

Q3
2026

PACKAGING

Quarterly Report

Packaging Manufacturers Face Shifting Cost Structures and Regulatory Requirements

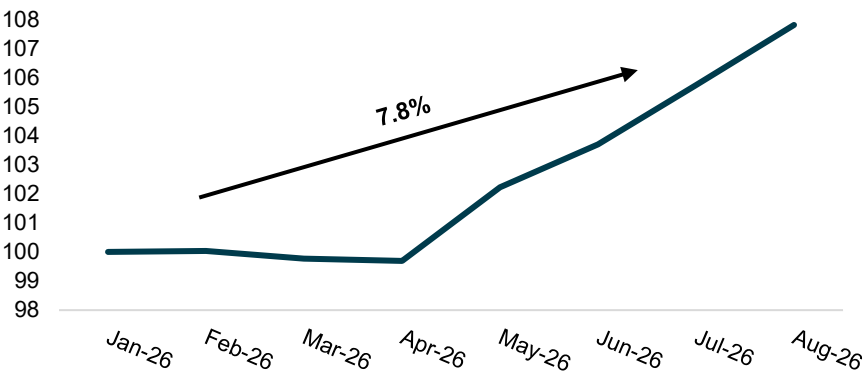
The packaging industry faced continued pricing pressure during the third quarter of 2026, as containerboard producers implemented additional price increases amid capacity rationalization and uneven demand conditions. Following significant mill closures and production reductions over the last several years, producers sought to strengthen pricing and offset elevated operating costs. These developments created differing implications across the packaging value chain, with integrated manufacturers benefiting from improved pricing opportunities while independent converters faced greater pressure to manage input costs and recover increases through customer pricing.

Containerboard pricing remained a central industry theme during the quarter. Packaging Corporation of America, Smurfit Westrock and International Paper announced price increases of \$140, \$100 and \$80 per ton, respectively, heading into September. Cascades also announced increases of \$110 per ton for linerboard and white-top linerboard and \$140 per ton for corrugating medium, effective September 8. These announcements represented the third round of containerboard price increases in 2026, reflecting continued efforts to offset higher production costs and support profitability despite mixed demand conditions.

September pricing data indicated that producers achieved a portion of the announced increases. According to Fastmarkets RISI, North American linerboard prices increased \$70 per ton from August, while corrugating medium prices increased \$100 per ton. These adjustments followed approximately \$100 per ton of combined increases during the first two pricing rounds of 2026. Although realized increases remained below certain initial announcements, the results demonstrated continued pricing momentum. Broader U.S. corrugated packaging producer prices also increased approximately 7.8% between January and August 2026, underscoring the impact of changing pricing conditions across the industry.

For integrated manufacturers, higher containerboard prices provided opportunities to improve profitability across upstream paper operations, while independent converters faced greater pressure to recover rising input costs through customer contracts and pricing adjustments. Supply rationalization further supported pricing, with approximately 3.9 million tons of North American containerboard capacity retired between February 2025 and March 2026, representing approximately 10% of industry capacity. While these reductions contributed to tighter supply and improved operating rates, underlying packaging demand remained mixed, reinforcing the importance of procurement discipline, pricing flexibility and operational efficiency in protecting margins.

U.S. CORRUGATED PACKAGING PRODUCER PRICE TRENDS



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Packaging Manufacturers Face Shifting Cost Structures and Regulatory Requirements (continued)

Raw material pricing conditions across other material substrates remained uneven during the third quarter of 2026, reflecting differences in feedstock costs, supply availability and underlying demand. North American polymer markets entered July under pressure, with most commodity resin prices declining amid ample supply and subdued purchasing activity. Market conditions became more mixed in August as feedstock costs created upward pressure on certain materials, although cautious demand continued to limit producers' pricing power. By September, standard thermoplastic prices were largely stable, while higher feedstock costs supported increases in certain engineering resins. These trends highlighted the importance of material-specific and geography-centric procurement strategies, as resin pricing did not affect all packaging formats equally.

These developments had differing implications for packaging manufacturers depending on material exposure, inventory positions and customer pricing arrangements. Lower resin costs provided opportunities for flexible and rigid packaging converters to improve input-cost positions, although margin benefits depended on contractual pass-through mechanisms and inventory purchasing cycles. Manufacturers with shorter purchasing cycles could benefit more quickly from declining prices, while those holding higher-cost inventories faced delays in realizing savings. Conversely, renewed feedstock inflation created challenges for converters operating under fixed-price customer agreements. These dynamics reinforced the importance of disciplined procurement and inventory management, particularly as manufacturers sought to balance changing raw-material costs with customer pricing expectations and profitability objectives.

Beyond near-term pricing considerations, evolving U.S. sustainability regulations are reshaping packaging design, material

selection and longer-term investment priorities. California's SB 54 implementing regulations, which took effect in May 2026, established a framework for reducing single-use plastic packaging and expanding producer responsibility for packaging waste. By 2032, the legislation requires a 25% reduction in single-use plastic covered material, a 65% recycling rate for plastic covered material and recyclable or compostable covered material. These requirements are expected to encourage investment in material innovation (e.g., compostables) and recycling infrastructure while increasing the importance of packaging design and recyclability considerations. For manufacturers supplying national customers, California's requirements may also influence broader product development decisions as companies seek cost-effective packaging solutions suitable for multiple markets.

These regulatory developments are influencing manufacturers' investment priorities and product development strategies. Manufacturers must balance sustainability objectives with packaging functionality, including barrier performance, durability and product protection. These considerations are particularly relevant for flexible packaging, where multilayer structures and food-contact requirements can complicate recyclability and recycled-material incorporation. Investment in material innovation, quality control and specialized converting capabilities may help manufacturers address changing customer specifications while maintaining efficiency.

Other states are advancing extended producer responsibility (EPR) programs, creating additional considerations for manufacturers serving multiple markets. Oregon's Recycling Modernization Act introduced producer registration, reporting and fee obligations in 2025, establishing a framework for financing improvements to recycling systems. As state-level requirements evolve, packaging

producers and their customers face increasingly complex considerations related to material composition, recyclability, reporting and compliance costs. These differences may encourage manufacturers to develop packaging formats that can satisfy multiple regulatory frameworks while limiting production complexity.

The transition toward recyclable packaging formats also presents opportunities for manufacturers with differentiated capabilities. Demand for solutions that satisfy evolving regulatory standards may support investment in mono-material structures, recyclable flexible packaging and alternative substrates. However, commercial viability will depend on material availability, production economics and customer performance requirements. Manufacturers delivering cost-effective solutions across multiple packaging formats may be better positioned to capture these opportunities. These developments may also create opportunities for manufacturers to strengthen customer relationships through collaborative packaging design and material innovation.

Looking ahead, North American packaging manufacturers will continue to navigate uneven end market demand, fluctuating input costs and evolving sustainability requirements. Differences in customer specifications and purchasing patterns will reinforce the importance of adaptable production capabilities, disciplined procurement and effective cost recovery. While near-term profitability will remain sensitive to material pricing and operating efficiency, manufacturers investing in recyclable packaging solutions and differentiated production capabilities may be better positioned to protect margins and capitalize on evolving customer requirements.

Sources: Plastics Information Europe, CalRecycle, Oregon Department of Environmental Quality

Packaging Insights Q3 2026

Sep-26: Butterfly Equity and Sabert announced a transaction under which Butterfly will acquire the foodservice packaging manufacturer, representing Butterfly's second packaging investment in 2026 after its acquisition of ePac

Sep-26: New Water Capital acquired LidWorks, a Florida-based manufacturer of custom foodservice packaging that produces **>2 billion hot and cold lids annually** for quick service restaurants, convenience and other foodservice customers

Sep-26: Federal lawmakers introduced legislation targeting PFAS in food packaging, adding to regulatory pressure as more than a dozen states have already enacted restrictions on PFAS use in packaging

Sep-26: Molded fiber packaging continues to benefit from sustainability-driven substitution, with the global market projected to grow from approximately **\$9.5 billion in 2026 to \$16.4 billion by 2034**, driven by demand for alternatives to plastic packaging

Aug-26: Ardagh Holdings began exploring a potential sale of its **~76% stake in Ardagh Metal Packaging (NYSE:AMBP)**, valued at approximately **\$3.1 billion**, as the company evaluates strategic alternatives for its controlling ownership position

Aug-26: U.S. containerboard operating rates rebounded to **~95% in Q2**, while the YoY production decline narrowed to ~2% from ~8% in Q1, signaling **improving supply-demand conditions**

Aug-26: Amcor reported \$6.4 billion of quarterly sales following the Berry Global combination and approximately \$285 million of FY2026 synergies, running ~10% ahead of initial expectations and approaching half of its three-year synergy target

Aug-26: Flexible packaging raw-material costs remained volatile, with North American **LLDPE resin prices increasing ~9% in August** while LDPE declined ~4%, highlighting continued mixed resin-cost pressure for flexible packaging converters

Jul-26: Plastic packaging converters faced renewed cost pressure as escalating Iran-related disruptions reduced expectations for near-term polyolefin market normalization and raised the prospect of further resin price increases

Jul-26: OCC prices increased every month through July, benefiting recyclers while increasing recovered-fiber input costs for containerboard producers following a sluggish 2025

Jul-26: International Paper reported improving North American box volumes, while noting that geopolitical and economic pressures continued to constrain demand despite recent pricing initiatives and ongoing investment across its North American footprint

Jul-26: Apax Partners agreed to acquire Gerresheimer's pharmaceutical packaging businesses for ~€1.5 billion, including 16 manufacturing facilities across nine countries and ~€570 million in annual revenue, expanding its presence in pharmaceutical packaging

RECENT LINCOLN INTERNATIONAL PACKAGING TRANSACTIONS

 has been sold to  Sell-Side 	 Roiffen Beteiligungsholding have sold  to  Sell-Side 	 has sold  to  Sell-Side 	 has sold  THE CONTAINER COMPANY to  Business Steel Solutions Sell-Side 	 has been sold to TRIMCO GROUP a portfolio company of  Sell-Side 	 and private shareholder have sold  to  Sell-Side 	 a portfolio company of has acquired  from its founder and  Buy-Side 	 has been sold to  a portfolio company of  Sell-Side 
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Recent M&A Transactions

Select Transactions

Date	Status	Target Company	Target Company Description	Acquiring Company
Sep-26	Announced	CMPC (Empresas CMPC (SS:CMPC))	Manufacturer of recycled containerboard and corrugated packaging products	Smurfit Westrock (NYSE:SW)
Sep-26	Announced	Sabert	Manufacturer of food packaging designed for protecting and serving food items	Butterfly Equity
Sep-26	Announced	Henyo	Manufacturer of flexible packaging materials and paper-based products, including laminated packaging films and paper straws, serving FMCG and other consumer end markets	Kapil Raj Finance Limited (BSE:539679)
Aug-26	Announced	Tosca	Manufacturer of reusable packaging products intended for perishable grocery markets	Infrastructure at Goldman Sachs Alternatives (NYSE:GS)
Jul-26	Announced	Centor and Primary Packaging Plastics Business (Gerresheimer)	Manufacturer of primary pharmaceutical plastic packaging and prescription dispensing systems	Apax
Sep-26	Closed	Polymer Packaging	Manufacturer of flexible and protective packaging products intended to serve the food, beverage and industrial markets	Adherex Group (Akoya Capital and Goldner Hawn)
Sep-26	Closed	TempAid	Manufacturer of temperature-controlled packaging solutions for pharmaceutical, life sciences and healthcare customers	eutecma
Sep-26	Closed	Tsubaki Style Co., Ltd.	Manufacturer of plastic bottles and containers intended for the cosmetic industry	Ant Capital Partners
Sep-26	Closed	Strata (Chiltern Capital)	Manufacturer of molded plastic home and garden products, including storage products, baskets, compost bins and planters	GreenCorp
Sep-26	Closed	KC Glass & Materials	Manufacturer of glass bottle packaging and glass containers for cosmetics, beverages, pharmaceuticals and other industrial markets	Opus Private Equity
Sep-26	Closed	Dialed Brands	Manufacturer of custom packaging designed for consumer product brands	AE Global (Fanjul Capital)
Sep-26	Closed	Lombardi Design & Manufacturing	Manufacturer of custom injection-molded parts intended to provide precision packaging services	Lumson S.p.A.
Sep-26	Closed	Polyex	Manufacturer of extruded polyethylene products intended for the building, construction, food processing and logistics sectors	SPHERE Group (Hivest Capital Partners)
Sep-26	Closed	LidWorks	Manufacturer of custom beverage and food container lids designed for brand differentiation	New Water Capital

Source: Bloomberg, Capital IQ and company filings, as of October 1, 2026

Recent M&A Transactions (continued)

Select Transactions

Date	Status	Target Company	Target Company Description	Acquiring Company
Sep-26	Closed	NADCO Tapes & Labels	Manufacturer of customized pressure-sensitive tapes, labels and related adhesive products	JBC Technologies (River Associates Investments)
Sep-26	Closed	Ulikett (CTI Group)	Manufacturer of self-adhesive labels and flexible packaging for food, beverage, pharmaceutical and consumer goods customers	Printeos
Sep-26	Closed	Yashio Chemical Co.	Manufacturer of plastic film packaging designed for food and daily necessities	Howa Sangyo Co.
Aug-26	Closed	Trident Solutions (River Associates Investments)	Manufacturer of commercial marking products and customized vinyl films intended for the electrical, plumbing, utilities, forestry, surveying and irrigation industries	Align Capital Partners
Aug-26	Closed	GT Etiketten & Labels	Manufacturer of self-adhesive labels and packaging foils intended to serve the food and industrial sectors	Asteria Group (Waterland Private Equity)
Aug-26	Closed	TPK Ceramics	Manufacturer of fully ceramic zirconia vape hardware, including ceramic cartridges and all-in-one devices, serving cannabis brands	AE Global (Jam Packaging CLLC)
Aug-26	Closed	PaperPack (CEE Equity Partners)	Manufacturer of paper packaging intended to serve cosmetics, foods, beverages, cigarettes, drugs and detergent industries	Faller Packaging (Imker Capital)
Aug-26	Closed	Rudholm Group + Bamatex	Manufacturer of garment labelling and packaging products intended for the global apparel and footwear industry	ITL Group
Aug-26	Closed	Triad Packaging	Manufacturer of custom corrugated boxes designed for industrial and commercial packaging needs	Rusken Packaging
Aug-26	Closed	Diamond Wipes (Nolan Capital)	Manufacturer of disinfectant, sanitizing and specialty cleaning wipes	River Associates Investments
Aug-26	Closed	Dongyang Conba Printing and Packaging	Manufacturer of paper-based pharmaceutical packaging, primarily printed outer cartons for pharmaceutical products	Forest Packing Group
Aug-26	Closed	Heartland Label Printers	Manufacturer of labels and printing supplies designed for business identification and tracking needs	Iconex (M2S Group)
Aug-26	Closed	Paper Australia (Nippon Paper Industries (TKS:3863))	Manufacturer of a variety of paper products	Magan Group
Aug-26	Closed	Tohoshiki	Manufacturer and seller of paper-made packaging products	OSP Holdings

Source: Bloomberg, Capital IQ and company filings, as of October 1, 2026

Recent M&A Transactions (continued)

Select Transactions

Date	Status	Target Company	Target Company Description	Acquiring Company
Aug-26	Closed	Speidel Verpackungen	Manufacturer of custom transport packaging intended for industrial and commercial sectors	Antalis (KPP Group Holdings (TKS:9274))
Aug-26	Closed	Polex	Manufacturer of polypropylene packaging intended to provide various plastic products	Pegas (Stroma)
Aug-26	Closed	MP Global Packaging (MP Global Products)	Manufacturer of thermal packaging solutions designed to protect temperature-sensitive goods during shipping	Pregis
Jul-26	Closed	Cristal Embalagens	Manufacturer of flexible packaging solutions designed to protect and enhance the presentation of products across food, hygiene, animal nutrition and construction markets	Goglio
Jul-26	Closed	Farmol (Portobello Capital)	Manufacturer of aerosol and liquid products intended for personal, home and healthcare industries	Dalli Group
Jul-26	Closed	Mesones Artes Gráficas	Manufacturer of custom adhesive labels for multiple industries, including food, wine, cosmetics and logistics	Tikedo (White Bridge Investments)
Jul-26	Closed	RediBag USA	Manufacturer of plastic and paper products catering to grocery, restaurant, deli, dry cleaner and industrial market segments	AmerCareRoyal (Oridian Capital Partners)
Jul-26	Closed	TransPak	Manufacturer and provider of packaging products and logistics solutions	Odyssey Investment Partners
Jul-26	Closed	EURO-M Flexible Packaging	Manufacturer of plastic packaging products intended for the food industry	WAD Capital
Jul-26	Closed	Medica Packaging (Harwood Private Equity)	Manufacturer of packaging intended for the pharmaceutical and healthcare industries	Woodberry Packaging (Woodberry Capital)
Jul-26	Closed	Gatto Astucci	Manufacturer of display and packaging products	Iconia Group (Capmont, DVR Capital, Bellevue Group)
Jul-26	Closed	NicEtikett	Manufacturer of labels designed for the e-commerce and logistics sectors	Volati (STO:VOLO)

Public Companies Operating Statistics and Valuation Parameters

\$ in Millions, Except for Stock Price

Company Name	Stock Price	% of High	Market Cap	Enterprise Value	LTM		YoY Revenue Growth	EBITDA Margin	Enterprise Value / LTM	
		52-Week			Revenue	EBITDA			Revenue	EBITDA
Flexible										
Amcor Plc	\$41.86	82.2%	\$19,309	\$33,645	\$23,506	\$3,536	1.9%	15.0%	1.4x	9.5x
Huhtamäki Oyj	28.94	88.4%	2,788	4,379	3,907	499	0.0%	12.8%	1.1x	8.8x
Winpak Ltd.	42.83	82.0%	2,527	1,589	1,142	235	1.9%	20.5%	1.4x	6.8x
Mean		84.2%					2.6%	16.1%	1.3x	8.4x
Median		82.2%					1.9%	15.0%	1.4x	8.8x
Labels										
Avery Dennison Corporation	\$170.67	85.5%	\$12,884	\$16,783	\$9,248	\$1,497	2.7%	16.2%	1.8x	11.2x
CCL Industries Inc.	93.83	95.2%	16,144	16,265	7,891	1,591	2.3%	20.2%	2.1x	10.2x
Mean		90.4%					2.5%	18.2%	1.9x	10.7x
Median		90.4%					2.5%	18.2%	1.9x	10.7x
Paper & Paperboard										
Cascades Inc.	\$18.31	97.1%	\$1,843	\$3,051	\$4,779	\$547	0.7%	11.4%	0.6x	5.6x
Graphic Packaging Holding Company	9.05	46.7%	2,549	10,036	8,637	1,143	(0.2%)	13.2%	1.2x	8.8x
International Paper Company	33.17	66.0%	16,973	31,104	24,203	3,934	(0.6%)	16.3%	1.3x	7.9x
Mondi Plc	8.14	82.9%	3,451	7,693	7,729	412	0.4%	5.3%	1.0x	18.7x
Packaging Corporation of America	229.26	88.2%	20,307	22,689	9,535	2,000	3.5%	21.0%	2.4x	11.3x
Smurfit Westrock Plc	44.10	83.8%	22,215	35,389	31,326	4,576	0.3%	14.6%	1.1x	7.7x
Mean		77.4%					0.7%	13.6%	1.3x	10.0x
Median		83.4%					0.4%	13.9%	1.1x	8.3x

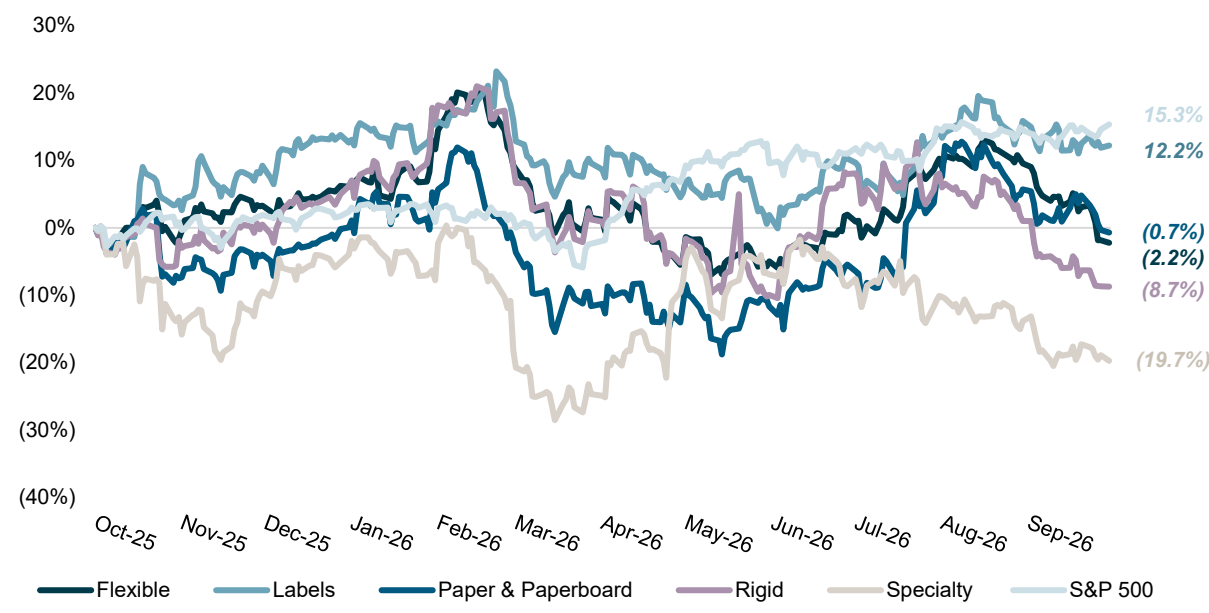
Public Companies Operating Statistics and Valuation Parameters (continued)

\$ in Millions, Except for Stock Price

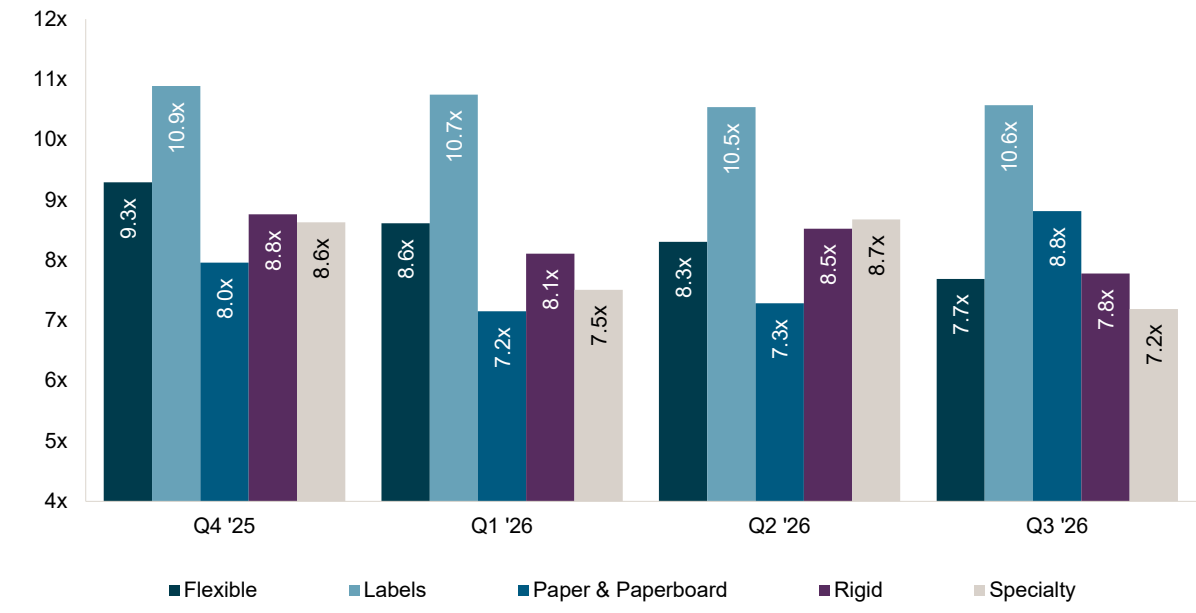
Company Name	Stock Price	% of High	Market Cap	Enterprise Value	LTM		YoY Revenue Growth	EBITDA Margin	Enterprise Value / LTM	
		52-Week			Revenue	EBITDA			Revenue	EBITDA
Rigid										
Amcor Plc	\$41.86	82.2%	\$19,309	\$33,645	\$23,506	\$3,536	1.9%	15.0%	1.4x	9.5x
AptarGroup, Inc.	121.16	82.5%	7,669	9,727	3,933	798	1.6%	20.3%	2.5x	12.2x
Crown Holdings, Inc.	105.41	85.8%	11,458	17,582	13,256	2,115	4.1%	16.0%	1.3x	8.3x
O-I Glass, Inc.	5.65	33.4%	856	6,725	6,360	914	(0.6%)	14.4%	1.1x	7.4x
Silgan Holdings Inc.	34.75	70.1%	3,698	9,069	6,682	978	1.6%	14.6%	1.4x	9.3x
Sonoco Products Company	48.82	80.5%	4,768	9,295	7,461	1,250	(0.3%)	16.7%	1.2x	7.4x
Mean		72.4%					1.4%	16.2%	1.5x	9.0x
Median		81.3%					1.6%	15.5%	1.3x	8.8x
Specialty										
Ranpak Holdings Corp.	\$4.15	53.1%	\$340	\$815	\$418	\$67	3.2%	16.0%	2.0x	12.2x
Macfarlane Group Plc	0.81	86.1%	130	198	303	21	0.4%	6.8%	0.7x	9.6x
Krones AG	106.60	73.9%	3,330	3,687	5,704	535	0.3%	9.4%	0.6x	6.9x
Mean		71.1%					1.3%	10.7%	1.1x	9.6x
Median		73.9%					0.4%	9.4%	0.7x	9.6x

Global Packaging Valuations by Subsector

LAST 12 MONTHS (LTM) RELATIVE STOCK PRICE PERFORMANCE

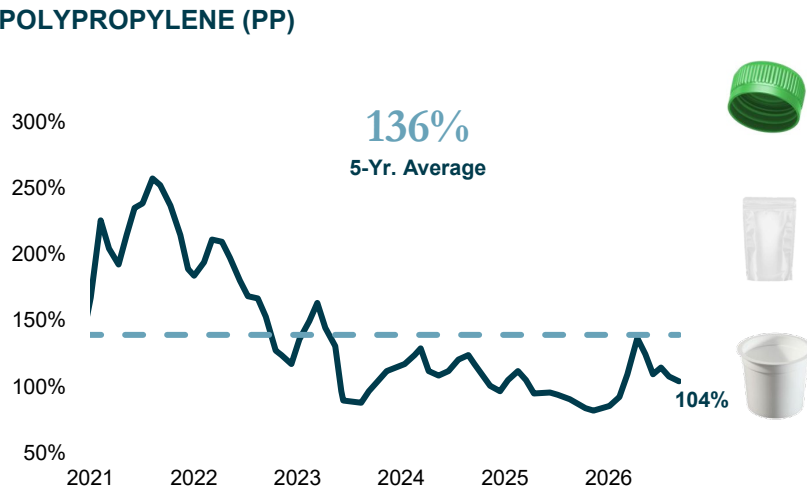
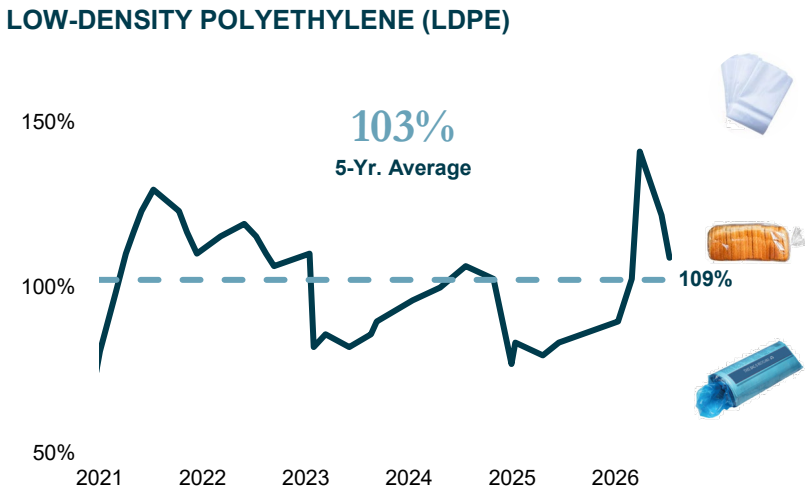
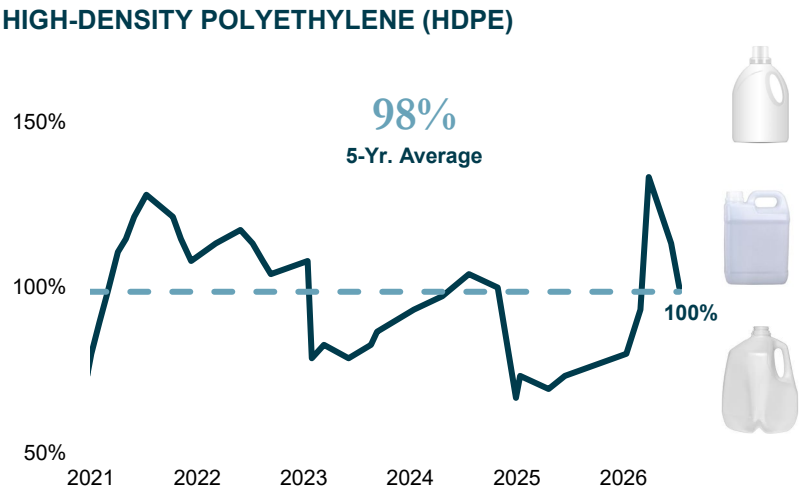
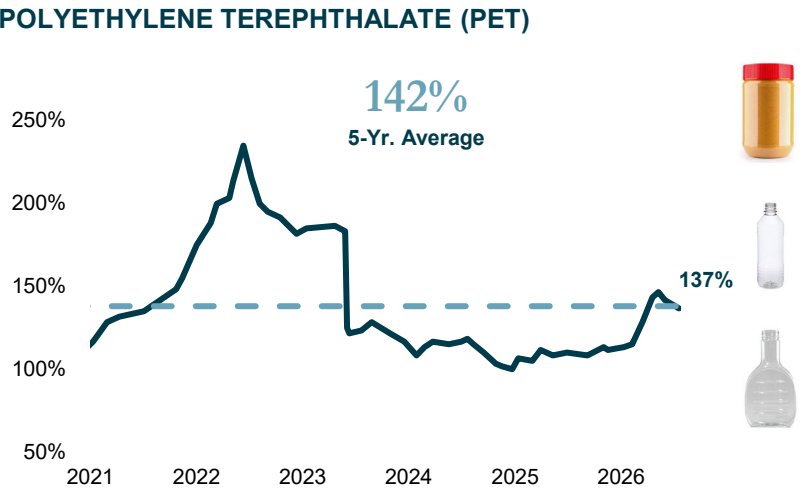
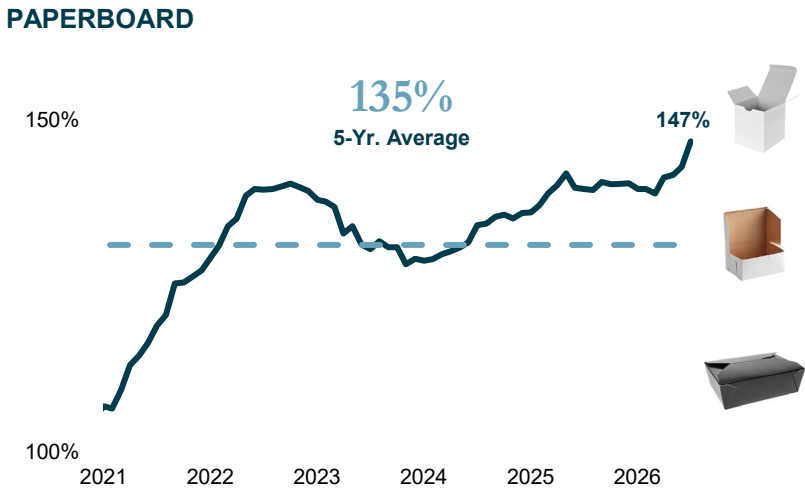
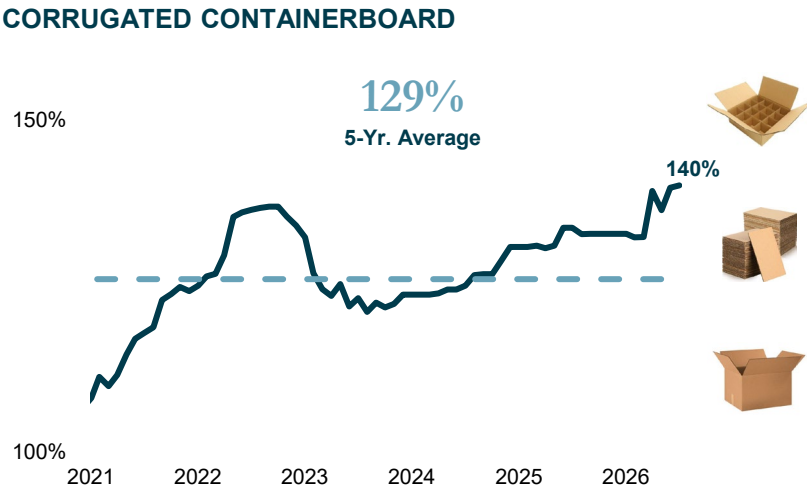


HISTORICAL ENTERPRISE VALUE / EBITDA VALUATION PERFORMANCE



FLEXIBLE		LABELS		PAPER AND PAPERBOARD		RIGID		SPECIALTY	
  		 		     		     		  	

Packaging Material Pricing Trends



About Lincoln International

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