

## Paper/Forest Products

# 4Q C'board/Boxb'd Wrap: Sluggish but improvement signs. Inventory still high

Industry Overview

## Intro: Inventories high but improvement in several areas

The American Forest & Paper Association (AF&PA) and Fibre Box Association (FBA) reported containerboard & box data for 4Q23, along with the AF&PA's Boxboard data on 1/26. Trends remain weak in several aspects but there were signs of improvement. Positives were shown in improved containerboard production, positive yy box shipments, increases in unmade boxboard orders, and the lessening pct. decline in tube/can production. On the negative, system-wide inventories still remain very high even as in-transit increased. Additionally, the yy percentage change in box shipments faded over the course of 4Q. With December box volumes -1.4%, following a +0.4% increase in November and +2.2% increase in October, this is a bit counter to the "increasing momentum" commentary we had heard in early January, though Packaging Corp's (PKG; Buy) 4Q results and early-January trends suggest volumes are doing well.

## 4Q23 c'board & box stats: Shipments up +0.4%

Box shipments increased slightly by +0.4% on an actual basis, and this follows a -4.0% decline in 3Q23. The 4Q22 comparison was not difficult as volumes last year were down -8.4%. Thus far during 4Q reporting, PKG reported box shipments up +5.1% y/y and noted that bookings are up 8% quarter-to-date, as noted earlier. International Paper (IP; U/P) and Buy-rated WestRock (WRK) will both report C4Q earnings on Thursday, February 1st. Meantime, systemwide inventories were reported at 2.636mn tons, up 50.7k tons from September's 2.586mn tons. Given downtime, capacity closures and better consumption trends, we would have liked to have seen lower levels of inventory — 2.6mn tons is simply too high for our liking. Moreover, our measure of "alt-use/in-transit" (i.e., the containerboard that was available to the market but not accounted for in reported box consumption or measured inventories) was 116.2k tons above 3Q23 levels at 916.9k tons, and well above the last several years' 4Q levels.

## Prod'n up +12.4%, exports up +61.6%

While capacity has been throttled back and closed throughout this year, we still believe that improving demand trends are needed to better balance the system, especially given new entrants, or there may be additional downtime/closures needed. As mentioned, PKG has seen improving demand trends and has been restarting its Wallula mill. According to the AF&PA, production was up +12.4% y/y to 9.508mn tons in 4Q23 vs. 8.461mn tons in 4Q22 and mills ran at an 89.4% operating rate, compared to 85.4% operating rate in 3Q23. Exports increased +61.6% y/y to 1.209mn tons, possibly as producers tried to preserve domestic balances — q/q, exports were up +9.7% from 3Q. In 4Q23 there was a 31-day gap between mill production and box cut-up, which is above the typical 27-30 day quarterly gap.

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United States  
Paper/Forest Products

**George L. Staphos**  
Research Analyst  
BofAS  
+1 646 855 4495  
[george.l.staphos@bofa.com](mailto:george.l.staphos@bofa.com)

**Cashen Keeler**  
Research Analyst  
BofAS  
+1 646 855 4256  
[cashen.keeler@bofa.com](mailto:cashen.keeler@bofa.com)

**Lucas Hudson**  
Research Analyst  
BofAS  
+1 917 861 6981  
[lucas.hudson@bofa.com](mailto:lucas.hudson@bofa.com)

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## Boxboard: soft data in 4Q

In boxboard, production was down an aggregate of -10.3% in 4Q23 vs. 4Q22. The trends were lower across the grades, somewhat weaker than the tone in RISI's Pulp and Paper Week (PPW) boxboard discussion last week. Solid bleached (SBS) board production was -16.2% y/y, recycled board was -10%, and unbleached kraft/gypsum board was -3.3%, with operating rates at 79.3%, 80.8%, and 87.2%, respectively. That said, unmilled orders improved sequentially with SBS board and coated recycled board up +4.3% and +8.7% respectively, while uncoated recycled board decreased -3.0% in comparison to September 2023. In aggregate this is a promising sign.

### Bleached results were down in all sub-markets...

Looking at SBS trends were lower across all sub-markets, with the declines in liquid packaging (down -19.2% y/y) and folding (down -13% y/y). Meantime, foodservice was down -19.8% with plate/dish/tray board down -18.8% and cup stock down -22%. We would have expected somewhat stronger trends.

### ...as were recycled grades, though tube/can better

As noted above recycled trends were not great and coated recycled board (CRB) was down -14.2% while uncoated recycled board (URB) was down -5.1%. We were encouraged that tube & can board, which saw a -12% drop in production in 3Q, saw only a -4.9% decrease in 4Q. Tube volumes are a coincident-to-leading indicator for economic activity and continued progress here would bode well for the economy. We will get more data points for boxboard as we continue into earnings season. Recall, Buy-rated Graphic Packaging (GPK) has exposure to packaging-related boxboard grades, as does Buy-rated WestRock (WRK). Buy-rated Sonoco (SON) and Neutral-rated Greif (GEF) have more exposure to URBs.

**Exhibit 1: Companies Mentioned**

Review of companies mentioned in this report

Company	Ticker	Q-R-Q	PO	Recent Price
<b>Packaging</b>				
Greif	GEF	B-2-7	\$77	\$64.29
Sonoco Products	SON	B-1-7	\$70	\$58.31
<b>Paper/Forest</b>				
Graphic Packaging	GPK	B-1-7	\$30	\$25.95
International Paper	IP	B-3-7	\$37	\$37.57
Packaging Corp.	PKG	B-2-7	\$179	\$171.96
WestRock	WRK	B-1-7	\$48	\$42.39

**Source:** Bloomberg, BofA Global Research estimates. Priced on 1/26/24.

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**Price objective basis & risk****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.

### **Packaging Corp. of America (PKG)**

Our \$179 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 \$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.

### **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.

### **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.

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Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
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	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	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
<b>NEUTRAL</b>				
	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
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	Amcor PLC	AMCR	AMCR US	George L. Staphos
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	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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Coverage Universe	Count	Percent	Inv. Banking Relationships <sup>R1</sup>	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 <sup>R1</sup>	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 <sup>R1</sup>	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%

<sup>R1</sup> 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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