

Packaging & Paper/Forest Wrap-up

“Pricing Friday”; Raise C'board op. rates; Channel checks, BALL/others - V32/Wk11

Price Objective Change

Packaging & Paper/Forest Wrap-Up: Volume 32, Week 11

Our Wrap-Up reviews: (1) Channel Checks; (2) NA C'board Supply/Demand; (3) Upcoming RISI pricing and; (4) wood pricing.

Channel checks: trim BALL (still > Street), review others

We recently had the chance to check in with our contacts in and around the industry, including our Global Ag & Materials Conference in Florida earlier in the month (see our [March 4](#) and [March 5 reports](#)). We come away from our month-to-date discussions with the following points: **(a) Ball Corp (BALL, Buy)** is doing a bit better on volumes early in the year, and the recent labor resolution at one of its larger customers removes some potential future volatility. We're also positive on BALL regarding Kaizen, Lean, etc. We remain above consensus, though we fine-tune estimates to consider Ball's "5%-plus" EPS guidance from our conference. Our 1Q estimate is now \$0.60 (was \$0.63) and our full year estimate is \$3.18 (was \$3.25). Our PO moves to \$71 (was \$72); **(b) O-I Glass (OI, Buy)** volumes should turn positive during 2Q but have faced declines during the first two months, as expected. Vols. were -8.5% in February after -10% in January. OI reviewed full-year guidance at our conference, with EPS targeted at \$2.25 to \$2.65 for 2024. While not guiding for 1Q, OI has discussed that ~15-17% of earnings are historically generated in 1Q – this would suggest ~34c at the low-end for 1Q24, where BofA is. The Street is at 38c, implying a midpoint pct. on the midpoint EPS guidance for 2024 (\$2.40); **(c) Elsewhere, our industry work suggests that volume and earnings trends are about in-line with our forecasts** for cos. like Buy-rated **SEE** (SEE; a/k/a Sealed Air) and **WestRock** (WRK), as well as Neutral-rated **Ardagh** (AMBP) and U/P-rated **Boise** (BCC). On the latter we note that oriented strand board (OSB) pricing has moved up sharply (which could indicate future trends for plywood) though we are also watching whether imported plywood volumes increase given the existence of a new certification agency for Brazilian plywood.

Raising c'board op. rate forecast by 2pts to 88%

Given recent industry discussions during our Global Ag and Materials Conference (see above) and other channel checks, we are updating our North American Containerboard Supply/Demand forecast – we now forecast operating rates to increase to 88% in 2024, 89% in 2025 and 90% in 2026, up 200-300bp from our prior estimate. Among other points, we now forecast US consumption to improve to 3% in both 2024 and 2025, up from prior 1.5-2% levels. **We review more details inside...**

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14 March 2024

Equity
United States
Packaging & Paper/Forest Products

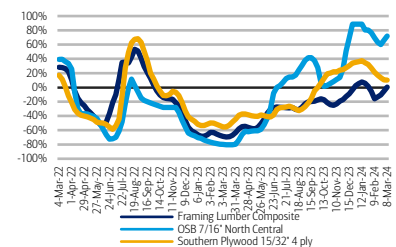
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Exhibit 1: Random Lengths Lumber and Structural Panel Pricing (Y/Y Chg)

Lumber, OSB, and plywood prices



Source: Random Lengths

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Exhibit 2: Ball old/new summary

A summary of our EPS and PO changes

BALL	New	OLD
PO	\$71	\$72
2024 EPS	\$3.18	\$3.25
2025 EPS	\$3.65	\$3.75
2026 EPS	\$4.05	\$4.15

Source: BofA Global Research estimates

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North America C'board Continued...

Our last BofA Box survey ([see our report](#)) also saw a sharp improvement in growth expectations (albeit, from depressed, prior levels). Additionally, RISI's Canadian forecasts (which are a component to our overall model) saw reduced supply. All these factors contributed to the increase in operating rates. To that point, we think shipments in North America have the potential for upside surprises once a consumer/retail inventory restocking cycle kicks in, though we have limited evidence thus far that this is occurring.

Exhibit 3: Containerboard – North American operating rates look like they're gradually improving

Summary of North America Supply/Demand for Containerboard

Containerboard - North America	2016	2017	2018	2019	2020	2021	2022	2023E	2024E	2025E	2026E
Production	38,407	39,890	40,993	39,105	40,271	42,767	39,927	38,800	39,699	40,949	41,793
Adjusted Capacity	40,430	41,424	42,423	42,927	43,077	44,938	44,729	45,316	45,151	45,966	46,295
Utilization Rate %	95%	96%	97%	91%	93%	95%	89%	86%	88%	89%	90%
Apparent Consumption	34,252	35,346	36,271	35,437	36,324	38,975	36,860	35,717	36,876	37,915	38,647
Net (Imports) Exports, est. % of Production	3,259 8%	3,465 9%	3,364 8%	2,812 7%	3,067 8%	2,263 5%	2,128 5%	2,178 6%	1,995 5%	2,082 5%	2,156 5%
Containerboard - US	2016	2017	2018	2019	2020	2021	2022	2023E	2024E	2025E	2026E
Production	36,317	37,570	38,513	36,624	37,732	40,339	37,644	36,413	37,120	38,345	39,158
Capacity	38,210	38,934	39,693	40,279	40,382	42,277	42,044	42,502	42,412	43,114	43,444
Utilization Rate %	95%	96%	97%	91%	93%	95%	90%	86%	88%	89%	90%
Exports	5,084	5,302	5,304	4,581	4,976	4,420	4,072	4,184	3,900	4,000	4,100
Imports	1,190	1,377	1,441	1,351	1,386	1,376	1,225	1,288	1,200	1,250	1,300
Net Exports as % of Production	10.7%	10.4%	10.0%	8.8%	9.5%	7.5%	7.6%	8.0%	7.3%	7.2%	7.2%
Year-End System-wide Inventories	2,302	2,380	2,659	2,525	2,301	2,770	2,720	2,637	2,450	2,400	2,400
Apparent Consumption % Growth	32,422 0.8%	33,566 3.5%	34,371 2.4%	33,527 -2.5%	34,365 2.5%	36,826 7.2%	34,847 -5.4%	33,599 -3.6%	34,607 3.0%	35,645 3.0%	36,358 2.0%
Containerboard - Canada	2016	2017	2018	2019	2020	2021	2022	2023E	2024E	2025E	2026E
Production	2,090	2,320	2,480	2,481	2,539	2,429	2,282	2,387	2,578	2,603	2,634
Capacity	2,220	2,490	2,730	2,648	2,695	2,661	2,685	2,814	2,739	2,852	2,851
Utilization Rate %	94%	93%	91%	94%	94%	91%	85%	85%	94%	91%	92%
Exports	1,310	1,490	1,450	1,435	1,405	1,301	1,262	1,262	1,302	1,326	1,338
Imports	1,050	950	870	863	824	1,021	992	992	992	992	992
Net Exports as % of Production	12.4%	23.3%	23.4%	23.0%	22.9%	11.5%	11.8%	11.3%	12.0%	12.8%	13.1%
Apparent Consumption % Growth	1,830 -6.2%	1,780 -2.7%	1,900 6.7%	1,909 0.5%	1,959 2.6%	2,149 9.7%	2,013 -6.3%	2,118 5.2%	2,269 7.2%	2,269 0.0%	2,289 0.9%
Canadian Exports ex-US	415	489	371	445	301	240	273	273	288	324	349

Source: RISI, AFPA, BofA Global Research

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Paper/Forest News

- 3/14: *Fastmarkets RISI's PPI Europe* reported that ongoing strikes by the Finnish Transport Union AKT are impacting various pulp & paper mills, straining production, and restricting supply. UPM-Kymmene (UPMKF; Rated Underperform by our colleague Patrick Mann) has temporarily idled production at graphic paper mills, while Metsä has temporarily suspended production at bleached chemi-thermomechanical pulp (BCTMP) mills. Meantime, Stora Enso (SEOAY; Rated Buy by Patrick Mann) has also already ramped down virgin containerboard and pulp production at two mills. The strikes in Finland began on March 11 and are expected to conclude on March 26. For now, *RISI* reports that the lower supply-side dynamic in Europe is having a slightly positive impact on woodfree paper prices. We expect this may be a positive for Buy-rated Sylvamo (SLVM) and perhaps a potential headwind for Avery (AVY; U/P) in terms of supply. In 2022, Avery also saw some disruptions in of paper supply because of extended strikes in Finland, but ultimately it was able to manage through this.
- 3/13: *Fastmarkets RISI Viewpoint* discussed overcapacity in the Chinese Tissue Sector. Since 2018, Chinese tissue production has seen overcapacity. RISI has predicted an increase in tissue demand, which would be positive. In the last few years, Chinese tissue producers have been adding extra capacity, and the added capacity and announced projects exceed the projected increase in tissue demand. Tax incentives have supported increased capacity – we'll watch to see whether demand rebounds sufficiently to absorb capacity, and continue the long-term demand increase for pulp (used to produce the tissue) in the region.
- 3/12: BofA's Latin America Pulp & Paper team reports that Brazilian box shipments are improving. In February, Brazilian shipments of boxes, accessories, and sheets were up +11.1% y/y but dropped 2.1% m/m.

Paper/Forest Valuation Summary Table

Exhibit 4: Paper/Forest Comparables Summary Valuation Data

Review of valuations for companies in Paper/Forest

Company	Ticker	Rating	Market Cap.	Recent Price	PO	Dividend Yield	TSR	Total Debt	Other LT-Liabs	Cash	Enterprise Value*	Reported P/E				Reported EV/EBITDA			
												2022A	2023A	2024E	2025E	2022A	2023A	2024E	2025E
Boise Cascade	BCC	U/P	\$5,175	\$129.31	\$132	0.5%	2.5%	\$445	\$224	\$950	\$4,894	6.0x	10.7x	11.1x	10.9x	3.9x	6.5x	6.3x	6.2x
Graphic Packaging	GPK	B	\$8,752	\$28.37	\$31	1.4%	10.7%	\$5,373	\$1,195	\$162	\$15,158	12.2x	9.7x	10.5x	9.5x	9.4x	7.8x	8.2x	7.8x
International Paper	IP	B	\$12,556	\$36.29	\$42	5.1%	20.8%	\$5,593	\$3,379	\$1,113	\$20,415	9.4x	16.7x	17.3x	13.4x	7.3x	9.3x	9.0x	8.1x
Louisiana-Pacific	LPX	U/P	\$5,639	\$78.32	\$68	1.2%	-11.8%	\$606	\$274	\$222	\$6,297	6.7x	24.3x	19.8x	20.1x	4.3x	14.6x	12.1x	12.3x
Packaging Corp.	PKG	B	\$16,506	\$184.42	\$202	2.7%	12.2%	\$2,475	\$936	\$677	\$19,239	16.6x	21.2x	21.7x	18.6x	9.9x	11.8x	12.1x	11.0x
PotlatchDeltic	PCH	N	\$3,681	\$45.78	\$55	3.9%	24.1%	\$1,034	\$180	\$230	\$4,665	9.5x	N/M	N/M	N/M	8.3x	5.4x	5.7x	5.8x
Sylvamo Corp.	SLVM	B	\$2,599	\$61.87	\$65	1.6%	6.7%	\$959	\$345	\$280	\$3,623	7.9x	9.5x	10.8x	11.2x	5.3x	6.4x	6.8x	7.3x
WestRock	WRK	B	\$12,053	\$46.90	\$47	2.3%	2.6%	\$8,698	\$4,377	\$488	\$24,640	10.0x	17.5x	19.9x	13.5x	9.1x	8.5x	9.1x	10.5x
Weyerhaeuser	WY	B	\$25,273	\$34.56	\$37	2.2%	9.3%	\$5,069	\$890	\$1,164	\$30,068	11.4x	34.2x	34.6x	32.9x	8.4x	18.8x	18.5x	17.7x
Average			\$92,234			2.3%	8.6%	\$30,252	\$11,799	\$5,286	\$129,000	10.0x	18.0x	18.2x	16.3x	7.3x	9.9x	9.8x	9.6x

Company	Ticker	Rating	FCF Yield		Reported EPS, Calendarized				Reported EBITDA			FCF		ROIC		Q-R-Q
			2023A	2024E	2022A	2023A	2024E	2025E	2022A	2023A	2024E	2023A	2024E	2023A	2024E	
Boise Cascade	BCC	U/P	9.1%	6.9%	\$21.56	\$12.12	\$11.70	\$11.90	\$1,259	\$757	\$779	\$472	\$355	44.8%	43.3%	B-3-7
Graphic Packaging	GPK	B	3.6%	4.9%	\$2.33	\$2.91	\$2.70	\$3.00	\$1,609	\$1,933	\$1,849	\$315	\$429	24.3%	22.4%	B-1-7
International Paper	IP	B	5.5%	5.6%	\$3.88	\$2.17	\$2.10	\$2.70	\$2,794	\$2,198	\$2,262	\$692	\$699	15.9%	16.1%	B-1-7
Louisiana-Pacific	LPX	U/P	0.3%	7.9%	\$11.77	\$3.22	\$3.95	\$3.90	\$1,461	\$432	\$519	\$16	\$446	25.9%	26.3%	C-3-7
Packaging Corp.	PKG	B	5.1%	4.9%	\$11.14	\$8.69	\$8.50	\$9.90	\$1,938	\$1,636	\$1,595	\$837	\$810	28.4%	27.9%	B-1-7
PotlatchDeltic	PCH	N	1.1%	3.4%	\$4.80	\$0.43	\$0.70	\$0.85	\$562	\$868	\$813	\$39	\$126	5.7%	8.1%	B-2-7
Sylvamo Corp.	SLVM	B	11.3%	7.1%	\$7.84	\$6.54	\$5.72	\$5.52	\$684	\$569	\$532	\$294	\$184	35.4%	32.1%	C-1-7
WestRock	WRK	B	6.1%	7.9%	\$4.68	\$2.68	\$2.36	\$3.48	\$2,719	\$2,897	\$2,705	\$731	\$950	-0.2%	12.1%	B-1-7
Weyerhaeuser	WY	B	3.4%	3.7%	\$3.02	\$1.01	\$1.00	\$1.05	\$3,560	\$1,602	\$1,628	\$862	\$933	10.4%	10.6%	B-1-7
Average			5.0%	5.8%	\$71.02	\$39.77	\$38.73	\$42.30	\$16,586	\$12,891	\$12,682	\$4,259	\$4,931	21.2%	22.1%	

Source: Company filings, BofA Global Research estimates. Priced at close on 3/13/24. WRK reported figures and estimates calendarized.

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Stock action

Exhibit 5: Packaging Coverage Performance

A review of our packaging coverage's performance from 3/6/24 – 3/13/24

BofA Packaging Coverage	
Simple Average	1.0%
Market Cap.	1.7%
Best:	
AMBP	6.7%
AMCR	3.5%
SLGN	3.4%
Worst:	
OI	-3.3%
ATR	-1.3%
GEF	0.4%

Source: Bloomberg, BofA Global Research

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Exhibit 6: Paper/Forest Coverage Performance

A review of our paper/forest coverage's performance from 3/6/24 – 3/13/24

BofA Paper/Forest Coverage	
Simple Average	2.5%
Market Cap.	2.1%
Best:	
GPK	8.9%
LPX	4.0%
SLVM	1.9%
Worst:	
PCH	-1.3%
WY	0.0%
BCC	0.5%

Source: Bloomberg, BofA Global Research

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Packaging Valuation Summary Table

Exhibit 7: Packaging Comparables Summary Valuation Data

Review of valuations for companies in Packaging

Company	Ticker	Rating	Market Cap.	Recent Price	PO	Dividend Yield	TSR	Total Debt	Other LT-Liabs	Cash	Enterprise Value*	Reported P/E				Reported EV/EBITDA			
												2022A	2023A	2024E	2025E	2022A	2023A	2024E	2025E
Amcor Plc	AMCR	U/P	\$13,709	\$9.52	\$9.70	5.1%	7.0%	\$7,069	\$1,624	\$430	\$21,972	11.7x	14.0x	13.6x	12.7x	10.3x	11.3x	11.0x	10.6x
AptarGroup	ATR	B	\$9,463	\$141.16	\$154	1.1%	10.2%	\$1,171	\$187	\$152	\$10,669	37.2x	29.5x	27.1x	25.0x	17.2x	15.3x	13.7x	13.0x
Ardagh Metal Packaging	AMBP	N	\$2,086	\$3.49	\$4.10	11.5%	28.9%	\$3,734	\$44	\$443	\$5,421	11.2x	29.0x	22.8x	17.0x	8.7x	9.0x	8.4x	8.1x
Avery Dennison	AVY	U/P	\$17,423	\$214.83	\$214	1.4%	1.0%	\$3,244	\$760	\$215	\$21,212	23.5x	27.2x	23.0x	21.1x	15.6x	16.9x	14.8x	14.3x
Ball Corp.	BALL	B	\$20,720	\$65.30	\$71	1.2%	10.0%	\$8,569	\$1,847	\$695	\$30,441	23.5x	22.5x	20.5x	17.9x	15.6x	14.4x	14.6x	14.0x
Berry Global	BERY	B	\$7,215	\$60.99	\$83	1.6%	37.9%	\$8,728	\$1,688	\$1,203	\$16,428	8.2x	8.3x	8.1x	7.6x	7.9x	8.0x	8.0x	7.8x
Brady Corp.	BRC	B	\$2,813	\$57.74	\$64	1.6%	12.4%	\$48	\$83	\$144	\$2,801	17.1x	14.7x	14.1x	13.2x	11.7x	10.4x	10.3x	9.7x
Crown Holdings	CCK	B	\$9,317	\$77.96	\$89	1.2%	15.4%	\$7,474	\$1,273	\$1,310	\$16,754	11.5x	13.3x	13.2x	12.0x	9.6x	8.9x	9.1x	8.6x
Greif (1)	GEF	N	\$3,015	\$63.57	\$81	3.1%	31.0%	\$2,289	\$789	\$181	\$5,912	8.3x	10.0x	16.1x	11.9x	6.6x	7.4x	8.8x	8.0x
O-I Glass	OI	B	\$2,415	\$15.66	\$21	0.0%	34.1%	\$4,946	\$992	\$913	\$7,440	6.8x	5.1x	7.0x	5.9x	6.2x	5.1x	5.4x	5.0x
Pactiv Evergreen	PTVE	B	\$2,369	\$13.28	\$16	3.0%	23.5%	\$3,611	\$1,090	\$233	\$6,837	7.4x	13.8x	12.1x	10.6x	8.7x	8.1x	7.9x	7.8x
Sealed Air	SEE	B	\$5,328	\$36.77	\$40	2.2%	11.0%	\$4,871	\$609	\$281	\$10,526	9.0x	11.5x	12.9x	11.3x	8.7x	9.5x	9.5x	9.1x
Silgan Holdings	SLGN	B	\$4,860	\$44.51	\$53	1.6%	20.7%	\$3,427	\$864	\$643	\$8,508	11.1x	13.1x	12.2x	11.1x	9.0x	9.8x	9.2x	9.0x
Sonoco Products	SON	B	\$5,729	\$57.77	\$64	3.4%	14.2%	\$3,083	\$566	\$152	\$9,226	8.9x	11.0x	11.0x	9.7x	8.9x	8.9x	8.4x	8.0x
Average			\$106,462			2.7%	18.4%	\$62,264	\$12,415	\$6,994	\$174,146	14.0x	15.9x	15.3x	13.4x	10.3x	10.2x	9.9x	9.5x

Company	Ticker	Rating	FCF Yield		Reported EPS, Calendarized				Reported EBITDA			FCF		ROIC		Q-R-Q
			2023A	2024E	2022A	2023A	2024E	2025E	2022A	2023A	2024E	2023A	2024E	2023A	2024E	
Amcor Plc	AMCR	U/P	5.6%	6.4%	\$0.82	\$0.68	\$0.70	\$0.75	\$2,136	\$1,937	\$2,006	\$765	\$874	20.6%	18.2%	B-3-7
AptarGroup	ATR	B	2.8%	3.7%	\$3.79	\$4.78	\$5.20	\$5.65	\$620	\$698	\$779	\$263	\$348	22.7%	25.3%	B-1-7
Ardagh Metal Packaging	AMBP	N	8.2%	4.2%	\$0.31	\$0.12	\$0.15	\$0.20	\$625	\$600	\$645	\$170	\$88	16.2%	17.7%	B-2-8
Avery Dennison	AVY	U/P	3.1%	4.6%	\$9.15	\$7.90	\$9.35	\$10.20	\$1,364	\$1,254	\$1,429	\$541	\$796	24.4%	30.0%	B-3-7
Ball Corp.	BALL	B	3.9%	-2.4%	\$2.78	\$2.90	\$3.18	\$3.65	\$1,957	\$2,112	\$2,080	\$818	-\$507	18.8%	29.1%	B-1-7
Berry Global	BERY	B	13.7%	18.5%	\$7.45	\$7.36	\$7.55	\$8.07	\$2,087	\$2,041	\$2,056	\$988	\$1,338	18.2%	18.8%	B-1-7
Brady Corp.	BRC	B	6.8%	7.0%	\$3.38	\$3.93	\$4.09	\$4.37	\$240	\$269	\$271	\$190	\$197	28.8%	28.9%	B-1-7
Crown Holdings	CCK	B	7.1%	7.9%	\$6.75	\$5.86	\$5.90	\$6.50	\$1,744	\$1,882	\$1,850	\$660	\$740	21.9%	21.5%	B-1-7
Greif (1)	GEF	N	13.1%	8.7%	\$7.66	\$6.36	\$3.94	\$5.32	\$891	\$797	\$672	\$396	\$261	21.0%	16.5%	B-2-7
O-I Glass	OI	B	5.4%	7.8%	\$2.30	\$3.09	\$2.25	\$2.65	\$1,193	\$1,464	\$1,386	\$130	\$188	26.4%	24.1%	C-1-9
Pactiv Evergreen	PTVE	B	10.5%	12.7%	\$1.78	\$0.96	\$1.10	\$1.25	\$785	\$840	\$864	\$249	\$302	17.6%	18.6%	C-1-7
Sealed Air	SEE	B	5.1%	8.7%	\$4.10	\$3.18	\$2.85	\$3.25	\$1,210	\$1,107	\$1,104	\$272	\$463	21.1%	22.8%	B-1-7
Silgan Holdings	SLGN	B	7.3%	10.4%	\$4.02	\$3.40	\$3.65	\$4.00	\$944	\$872	\$920	\$355	\$505	15.9%	18.6%	B-1-7
Sonoco Products	SON	B	10.5%	7.0%	\$6.48	\$5.26	\$5.25	\$5.95	\$1,041	\$1,035	\$1,097	\$600	\$401	19.7%	20.1%	B-1-7
Average			7.4%	7.5%	\$60.77	\$55.78	\$55.17	\$61.81	\$16,837	\$16,907	\$17,160	\$6,397	\$5,995	21.0%	22.2%	

Source: Company filings, BofA Global Research estimates. Priced at close on 3/13/24.

Note: GEF EPS and P/E based on Class A shares; GEF market cap and EV/EBITDA based on Class A and B shares.

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Paper/Forest Products

Pricing review

Exhibit 8: Paper & Wood Products Pricing

Benchmark pricing for the pulp, paper, paperboard, recovered paper and wood product markets

	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	1Q24E	2Q24E	3Q24E	4Q24E
Market Pulp (NBSK, \$/mt)	\$1,340	\$1,270	\$1,270	\$1,270	\$1,315	\$1,350	\$1,380	\$1,430	\$1,370	\$1,390	\$1,390	\$1,340
Market Pulp (NBHK, \$/mt)	1,070	990	1,010	1,040	1,085	1,125	1,160	1,220	1,140	1,160	1,150	1,100
Market Pulp (SBSK, \$/mt)	1,270	1,200	1,180	1,180	1,235	1,260	1,290	1,350	1,283	1,303	1,303	1,253
Market Pulp (SBHK, \$/mt)	1,070	990	1,010	1,040	1,085	1,125	1,160	1,220	1,140	1,160	1,150	1,100
Fluff Pulp (U.S. Southern Kraft, \$/mt)	1,800	1,730	1,710	1,710	1,765	1,790	1,820	1,840	1,805	1,810	1,800	1,780
Coated Groundwood (no. 5, 40-lb)	1,250	1,250	1,250	1,230	1,230	1,230	1,210	1,210	1,205	1,205	1,205	1,180
Coated Free Sheet (no. 3, 60-lb)	1,450	1,450	1,450	1,435	1,435	1,435	1,405	1,405	1,410	1,410	1,410	1,385
Uncoated Free Sheet (20-lb, repro bond)	1,465	1,465	1,465	1,445	1,445	1,445	1,405	1,405	1,405	1,450	1,450	1,450
Uncoated Free Sheet (50-lb offset rolls)	1,350	1,330	1,320	1,320	1,305	1,305	1,285	1,285	1,280	1,305	1,295	1,295
Uncoated Groundwood (SC-A, 35-lb)	1,120	1,120	1,120	1,120	1,110	1,110	1,090	1,090	1,090	1,070	1,060	1,050
Newsprint (30-lb, east coast)	855	855	845	845	845	820	820	795	800	790	780	780
Corrugating Medium (East, Semi-Chem, 26-lb)	715	715	715	715	695	695	695	755	735	775	775	795
Corrugating Medium (West, Semi-Chem, 26-lb)	715	715	715	715	695	695	695	755	735	775	775	795
Unbleached Kraft Linerboard (East, 42-lb)	845	845	845	845	825	825	825	865	865	885	885	905
Unbleached Kraft Linerboard (West, 42-lb)	845	845	845	845	825	825	825	865	865	885	885	905
Kraft Paper (Grocery Sack, 50-lb)	1,175	1,175	1,175	1,175	1,175	1,175	1,175	1,175	1,175	1,175	1,200	1,200
Coated Unbleached Kraft Board (20-pt. folding carton)	1,470	1,470	1,470	1,470	1,470	1,470	1,470	1,470	1,470	1,480	1,510	1,510
Bleached Kraft Board (16-pt, folding, C1S)	1,510	1,450	1,450	1,450	1,450	1,450	1,450	1,410	1,450	1,450	1,450	1,470
Coated Recycling Boxboard (20-pt. clay coated news)	1,270	1,270	1,270	1,250	1,250	1,250	1,250	1,250	1,250	1,260	1,300	1,300
Uncoated Recycling Boxboard (20-pt. bending chip)	1,040	1,040	1,040	1,020	1,020	1,020	1,020	1,020	1,020	1,050	1,060	1,060
Old Corrugated Containers (US Average)	49	54	63	73	75	79	87	91	95	105	115	110
Random Lengths Framing Lumber Composite (\$/mbf)	460	430	428	395	371	385	399	384	400	450	460	430
Random Lengths Structural Panels Composite (\$/msf)	616	643	645	579	578	594	601	592	545	575	590	545
Random Lengths OSB 7/16" North Central (\$/msf)	466	510	497	375	403	414	415	408	390	420	440	380
Random Lengths So. Plywood 15/32" 4-Ply (\$/msf)	528	556	627	637	595	617	642	637	595	625	640	605

Source: Fastmarkets RISI / PPW, Random Lengths, BofA Global Research estimates

BofA GLOBAL RESEARCH

PPW pricing out this weekend

We will get the next data points on paperboard and pulp pricing this Friday (3/15) when Fastmarkets RISI / Pulp & Paper Week (PPW or RISI) comes out with its review for March. In February, northern bleached softwood kraft (NBSK) prices were up \$50/MT at \$1,430/MT and southern bleached softwood kraft (SBSK) prices were up \$60/MT at \$1,350/MT. Fluff pulp (which is frequently priced at a spread to SBSK) was up \$20/MT at \$1,840/MT. Meantime, southern bleached hardwood kraft (SBHK) and northern bleached hardwood kraft (NBHK) prices were up \$60/MT to \$1,220/MT. As for paper, prices remained flat across the grades. Uncoated free sheet (UCFS) prices remained at \$1,285/ton and coated free sheet (CFS) prices were at \$1,405/ton. Coated groundwood (or coated mechanical; CM) prices and uncoated groundwood (uncoated mechanical; UCM) prices were flat at \$1,210/ton and \$1,090/ton, respectively.

C'board: expect higher export, further domestic uptick

As for containerboard, PPW reported in February that domestic prices were up \$40/ton for corrugating medium (East/West, 26lb) at \$865/ton (midpoint) and up \$60/ton for unbleached kraft linerboard (East/West, 42lb) at \$755/ton (midpoint). We expect another \$10-20/ton of progress on the announced \$70/ton hikes in linerboard (which were effective 1/1). Meantime, export prices were flat in the four regions at €505/tonne (midpoint) in Southern Europe, \$515/tonne (midpoint) in Hong Kong/China, \$620/tonne in Mexico, and \$485/ton in Central/South America. Given recent industry commentary, we expect upward movement in export prices this month.

In boxboard, prices were flat in February with coated recycled board (CRB) at \$1,250/ton, and uncoated recycled board (URB) at \$1,020, and coated unbleached kraft (CUK) at \$1,470/ton. The only change month over month was a \$40/ton decline in solid bleached sulfate (SBS) at \$1,450/ton. We ultimately expect flat-to-higher pricing trends in boxboard this month given announced price increases.



We are generally positive on containerboard and boxboard with our most recent upgrades being International Paper (Buy) and Packaging Corp. (PKG) on March 4th. We maintain our Buy ratings on Graphic Packaging (GPK), WestRock (WRK) and Sonoco (SON), PKG, and IP, and our Neutral rating on Greif (GEF).

Random Lengths Wood Pricing Update

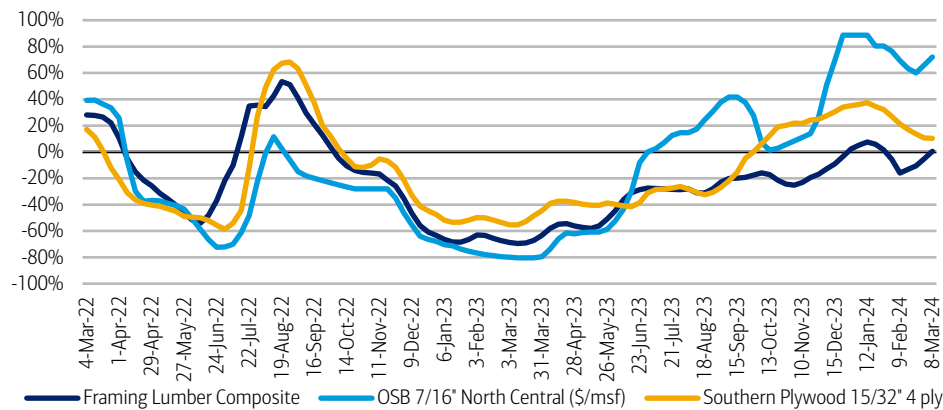
Lumber, OSB, and plywood prices

Random Lengths' (RL) Midweek Report showed that its Framing Lumber Composite prices were up \$10/MBF at \$421/MBF vs. the prior midweek. The Structural Panel index was up \$26/MSF to \$630/MSF. North Central OSB prices were up \$25/MSF at \$450/MSF and South East OSB prices were up \$70/MSF at \$465/MSF vs. the prior midweek. As for Southern plywood, prices were up \$7/MSF at \$619/MSF for 15/32" 4-ply (West/East average).

Framing lumber prices were up even as buyers were seen cutting back on new orders. That said, downside to pricing was minimal. Oriented strand board (OSB) prices "surged" according to RL as buyers hit offers as soon as they opened on the market. In plywood, prices were up \$3-\$5 across all open markets. Companies in our coverage with exposure to wood products include Buy-rated Weyerhaeuser (WY), as well as PotlatchDeltic (PCH; Neutral), Louisiana-Pacific (LPX; Underperform) and Boise Cascade (BCC; Underperform).

Exhibit 9: Random Lengths Lumber and Structural Panel Pricing (Y/Y Chg)

Lumber, OSB, and plywood prices in midweek



Source: Random Lengths

BofA GLOBAL RESEARCH

Exhibit 10: Companies mentioned

Companies mentioned in this report

BofA Ticker	Bloomberg ticker	Company name	Price	Rating
AMCCF	AMC AU	Amcor	A\$ 14.39	A-3-7
AMCR	AMCR US	Amcor PLC	US\$ 9.43	B-3-7
ATR	ATR US	AptarGroup Inc.	US\$ 140.93	B-1-7
AMBP	AMBP US	Ardagh Metal Pkgg	US\$ 3.34	B-2-8
AVY	AVY US	Avery Dennison	US\$ 215.97	B-3-7
BALL	BALL US	Ball Corp	US\$ 64.67	B-1-7
BERY	BERY US	Berry Global	US\$ 59.96	B-1-7
BCC	BCC US	Boise Cascade	US\$ 127.87	B-3-7
BRC	BRC US	Brady Corp - A	US\$ 57.64	B-1-7
CCK	CCK US	Crown Holdings	US\$ 77.26	B-1-7
GPX	GPX US	GraphicPackaging	US\$ 27.79	B-1-7
GEF	GEF US	Greif Inc.	US\$ 63.57	B-2-7
IP	IP US	Intl Paper Co	US\$ 36.19	B-1-7
LPX	LPX US	Louisiana-Pacific	US\$ 76.33	C-3-7
OI	OI US	O-I Glass Inc	US\$ 15.25	C-1-9
PKG	PKG US	Packaging Corp	US\$ 183.01	B-1-7
PTVE	PTVE US	Pactiv Evergreen	US\$ 13.06	C-1-7
PCH	PCH US	PotlatchDeltic Corp	US\$ 44.73	B-2-7
SEE	SEE US	Sealed Air Corp	US\$ 35.97	B-1-7
SLGN	SLGN US	Silgan Holdings	US\$ 44.4	B-1-7
SON	SON US	Sonoco Products	US\$ 56.86	B-1-7
SLVM	SLVM US	Sylvamo	US\$ 60.77	C-1-7
WRK	WRK US	WestRock	US\$ 47.93	B-1-7
WY	WY US	Weyerhaeuser Co	US\$ 34.26	B-1-7

Source: BofA Global Research

BofA GLOBAL RESEARCH

Price objective basis & risk**Amcor PLC (AMCR / AMCCF)**

Our \$9.70 price objective (AU\$14.85) is derived from a three-part valuation approach, which includes (1) a 16-17x calendarized 2024E P/E multiple, (2) a 10-12x 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 (in-line 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 \$154 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 26x 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 \$4.10 price objective is based on a three-part valuation approach, which takes: (1) a 15x 2024E P/E multiple, (2) a 10-12x 2024E EV/EBITDA multiple and (3) our intrinsic free cash flow (FCF) valuation, which assumes \$200mn of normalized FCF, 10% 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 \$214 price objective is derived from a three-part valuation approach, which includes the use of (1) a 20x 2024E P/E multiple, (2) a 16-17x 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), 9% cost of equity and a 5% growth rate. Based on history, we think our valuation multiples are appropriate for a late-cycle period with limited inflation.

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) investments, (5) unfavorable volume and pricing trends, (6) unfavorable macroeconomic environment, (7) variability in governmental policy.

Ball Corp. (BALL)

Our \$71 price objective is based on a three-part valuation approach, which takes: (1) a 18-19x 2024E P/E multiple, (2) a 14x 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 \$83 price objective is derived from a three-part valuation approach, which includes: (1) a 13x calendarized 2024E P/E multiple, (2) a 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 \$132 PO is based on the average of (a) a free cash flow (FCF) valuation based on our estimate of \$400mn in FCF, a calculated cost of equity of 11% 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. - CI A (BRC)

Our \$64 PO is based on a three-part valuation approach, which includes: (1) a 17-18x calendarized 2024E P/E multiple, (2) a 10-11x calendarized 2024E EV/EBITDA multiple,



and (3) our intrinsic free cash flow (FCF) valuation, which assumes \$185mn normalized FCF, 10% cost of equity, and a 3% growth rate. We apply multiple ranges to reflect a more normalized environment. The selected ranges reflect historical company ranges as well as current peer market multiples.

Downside risks to our PO: (1) risk relative to BRC's ability to generate performance from its comprehensive industrial track and trace investments & other efforts, (2) unfavorable organic growth (volume/pricing) trends in key economies, (3) acquisition/integration risk, (4) senior management succession and bench development risk, (5) unfavorable macroeconomic environments, (6) 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.

Crown Holdings Inc. (CCK)

We calculate our PO of \$89 by using our 2024 estimates and averaging the fair values derived from (1) a 15-16x '24E P/E multiple (adj. for asbestos), (2) a sum-of-the-parts (SOTP) valuation which values the Americas Beverage segment at 11x EBITDA, European Beverage at 7x, Asia Pacific at 9x, Transit Packaging at 10x and Other at 7x, (3) our intrinsic FCF valuation, which assumes \$800mn normalized FCF, a 11% cost of equity and a 2% growth rate.

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 \$31 PO is based on the average of (a) an EV/EBITDA valuation calculated by applying a 8x EV/EBITDA multiple to our 2024 EBITDA estimate of \$1.8bn (our multiple is consistent with where comparable companies have traded), (b) a P/E valuation calculated by applying a 15x P/E multiple to our 2024 EPS estimate of \$2.75 (our multiple is consistent with where comparable companies have traded), (c) a free cash flow (FCF) valuation based on our estimate of \$676mn 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 \$81 PO for Class A shares is based on (1) a 14x calendarized 2024E P/E, (2) an 10x 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, 10% 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 \$42 price objective is based on an average of (a) an EPS forecast of \$2.70 in 2025E 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) trends in the US\$ and its effect on trade flows, (5) emerging market risk, (6) operational risks related to investment projects, (7) IP's pension, (8) the potential for new capacity to come into the market, (9) 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 \$68 PO is based on an average of (a) a normalized free cash flow (FCF) estimate of \$383mn, 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) regulatory and policy changes, and (8) supply/demand and market risks in Siding, and across LPX's business.

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 \$21 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 \$350mn 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 \$202 price objective is based on an average of (a) an EPS forecast of \$8.50 in 2024E and a P/E of 20x, in line with peer multiples, (b) a normalized free cash flow (FCF) estimate of \$800mn, a calculated cost of equity of 8% 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 \$16 price objective is derived from a three-part valuation approach using our estimates, which includes (1) a 12x 2024E P/E multiple, (2) an 9x 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 \$55 PO is based on: (a) an assumed mid-cycle dividend yield of 3% and dividend of \$1.80-2.00/share, (b) a 21-25x 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 \$40 price objective is derived from a three-part valuation approach, which includes: (1) a 14-15x 2024E P/E multiple, (2) a 10x 2023E EV/EBITDA multiple, and (3) our intrinsic free cash flow (FCF) valuation, which assumes \$450mn 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 \$53 price objective (PO) is based on a 15x 2024E P/E multiple, a 11x 2024E EV/EBITDA multiple, and our intrinsic FCF valuation, which assumes \$375mn normalized FCF, 9% cost of equity, and a 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 13-14x 2024E P/E multiple, (2) an 9-10x 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 \$65 price objective is based on an average of: (a) an EPS forecast of \$5.75 in 2024E and a P/E of 12x, which is within the range in which paper companies have traded, (b) a normalized FCF estimate of around \$245mn, 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 \$47 PO is based on an average of (a) a calendarized EPS forecast of \$2.38 in C24 and a P/E of 16x, given optionality with the potential Smurfit Kappa deal, (b) a normalized free cash flow (FCF) of \$1.1bn, a cost of equity of 11% and forecast growth rate of 3%, (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 9x to 10x 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 \$37 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 21-25x 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.

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US - Paper and Packaging Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
BUY				
	AptarGroup Inc.	ATR	ATR US	George L. Staphos
	Ball Corp.	BALL	BALL US	George L. Staphos
	Berry Global	BERY	BERY US	George L. Staphos
	Brady Corp. - CI A	BRC	BRC US	Cashen Keeler
	Crown Holdings Inc.	CCK	CCK US	George L. Staphos
	Graphic Packaging	GPK	GPK US	George L. Staphos
	International Paper Co.	IP	IP US	George L. Staphos
	O-I Glass Inc	OI	OI US	George L. Staphos
	Packaging Corp. of America	PKG	PKG US	George L. Staphos
	Pactiv Evergreen	PTVE	PTVE US	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	SON US	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
	Greif Inc.	GEF	GEF 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
	Avery Dennison Corp.	AVY	AVY US	George L. Staphos
	Boise Cascade Company	BCC	BCC US	George L. Staphos
	Louisiana-Pacific Corp.	LPX	LPX US	George L. Staphos

Disclosures

Important Disclosures

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

Coverage Universe	Count	Percent	Inv. Banking Relationships ^{R1}	Count	Percent
Buy	14	60.87%	Buy	10	71.43%
Hold	6	26.09%	Hold	5	83.33%
Sell	3	13.04%	Sell	2	66.67%

Equity Investment Rating Distribution: Paper/Forest Products Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships ^{R1}	Count	Percent
Buy	9	45.00%	Buy	8	88.89%
Hold	2	10.00%	Hold	1	50.00%
Sell	9	45.00%	Sell	5	55.56%

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

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

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

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Investment rating	Total return expectation (within 12-month period of date of initial rating)	Ratings dispersion guidelines for coverage cluster ^{R2}
Buy	≥ 10%	≤ 70%
Neutral	≥ 0%	≤ 30%
Underperform	N/A	≥ 20%

^{R2}Ratings dispersions may vary from time to time where BofA Global Research believes it better reflects the investment prospects of stocks in a Coverage Cluster.

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