CHOICES
The magazine of food, farm, and resource issues
3rd Quarter 2015 • 30(3)

A publication of the Agricultural & Applied Economics Association

AAEA Agricultural & Applied Economics Association

Economics of Agricultural Contract Grower Protection Legislation

Steven Y. Wu and James MacDonald

JEL Codes: D02, D23, D86, L11, Q18
Keywords: Agricultural Contracts, Production Contracts, Grower Protection Legislation, Packers and Stockyard Act

Contract production has been controversial in the livestock, meat, and poultry sectors, with many farm activists alleging that the market power held by large processors combined with the use of contracts can be exploitive of growers. For example, The Rural Advancement Foundation (RAFI) website states that the production contracts is "…the mechanism for exploitation" used by large concentrated integrators.

A 2013 Pew Charitable Trust report focusing on the broiler sector, which is a sector that is nearly 100% vertically coordinated by contracts, highlights a number of issues with broiler production contracting (The Pew Charitable Trusts, 2013):

- Few growers are able to live solely on their income from the broiler business.
- Poultry contracts often stipulate with detail and precision the obligations of growers but leave the company with the discretion to change quantity commitments and grower equipment upgrade requirements.
- Growers are in heavy debt due to the need to finance equipment and buildings that meet the company's specifications.
- Regional concentration by a small number of buyers can be leveraged to lower prices paid to growers.

The concerns about concentration are not without merit. USDA's farm-level data suggest that a significant number of growers cannot contract with more than a single integrator even when more than one integrator operates in their area and that fees received by growers tend to be lower for growers in markets with fewer integrators (MacDonald, 2014). This is not surprising as markets can be highly localized, particularly for poultry where economies of scale in processing is important, birds cannot travel far, and environmental concerns limit the density of production to a geographic location.

At the same time, greater concentration has also led to unprecedented efficiency gains. Larger processing plants are able to leverage economies of scale, though the benefits of scale can be realized only if there is consistent flow of animals and birds into the plants (MacDonald and McBride, 2009). Thus, vertical coordination via the use of contracts complement large plants by ensuring a consistent flow of uniform animals into the plants. Consequently, the same system that has been seen as unfair to growers has led to lower production costs, which has likely benefited consumers in the form of lower prices, consistent quality, and abundance.

How do we reconcile these issues and how should we go about evaluating recent policy proposals to regulate the contracting process?

Economic Concepts and the Packers and Stockyard Act

The Packers and Stockyard Act of 1921(PSA) is the primary legislation for regulating competition and trade practices in the livestock, meat, and poultry industries. Sections 202(a) and (b) of the PSA include provisions that are meant to discourage actions that can be considered unfair, deceptive or fraudulent, while Sections 202(c)-(e) are antitrust-like limits on behaviors that are monopolistic in nature and can restrict competition in the marketplace.

The provisions related to "unfair, deceptive or fraudulent" behavior refers to actions that are not necessarily anticompetitive but can cause harm to specific parties. Examples include practices such as falsifying measurements or weighing of birds or inputs, misleading promises about income prospects, false record keeping, discriminating or providing unfair advantages to any person without business justification.

On the other hand, the antitrust provisions refer to monopolistic—large seller—or monopsonistic—large buyer—actions that can harm an entire industry by restraining commerce. To understand this point, consider the classic monopsony model used by economists, which is a standard imperfect competition model that conceptualizes the behavior of a large buyer. Because the large buyers have a large market share, they drive up the market price when it purchases a high volume so it will restrict volume to keep prices low. Therefore, commerce is restrained relative to the counterfactual of perfect competition. The restraint of commerce is the key inefficiency created by imperfect competition and is a crucial aspect of the injury to competition element of antitrust policy. Thus, antitrust language often includes references to the "restraint of commerce." The monopsony model also predicts that a large buyer can hurt suppliers by purchasing less and paying less than what would occur in a competitive situation.

An important point to note is that imperfect competition is considered a market imperfection by economists. This is because the firm's objective of maximizing profit is no longer aligned with the economic goals of society, which is to create the most value-added. In this situation, the monopsonist will restrict output to maximize profit even when expanding output would create more economic value for society.

From a policy perspective, if imperfect competition was the only market imperfection, then policy prescriptions should focus on enhancing competition; then the implications would be clear cut. However, market imperfections often do not exist in isolation and when other imperfections also exist, then economic analysis of policy interventions can become substantially more complicated. It is well known among economists that, when there is more than one market imperfection, it becomes difficult to anticipate the consequences of policy interventions.

Agency Problems, Incomplete Contracts, and Relationship-Specific Investments

Agency problems is an economic term used to describe the situation when one party produces or works on behalf of another party but the two parties have some conflicts of interest. In agricultural contracting there is potential for agency problems because the company may want high quality and high volume at the lowest prices, whereas producing high quality and volume is expensive for growers so they want higher prices.

Typically, when everything is transparent, there is not a problem since parties can agree to exchange the desired quality and quantity at prices that reflect the value of the good, which is typical of well-functioning markets. This transparency ensures that buyers get what they pay for and sellers are compensated for producing higher volume or quality.

However, when some important aspects of trade is unobservable or cannot be verified by a third-party, agency problems can arise. For example, if a buyer does not know the quality of the product that she is purchasing, then she may be reluctant to purchase the product unless it is dramatically discounted. On the other hand, sellers of high quality goods would not sell at discounted prices, hence, either trade is substantially reduced or only low quality products are traded.

Similarly, if trade takes time to complete—which is the case in agriculture due to biological cycles—and the quality of the product will depend on the efforts and investments made by growers throughout the production cycle, then incentives must be provided to growers to make the investments to assure quality. In addition, growers have to trust that the integrator company will not renege on their promises regarding compensation or other expectations of growers. If not, growers will either reject the contract or will not undertake expensive investments to enhance quality or assure adequate supply. Agency problems have similar effects as imperfect competition since it can restrain the quality and quantity of trade.

Contracts are mechanisms for preventing agency problems since a well-designed contract includes incentive pay or other rewards and punishments to align interests between processors and growers. For instance, production contracts include bonuses and deducts based on settlement costs. Processing tomato contracts include quality and seasonal premiums. Ideally, all promises, obligations, and contingencies relevant to the transaction should be contained in the contract and verifiable by a third-party. Then all provisions in a contract are legally enforceable. These are referred to as complete contracts. Complete contracts are treated as benchmarks by economists as they can minimize the damaging effects of agency problems.

In practice, most contracts are not complete as it is often prohibitively expensive and complex to include all relevant provisions and ensure that they are third-party verifiable. Incomplete contracts arise when terms are omitted or included but are difficult to enforce legally due to

verifiability problems. In either case, at least one party will have discretionary latitude to deviate from expectations in the course of the contracting relationship. For example, many agricultural contracts do not specify the exact volume or delivery schedule over the course of the harvest season. Production contracts often do not guarantee the number of flocks that a grower will receive even with long-term contracts (MacDonald, 2014). The type and frequency of upgrades to existing equipment and animal housing facilities are often left to the discretion of the processor.

Even when contracts are incomplete, contracts can still be self-enforcing. That is, the contracting parties can form handshake agreements which are "enforced" by the prospect of repeat business relationships. These types of informal agreements are known as relational contracts. Most contracts in practice are a hybrid of legalistic formal contracts combined with relational elements that are self-enforced through repeat transactions. However, it should be noted that self-enforcing contracts are theoretically not as effective as complete contracts for mitigating agency problems and thus incomplete contracts can be viewed as a form of imperfection in the contracting process.

Aside from incomplete contracts, there is another type of market imperfection created by relationship-specific investments. If a party has to make expensive investments that have more value within the relationship than outside the relationship, then the party risks being "held-up" later. This means that the non-investing party, knowing that it is costly for the investing party to switch to a different contracting partner after investing, will attempt to renegotiate the terms of the agreement in their favor. In other words, the relationship specific investments confer ex post market power to the non-investing party.

The idea that relationship-specific investments can create ex post market power is useful for understanding the ability of relational contracts to mitigate agency problems. A key to making relational contracts self-enforcing is that the contracting parties have to have relationship-specific gains from trade with each other. In other words, they must benefit from contracting with each other above and beyond what they can gain if they switched contracting partners. Relationship-specific gains from trade is what motivates the contracting parties to honor informal handshake agreements.

It should be clear that relationship-specific investments facilitate relational contracts by "locking-in" the investing party into the relationship. Once investments are made, the investing party has fewer options and therefore is less willing to renege on informal agreements. Hence, relationship-specific investments improve the power of relational contracts to mitigate agency problems in repeat trading environment. At the same time, relationship-specific investments can lead to very uneven distributional effects for growers which can be a major source of tension.

Putting it All Together

The combination of imperfect competition, agency problems, incomplete contracts, and ex post market power due to relationship-specific investments means that there are multiple trading imperfections. While each imperfection in isolation would negatively impact trading outcomes, it is possible that inefficiency will largely be mitigated, if not increased, when all of the imperfections are combined.

First, consider how the combination of agency problems and imperfect competition can mitigate the commerce restraining effects of monopsony power. Volume suppression under the standard monopsony model relies on the assumption that the monopsonist pay only a single uniform price. However, Vickers (1996) points out that firms with market power can engage in a variety of two-part pricing schemes. In fact, in order to resolve agency problems, incentives must be provided via two-part pricing schemes consisting of a base price and a bonus or deduct. Because resolving agency problems requires a non-uniform pricing scheme, it is quite possible for inefficiency to be smaller than what the standard monopsony model predicts.

Adding relationship-specific investments that create ex post market power may mitigate inefficiencies even further. As mentioned earlier, ex post market power, which increases relationship specific gains from trade, enhances the power of relational contracts to resolve agency problems.

Taken together, the multiple market imperfections can actually complement each other and the net effects may depart considerably from simple imperfect competition models of uniform pricing. Thus, tools based on the simple models of single market imperfections may be ineffective at detecting market power in agricultural contracting environments. This may explain the conclusion of a recent U.S. General Accounting Office (2009) report that economic studies have largely found little evidence of the exercise of market power in agricultural contracting environments. Thus, even in the presence of market power, it would be extremely difficult for researchers to detect "competitive harm."

Distributional Concerns

Even though agency problems and relationship-specific investments can complement imperfect competition in terms of incentive efficiency, the distribution of economic gains may not be favorable to growers. The reasoning is straightforward. In standard contract theory, there are usually two constraints that a contract designer must satisfy: (1) the participation

constraint to get growers to sign the contract and (2) the incentive compatibility constraint to provide growers with incentives to produce what the processor wants.

Typically, these two constraints conflict since providing stronger incentives reduces the attractiveness of the contract so that growers would be more reluctant to sign. This is because stronger incentives increase risk to growers and so compensation has to be raised. However, the combination of imperfect competition and relationship-specific investments can serve to relax both the incentive compatibility and participation constraints by lowering growers' outside options both before and after relationship-specific investments are made. In practice, this would imply that growers would be willing to settle for contracts that while highly efficient in terms of incentive provision, tend to be more risky and offer lower compensation.

The above logic can potentially explain some of the controversies in the poultry industry. Imperfect competition typically leads to lower compensation for suppliers which is consistent with complaints that growers are not able to live solely on their income from the broiler business. Relationship-specific investments also increase ex post market power for integrators which may explain the finding reported in MacDonald (2014) that integrators in concentrated markets appear to be making firmer commitments on duration, quantity or flock placements, and pay to new growers but not to existing growers.

This raises the question of why not all poultry contracts contain firm commitment regarding flock placements, future pay adjustments, and equipment and housing upgrade requirements. Within the context of incomplete contracts, Bernheim and Whinston (1998) have shown that one way to provide incentives is to leave oneself with discretionary flexibility rather than make upfront guarantees to the other party. In other words, if the integrator leaves itself with flexibility, the flexibility can be used to reward high performance or punish low performance. High levels of discretionary flexibility, however, are a double edged sword because the discretion can also be used to renege on promises. Thus, strong incentives also expose growers to counter-party risk. In principle, growers can demand either higher compensation to offset the risk, or more assurance of continued future business commitments—for example, guarantees of future flock placements. However, these demands are only credible when the grower has attractive options. Typically, new growers who have not made relationships-specific investments have more attractive options than existing growers.

Recent Attempts at Reform to Protect Growers

Apart from the PSA, in 2000, attorney generals from 16 states proposed a model legislation called the Producer Protection Act. This proposed legislation included a number of provisions including the requirement that contracts be written in plain language with clear disclosure of risks, allow producers three days of review, limit confidentiality provisions, provide growers with a priority lien for contract payments, and provide protections against early termination of contracts. In addition, there was a section that prohibits a list of "unfair practices" including coercing, retaliating or discriminating against growers who join producer associations, to provide false information to growers about their rights, to refuse to provide information about how grower compensation was determined, and to ban the use of tournament contracts.

With the exception of a few clauses, most of the provisions in the Producer Protection Act were never implemented. However, concerns about livestock industry concentration continued and the 2008 farm bill included stipulations to amend the PSA to offer greater protection to growers.

In accordance with the farm bill, the USDA Grain Inspection, Packers, and Stockyard Administration (GIPSA) published rules to amend the PSA in June 2010 (Federal Register, 2010). A central theme of the published GIPSA rules is that "unfair, unjustly discriminatory, or deceptive" practices covered by Sections 202(a) and (b) in the PSA, need not be tied to the anti-trust issues of competitive harm or injury in Sections 202(c)-(e).

This contrasts earlier interpretations by courts that violations of Sections 202(a) and (b) do not constitute violations of the Act without proof of competitive harm. The GIPSA rule also provides a number of examples that would constitute violations of Sections 202(a) and (b) many of which are not dissimilar to the protections proposed in the original producer protection act. The practical implication of the GIPSA rule is that it would ease the burden of proof for both growers and regulators when attempting to show violations of the PSA. This would facilitate the ability of the USDA to use the PSA to enforce a broad range of issues related to agricultural contracting.

Greene (2015) points out that the GIPSA rules encountered substantial opposition as opponents felt that the rules went beyond what Congress intended in the formulation of the 2008 farm bill. Thus, the final rule that the USDA issued in December 2012 did not include some of the most controversial provisions, such as the decoupling of competitive harm from personal harm to growers. The controversial provisions were omitted either because the USDA chose not to include them after reviewing public comments or because of prohibitions in Congressional appropriation acts passed in 2012, 2013, 2014,

and 2015 (Greene, 2015). However, the final rule that did go into effect in February 2012 includes stipulations that poultry companies provide growers with a 90-day notice before suspending the delivery of birds, that there be limits on whether growers would be required to upgrade equipment, that growers be given an opportunity to remedy a breach of contract, and that growers be given the right to decline arbitration provisions in contracts.

Policy Challenges

Current antitrust policy leans heavily on the efficiency criteria for good reason. Economic models of monopoly predict that elevated prices to consumers come with a decrease in volume of output and services, while monopsony models predict that lower prices to suppliers often come with a reduction in sales. As such, pro-efficiency policies that increase volume of trade also reduce the extraction of economic gains from consumes and suppliers. Thus, competition policy that promotes efficiency is implicitly compatible with issues of "fairness."

But what happens when business strategies that increase efficiency also result in more unbalanced distribution of economic rents? Much of our economic synthesis in the earlier sections suggests that this is a likely outcome in the poultry sector. In this situation, there are potential harms in contracting that cannot be addressed under antitrust "injury to competition" standards, and thus, GIPSA's attempt to separate Sections 202(a) and (b)—issues related to fairness and personal harm—of the PSA from Sections 202(c)-(e)—issues related to competition—might make some economic sense.

If indeed efficiency and more balanced distribution of economic gains are competing rather than complementary, then policy makers may also be forced to choose between efficiency and more equitable distribution. Unfortunately, economic theory offers little help on how exactly to quantify the tradeoff. While the economic concept known as the Pareto principle provides normative efficiency guidance, there is very little economic guidance about how society should distribute resources. There is an emerging economic theory of fairness in the behavioral economics literature, but this literature is still highly abstract and somewhat limited in practical applicability.

The current situation appears to be one where policy makers may have to impose value judgements when weighing the tradeoff between efficiency and distribution or rely on past precedence. With regard to precedence, Hovenkamp (2011), a leading antitrust legal scholar, points out that 5 sections of the Federal Trade Commission Act, which was passed several years earlier than the PSA, "…separately recognizes concerns of competitive harm and the harms caused by fraud, deception, or unfair practices where no monopoly or cartel is in contemplation." In addition, Hovenkamp's interpretation of the PSA is that Sections 202(a) and (b) are "tort-like" provisions that are meant to address concerns of unfair practices and discrimination in business practices rather than issues of monopoly or anti-trust.

On a qualitative basis, our economic synthesis, Hovenkamp's legal interpretation, and past precedence all suggest that a separation between the tort-like provisions and the antitrust provisions of the PSA might be warranted. However, courts have consistently viewed the PSA as an antitrust statute and therefore have required injury to competition standards when growers have sued for personal harm. As long as courts continue to view the PSA as an antitrust statute, the approach taken in the recent GIPSA-rulemaking to dispense with an injury-to-competition standard are unlikely to overcome legal challenge. In these circumstances, Congressional action is a more likely path for addressing damages for growers who are harmed by the contracting process.

One other possibility, though more research is needed, is that there is only an ostensible tradeoff between efficiency and distribution. Wu (2003) points out that, while government restraints on private marketing mechanisms usually reduce efficiency, government enforcement of property rights, protection of people from fraud and misinformation, and creation of institutions that enhance transparency and third-party verifiability can facilitate efficient trading by reducing counter-party risk and enhancing time-consistency. If this is the case, then the separation of regulations that are antitrust oriented versus those that are tort-like may facilitate regulatory oversight of policies that enhance transparency, protect property rights, and prohibit misinformation and fraud. This could enhance long-term efficiency in agriculture in the same way that the rule of law and protection from opportunism generally promotes efficient long-run investments.

For More Information

Bernheim, B.D., and M.D. Whinston. 1998. "Incomplete Contracts and Strategic Ambiguity." *American Economic Review* 88(4):902-932.

Federal Register. 2010. "Implementation of Regulations Required Under Title XI of the Food, Conservation, and Energy Act of 2008: Conduct in Violation of the Act." Volume 75, No. 119, June 22, pp. 35338-35354.

Greene, J.L. 2015. *USDA's "GIPSA Rule" on Livestock and Poultry Marketing Practices.* Congressional Research Service, CRS Report for Congress 7-5700, January.

Hovenkamp, H.J. 2011. *Does the Packers and Stockyards Act Require Antitrust Harm?* University of Iowa – College of Law, January.

Available online: http://ssrn.com/abstract=1737440 or http://dx.doi.org/10.2139/ssrn.1737440

MacDonald, J.M. 2014. *Technology, Organization, and Financial Performance in U.S. Broiler Production.* U.S. Department of Agriculture, Economic Research Service, Economic Information Bulletin Number 126, Washington, D.C., June.

MacDonald, J.M., and W.D. McBride. 2009. *The Transformation of U.S. Livestock Agriculture: Scale, Efficiency, and Risks.* U.S. Department of Agriculture, Economic Research Service, Economic Information Bulletin, Washington, D.C., January.

The Pew Charitable Trusts. 2013. *The Business of Broilers: Hidden Costs of Putting a Chicken on Every Grill.* Washington, D.C., December 20. Available online:

http://www.pewtrusts.org/en/research-and-analysis/reports/2013/12/20/the-business-of-broilers-hidden-costs-of-putting-a-chicken-on-every-grill

U.S. General Accounting Office (GAO). 2009. *Agricultural Concentration and Agricultural Commodity and Retail Food Prices,* GAO-09-746R, Washington, D.C., April 24.

Vickers, J. 1996. "Market Power and Inefficiency: A Contracts Perspective." *Oxford Review of Economic Policy* 12(4): 11-26.

Wu, S.Y. 2003. "Regulating Agricultural Contracts: What are the Tradeoffs?" *Choices,* First Quarter.

Steven Y. Wu (sywu@purdue.edu) is Associate Professor, Department of Agricultural Economics, Purdue University, West Lafayette, IN.

James MacDonald (macdonal@ers.usda.gov) is Branch Chief of the Structure, Technology, and Productivity Branch of the USDA-Economic Research Service, Washington, D.C.

The views expressed in this paper are those of the authors, and not necessarily those of the U.S. Department of Agriculture. Some of the insights in this article were drawn from research funded by the United States Department of Agriculture Cooperative Agreement No. 58-6000-7-0096 and United States Department of Agriculture-National Institute of Food and Agriculture Award No. 2010-65400-20430.