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Who Will Own the Grain? Elevators Eye Improved Prospects

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Inside…

Key Points:

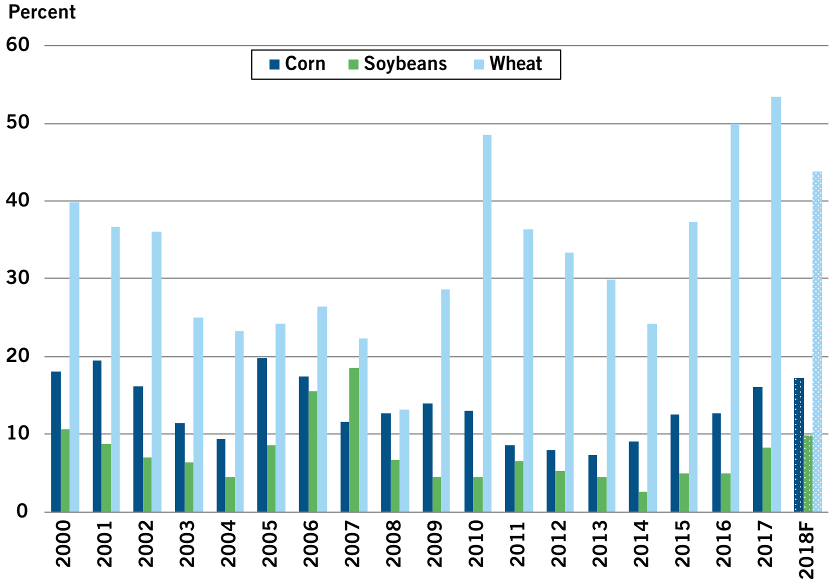
- Opportunities from significant futures market carry, weak harvest basis, and low transportation rates point to improved margins for grain elevators this year.
- Areas in the Western Corn Belt and Western Plains will see significant storage shortages, while some areas of the Northern Plains will see surpluses from a smaller spring wheat harvest.
- Good carry will incentivize elevators to own and store wheat and corn this year. It may be more difficult for elevators to own corn as on-farm storage capacity grows and farmers sell later in the marketing year.
- A La Niña event developing in the Pacific may limit Brazilian corn and soybean production and in turn squeeze carry starting in late spring or early summer 2018.
- Elevators will seek to capitalize on weak harvest basis that strengthens through the year, in contrast to last year's low and steady basis.
- Barge rates are in line with historical averages and secondary railcar bids/offers remain low year-over-year and compared to historic averages.

Overview

The 2018 crop year is likely to offer much better prospects to elevators than producers. Wide carry in futures markets, weak harvest basis, and low transportation rates should provide opportunities for grain elevators to secure healthy margins. A wet fall in the Eastern Corn Belt and Northern Plains will also improve drying revenue in these areas. Demand growth is critical to reduce large stocks and support appreciating basis.

Storage will come up short in many areas of the Corn Belt and Plains this year with large carryover stocks and above average new crop production. With these large supplies, futures markets are providing significant returns to storage, especially for corn and wheat. Long-term carry for corn and soybeans may be threatened by Brazilian production issues as a La Niña begins to develop.

Exhibit 1: US Ending Stocks-Use Ratio



Source: USDA-NASS

Harvest basis around the country is weak in comparison to recent years due to large supplies. Many elevators are looking for basis to strengthen this year as end users work through stocks in the first-half of the year. However, marketing decisions by farmers in the face of low prices will play an important factor in corn basis appreciation and profitability. Exports continue to play an important role, but are unlikely to post records this year as they revert to more normal levels amid smaller corn and wheat harvests in the U.S. and large grain surpluses overseas. A larger than expected dip in export demand may drag down domestic basis.

Storage

Elevators are looking forward to profiting on grain storage in the year ahead. Vast ending stocks and large new-crop production have created an attractive carry in futures markets, particularly for wheat. These will provide elevators with returns to storage if they can find room to store grain and gain ownership of it.

U.S. ending stocks for corn and soybeans are currently estimated to be the largest since 1987/88 and 2006/07, respectively. While corn and soybeans notched record use during 2016/17, the respective stocks-use ratios are manageable at just north of 17 percent for corn and just under 10 percent for soybeans. (*See Exhibit 1.*) The supply situation for wheat, however, remains more burdensome with large stocks expected to continue weighing on the market in the year ahead. Many elevators in the Southern Plains have wheat in long-term storage from 2015. US wheat stocks as of Sept. 1 are lower year-over-year from a sharp decrease in acreage. Nonetheless, the 2016/17 stocks-use ratio remained above an ample 50 percent, with the 2017/18 stocks-use ratio forecast to drop only slightly to 44 percent.

While some regions of the country will enjoy a surplus of storage, other regions will experience storage shortages. (*See Exhibit 2.*) Elevators in the Western Corn Belt and plains, especially Nebraska, Iowa and Kansas, are likely to feel this squeeze. The slow harvest this year spread out the harvest rush to put grain in storage. However, with big incentives to store, it is unlikely that this made a significant dent in the shortage. This This forces elevators to rely on temporary storage like bunkers and ground piles for potentially long periods of time in search for returns to storage. In contrast, storage surplus in some areas of the Northern Plains from a weak spring wheat harvest and lower corn and soybean production compared to last year's bumper crops may weigh on profits because of lower throughput.

Carry

The futures carry has moved wider this fall on large production expectations. Weather concerns tightened the carry for wheat and soybeans during the early summer months before widening through the end of the summer. (*See Exhibit 3.*) The carry offered by futures markets for Kansas City (KC) and Chicago (Chi) wheat currently approach the full cost of carry for many elevators with

storage costs of 5 cents/bushel/month[1]. However, when CME variable storage rates (VSR) are used, this full cost of carry drops significantly. The carry for Minneapolis (MGX) spring wheat and corn is hovering around 65 percent of full carry. Soybean carry is around 60 percent of full carry. Many elevators will look to gain ownership and store wheat and corn with their relative carry advantage over soybeans.

[1]Full carry is calculated assuming a 5 cents/bu/mo storage cost for corn, soybeans, SRW wheat, and HRW wheat. HRS wheat uses a storage rate of 6.9 cents/bu/mo. The prime rate as reported by the Wall Street Journal is used as the interest rate.

Soybeans would typically move fast with front-loaded export demand. USDA currently projects a year-over-year increase in exports, however, total export commitments are running at 85 percent compared to last year. This looks to be a temporary delay as Brazilian farmers were slow to sell soybeans due to low prices and a relatively strong Brazilian real this spring and early summer. This pushed more Brazilian export sales later in the year and into the traditional U.S. soybean export season. As the Brazilian real has weakened through September and October, exports from Brazil continued to China. However, as Brazil's supplies shrink and with expectations of a smaller Brazilian soybean crop harvested in spring 2018, soybean exports from the U.S. should see a significant uptick this winter and spring.

Exhibit 2: Grain Storage Needs and Capacity

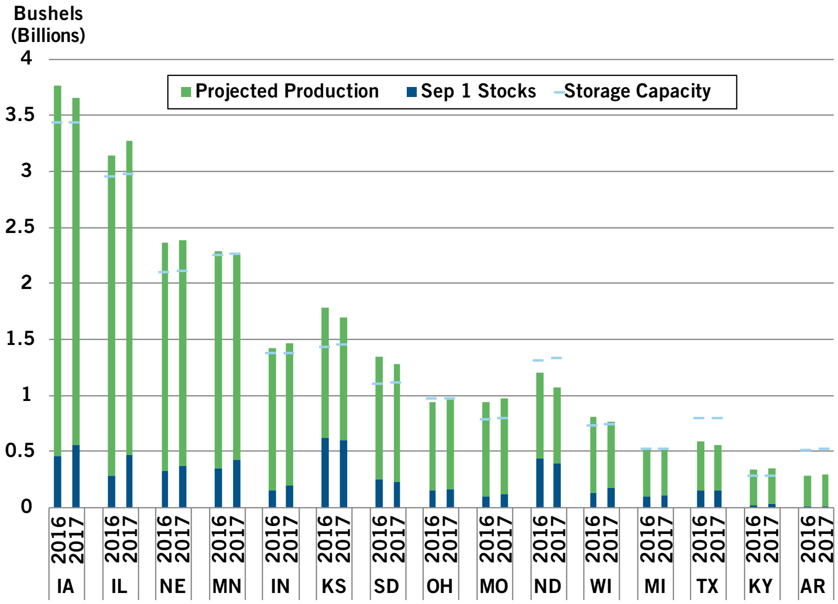
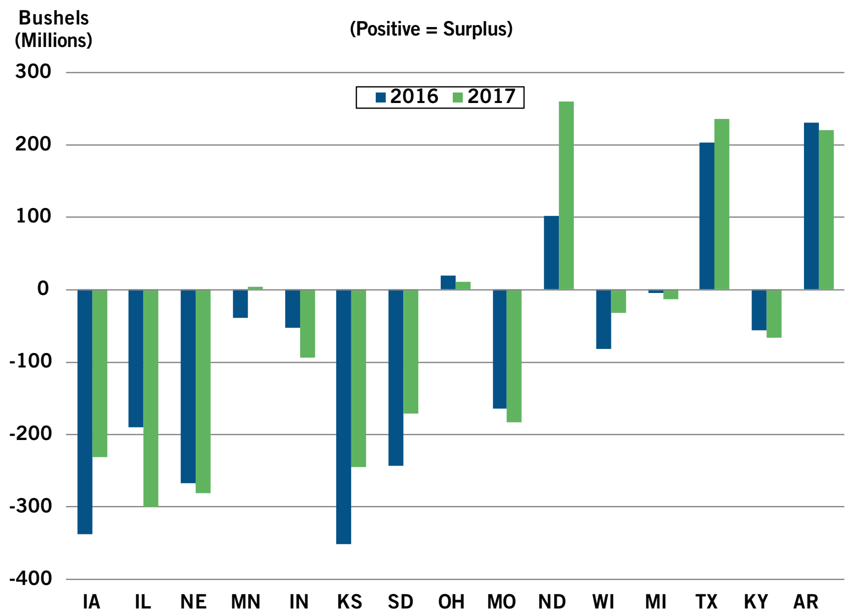


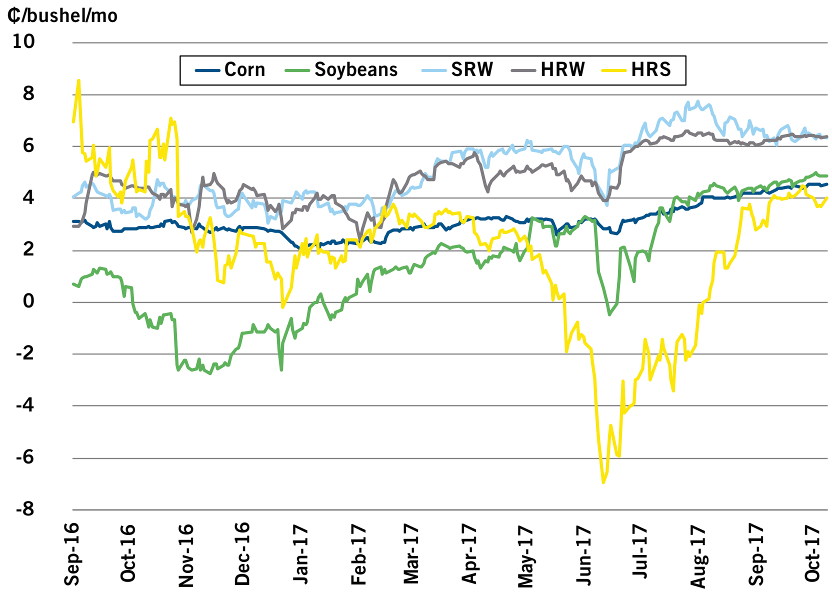
Exhibit 2b: Grain Storage Surplus/Shortage



Source: USDA-NASS

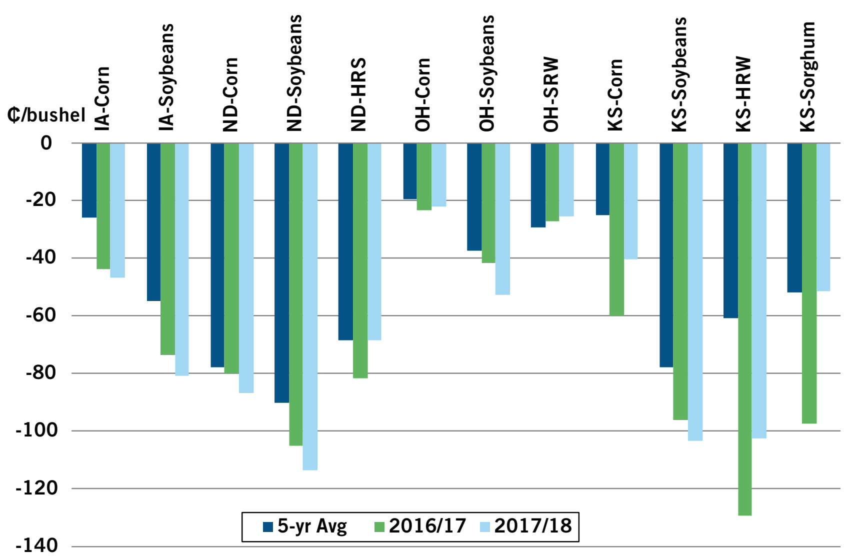
Production issues in South America could compress the carry for corn and soybeans moving into 2018. A weak La Niña has developed in the Pacific Ocean, and NOAA pegs the probability for it to continue through the winter at 65-75 percent. As La Niña conditions persist, look for improved U.S. export potential as Brazilian production may decline, particularly in southern Brazil and northern Argentina where conditions typically turn dry during La Niña. Any decline in production would put upward pressure on

Exhibit 3: Futures Carry



Source: CME Group; Minneapolis Grain Exchange

Exhibit 4: Historical October Basis



Source: Bloomberg

Note: Basis for the nearby cash bid.

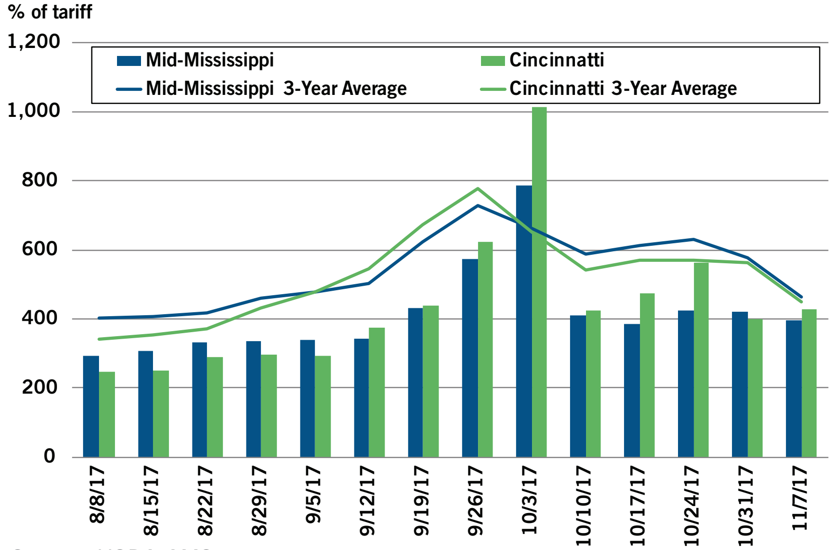
prices by mid-2018 as Brazil completes its soybean and Safrinha corn harvests in late-spring and mid-summer, respectively. This would hurt carry only for the few remaining months of the 2018 crop year.

Domestically, KC hard red winter (HRW) contracts are shifting to VSR in March to address non-convergence between futures and cash markets. It is unlikely that this change will impact country elevators taking-in or storing HRW wheat directly as they will not take physical delivery of the contracts. However, the switch to VSR may slightly increase the carry in deferred KC HRW futures contracts if the price of storage set by CME increases. This increase in carry is caused by the decline of nearby futures prices to meet cash prices as the market value of storage is disentangled from the nearby futures price.

Meanwhile, as Southern Hemisphere winter wheat crops are harvested, wheat carry may tighten incrementally in the near term due to adverse growing conditions in Australia and Argentina. Both are currently projected to have smaller crops this year, so upward pressure on front-end futures prices would need to come from new and worsening harvest updates. However, the forecasts for growing wheat ending stocks for 2017/18 provide support for wide carry well into 2018.

Grain elevators can only profit on futures carry if they own the grain. In the corn market especially, ownership can be an issue with farmers that are reluctant sellers. In recent years, farmers have been selling corn later in the marketing year in the hopes of a market rally. Moreover, farmers do not significantly catch up on marketing their grain until the last three months of the crop year. If farmers continue to hold back on corn sales, the futures carry may end up being less beneficial than it currently appears. However, elevators may recuperate that lost carry income in delayed-price contracts or storage fees.

Exhibit 5: Barge Rates at Select Locations on US Waterways



Source: USDA-AMS

Basis

Last year, basis around the country sank to harvest lows and stayed there due to tremendous supply from record new-crop production. Thanks to significant carryover supplies from the 2016-17 crop with yet another sizable fall crop following behind, corn and soybean basis across the nation remains lower than the previous 5-year averages. (*See Exhibit 4.*) In most areas, corn and soybean basis is tracking lower or approximately the same as last year. Large stocks and strong production dominate demand growth in these areas. Wheat basis is stronger compared to last year across all major regions on smaller winter wheat and spring wheat crops year-over-year.

Unlike most areas of the country, basis in the Western Plains started stronger for all crops except soybeans this year compared to last year. For corn, growing demand from the livestock sector is pushing basis upward as cattle and hog numbers continue to increase. For wheat, the story is supply reduction with stocks finally shrinking with lower production amid steady export demand. However, basis in the Western Plains remains weak at levels well below 5-year averages for each crop.

Elevators locking in basis at this stage are likely in good shape as basis is at or near harvest lows. Basis looks to strengthen this year as processors and ethanol plants work through grain stocks early in the year. However, significant gains in futures prices or another bumper crop in 2018/19 may keep basis levels from strengthening. Increased on-farm storage capacity and local end-user demand growth may also restrict basis appreciation this year as much of this grain will flow straight from farmer bins to local end-users. Look for this dynamic to play a potentially large role this year with farmers hesitant to sell grain at low prices and farmers' ability to store grain improving this year from smaller crops and more storage.

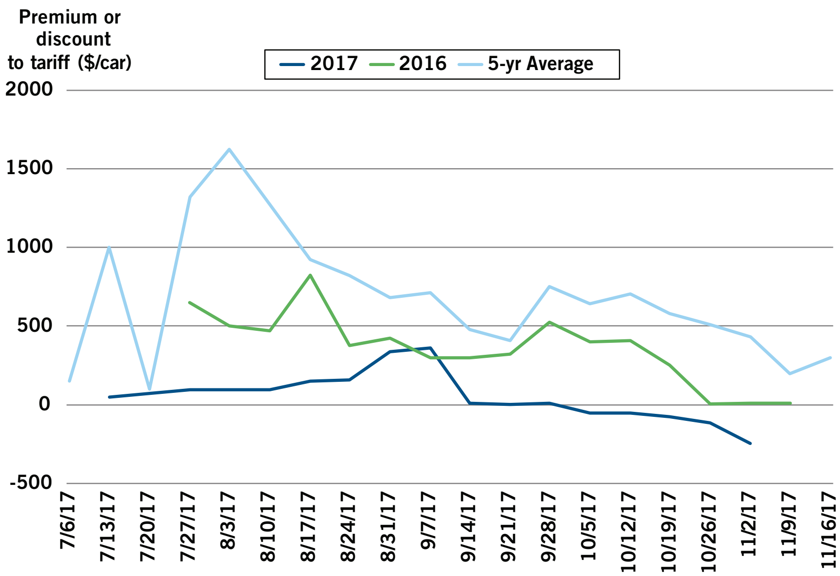
Transportation

In the absence of major weather events, weak transportation rates will largely remain a blessing for grain merchandisers in the year ahead. A significant uptick in global economic activity could push rates higher. However, a strong, global economic recovery remains elusive.

Barge rates have settled after skyrocketing in early October when lock repairs compounded low water conditions on the Illinois, Mississippi, and Ohio rivers. (*See Exhibit 5.*) Barge rates doubled week-over-week on parts of the Mississippi river with interior basis bearing the brunt of soaring barge rates. Basis plummeted 60 cents on soybeans and 30 cents on corn in just two weeks at some terminal elevators along the Ohio and Mississippi rivers. River conditions improved after early harvest rainfall in the Midwest, bringing barge rates down precipitously. Barge rates are now in line with the 3-year average.

Grain merchandisers will also benefit from ample railcar availability due to decreased shipments in the energy sector, specifically coal and petroleum. Bids/offers for railcars on the secondary market flat-lined at levels well below last year and the 3-year average beginning in September. (*See Exhibit 6.*) Rail rates for shuttle cars for November delivery in the secondary market are trading at nearly $250 below tariff compared to trading at tariff last year and an average of $430 above tariff over the last five years.

Exhibit 6: Bids/Offers for Shuttle Cars in November, SecondaryMarket



Source: USDA-AMS

Low bids/offers for railcars on the secondary market are driven by continued low demand for rail cars overall and lower demand for grain cars, specifically. Calendar year-to-date carload volume exceeds 2016, but remains low compared to previous years and low in the important coal and petroleum sectors. For grain cars specifically, grain car demand is low due to below-record production and a soft start to exports in the 2017/18 marketing year. Rail deliveries to ports in October were only three-quarters of last year's. Grain car loadings are depressed from last year's levels (down 10 percent) and the 3-year average (down 6 percent).

Grain in temporary storage like bunkers and ground piles is slow to move and more complicated to load, so railcar availability will not play a major role in the short-term. However, the availability of railcars will enable elevators with rail access to take advantage of fast-developing arbitrage opportunities throughout the marketing year.

On the road, diesel prices are up 17 percent from last year, increasing trucking costs and stressing interior elevators lacking rail or barge access. Hurricane Harvey contributed to a spike in diesel prices, which were already higher year-over-year since the beginning of December 2016. Although there are agricultural exemptions from the new U.S. Department of Transportation Electronic Logging Device (ELD) regulations, some elevators will need to comply if they truck grain outside of the state or more than 150 miles from their location across state lines. If the elevator contracts this service they may face increased fees despite the agricultural exemptions, if the company they contract faces an increased compliance cost.

Conclusions

Many grain elevators are projecting solid margin growth for the year ahead. Huge stocks and large new-crop production have widened the futures carry through 2018. Elevators will look to move soybeans faster than corn and wheat because of a weaker carry. Farmer marketing decisions will be a key factor for corn as farmers look at a fourth consecutive year of low prices and depressed incomes. Elevators may have a difficult time taking advantage of a wider corn carry and strengthening basis if farmers continue to hold onto corn longer into the marketing year.

Low transportation rates make moving grain profitable when conditions incentivize sales over storage. This is especially the case with cheap railcars due to low overall demand and weaker year-over-year grain demand.

Ample domestic grain supplies have weakened basis to historically low levels. Demand must now step up to work through supply and strengthen basis. Corn and soybean exports for the year ahead appear to be reverting to the mean after record highs last year. Any additional decrease in exports will put a damper on basis as more grain will stay in domestic markets. However, with strong domestic demand growth and a tightening of global corn and soybean balance sheets on a stocks-use basis, many elevators should benefit from strengthening basis this year and an improvement in margins year-over-year.

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