

Paper/Forest Products

C'board hike in the market – we're wait/see for now, stay Buy on WRK

Industry Overview

Containerboard price hike of \$70/ton...

Bloomberg reported today (and we were able to confirm with an industry contact) that Packaging Corp (PKG; Neutral) is out with a price hike in containerboard for early 2024 – our research suggests \$70/ton on kraft linerboard (\$100/ton on semi-chem medium) effective January 1. We don't love speculating on pricing trends and probabilities once a new price increase is in the market and before we have updated our own intermediate and longer-term views. Nonetheless, for what it's worth: (a) we had slight erosion (\$10/ton) built in for December/January; (b) our recent research ([see here for our notes coming from the Fastmarkets Intl. Containerboard Conference](#)) suggested trends were gradually getting better in 4Q, though several of our industry contacts had noted a drop-off in demand since September; (c) we were assuming flat pricing in 2024 given our supply/demand work. To that point (please see the attached model) we would need to be seeing a much stronger uptick in demand in 4Q and into 2024 for supply/demand to be into the 90s as a pct, even with recent closures. We currently have a 5% drop in consumption pegged for 2023 and a 2% increase for 2024.

... so what's going on? No changes now, stay Buy on WRK

Some we have spoken today have theorized that the increase may be aimed at stabilizing the market after prices dropped somewhat surprisingly by -\$20/ton in November ([see here for our note](#)). Based on our time covering PKG, that's not the company's usual approach – it attempts price increases when it believes it will be successful, period. We still don't know what to make of PKG's much better reported trends coming out of 3Q versus what our trade contacts have stated – perhaps there's a lag. Our forecasts remain unchanged and we'll evaluate datapoints as we receive them. We maintain a Buy on WestRock (WRK), Neutral on PKG, and Underperform on International Paper (IP).

27 November 2023

Equity
United States
Paper/Forest Products

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Timestamp: 27 November 2023 02:23PM EST

Exhibit 1: Containerboard – North America Supply Demand

We currently have a 5% drop in consumption pegged for 2023 and a 2% increase for 2024.

| 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 | 37,912 | 38,840 | 39,597 | 40,243 |
| Adjusted Capacity | 40,430 | 41,424 | 42,423 | 42,927 | 43,077 | 44,938 | 44,729 | 45,314 | 45,322 | 46,051 | 46,410 |
| Utilization Rate % | 95% | 96% | 97% | 91% | 93% | 95% | 89% | 84% | 86% | 86% | 87% |
| Apparent Consumption | 34,252 | 35,346 | 36,271 | 35,437 | 36,324 | 38,975 | 36,880 | 35,126 | 35,850 | 36,383 | 36,933 |
| Net (Imports) Exports, est. % of Production | 3,259 8% | 3,465 9% | 3,364 8% | 2,812 7% | 3,067 8% | 2,263 5% | 2,107 5% | 1,943 5% | 2,127 5% | 2,240 6% | 2,265 6% |

| 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 | 35,524 | 36,262 | 36,994 | 37,608 |
| 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% | 84% | 85% | 86% | 87% |
| Exports | 5,084 | 5,302 | 5,304 | 4,581 | 4,976 | 4,420 | 4,073 | 3,700 | 3,800 | 4,000 | 4,100 |
| Imports | 1,190 | 1,377 | 1,441 | 1,351 | 1,386 | 1,376 | 1,247 | 1,180 | 1,175 | 1,250 | 1,300 |
| Net Exports as % of Production | 10.7% | 10.4% | 10.0% | 8.8% | 9.5% | 7.5% | 7.5% | 7.1% | 7.2% | 7.4% | 7.4% |
| Year-End System-wide Inventories | 2,302 | 2,380 | 2,659 | 2,525 | 2,301 | 2,770 | 2,720 | 2,600 | 2,450 | 2,400 | 2,400 |
| Apparent Consumption | 32,422 | 33,566 | 34,371 | 33,527 | 34,365 | 36,826 | 34,868 | 33,124 | 33,787 | 34,294 | 34,808 |
| % Growth | 0.8% | 3.5% | 2.4% | -2.5% | 2.5% | 7.2% | -5.3% | -5.0% | 2.0% | 1.5% | 1.5% |

| 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 | 2,812 | 2,910 | 2,938 | 2,966 |
| Utilization Rate % | 94% | 93% | 91% | 94% | 94% | 91% | 85% | 85% | 89% | 89% | 89% |
| Exports | 1,310 | 1,490 | 1,450 | 1,435 | 1,405 | 1,301 | 1,262 | 1,274 | 1,384 | 1,421 | 1,461 |
| Imports | 1,050 | 950 | 870 | 863 | 824 | 1,021 | 992 | 888 | 869 | 908 | 951 |
| Net Exports as % of Production | 12.4% | 23.3% | 23.4% | 23.0% | 22.9% | 11.5% | 11.8% | 16.2% | 20.0% | 19.7% | 19.3% |
| Apparent Consumption | 1,830 | 1,780 | 1,900 | 1,909 | 1,959 | 2,149 | 2,013 | 2,001 | 2,063 | 2,090 | 2,125 |
| % Growth | -6.2% | -2.7% | 6.7% | 0.5% | 2.6% | 9.7% | -6.3% | -0.6% | 3.1% | 1.3% | 1.7% |
| Canadian Exports ex-US | 415 | 489 | 371 | 445 | 301 | 240 | 273 | 311 | 371 | 398 | 417 |

Source: RISI, AF&PA, BofA Global Research

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Exhibit 2: Companies mentioned

Companies mentioned in this report

| Paper/Forest | Ticker | Rating | Price objective | Current price |
|---------------------|---------------|---------------|------------------------|----------------------|
| International Paper | IP | B-3-7 | \$34 | \$33.99 |
| Packaging Corp. | PKG | B-2-7 | \$162 | \$158.91 |
| WestRock | WRK | B-1-7 | \$40 | \$37.94 |

Source: Bloomberg, BofA Global Research

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Price objective basis & risk

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.

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.

Analyst Certification

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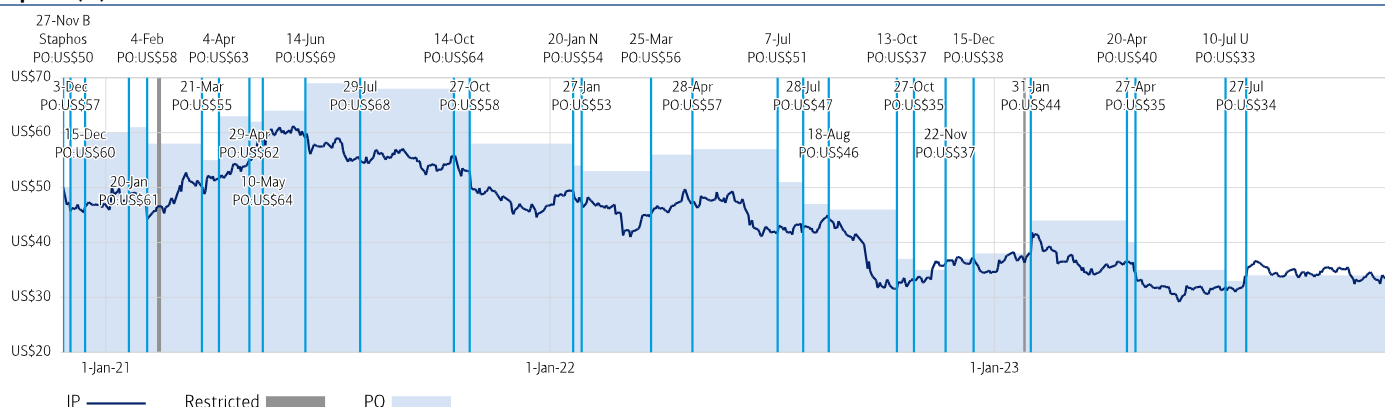
US - Paper and Packaging Coverage Cluster

| Investment rating | Company | BofA Ticker | Bloomberg symbol | Analyst |
|---------------------|-----------------------------|-------------|------------------|-------------------|
| BUY | | | | |
| | AptarGroup Inc. | ATR | ATR US | George L. Staphos |
| | 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 |
| | Graphic Packaging | GPX | GPX 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 |
| NEUTRAL | | | | |
| | Ardagh Metal Packaging S.A. | AMBP | AMBP US | George L. Staphos |
| | Ball Corp. | BALL | BALL US | George L. Staphos |
| | Greif Inc. | GEF | GEF US | George L. Staphos |
| | Packaging Corp. of America | PKG | PKG US | George L. Staphos |
| | Pactiv Evergreen | PTVE | PTVE US | George L. Staphos |
| | PotlatchDeltic Corp. | PCH | PCH US | George L. Staphos |
| UNDERPERFORM | | | | |
| | Amcor Plc | AMCCF | AMC AU | George L. Staphos |
| | Amcor PLC | AMCR | AMCR US | George L. Staphos |
| | Boise Cascade Company | BCC | BCC US | George L. Staphos |
| | Brady Corp. - Cl A | BRC | BRC US | George L. Staphos |
| | International Paper Co. | IP | IP US | George L. Staphos |
| | Louisiana-Pacific Corp. | LPX | LPX US | George L. Staphos |

Disclosures

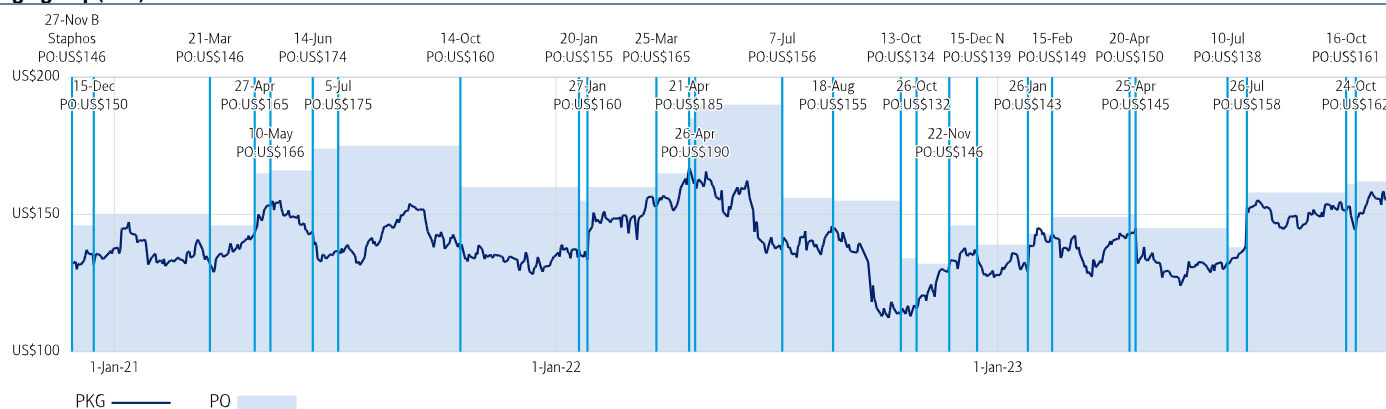
Important Disclosures

Intl Paper Co (IP) Price Chart

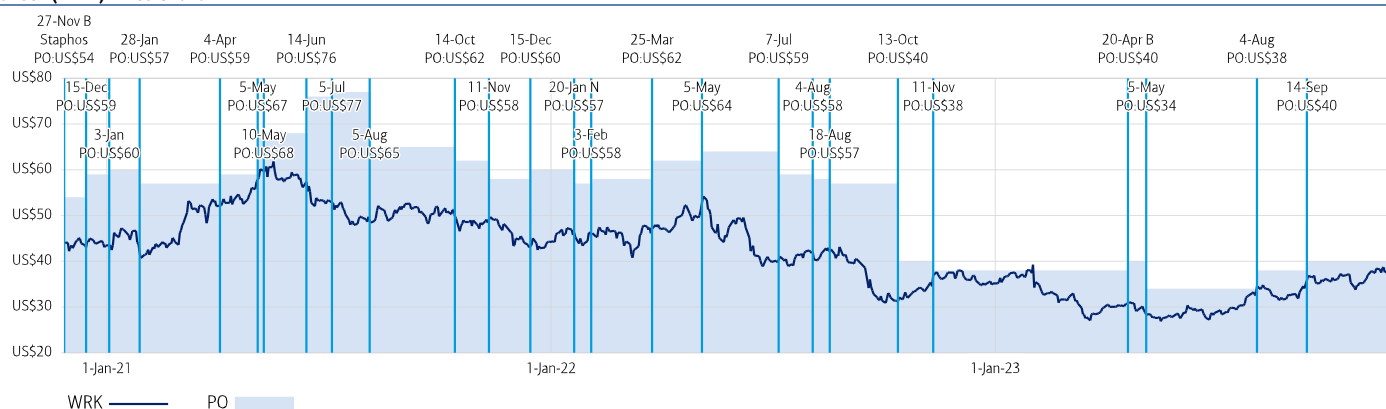


B: Buy, N: Neutral, U: Underperform, PO: Price Objective, NA: No longer valid, NR: No Rating

The Investment Opinion System is contained at the end of the report under the heading "Fundamental Equity Opinion Key". Dark grey shading indicates the security is restricted with the opinion suspended. Medium grey shading indicates the security is under review with the opinion withdrawn. Light grey shading indicates the security is not covered. Chart is current as of a date no more than one trading day prior to the date of the report.

Packaging Corp (PKG) Price Chart

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WestRock (WRK) Price Chart

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

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

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

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

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

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

^{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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