

PAPERBOARD

NAICS 322130

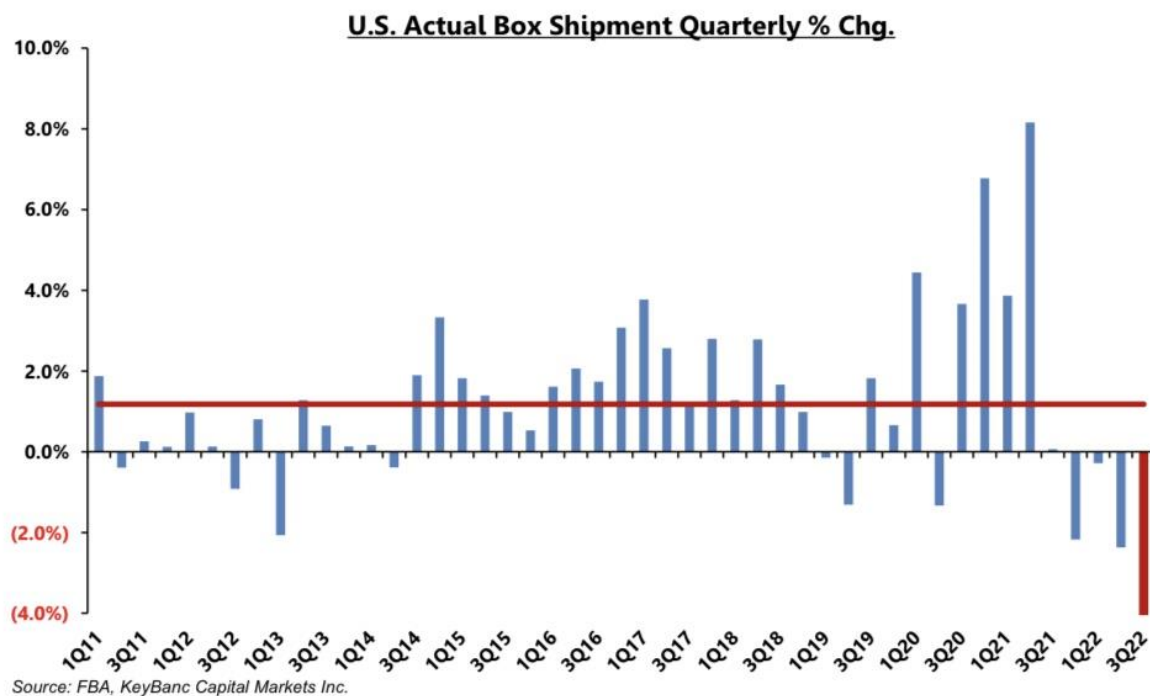
January 9, 2023

Description: Includes activities related to the manufacturing of paperboard materials (e.g., can/drum stock, container board, corrugating medium, folding carton stock, linerboard, tube) from pulp.

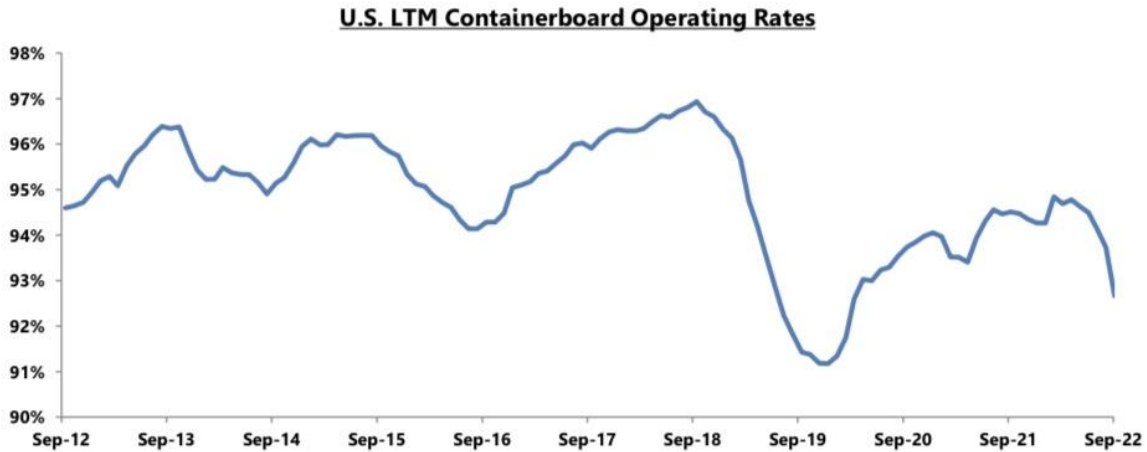
Outlook: Short-Term - **Negative** / Long-Term - **Stable**

An inventory glut may impact supply in the short to intermediate term and exacerbate typical seasonal trends in the industry. Per industry analysts, supply/demand conditions are the worst they've been since 2008. Earnings calls from the 3rd quarter for WestRock (WEST), International Paper (IP), and Packaging Corporation of America (PKG) all point to weaker demand and "inventory rebalancing." Tone of earnings calls was cautious and focused on "resiliency" and "diversification of end markets" and "forecasting demand." This resulted in significant economic downtime (temporary plant closures and lay-offs at some facilities) in the 3rd quarter. The PKG plant in Jackson, AL laid off 400+ of its workers from mid-November 2022 through early January 2023. Company guidance for all three points to a stabilized or normalized Q2 2023 in terms of containerboard demand. Macroeconomic uncertainty and a decrease in nondiscretionary consumer demand, however, could continue to weigh on containerboard demand.

Reduction in shipping volume...

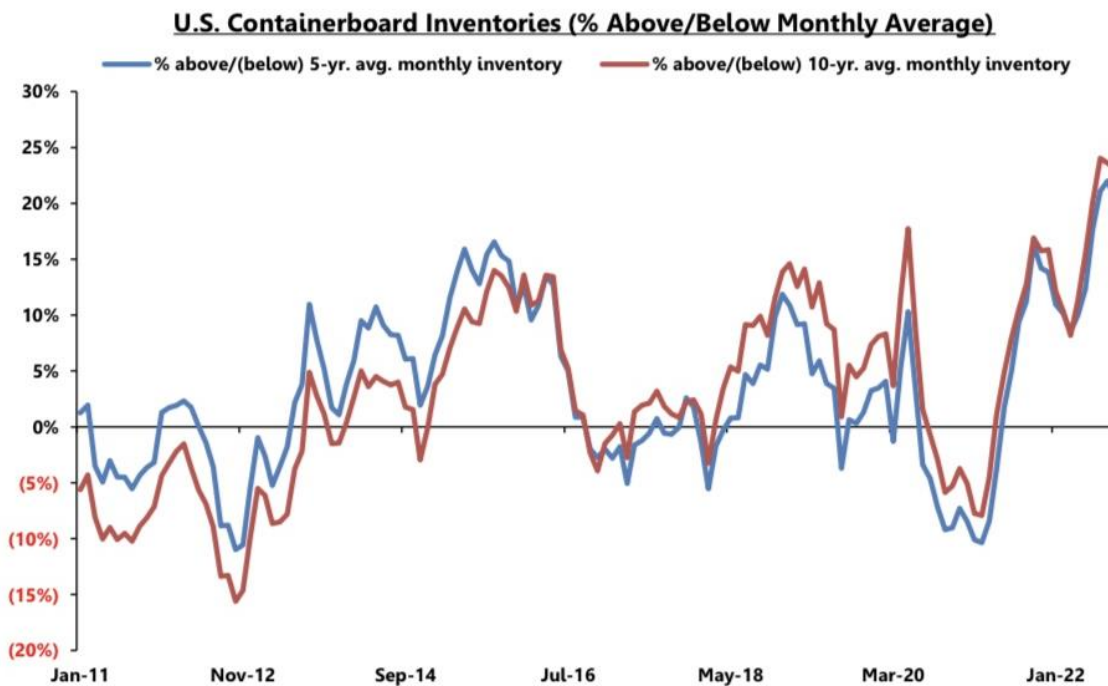


Declining operating rates for containerboard producers...



Source: AF&PA, KeyBanc Capital Markets Inc.

And, well-above average inventories...



Source: AF&PA, FBA, KeyBanc Capital Markets Inc.

Impact:

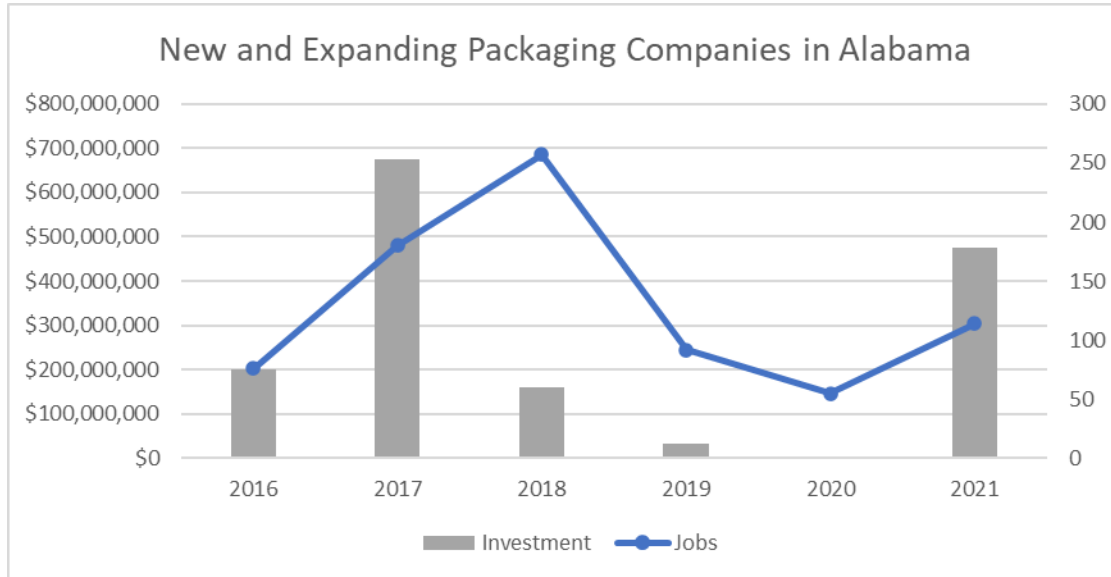
Packaging Corporation of America announced a lay-off of at least 400 workers “due to economic conditions and lower demand for our products...we fully intend to resume operations after the holidays” on [Nov. 17th](#) and called workers back to resume production [Jan. 9th](#).

International Paper, WestRock, and Georgia Pacific have not announced lay-offs as of the date of this note. A couple of bright spots to note: The International Paper facilities have a lower cost of production relative to other mills in the portfolio, which may bode well for Alabama when IP plans economic

downtime. Also, Georgia Pacific's Brewton mill announced a capital investment in November amidst the supply/demand turmoil announced by its public company competitors in the 4th quarter.

Remain vigilant for potential reductions in workforce and production activity at containerboard facilities in the first half of 2023 as we monitor containerboard supply/demand conditions.

Containerboard is an important segment of the robust forestry industry in Alabama and contributed \$1.5 billion in investment and 774 in new jobs predominantly from expansion of existing business in the state from 2016 to 2021. A list of all containerboard facilities in Alabama are listed below.



Alabama Locations:

Company	City	County	ZIP	Phone	Products
All State Packaging Company Inc.	Opelika	Lee	36801	(334) 745-6239	Paperboard Boxes & Cartons
ALTEX Packaging	Anniston	Calhoun	36207	(256) 831-6603	Pallets, Crating, Boxes
Capitol Container Inc.	Montgomery	Montgomery	36109	(334) 277-5644	Corrugated Boxes
Caraustar Industries	Bay Minette	Baldwin	36507	(251) 937-4888	Paper Cores & Tubes - Spiral, Construction
Cascades Sonoco Inc, Birmingham Division	Birmingham	Jefferson	35217	(205) 854-8574	Roll Packaging Products, Specialty Coatings and Paper Laminations
Dixie Matting & Graphics	Clanton	Chilton	35046	(205) 755-7558	Matting
Georgia-Pacific	Pennington	Choctaw	36916	(205) 459-1900	SBS and Tissue Products
Georgia-Pacific	Brewton	Escambia	36426	(251) 809-2180	Bleached Board/Containerboard
Georgia-Pacific	Huntsville	Madison	35811	(256) 859-5770	Corrugated Boxes
Graphic Packaging International	Tuscaloosa	Tuscaloosa	35401	(205) 339-1610	Folding Paperboard Boxes & Printing
Gulf Packaging Inc.	Tallassee	Elmore	36078	(334) 544-1121	Corrugated Containers

Gulf Packaging Inc.	Bay Minette	Baldwin	36507	(251) 937-4333	Corrugated Shipping Containers
Huhtamaki	Andalusia	Covington	36420	(334) 427-4996	Folding Cartons
Intercontinental Packaging Inc.	Opelika	Lee	36801	(334) 749-6168	Corrugated Boxes & Wooden Packaging
International Paper	Selma	Dallas	36703	(334) 872-3481	Uncoated Free Sheet (printing paper) and BriteTop Linerboard/Medium
International Paper	Pine Hill	Wilcox	36769	(334) 963-4391	Linerboard and Medium
International Paper	Prattville	Autauga	36067	(334) 361-5000	Linerboard
International Paper	Huntsville	Madison	35824	(256) 772-9611	Corrugated Sheets
International Paper	Dothan	Houston	36303	(334) 673-9401	Boxes: Corrugated & Fiber
International Paper	Bay Minette	Baldwin	36507	(251) 937-5546	Corrugated Shipping Containers
International Paper	Decatur	Morgan	35601	(256) 355-7610	Corrugated Containers
NGC Industries	Oxford	Calhoun	36203	(256) 831-6900	Wallboard Paper
Packaging Corporation of America	Jackson	Clarke	36545	(251) 246-4461	Linerboard
Packaging Corporation of America	Madison	Madison	35758	(256) 772-9696	Corrugated Boxes
Packaging Corporation of America	Opelika	Lee	36801	(334) 749-8203	Corrugated Shipping Containers
Pratt Industries	Bessemer	Jefferson	35023	(205) 424-1127	Corrugated Containers
Prystup Packaging Products Inc.	Demopolis	Marengo	36732	(334) 289-5388	Folding Cartons
Prystup Packaging Products Inc.	Livingston	Sumter	35470	(205) 652-9583	Folding Cartons
Rusken Packaging	Heflin	Cleburne	36264	(256) 831-9915	Corrugated Boxes
Rusken Packaging Inc.	Cullman	Cullman	35055	(256) 734-0092	Corrugated Boxes
Shoals Box & Pallet	Florence	Lauderdale	35630	(256) 767-3813	Custom Packaging
Sonoco	Opp	Covington	36467	(334) 493-3567	Paper Tubing & Cores
South Coast Paper	Maplesville	Chilton	36750	(334) 366-2150	Custom Converter of Cut Size Papers
Southwest Paper Sales Inc.	Livingston	Sumter	35470	(205) 652-9655	Industrial Packaging
Sterling Packaging	Monroeville	Monroe	36460	(251) 340.1333	Folding Paperboard Boxes
Tekpak Inc.	Marion	Perry	36756	(334) 683-6121	Containers, Fiber Cans
Triad Packaging Inc.	Athens	Limestone	35611	(256) 232-7949	Corrugated Containers
WestRock	Stevenson	Jackson	35772	(256) 437-2161	Medium
WestRock	Demopolis	Marengo	36732	(334) 289-1242	Market Pulp and SBS (food board)
WestRock	Cullman	Cullman	35055	n/a	Corrugated Containers
WestRock	Athens	Limestone	35611	n/a	Corrugated Containers

WestRock	Montgomery	Montgomery	36105	n/a	Corrugated Containers
WestRock Eutaw	Eutaw	Greene	35462	(205) 372-3337	Folding Paperboard Boxes
WestRock Mahrt Operations	Cottonton	Russell	36851	(334) 855-4711	Coated Linerboard

Public Company Earnings Call Highlights:

Packaging Corporation of America:

- "[D]emand in our Packaging segment was well below our expectations for the quarter"
- "The containerboard mills operated in an efficient and cost-effective manner as we balanced our supply with current domestic and export demand. As part of the effort, we began the scheduled maintenance outage in the first phase of the #3 machine conversion to containerboard at our Jackson, Alabama mill, a few weeks earlier than originally planned. Total economic related downtime for the third quarter was approximately 128,000 tons. The outage and conversion work at Jackson will be completed in the fourth quarter, and we will remain committed to ramping up our internal capacity according to our customers' demand requirements."
- **Not a positive outlook going into Q4...**"The ongoing inventory correction in the retail channels is larger than originally thought and significant inflation continues to negatively impact consumers' purchases of both durable and nondurable goods. In addition, various events and issues in 2021 and this year, including the recent hurricane in Florida, continue to have a negative effect on the agriculture and protein markets. Demand is beginning to experience headwinds from the cooler housing markets as well. These things, combined with rising global interest rates, deterioration in U.S. economic conditions, economic weakness in China and Europe along with China's zero tolerance COVID policy all negatively impacted domestic containerboard and box demand. As we look from the third quarter and into the fourth quarter, we expect the majority of these conditions to continue."
- **Going to take a couple quarters to work through inventory issues...**"So we are going through this period right now of pretty severe inventory adjustment...And that's going to take a while to work through the system. We had thought that it was going to work through the system in about 30 or 60 days, but this looks like it's going to be probably a couple of quarters to get through this completely."
- **Extreme inventory issues....**"I've never experienced this, to be honest with you, in my entire career. So, this severity of this building the inventories, the lead times, the box plants got to and the -- and kind of in some cases, almost a panic because they couldn't ship their products without it, obviously."

WestRock:

- Closed high-cost Panama City mill and St. Paul corrugated medium production
- Focused on strategic opportunities in food & beverage with trend to replace plastics. Introduced new product lines for can collars and cluster packs
- Lower sales volumes in corrugated packaging driven by "**customer inventory rebalancing and softer economic conditions.**" Corrugated packaging makes up ~40% of net sales.
- "[E]levated inflation, rising interest rates, energy shortages, supply chain disruptions and geopolitical conflict. These challenges, along with continued **inventory rebalancing** negatively impacted our business in the fiscal fourth quarter."
- "While we have seen a **slowdown in corrugated demand due to inventory destocking** and the slowing economy, our Consumer segment remains robust, demonstrating the value of our diverse portfolio to navigate the current challenges."

- **"During the quarter, North American shipments per day declined 4.6% as continued inventory rebalancing and softer demand drove weakness in several of our end markets. That said, we serve a broad range of customers and several other end markets exhibited more resilient demand, including packaged food and beverage."**
- **"[I]ncurred economic downtime of approximately 288,000 tons as we sought to balance our supply with our customers' demand. In the near-term, we will continue to actively manage our business for the current environment, and we will focus on balancing our production with our customers' demand"**
- **"We continue to actively manage our business to balance our supply with our customers' demand as we navigate the current economic uncertainty."**
- **"As we look at fiscal 2023, we face a challenging environment to start the year."**
- **Reorganizing the way, they're running the corrugated business segment. Complete in Midwest. Unsure of impact in terms of headcount and investment.**
- **One positive...1Q maintenance downtime is usually highest which will coincide with economic downtime for inventory rebalancing**
- **See potential for Q2 to get back to a more normalized order rate**
- **Mahrt mill labor negotiations with United Steel Workers Union still ongoing..."we are fully operating the Mahrt mill. And in fact, we're actually ahead of our planned contingency production rates at Mahrt."**

International Paper:

- **Lower packaging demand driven by lower consumer spending for goods and retailer inventory destocking..."We experienced a sharp decline in demand in our Industrial Packaging segment and significantly higher cost headwinds from higher energy and distribution costs. As we enter the third quarter, we recognized there were macroeconomic uncertainties ahead of us and that our businesses are not immune to these risks. However, these macro trends shifted drastically midway through the quarter, creating stronger headwinds than expected versus our previous outlook, particularly in our Industrial Packaging business...In response to these trends, we quickly aligned our production with our customer demand, which resulted in significant economic downtime in the quarter for our Containerboard system. **As we enter the fourth quarter, Packaging demand appears to be stabilizing at these lower levels."****
- **Inventory destocking exacerbated...."retailer inventory destocking has exacerbated. The demand decline is for most segments in the near term. Based on feedback from our customers and our performance in October, demand appears to be stabilizing at these lower levels as companies continue to work through their inventories in the fourth quarter."**
- **Focused on aligning production with customer demand**
- **"I think part of what's unique right now compared to maybe prior periods is the amount of production slow backs we're taking over a relatively short period of time and in a period where most of our maintenance out -- almost all of our maintenance outages are behind us."**
- **Think the inventory situation is a 4Q unwinding process. Will be watching consumer demand (at risk). Sound uncertain**
- **Unpacking the economic downtime...I think the AL facilities may be at less of a risk because of proximity to rail and high natural gas costs impacting the recycled mills, but capacity reduction plan fluid...**
 - **" So, an IP example would be our large, recycled mill that's up in the Midwest, might be a candidate to scale back for energy costs, but it defeats our ability to save on logistics because it's so close to the market. So, one of the reasons you see us doing more of, as you described, rolling, so not fully shut down, but adjusting the output of multiple plants**

is to try to make all of that balance, get our integrated mills to be as close to energy independent as possible. And our nonintegrated mills, which tend to be located physically in places and they were built for that reason to be close to the end use market, and they're beyond a lot of the rail chokepoints to get those to serve as much. As things change, as supply chain costs change, as energy changes, it will lead us to different conclusions."

- **Mngt never gave a straight answer to operating rates and where they thought they'd be and inventory relative to demand slowdown and increased capacity buildup in tight supply chain environment.... highly uncertain environment--multiple variables (shipping costs/logistics, energy costs, demand)**
- **Also have Q1 maintenance downtime planned like WestRock...**
"We're getting ready to enter into our normal outage season, and that factors into what we think we have to run whether or not there was an economic slowdown or not, so we can get through our outages."
- **Intentionally holding a higher inventory level but dodging commitment to cut inventories based on weaker demand....**"We need less absolute inventory when the supply chain is flowing than we do when it's not. And it's a long way from flowing and especially in the rail area, a lot of our mills are in the Southeast, deep Southeast where the rail chokepoints are not getting any better, and the labor situation is not getting a lot better. So, we're working with what we know right now. And what we know right now says the inventory levels we have; the absolute number matches the slow velocity of the supply chain. If that changes, we'll adjust our production output to match the fact that the inventory is moving faster. So, it's not a matter of will we lower our inventory? it's a matter of all of those variables lead to an inventory number."
- **"we're good on containerboard. We just made the Riverdale (Selma, AL) investment in 2020.... I think we've got the containerboard capacity we need"**