Long Live Cattle Futures

Thesis: Various agricultural commodities such as corn, wheat, and other grains can be expected to appreciate further in price due to the global inflationary situation and medium-term supply disruptions. Since live cattle are typically fed a fattening diet of grains as they mature and due to elevated and increasing demand for beef, live cattle future prices can be expected to appreciate.

Grains outlook

Historically, grains such as corn, wheat, etc. have been supported in high-inflation, moderate-/low-growth scenarios as investors flock to the commodities. Their prices are typically expected to rise on pace with inflation despite dampened economic growth outlooks. This has been the case recently as inflation accumulated in many developed and emerging economies, and I expect this to continue.

Additionally, the outlook for grain prices is significantly impacted by the Ukraine-Russia conflict. Ukraine and Russia together account for over ¼ of global wheat exports and ⅕ of global corn exports. With Ukrainian and Russian ports, railway, airports, and other modes of transportation closed and/or disrupted and business uncertainty in both nations, large risks will plague grain deliveries in the near future. As stronger-than-expected Ukrainian resistance draws the conflict on longer and sanctions become more severe, the conflict may result in even greater grain prices in the short-/medium-term. Though prices for these goods have dropped from peaks, I expect them to steadily rise back up as real supply disruptions materialise.

Cattle and grains

Live cattle are kept on chiefly grass diets, but over three-fourths of them are grown to maturity (final delivery) via processed feed. These cattle are fed specially-formulated feed based on corn, wheat, and other grains aimed at increasing yield. The correlation between the values of first contract live cattle futures and a feed index taking the average value of the first futures contracts of the main grains used in this feed (wheat, corn, barley, and oats). The resulting regression showed a strong statistical significance (~0.000), high R^2 (.875), and high correlation (.936) between the two variables (Appendix A).

Beef supply and demand

Feeder cattle are younger cows that are purchased to be fattened and finally sold as live, finished cattle. With high rates of feeder cattle slaughter now, a significant chunk of supply is currently being processed. Slaughter-ready live cattle supplies can be expected to tighten into the coming months relative to recent years. This is in part due to elevated beef demand, which is expected to continue despite inflationary pressure, but begin to shift towards less choice (high-quality) cuts and more select (lower-quality) cuts.

Conclusion

Persisting demand for beef has compensated for year-on-year supply increases, resulting in a relative shortage that is pushing live cattle prices up. Additionally, grain prices can be expected to appreciate in the coming months, increasing production costs and resulting in higher live cattle futures prices.

Appendix

A. Value regression between y=first live cattle futures,

x=FEED Index=avg(first wheat, barley, oats, corn contracts)