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# Grain Elevator Outlook 2018/2019

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## Key Points:

- Trade disruptions and large fall crops have had the biggest impacts on grain markets so far this year.
- The U.S.-China trade dispute has impacted soybeans most this year with carry widening and basis weakening significantly.
- Corn and wheat fundamentals support basis strengthening this year, while carry in the future’s market will provide a reasonable return to storage.
- Transportation costs are largely in line with historical averages. However, elevators heavily dependent on trucking will face diesel price and trucker availability risks.

## Introduction

Trade disputes and large fall crops have been the major drivers of grain markets this year. Both factors have contributed to wider carry and weakened basis. Other factors outside the grain markets will also play important roles. Rising interest rates and high diesel prices will increase costs for grain elevators.

Fundamentals for both corn and wheat are promising. Demand for corn is very strong and global stocks are shrinking. Wheat demand continues to grow while drought conditions reduced production for major U.S. export competitors including the EU, Russia, Ukraine, and Argentina. These strong fundamentals should support good carry and a strengthening basis through the year.

A record soybean crop is poorly timed as the U.S.-China trade dispute has moved into high gear, excluding the U.S. from the Chinese market. These huge supplies and weak demand will hinder basis appreciation. However, futures market carry will incentivize soybean storage until the summer.

## Storage

Storage capacity will be pushed to the limit in some regions this year. (See Exhibit 1.) 2018 is the fifth consecutive year that U.S. corn and soybean yields are above trend for the nation.

However, some regional storage surpluses have started to emerge for two reasons. First, a slow Midwestern harvest has increased corn yield losses to around 10-15 percent in some areas. Second, 2018 acreage shifted significantly in favor of soybeans. As a result, some elevators, especially in the Western Corn Belt are finding it difficult to gain ownership of harvest bushels.

Slow soybean exports will force many elevators to store more soybeans longer. This will increase storage costs for many elevators due to the higher price of soybeans relative to corn and wheat.

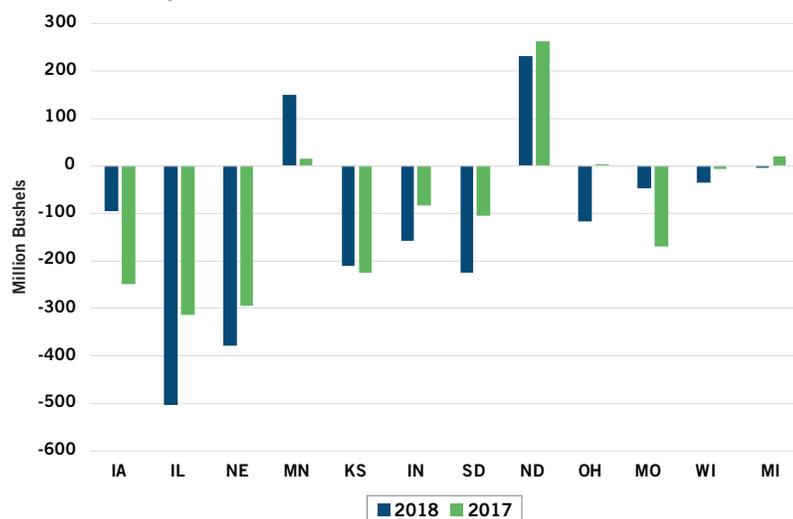
An additional soybean wrinkle is farmer storage of soybeans. If farmers have storage available and have unsold soybeans, they will look to store them until prices rebound. This is atypical and reduces the harvest draw for elevators. If significant soybean bushels remain on farm, then soybean basis will likely face downward pressure throughout the marketing year that will limit basis appreciation.

However, soybeans are slightly more risky to store because their high oil content increases the potential of spoilage. Soybeans well-managed in bins with adequate aeration can be stored for many months. However, soybeans in piles or ag bags that are stored for any significant length of time after winter face significant spoilage risks.

Current U.S. trade policy has also discouraged the construction of new storage. Steel and aluminum tariffs that went into effect in March have raised the cost of steel for grain bin construction by 25 to 33 percent. As a result, many elevators are holding off on making these storage expansion decisions until tariff issues are resolved.

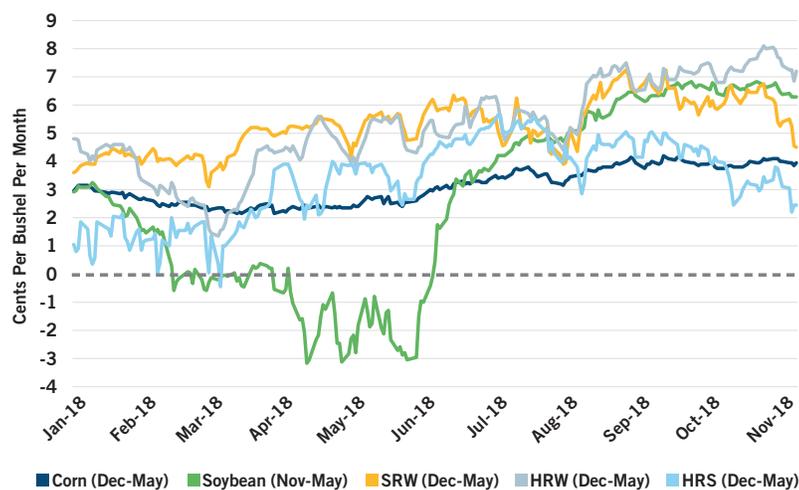
## EXHIBIT 1: Grain Storage Surplus/Shortage

(Positive = Surplus)



Source: USDA-NASS; CoBank ACB

## EXHIBIT 2: Futures Market Carry

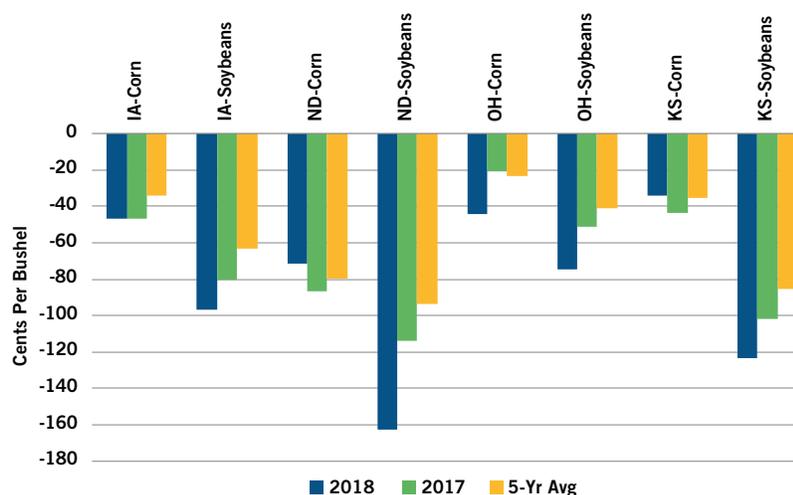


Source: CME Group; Minneapolis Grain Exchange; CoBank, ACB

## Carry

As the size of this year's crop became better known, the futures carry started to widen for corn and soybeans. (See Exhibit 2.) Corn carry widened from 2.2 cents/bu/mo to 4 cents/bu/mo over the past 9 months. This represents nearly 250 percent of the interest expense of carrying the grain.

### EXHIBIT 3: Historical October Basis



Source: CME Group; DTN; CoBank, ACB

Trade dispute-impaired export demand for U.S. soybeans have resulted in wider carry. Soybean carry widened from -2.3 cents/bu/mo to just over 6 cents/bu/mo since May 1, 2018. This widened carry supports holding soybeans at least until the summer of 2019.

U.S. wheat production was strong this year. Soft red winter (SRW) and hard red spring (HRS) wheat acres increased. Meanwhile, hard red winter (HRW) wheat production was stronger than expected as timely rain helped the crop impacted by dry conditions in the Southern Plains. However, weak demand has pushed carry wider. HRW wheat carry started at 5 cents/bu/mo in June and is now at 7.2 cents/bu/mo.

Future interest rate hikes will be an important factor for elevators holding crops this year. The Fed is expected to increase the federal funds rate in December and two times in 2019. This potential 75 basis point increase in interest rates would increase the cost of carry by around 15 percent.

As interest rates rise, the cost of carry increases. Futures market carry will need to widen to accommodate this going forward. Additionally, elevators will face higher storage costs than usual as they will likely be carrying more soybeans.

### Basis

The U.S.-China trade dispute has caused significant regional variation in soybean basis. (See Exhibit 3.) Most soybeans in the Dakotas are typically destined for China, so basis in the region has suffered disproportionately.

The risk for many elevators in the region is that these soybeans will have to be stored for an extended period of time. Soybean futures carry will offset much of the interest expense related to storing the soybeans, but basis improvement is far less certain. Eventually, elevators expect to squeeze a margin out of these soybeans. The question is when and how wide a margin it will be.

Local demand from soybean processors has supported soybean basis in other Midwest areas. Crush margins remain elevated and three new plants are projected to be online by the end of 2019. U.S. crush demand will be an important outlet for U.S. soybeans this year due to current trade disruptions. Any downturn in domestic crush would quickly become a major issue.

Overall, soybean basis appreciation will face resistance in 2018/19. Ample supplies and weak demand will continue to hobble the market. Additionally, with farmers looking to store soybeans and elevators wanting to own bushels at harvest, there is a risk that elevators will narrow the harvest basis to gain ownership on the farmers' remaining unsold bushels. This basis-ownership tightrope walk is not new for elevators, but the risk is enhanced this year for soybeans.

Corn basis remains relatively strong considering the large crop, thanks to strong domestic demand. Ethanol use is expected to increase year-over-year, and feed demand will remain robust as cattle, hog, and poultry numbers continue to increase. Amid this strong demand, elevators will likely see strong basis appreciation this year.

## EXHIBIT 4: U.S. Retail Diesel Price



Source: U.S. EIA

This basis appreciation combines with significant futures market carry to provide a strong profit opportunity for elevators. Fewer corn bushels are available to elevators this year, so the key is obtaining ownership.

Wheat basis varies by class. HRW wheat basis is stronger than the three year average due to tightening supplies. However, SRW wheat basis is very similar to last year. HRS wheat basis is weaker year-over-year due to the rebound in production after last year's devastating drought in the Northern Plains.

Wheat exports were surprisingly weak due to relatively low global production. Wheat export commitments started over 35 percent lower year-over-year. However, export commitments have accelerated and are expected to remain strong after the New Year. This is based on expectations that Russia and Australia will not be able to maintain their current export pace. As exports increase and demand for wheat picks up, elevators will start to realize the carry on grain bought in prior years. This will support grain elevators' wheat margins this year.

## Transportation

Transportation is shaping up to have a neutral impact this year. Elevators in the Northern Plains face a wild card this year due to the trade dispute. New and unique trade

routes will be explored in response to the lack of soybean trade with China.

Elevators are shipping some soybeans from the Northern Plains to St. Louis, loading them on barges, and exporting them through the Gulf. However, the cost is high and St. Louis port & barge infrastructure cannot handle all of the soybean exports typically destined for China. Alternatively, elevators near the Canadian border may look to ship soybeans to Canada as Canada will likely ship more soybeans to China. It is unclear what volumes will move through these non-traditional routes. This should be closely watched.

Prices for rail cars on the secondary market are in line with three-year averages. However, fuel surcharges and tariff rates continue to rise. Fuel surcharges are double what they were this time last year and nearly 4 times larger than the three year average. These raise the cost of using rail. On a positive note, it appears that most rail carriers are servicing their grain customers well. As a result, rail issues are not expected going forward.

Barge rates have finally come down to the three-year average after six months of being above this metric. Southbound barge rates are now 12 percent, 25 percent and 7 percent below three year averages on the Lower Illinois River, on the Ohio River at Cincinnati, and on the Mississippi River at St. Louis, respectively. High water and river infrastructure repairs and closures during the first eight months of 2018 pushed barge prices higher.

With the new Omstead Lock and Dam operational, most of the issues at Locks 52 and 53 on the Ohio River should be resolved. Looking ahead, barge rates will likely remain firm on strong corn export demand and higher than normal soybean export demand out of the Gulf.

Finally, fuel costs remain elevated year-over-year. (See Exhibit 4.) The national average diesel price is now \$3.26. As oil prices come off recent highs in the mid-80 dollar range, diesel prices may start to fall. However, price declines will likely be modest.

Truck driver costs, availability, and quality will continue to be an issue for grain elevators. A strong economy and low unemployment will keep truck drivers in high demand. For elevators that truck most of their grain, higher diesel prices again in 2019 and higher truck labor costs will drag on margins.

## Conclusions

Average grain elevator margins are expected to be relatively normal this year for most of the Midwest. However, elevators are cautious about the outlook. Trade disruptions and large crops will test the storage capacity of several elevators, especially in the Northern Plains.

While soybean margins will likely be weak in the near term, the market fundamentals of corn will support strong corn handling margins. Additionally, wheat margins will be strong as elevators benefit from healthy carry on old grain blended with this year's quality crop.

Futures market carry will incentivize storage of these large crops, while basis will likely strengthen for corn and wheat. It is unclear how much basis appreciation soybeans will see amid weak demand and a record crop.

The keys to watch in the year ahead will be for any resolution to the trade dispute as well as the South American crop. If the trade dispute is resolved, China will buy U.S. soybeans again, but they are unlikely to return to the same levels as before. New relationships were built during this disruption with non-U.S. suppliers. Chinese buyers will not switch back right away and may not return to previous levels for several years.

Brazil is likely to have a huge soybean crop in 2019, and Brazil's corn crop is projected to rebound from last year's weak production due to dry weather. Additionally, Argentina is unlikely to repeat last year's drought-reduced production levels. As the exact size of South America's production is revealed in the months ahead, markets will respond. A larger than expected crop will widen the carry and mute any basis appreciation, and vice versa if production falls short of projections.

While corn and wheat margins look solid on good carry and expected basis improvement, corn ownership may be difficult for some elevators to obtain. Additionally, soybean margins are uncertain for the year ahead. Elevators are confident they will make a margin on them, but the question is when. Trade, logistics, and export competitor production will be major factors impacting margins going forward. ■

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