Livestock Market Outlook and Thoughts on Price Risk Management

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USDA's livestock inventory, Cattle on Feed, and Hogs and Pigs reports, make the North American livestock supply situation relatively clear. What is not so clear is the demand side of the market and how many more cattle will come to market because of drought conditions in the US. We discuss the major factors below and offer some thoughts on managing price risk currently.

Beef

The Supply Side

US production of beef and veal was at 12.4 million tonnes in 2019 and 2020, rose to the 12.7 area in 2021, and is projected at 12.8 for 2022, but then down to 12.0 in 2023. Canada was at 1.3 million tonnes in 2019 and 2020, then rose to 1.38 in 2021 and 2022, and is projected to decline slightly in 2023.

Behind this production pattern is a declining inventory of cattle. Table 1 tells the story:

Table 1: Cattle Inventory in US and Canada – 2019- 2023 (Million Hd.)

	2019	2020	2021	2022	2023
US	94.8	93.8	93.8	91.9	89.4
Canada	11.7	11.5	11.5	11.5	11.2

Note two things. First, the projected decline in cattle inventory for 2023 is the largest of the series for both countries. Second, while inventories have been falling, production rose. Why? Two related factors that are part of the beef cycle explain this:

- When the herd and beef production are nearing the top of the cycle, profitability falls and people begin to exit the industry by shipping more cows and heifers for slaughter instead of holding them in the breeding herd. This increases the current supply of beef, further driving down prices.
- In this cycle, this was exacerbated by drought conditions that moved cows and heifers to market even faster.

The result is relatively low prices at the time feed and other costs rose, thereby increasing the incentive to sell cattle.

To date this year, beef slaughter is up by around 3.2%, mainly due to these two factors.

The Demand Side

The demand side is more difficult to assess because it depends on peoples' attitudes. We do know that despite the supply situation, live cattle prices in the US are about $20/cwt higher this year than last. This is also despite a U$ that is strong against other currencies. That was supposed to reduce export demand. But US 2022 exports are pegged 22% higher than in 2020, largely to China which hasn't had its best year from an economic perspective. So, Ch8ina's demand is strong. Canada's exports are up about 12.5% over the same period.

So, we have more supply, more demand for exports, and higher prices. Economics 100 would suggest that there has been a positive shift in demand. This seems somewhat logical given that people have been able to get back to restaurants and the like.

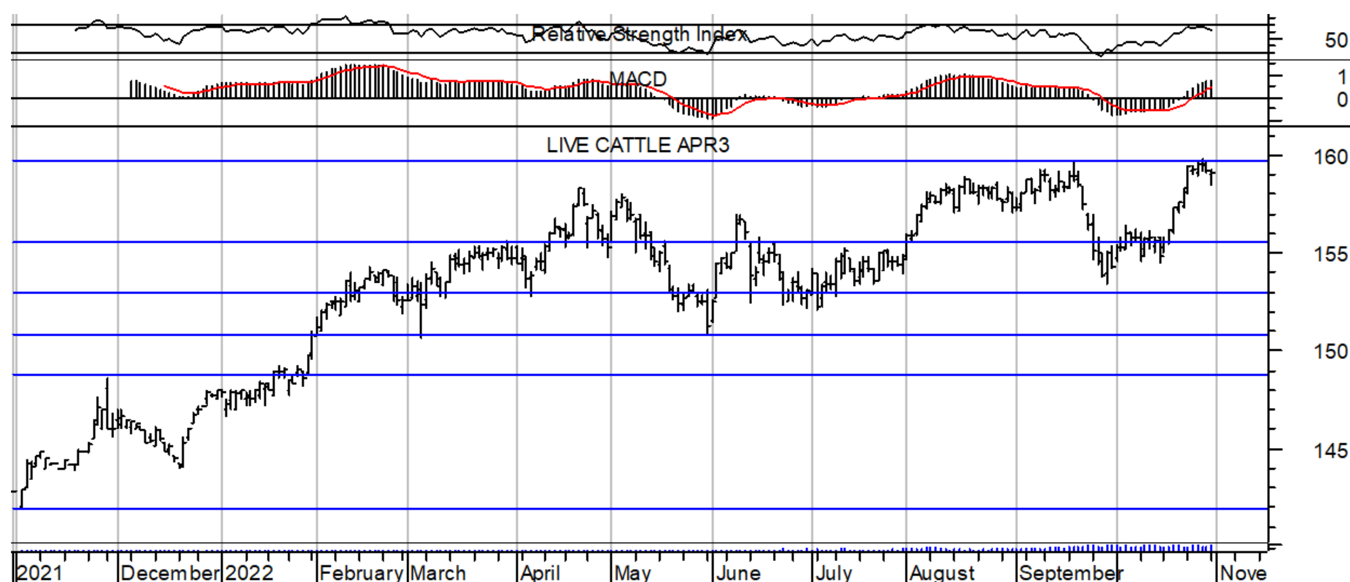
What is clouding the picture is the threat of recession, as well as inflation. The threat is that with lower nominal income (recession) and/or lower real income (inflation) demand for meat will suffer. These spectres and the currency argument above have been raised a few times over the past few months, usually when prices fell (e.g. in mid-May and late September on the April live cattle futures chart below). But each time prices came back, even with higher supply. So, demand has been strong – people are paying more for more supply!

Where to From Here?

Barring a total collapse of the economy, it appears that demand is strong. The projected drop in supply of beef for 2023 seems entirely logical. The only question is, when will herd liquidation stop so production falls? This will be answered by weekly cattle slaughter lower than last year. That's what we are watching. If/when production actually starts to fall, prices could blow through that resistance at U$159.65 on the April chart.

So, there appears to be considerable upside opportunity, but some risk of the downside if demand dwindles. How can this be managed? Using the April chart below to illustrate, there is strong resistance at U$159.65. The three lines below that are called Fibonacci retracements of 23.6%, 38.2% and 50%. The 38.2 and 50 are relatively strong support. At least three possible futures or options trading strategies could be followed presently:

- Buy out-of-the money Puts, sell further out-of-the money Puts. Options are expensive, so the buy a Put/sell a Put reduces the cost of insurance and gives a partial floor to prices. We would consider buying U$156 or $157 Puts and selling $150's or $149's.
- Buy out-of-the money Puts, sell out-of-the money Calls. This is the same idea: reduce the cost of insurance by fixing a window of prices. For example, one could buy U$156 or $157 Puts and sell $165 or $166 Calls. We don't like this strategy with the current fundamentals. It limits the upside. Our reading of the market is that it has more chance of going up substantially because of the supply situation than of going down because of the demand issues. After losing lots or, at best, making little over the past three years, why would feed lots limit the possibility of a windfall gain?
- Sell futures at U$158 or higher, use a close only stop above $159.65, or look to take profit if the market stops at one of the support planes. This approximates an at-the-money Put: If one sells futures and the market goes down, there is no cost to the Put and it will protect until you buy it back at a profit. If the market goes up, the stop allows you to take windfall profits on your physical cattle, you are not making margin calls, and the cost of the Put is the loss on the futures position, which is usually lower than a Put premium.



Pork

The pork market situation is a little more straight forward than beef, but has the same uncertainty about demand.

Production in both countries have trended down slightly since 2020, from 2.1 to 2.0 million tonnes in Canada and from 12.8 to 12.3 million in the US. Production in 2023 is forecast to be very similar to 2022 in the US but slightly lower in Canada.

Live animal inventories are trending similar to production with the US in the 77 million head range for 2020 and 2021, declining to 74 million in 2022 and 2023. Canada hovered around 14 million head all three of 2020-22, and is projected to 13.8 in 2023.

International trade in pork can have a major impact on the domestic market, especially with China, whose swine herd is more than four times the US and is close to being self-sufficient. In 2020 and 2021, China imported 5.3 and 4.3 million tonnes of pork, dropping off to 1.8 and 1.7 projected for this year and next. Canada's pork exports have been maintained by picking up other customers. Especially Mexico, the Philippines and Vietnam. The US is projected to fall off slightly in 22/23.

Overall, the North American pork market has performed reasonably well in spite of the drop in China's imports and continued high domestic production. This implies, as with beef, that domestic demand is relatively strong. US prices in 2021 and '22 are higher than the previous two years and it appears that 2022 will end up being the higher of the two.

Where to From Here?

USDA's September Hogs and Pigs report confirmed another 1% decline in the breeding herd. So, going forward, excess production should not be a problem and the hog market is likely to benefit with higher prices from the likely higher beef prices – if demand doesn't collapse.

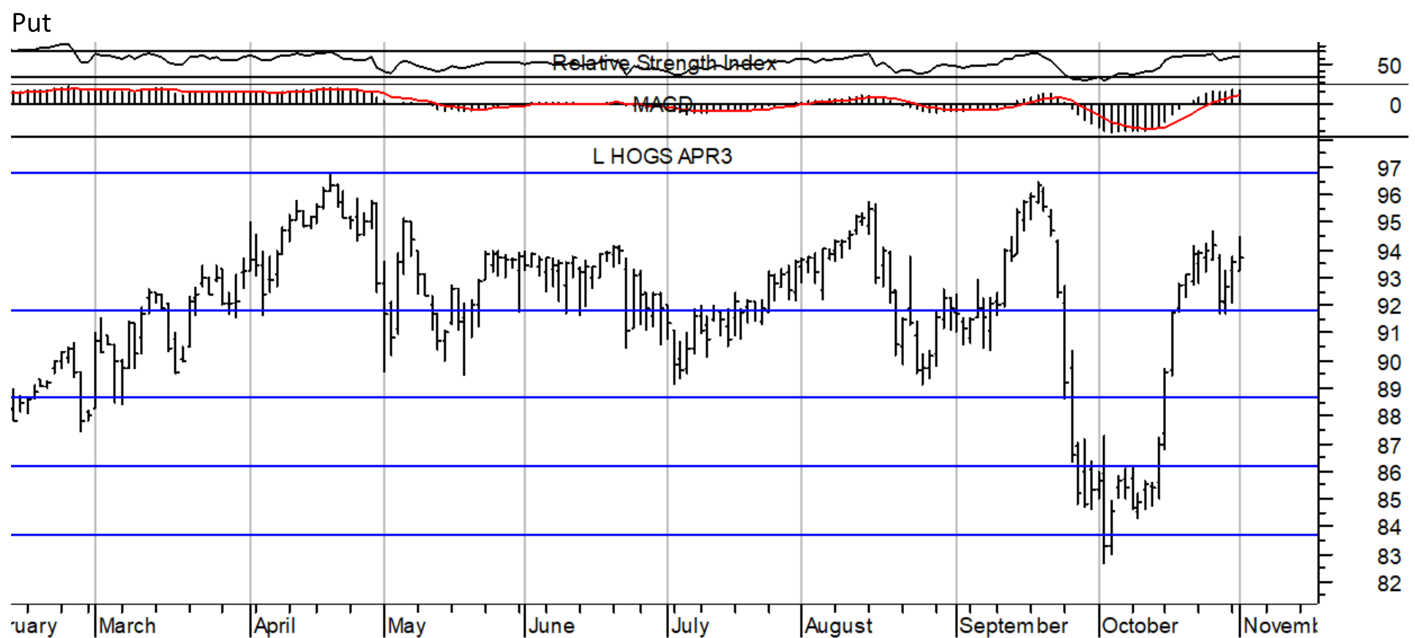
As with beef, some prognosticators have wrung hands and gnashed teeth over the prospect of declining demand. But so far, the market has always moved back toward previous tops as can be seen in the April Lean Hog futures chart below. It shows that a “feared demand collapse” occurred in mid-September when prices fell all the way from $96 to $84 at the 62.8% Fibonacci retracement before finding support. But it has recovered back to the $94 area so far.

When these drops appear, the so-called “hedge funds” get scared. They have been net long futures to the tune of 65,000- 70,000 contracts on the rallies. They get scared of the demand effect, sell off their positions to the 10,000 net long area, thereby driving prices down below cash prices. Sensible people know that futures have to coincide with cash and start to bid them back up. The funds then get optimistic again, join the band wagon, and move back to 65,000 – 70,000 net longs. Both cattle and hogs got to that area last week even with the dip at the end of the week (again taking futures below cash).

As with cattle, there are at least three approaches to managing price risk.

- As with cattle, we don’t like the buy a Put/sell a Call approach because of the likelihood of higher prices.
- The buy a Put/Sell a Put strategy is more appealing, though which Put to sell is more problematic since support is at the 62.8% level.
- We like the concept of selling futures above $95.50. Resistance back in April at $96.50 would be the point for a close-only stop. Because of the lack of clarity about which area will provide support, this approach means watching the market carefully to decide where to take profits.

Put



Reference

- USDA , ***Livestock and Poultry***: ***World Market and Trade Report*** , October 12, 2022