

## Paper/Forest Products

# 3Q C'board/Boxb'd Wrap: Trends generally lower across the "board"

Industry Overview

### Intro: Not a lot to get excited about

The American Forest & Paper Association (AF&PA) and Fibre Box Association (FBA) reported containerboard & box data for 3Q23, along with the AF&PA's Boxboard (folding carton grade) data on 10/27. Trends were fairly lackluster in containerboard, with September shipments declining more sequentially from August than was the case last year. In boxboard, the best thing we could say is that production was up in September versus August, albeit from weak levels. Back to containerboard/corrugated, that box volumes were down only 3% in 3Q v. 2Q's -7.9% supports our view that that trends are stabilizing based on our survey work and roundtables, and 3Q reporting thus far (see below) from Packaging Corp. (PKG; Neutral) and International Paper (IP; Underperform). There is still a fair amount of inventory in the system and demand trends will need to improve further (or supply reduce) for box markets to get a firmer footing. In boxboard, production trends were quite weak across the grades and sub-markets.

### 3Q23 c'board & box stats: Shipments down -2.9%

Box shipments declined -2.9% on an actual basis following a -7.9% decline in 2Q23. Thus far during 3Q reporting, Packaging Corp. (PKG; Neutral), reported box shipments up +1.9% y/y, while International Paper (IP; Underperform) reported box shipments down -4% y/y. (Buy-rated WestRock [WRK] will report C3Q earnings on November 9th). Meantime, systemwide inventories were reported at 2.586mn tons, down only 20k tons from June's 2.606mn tons. Overall, we are not terribly surprised by the shipments given recent earnings reports and trade checks. While we understand that there may be some seasonal factors at play we would have expected a somewhat larger reduction in total inventories, especially given the downtime we observed in the quarter 3Q (i.e., IP's ~458k tons of market-related downtime). Moreover, our measure of "alt-use/in-transit" was 688.3k tons – up from 2Q22 levels and still high by historical standards.

### Production down only -0.6%, exports pushed

While capacity has been throttled back and closed throughout the 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. To that end, PKG and IP noted some improving demand trends to start 4Q. However, production was down only -0.6% y/y to 9.27mn tons in 3Q23 vs. 9.33mn tons in 3Q22 and mills ran at an 85.4% operating rate, compared to an 86.1% operating rate in 2Q23. Exports increased 16.3% y/y to 1.1mn tons, possibly as producers tried to preserve domestic balances – q/q, exports were up +16.2% from 2Q. We recognize that recent closure announcements (i.e., IP's shutdown of 800k tons at its Orange, TX mill) have not yet hit and this should ultimately help further balance the market moving forward. That said, we still view the demand trajectory as an important part of the story here as noted above. In 3Q23 there was a 30-day gap between mill production and box cut-up, which is within the typical 27-30 day quarterly gap. Similarly, after some hope from market participants that export prices were bottoming, Fastmarkets RISI's October pricing showed that export pricing was down by -\$3-20/ton(ne) ([See here for our note](#)). We'll need to see international markets pick up to absorb the supply coming from North America

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**Refer to important disclosures on page 6 to 9. Analyst Certification on page 5. Price Objective Basis/Risk on page 3.**

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## C'board outlk:

As a reminder, our containerboard pricing forecasts ([see here for our preview note](#)) assume some modest deterioration in containerboard pricing in 4Q with some additional declines in early 2024. While there has been a considerable amount of downtime taken recently, along with additional mill closures, there still appears to be somewhat of a supply/demand imbalance that could create some downward pricing tension. Furthermore, our research and market commentary suggests that new entrants are becoming increasingly aggressive on pricing, depending on the region.

## Boxboard: Production down sharply in SBS, recycled, unbl.

In boxboard, production was down an aggregate of -16.8% in 3Q23 vs. 3Q22. The trends were lower across the grades, and given commentary from RISI's *Pulp and Paper Week* (PPW) on boxboard markets, we are not terribly surprised by this result, although it is a touch lower than we would have expected. Solid bleached (SBS) board production was -20.2% y/y, recycled board was -17.8%, and unbleached kraft/gypsum board was -11.5%, with operating rates at 80.3%, 79.9%, and 87.2%, respectively. Unmade orders also declined sharply vs. last year including by 46.8% in SBS and 49.3% in CRB. Meantime, uncoated recycled unmade orders were down 11.3% y/y.

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

Looking at SBS trends were lower across all sub-markets, with the most pronounced declines in liquid packaging (down -20.2% y/y) and folding (down -25.3% y/y). Meantime, foodservice was down -15.1% with plate/dish/tray board down -10.4% and cup stock down -20.6%. As we noted above, September production did increase relative to August (up 8%; though down 13% yy), hopefully a sign that trends are stabilizing.

## ...and the recycled grades were also quite soft in 3Q

As noted above recycled trends were not great and coated recycled board (CRB) was down -21.8% while uncoated recycled board (URB) was down -14.2%. Additionally, there were double-digit declines across the sub-markets. More data points for boxboard will become available as we continue into earnings season. Recall, Neutral-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 URB.

### 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 | \$79  | \$63.49      |
| Sonoco Products     | SON    | B-1-7 | \$64  | \$50.63      |
| <b>Paper/Forest</b> |        |       |       |              |
| Graphic Packaging   | GPK    | B-2-7 | \$29  | \$20.93      |
| International Paper | IP     | B-3-7 | \$34  | \$33.14      |
| Packaging Corp.     | PKG    | B-2-7 | \$162 | \$150.18     |
| WestRock            | WRK    | B-1-7 | \$40  | \$35.20      |

Source: Bloomberg, BofA Global Research estimates. Priced on 10/27/23.

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## Price objective basis & risk

### Graphic Packaging (GPK)

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

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

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

### Greif Inc. (GEF)

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

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

### International Paper Co. (IP)

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

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



downside to the shares relative to our PO. Better performance or macro news could cause the shares to perform better than our price objective.

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

Our \$162 price objective is based on an average of (a) an EPS forecast of \$7.75 in 2024E and a P/E of 18x, in line with peer multiples, (b) a normalized free cash flow (FCF) estimate of \$750mn, a calculated cost of equity of 9% and forecast rate of growth of 4%, (c) a sum-of-the-parts (SOTP) value, based on forecast midcycle EBITDA or per ton(ne) replacement values.

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

### **Sonoco Products Co. (SON)**

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

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

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

### **WestRock (WRK)**

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

Risks to our PO are (1) the broader employment, macro and consumer spending outlook, (2) potential volatility in OCC prices, (3) paper/board sector volatility and demand trends across end markets, (4) supply-chains, (5) potential governmental policy and regulatory changes, (6) risks related to the closing of the Smurfit Kappa transaction. As with all our

packaging and paper/forest product companies, WRK must contend with a variety of macro, FX, commodity inflation and other considerations. Should the factors above impact WRK more negatively than expected, its results and stock price will have difficulty achieving our forecasts. Similarly, should these factors combine more positively than expected, WRK's results and stock price could exceed our forecasts.

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| Investment rating   | Company                     | BofA Ticker | Bloomberg symbol | Analyst           |
|---------------------|-----------------------------|-------------|------------------|-------------------|
| <b>BUY</b>          |                             |             |                  |                   |
|                     | AptarGroup Inc.             | ATR         | ATR US           | George L. Staphos |
|                     | Avery Dennison Corp.        | AVY         | AVY US           | George L. Staphos |
|                     | Berry Global                | BERY        | BERY US          | George L. Staphos |
|                     | Crown Holdings Inc.         | CCK         | CCK US           | George L. Staphos |
|                     | O-I Glass Inc               | OI          | OI 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 |
|                     | Ball Corp.                  | BALL        | BALL US          | George L. Staphos |
|                     | Graphic Packaging           | GPK         | GPK US           | George L. Staphos |
|                     | Greif Inc.                  | GEF         | GEF US           | George L. Staphos |
|                     | Packaging Corp. of America  | PKG         | PKG US           | George L. Staphos |
|                     | Pactiv Evergreen            | PTVE        | PTVE US          | George L. Staphos |
|                     | PotlatchDeltic Corp.        | PCH         | PCH US           | George L. Staphos |
| <b>UNDERPERFORM</b> |                             |             |                  |                   |
|                     | Amcor Plc                   | AMCCF       | AMC AU           | George L. Staphos |
|                     | Amcor PLC                   | AMCR        | AMCR US          | George L. Staphos |
|                     | Boise Cascade Company       | BCC         | BCC US           | George L. Staphos |
|                     | Brady Corp. - Cl A          | BRC         | BRC US           | George L. Staphos |
|                     | International Paper Co.     | IP          | IP US            | George L. Staphos |
|                     | Louisiana-Pacific Corp.     | LPX         | LPX US           | George L. Staphos |

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

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| Coverage Universe | Count | Percent | Inv. Banking Relationships <sup>R1</sup> | Count | Percent |
|-------------------|-------|---------|--|-------|---------|
| Buy               | 8     | 42.11%  | Buy                                      | 7     | 87.50%  |
| Hold              | 3     | 15.79%  | Hold                                     | 2     | 66.67%  |
| Sell              | 8     | 42.11%  | Sell                                     | 5     | 62.50%  |

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

| Coverage Universe | Count | Percent | Inv. Banking Relationships <sup>R1</sup> | Count | Percent |
|-------------------|-------|---------|--|-------|---------|
| Buy               | 1869  | 53.48%  | Buy                                      | 1046  | 55.97%  |
| Hold              | 828   | 23.69%  | Hold                                     | 461   | 55.68%  |
| Sell              | 798   | 22.83%  | Sell                                     | 370   | 46.37%  |

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

<sup>R2</sup> 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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