

Packaging & Paper/Forest Wrap-up

Preview of “Pricing Friday” for paper, pulp and board - V32/Wk3

Industry Overview

Packaging & Paper/Forest Wrap-Up: Volume 32, Week 3

Our Wrap-Up reviews: (1) Upcoming paper, pulp and board pricing and; (2) wood pricing.

Paperboard pricing data out Friday (1/19)

We will get the next data points on paperboard and pulp pricing on Friday (1/19) when Fastmarkets RISI / Pulp & Paper Week (RISI or PPW) comes out with its monthly review. Last month, containerboard prices were flat for both linerboard and medium. That said, we expect higher pricing trends this month following the announcement of price hike announcements from major producers, effective January 1. As discussed in previous research, the price increases are ~ \$70/ton for linerboard and ~\$110/ton for corrugating medium. As for boxboard, prices were flat across coated unbleached kraft (CUK), solid bleached sulfate (SBS) cup stock and folding carton, coated recycled board (CRB) and uncoated recycled board (URB). We expect generally flat pricing trends in boxboard this month. However, several boxboard producers have announced price increases which will be effective next month ([see our note here](#)). We maintain our Buy rating on Graphic Packaging (GPK), WestRock (WRK) and Sonoco (SON), Neutral ratings on Packaging Corp. (PKG), and Greif (GEF) and Underperform on International Paper (IP).

Lumber, OSB, and plywood prices mixed

Random Lengths' (RL) Midweek Report showed that framing lumber demand momentum slowed as buyers exercised caution and digested recent purchases. RISI noted the severe winter weather conditions caused some producers to curtail production. As for structural panels, oriented strand board (OSB) prices were flat across all producing regions given tight supplies. Plywood prices were higher with order files extending into late-January or early-February. Companies in our coverage with exposure to wood products include Buy-rated Weyerhaeuser (WY), as well as PotlatchDeltic (PCH; Neutral), Louisiana-Pacific (LPX; U/P) and Boise Cascade (BCC; U/P).

BofA Global Agriculture/Materials Conf. 2/28-29

Our Annual Global Agriculture & Materials Conference (Ft. Lauderdale, 2/28-29) will host fireside chats with Ball Corp (BALL), International Paper (IP), Packaging Corp (PKG), Smurfit Kappa (SKG) as well as much of BofA's packaging and paper/forest coverage. We will also host several expert panels on GLP-1, recycled fiber, boxboard, containerboard, and sustainable plastics, along with several company dinners, as well. Please call your BofA representative for information.

19 January 2024

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United States

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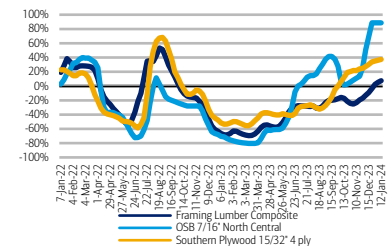
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Lumber, OSB, and plywood prices mixed in midweek



Source: Random Lengths

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Timestamp: 19 January 2024 03:20PM EST

Paper/Forest Valuation Summary Table

Exhibit 2: 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	2023E	2024E	2025E	2022A	2023E	2024E	2025E
Boise Cascade	BCC	U/P	\$5,264	\$131.66	\$132	0.5%	0.7%	\$445	\$195	\$1,273	\$4,631	6.1x	10.9x	11.0x	11.0x	3.7x	6.1x	6.0x	5.9x
Graphic Packaging	GPK	B	\$7,879	\$25.49	\$30	1.6%	19.3%	\$5,509	\$1,106	\$125	\$14,369	10.9x	9.2x	9.3x	8.2x	8.9x	7.6x	7.9x	7.5x
International Paper	IP	U/P	\$12,786	\$36.90	\$37	5.0%	5.3%	\$5,820	\$3,530	\$746	\$21,390	9.5x	17.5x	16.4x	13.2x	7.7x	9.9x	9.3x	8.5x
Louisiana-Pacific	LPX	U/P	\$4,861	\$67.52	\$65	1.4%	-2.8%	\$613	\$266	\$160	\$5,580	5.7x	22.1x	19.6x	18.0x	3.8x	14.2x	11.8x	11.2x
Packaging Corp.	PKG	N	\$14,702	\$164.27	\$176	3.0%	10.2%	\$2,475	\$936	\$677	\$17,436	14.7x	19.6x	20.2x	17.8x	9.0x	10.9x	11.1x	10.3x
PotlatchDeltic	PCH	N	\$3,722	\$46.29	\$56	3.9%	24.9%	\$1,033	\$45	\$331	\$4,469	9.6x	N/M	N/M	N/M	8.0x	5.2x	5.3x	5.3x
Sylvamo Corp.	SLVM	B	\$1,947	\$46.36	\$59	2.2%	29.4%	\$999	\$329	\$254	\$3,021	5.9x	7.5x	9.8x	7.9x	4.4x	5.5x	6.4x	5.9x
WestRock	WRK	B	\$10,442	\$40.49	\$48	2.7%	21.3%	\$8,584	\$4,376	\$393	\$23,009	8.6x	14.6x	17.0x	12.0x	8.5x	7.9x	8.5x	7.7x
Weyerhaeuser	WY	B	\$23,780	\$32.47	\$37	2.3%	16.3%	\$5,797	\$805	\$1,760	\$28,622	10.8x	33.8x	29.5x	28.2x	8.0x	18.2x	16.3x	15.8x
Average			\$85,384			2.5%	13.8%	\$31,275	\$11,587	\$5,720	\$122,527	9.1x	16.9x	16.6x	14.5x	6.9x	9.5x	9.2x	8.7x

Company	Ticker	Rating	FCF Yield		Reported EPS, Calendarized				Reported EBITDA			FCF		ROIC		Q-R-Q
			2023E	2024E	2022A	2023E	2024E	2025E	2022A	2023E	2024E	2023E	2024E	2023E	2024E	
Boise Cascade	BCC	U/P	6.7%	9.7%	\$21.56	\$12.05	\$11.95	\$12.00	\$1,259	\$757	\$776	\$355	\$512	42.3%	44.2%	B-3-7
Graphic Packaging	GPK	B	7.9%	6.7%	\$2.33	\$2.78	\$2.75	\$3.10	\$1,609	\$1,881	\$1,822	\$619	\$528	25.0%	23.5%	B-1-7
International Paper	IP	U/P	4.2%	5.0%	\$3.88	\$2.11	\$2.25	\$2.80	\$2,794	\$2,168	\$2,291	\$543	\$645	15.0%	15.4%	B-3-7
Louisiana-Pacific	LPX	U/P	3.6%	3.4%	\$11.77	\$3.05	\$3.45	\$3.75	\$1,461	\$394	\$471	\$177	\$166	25.9%	26.3%	C-3-7
Packaging Corp.	PKG	N	5.5%	5.3%	\$11.14	\$8.39	\$8.15	\$9.25	\$1,938	\$1,605	\$1,577	\$815	\$781	27.8%	27.6%	B-2-7
PotlatchDeltic	PCH	N	1.2%	3.0%	\$4.80	\$0.48	\$0.58	\$0.90	\$562	\$862	\$851	\$45	\$112	5.9%	7.4%	B-2-7
Sylvamo Corp.	SLVM	B	10.9%	8.1%	\$7.84	\$6.19	\$4.75	\$5.85	\$684	\$553	\$469	\$211	\$158	34.1%	28.3%	C-1-7
WestRock	WRK	B	7.8%	9.9%	\$4.69	\$2.78	\$2.38	\$3.36	\$2,720	\$2,909	\$2,712	\$810	\$1,036	-0.2%	13.3%	B-1-7
Weyerhaeuser	WY	B	3.6%	3.9%	\$3.02	\$0.96	\$1.10	\$1.15	\$3,560	\$1,574	\$1,753	\$862	\$933	10.4%	10.6%	B-1-7
Average			5.7%	6.1%	\$71.02	\$38.79	\$37.36	\$42.17	\$16,587	\$12,703	\$12,723	\$4,438	\$4,870	20.7%	21.8%	

Source: Company filings, BofA Global Research estimates. Priced at close on 1/17/24. WRK reported figures and estimates calendarized.

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Stock action

Exhibit 3: Packaging Coverage Performance

A review of our packaging coverage's performance from 1/10/24 – 1/17/24

BofA Packaging Coverage	
Simple Average	-1.3%
Market Cap.	-2.2%
Best:	
AMBP	1.7%
ATR	1.2%
AVY	0.1%
Worst:	
OI	-6.3%
BALL	-4.7%
SEE	-4.0%

Source: Bloomberg, BofA Global Research

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Exhibit 4: Paper/Forest Coverage Performance

A review of our paper/forest coverage's performance from 1/10/24 – 1/17/24

BofA Paper/Forest Coverage	
Simple Average	-2.2%
Market Cap.	-2.5%
Best:	
BCC	0.6%
SLVM	-1.2%
GPK	-1.3%
Worst:	
PCH	-4.8%
WY	-4.0%
WRK	-3.3%

Source: Bloomberg, BofA Global Research

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Packaging Valuation Summary Table

Exhibit 5: 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	2023E	2024E	2025E	2022A	2023E	2024E	2025E
Amcor Plc	AMCR	U/P	\$13,613	\$9.46	\$9.90	5.2%	9.8%	\$7,097	\$1,735	\$524	\$21,921	11.6x	14.2x	13.0x	12.2x	10.3x	11.3x	10.7x	10.3x
AptarGroup	ATR	B	\$8,493	\$126.69	\$150	1.2%	19.6%	\$1,171	\$187	\$152	\$9,699	33.4x	27.1x	25.1x	23.0x	15.7x	14.0x	12.9x	12.2x
Ardagh Metal Packaging	AMBP	N	\$2,175	\$3.64	\$4.40	11.0%	31.9%	\$3,655	\$41	\$154	\$5,717	11.6x	23.8x	18.5x	14.3x	9.1x	9.3x	8.7x	8.2x
Avery Dennison	AVY	U/P	\$15,906	\$196.37	\$208	1.5%	7.5%	\$3,314	\$728	\$210	\$19,737	21.5x	25.1x	21.9x	19.4x	14.5x	15.8x	14.4x	13.4x
Ball Corp.	BALL	U/P	\$17,334	\$54.63	\$59	1.5%	9.5%	\$9,591	\$1,796	\$1,335	\$27,386	19.6x	18.6x	17.3x	14.9x	14.0x	13.0x	12.1x	11.4x
Berry Global	BERY	B	\$8,024	\$65.50	\$83	1.5%	28.6%	\$9,307	\$1,688	\$1,203	\$17,816	8.8x	8.8x	8.5x	8.0x	8.5x	8.7x	8.5x	8.3x
Brady Corp.	BRC	B	\$2,893	\$59.27	\$65	1.6%	11.2%	\$52	\$84	\$175	\$2,854	17.5x	15.1x	14.3x	13.4x	11.9x	10.5x	10.2x	9.8x
Crown Holdings	CCK	B	\$10,702	\$89.56	\$105	1.1%	18.3%	\$7,065	\$1,296	\$807	\$18,256	13.3x	14.9x	14.1x	12.6x	10.5x	9.7x	9.8x	9.4x
Greif (1)	GEF	N	\$3,081	\$63.23	\$77	3.2%	25.4%	\$2,289	\$789	\$181	\$5,978	8.3x	11.0x	17.0x	12.6x	6.7x	7.4x	9.2x	8.3x
O-I Glass	OI	B	\$2,337	\$14.67	\$22	0.0%	43.1%	\$4,913	\$798	\$792	\$7,256	6.4x	4.9x	6.4x	5.3x	6.1x	5.0x	5.1x	4.8x
Pactiv Evergreen	PTVE	B	\$2,460	\$13.79	\$16	2.9%	18.9%	\$3,611	\$1,090	\$233	\$6,928	7.7x	18.7x	13.1x	11.0x	8.8x	8.3x	8.1x	7.9x
Sealed Air	SEE	B	\$5,009	\$34.57	\$42	2.3%	23.8%	\$4,871	\$609	\$281	\$10,207	8.4x	12.0x	11.5x	10.3x	8.4x	9.3x	9.0x	8.7x
Silgan Holdings	SLGN	B	\$4,662	\$42.85	\$53	1.7%	25.4%	\$4,210	\$802	\$307	\$9,368	10.7x	12.9x	11.6x	10.6x	9.9x	10.8x	10.5x	10.3x
Sonoco Products	SON	B	\$5,537	\$55.98	\$70	3.5%	28.5%	\$3,255	\$540	\$258	\$9,074	8.6x	10.5x	9.7x	9.0x	8.7x	8.7x	8.0x	7.8x
Average			\$102,225			2.7%	21.5%	\$64,401	\$12,182	\$6,612	\$172,196	13.4x	15.5x	14.4x	12.6x	10.2x	10.1x	9.8x	9.3x

Company	Ticker	Rating	FCF Yield		Reported EPS, Calendarized				Reported EBITDA			FCF		ROIC		Q-R-Q
			2023E	2024E	2022A	2023E	2024E	2025E	2022A	2023E	2024E	2023E	2024E	2023E	2024E	
Amcor Plc	AMCR	U/P	5.6%	6.6%	\$0.82	\$0.67	\$0.73	\$0.77	\$2,136	\$1,937	\$2,047	\$765	\$894	20.6%	19.1%	B-3-7
AptarGroup	ATR	B	3.0%	3.6%	\$3.79	\$4.67	\$5.05	\$5.50	\$620	\$693	\$750	\$257	\$307	23.3%	24.9%	B-1-7
Ardagh Metal Packaging	AMBP	N	1.3%	7.6%	\$0.31	\$0.15	\$0.20	\$0.26	\$625	\$612	\$654	\$27	\$165	15.6%	17.8%	B-2-8
Avery Dennison	AVY	U/P	3.9%	4.3%	\$9.15	\$7.82	\$8.95	\$10.10	\$1,364	\$1,249	\$1,372	\$613	\$686	24.9%	29.1%	B-3-7
Ball Corp.	BALL	U/P	4.2%	5.3%	\$2.78	\$2.94	\$3.15	\$3.65	\$1,957	\$2,112	\$2,255	\$734	\$920	18.3%	19.9%	B-3-7
Berry Global	BERY	B	18.2%	10.5%	\$7.45	\$7.44	\$7.67	\$8.21	\$2,087	\$2,043	\$2,088	\$1,457	\$841	18.2%	19.2%	B-1-7
Brady Corp.	BRC	B	6.6%	6.5%	\$3.38	\$3.92	\$4.15	\$4.43	\$240	\$271	\$280	\$190	\$188	28.8%	29.4%	B-1-7
Crown Holdings	CCK	B	4.6%	6.9%	\$6.75	\$6.01	\$6.35	\$7.10	\$1,744	\$1,883	\$1,870	\$493	\$737	22.3%	22.2%	B-1-7
Greif (1)	GEF	N	12.7%	8.4%	\$7.66	\$5.77	\$3.71	\$5.00	\$891	\$812	\$652	\$391	\$260	21.0%	16.3%	B-2-7
O-I Glass	OI	B	5.3%	15.4%	\$2.30	\$3.00	\$2.30	\$2.75	\$1,193	\$1,462	\$1,411	\$124	\$359	26.4%	25.4%	C-1-9
Pactiv Evergreen	PTVE	N	11.3%	11.9%	\$1.78	\$0.74	\$1.05	\$1.25	\$785	\$833	\$852	\$278	\$293	17.9%	18.7%	B-1-7
Sealed Air	SEE	B	3.6%	8.7%	\$4.10	\$2.88	\$3.00	\$3.35	\$1,210	\$1,098	\$1,130	\$178	\$434	21.2%	23.2%	B-1-7
Silgan Holdings	SLGN	B	6.2%	7.7%	\$4.02	\$3.33	\$3.70	\$4.05	\$944	\$866	\$893	\$290	\$360	16.3%	17.9%	B-1-7
Sonoco Products	SON	B	10.9%	9.9%	\$6.48	\$5.32	\$5.75	\$6.25	\$1,041	\$1,047	\$1,131	\$604	\$547	21.4%	22.7%	B-1-7
Average			7.0%	8.1%	\$60.77	\$54.67	\$55.75	\$62.67	\$16,837	\$16,916	\$17,386	\$6,402	\$6,992	21.2%	21.8%	

Source: Company filings, BofA Global Research estimates. Priced at close on 1/17/24.

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

Paper/Forest Products

Pricing review

Exhibit 6: Paper & Wood Products Pricing

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

	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	1Q24E	2Q24E	3Q24E	4Q24E
Market Pulp (NBSK, \$/mt)	\$1,510	\$1,420	\$1,340	\$1,270	\$1,270	\$1,270	\$1,315	\$1,350	\$1,370	\$1,390	\$1,390	\$1,340
Market Pulp (NBHK, \$/mt)	1,280	1,160	1,070	990	1,010	1,040	1,085	1,125	1,140	1,160	1,150	1,100
Market Pulp (SBSK, \$/mt)	1,460	1,360	1,270	1,200	1,180	1,180	1,235	1,260	1,283	1,303	1,303	1,253
Market Pulp (SBHK, \$/mt)	1,280	1,160	1,070	990	1,010	1,040	1,085	1,125	1,140	1,160	1,150	1,100
Fluff Pulp (U.S. Southern Kraft, \$/mt)	1,980	1,890	1,800	1,730	1,710	1,710	1,765	1,790	1,770	1,780	1,770	1,750
Coated Groundwood (no. 5, 40-lb)	1,250	1,250	1,250	1,250	1,250	1,230	1,230	1,230	1,205	1,205	1,205	1,180
Coated Free Sheet (no. 3, 60-lb)	1,450	1,450	1,450	1,450	1,450	1,435	1,435	1,435	1,410	1,410	1,410	1,385
Uncoated Free Sheet (20-lb, repro bond)	1,475	1,465	1,465	1,465	1,465	1,445	1,445	1,445	1,435	1,425	1,425	1,425
Uncoated Free Sheet (50-lb offset rolls)	1,360	1,350	1,350	1,330	1,320	1,320	1,305	1,305	1,280	1,255	1,245	1,245
Uncoated Groundwood (SC-A, 35-lb)	1,140	1,120	1,120	1,120	1,120	1,120	1,110	1,110	1,090	1,070	1,060	1,050
Newsprint (30-lb, east coast)	880	855	855	855	845	845	845	820	800	790	780	780
Corrugating Medium (East, Semi-Chem, 26-lb)	715	715	715	715	715	715	695	695	735	775	775	795
Corrugating Medium (West, Semi-Chem, 26-lb)	715	715	715	715	715	715	695	695	735	775	775	795
Unbleached Kraft Linerboard (East, 42-lb)	845	845	845	845	845	845	825	825	865	885	885	905
Unbleached Kraft Linerboard (West, 42-lb)	845	845	845	845	845	845	825	825	865	885	885	905
Kraft Paper (Grocery Sack, 50-lb)	1,195	1,195	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)	1,490	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)	1,530	1,530	1,510	1,450	1,450	1,450	1,450	1,450	1,450	1,450	1,450	1,470
Coated Recycling Boxboard (20-pt. clay coated news)	1,270	1,270	1,270	1,270	1,270	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	1,040	1,040	1,020	1,020	1,020	1,020	1,050	1,060	1,060
Old Corrugated Containers (US Average)	41	47	49	54	63	73	75	79	95	105	115	110
Random Lengths Framing Lumber Composite (\$/mbf)	400	406	460	430	428	395	371	385	400	450	460	430
Random Lengths Structural Panels Composite (\$/msf)	537	537	616	643	645	579	578	594	545	575	590	545
Random Lengths OSB 7/16" North Central (\$/msf)	300	330	466	510	497	375	403	414	390	420	440	380
Random Lengths So. Plywood 15/32" 4-Ply (\$/msf)	553	503	528	556	627	637	595	617	595	625	640	605

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

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PPW pricing out this weekend

We will get the next data points on paperboard and pulp pricing this Friday (1/19) when Fastmarkets RISI / Pulp & Paper Week (PPW or RISI) comes out with its review for January. Preliminary January pricing shows northern bleached softwood kraft (NBSK) and southern bleached softwood kraft (SBSK) prices were up \$10/MT at \$1,360/MT and \$1,270/MT, respectively. Fluff pulp (which is frequently priced off of SBSK) prices were up \$15/MT at \$1,805/MT. Meantime, southern bleached hardwood kraft (SBHK) and northern bleached hardwood kraft (NBHK) prices were up \$35/MT to \$1,160/MT. In December, paper grades were flat across the grades with uncoated freesheet (UCFS) 50-lb offset rolls at \$1,305/ton, 20-lb UCFS copy paper at \$1,445/ton, and coated freesheet (CFS) at \$1,435/ton. Coated groundwood (or coated mechanical; CM) prices and uncoated groundwood (uncoated mechanical; UCM) prices were also flat at \$1,230/ton and \$1,110/ton, respectively.

C'board prices: Expect some traction on Jan. price hikes

As for containerboard, PPW reported in December that domestic prices were flat for both corrugating medium (East/West, 26lb) prices at \$695/ton (midpoint) and unbleached kraft linerboard (East/West, 42lb) prices at \$825/ton (midpoint). Meantime, export prices were flat-to-down: -\$5/ MT drop in Mexico and in Central/South America, and flat pricing in Southern Europe and Hong Kong/China. Ultimately, given our forecasts and recent discussions, we expect higher containerboard pricing this month. Overall, our forecasts are baking in a \$40/ton increase in both corrugating medium and unbleached kraft linerboard for 1Q24 from current levels (so expect \$10-20/ton per month in the quarter) with the ultimate increase being \$60/ton through 2Q. In boxboard, prices were flat in December with solid bleached sulfate (SBS) at \$1,450/ton, 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. We ultimately expect flat pricing trends in boxboard this month but increases through 2024, with timing varying by grade.

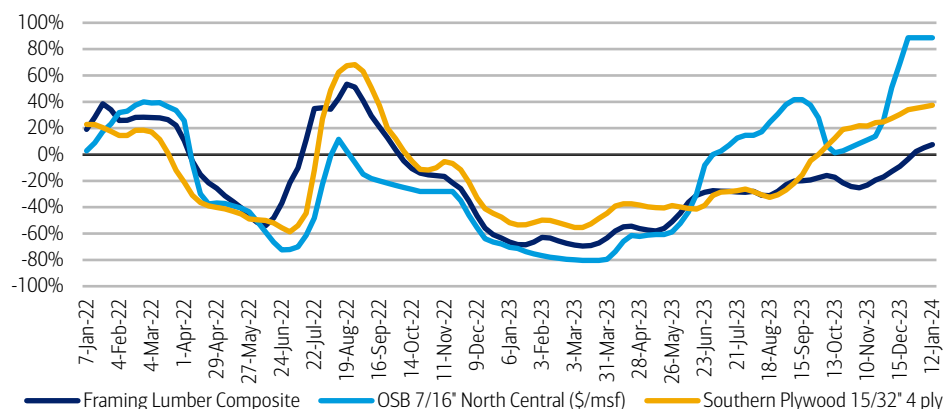
Random Lengths Wood Pricing Update

Lumber, OSB, and plywood prices

Random Lengths' (RL) Midweek Report showed that its Framing Lumber Composite decreased \$1/MBF to \$400/MBF vs. the prior midweek. Meanwhile, the Structural Panel index was up \$1/MSF to \$601/MSF. North Central OSB prices were flat at \$415/MSF while South East OSB prices were flat at \$355/MSF vs. the prior midweek. As for Southern plywood, prices were up \$3/MSF at \$643/MSF for 15/32" 4-ply (West/East average).

Exhibit 7: Random Lengths Lumber and Structural Panel Pricing (Y/Y Chg)

Lumber prices down, OSB prices flat, and plywood prices up in midweek



Source: Random Lengths

BofA GLOBAL RESEARCH

Exhibit 8: Stock Mentioned

Stock prices and ratings mentioned in this report

BofA Ticker	Bloomberg ticker	Company name	Price	Rating
AMCCF	AMC AU	Amcor	A\$ 14.27	A-3-7
AMCR	AMCR US	Amcor PLC	US\$ 9.45	B-3-7
ATR	ATR US	AptarGroup Inc.	US\$ 129.14	B-1-7
AMBP	AMBP US	Ardagh Metal Pkgs	US\$ 3.59	B-2-8
AVY	AVY US	Avery Dennison	US\$ 198.49	B-3-7
BALL	BALL US	Ball Corp	US\$ 54.85	B-3-7
BERY	BERY US	Berry Global	US\$ 66.43	B-1-7
BCC	BCC US	Boise Cascade	US\$ 132.51	B-3-7
BRC	BRC US	Brady Corp - A	US\$ 59.47	B-1-7
CCK	CCK US	Crown Holdings	US\$ 89.29	B-1-7
GPK	GPK US	GraphicPackaging	US\$ 25.15	B-1-7
GEF	GEF US	Greif Inc.	US\$ 63.69	B-2-7
IP	IP US	Intl Paper Co	US\$ 36.69	B-3-7
LPX	LPX US	Louisiana-Pacific	US\$ 67.77	C-3-7
OI	OI US	O-I Glass Inc	US\$ 14.68	C-1-9
PKG	PKG US	Packaging Corp	US\$ 164.3	B-2-7
PTVE	PTVE US	Pactiv Evergreen	US\$ 14.12	B-1-7
PCH	PCH US	PotlatchDeltic Corp	US\$ 46.67	B-2-7
RYN	RYN US	Rayonier Inc	US\$ 31.25	HOLD
SEE	SEE US	Sealed Air Corp	US\$ 34.57	B-1-7
SLGN	SLGN US	Silgan Holdings	US\$ 42.66	B-1-7
SON	SON US	Sonoco Products	US\$ 56.93	B-1-7
SLVM	SLVM US	Sylvamo	US\$ 47.13	C-1-7
WRK	WRK US	WestRock	US\$ 40.49	B-1-7
WY	WY US	Weyerhaeuser Co	US\$ 32.59	B-1-7

Source: BofA Global Research

BofA GLOBAL RESEARCH



Price objective basis & risk

Amcor PLC (AMCR / AMCCF)

Our \$9.90 price objective (AU\$14.75) 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 \$150 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 \$4.40 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 \$208 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 \$61 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 \$65 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.

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 \$105 by using our 2024 estimates and averaging the fair values derived from (1) a 16-17x 2024E P/E multiple (adj. for asbestos), (2) a 10-13x 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 \$30 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 \$1.8bn (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 \$2.75 (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 \$77 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 \$37 price objective is based on an average of (a) an EPS forecast of \$2.25 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) 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 \$65 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) 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 \$22 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 \$176 price objective is based on an average of (a) an EPS forecast of \$8.15 in 2024E and a P/E of 20x, 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 \$14 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 \$56 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 \$42 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 \$48 PO is based on a 13x 2024E P/E multiple, a 10x 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 \$70 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 \$59 price objective is based on an average of: (a) an EPS forecast of \$4.75 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 \$258mn, 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 \$48 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.

Analyst Certification

We, George L. Staphos and Cashen Keeler, hereby certify that the views each of us has expressed in this research report accurately reflect each of our respective personal views about the subject securities and issuers. We also certify that no part of our respective compensation was, is, or will be, directly or indirectly, related to the specific recommendations or view expressed in this research report.



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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
	Berry Global	BERY	BERY US	George L. Staphos
	Brady Corp. - Cl A	BRC	BRC US	Cashen Keeler
	Crown Holdings Inc.	CCK	CCK US	George L. Staphos
	Graphic Packaging	GPX	GPX US	George L. Staphos
	O-I Glass Inc	OI	OI 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
	Packaging Corp. of America	PKG	PKG 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
	Ball Corp.	BALL	BALL US	George L. Staphos
	Boise Cascade Company	BCC	BCC US	George L. Staphos
	International Paper Co.	IP	IP US	George L. Staphos
	Louisiana-Pacific Corp.	LPX	LPX US	George L. Staphos

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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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