects the nominal cash price for the security; and in the case of CDS, the price shown reflects the spread, on the date of the relevant action.

B=Bond; L=Loan; CS=Capital Security (Not including Equity Preferred); EP=Equity Preferred; CDS=Credit Default Swap

BofA Global Research Credit Opinion Key

BofA Global Research provides recommendations on an issuer's bonds (including corporate and sovereign external debt securities), loans, capital securities, equity preferreds and CDS as described below. Convertible securities are not rated. An issuer level recommendation may also be provided for an issuer as explained below. BofA Global Research credit recommendations are assigned using a three-month time horizon.

Issuer Recommendations: If an issuer credit recommendation is provided, it is applicable to bonds and capital securities of the issuer except bonds and capital securities specifically referenced in the report with a different credit recommendation. Where there is no issuer credit recommendation, only individual bonds and capital securities with specific recommendations are covered. Loans, CDS and equity preferreds are rated separately and issuer recommendations do not apply to them.

BofA Global Research credit recommendations are assigned using a three-month time horizon:

Overweight: Spreads and /or excess returns are likely to outperform the relevant and comparable market over the next three months.

Marketweight: Spreads and/or excess returns are likely to perform in-line with the relevant and comparable market over the next three months.

Underweight: Spreads and/or excess returns are likely to underperform the relevant and comparable market over the next three months.

BofA Global Research uses the following rating system with respect to **Credit Default Swaps (CDS)**:

Buy Protection: Buy CDS, therefore going short credit risk.

Neutral: No purchase or sale of CDS is recommended.

Sell Protection: Sell CDS, therefore going long credit risk.

Corporate Credit Issuer Investment Rating Distribution: Global Group (as of 30 Sep 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships ^{R3}	Count	Percent
Buy	152	41.19%	Buy	125	82.24%
Hold	177	47.97%	Hold	150	84.75%
Sell	40	10.84%	Sell	29	72.50%

^{R3} 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 corporate credit issuer recommendations. A corporate credit issuer rated Overweight is included as a Buy, a corporate credit issuer rated Marketweight is included as a Hold, and a corporate credit issuer rated Underweight is included as a Sell.

Credit Opinion History Tables for the securities referenced in this research report are available on the [Price Charts and Credit Opinion History Tables website](#), or call 1-800-MERRILL to have them mailed.

BofAS or an affiliate was a manager of a public offering of securities of this issuer within the last 12 months: AutoZone, Genl Mills.

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

BofAS or an affiliate has received compensation from the issuer for non-investment banking services or products within the past 12 months: AutoZone, Genl Mills.

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: AutoZone, Genl Mills.

BofAS or an affiliate has received compensation for investment banking services from this issuer within the past 12 months: AutoZone, Genl Mills.

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: AutoZone, Genl Mills.

BofAS together with its affiliates beneficially owns one percent or more of the common stock of this issuer. If this report was issued on or after the 9th day of the month, it reflects the ownership position on the last day of the previous month. Reports issued before the 9th day of a month reflect the ownership position at the end of the second month preceding the date of the report: Genl Mills.

BofAS or one of its affiliates has a significant financial interest in the fixed income instruments of the issuer. If this report was issued on or after the 15th day of the month, it reflects a significant financial interest on the last day of the previous month. Reports issued before the 15th day of the month reflect a significant financial interest at the end of the second month preceding the report: Genl Mills.

BofAS or one of its affiliates trades or may trade as principal in the debt securities (or in related derivatives) that are the subject of this research report: AutoZone, Genl Mills.

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: AutoZone, Genl Mills.

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.

BofA Securities fixed income analysts regularly interact with sales and trading desk personnel in connection with their research, including to ascertain pricing and liquidity in the fixed income markets.

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.

This report may refer to fixed income securities or other financial instruments that may not be offered or sold in one or more states or jurisdictions, or to certain categories of investors, including retail investors. Readers of this report are advised that any discussion, recommendation or other mention of such instruments is not a solicitation or offer to transact in such instruments. Investors should contact their BofA Securities representative or Merrill Global Wealth Management financial advisor for information relating to such instruments.

Rule 144A securities may be offered or sold only to persons in the U.S. who are Qualified Institutional Buyers within the meaning of Rule 144A under the Securities Act of 1933, as amended. SECURITIES OR OTHER FINANCIAL INSTRUMENTS DISCUSSED HEREIN MAY BE RATED BELOW INVESTMENT GRADE AND SHOULD THEREFORE ONLY BE CONSIDERED FOR INCLUSION IN ACCOUNTS QUALIFIED FOR SPECULATIVE INVESTMENT.

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.

The securities or other financial instruments discussed in this report may be traded over-the-counter. Retail sales and/or distribution of this report may be made only in states where these instruments are exempt from registration or have been qualified for sale.

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.

This report, and the securities or other financial instruments discussed herein, may not be eligible for distribution or sale in all countries or to certain categories of investors, including retail investors.

Information relating to Affiliates of BofAS, MLPF&S and Distribution of Affiliate Research Reports:

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.**

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 Prudentiel et de Résolution (ACPR) and regulated by the ACPR and the Autorité des Marchés Financiers (AMF). BofA Securities Europe SA ("BofASE") with registered address at 51, rue La Boétie, 75008 Paris is registered under no. 842 602 690 RCS Paris. In accordance with the provisions of French Code Monétaire et Financier (Monetary and Financial Code), BofASE is an établissement de crédit et d'investissement (credit and investment institution) that is authorised and supervised by the European Central Bank and the Autorité de Contrôle Prudentiel et de Résolution (ACPR) and regulated by the ACPR and the Autorité des Marchés Financiers. BofASE's share capital can be found at www.bofam.com/BofASEdisclosure; 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 Equities (Australia) Limited, regulated by the Australian Securities and Investments Commission; Merrill Lynch (Hong Kong): Merrill Lynch (Asia Pacific) Limited, regulated by the Hong Kong Securities and Futures Commission (HKSF); Merrill Lynch (Singapore): Merrill Lynch (Singapore) Pte Ltd, regulated by the Monetary Authority of Singapore (MAS); Merrill Lynch (Canada): Merrill Lynch Canada Inc, regulated by the Investment Industry Regulatory Organization of Canada; Merrill Lynch (Mexico): Merrill Lynch Mexico, SA de CV, Casa de Bolsa, regulated by the Comisión Nacional Bancaria 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 Limited, regulated by Israel Securities Authority; Merrill Lynch (DIFC): Merrill Lynch International (DIFC Branch), regulated by the Dubai Financial Services Authority (DFSA); Merrill Lynch (Brazil): Merrill Lynch S.A. Corretora de Títulos e Valores Mobiliários, regulated by Comissão de Valores Mobiliários; Merrill Lynch KSA Company: Merrill Lynch Kingdom of Saudi Arabia Company, regulated by the Capital Market Authority.

This information: has been approved for publication and is distributed in the United Kingdom (UK) to professional clients and eligible counterparties (as each is defined in the rules of the FCA and the PRA) by MLI (UK), which is authorized by the PRA and regulated by the FCA and the PRA - details about the extent of our regulation by the FCA and PRA are available from us on request; has been approved for publication and is distributed in the European Economic Area (EEA) by BofASE (France), which is authorized by the ACPR and regulated by the ACPR and the AMF; has been considered and distributed in Japan by BofAS Japan, a registered securities dealer under the Financial Instruments and Exchange Act in Japan, or its permitted affiliates; is issued and distributed in Hong Kong by Merrill Lynch (Hong Kong) which is regulated by HKSF; 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 or its local distribution is by Merrill Lynch (Brazil) in accordance with applicable regulations. Merrill Lynch (DIFC) is authorized and regulated by the DFSA. Information prepared and issued by Merrill Lynch (DIFC) is done so in accordance with the requirements of the DFSA conduct of business rules. BofA Europe (Frankfurt) distributes this information in Germany and is regulated by BaFin, the ECB and the CBI. BofA Securities entities, including BofA Europe and BofASE (France), may outsource/delegate the marketing and/or provision of certain research services or aspects of research services to other branches or members of the BofA Securities group. You may be contacted by a different BofA Securities entity acting for and on behalf of your service provider where permitted by applicable law. This does not change your service provider. Please refer to the [Electronic Communications Disclosures](#) for further information.

This information has been prepared and issued by BofAS and/or one or more of its non-US affiliates. The author(s) of this information may not be licensed to carry on regulated activities in your jurisdiction and, if not licensed, do not hold themselves out as being able to do so. BofAS and/or MLPF&S is the distributor of this information in the US and accepts full responsibility for information distributed to BofAS and/or MLPF&S clients in the US by its non-US affiliates. Any US person receiving this information and wishing to effect any transaction in any security discussed herein should do so through BofAS and/or MLPF&S and not such foreign affiliates. Hong Kong recipients of this information should contact Merrill Lynch (Asia Pacific) Limited in respect of any matters relating to dealing in securities or provision of specific advice on securities or any other matters arising from, or in connection with, this information. Singapore recipients of this information should contact Merrill Lynch (Singapore) Pte Ltd in respect of any matters arising from, or in connection with, this information. For clients that are not accredited investors, expert investors or institutional investors Merrill Lynch (Singapore) Pte Ltd accepts full responsibility for the contents of this information distributed to such clients in Singapore.

General Investment Related Disclosures:

Taiwan Readers: Neither the information nor any opinion expressed herein constitutes an offer or a solicitation of an offer to transact in any securities or other financial instrument. No part of this report may be used or reproduced or quoted in any manner whatsoever in Taiwan by the press or any other person without the express written consent of BofA Securities.

This document provides general information only, and has been prepared for, and is intended for general distribution to, BofA Securities clients. Neither the information nor any opinion expressed constitutes an offer or an invitation to make an offer, to buy or sell any securities or other financial instrument or any derivative related to such securities or instruments (e.g., options, futures, warrants, and contracts for differences). This document is not intended to provide personal investment advice and it does not take into account the specific investment objectives, financial situation and the particular needs of, and is not directed to, any specific person(s). This document and its content do not constitute, and should not be considered to constitute, investment advice for purposes of ERISA, the US tax code, the Investment Advisers Act or otherwise. Investors should seek financial advice regarding the appropriateness of investing in financial instruments and implementing investment strategies discussed or recommended in this document and should understand that statements regarding future prospects may not be realized. Any decision to purchase or subscribe for securities in any offering must be based solely on existing public information on such security or the information in the prospectus or other offering document issued in connection with such offering, and not on this document.

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

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.

This report may contain a trading idea or recommendation which highlights a specific identified near-term catalyst or event impacting a security, issuer, industry sector or the market generally that presents a transaction opportunity, but does not have any impact on the analyst's particular "Overweight" or "Underweight" rating (which is based on a three month trade horizon). Trading ideas and recommendations may differ directionally from the analyst's rating on a security or issuer because they reflect the impact of a near-term catalyst or event.

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

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

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

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

Copyright and General Information:

Copyright 2023 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 law relating to the subject matter of this material. BofA Global Research personnel's knowledge of legal proceedings in which any BofA Securities entity and/or its directors, officers and employees may be plaintiffs, defendants, co-defendants or co-plaintiffs with or involving issuers mentioned in this material is based on public information. Facts and views presented in this material that relate to any such proceedings have not been reviewed by, discussed with, and may not reflect information known to, professionals in other business areas of BofA Securities in connection with the legal proceedings or matters relevant to such proceedings.

This information has been prepared independently of any issuer of securities mentioned herein and not in connection with any proposed offering of securities or as agent of any issuer of any securities. None of BofAS or 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.