Production Contract Pay: 'New Math' for Contract Growers

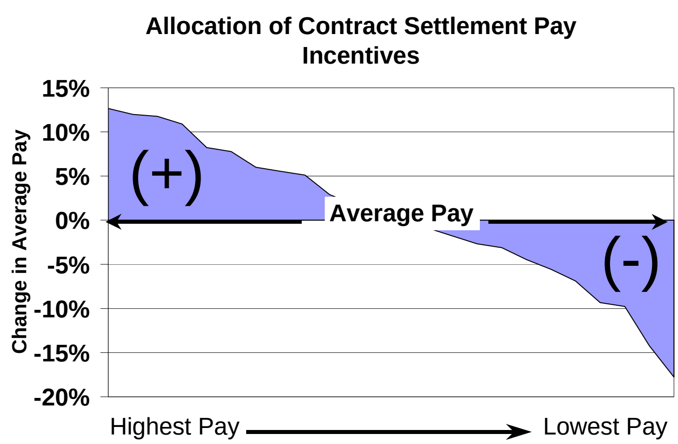
Mark Jenner, Economist[1]

October 21, 2002

Farmers and ranchers are concerned about the impacts of packer concentration and changes in market structures. They want a fair market price. Contract broiler grower pay has been unrelated to competitive market prices for a long time. Broiler companies set their own price that they will pay growers. It is a fixed rate unrelated to the retail price of chicken. The greater problem is that grower pay is not based on factors that growers control. Benefits of production contract relationships may appeal to growers and packers of beef and pork, but the economic costs of contract settlement payments are still not clearly understood by contract broiler growers.

Production Without an Upstream Economic Incentive. Broiler grower contract settlement pay does not change with the market price for broiler meat. There is no farm-to-retail price spread. The USDA constructs a farm value of broiler production by subtracting the estimated costs to the companies for production and processing from the wholesale prices. The price USDA reported for 2000 for the farm value of production of broilers was $0.336 per pound. Broiler companies set a different price that they pay contract growers, such as $0.045 per pound, that they treat as a line item cost of their production budget. Broiler companies keep their total cost of production low by making adjustments across all the costs of production (genetics, feed, transportation, labor, and the settlements to contract growers). There is no market incentive to raise the base contract settlement price that contract growers are paid.

Companies impose competition on contract growers by constructing a performance rank within the flocks that are processed each week. Companies view the ranking as a measure of grower performance. Growers view the ranking as arbitrary and confusing. They are both right, but the settlement rank reflects individual flock performance better than it does grower performance[2].



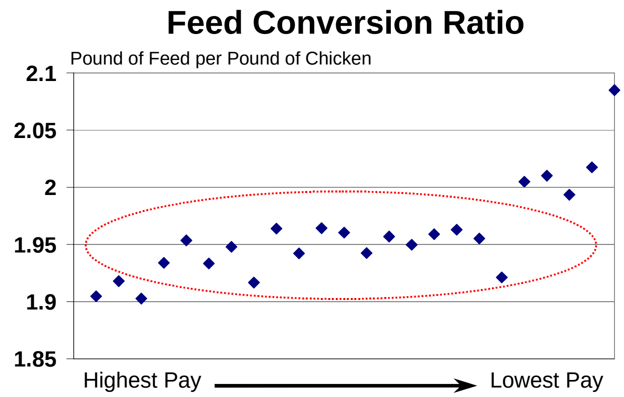
The chart on the right shows how the settlement pay for broiler growers within a group is shifted away from the lowest ranking growers to the highest-ranking growers. Expected revenue from growers ranking poorly (on right) is subtracted and used as 'incentive pay' to growers ranking better (on left). "Average pay" is the value used by the companies, growers and lenders as a budgeting tool to manage financial commitments. It is also an amount no one receives. Half the growers do receive an amount greater than average pay. The other half of the growers receives below average pay.

---

[1] Mark Jenner was a staff economist with the American Farm Bureau Federation when this paper was written.

[2] *Does Flock Performance Rank = Grower Performance Rank? Mark Jenner. AFBF. April 2002.*

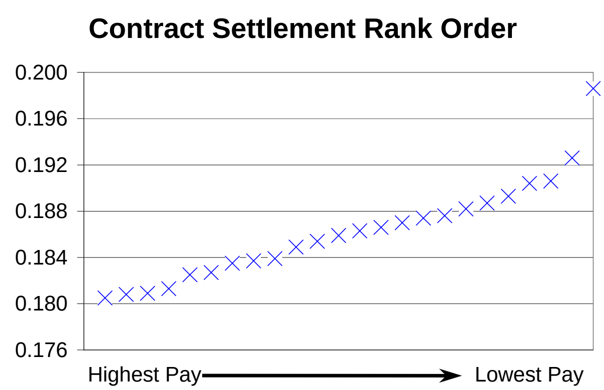
Efficiency and Flock Performance. Contract settlement payments are based in part on feed conversion ratios. This is a good measure of efficiency (pound of feed used for each pound of chicken grown). The chart of feed conversion ratios indicates that 80 percent of the growers were able to turn less than 2 pounds of feed into each pound of chicken produced. This is good for the companies and good for the growers. This is not the only factor used to distribute the settlement pay incentives. The companies use other measures to impose a distribution that defines the rank.



Constructing a Grower Rank. The companies want a definitive rank order, so they construct one. This is accomplished by building on the feed conversion rate discussed above. The size of the flock that is placed is included in the calculation. The first factor (rate of gain/bird) of the equation below actually makes that happen. Companies can increase the impact of the gain/bird factor by simply multiplying both factors by different numbers. This 'multiplier' number (f) is called different things (points, costs, factors, etc.). The multiplier for the rate-of-gain tends to be twice as big as the multiplier for the feed-conversion-ratio. The actual formulas look much different than what is shown here, but these basic relationships are common across companies.

$$\begin{matrix} \textit{Rank Order} = & \dfrac{f(\textit{Birds per Flock})}{\textit{Pounds of Chicken}} & + & \dfrac{f(\textit{Pounds of Feed})}{\textit{Pounds of Chicken}} \\ & [\textbf{\textit{Rate of gain/bird}}] & & [\textbf{\textit{Feed conversion ratio}}] \end{matrix}$$

The graph above shows most growers efficiently convert feed into chicken. The graph below shows how the rate of gain-per-bird numbers, and other multipliers, shift the feed conversion ratio. Using this gain-per-bird factor gives the heavier, faster growing birds an advantage in the rank. Dutiful growers will grow birds faster, but the best growers can not overcome company influences like genetics, chick quality, same-sex flocks, age of birds and different feed rations.



The settlement rank is constructed to allocate the incentives across the fixed, average pay a company will pay a grower. It does not credit the majority of growers with the efficient work they are doing. So growers get docked in pay for management choices made by the companies.

The Bottom Line. Production contracts can benefit growers and companies if the incentives benefit both parties. Efficient incentives can be *direct* (such as a share of company success) or *indirect* (that dovetail into upstream successes). Spot prices are not necessary for producers to be paid fairly, but for contract production to ever become equitable, compensation must be based on the specific efficiency achieved by growers based on factors they truly control.

biomassrules@markjenner.com