

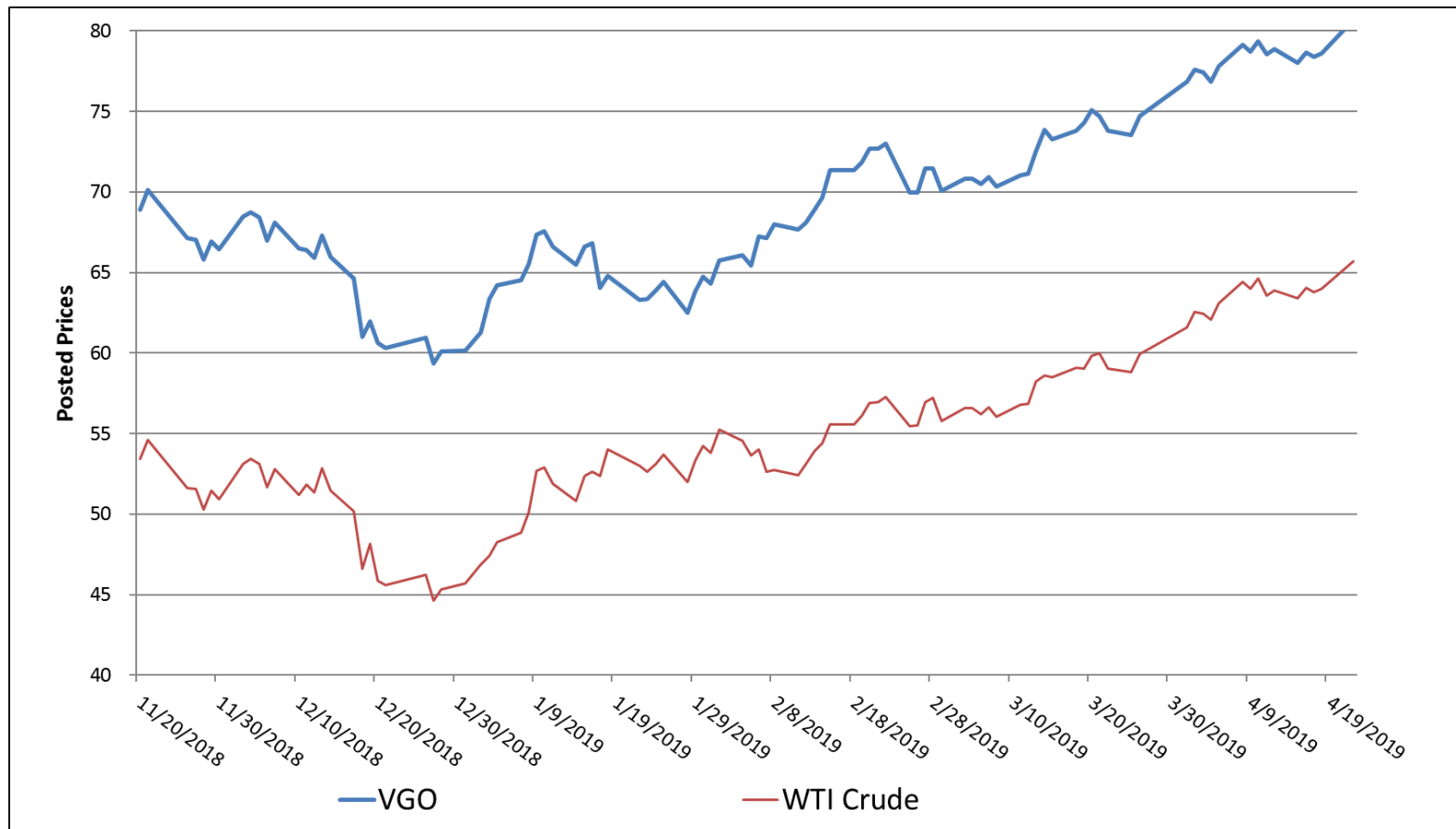


US Market Conditions

April 2019

Summary View of Crude Market

- ❖ Crude oil and Vacuum Gas Oil (VGO), the primary feedstock for base oils, have risen 44% YTD*
- ❖ US Gulf Coast refiner margins compressed to the lowest levels since 2014** causing base oil producers to raise prices in March and again in April



Sources: **Reuters, *ICIS, ZEMA

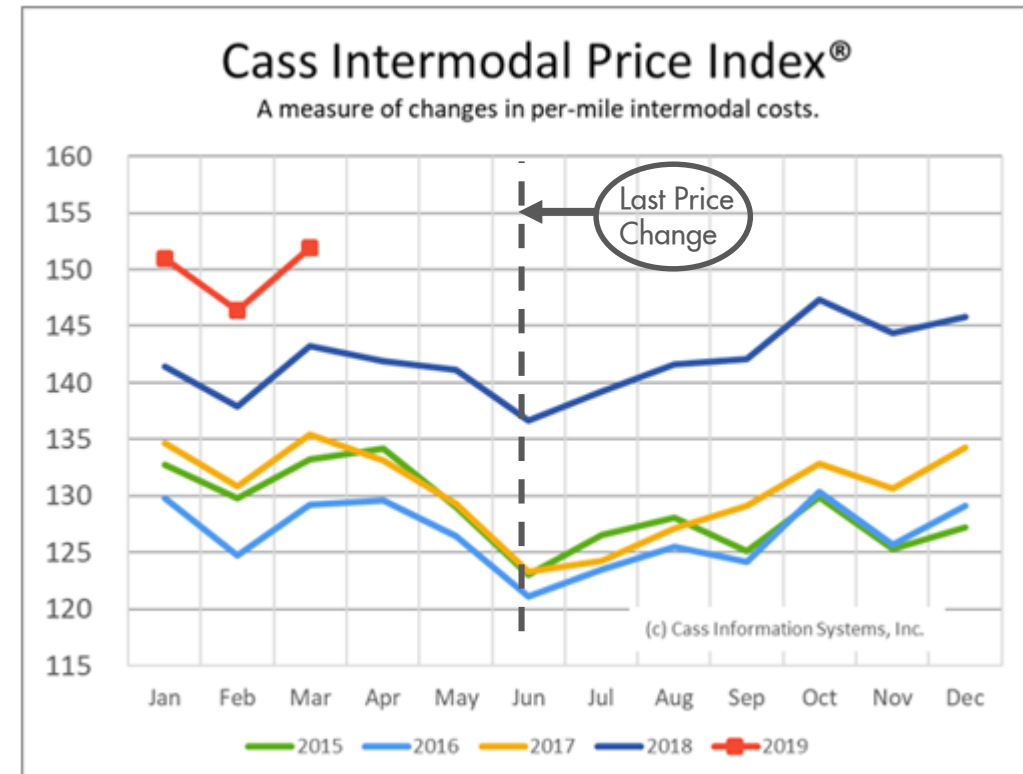
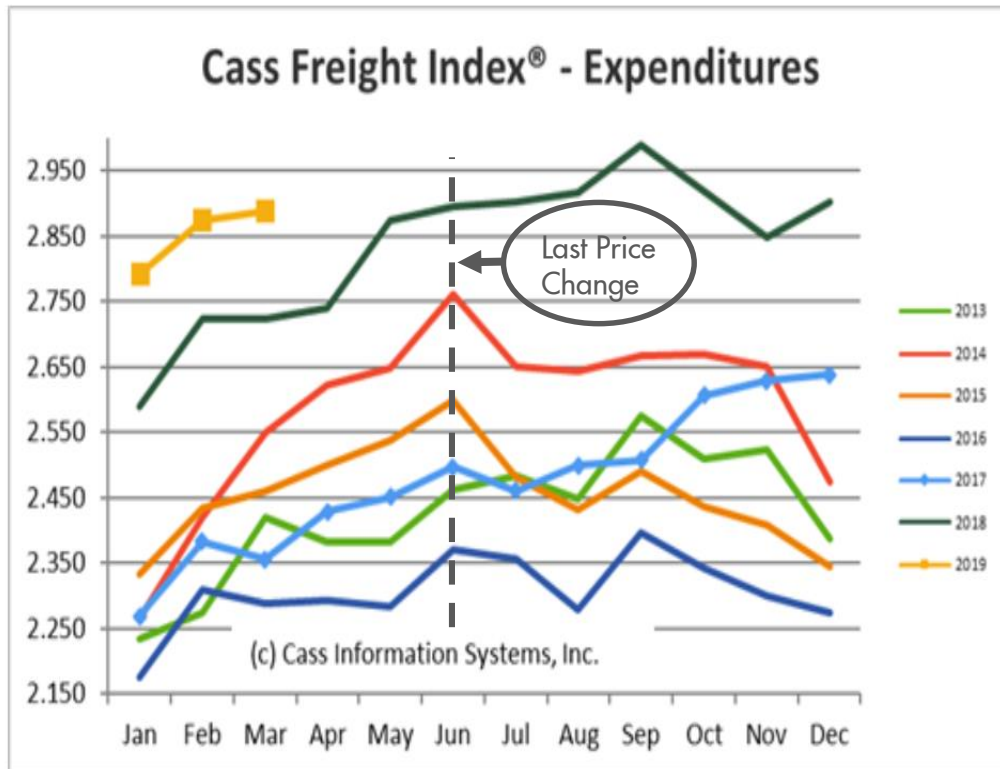
Base Oil Market

- ❖ Table below reflects per gallon changes since mid January
- ❖ Producers increase prices in March and a second round of increases in April

Supplier	Gr I			Gr II			Gr II+
	Lght	Mid	Hvy	Lght	Mid	Hvy	
Chevron				13%	13%		
Motiva				17%	14%	14%	
Excel				13%	13%	13%	
XOM	12%	11%	7%				13%

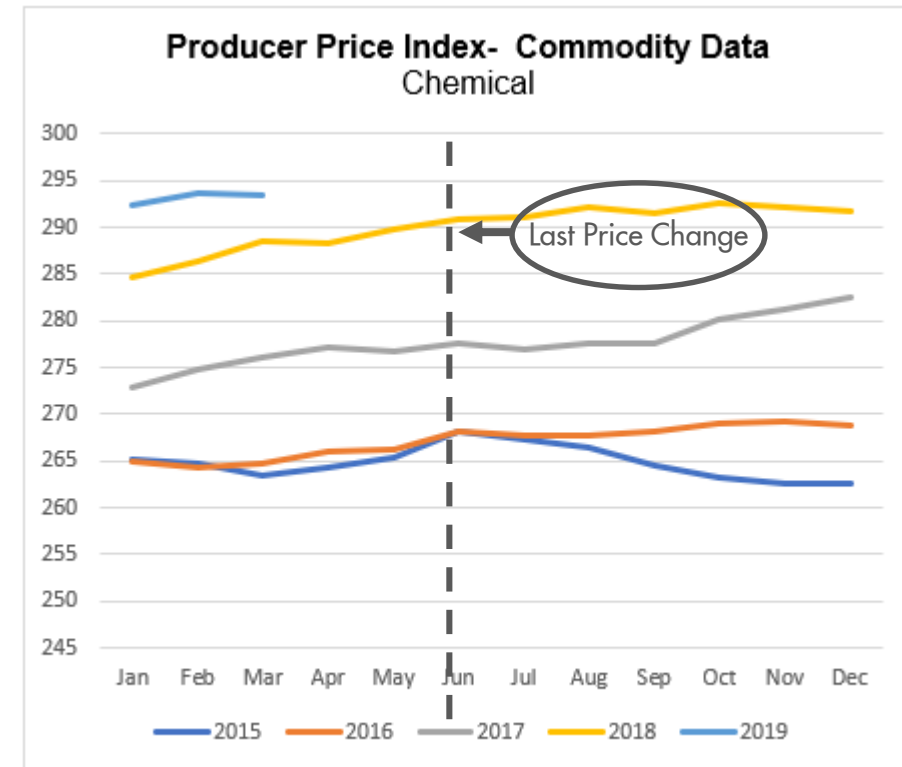
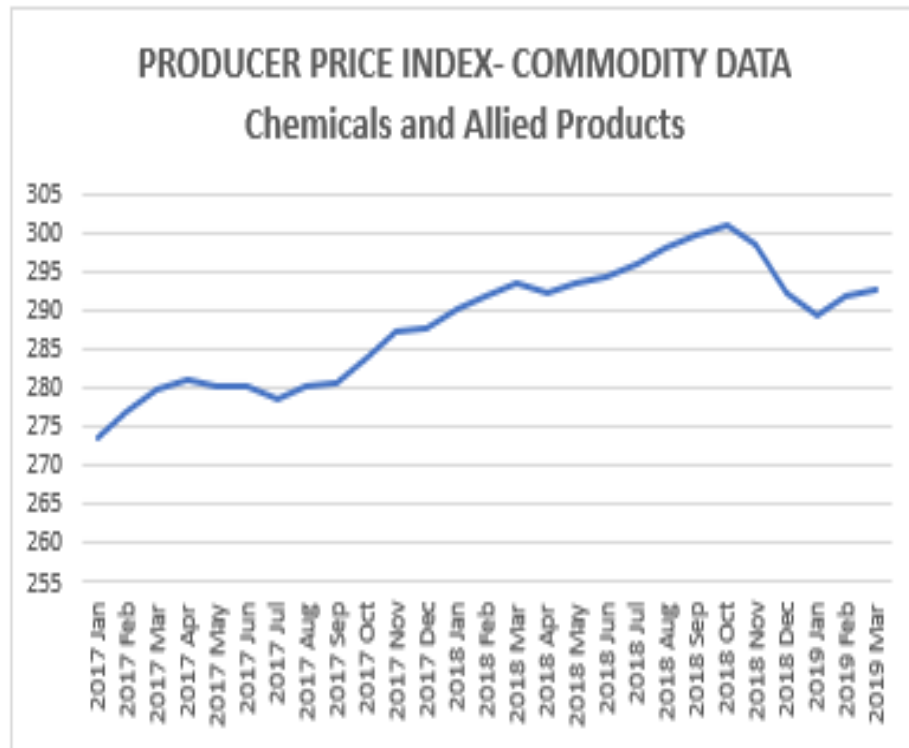
Transportation

- ❖ Increased freight cost driven by a systemically short carrier market linked to reduced drivers, increased road transport demand, and regulations decreasing hours on road by as much as +20%
- ❖ 2018 was the highest year of realized pricing for truckload since deregulation in 1980
- ❖ March pricing finished 6.1% higher y/o/y



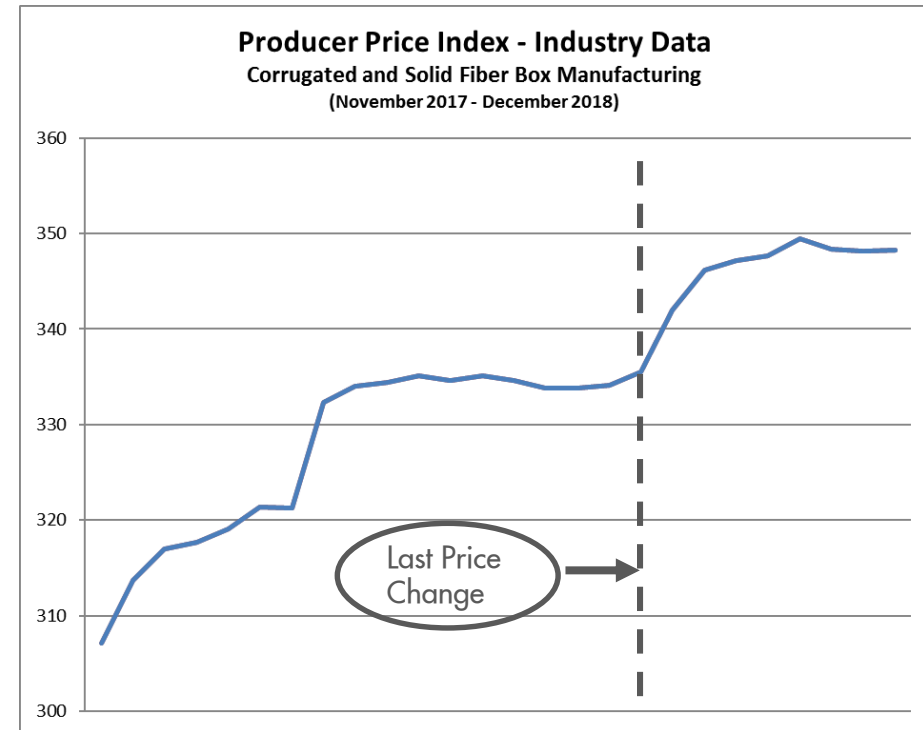
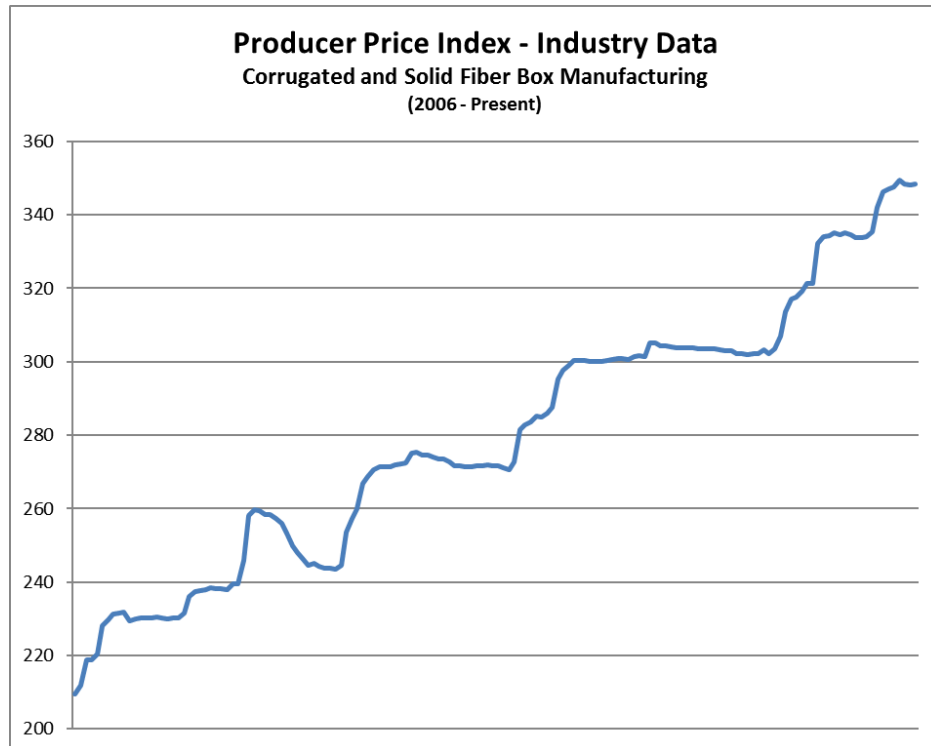
Additives

- ❖ Additives comprise a significant portion of product cost, and new, tougher fuel economy and longevity standards have fueled an estimated 40% growth in prices since 2006
- ❖ Trailing PPI data shows increased costs since our last announcement



Packaging

- ❖ Paper prices for corrugated uses have risen at an annualized rate of 4% over the past several years
- ❖ Corrugate prices are up 10% over the past year, the rise of E-Commerce indicates continued upward pressure
- ❖ Steel tariffs have led some manufacturers announce over 7% increases in steel drum prices

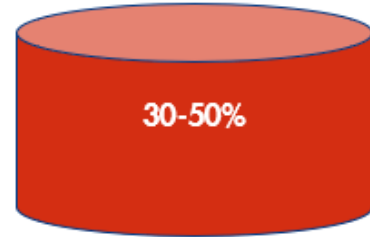


Sources: United States Department of Labor, Bureau of Labor Statistics; MyPurchasingCenter.com; IBISWorld. JobbersWorld



Back-up

❖ Lubricant Cost Component



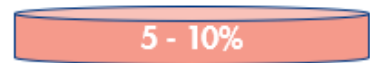
Base Oil: US\$ based and sensitive to fluctuations in world markets. Driven by ICIS-LOR quotations.



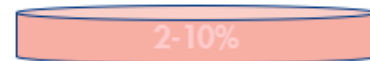
Additives: US\$ based and sensitive to fluctuations in world markets for chemicals.



Transportation: Local cost impacted by local inflation and market conditions.



Packaging: Local cost, although prices sensitive to world markets for Steel, Plastic, Paper.



Blending & Filling: Local cost of the Lubricants Oil Blending Plant (impacted by local inflation etc.).

* In addition, also have R&D costs, OEM approvals, Quality control, and trial testing.