

Packaging & Paper/Forest Products

Packaging recession ends, prefer v forest prods despite GLP-1; Trim BCC to U/P

Rating Change

Favorite ideas include ATR, CCK, SEE, and WRK

Based on our indicators, the average paper/forest stock is up only 1.4% ytd (the market is up ~11%) with a bottom-up decrease in 2023 earnings of 47% forecasted by BofA. Meantime, the average packaging stock is down -10% ytd with a bottom-up decrease in earnings of -10% forecasted for 2023 by BofA. Our 2024 forecasts currently call for a -7% decrease in paper/forest earnings and a 12% increase in packaging. In that context and based on factors discussed below, our favorite ideas are AptarGroup (ATR), Crown Holdings (CCK), Sealed Air (SEE), and WestRock (WRK).

Relative declines should be nearly done...

We think we are near the end of volume declines and expect volumes to turn positive between 4Q23 and 2Q24 depending on the company after a packaging recession that began in mid-2022. Our recent box survey (see our note) and research commentary from the recent Association of Independent Corrugated Converters (AICC) conference suggest trends are stable or modestly improving. An indicator for the economy: the fact that box shipments are at 2016 levels and below trendline growth according to data from the Fibre Box Association (FBA) indicates that destocking has remained a headwind. Its conclusion will therefore drive a step-up to shipments.

...but that doesn't mean strong growth, and GLP-1 no help

Growth will still be weak – like the early 2000s and 2010s based on our read of this cycle. Volumes are still down 5%-plus year-on-year for many sectors and companies we review (see Exhibit 10). Retail sell-through remains weak, and we doubt whether there is much room for brand owners or packagers to push more pricing into the system. With the investment community pondering whether there will be a soft landing or recession, it illustrates that growth will likely remain weak, no matter what. We believe the impact of anti-obesity drugs (GLP-1) is being overplayed in the market (see report) but, truth be told, we don't know and they certainly aren't helping consumption, either.

Increased prominence for cost-outs, restructuring, M&A

Investors and companies will likely target inorganic means to grow as a result – expect increased valuations for companies that are (expected to be) able to take advantage of cost-outs, M&A, etc. Companies with these drivers include Berry Global (BERY; Buy), WestRock (WRK; Buy), and Sealed Air (SEE; Buy). In this report we revise estimates and make PO changes as shown in Exhibit 1.

Drop BCC to U/P for now on rates; Cautious on wood

Boise Cascade (BCC; Underperform) has well exceeded forecasts for most of this year. While a Buy rating on the stock in a very strong year for BCC would have been better, with mortgage rates now above 7%, we are cautious on wood/timber overall and think BCC is due for a pause. Accordingly we downgrade from our prior Neutral to Underperform. Research suggests trends have slowed in repair/remodel, as well as multi-family as well. We also rate Louisiana-Pacific (LPX) Underperform, while we rate PotlatchDeltic (PCH) Neutral (we have a moderately more positive view on timber v. wood products). In that regard, we rate Weyerhaeuser (WY) Buy for some exposure should sentiment improve.

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Refer to important disclosures on page 26 to 29. Analyst Certification on page 25. Price Objective Basis/Risk on page 17.

16 October 2023

Equity United States Packaging

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Exhibit 1: Price objective changes

A summary of PO changes in this report

	New	Old
Packaging		
AMCR	\$9.30	\$9.40
ATR	\$145	\$150
AMBP	\$3	\$4
AVY	\$192	\$190
BALL	\$55	\$62
BERY	\$80	\$75
CCK	\$103	\$107
GEF	\$79	\$81
OI	\$25	\$28
SEE	\$43	\$47
SLGN	\$47	\$52
Paper/Forest		
GPK	\$29	\$28
LPX	\$64	\$60
PKG	\$161	\$158
SLVM	\$48	\$50
WRK	\$39	\$40

Source: BofA Global Research

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Packaging Valuation Summary Table

Exhibit 2: Packaging Comparables Summary Valuation Table Review of valuations for companies in Packaging

			Market	Recent		Dividend		Total	Other		Enterprise		Reporte	d P/E		Re	ported I	EV/EBITD	A
Company	Ticker	Rating	Сар.	Price	PO	Yield	TSR	Debt	LT-Liabs	Cash	Value*	2022A	2023E	2024E	2025E	2022A	2023E	2024E	2025E
Amcor Plc	AMCR	U/P	\$12,856	\$8.71	\$9.30	5.6%	12.4%	\$7,013	\$1,758	\$564	\$21,063	10.7x	13.3x	12.3x	11.7x	9.9x	11.0x	10.5x	10.2x
AptarGroup	ATR	В	\$8,407	\$125.97	\$145	1.2%	16.3%	\$1,187	\$193	\$127	\$9,660	33.2x	27.5x	24.9x	22.9x	15.6x	14.2x	13.2x	12.3x
Ardagh Metal Packaging	AMBP	N	\$1,602	\$2.68	\$3.50	14.9%	47.0%	\$3,668	\$74	\$124	\$5,220	8.6x	13.3x	12.6x	9.9x	8.4x	8.2x	7.8x	7.3x
Avery Dennison	AVY	В	\$14,889	\$182.69	\$192	1.6%	6.7%	\$3,559	\$625	\$351	\$18,722	20.0x	23.4x	18.8x	16.8x	13.7x	15.0x	13.1x	12.1x
Ball Corp.	BALL	N	\$13,959	\$44.08	\$55	1.8%	26.6%	\$9,678	\$1,928	\$572	\$24,993	15.8x	14.7x	13.0x	11.2x	12.8x	11.7x	10.8x	10.1x
Berry Global	BERY	В	\$6,816	\$55.64	\$80	1.8%	45.0%	\$9,307	\$1,703	\$696	\$17,130	7.5x	7.6x	7.0x	6.8x	8.2x	8.3x	8.0x	8.1x
Brady Corp.	BRC	U/P	\$2,711	\$54.22	\$51	1.7%	-4.2%	\$77	\$98	\$108	\$2,778	16.0x	13.9x	13.3x	12.8x	11.6x	10.3x	10.1x	9.8x
Crown Holdings	CCK	В	\$9,463	\$79.36	\$103	1.2%	31.0%	\$7,333	\$1,308	\$403	\$17,701	11.8x	12.8x	10.7x	9.9x	10.1x	9.4x	9.0x	8.8x
Greif (1)	GEF	N	\$3,159	\$64.32	\$79	3.1%	25.7%	\$2,289	\$800	\$159	\$6,090	8.4x	10.5x	10.5x	9.7x	6.8x	7.2x	7.7x	7.5x
O-I Glass	OI	В	\$2,461	\$15.47	\$25	0.0%	61.6%	\$4,767	\$861	\$480	\$7,609	6.7x	4.9x	5.0x	4.8x	6.4x	5.1x	5.1x	5.1x
Pactiv Evergreen	PTVE	N	\$1,409	\$7.90	\$10	5.1%	31.6%	\$4,022	\$1,118	\$427	\$6,122	4.4x	15.7x	9.3x	7.9x	7.8x	7.6x	7.5x	7.4x
Sealed Air	SEE	В	\$4,279	\$29.55	\$43	2.7%	48.2%	\$4,830	\$637	\$303	\$9,442	7.2x	11.0x	9.8x	8.4x	7.8x	8.8x	8.4x	7.9x
Silgan Holdings	SLGN	В	\$4,464	\$40.29	\$47	1.8%	18.4%	\$4,155	\$866	\$501	\$8,984	10.0x	11.8x	10.2x	9.2x	9.5x	10.0x	9.4x	9.1x
Sonoco Products	SON	В	\$5,213	\$52.86	\$64	3.7%	24.8%	\$3,165	\$541	\$210	\$8,709	8.2x	10.2x	9.3x	8.6x	8.4x	8.3x	7.8x	7.6x
Average			\$91,688			3.3%	27.6%	\$65,052	\$12,509	\$5,025	\$164,224	12.0x	13.6x	11.9x	10.8x	9.8x	9.7x	9.2x	8.8x

			FCF '	/ield	Rep	orted EPS	5, Calenda	rized	R	eported EB	ITDA	F	CF	RC	OIC	
Company	Ticker	Rating	2023E	2024E	2022A	2023E	2024E	2025E	2022A	2023E	2024E	2023E	2024E	2023E	2024E	Q-R-Q
Amcor Plc	AMCR	U/P	6.0%	6.8%	\$0.82	\$0.65	\$0.71	\$0.75	\$2,136	\$1,922	\$1,999	\$765	\$876	20.6%	19.1%	B-3-7
AptarGroup	ATR	В	3.0%	3.5%	\$3.79	\$4.57	\$5.05	\$5.50	\$620	\$682	\$730	\$250	\$294	22.9%	24.1%	B-1-7
Ardagh Metal Packaging	AMBP	N	-5.0%	11.8%	\$0.31	\$0.20	\$0.21	\$0.27	\$625	\$634	\$671	-\$79	\$189	16.3%	17.7%	B-2-8
Avery Dennison	AVY	В	4.1%	5.0%	\$9.15	\$7.80	\$9.70	\$10.85	\$1,364	\$1,248	\$1,433	\$606	\$739	26.2%	32.1%	B-1-7
Ball Corp.	BALL	N	5.2%	7.1%	\$2.78	\$3.00	\$3.40	\$3.95	\$1,957	\$2,134	\$2,306	\$728	\$995	18.5%	20.0%	B-2-7
Berry Global	BERY	В	20.4%	13.0%	\$7.45	\$7.31	\$7.94	\$8.15	\$2,087	\$2,052	\$2,129	\$1,391	\$885	18.3%	19.5%	B-1-7
Brady Corp.	BRC	U/P	7.0%	6.9%	\$3.38	\$3.89	\$4.09	\$4.24	\$240	\$270	\$275	\$190	\$187	28.8%	29.2%	B-3-7
Crown Holdings	CCK	В	6.0%	9.2%	\$6.75	\$6.20	\$7.40	\$8.05	\$1,744	\$1,890	\$1,965	\$564	\$872	22.4%	23.3%	B-1-7
Greif (1)	GEF	N	13.0%	12.6%	\$7.66	\$6.14	\$6.12	\$6.63	\$891	\$842	\$793	\$410	\$397	21.1%	20.0%	B-2-7
O-I Glass	OI	В	6.4%	19.6%	\$2.30	\$3.15	\$3.10	\$3.25	\$1,193	\$1,506	\$1,502	\$159	\$482	27.0%	26.8%	C-1-9
Pactiv Evergreen	PTVE	N	18.8%	22.1%	\$1.78	\$0.50	\$0.85	\$1.00	\$785	\$801	\$815	\$266	\$312	17.2%	18.2%	B-2-7
Sealed Air	SEE	В	3.5%	10.1%	\$4.10	\$2.70	\$3.00	\$3.50	\$1,210	\$1,069	\$1,123	\$149	\$433	27.2%	29.9%	B-1-7
Silgan Holdings	SLGN	В	8.3%	7.1%	\$4.02	\$3.40	\$3.95	\$4.40	\$944	\$896	\$961	\$371	\$315	17.0%	19.2%	B-1-7
Sonoco Products	SON	В	13.1%	10.6%	\$6.48	\$5.20	\$5.70	\$6.15	\$1,041	\$1,050	\$1,118	\$681	\$551	21.7%	22.9%	B-1-7
Average			7.8%	10.4%	\$60.77	\$54.72	\$61.22	\$66.68	\$16,837	\$16,996	\$17,819	\$6,449	\$7,526	21.8%	23.0%	

Source: Company filings, BofA Global Research estimates. Priced on 10/13/2023

Note: GEF EPS and P/E based on Class A shares; GEF market cap and EV/EBITDA based on Class A and B shares. AMCR, BERY, BRC, and GEF reported figures and estimates calendarized.

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Paper/Forest Valuation Summary Table Exhibit 4: Paper/Forest Comparables Summary Valuation Table Review of valuations for companies in Paper/Forest

			Market	Recent		Dividend		Total	Other		Enterprise		Reporte	ed P/E		Re	eported l	EV/EBITD	A
Company	Ticker	Rating	Сар.	Price	PO	Yield	TSR	Debt	LT-Liabs	Cash	Value*	2022A	2023E	2024E	2025E	2022A	2023E	2024E	2025E
Boise Cascade	BCC	U/P	\$3,741	\$93.91	\$111	0.6%	18.5%	\$444	\$196	\$1,081	\$3,300	4.4x	8.3x	8.7x	9.2x	2.6x	4.5x	4.6x	4.8x
Graphic Packaging	GPK	N	\$6,469	\$20.93	\$29	1.9%	40.5%	\$5,509	\$1,106	\$125	\$12,959	9.0x	7.6x	7.9x	7.5x	8.1x	7.0x	7.3x	7.2x
International Paper	IP	U/P	\$12,179	\$35.15	\$34	5.3%	2.0%	\$5,820	\$3,530	\$746	\$20,783	9.1x	16.4x	20.1x	17.6x	7.4x	9.2x	9.9x	9.5x
Louisiana-Pacific	LPX	U/P	\$3,774	\$52.42	\$64	1.8%	24.3%	\$644	\$240	\$71	\$4,587	4.5x	15.4x	12.6x	11.6x	3.1x	10.4x	8.5x	8.0x
Packaging Corp.	PKG	N	\$13,548	\$151.37	\$161	3.3%	9.7%	\$2,474	\$988	\$463	\$16,547	13.6x	18.7x	19.9x	19.2x	8.5x	10.6x	11.0x	10.8x
PotlatchDeltic	PCH	N	\$3,608	\$44.87	\$57	4.0%	31.0%	\$1,033	\$45	\$331	\$4,355	9.3x	N/M	44.9x	34.5x	7.8x	5.2x	5.4x	5.4x
Sylvamo Corp.	SLVM	В	\$1,858	\$43.21	\$48	2.3%	13.4%	\$1,033	\$340	\$164	\$3,067	5.5x	7.3x	9.9x	7.5x	4.5x	5.6x	6.8x	6.1x
WestRock	WRK	В	\$9,494	\$36.94	\$40	3.0%	11.2%	\$9,027	\$4,504	\$315	\$22,710	7.5x	13.9x	18.3x	13.1x	8.4x	7.9x	8.5x	7.9x
Weyerhaeuser	WY	В	\$21,927	\$29.94	\$38	2.5%	29.5%	\$5,797	\$805	\$1,760	\$26,769	9.9x	30.2x	29.6x	28.0x	7.5x	16.5x	15.9x	15.2x
Average			\$76,598			2.8%	19.7%	\$31,782	\$11,754	\$5,056	\$115,078	8.1x	14.7x	19.1x	16.5x	6.4x	8.5x	8.7x	8.3x

			FCF '	Yield	Rep	orted EPS	, Calendar	ized	Re	ported EBIT	DA	F	CF	RC	OIC	
Company	Ticker	Rating	2023E	2024E	2022A	2023E	2024E	2025E	2022A	2023E	2024E	2023E	2024E	2023E	2024E	Q-R-Q
Boise Cascade	BCC	U/P	10.9%	12.6%	\$21.56	\$11.35	\$10.85	\$10.25	\$1,259	\$727	\$715	\$407	\$473	47.1%	47.6%	B-3-7
Graphic Packaging	GPK	N	10.2%	7.5%	\$2.33	\$2.75	\$2.65	\$2.80	\$1,609	\$1,863	\$1,767	\$659	\$488	26.9%	23.5%	B-2-7
International Paper	IP	U/P	4.9%	3.8%	\$3.88	\$2.14	\$1.75	\$2.00	\$2,794	\$2,251	\$2,091	\$599	\$468	16.1%	14.5%	B-3-7
Louisiana-Pacific	LPX	U/P	3.5%	5.7%	\$11.77	\$3.40	\$4.15	\$4.50	\$1,461	\$439	\$538	\$132	\$217	25.9%	26.3%	B-3-7
Packaging Corp.	PKG	N	5.8%	5.4%	\$11.14	\$8.10	\$7.60	\$7.90	\$1,938	\$1,568	\$1,509	\$787	\$728	27.2%	26.4%	B-2-7
PotlatchDeltic	PCH	N	2.4%	4.0%	\$4.80	\$0.67	\$1.00	\$1.30	\$562	\$834	\$805	\$86	\$146	7.0%	9.1%	B-2-7
Sylvamo Corp.	SLVM	В	11.6%	7.7%	\$7.84	\$5.90	\$4.38	\$5.73	\$684	\$547	\$449	\$215	\$143	32.7%	26.2%	C-1-7
WestRock	WRK	В	10.2%	10.6%	\$4.91	\$2.65	\$2.02	\$2.82	\$2,720	\$2,891	\$2,669	\$969	\$1,007	1.1%	14.2%	B-1-7
Weyerhaeuser	WY	В	3.9%	4.3%	\$3.02	\$0.99	\$1.01	\$1.07	\$3,560	\$1,622	\$1,680	\$862	\$933	10.4%	10.6%	B-1-7
Average			7.0%	6.9%	\$71.24	\$37.95	\$35.41	\$38.37	\$16,587	\$12,743	\$12,221	\$4,715	\$4,602	21.6%	22.0%	

Source: Company filings, BofA Global Research estimates. Priced on 10/13/2023

WRK reported figures and estimates calendarized.



Tough year, that 2023

Valuations and earnings down this year

Based on our indicators, the average paper/forest stock is up only 1.4% ytd (the market is up \sim 11%) with a bottom-up decrease in 2023 earnings of 47% forecasted by BofA. Meantime, the average packaging stock is down -10% ytd with a bottom-up decrease in earnings of -10% forecasted for 2023 by BofA. Our 2024 forecasts currently call for a -7% decrease in paper/forest earnings and a 12% increase in packaging.

Exhibit 5: BofA calendarized EPS estimates 2022A-2025E

Both packaging and paper/forest earnings will be down this year by 10% and 47% given our forecasts

			Repo	rted EPS,	Calen darized		
Ticker	2022A	2023E	% change y/y	2024E	% change y/y	2025E	% change y/y
AMCR	\$0.82	\$0.65	-19.8%	\$0.71	7.8%	\$0.75	6.0%
ATR	\$3.79	\$4.57	20.6%	\$5.05	10.4%	\$5.50	8.8%
AMBP	\$0.31	\$0.20	-35.5%	\$0.21	5.3%	\$0.27	27.0%
AVY	\$9.15	\$7.80	-14.8%	\$9.70	24.4%	\$10.85	11.9%
BALL	\$2.78	\$3.00	7.7%	\$3.40	13.3%	\$3.95	16.2%
BERY	\$7.45	\$7.31	-1.9%	\$7.94	8.6%	\$8.15	2.7%
BRC	\$3.38	\$3.89	15.2%	\$4.09	4.9%	\$4.24	3.8%
CCK	\$6.75	\$6.20	-8.2%	\$7.40	19.4%	\$8.05	8.7%
GEF	\$7.66	\$6.14	-19.8%	\$6.12	-0.3%	\$6.63	8.2%
OI	\$2.30	\$3.15	36.8%	\$3.10	-1.5%	\$3.25	4.6%
PTVE	\$1.78	\$0.50	-71.8%	\$0.85	68.7%	\$1.00	18.1%
SEE	\$4.10	\$2.70	-34.2%	\$3.00	11.3%	\$3.50	16.5%
SLGN	\$4.02	\$3.40	-15.3%	\$3.95	15.9%	\$4.40	11.6%
SON	\$6.48	\$5.20	-19.8%	\$5.70	9.8%	\$6.15	7.8%
Total	\$60.77	\$54.72	-10.0%	\$61.22	11.9%	\$66.68	8.9%

			Repo	rted EPS,	Calendarized		
Ticker	2022A	2023E	% change y/y	2024E	% change y/y	2025E	% change y/y
BCC	\$21.56	\$11.35	-47.4%	\$10.85	-4.4%	\$10.25	-5.5%
GPK	\$2.33	\$2.75	18.0%	\$2.65	-3.6%	\$2.80	5.7%
IP	\$3.88	\$2.14	-44.8%	\$1.75	-18.2%	\$2.00	14.3%
LPX	\$11.77	\$3.40	-71.1%	\$4.15	22.1%	\$4.50	8.4%
PKG	\$11.14	\$8.10	-27.3%	\$7.60	-6.2%	\$7.90	3.9%
PCH	\$4.80	\$0.67	-86.0%	\$1.00	49.3%	\$1.30	30.0%
SLVM	\$7.84	\$5.90	-24.7%	\$4.38	-25.7%	\$5.73	30.7%
WRK	\$4.91	\$2.65	-45.9%	\$2.02	-23.8%	\$2.82	39.5%
WY	\$3.02	\$0.99	-67.2%	\$1.01	2.0%	\$1.07	5.9%
Total	\$71.24	\$37.95	-46.7%	\$35.41	-6.7%	\$38.37	8.3%

Source: BofA Global Research estimates, company reports

The stocks are at some of the lower valuations of the last number of years. As the chart below illustrates, Packaging is at a 69% relative EV/EBITDA (absolute 9.3x) based on FactSet data, while Paper/Forest is at a 74% relative (absolute 9.9x).

Exhibit 5: BofA's Packaging Indicator is at 69% relative EV/EBITDABofA Packaging Indicator Relative EV/EBITDA – FY1

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Exhibit 6: BofA's Paper/Forest Indicator is at 74% relative EV/EBITDABofA Paper/Forest Indicator Relative EV/EBITDA – FY1



Source: FactSet, BofA Global Research

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Source: FactSet, BofA Global Research

Seen this movie, we think - buy packaging v. paper/forest

At these valuations and having gone through their own recession, we believe there is upside in packaging stocks in particular. The stocks typically underperform ahead of a recession and risks have increased for a broader macro slowdown, based on BofA Global Research's strategist Michael Hartnett's views. However, they typically outperform during the actual recession once it arrives. Paper/forest meantime will contend with the full-year's impact of 2023 price declines in 2024, a headwind for earnings.

Additionally, while diet suppression drugs can't be good for packaging stocks, we believe that the bigger impact on demand has been because of the economy and consumer demand elasticities given rising prices – Exhibit 8 below which illustrates how corrugated box volumes are correlated with a function of hours and earnings.

Exhibit 7: Box shipments and earnings tend to move in tandem

LTM Actual Box Shipments (Y/Y Change) vs. Employment Rate * Hourly Wage (Y/Y Change)



Source: Fibre Box Association, Bureau of Labor Statistics, Bloomberg, BofA Global Research

Stock ideas

Best Buy ideas include CCK, SEE, WRK, and ATR

We highlight four Buys:

- Crown Holdings trades at a 11x multiple on 2024 earnings, should see better-thanaverage volume growth and is leveraged to beverage can end markets, including private label, which should remain relatively strong;
- Sealed Air trades at a 55% relative multiple when it has traditionally traded at 100%. Yes, its businesses are facing sharp cyclical headwinds, but management's sense of urgency on optimizing performance and the portfolio appears high;
- WestRock has \$1bn of self-help opportunities and is being acquired by Smurfit Kappa, even as the containerboard market looks to be stabilizing;
- AptarGroup is relatively inexpensive versus other pharma packaging companies like Buy-rated West Pharma (WST) and Stevanato (STVN), even as volume trends are strong in Pharma and the company seems more intent than ever on improving returns. A recent field trip visit points to continued, long-term positives.

Downgrade Boise; trends slowing as BofA Research sees some headwinds

With mortgage rates now at or above 7%, we think BCC is due for a pause and we downgrade to Underperform from our prior Neutral. We are cautious on wood/timber overall. It is true that Boise trades at inexpensive valuation multiples, but that is frequently the case – its relative EV/EBITDA multiple at 35% is similar to its historical 35% average. Moreover, we anticipate that earnings will decline somewhat into 2024 and 2025 on lower wood product pricing and homebuilding/remodeling activity. Additionally, our colleagues in BofA Research relay that builders are beginning to push back on higher wood and building product pricing, while repair/remodel (R&R) activity is slowing. The current expectation is that R&R units will be down in 2024, with recent



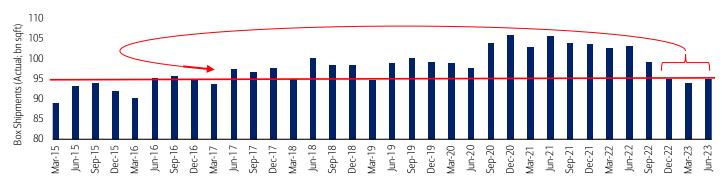
BAC aggregated credit & debit card data reflecting a slowdown in recent trends. Inventories will be coming down as well. All of this will also begin to put pressure not just on BCC plywood and engineered wood, but also its Building Materials Distribution (BMD) business.

Other sector stock and fundamental comments

Corrugated / containerboard – trends were flat/up into 3Q. Interestingly, it appears
that some capacity that had been slated to come online has been pushed further
into the future. While demand is still sluggish, capacity reductions and project
pushouts mean the net impact is not as bad as previous concerns would have
indicated – <u>something discussed in past research (see report)</u>. Additionally, that box
volumes are now at 2016 levels signifies to us that the economy has gone through a
large destocking. See below.

Exhibit 8: Quarterly box shipments are near 2016 levels

 $Box shipments were down -7.9\% \ y/y \ in \ 2Q \ which follows \ a -8.5\% \ decline \ in \ 1Q23-probably \ doesn't get \ worse from here$



Source: Fibre Box Association, BofA Global Research

- Folding cartons / boxboard our Box survey discussion on end markets suggests food/beverage is getting better, which should be positive for folding cartons. RISI commentary has remained sluggish here, however (see here for our report);
- Pulp and paper the worst of the declines seems to be over and graphic paper prices have held up. Hardwood pulp prices to China have rebounded, although fluff apparently remains under pressure based on trade press reports;
- Wood and timber while prices were strong to enter 3Q and oriented strand board (OSB) forecasts went up as a result, demand and pricing faded later in 3Q and into 4Q. We have become more cautious with mortgage rates at or above 7%;
- Specialty packaging remains under downward valuation pressure as investors fret about volume trends. A pickup in volume would be helpful to move the stocks in the right direction. Resin prices have ticked up from July levels given higher energy and feedstock costs, some delays in the start-up of new capacity, and force majures. While the market remains dynamic, the consultancies generally seem to expect some more upward tension in prices through the balance of the year;
- Beverage cans beer volumes continue to be under pressure and the inflection appears pushed into 2024 based on our recent travels and research;
- Glass containers volumes remain down. Expect weaker open-market prices in Europe for 2024, as input cost declines encourage price givebacks.



Exhibit 10: Packaging Input Costs will be increasing in 2024

Packaging Input Cost Trends and Forecasts 2021-2024E

	2021	Q1:22	Q2:22	Q3:22	Q4:22	2022E	Q1:23	Q2:23	Q3:23	Q4:23E	2023E	Q1:24E	Q2:24E	Q3:24E	Q4:24E	2024E
Metals																
Aluminum	\$1.18	\$1.58	\$1.10	\$0.98	\$1.07	\$1.18	\$1.08	\$0.96	\$1.06	\$1.13	\$1.06	\$1.25	\$1.25	\$1.36	N/A	\$1.29
Can sheet, body stock (\$/lb) (*)	\$1.83	\$2.23	\$1.75	\$1.63	\$1.72	\$1.83	\$1.73	\$1.61	\$1.71	\$1.78	\$1.71	\$1.90	\$1.90	\$2.01	N/A	\$1.94
Steel (\$/metric tonne) (**)	\$2,018	\$1,938	\$1,921	\$1,344	\$1,052	\$1,564	\$1,204	\$1,392	\$1,135	N/A	\$1,244	N/A	N/A	N/A	N/A	N/A
Oil & Petrochemicals/Resin																
HDPE (Blow Mldg.) y/y change	40.2%	10.1%	-0.7%	-11.2%	-7.5%	-2.9%	-1.6%	-4.0%	1.4%	5.0%	0.1%	2.8%	2.8%	4.1%	5.5%	3.8%
LDPE y/y change	40.1%	11.3%	-0.6%	-10.8%	-7.2%	-2.4%	-1.5%	-3.8%	1.3%	4.8%	0.1%	2.7%	2.7%	4.0%	5.3%	3.7%
Polystyrene y/y change	33.0%	22.6%	15.5%	24.8%	9.2%	17.8%	7.0%	-5.5%	-12.1%	3.5%	-2.2%	-0.1%	0.1%	4.7%	-1.8%	0.7%
PET (market based) y/y change	40.7%	57.1%	61.7%	27.2%	4.9%	35.4%	-11.8%	-24.0%	-12.7%	-2.2%	-13.3%	-7.8%	-7.3%	-7.6%	-7.9%	-7.7%
PP y/y change	93.5%	-1.6%	-8.1%	-33.0%	-40.0%	-21.4%	-24.8%	-32.5%	-24.1%	-1.9%	-22.6%	-10.3%	1.8%	1.9%	3.5%	-1.2%
Benzene y/y change	88.9%	43.1%	11.0%	45.3%	-3.2%	22.6%	-1.1%	-20.3%	-29.1%	12.4%	-12.3%	-	-	-	-	-
Crude Oil (WTI Spot, \$/Bbl)	\$71	\$100	\$106	\$79	\$80	\$91	\$82	\$74	\$82	\$92	\$82	\$90	\$88	\$84	\$82	\$86
Natural Gas (Composite Spot, \$/MMBtu)	\$3.47	\$4.59	\$7.50	\$7.95	\$6.09	\$6.53	\$2.65	\$2.25	\$2.75	\$3.25	\$2.73	\$3.75	\$3.50	\$4.25	\$4.50	\$4.00
Paper/Board																
Linerboard (transaction) (\$/ton)	\$943	\$1,005	\$1,045	\$1,045	\$1,025	\$1,030	\$982	\$962	\$955	\$951	\$962	\$945	\$945	\$945	\$945	\$945
OCC (\$/ton)	\$119	\$128	\$123	\$104	\$32	\$97	\$32	\$42	\$55	\$65	\$49	\$75	\$90	\$100	\$90	\$89
Bleached Board (\$/ton)	\$1,541	\$1,747	\$1,837	\$1,877	\$1,920	\$1,845	\$1,920	\$1,920	\$1,860	\$1,840	\$1,885	\$1,790	\$1,790	\$1,840	\$1,840	\$1,815
Market Pulp (NBSK, \$/metric tonne)	\$1,478	\$1,527	\$1,743	\$1,800	\$1,745	\$1,704	\$1,675	\$1,510	\$1,293	\$1,400	\$1,470	\$1,420	\$1,400	\$1,350	\$1,300	\$1,368
Other																
Soda Ash (\$/ton)	\$170.10	\$175.09	\$175.09	\$175.09	\$175.09	\$175.09	\$188.70	\$188.70	\$188.70	\$188.70	\$188.70	NA	NA	NA	NA	NA

Source: ICIS, Fastmarkets RISI, Bloomberg, BofA Global Research estimates; (*) Can sheet illustrated as aluminum ingot plus \$0.35/lb in premiums for illustrative purposes, (**) steel illustrated as cold-rolled coil (CRC)



Exhibit 11: Packaging trends by category and substrate

The table below displays trends across a range of packaging substrates and categories from 2020-2023 YTD

			Yea	r			Per	cent Char	nge y/y	
	2020A	2021A	2022A	2022 YTD	2023 YTD	2019A	2020A	2021A	2022A	2023 YTE
Beverage Packaging										
Beer (mn units)										
Cans (1)	42,120	40,961	40,732	19,774	19,495	4.7%	9.7%	-2.8%	-0.6%	-1.4%
Glass*	10,118	9,934	9,502	4,873	4,411	-11.8%	-8.0%	-1.8%	-4.3%	-9.5%
CSD/NAB		,	,	·	,					
Cans (1)	61,126	63,656	64,477	32,427	32,427	2.7%	3.9%	4.1%	1.3%	0.0%
PET (mns lbs)	9,162	9,563	9,715	N/A	N/A	-1.6%	6.6%	4.4%	1.6%	N/A
Glass*	2,227	1,966	2,009	991	961	-0.7%	2.0%	-11.7%	2.2%	-3.0%
ood Packaging										
Cans (mn units)*										
Vegetable	9,605	10,053	8,255	3,007	2,912	-5.5%	10.9%	4.7%	-17.9%	-3.2%
Fruit	779	790	771	245	233	0.1%	2.1%	1.3%	-2.4%	-4.8%
Other Human	9,569	8,889	8,224	4,041	3,966	-3.8%	15.7%	-7.1%	-7.5%	-1.9%
Pet	8,498	9,130	9,040	4,563	4,587	-2.4%	9.9%	7.4%	-1.0%	0.5%
Total Cans (ex Aerosol & General Line)	28,451	28,862	26,290	11,856	11,698	-3.9%	11.9%	1.4%	-8.9%	-1.3%
Glass (mn units)*										
Food Glass Containers	5,018	4,765	4,706	2,414	2,249	-3.1%	11.2%	-5.0%	-1.2%	-6.8%
Rigid Plastic**										
PP - Cups and Containers (indicator)	952	973	1,001	679	632	-1.3%	23.9%	2.2%	2.9%	-6.9%
Flexible Films (indicator)**										
Food	3,895	3,848	3,788	2,683	2,367	-2.4%	1.7%	-1.2%	-1.6%	-11.8%
Non-Food	2,258	2,272	2,140	1,386	1,121	10.2%	0.6%	0.6%	-5.8%	-19.1%
Other**										
PS - Food & Foodservice (indicator)	2,321	2,390	2,294	1,611	1,332	-4.6%	-7.1%	3.0%	-4.0%	-17.39
Bleached Board (thousand tons)*										
Liquid Packaging	1,191	1,133	1,089	544	467	-3.9%	2.6%	-4.9%	-3.9%	-14.1%
Plate, Dish & Tray	959	997	1,080	509	512	20.1%	-2.5%	4.0%	8.3%	0.6%
Cup Stock	683	675	753	363	370	1.6%	-26.9%	-1.1%	11.6%	1.8%
ther Boxboard (thousand tons)										
CUK (beverage cases, food)*	3,924	4,134	4,171	1,077	988	-0.8%	0.8%	5.3%	0.9%	-8.3%
Boxboard - Tube Can & Drum Stock (thousand tons)*	1,415	1,429	1,498	762	706	-2.7%	1.7%	1.0%	4.8%	-7.4%
isc. Consumer & Household Products (indicator)										
Closures**	1,128	1,169	918	652	584	2.5%	1.6%	3.7%	-21.5%	-10.39
Household cleaners**	1,129	1,136	1,205	709	641	-0.7%	-1.0%	0.6%	6.1%	-9.6%
Pharma, cosmetics, toiletries**	494	468	474	296	204	8.3%	7.2%	-5.3%	1.4%	-31.09
Aerosol cans (mn units)*	3,701	3,545	1,485	1,675	1,485	-5.3%	2.4%	-4.2%	-58.1%	-11.49
Apparel imports (mn units)***	23,129	29,428	31,093	19,487	15,951	-0.3%	-16.3%	27.2%	5.7%	-18.19
dustrial Packaging	563	607	571	405	221	0.10/	0.70/	0.10/	E 00/	10.50
HDPE - Industrial drums (indicator)**	561	607	571	406	331	-0.1%	0.7%	8.1%	-5.8%	-18.5%
Boxboard - Tube Can & Drum Stock (thousand tons)*	1,415	1,429	1,498	762	706	-2.7%	1.7%	1.0%	4.8%	-7.4%

Source: (1) CMI discontinued reporting of beverage can shipments in 4Q20. 2021-2023 figures based on BofA Global Research estimates.

Source: BofA Global Research, American Chemistry Council, Can Manufacturer's Institute, AF&PA, ICIS / Chemical Data

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^{*} YTD data through 2Q23

^{**} YTD data through August

^{***} YTD data through July

Paper/forest product pricing trends

Pricing Estimates

As we show in Exhibit 12 below, our pulp forecasts generally decrease given trends we observed in 3Q and continued softness in the market we see into 2024 (particularly given weak demand in paper markets). That said, we raise our paperboard forecasts slightly, as pricing did not deteriorate to the degree we had expected throughout 3Q. We continue to see a modest, seasonal downtick in containerboard prices in 4Q and still see flat pricing in 2024. Lastly, we adjust our forecasts in wood products based on the trajectory out of 3Q. Lumber moves lower while oriented strand board (OSB) moves higher.

Exhibit 12: BofA Pulp, Paper, Board, & Wood Products Price Forecasts, 2022-2025E Review of pricing forecasts for 2023-2025

	2022	1023	2023	3023	4023E	2023E	1024E	2024E	3024E	4024E	2024E	1025E	2025E	3025E	4025E	2025E
NBSK Market Pulp (1)	\$1,704	\$1,675	\$1,510	\$1,293	\$1,300	\$1,445	\$1,330	\$1,350	\$1,350	\$1,300	\$1,333	\$1,275	\$1,250	\$1,250	\$1,250	\$1,256
NBSK Market Pulp (old) (1)	\$1,704	\$1,675	\$1,510	\$1,400	\$1,400	\$1,496	\$1,420	\$1,400	\$1,350	\$1,300	\$1,368	\$1,300	\$1,300	\$1,300	\$1,300	\$1,300
NBHK Market Pulp (1)	\$1,514	\$1,523	\$1,277	\$1,020	\$1,030	\$1,213	\$1,060	\$1,100	\$1,100	\$1,050	\$1,078	\$1,050	\$1,050	\$1,050	\$1,050	\$1,050
NBHK Market Pulp (old) (1)	\$1,514	\$1,523	\$1,277	\$1,150	\$1,170	\$1,280	\$1,200	\$1,200	\$1,200	\$1,150	\$1,188	\$1,150	\$1,150	\$1,150	\$1,150	\$1,150
SBSK Market Pulp (1)	\$1,678	\$1,643	\$1,460	\$1,218	\$1,225	\$1,387	\$1,255	\$1,275	\$1,275	\$1,225	\$1,258	\$1,200	\$1,175	\$1,175	\$1,175	\$1,181
SBSK Market Pulp (old) (1)	\$1,678	\$1,643	\$1,460	\$1,353	\$1,353	\$1,452	\$1,373	\$1,353	\$1,303	\$1,253	\$1,321	\$1,253	\$1,253	\$1,253	\$1,253	\$1,253
Fluff Pulp (1)	\$2,070	\$2,138	\$1,977	\$1,742	\$1,670	\$1,882	\$1,650	\$1,600	\$1,500	\$1,500	\$1,563	\$1,400	\$1,375	\$1,375	\$1,375	\$1,381
Fluff Pulp (old) (1)	\$2,070	\$2,138	\$1,977	\$1,875	\$1,650	\$1,910	\$1,623	\$1,553	\$1,503	\$1,453	\$1,533	\$1,453	\$1,453	\$1,453	\$1,453	\$1,453
China HW, net (1)	\$792	\$764	\$555	\$500	\$533	\$588	\$600	\$600	\$600	\$600	\$600	\$600	\$600	\$600	\$600	\$600
China HW, net (old) (1)	\$792	\$764	\$555	\$500	\$533	\$588	\$600	\$600	\$600	\$600	\$600	\$600	\$600	\$600	\$600	\$600
Coated Groundwood	\$1,191	\$1,270	\$1,250	\$1,250	\$1,225	\$1,249	\$1,200	\$1,175	\$1,175	\$1,150	\$1,175	\$1,150	\$1,150	\$1,150	\$1,150	\$1,150
Coated Groundwood (old)	\$1,191	\$1,270	\$1,250	\$1,200	\$1,100	\$1,205	\$1,050	\$1,030	\$1,030	\$1,030	\$1,035	\$1,030	\$1,030	\$1,030	\$1,030	\$1,030
Coated Freesheet	\$1,396	\$1,485	\$1,450	\$1,450	\$1,425	\$1,453	\$1,400	\$1,375	\$1,350	\$1,325	\$1,363	\$1,325	\$1,325	\$1,325	\$1,325	\$1,325
Coated Freesheet (old)	\$1,396	\$1,485	\$1,450	\$1,400	\$1,310	\$1,411	\$1,260	\$1,220	\$1,200	\$1,200	\$1,220	\$1,200	\$1,200	\$1,200	\$1,200	\$1,200
Uncoated Freesheet - 20-lb repro	\$1,412	\$1,495	\$1,472	\$1,465	\$1,440	\$1,468	\$1,420	\$1,400	\$1,400	\$1,350	\$1,393	\$1,300	\$1,300	\$1,300	\$1,300	\$1,300
Uncoated Freesheet - 20-lb repro (old)	\$1,412	\$1,495	\$1,472	\$1,435	\$1,400	\$1,450	\$1,400	\$1,400	\$1,350	\$1,300	\$1,363	\$1,300	\$1,300	\$1,300	\$1,300	\$1,300
Uncoated Groundwood	\$1,091	\$1,140	\$1,133	\$1,120	\$1,100	\$1,123	\$1,050	\$1,000	\$930	\$930	\$978	\$930	\$930	\$930	\$930	\$930
Uncoated Groundwood (old)	\$1,091	\$1,140	\$1,133	\$1,090	\$1,050	\$1,103	\$1,000	\$1,000	\$930	\$930	\$965	\$930	\$930	\$930	\$930	\$930
Newsprint (1)	\$815	\$905	\$872	\$852	\$830	\$865	\$800	\$750	\$725	\$725	\$750	\$725	\$725	\$725	\$725	\$725
Newsprint (old) (1)	\$815	\$905	\$872	\$820	\$800	\$849	\$750	\$710	\$710	\$710	\$720	\$710	\$710	\$710	\$710	\$710
Containerboard - Liner, East	\$920	\$872	\$852	\$845	\$841	\$852	\$835	\$835	\$835	\$835	\$835	\$835	\$870	\$870	\$870	\$861
Containerboard - Liner, East (old)	\$920	\$872	\$852	\$845	\$841	\$852	\$835	\$835	\$835	\$835	\$835	\$835	\$870	\$870	\$870	\$861
Containerboard - Medium, East	\$845	\$762	\$728	\$715	\$712	\$729	\$705	\$705	\$705	\$705	\$705	\$705	\$740	\$740	\$740	\$731
Containerboard - Medium, East (old)	\$845	\$762	\$728	\$715	\$712	\$729	\$705	\$705	\$705	\$705	\$705	\$705	\$740	\$740	\$740	\$731
Coated unbleached kraft board	\$1,465	\$1,490	\$1,483	\$1,470	\$1,450	\$1,473	\$1,425	\$1,425	\$1,450	\$1,450	\$1,438	\$1,450	\$1,400	\$1,400	\$1,400	\$1,413
Coated unbleached kraft board (old)	\$1,465	\$1,490	\$1,483	\$1,450	\$1,425	\$1,462	\$1,390	\$1,390	\$1,400	\$1,430	\$1,403	\$1,400	\$1,390	\$1,390	\$1,390	\$1,393
Coated recycled board	\$1,231	\$1,270	\$1,270	\$1,270	\$1,260	\$1,268	\$1,250	\$1,250	\$1,275	\$1,275	\$1,263	\$1,250	\$1,250	\$1,225	\$1,225	\$1,238
Coated recycled board (old)	\$1,231	\$1,270	\$1,270	\$1,230	\$1,200	\$1,243	\$1,150	\$1,150	\$1,200	\$1,200	\$1,175	\$1,200	\$1,200	\$1,150	\$1,150	\$1,175
Uncoated recycled board	\$1,073	\$1,053	\$1,040	\$1,040	\$1,030	\$1,041	\$1,020	\$1,020	\$1,020	\$1,000	\$1,015	\$1,000	\$1,000	\$1,050	\$1,050	\$1,025
Uncoated recycled board (old)	\$1,073	\$1,053	\$1,040	\$1,000	\$1,000	\$1,023	\$980	\$980	\$1,000	\$1,000	\$990	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000
Bleached board	\$1,455	\$1,530	\$1,530	\$1,470	\$1,450	\$1,495	\$1,425	\$1,425	\$1,450	\$1,450	\$1,438	\$1,420	\$1,400	\$1,375	\$1,375	\$1,393
Bleached board (old)	\$1,455	\$1,530	\$1,530	\$1,500	\$1,450	\$1,503	\$1,400	\$1,400	\$1,450	\$1,450	\$1,425	\$1,420	\$1,400	\$1,375	\$1,375	\$1,393
Kraft Paper - Grocery Sack 70lb	\$1,204	\$1,202	\$1,195	\$1,175	\$1,175	\$1,187	\$1,175	\$1,175	\$1,175	\$1,175	\$1,175	\$1,200	\$1,220	\$1,220	\$1,220	\$1,215
Kraft Paper - Grocery Sack 70lb (old)	\$1,204	\$1,202	\$1,195	\$1,180	\$1,180	\$1,189	\$1,180	\$1,180	\$1,180	\$1,180	\$1,180	\$1,220	\$1,220	\$1,220	\$1,220	\$1,220
Old Corrugated Containers, US Avg	\$97	\$32	\$42	\$55	\$65	\$49	\$75	\$90	\$100	\$90	\$89	\$90	\$90	\$90	\$90	\$90
Old Corrugated Containers, US Avg (old)	\$97	\$32	\$42	\$50	\$65	\$47	\$75	\$90	\$100	\$90	\$89	\$89	\$89	\$89	\$89	\$89
Framing Lumber Composite Price (2)	\$786	\$412	\$409	\$438	\$400	\$415	\$400	\$450	\$460	\$430	\$435	\$435	\$465	\$470	\$440	\$453
Framing Lumber Composite Price (old) (2)	\$786	\$412	\$409	\$465	\$400	\$422	\$420	\$450	\$460	\$430	\$440	\$435	\$465	\$470	\$440	\$453
OSB 7/16" North Central (2)	\$629	\$243	\$300	\$492	\$375	\$352	\$350	\$360	\$370	\$300	\$345	\$275	\$300	\$310	\$270	\$289
OSB 7/16" North Central (old) (2)	\$629	\$243	\$300	\$360	\$300	\$301	\$270	\$300	\$350	\$300	\$305	\$275	\$300	\$310	\$270	\$289
Southern Plywood 15/32" 3-ply (2)	\$815	\$531	\$535	\$574	\$585	\$556	\$585	\$600	\$600	\$550	\$584	\$475	\$450	\$450	\$370	\$436
Southern Plywood 15/32" 3-ply (old) (2)	\$815	\$531	\$535	\$510	\$500	\$519	\$500	\$520	\$500	\$450	\$493	\$400	\$400	\$420	\$370	\$398

Source: Fastmarkets RISI / Pulp & Paper Week, Random Lengths, BofA Global Research estimates. All prices per short ton, except as noted; (1) S/metric tonne; (2) Lumber price per MBF, Panel price per MSF.

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Packaging & Paper/Forest valuation and EPS changes

Exhibit 13: BofA Rigid Packaging strategy, valuation and EPS grid (1/2):

Summary of Rigid Packaging Price Objective, Estimate, and Valuation Changes

Rigid Packa	ging:						Valuation	n/range method			
					r EPS esti					Cost of	
Ticker		Rating		2023	2024	2025	PE	EV / EBITDA	FCF	Equity	Comments
AMBP	New Old	N N	\$3.50 \$4	\$0.20 \$0.20	\$0.21 \$0.21	\$0.27 \$0.27	15x 16x	9-10x 10-11x	\$150 \$150	11% 10%	Our EPS estimates for AMBP are unchanged, as we make no changes to our model at this juncture. We are in line with the Street for 2023, although our models forecast less EPS growth in 2024, partly on higher interest costs. AMBP is guiding to adj. EBITDA of \$630-640mn for this year and we are currently at \$634mn and are modeling for ~5% volume growth overall. Given recent trends comparable and market multiples, we lower our valuation multiples to 15x P/E (from 16x) and 9-10x EV/EBITDA (from 10-11x). Meantime, our cost of equity increases to 11% from 10% given Bloomberg inputs. With these changes, we move our PO to \$3.50 from \$4.
BALL	New Old	N N	\$55 \$62	\$3.00 \$3.05	\$3.40 \$3.60	\$3.95 \$4.00	16-17x 18-19x	12x 13x	\$1,200 \$1,200	11% 11%	We are in line to slightly above the Street in our earnings forecasts. However, our estimates drop 5c in 2023 and 20c for 2024 as we incorporate the impact of weaker expected North American volumes and the potential for European volumes to be impacted by a recession. Our overall volume estimates drop by 20bps in 2023 and 70bps in 2024. Additionally, our 2025 estimate drops by 5c given the incorporation of these changes. Given the recent compression in comparable and market multiples, we lower our valuation multiples to 16-17x P/E (from 18-19x) and 12x EV/EBITDA (from 13x). The combination of these changes causes our PO to move from \$62 to \$55.
CCK	New Old	B B	\$103 \$107	\$6.20 \$6.15	\$7.40 \$7.35	\$8.05 \$8.00	15x 15-16x	10-11x 11x	\$900 \$900	11% 11%	We are about in line with the Street for 2023, after raising 3Q estimates to \$1.70 (up 5c) – the low end of CCK's guidance for the quarter. The increase in our estimates is largely driven by higher volume growth relative to our prior model. Overall, we raise our beverage can volume growth by 25bps in 2023. While Crown did not update estimates during recent conference appearances or our field trip visit to Bowling Green, we did not take away any comments that suggested trends were not as expected coming out of 2Q reporting. Looking ahead, our estimates are modestly above the Street for 2024-25. Given the recent moves in peer and market multiples, we slightly lower our valuation multiples to 15x P/E (was 15-16x) and 10-11x EV/EBITDA (was 11x). The combination of changes in our EPS estimates and valuation multiples causes our PO to move to \$103 from \$107. CCK continues to be our preferred and only Buyrated beverage canmaker at present.
Ol	New Old	B B	\$25 \$28	\$3.15 \$3.22	\$3.10 \$3.30	\$3.25 \$3.50	8-10x 10x	6-7x 7x	\$300 \$275	14% 14%	We are slightly below consensus in 3Q and for the year at \$0.68 and \$3.15, respectively. Our estimates also drop by 20c for 2024 to \$3.10 (from a prior \$3.30). For this year, we reduced volumes 1-2%pts in the Americas for 3Q and 4Q as we further refine models such that overall volume is down 8% overall (in line with guidance of mid-high-single digit volume declines). Additionally, we now assume -1 to -2% pricing in Europe as a precaution – volumes have been weak and we expect the roughly 70% of volume that is annually renegotiated to see price erosion. OI has already retraced about 20-25% since 2Q reporting, so we think this is already in the stock – our forecast moves from here will be based on the outlook relative to our new estimates. Given recent moves in valuation multiples and our review of historical company, peer, and market multiple ranges, we tweak our valuation multiples lower to 8-10x P/E (was 10x) and 6-7x EV/EBITDA (was 7x). Upon further review of our models, our normalized FCF estimate is now \$300mn, up from \$275mn. The combination of these changes causes our PO to move down \$3 to \$25.

Source: FactSet, BofA Global Research estimates. Full-year estimates calendarized. B = Buy, N = Neutral, UP = Underperform. Note: our cost of equity percentages are adjusted typically based on changes in beta (source: Bloomberg).

BofA GLOBAL RESEARCH

Exhibit 14: BofA Rigid Packaging strategy, valuation and EPS grid (2/2): Summary of Rigid Packaging Price Objective, Estimate, and Valuation Changes



Rigid Packaging:



				Calenda	r EPS estir	nates			Normal	Cost of	
Ticker		Rating	g PO	2023	2024	2025	PE	EV / EBITDA	FCF	Equity	Comments
SLGN	New	В	\$47	\$3.40	\$3.95	\$4.40	12-13x	9x	\$375	9%	We are now at the low end of Silgan's guidance for the quarter and the year (at \$1.10 and \$3.40,
	Old	В	\$52	\$3.45	\$4.00	\$4.50	12-13x	9x	\$375	9%	respectively), as we don't believe there has been a material change in destocking/sell-through trends in Silgan's customer base. While we think that Silgan had already incorporated this into guidance, last we had heard the pack was running a week or two behind, which is another reason to keep estimates conservative. Upon further review, we trim our forecasts on margin for both Dispensing & Specialty Closures (DSC) and Custom Containers (CC), but we remain above the Street in these segments. We now expect a volume decline of -1.1% (down 50bps from our prior forecast) in DSC and -10.4% in CC (down 50bps) in 2023. In our view, progress on volume and margin in DSC will be an important consideration in SLGN's re-rating. Overall, our EPS estimates drop by 5c in 2023 and 2024 to \$3.40 and \$3.95, respectively, and by 10c in 2025 to \$4.40. These changes drive or PO lower to \$47 (was \$52).

Source: FactSet, BofA Global Research estimates. Full-year estimates calendarized. B = Buy, N = Neutral, UP = Underperform. Note: our cost of equity percentages are adjusted typically based on changes in beta (source: Bloomberg).

Exhibit 15: BofA Specialty Packaging strategy, valuation and EPS grid (1/2): Summary of Specialty Packaging Price Objective, Estimate, and Valuation Changes

Special	ty Pack	aging	:				Valua	tion/range method			
				Calendar	EPS esti	mates	Valua	icion/range method	Normal	Cost of	
Ticker		Rating	PO	2023	2024	2025	PE	EV / EBITDA	FCF	Equity	Comments
AMCR	New Old	UP UP	\$9.30 \$9.40	\$0.65 \$0.67	\$0.71 \$0.72	\$0.75 \$0.77	16x 16x	10-11x 10-11x	\$1,100 \$1,100	10% 10%	We are modestly below the Street for F24 at \$0.68 (vs. the Street at \$0.69). We took roughly 1pct point off our volume forecasts for F1H24 to account for continued demand weakness we expect through year-end. Overall, we expect F24 volume to decline by -3% in both Flexibles and Rigid. Balancing cost reductions with operating leverage headwinds, (particularly for Rigid in F1Q) our estimates decline 1c for F24. This also causes our F24 and F25 estimates to decline by 2c to \$0.73 and \$0.77, respectively. Given these adjustments, we move P0 to \$9.30 from \$9.40.
ATR	New Old	B B	\$145 \$150	\$4.57 \$4.55	\$5.05 \$4.95	\$5.50 \$5.40		SOTP value = \$189.17 SOTP value = \$187.44	\$300 \$300	10% 9%	We increase our volume forecasts 1-2%pts in Pharma-, Fragrance-, and Cosmetic-related areas, partly offset by additional volume reductions in Home and Personal Care given destocking. We also raise our margins in Beauty by 60bp in 2024 as we give more credit towards ATR's analyst-day goals over-time. Given these adjustments, our estimates increase by 2c in 2023 and 10c in 2024, and we are above the Street. Our 2025 EPS estimate also moves up by 10c to \$5.50 as a result of these changes. While our SOTP valuation multiples are unchanged, we increase our cost of equity to 10% given Bloomberg inputs. This causes the equity value derived from the FCF component of our PO calculation to drop, resulting in a PO of \$145 (down from \$150).
AVY	New Old	B B	\$192 \$190	\$7.80 \$7.75	\$9.70 \$9.55	\$10.85 \$10.70	19x 19x	13-14x 13-14x	\$800 \$800	11% 10%	We are below the Street for 3Q and the year but raise estimates 5c for the year, all in 4Q. This change is a result of our updated Solutions volume growth estimate of 17% in 4Q (up from 10%). Our 2024-25 estimates also increase 15c as we review/increase Solutions volumes (by 170bps in 2024) in consideration of comparisons. Our discussions during the quarter with packaging and corrugated participants suggests a slow sequential improvement in total and so we don't expect AVY label volumes to provide upside surprises in the current quarter. Our revised Solutions revenue estimates imply 5% base-business increases for 2H23 v. 2H22 (mostly weighted to 4Q) when considering 40% growth for Intelligent Labels. Our 2024 estimates assume 20% growth in IL and 5% in base for Solutions. Given the adjustments to our forecasts,we move our PO up by \$2 to \$192.

Source: FactSet, BofA Global Research estimates. AMCRs fiscal year-end is June. Full-year estimates calendarized. B = Buy, N = Neutral, UP = Underperform. Note: our cost of equity percentages are adjusted typically based on changes in beta (source: Bloomberg). *Sonoco is also part of this group but covered in Diversified/Industrial

Exhibit 16: BofA Specialty Packaging strategy, valuation and EPS grid (2/2): Summary of Specialty Packaging Price Objective, Estimate, and Valuation Changes

Specialty Packaging:	
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				Calendar	EPS estim	ates			Normal	Cost of	
Ticker		Rating	PO	2023	2024	2025	PE	EV / EBITDA	FCF	Equity	Comments
BERY	New Old	B B	\$80 \$75	\$7.31 \$7.38	\$7.94 \$8.01	\$8.15 \$8.16	12x 12x	8-9x 7-9x	\$900 \$900	11% 11%	We are modestly below the Street in our forecasts overall. Among other adjustments, we reduce our Health, Hygiene & Specialties (HHS) EBITDA about 1-4% from prior forecasts, as we assume the strategic review will lead to internal distraction, partly offset by continued good trends in foodservice for Consumer Packaging North America (CPNA). We raise CPNA forecasts by 1-2% from our prior model in F24 and F25, partly on a 1pt increase in volume from prior estimates. Our F4Q and F23 estimates drop by 5c to \$2.07 and \$7.21, respectively. Meantime, our F24 estimate moves to \$7.75 (from \$7.85) while our F25 estimate is unchanged at \$8.40. Upon further review of historical company, sector and market valuation ranges, we slightly increase our EV/EBITDA multiple to 8-9x from 7-9x. This change causes our PO to move up by \$5 to \$80.
PTVE	New Old	N N	\$10 \$10	\$0.50 \$0.50	\$0.85 \$0.85	\$1.00 \$1.00	10-12x 10-12x	7-8x 7-8x	\$185 \$185	11% 10%	We leave our estimates for PTVE unchanged, as we do not believe that trends have changed materially for the company since exiting 2Q reporting. Overall, we forecast \$801mn in adj. EBITDA for 2023, which compares to the company's guidance of \$775-800mn. We also raise our cost of equity by 100bps given Bloomberg inputs, but our PO remains at \$10.
SEE	New Old	B B	\$43 \$47	\$2.70 \$2.70	\$3.00 \$3.05	\$3.50 \$3.50	14-15x 15x	9-10x 10x	\$400 \$500	11% 11%	We are slightly below guidance for 2023 - our EPS and EBITDA estimates are \$2.70 and \$1.069bn, respectively, versus SEE expectations of \$2.75 and \$1.075bn, respectively, given some remaining uncertainty on the timing of machinery orders. Further, given the continued lackluster volume in Protective we expect into 2024, we lowered our margin estimates roughly 50bp in the segment for the first three quarters. In aggregate, however, we are projecting about 5% EBITDA growth in 2024 on 1% volume growth (modest bounce off easy comps). Hopefully 2023 represents a bottom – while from a much-reduced base, we expect SEE will show progress on its automation, digital, Liquibox acquisition integration, portfolio optimization, Reinvent SEE 2.0 and "Cost take-out to grow" (CTO2Grow) initiatives (worth \$175-205mn). Investors likely will expect progress in these areas and, failing this, will look for even more urgent actions from management. Given these changes to our model, our EPS estimate for 2024 moves to \$3.00 (from \$3.05) and our 2023 and 2025 estimates are unchanged at \$2.70 and \$3.50, respectively. Upon further review of historical company, sector and market valuation ranges, we adjust our valuation multiples to 14-15x P/E (was 15x) and 9-10x EV/EBITDA (was 10x). The combination of the adjustments in our valuation multiples and estimates causes our PO to move to \$43 from \$47.

Source: FactSet, BofA Global Research estimates. BERY's fiscal year-end is September. Full-year estimates calendarized. B = Buy, N = Neutral, UP = Underperform. Note: our cost of equity percentages are adjusted typically based on changes in beta (source: Bloomberg). *Sonoco is also part of this group but covered in Diversified/Industrial

BofA GLOBAL RESEARCH

Exhibit 17: BofA Diversified/Industrial Packaging strategy, valuation and EPS grid:Summary of Diversified/Industrial Packaging Price Objective, Estimate, and Valuation Changes

Diversif	ied / Ind	lustrial	:								
				Calanday	EPS estin		Valuation	n/range method	Navend	Coat of	
Ticker		Rating		2023	2024	2025	PE	EV / EBITDA		Cost of Equity	
BRC	New	UP	\$51	\$3.89	\$4.09	\$4.24	13-14x	9x	\$150	10%	BRC reported earnings on September 5. Given BRC's commentary and guidance regarding organic growth
	Old	UP	\$51	\$3.89	\$4.09	\$4.24	13-14x	9x	\$150	10%	(guiding to mid-single-digit growth in both segments) and its continued operational and commercial efforts, we raised our estimates by 45c in F2024 and F2025. We are at \$4.00 for F24, which compares to the company's guidance of \$3.85-4.05 and the Street at \$3.99.
GEE	New	N	\$79	\$6.14	\$6.12	\$6.63	12x	8x	\$400	11%	





	Old	N	\$81	\$6.14	\$6.08	\$6.61	12x	8-9x	\$400	11%	We now incorporate our updated paperboard pricing forecasts, which causes our estimates in Paper, Packaging, & Services (PPS) to move higher throughout our forecasts. We are not updating our volume assumptions at this juncture, as we recently refined our forecasts following GEF's F3Q reporting. Recall that demand appears to remain soft in both businesses and GEF stated that its customers do not expect any improvements in demand over the next two quarters. Despite this, acquisitions and GEF's operational and cost-out efforts should serve as offsets to some of the demand weakness. Lastly, upon further review of historical valuation ranges, we adjust our EV/EBITDA valuation multiple to 8x (from 8-9x). This adjustment largely drives the \$2 drop in our PO to \$79.
SON	New Old	B B	\$64 \$64	\$5.20 \$5.10	\$5.70 \$5.55	\$6.15 \$6.00	12-13x 12-13x	8-9x 9x	\$600 \$600	10% 10%	We bump estimates but remain slightly below company guidance (\$1.24 v. \$1.25-1.35 guidance for 3Q) and versus the Street. Our estimates increase for 2024 and 2025, mainly on the inclusion of the RTS acquisition. Coming out of 2Q, SON expected Industrial to stay at relatively low activity levels and that has largely occurred given our research, with some remaining boost from prior price/cost actions. Sell-through and customer demand in Consumer has remained at low levels, too, partly as inventory has been managed tightly. We trimmed our productivity forecasts by \$5mn+ for 2H to account for the continued sluggish volume outlook, and lowered for 2024 by similar amounts. We also lowered pricing for both main segments by 1-2% to account for likely, in our view, deflation. Our estimates include an initial estimate for consolidating RTS Packaging – Sonoco will provide additional details during reporting. These changes result in a 10c increase in our 2023 EPS estimate to \$5.20. Meantime, our 2024 and 2025 estimates increase by 15c to \$5.70 and \$6.15, respectively. We also slightly lower our EV/EBITDA multiple from 9x to 8-9x in consideration of peer and market multiples. With these changes, our PO remains at \$64.

Source: FactSet, BofA Global Research estimates. Full-year estimates calendarized. BRC's year-end is July, GEF's is October. B = Buy, N = Neutral, UP = Underperform. Note: our cost of equity percentages are adjusted typically based on changes in beta (source: Bloomberg).

Exhibit 18: BofA Boxboard strategy, valuation and EPS grid:Summary of Boxboard Price Objective, Estimate, and Valuation Changes

Boxboard:				Calendar	r EPS estin	nates	v	aluation/rang SOTP	ge method Normal	Cost of	
Ticker		Rating	PO	2023	2024	2025	PE	Value	FCF	Equity	Comments
GPK	New	N	\$29	\$2.75	\$2.65	\$2.80	14.0x	N/A	\$634	10%	We are below the street for GPK, as we anticipate some remaining price cuts into 2024 driven by demand
	Old	N	\$28	\$2.75	\$2.60	\$2.75	14.0x	N/A	\$613	10%	trends. GPK anticipates low-single-digit declines in 3Q with the potential for growth in 4Q, though the company fairly points out that its trends will largely mirror its customer base as destocking comes to a conclusion. Given less-negative pricing in 2H23 than we'd previously anticipated we raise benchmark price forecasts (discussed earlier in the report) our estimates increase ~5c in 2024.

Source: FactSet, BofA Global Research estimates. Full-year estimates calendarized. B = Buy, N = Neutral, UP = Underperform. Note: our cost of equity percentages are adjusted typically based on changes in beta (source: Bloomberg). *WestRock is part of this group but covered in Containerboard. Sonoco and Greif are also part of this group but are covered in Diversified/Industrial

Exhibit 19: BofA Containerboard strategy, valuation and EPS grid: Summary of Containerboard Price Objective, Estimate, and Valuation Changes

				Calendar	EPS estim	ates		SOTP	Normal	Cost of	
Ticker		Rating	PO	2023	2024	2025	PE	Value	FCF	Equity	Comments
IP .	New Old	UP UP	\$34 \$34	\$2.14 \$2.15	\$1.75 \$1.70	\$2.00 \$2.00	14.0x 14.0x	\$42.66 \$42.49	\$1,000 \$1,000	10% 10%	We are in-line with the Street for 2023 results but below the Street for 2024 and 2025, partly as we assume continued erosion in pulp trends for IP. On the positive, containerboard fundamentals have likely seen most of their declines – with better operations, we tweak our margin assumptions by 10-20bp per quarter. That said, we worry about the combination of higher-than-average spreads in IP's Global Cellulose Fibers markets (i.e., fluff is selling at a much higher premium versus southern bleached softwood kraft than in past periods) and the threat of new capacity over time. Given these factors, our 2023 estimate drops by 1c to \$2.14 while our 2025 estimate moves up by 5c to \$1.75. Our PO remains at \$34.
PKG	New Old	N N	\$161 \$158	\$8.10 \$8.05	\$7.60 \$7.15	\$7.90 \$7.60		\$163.68 \$163.19	\$750 \$750	9% 9%	We raise our estimates slightly ahead of the Street for 3Q to \$1.95 from a prior \$1.90 and versus guidance of \$1.88. We also raise our 2024 EBITDA estimate by \$50mn. Our sense from our channel checks is that demand trends in some of PKG's end markets remained good, as were operations. As we preliminarily project into 2024, we estimate 2023's pricing effects amount to a ~\$200mn headwind, but a return to more normal volume (and Wallula getting back to running – our research suggests PKG has been selectively hiring in advance of an upturn) would add back \$100mn, with input costs and productivity adding further tailwind. This results in a 45c increase to our 2024 EPS figure to \$7.60 and a 30c increase in our 2025 estimate to \$7.90. These changes drive our PO to \$161 from \$158.
WRK	New Old	B B	\$40 \$40	\$2.65 \$2.72	\$2.02 \$2.02	\$2.82 \$2.83	13.5x 13.5x	43.45 43.71	\$1,000 \$1,000	11% 11%	Our estimates are largely unchanged, though we take a nickel out of F24 and are now at \$1.95. We modestly increased our box/containerboard volume forecast for F4Q (now forecasting -3%; was -5% prior) but trimmed our consumer volume forecasts to -3% through F1Q24 (down 200-300bp from prior) as the industry destocks. We had already anticipated a fairly sharp drop in consumer/boxboard pricing and so our forecasts don't change much in consideration of the recent \$60/ton (August) drop in bleached board pricing. Our forecasts assume further decreases in boxboard pricing, which hopefully adds some shock absorber relative to the macro. Our P0 is unchanged at \$40.

Source: FactSet, BofA Global Research estimates. Full-year estimates calendarized. B = Buy, N = Neutral, UP = Underperform. Note: our cost of equity percentages are adjusted typically based on changes in beta (source: Bloomberg). *Sonoco and Greif are also part of this group but are covered in Diversified/Industrial; Veritiv is a distributor but seems to move most dosely with containerboard and corrugated trends.

Exhibit 20: BofA Pulp & Paper strategy, valuation and EPS grid: Summary of Pulp & Paper Price Objective, Estimate, and Valuation Changes







							V	aluation/ran	ge method		
				Calendar	EPS estim	ates		SOTP	Normal	Cost of	
Ticker		Rating	PO	2023	2024	2025	PE	Value	FCF	Equity	Comments
SLVM	New	В	\$48	\$5.90	\$4.38	\$5.73	9.0x	\$58.95	\$211	8%	We lowered our volume forecasts another 5% in each of 3Q and 4Q and are expecting 15-20% declines in the
	Old	В	\$50	\$5.95	\$4.75	\$5.90	9.0x	\$59.73	\$211	8%	2H23. This lower volume step-off point coupled with additional volume headwinds in 2024 creates the potential
											for more downtime. Meantime, we estimate that pricing trends in 2023 amount to \$125mn-150mn of headwinds into 2024, offset by ~\$50mn of input cost tailwinds. As a result, we think it is likely EBITDA is down over \$100mn in 2024 v. 2023, and our forecasts are \$580mn in 2023 (relatively unchanged v. prior) and \$465mn in 2024 (down \$22mn). Our forecasts call for further price erosion in 2024 and 2025, though this is a placeholder – recent trends suggest some firming up in graphic paper demand and pricing. Our EPS estimates move to \$5.90 (down 5c) in 2023, \$4.38 (down 37c) in 2024, and \$5.73 (down 17c) in 2025. Given these changes, our PO moves to \$48 from \$50.

Source: FactSet, BofA Global Research estimates. Full-year estimates calendarized. B = Buy, N = Neutral, UP = Underperform. Note: our cost of equity percentages are adjusted typically based on changes in beta (source: Bloomberg). *International Paper is also part of this group through its fluff pulp business and offtake agreements with Sylvamo but is induded in Containerboard.

Exhibit 21: BofA Wood & Timber strategy, valuation and EPS gridSummary of Wood & Timber Price Objective, Estimate, and Valuation Changes

Wood & Tim	ber:										
				Calendai	r EPS estir	nates		Valuation/rang SOTP	e method Normal	Cost of	
Ticker		Rating	PO	2023	2024	2025	PE	Value	FCF	Equity	Comments
ВСС	New Old	UP N	\$111 \$111	\$11.35 \$11.20	\$10.85 \$10.55	\$10.25 \$10.10		\$124.20 \$121.97	\$325 \$325	12% 12%	We are below consensus for this year at \$11.35 (vs. the street currently at \$11.64). However, we are more in line with the Street for next year at \$10.85 (vs. the Street at \$10.88). Given what was a relatively positive backdrop for most of the quarter, we assume a 1% increase to our sales/day and overall revenues for Building Materials Distribution (BMD), though our estimates do not include the impact of the Brockway-Smith Company (BROSCO) door/millwork distributor transaction. Our research also suggests that BCC has gained some relative momentum in the engineered wood sector, and our 3Q/4Q estimates are bumped as a result. Our model also now includes our updated benchmark price forecasts for plywood, which drive our EPS estimates higher. That said, our SOTP valuation is slightly higher which causes our PO to remain unchanged at \$111. Bigger picture, a slowdown in repair/remodel activity and more pushback on pricing from builders will be a headwind for the shares, and we move to Underperform from a prior Neutral.
LPX	New Old	UP UP	\$64 \$60	\$3.40 \$3.20	\$4.15 \$4.20	\$4.50 \$5.10	N/A N/A	\$67.27 \$66.23	\$396 \$332	13% 13%	Our estimates increase about 8c for 3Q – while softer open-market volumes lead us to trim oriented strand board (OSB) shipment estimates, incorporating higher-than-expected OSB pricing than we were previously modeling for 3Q more than offset this impact. Navigating the end of destocking in Siding is challenging, but we maintain our estimates. Estimates for future periods are flat/down with prior estimates as we balance lower OSB pricing with expected better operating costs. We similarly expect Siding margins to approach 25% by 2025 on operating factors. Overall, our EPS estimates move to \$3.40 (was \$3.20) in 2023, \$4.15 (was \$4.20) in 2024, and \$4.50 (was \$5.10) in 2025. We also lower capex to \$250mn in 2024 from a prior \$340mn, as spending on new siding capacity will likely not need accelerate til 2025 for Wawa. Our PO moves to \$64 from \$60 given these adjustments to our model.
PCH	New Old	N N	\$57 \$57	\$0.67 \$0.75	\$1.00 \$1.05	\$1.30 \$1.35	N/A N/A	\$49.93 \$48.57	N/A N/A	7% 7%	Our estimates are about in line with the Street and are trimmed modestly for a somewhat sluggish end to $3Q$ in lumber trends and some modest margin adjustments in Timberlands. Similarly, our 2024 and 2025 estimates drop by $5c$ to $$1.00$ and $$1.30$. Meantime, our PO remains unchanged at $$57$.
WY	New Old	B B	\$38 \$38	\$0.99 \$0.97	\$1.01 \$1.00	\$1.07 \$1.05	N/A N/A	\$42.34 \$42.18	N/A N/A	7% 7%	Relative to our recent estimate reduction following WY's normal, quarter-end update, our estimates move up 1-2c as we include our updated price forecasts – OSB prices wound up 3Q a bit stronger than we had previously modeled. On a separate point, our trade contacts have recently pointed out that lead times for some (though not all) of the engineered wood producers have increased. Given the slight adjustments to our model, our PO remains unchanged at \$38.

Investment Rationale

Boise Cascade Company

BCC has performed well throughout '23, but we now rate it Underperform. With increased mortgage rates, we think BCC is due for a pause. We anticipate earnings will decline somewhat into '24 and '25 on lower wood pricing and homebuilding/remodeling activity. Our research suggests multifamily construction will weigh on starts, even as r&r activity is down. Ultimately, we believe this will begin to put pressure on BCC's plywood, engineered wood, and Building Materials Distribution (BMD) business.

Price objective basis & risk

Amcor PLC (AMCR / AMCCF)

Our \$9.30 price objective (AU\$14.75) is derived from a three-part valuation approach, which includes (1) a 16x calendarized 2024E P/E multiple, (2) a 10-11x calendarized 2024E EV/EBITDA multiple, (3) a normalized FCF estimate of \$1,100mn, an estimated cost of equity of 10% and forecast rate of growth of 0%. We believe the multiples (inline to a slight premium) are appropriate relative to peers given the company's quality, size, and low leverage.

Risks to our PO are: (1) plastic packaging markets' potential sustainability challenges, particularly in rigid plastic bottles, (2) food, beverage and other packaging fundamentals' potential to disappoint relative to expectations, (3) unfavorable resin price volatility relative to our forecasts could impact results despite contractual pass throughs, (4) competitive factors, (5) unfavorable volume and pricing trends relative to our forecasts, (6) unfavorable macroeconomic trends. Should risk factors cited here and the company fundamentals prove more benign/favorable versus our forecasts, AMCR results and its PO could exceed our forecasts over time.

AptarGroup Inc. (ATR)

Our \$145 PO is based on a two-part valuation approach: (1) Sum-of-the-parts (SOTP) valuation based on our projection of ATR's 2024 segment results. Given our evaluation of peer and market multiples, we project ATR's Pharma business will be valued at 25x our 2024E EBITDA forecast given where peers currently trade. We value Aptar Closures at 7-8x EV/EBITDA and we value Aptar Beauty segment at a 7x multiple given a longer than expected rebound in the beauty and fragrance market. (2) Normalized FCF valuation which reflects our expectation that it will generate nearly \$300mn of FCF on a normalized basis, an estimated COE of 10%, and a forecast growth rate of 5%.

Upside risks: (1) strength of ATR's project backlog given conversions to dispensing products, (2) specialty packagers' ability to surprise in performance in the mid-to-late cycle, (3) a stronger-than-expected recovery from Asian beverage market destocking, (4) depreciation of USD, (5) ATR's restructuring program which could add materially to forecasts.

Downside risks: (1) should consumer trends remain unfavorable for the stock, (2) acquisition risks, given ATR's balance sheet, (3) unfavorable resin swings, (4) unfavorable international growth and potential effects from coronavirus, (5) mgmt transitions, (6) should trends reverse in the policy or regulatory outlook for the US or other countries.

Ardagh Metal Packaging S.A. (AMBP)

Our \$3.50 price objective is based on a three-part valuation approach, which takes: (1) a 15x 2024E P/E multiple, (2) an 9-10x 2024E EV/EBITDA multiple and (3) our intrinsic free cash flow (FCF) valuation, which assumes \$150mn of normalized FCF, 11% cost of



equity, and a 2% growth rate. These multiples are consistent with comparable company multiples and we'd expect the company to trade slightly below peers.

Downside risks to our price objective are (1) AMBP's ability to compete with well established peers, (2) growth, pricing and valuation considerations should volumes slow, (3) a more concentrated customer base relative to peers, (4) end-market mix given its weighting to hard seltzer, (5) raw material availability in light of recent supply-chain disruptions and the need to pass through primary raw materials (i.e. aluminum can sheet), (6) leverage relative to other rigid packaging companies, (7) energy cost volatility in Europe, and (8) future equity dilution related to existing warrants and an earnout agreement with Ardagh Group.

As with all paper/forest and packaging companies a multitude of micro and macro factors are at work and, coupled with operational leverage, results could be better- or worse-than-expected with downside & upside risks to our PO should fundamentals wind up above or below expectations.

Avery Dennison Corp. (AVY)

Our \$192 price objective is derived from a three-part valuation approach, which includes the use of (1) a 19x 2024E P/E multiple, (2) a 13-14x 2024E EV/EBITDA multiple, and (3) our intrinsic free cash flow (FCF) valuation, which estimates \$800mn of normalized FCF (please see our free cash flow model for additional information), 10% cost of equity and a 4% growth rate. Based on history, we think our valuation multiples are appropriate for a late-cycle period with limited inflation.

Downside risks to our price objective are (1) risk relative to AVY's ability to execute on its cost reduction plans, (2) volume and pricing trends in core Materials Group and Solutions Group segments, (3) growing dependence on emerging economies, (4) dilution from radio frequency identification (RFID) and (RBIS) investments, (5) unfavorable volume and pricing trends, (6) unfavorable macroeconomic environment, (7) variability in governmental policy, (8) potential volatility from coronavirus.

Ball Corp. (BALL)

Our \$55 price objective is based on a three-part valuation approach, which takes: (1) a $16\text{-}17x\ 2024E\ P/E\ multiple}$, (2) a $12x\ 2024E\ EV/EBITDA\ multiple$ and (3) our intrinsic free cash flow (FCF) valuation, which assumes \$1.2bn of normalized FCF, 11% cost of equity and a 3% growth rate. Multiple ranges are higher vs. past valuation levels given packaging group valuations and the growth trajectory offered by the beverage can market.

Downside risks to our PO are (1) increasing operational challenges from new capacity onboarding, (2) potentially increased competition arising from new entrants, (3) BALL's ability to realize benefits from prior capital spending (e.g., new capacity, custom cans, productivity, etc.), (4) input cost volatility including energy cost volatility in Europe, (5) overseas/emerging market risks (for example, currency), (6) demand trends in beverages, including the risks to overall valuation, demand and pricing should growth slow, (7) seasonal-weighting of full-year earnings to the key 2Q/3Q period, (8) potential governmental policy and regulatory changes in the US and elsewhere, (9) increasing risk from Russia and South America.

And, as with most packaging companies, there are numerous macro risks and other risks around volumes, pricing, input costs and other factors that could negatively affect fundamental and stock price performance. Similarly should these factors prove more constructive than expected, BALL's performance/PO could exceed our forecasts.

Berry Global (BERY)



Our \$80 price objective is derived from a three-part valuation approach, which includes: (1) a 12x calendarized 2024E P/E multiple, (2) a 8-9x calendarized 2024E EV/EBITDA multiple, (3) a normalized FCF estimate of \$900mn, an estimated cost of equity of 11% and forecast rate of growth of 0%. We believe the multiples (in-line to a slight discount) we use are appropriate relative to peers given the increased leverage.

Downside risks to our PO are: (1) plastic packaging markets' potential sustainability challenges, including in Europe, (2) food, beverage and other packaging fundamentals could disappoint relative to expectations, (3) unfavorable resin price volatility could impact results despite contractual pass-through, (4) competitive factors, (5) financial leverage, (6) unfavorable volume and pricing trends, (7) unfavorable macroeconomic trends.

Overall, energy, commodity and macro volatility represent ongoing risks for packaging companies. We have tried to forecast and model accurately. However, industry and economic trends could prove weaker or stronger than we modeled.

Boise Cascade Company (BCC)

Our \$111 PO is based on the average of (a) a free cash flow (FCF) valuation based on our estimate of \$325mn in FCF, a calculated cost of equity of 12% and forecast rate of growth of 3%, (b) a sum-of-the-parts (SOTP) value that values BCC's Wood segment at 6x EBITDA (which is consistent with Wood multiples at this stage of the cycle) and 0.8x sales while its Building Materials Distribution segment will be valued at 8x and 0.5x, respectively. We then discount this valuation back to derive our 12 month PO.

Downside risks to our price objective being achieved are: (1) a slower housing recovery, (2) downwards commodity pricing volatility, (3) demand, supply-chain, (4) distribution business inventory and inflation trends, (5) potential volatility in actual performance relative to consensus given operating and financial leverage, (6) potential increases in Brazilian exports of plywood to the US.

Upside risks are: (1) increases in single and multi-family construction, and/or greater-than-expected usage of BCC products in construction, (2) upwards commodity pricing volatility, (3) reduced imports of plywood from Brazil.

BCC is impacted by numerous macro, inflation, currency and other considerations. To the extent that the points above are more negative than expected, BCC's results and stock price could wind up below our forecasts. Similarly, to the extent that the points above are more positive than expected, BCC results and stock price could wind up above our forecasts.

Brady Corp. - Cl A (BRC)

Our \$51 PO is based on a three-part valuation approach, which includes: (1) a 13-14x calendarized 2024E P/E multiple, (2) a 9x calendarized 2024E EV/EBITDA multiple, and (3) our intrinsic free cash flow (FCF) valuation, which assumes \$150mn normalized FCF, 10% cost of equity, and a 3% growth rate. We apply multiple ranges to reflect a more normalized environment.

Downside risks to PO: (1) risk relative to BRC's ability to generate performance improvements from its WPS & IDS investments & other efforts, (2) unfavorable organic growth (vol/pricing) trends in key economies, (3) increasing dependence on emerging economies, (4) acquisition/integration risk, (5) senior mgmt succession and bench development risk, (6) unfavorable macroeconomic environments, (7) potential for BRC's future valuation to be impaired relative to our expectations given secular headwinds, or other factors, (8) risks associated with trade & other administration policies. Upside risks are: (1) a faster-than-expected recovery in Brady's end markets, (2) more favorable



pricing or volume than our expectations, (3) favorable foreign currency translation, and (4) a greater pace of share repurchases than we have modeled for.

Crown Holdings Inc. (CCK)

We calculate our PO of \$103 by using our 2024 estimates and averaging the fair values derived from (1) a 15x 2024E P/E multiple (adj. for asbestos), (2) a 10-11x 2024E EV/EBITDA multiple, and (3) our intrinsic FCF valuation, which assumes \$900mn normalized FCF, a 11% cost of equity and a 2% growth rate. Multiple ranges are in line with past valuation levels reached when fundamentals are positive, and are targeted with past normalized ranges in mind for rigid packaging (10-17x).

Downside risks to our PO are (1) weather uncertainties during key seasonal periods in 2Q-3Q, (2) asbestos liabilities that could present a greater drain on cash flow than we currently expect, (3) FX translation, as the majority of sales are outside the US, (4) increasing investment, particularly in EM, (5) share loss to aseptic or plastic/flexible pkgg or other materials, particularly as regards its food can ops, (6) unfavorable demand trends in key food & beverage end markets, and the overall risks to valuation, demand and pricing should growth slow, (7) unfavorable volume and pricing trends, (8) potential governmental policy and regulatory changes in the US and elsewhere.

And, as with most packaging companies, there are numerous macro risks and other risks around volumes, pricing, input costs and other factors that could negatively affect fundamental & stock price performance. Similarly should these factors prove more constructive than expected, CCK's performance/PO could exceed our forecasts.

Graphic Packaging (GPK)

Our \$29 PO is based on the average of (a) an EV/EBITDA valuation calculated by applying a 7.5x EV/EBITDA multiple to our 2024 EBITDA estimate of \$1.7bn (our multiple is consistent with where comparable companies have traded), (b) a P/E valuation calculated by applying a 14x P/E multiple to our 2024 EPS estimate of \$2.65 (our multiple is consistent with where comparable companies have traded), (c) a free cash flow (FCF) valuation based on our estimate of \$634mn in FCF, a calculated cost of equity of 10% and forecast rate of growth of 2%.

Risks to our PO: (1) closing and integration risks associated with the acquisitions, (2) demand trends in food & bev and other GPK end markets, (3) potential volatility in fiber, energy, other input costs, (4) paper/board sector volatility & demand trends, including trade flow volatility created by exchange rates, (5) fundamental trends that could wind up being worse than expected, (6) should trends reverse in the policy outlook for the current Administration, that would present a source of volatility and risk for the shares, (7) various factors associated with its new CRB machine

Also, industry & economic trends could prove weaker or stronger than modeled. Greater-than-expected weakness could lead to valuation multiples and earnings below our forecasts, even as better-than expected trends could lead to a higher relative multiple premium & stock price.

Greif Inc. (GEF)

Our \$79 PO for Class A shares is based on (1) a 12x calendarized 2024E P/E, (2) an 8x calendarized 2024E EV/EBITDA which derives a value for the combined equity market cap of Class A and B shares. We believe the multiples (a discount versus market and peers) are appropriate given weaker fundamentals against past normalized ranges (PE of 10-17x) and 5-10x EV/EBITDA for peers. We assume the elimination of a premium or discount to our combined equity value will occur equally for Class A and B, driving our target for Class A shares on this method, and (3) our intrinsic FCF valuation assumes \$400mn normalized FCF, 11% cost of equity and 2% growth rate.



Risks to our PO: (1) unfavorable demand in GEF's markets and geographies, (2) volatility in steel, resin, OCC, energy and other inputs, (3) acquisition/integration risks, (4) Class B share ownership, which retains voting power, is 70% held by insiders, (5) Regulatory review or litigation, (6) trade policy.

International Paper Co. (IP)

Our \$34 price objective is based on an average of (a) an EPS forecast of \$1.75 in 2024E and a P/E of 14x, which is consistent with historical ranges, (b) a normalized free cash flow (FCF) estimate of \$1bn, a calculated cost of equity of 10% and forecast rate of growth of 2%, (c) our IP sum-of-the-parts (SOTP) value, based on normal EBITDA, which is an average of historical periods 2016-22 and our forecasts through '25E.

Risks to our price objective are (1) the broader employment & macro picture, (2) paper/board sector volatility & demand trends, (3) wastepaper/input cost volatility, (4) demand, supply-chain and other risks created by the Covid-19 pandemic, (5) trends in the US\$ and its effect on trade flows, (6) emerging market risk, (7) operational risks related to investment projects, (8) IP's pension, (9) the potential for new capacity to come into the market, (10) potential volatility coming from any future Administration policy changes. Fundamental trends could wind up worse than expected, causing further downside to the shares relative to our PO. Better performance or macro news could cause the shares to perform better than our price objective.

Louisiana-Pacific Corp. (LPX)

Our \$64 PO is based on an average of (a) a normalized free cash flow (FCF) estimate of \$396mn, a calculated cost of equity of 13% and forecast rate of growth of 4%, (b) a SOTP value, using our evaluation of normal EBITDA, which is an average of historical periods 2016-22 and our forecasts through '25E. We project LPX's OSB segment will be valued at 5x our 2024E EBITDA forecast and its Siding segment will be valued at 10x EBITDA given building product/siding peer comps. We apply 6-8x EBITDA multiples to its other businesses. Separately, we value LPX's OSB business at 1.5x sales, its siding business at 2.5x sales and its other businesses at 1-2x sales. We assume the average of our EV/EBITDA and EV/Sales valuations, and then discount this to derive our 12-month PO.

Downside risks: (1) the broader housing picture, (2) weak demand and supply-chain, (3) changes in average home size, (4) OSB supply/demand dynamics, (5) cost volatility (wood fiber, resin, and foreign exchange), (6) operational risks associated with the expansion of LPX's siding segment, (7) should trends reverse in the policy outlook for the current Administration, that would be a source of volatility for the shares, and (8) should the trends in supply/demand for its products prove worse-than-expected, then LPX stock could perform below our forecasts.

Upside risks: Should housing and related demand trends or supply/demand in LPX's various product markets prove better-than-expected, LPX stock could exceed our PO.

O-I Glass Inc (OI)

Our \$25 PO is based on an average of P/E, EV/EBITDA and intrinsic free cash flow (FCF) valuations. We use a $8x\ 2024E$ P/E multiple, a $6-7x\ 2024E$ EV/EBITDA multiple, and our intrinsic FCF valuation, which assumes \$300mn normalized FCF, 13% cost of equity, and a -3% growth rate. Multiples are in line with those of metal/rigid packaging peers. Similar to CCK, OI has a larger international presence relative to its peers.

Risks to our PO are: (1) unfavorable demand and pricing, (2) the potential for pension or asbestos risks/claims to consume greater amounts of earnings or cash flow, (3) unfavorable international market volatility and FX risks, (4) integration risk with acquisitions, (5) risks in Mexican pricing and pack mix, (6) potential governmental policy changes in the US and other portions of the world. As is the case with all our coverage,



packaging and paper/forest stocks are highly sensitive to macro, FX, commodity inflation and other factors which could create variances with our forecasts and POs. Similarly, should the factors discussed above prove less negative or more positive to forecasts, OI's price could exceed our PO.

Packaging Corp. of America (PKG)

Our \$161 price objective is based on an average of (a) an EPS forecast of \$7.60 in 2024E and a P/E of 18x, in line with peer multiples, (b) a normalized free cash flow (FCF) estimate of \$750mn, a calculated cost of equity of 9% and forecast rate of growth of 4%, (c) a sum-of-the-parts (SOTP) value, based on forecast midcycle EBITDA or per ton(ne) replacement values.

Risks to our price objective being achieved are (1) PKG's leverage to economic cycles, (2) containerboard market volatility and demand trends, (3) input cost volatility, (4) demand, supply-chain and other risks created by the Covid-19 pandemic, (5) potential structural changes in the economy, (6) the potential for mill or converting operations to perform less well than anticipated, (7) the potential for new capacity to come into the market, (8) volatility coming from changes by the Administration. While we've tried to be conservative in our modeling, fundamental trends could wind up worse than expected, causing downside risk to the shares relative to our price objective. Similarly, PKG results could wind up stronger than our forecasts, causing the shares to move beyond our PO.

Pactiv Evergreen (PTVE)

Our \$10 price objective is derived from a three-part valuation approach using our estimates, which includes (1) a 10-12x 2024E P/E multiple, (2) an 7-8x 2024E EV/EBITDA multiple, (3) a normalized FCF estimate of \$185mn, an estimated cost of equity of 11% and forecast rate of growth of -2%. Our multiples represent discounts to foodservice/food packaging peers given the company's leverage and its weak earnings performance from 2018 to 2020.

Risks to our PO are (1) financial leverage, (2) rising labor and other costs, (3) Rank Group majority ownership, (4) unfavorable resin price volatility and/or price/cost, (5) the competitive landscape, (6) potential missteps with its Strategic Investments, (7) potential volatility in food, beverage and other packaging fundamentals, (8) COVID-related volatility, (9) macro and geopolitical risks, (10) sustainability trends. We have tried to forecast accurately, but risk factors could significantly affect results relative to forecasts.

PotlatchDeltic Corp. (PCH)

Our \$57 PO is based on: (a) an assumed mid-cycle dividend yield of 3% and dividend of \$1.80-2.00/share, (b) a 23-27x mid-cycle AFFO multiple, and (c) a sum-of-the-parts (SOTP) value. Our SOTP model values PCH's Resources business based on our estimates of the per acre values for its timberlands, and values its Wood Products business based on our forecast for mid-cycle EBITDA and applying a 5x EV/EBITDA multiple. Meanwhile, we value its Real Estate operations based on the average premium generated over time, and assuming properties sold are ultimately replaced with other timberlands.

Risks to our PO being achieved are: (1) Flattening yield curve, (2) Housing market weakness, which can impact PCH's Wood Products and Real Estate operations, as well as timberland profits, (3) Broader housing and economic trends, which can impact timberland and REIT valuations, including the threat of deflation, (4) Risk that synergies with CatchMark is not realized (5) Dividend trends, (6) Demand, supply chain and other risks created by the Covid-19 pandemic, (7) Regulations on tax status of REITs. Upside risks to our PO are better-than-expected improvement in the housing market and dividend trends.

While we have tried to be conservative in our modeling, certain fundamental trends



could wind up worse than expected, causing further downside to the shares relative to our price objective. Similarly, PCH performance could prove better than our forecast, lifting the shares above our PO.

Sealed Air Corp. (SEE)

Our \$43 price objective is derived from a three-part valuation approach, which includes: (1) a 14-15x 2024E P/E multiple, (2) an 9-10x 2023E EV/EBITDA multiple, and (3) our intrinsic free cash flow (FCF) valuation, which assumes \$400mn of normalized FCF, 11% cost of equity, and a 3% growth rate. Our target multiples are based on SEE's past trading history and also peer multiples. SEE has been able to trade in the high teens to low twenties on a P/E basis, and a premium to the market when fundamentals improve.

Downside risks to our price objective are (1) risks relative to the company's ability to manage pricing and spreads, given (2) energy volatility, resin price volatility and agricultural market risks, (3) international business risks (approximately 65% of sales derived abroad), including FX and emerging market trends, (4) competitive and other factors negatively impacting volume to a greater degree than expected, (5) risks relative to execution of the company's transformation strategies over the last several years, (6) challenges associated with management transitions.

Overall, energy and commodity volatility represent ongoing risks for packaging companies. Industry and economic trends could prove weaker or stronger than we modeled. Greater-than-expected weakness could lead to valuation multiples and earnings that are below our forecasts.

Silgan Holdings Inc. (SLGN)

Our \$47 PO is based on a 12-13x 2024E P/E multiple, a 9x 2024E EV/EBITDA multiple, and our intrinsic FCF valuation which assumes \$375mn normalized FCF, 9% cost of equity and 1% growth rate. We believe SLGN should trade about in line with to slightly below its packaging peers given its relatively defensive profile.

Downside risks: (1) potential for metal cans to lose a greater amount of share over time, (2) potential for raw material costs to swing sufficiently so as to alter normal purchasing patterns, (3) food can business' heavy seasonality during 2Q/3Q pack, (4) SLGN's ability to integrate its recent acquisitions, (5) potential for bisphenol A (BPA) concerns to again impact demand, (6) operational considerations related to SLGN's new metal and plastic packaging ops, (7) risks related to policy changes.

Energy and commodity volatility represent ongoing risks for packaging companies. We have tried to forecast accurately. However, industry and economic trends could prove weaker or stronger than we modeled.

Sonoco Products Co. (SON)

Our \$64 price objective is derived from a three-part valuation approach, which includes: (1) a 12-13x 2024E P/E multiple, (2) an 8-9x 2024E EV/EBITDA multiple, and (3) our intrinsic free cash flow (FCF) valuation, which assumes \$600mn of normalized FCF, 10% cost of equity, and -2% growth rate. The P/E and EV/EBITDA multiples are consistent with past valuation multiples within packaging.

Downside risks to our price objective are: (1) potential volatility in old corrugated container (OCC) prices, (2) execution on restructuring and integration initiatives, (3) integration of present acquisitions, (4) periodic volatility in its business, (5) execution of its consumer/growth strategies in packaging, (6) unexpected volume and pricing trends, (7) macroeconomic trends, (8) potential trend reversals related to Administration policies. In addition, energy and commodity cost volatility represent ongoing risk for all packaging companies.



Upside risks to our PO are: (1) Sonoco's ability to acquire businesses accretively, making our forecasts too pessimistic, driving SON above our PO, (2) Additionally, should volumes accelerate while input costs stay benign, this could lead to higher earnings than we are projecting and result in the stock exceeding our PO, (3) The factors noted earlier could play out in a way that causes results to exceed our forecast and drive the shares above our PO.

Sylvamo Corp. (SLVM)

Our \$48 price objective is based on an average of: (a) an EPS forecast of \$4.38 in 2024E and a P/E of 9x, which is within the range in which paper companies have traded, (b) a normalized FCF estimate of around \$211mn, a calculated cost of equity of 8% and forecast rate of decline of 3%, (c) our SLVM sum-of-the-parts (SOTP) value, based on forecast midcycle EBITDA values and applying multiples of 4-7x across the regions.

Risks to our PO are: (1) Broader employment and macro picture, (2) Paper sector volatility and demand trends, (3) Changes in the cost or availability of key inputs, energy and transportation, (4) Demand, supply chain and other risks created by the pandemic, (5) Potential cash outflow related to the pending tax ruling on the deductibility of goodwill from IP's 2007 acquisition of the Luis Antonio mill, (6) Emerging market risk, including potential for volatility in Latin America, (7) Potential dis-synergies and operational risks related to the spin-off from IP, (8) Operational risks associated with the Svetogorsk recovery boiler project, (9) Potential for supply/demand imbalances in UCFS, (10) Potential loss of a key customer, (11) Risks of fragmentation in Europe. Volatility in macro and micro factors and the earnings leverage that exists could mean fundamental trends wind up worse than expected, causing further downside to the shares relative to our PO. Alternatively, better performance could cause the shares to perform better than our PO.

WestRock (WRK)

Our \$40 PO is based on an average of (a) a calendarized EPS forecast of \$2.02 in C24 and a P/E of 13-14x, given optionality with the potential Smurfit Kappa deal, (b) a normalized free cash flow (FCF) of \$1bn, a cost of equity of 11% and forecast growth rate of 2%, (c) our WRK sum-of-the-parts (SOTP) value, based on our evaluation of normal EBITDA, which is an average of historical periods 2020-22 and our forecasts through '25E. Based on current market and sector valuations, we estimate 7x to 8x EV/EBITDA multiple for Corrugated Packaging and an 8x to 9x multiple for Consumer Packaging. Separately, we apply 6x EV/EBITDA multiple for WRK's Global Paper business and a 5x EV/EBITDA multiple for WRK's Distribution businesses.

Risks to our PO are (1) the broader employment, macro and consumer spending outlook, (2) potential volatility in OCC prices, (3) paper/board sector volatility and demand trends across end markets, (4) supply-chains, (5) potential governmental policy and regulatory changes, (6) risks related to the closing of the Smurfit Kappa transaction. As with all our packaging and paper/forest product companies, WRK must contend with a variety of macro, FX, commodity inflation and other considerations. Should the factors above impact WRK more negatively than expected, its results and stock price will have difficulty achieving our forecasts. Similarly, should these factors combine more positively than expected, WRK's results and stock price could exceed our forecasts.

Weyerhaeuser Co. (WY)

Our \$38 PO is based on the average of (a) an assumed mid-cycle dividend yield of 1.8% and dividend of \$0.80-0.90/share, (b) a 23-27x mid-cycle AFFO multiple, and (c) a sum-of-the-parts (SOTP) value. Our SOTP model values WY's Timberlands business based on our estimates of the per acre values for its timberlands, and values its Wood Products business based on our forecast for mid-cycle EBITDA and applying a 5.5x EV/EBITDA multiple. Meanwhile, we value its Real Estate operations based on the average premium generated over time, and assuming properties sold are ultimately replaced with other



timberlands.

Risks to our PO being achieved are (1) weak employment, (2) weak housing fundamentals, (3) regulations on the tax status of REITs - given WY's REIT status, some elements of the company's future performance (i.e., tax rate, corporate expense) could prove difficult to forecast, (4) Emerging market and FX trends, which could impact demand and pricing for WY timber, (5) dividend trends, (6) trends in China. As with all of our stocks, WY will be sensitive to changes in the domestic and global macro outlook, input cost trends, and potential policy and regulatory changes.

Analyst Certification

I, George L. Staphos, 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.

Special Disclosures

BofA Securities is currently acting as financial advisor to BAE Systems PLC in connection with its proposed acquisition of Ball Aerospace from Ball Corp, which was announced on 17th August 2023



US - Paper and Packaging Coverage Cluster

Investment rating	Company	Bof A Ticker	Bloomberg symbol	Analyst
BUY				
	AptarGroup Inc.	ATR	ATR US	George L. Staphos
	Avery Dennison Corp.	AVY	AVY US	George L. Staphos
	Berry Global	BERY	BERY US	George L. Staphos
	Crown Holdings Inc.	CCK	CCKUS	George L. Staphos
	O-I Glass Inc	OI	OIUS	George L. Staphos
	Sealed Air Corp.	SEE	SEE US	George L. Staphos
	Silgan Holdings Inc.	SLGN	SLGN US	George L. Staphos
	Sonoco Products Co.	SON	SONUS	George L. Staphos
	Sylvamo Corp.	SLVM	SLVM US	George L. Staphos
	WestRock	WRK	WRK US	George L. Staphos
	Weyerhaeuser Co.	WY	WY US	George L. Staphos
NEUTRAL				
	Ardagh Metal Packaging S.A.	AMBP	AMBP US	George L. Staphos
	Ball Corp.	BALL	BALL US	George L. Staphos
	Graphic Packaging	GPK	GPK US	George L. Staphos
	Greif Inc.	GEF	GEF US	George L. Staphos
	Packaging Corp. of America	PKG	PKG US	George L. Staphos
	Pactiv Evergreen	PTVE	PTVE US	George L. Staphos
	PotlatchDeltic Corp.	PCH	PCH US	George L. Staphos
UNDERPERFORM				
	Amcor Plc	AMCCF	AMC AU	George L. Staphos
	Amcor PLC	AMCR	AMCR US	George L. Staphos
	Boise Cascade Company	BCC	BCC US	George L. Staphos
	Brady Corp Cl A	BRC	BRC US	George L. Staphos
	International Paper Co.	IP	IP US	George L. Staphos
	Louisiana-Pacific Corp.	LPX	LPX US	George L. Staphos

Disclosures

Important Disclosures

Equity Investment Rating Distribution: Packaging Group (as of 30 Sep 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships R1	Count	Percent
Buy	13	56.52%	Buy	9	69.23%
Hold	7	30.43%	Hold	4	57.14%
Sell	3	13.04%	Sell	2	66.67%

Equity Investment Rating Distribution: Paper/Forest Products Group (as of 30 Sep 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships ^{R1}	Count	Percent
Buy	8	42.11%	Buy	7	87.50%
Hold	3	15.79%	Hold	2	66.67%
Sell	8	42.11%	Sell	5	62.50%

Equity Investment Rating Distribution: Global Group (as of 30 Sep 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships ^{R1}	Count	Percent
Buy	1869	53.48%	Buy	1046	55.97%
Hold	828	23.69%	Hold	461	55.68%
Sell	798	22.83%	Sell	370	46.37%

^[8] Issuers that were investment banking dients of BofA Securities or one of its affiliates within the past 12 months. For purposes of this Investment Rating Distribution, the coverage universe includes only stocks. A stock rated Neutral is included as a Hold, and a stock rated Underperform is included as a Sell.



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

Investment rating Total return expectation (within 12-month period of date of initial rating) Ratings dispersion guidelines for coverage cluster^{R2}

 Buy
 ≥ 10%
 ≤ 70%

 Neutral
 ≥ 0%
 ≤ 30%

 Underperform
 N/A
 ≥ 20%

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