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Can the Cage-Free Commitments be Met?

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Inside…

Key Points:

- The avian flu outbreak in 2015 caused egg prices to surge and incentivized egg producers to boost output. Coincidentally, major food companies pledged to use cage-free eggs by 2025 just as egg prices went into freefall. Since then, cage-free production has surged amidst a surplus of less expensive, conventionally produced eggs.
- Cage-free retail prices have swung wildly over the past year. The historical average cage-free premium is 120 percent. During the egg supply shortage, that premium fell to zero. As conventional egg supplies ballooned, the premium peaked at over 250 percent. The premium has fallen in 2017, and is expected to trend toward normalization in 2018.
- The oversupply of conventional table eggs has depressed demand for higher priced cage-free eggs – a problem that is expected to last several more months until the conventional supply is drawn down.
- To fully meet food company cage-free pledges by 2025, nearly three quarters of the U.S. layer flock would need to be transitioned. The estimated cost to the industry would be $10 billion.
- Egg producers will be more cautious in further transitioning to cage-free, which will now be driven by fundamental consumer demand rather than pledges made by retailers and food manufacturers. Cage-free production will adjust lower in the near-term as the market continues to seek equilibrium.

Introduction

U.S. egg production, pricing and producer profitability have been highly volatile over the last two years. The Highly Pathogenic Avian Influenza (HPAI) outbreak in 2015 caused egg prices to surge, incentivizing egg producers to ramp up production and quickly replace the laying hens lost to HPAI. Coincidentally, during the second half of 2015 and into 2016, major food companies pledged to transition to higher cost cage-free production by the year 2025 just as egg prices went into freefall. The result has been an increasing supply of cage-free production amidst a surplus of less expensive, conventionally produced eggs.

Exhibit 1: Cage-Free Layer Flock

Year	2010	2011	2012	2013	2014	2015	2016	2017	2025F
Cage-Free Layers (Million)	12.2	15.2	16.9	17.1	17.2	24.3	37.6	49.4	223
% of Total Layer Flock	4.4	5.4	6	5.9	5.7	8.7	11.8	15.6	72.0

Source: USDA-AMS, United Egg Producers

To date, 16 percent of the layer flock is estimated to be classified as cage-free, up from 4 percent in 2010. (*See Exhibit 1.*) The ramp up for cage-free production began in 2015 in response to end user pledges. However, during 2016 and 2017, producers with cost-plus arrangements and fixed priced contracts were able to capture the premium and market eggs as cage-free. All others, with more exposure to the spot market and waning demand for cage-free, likely had to sell cage-free production into the lower valued conventional markets and margins suffered. Going forward, supply will continue to grow, likely by double digit annual increases. According to industry estimates, 223 million cage-free hens would be required to fully meet the current food company pledges. However, the lofty goal of converting nearly two thirds of the layer flock to cage free by 2025 is unlikely.

In the near term, total table egg production is expected to return to historical growth patterns as low egg prices pare back production and producer profitability returns to normal levels. This will allow the price premium for cage-free eggs to recover to historical averages and help facilitate the transition in the coming years as a reduction in cage-free egg production brings supply into alignment with true demand.

Less expensive, abundant supplies of conventionally produced eggs, and the memory of negative margins in 2016, have made producers hesitant to make investments to transition to high-cost cage-free eggs. However, not all cage-free egg producers have suffered equally in the transition. Producers that have negotiated forward marketing arrangements with major food companies have gained a buffer from price volatility and are leading the way in growing the cage-free supply. Marketing arrangements and less exposure to the spot market will lead to more stable and predictable returns long term and ultimately allow companies to capture a value-added premium in this specialty category.

Unrealistic Pledges

According to the United Egg Producers (UEP), 229 major food companies have pledged to market all or a significant portion of their eggs as cage-free by 2025. These companies include retail grocers, restaurant operators, foodservice distributors, food processors and major travel companies. These commitments were driven by animal welfare group efforts as well as perceived competitive and social pressures to make the pledge.

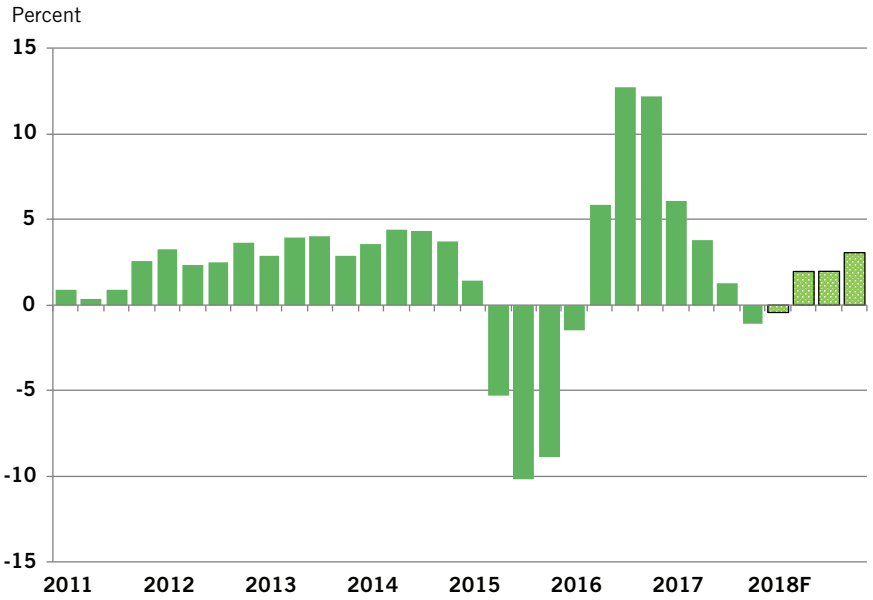
In response, many producers have transitioned to cage-free. Nearly a third of the cage-free flock has also being certified as organic. In an effort to maximize marketing claims and reduce overall retail stock keeping units, or sku's, these two attributes are increasingly marketed as one product line.

Current estimates indicate that in order to fully meet food company commitments by 2025, a total of 223 million layers would need to be cage-free in the U.S. – about 72 percent of the entire layer flock. The estimated cost to the industry to make the transition is $10 billion according to UEP, with most costs tied to converting existing layer houses or constructing new layer houses.

However, financing these investments can be difficult due to the current abundant supply of conventional eggs and lackluster pricing. HPAI led to year-over-year (YoY) production declines for four consecutive quarters in 2015 and early 2016. (*See Exhibit 2.*) The supply shortage resulted in product rationing and price spikes. Producer profitability soared for those producers largely unnaffected by the HPAI outbreak, incentivizing flock rebuilding efforts and greater overall output throughout 2017.

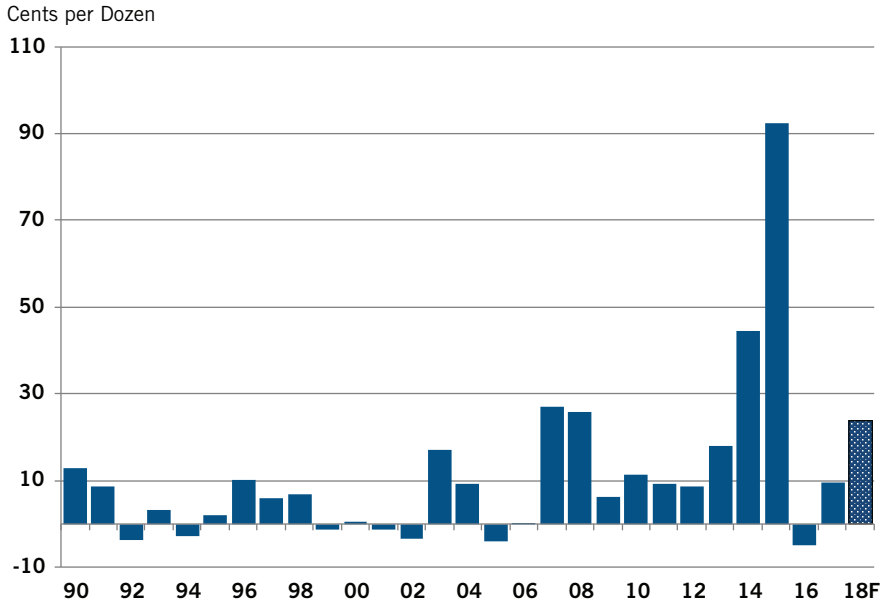
The oversupply of conventional table eggs has significantly depressed demand for higher priced cage-free eggs – a problem that is expected to last several more months until the conventional supply is drawn down. Negative margins in 2016 slowed the supply growth of cage-free eggs, which should finally stabilize production, producer profitability and retail egg value by late 2018. (*See Exhibit 3.*)

Exhibit 2: U.S. Table Egg Production Growth



Source: USDA-NASS

Exhibit 3: U.S. Cartoned Egg Profitability Series

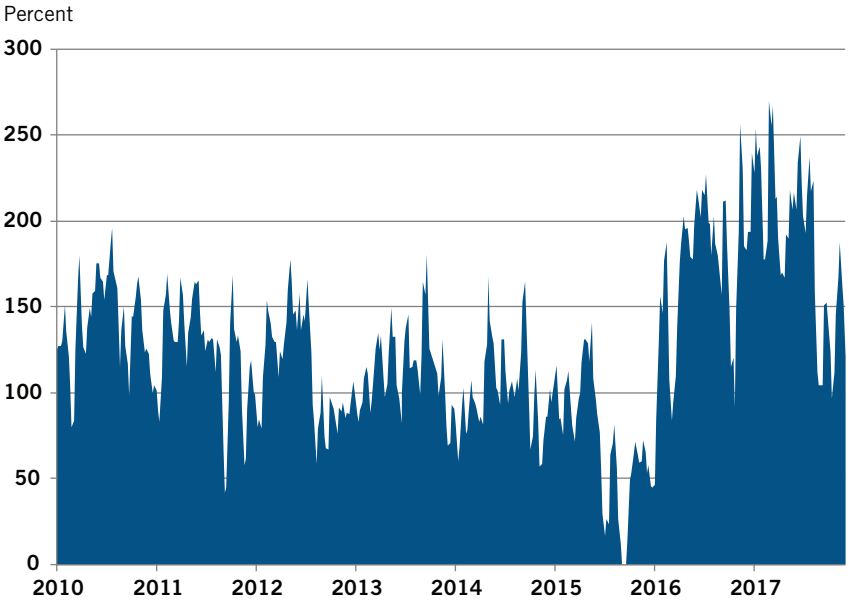


Source: EMI Analytics Model

Price Premium Expected to Erode

Cage-free retail prices have swung wildly over the past year. Prior to the HPAI aftermath, the long term average cage-free premium was 120 percent. (*See Exhibit 4.*) During the peak of supply shortages, that premium dissipated, and for a short period of time, cage-free and conventional egg prices were at par. As egg supplies ballooned, retailers aggressively featured low-priced eggs which cannibalized demand for cage-free eggs. The cage-free premium earlier this year peaked at over 250 percent – an unsustainable premium that was bound for correction. The premium has steadily fallen in the second half of 2017, and is expected to continue trending toward normalization in 2018.

Exhibit 4: Retail Cage-Free Egg Premium versus Conventional



Source: USDA-AMS, CoBank ACB Analysis

Hastening the correction in premium is the return of demand among food manufacturers. During the supply shortages of 2015-16, high egg prices enticed food manufacturing companies to seek out cheaper alternatives to eggs. But because of eggs' superior attributes as an ingredient and the steep correction in prices, manufacturers have been reintroducing eggs into formulations. This shift should support wholesale values and further compress the price spread between conventional and cage-free eggs.

Egg export momentum is also helping to reduce supply and will support wholesale values in 2018. Total U.S. egg exports (table eggs plus liquid egg products in shell equivalent) increased 32 percent YoY in September, and show no sign of slowing down in the year ahead.

Producers that have successfully aligned themselves with major end users via marketing arrangements will lead the way toward cage-free production growth in 2018. Cost-plus arrangements and fixed pricing contracts will allow producers to hedge inputs and forecast more stable margins as the spread in the spot market between conventional and cage-free eggs narrows. Less exposure to the spot market, steadier premiums and more guaranteed demand will enhance producers' willingness to invest in cage-free facilities.

Supply Correction

The rebalancing of the market will allow the cage-free transition to be driven by consumer demand rather than pledges made by retailers and food manufacturers. As a result, large egg producers are taking a more cautious approach to cage-free expansion by focusing on long-term growth potential and market premium expectations. Public statements by the biggest producers indicate that cage-free production will adjust downward in the near-term as the market continues to seek equilibrium. Producers are also positioning themselves to boost cage-free production capacity should the fundamental demand dictate the need.

Pending animal welfare legislation also has the potential to change the demand profile for cage-free eggs in the coming years. Proposition 2 in California drove down egg production in the state and subsequently raised prices to end users and consumers. While Prop 2 only increased the cage size requirements for layers, pending legislation for complete cage-free requirements is on the table for 2018. Should the state government approve this measure, additional complexity and costs would be added into the overall U.S. layer industry as producers adjust to meet the new requirements in the massive California consumer market. Previous Prop 2 production systems would become obsolete in the state of California, and producers would be forced to convert to cage-free systems.

Producers in other states who currently comply with Prop 2 production standards would also be forced to make the decision between converting to cage-free or reverting back to conventional production.

Conclusion

The U.S. egg industry has experienced significant HPAI-related volatility in recent years, creating unforeseen dynamics in a push to grow cage-free egg production. Normalization is expected to return to the market in the form of production growth, producer profitability and specialty egg premiums.

However, in light of recent volatility, egg producers will be more cautious about investing to grow the cage-free supply. Output is unlikely to follow the growth trajectory needed to meet the stated commitments by 2025, and instead will mirror actual end user demand.

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