Grain and Oilseed Market Outlook Larry Martin November 17, 2022

Grain and oilseed markets have been moving sideways since July or August. This may seem odd with all the talk about market volatility. But the volatility lies in the fact that actual and projected carryover inventories at crop year-end are relatively low and face considerable uncertainty about future supply and demand in the markets. In fact. There is potential for prices to break strongly in either direction from current levels. What makes this unique is that farmers are facing huge increases in costs of fertilizer, plant protection material, fuel, and machinery, not to mention fast-rising interest rates. This means break-even prices are much higher than previously and a tumble in grain prices can put even moderately leveraged farms in debt-service difficulty. So, understanding what is happening in markets and having a strategy to manage risk is particularly important.

In this article, we discuss the factors driving the grain and oilseed markets, and investigate some ways to manage risk.

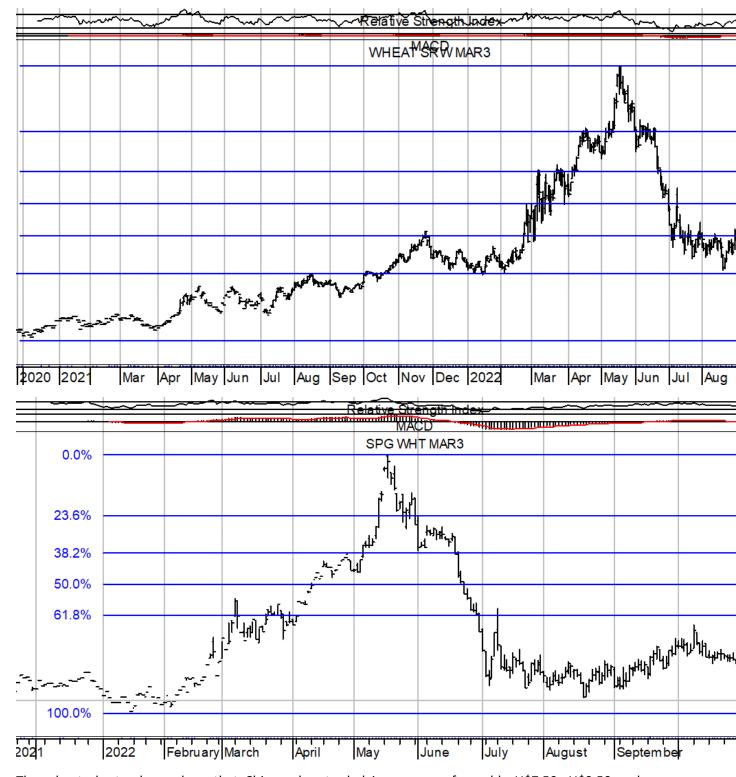
The Stocks/Use Ratio

An important factor in assessing grain and oilseed markets is the amount of carryover stocks a market has at the end of a crop year - the actual (last year) and expected (forecast end of this year) stocks/use ratios. S/U is the amount of inventory (stocks) expressed as a percentage of the amount used during the year (domestic use plus exports). For context, an S/U of 8% is 29.2 days, or just under a month of carry over. Stocks/Use lower than 8% mean that supplies are tight and prices may be high and volatile. USDA's November 9 report increased expected average yields for the current US corn and soybean crops by 0.4 bu. per acre. Working that through the rest of USDA's calculations, the expected S/U for corn at the end of the 2022/23 crop year went from 8.2 to 8.3%, indicating the US market is on the verge of a shortage. Stocks/use for soybeans went from 4.5 to 5.0%, indicating an even tighter situation, even with the higher yield. For further context, those ratios for were in the 13 -16% range during the low-price period from 2015-2019.

Stocks/use for all wheat is much higher at around 29%, but it is typically around 40% or more during low price periods, and internationally, the ratio is currently at historic lows.

Given the foregoing, prices are not at their recent peaks, but are much higher than during the 2015-2019 period and are in generally sideways trends as US and Eastern Canadian harvests are finishing. The charts throughout the remainder of this document show March futures for Chicago wheat, Minneapolis wheat, corn, soybeans and canola.

Current Price Drivers



The wheat charts above show that Chicago has traded in a range of roughly U\$7.50 -U\$9.50 and Minneapolis about a dollar higher since the beginning of July. Lately that range has been getting narrower. Several factors are driving the wheat market:

- The most immediate is the agreement on Ukraine exports of grain, in which Russia guarantees the safety of ships leaving ports in southern Ukraine. It expires on November 19, but will roll over for another 120 days if no party objects. Russia says it will not object. What is not clear is whether the agreement will expand to ports in eastern Ukraine, and include fewer restrictions on Russian exports of grain, fertilizer and the activities of a Russian state bank that finances agriculture and trade. If it expands, it may put downward pressure on prices because more wheat and corn will be available, effectively increasing the stocks/use ratio. Russia had an exceptional crop this year.
- India, after losing much of its last crop to poor weather, is increasing acres of wheat by 9.7% in the current season.
- Australia has another bumper crop, but late season rains reduced its quality. But the
 market continues to count on it as a likely increase in S/U. Clearer numbers will be
 available soon.
- Argentina experienced a drought that appears to have cut its wheat crop by as much as half. Rains in recent days is finally allowing farmers to seed soybeans and corn in the next crop, but most observers say they came too late to help wheat.
- The US is experiencing a drought in its winter wheat area with as little as 28% being classified as good to excellent, though that moved up to 32% on November 15. 34% of the crop is rated poor.



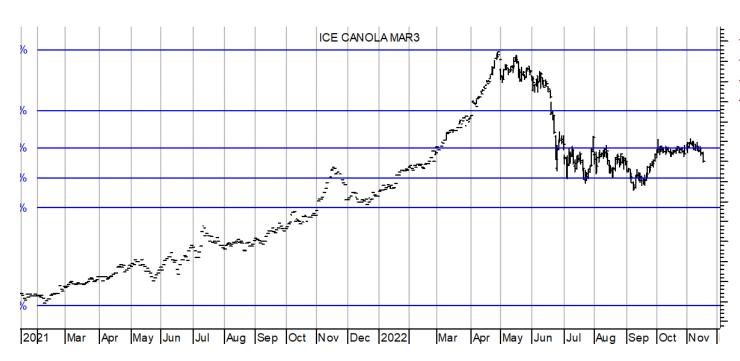
The chart above shows that corn prices moved sideways in a narrow range during September and October. USDA's increase in expected yield contributed to the drop in November, as has the positive outlook for expansion of the Ukraine agreement.

Two additional factors are hanging over the corn market:

• US export demand has shrunk substantially. As of November 10, US export sales committed for the current crop year were 580 billion bu. compared to 1.26 billion last year. USDA has not

- adjusted their balance sheet for a decline in corn exports. But if the trend continues, it will obviously increase the stocks/use ratio.
- Brazil is currently planting their second season crop with several predictions of a 125 million tonne corn crop, 15 million more than last year's record. Rainfall has been plentiful, as is soil moisture. It's three months until harvest and much could change, but the eventual size of that crop will be a major determinant of prices going forward because the larger it is, the more competition there will be for North American corn, and vice versa if it is small.





Soybean prices have been variable within in a broad range, while canola prices have been stable the past month and a half. This industry faces substantial uncertainty going forward. Several factors contribute to this:

- China's hog industry grew substantially after its outbreak of African Swine Flu, and with it the demand for soybean meal. Chinese stocks of meal are currently less than 40% of last year, but China's demand for meal and beans have not increased, especially from the US where export sales are the same as in 2021. The question is whether demand will stay down or increase.
- Brazil had a smaller crop than expected in 2021, but still a record at 125 million tonnes. With expanded land area, several forecasts of this year's crop are in the 153/154 million tonne area, a massive increase if good weather holds. Recent rains in Argentina are stimulating seeding and potentially adding to the crop. If crops meet or exceed forecasts, stocks will rise and prices will fall. This may explain the Chinese purchasing strategy. But if weather problems occur and these crops are smaller, we could see much higher prices.
- Indonesia, one of the two largest palm oil producers, is considering increasing their bio-diesel mandate from 30% to 40%. Other countries are considering increased mandates. The US will see two new bio-diesel plants in North Dakota in the next two years. These developments have and will affect palm oil and, therefore, soybean oil prices. Soy oil rallied from under U\$.55 to over U\$.71 from July to mid-November before falling back the past three days. It is responsible for upward price pressure on soybeans and canola. That pressure in canola was largely offset by a strengthening Canadian dollar.

Prices Going Forward and Potential Hedge Protection

The factors discussed above lead to the clear conclusion that there are big things in both the "bull bag" and the "bear bag" – things that could cause major price adjustments in either direction. A Brazilian soy crop in in the 155 MT range, delayed bio-diesel mandates, and continued hand-to mouth buying by Chinese crushers could push prices down substantially, adding pressure to the corn and wheat markets. A weather issue in Brazil, increased mandates, and aggressive buying by Chinese crushers could send them soaring.

There are always things in both the bull and bear bags, but the risks seem higher currently because of the magnitudes of the unknowns and because production costs have risen so much. In an ideal world, producers would benefit by strategies that allow them to protect against downside price movements and take advantage of upside movements. This would apply to both old crop grain that hasn't been priced, and new crop product that won't be planted until next spring. As the charts show, most are breaking toward the downside.

In developing a pricing strategy for old crop, none of the markets are showing a return to storage - e. g. at current interest rates, distant contracts are not at enough premium over nearby's to cover even the cost of interest on inventory. This could change if southern hemisphere crops have problems, but the market is clearly not rewarding storage. We'll return to this briefly below.

For those holding inventory or considering next year's crop, the objective of protecting the downside while taking advantage of the upside cries out for a Put option strategy. Problem is that Puts are very expensive for everything except canola because of the implied volatility. An alternative, though it takes discipline to follow, is to use support and resistance for entry and exit decisions in a "selective" hedging

strategy – i.e, be short futures when the decision rule says there is a high probability the market will fall and be out when there is a high probability it will rise.

The approach can be illustrated with the Chicago wheat chart above. Its decision rules use technical analysis for discipline. In this case, it relies on "Fibonacci retracements". These are the horizontal lines on the chart. Our rule would have us get short just under the Fibonacci resistance at \$9.30 in late September or early October. We would have a stop loss (rule to offset the short position) based on closes above \$9.30. We also note that there was support at the next two Fibonacci lines (\$8.50 and \$7.50), we could take profits at one of those if the market fell, then moved sideways. It did move sideways at \$8.50. We could have taken profits there.

- If we did, we got another sell signal when the market went down through \$8.50 and put our stop loss above \$8.50.
- If we didn't, we would still be short, could move the stop down to \$8.50 and be watching to realize profit if the market gets down to the \$7.50 area.

For those who sold their inventory and are concerned that they may have sold too low, either buying Calls or a strategy which is the reverse of this can be used. We would certainly be interested in one of those strategies if prices fall to the \$7.50 area given the strength of the technical support at that level.

Careful observation of the other charts reveals that they all have similar support and resistance on them, sometimes at Fibonacci lines, sometimes other points. So do the new crop charts that are not shown here.

We address this and other strategies in our Introduction to Risk Management course. We like to incorporate significant support and resistance levels into trading strategies because they often tie to the underlying fundamentals: as our discussion here indicates, major moves are possible up or down depending on the war, southern hemisphere crops and/or Chinese purchasing decisions. Historical support and resistance essentially say they are the upper and lower limits (\$9.30 and \$7.50 in the case of wheat) of the market's perception of the underlying fundamentals. And those limits are supported by technical traders. So, a movement outside that range will likely mean a change in the fundamentals. Until that happens, sellers will do well to sell the top and buyers will do well to buy the bottom.