Implications for Ukrainian Grain Shipping Agreement

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Implications for Ukrainian Grain Shipping Agreement

Frayne Olson, NDSU Extension crop economist/marketing specialist

Ukraine, Russia, Turkey and the United Nations have successfully negotiated agreements to allow Ukrainian grain shipments through selected Black Sea ports. The initial market response to the announcement has been mixed. Futures markets responded to the news with lower prices, suggesting expectations for increased grain shipments. However, comments from international grain traders suggest there are still logistical issues that need to be addressed and there are concerns about the long-term stability of the agreements.

The deal that was struck is composed of two separate agreements. One between Ukraine and Turkey addressing grain exports from Ukraine and a second between Russia and Turkey covering food and fertilizer exports from Russia.

The Ukraine-Turkey agreement allows safe passage for ships carrying Ukrainian grain loaded in the ports of Odessa, Chornomorsk and Yuzhne. Chornomorsk and Yuzhne are cities very close to Odessa. The agreement does not include the port of Mykolaiv, which accounts for about 20% of Ukraine’s annual Black Sea exports.

Figure 1 – Russian Control of Ukrainian Territory

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Ukrainian grain ships will be escorted through safe zones by Ukrainian military vessels. Grain vessels will be inspected by U.N. and Turkish officials to reduce Russian concerns that Ukrainian ships will carry military equipment into the country. Russia has agreed not to attack vessels carrying agricultural products, such as wheat, barley, corn, sunflower and sunflower oil.

The Russia-Turkey agreement provides assurances that Russian exports of food and fertilizer will not be affected by export sanctions. The agreement does not include natural gas, which is a key feedstock for nitrogen fertilizers.

The initial response by steamship lines, who own the vessels, and insurance companies who insure these vessels has been to quickly work towards allowing shipments. Ukrainian government officials have estimated initial grain shipments at about 1.5 million metric tons (mmt) per month, gradually increasing to 3 mmt per month. Pre-war grain export volumes ranged from 4 to 5 mmt per month.

However, private grain companies have said there are other logistical issues that must be addressed before the higher export levels can be reached. First, the export terminals must remain in good condition. Continued Russian missile attacks on port cities like Odessa have threatened grain handling facilities and port infrastructure.

There are also logistical issues in moving grain from farms or local elevators into the designated export terminals. Damage to bridges, roads and railroad lines have slowed traffic flows. In addition, grain must compete with military and other commercial shipments for the use of the transportation system. It is still unknown how much lead time will be required to accumulated the grain needed to fill the ocean vessels before they arrive in port to be loaded.

And finally, there is also uncertainty regarding how much Ukrainian grain will be purchased by international buyers, given the uncertainty regarding deliveries and grain quality. Figure 1 shows free-on-board (FOB) prices for wheat loaded onto vessels at selected international ports. Ukrainian wheat prices are significantly lower than wheat prices from other destinations. The lower prices can be enticing for some international buyers, but the grain quality and delivery risks may limit trade volumes.

The current agreements are effective for 120 days but can be extended if all parties agree. The expectation is that Ukrainian grain will continue to move through alternative ports like Constanta, Romania and by rail into Poland. While these alternative routes have been shipping grain, they confront their own logistical challenges and do not offer the handling volumes available in ports like Odessa.

There are still many concerns whether Ukraine, and even Russia, can be considered reliable grain suppliers into the international marketplace.
Cyclical Beef Cow Herd Liquidation Will Support Prices

Tim Petry, Extension Livestock Marketing Economist

On July 23, 2022 the United States Department of Agriculture National Agricultural Statistics Service (NASS) released the semi-annual July Cattle inventory report. The current and past reports are available online at: https://usda.library.cornell.edu/concern/publications/h702q636h.

The July Cattle inventory report is important because it gives a mid-year indication of possible changes to look forward to in cattle numbers, beef production and potential market price impact. But the July report is less detailed and only provides total U.S. cattle inventory numbers. The January Cattle report provides a more detailed state-by-state breakdown, which allows regional comparisons and weather-related changes to be documented.

Most beef cattle market observers expected the July Cattle report to show lower beef cattle inventory numbers compared to last year and that was confirmed.

NASS reported the July 1 U.S. beef cow herd at 30.35 million head, down 750,000 or 2.4% from last year’s 31.1 million. The current inventory is down 6.3% from the 2018 cyclical peak of 32.4 million head, the lowest number since the last cyclical low of 29.75 million head in 2014.

Drought in the southern Plains and western states is causing forced beef cow liquidation. Through the first half of 2022, U.S. beef cow slaughter was up 14.6% over last year following a 9% increase in 2021.

Further liquidation is likely to continue as long as drought conditions persist.

Weather-related forage and grazing conditions are always a wild card. In late July, NASS reported U.S. pasture and range conditions at 50% in the poor to very poor category compared to 42% last year. The USDA estimates that 59% of the U.S. cattle inventory is located in areas experiencing some level of drought compared to 32% last year (www.usda.gov/oe/weather-drought-monitor).

The July 1 number of heifers over 500 pounds kept for beef cow replacement at 4.15 million head was down 3.5% year over year. That was the lowest number of beef replacements since July 1 records began in 1973.

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The July Cattle report also gives the first estimate by NASS of the 2022 calf crop. The calf crop (including both beef and dairy calves) at 34.6 million head is down 1.4% from last year and down 4.7% from the 2018 cyclical peak of 36.3 million head.

Calf crop declines and drought-forced feeder cattle and calf placements into feedlots reduced the July 1 feeder cattle and calf supply outside feedlots by a million head or 2.7% from last year.

The number of cattle on feed at 13.4 million head was the same as last year, but cattle on feed inventories will likely decline in future months due to the fewer available supplies.

Higher corn prices and cost of gain mean feedlots prefer to purchase heavier feeder cattle, but severe drought is causing forced sales of calves and feeder cattle from pastures and ranges into feedlots, especially heifers originally kept for replacements. Continued and expanding drought could temporarily cause more placements into feedlots.

The bottom line for cattle prices from a supply standpoint is the smaller beef cow herd and calf crop will be supportive to prices. Declining supplies along with good beef demand and record high beef exports have resulted in current cattle prices increasing back up to 2015 levels.

In the short-term, drought continues, the size of the 2022 U.S. corn crop is unknown, COVID-19 pandemic impacts linger, inflation is a concern for consumer beef demand, and the Russia-Ukraine war is causing chaos in world agriculture, energy and financial markets with unprecedented uncertainty and price volatility.

But in the long term, cyclically lower cattle numbers will be supportive to cyclical increasing cattle prices which may challenge the historical 2014 record highs.
Higher Energy Prices to Impact Crop Drying Costs

By Bryon Parman, agricultural finance specialist

Higher production costs have been a story throughout 2022 as fertilizer prices, land values and rents, machinery costs, chemical costs, and interest rates have been elevated throughout the year. Fortunately, commodity prices remained elevated through most of the first half of 2022 allowing farmers the opportunity to lock in prices high enough to turn a profit despite the higher production costs (assuming yields are strong enough). Some costs including fertilizer, fuels and chemicals have begun edging lower over the summer, however, but are still well above where they were a year ago. This has also coincided with some of the major U.S. crops, such as corn and soybeans, seeing market prices slip as the summer turns to fall.

With harvest being the only major field operation left for most U.S. crops, farmers have the option to wait and see what machinery, fertilizer, rents and chemical costs do over the next several months before they have to make any purchases. However, grain drying is often necessary in North Dakota and with the elevated price of natural gas and propane, North Dakota producers may be facing a steep bill this fall.

Henery Hub Natural Gas Spot Price

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Typically, the spring and early summer months see the lowest natural gas prices of the year, as demand is lower for heating in the U.S. In 2020 from March to June, natural gas spot prices averaged $1.73 per million Btu and in 2021 they averaged $2.86 per million Btu. In 2022, however, natural gas prices have averaged $6.84 per million Btu. The last time natural gas prices were this high was 2008. Further, prices tend to increase through the fall indicating that, if 2022 natural gas prices follow a normal seasonality, fall prices will be higher than they are right now.

Seasonality also impacts propane prices across the county, though not typically as dramatically as natural gas. Propane prices typically begin increasing in early fall and continue to increase over the winter months. In 2022, we have seen prices of propane exceed $3 per gallon, which is the highest since 2014. Propane sales are typically slow enough during the summer months that no data is reported, as illustrated by the gaps in the graph above, and then price reports and sales pick up in October.

According to the NDSU Extension Agricultural and Biosystems Engineering department, at $2 per gallon for propane, the estimated cost for a high-temperature drying system to dry corn from 26% to 16% moisture is $0.04 per point of moisture or $0.40 per bushel. At $3 per gallon, this cost would increase to $0.06 per point or $0.60 per bushel, and at $4 per gallon, the total cost for drying corn from 26% to 16% moisture would double to $0.08 per point or $0.80 per bushel.

The cost of drying of course does change not only with the cost of propane and the percentage points of moisture being removed but with the outside air temperature and the method used to dry grains. Of course, field drying is also an option but there are many factors to consider in North Dakota with respect to the costs and benefits to leaving a standing crop in the field during the winter.

More information on the costs of drying grain and available options may be obtained by visiting: www.ndsu.edu/agriculture/ag-hub/ag-topics/crop-production/drying-storage/corn-and-soybeans.

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