

POLITICAL ECONOMY OF REGULATION OF BROILER CONTRACTS

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In this paper we present a brief history of regulation of broiler contracts whose main characteristic has been that virtually all regulatory attempts on either federal or state levels have failed. We identify two possible sources of market failure that may justify regulation: asymmetric bargaining power between integrators and contract growers and imperfect information. We search for the explanation for this outcome by comparing the public interest theory of regulation with the interest group theory (Posner 1974).

Based on the existing literature on possible market failures in broiler contracts, we found that empirical evidence in support of those is rather weak. This may or may not explain the existing lax regulatory environment in which poultry processors operate from the public interest theory's point of view. However, we can build a more compelling case for the lack of regulation resorting to the interest group theory's main arguments as formulated by Becker (1983).

Broiler Industry Organization

Modern broiler industry is a vertically integrated system of production, processing, and distribution. Broiler companies (called integrators) control all stages of production ranging from breeding flocks and hatcheries to broiler grow-out and processing. Over the past 40 years, the industry has become increasingly concentrated such that in 2002 the industry's five-firm concentration ratio based on the volume of production was 55.41. The largest five firms in the industry are Tyson Foods, Goldkist, Pilgrim's Pride, ConAgra Poultry, and Perdue Farms (see table 1). The industry is mainly

concentrated in the Southeastern region of the United States. This region produces more than 85% of U.S. broiler meat. The Southeastern region has a comparative advantage in raising chickens due to the warm climate and inexpensive farm labor. In 2002, Georgia was the leading state in broiler production with 15% of U.S. production, followed by Arkansas, Alabama, Mississippi, and North Carolina (see table 2).

The finishing stage of broiler production (the final stage of the production process where one-day-old chicks are brought to the farm and grown to market weight) is organized almost entirely through contracts between processors and independent growers. As seen from table 2, in 2002 there were over twenty thousand farms with broiler contracts, the majority of them concentrated in the top five broiler producing states.

Modern broiler contracts are written by the integrator and offered to prospective growers on a *take-it-or-leave-it* basis. Contracts typically cover only one flock of birds at a time and generally do not guarantee any specific number of flocks per year. In order to obtain a contract, prospective broiler growers are responsible for constructing broiler facilities according to integrator's specifications. Growers are also responsible for labor, utility costs (electricity and water), clean-up costs, and dead birds disposal. The integrator provides baby chicks, feed, medication, and the services of field personnel and decides on the volume of production (the rotation of flocks on a given farm and the density of birds in a given house). The distribution of production inputs (feed and chicks) and the requests for the facilities and equipment upgrades and replacements are also under the discretion of the integrator.

The majority of contracts are settled via *tournament-based* schemes, consisting of a base payment per pound of live meat and the bonus payment. The bonus payment is tied to the grower's performance relative to other growers. Generally, the relative performance is measured by the difference between a

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Table 1. Top 10 Broiler Companies in 2002

Company	Weekly Production (Million Pounds)	Market Share (%)
Tyson Foods	148.84	22.44
Goldkist	61.53	9.27
Pilgrim's Pride	57.53	8.67
ConAgra Poultry	51.53	7.77
Perdue Farms	48.15	7.26
Wayne Farms	29.15	4.39
Sanderson Farms	25.11	3.78
Mountaire Farms	19.71	2.97
Cagle's	16.18	2.43
Foster Farms	15.54	2.34

Source: Thornton (2003, pp. 18A–18F).

grower's individual settlement costs (the costs of integrator supplied inputs) and group average settlement costs. For below average settlement costs the grower receives a bonus and for the higher-than-average settlement costs he receives the penalty (for details see Vukina, 2001).

Production contracts have played a decisive role in the broiler industry's remarkable growth but the integrator-grower relations have gradually worsened. Starting in the mid 1990s the tensions have received increasing attention nationwide. The National Contract Poultry Grower Association (NCPGA), state and federal legislators, and the USDA have started to systematically seek information about the impact of integrators practices and contractual arrangements on contract growers. According to Ilvento and Watson (1998) and the FLAG¹ (2001) survey, the issues of major concern to growers are: (a) use of tournament schemes to determine payments, (b) concerns about quality of inputs (chicks and feed), (c) high number of birds condemned at the plants with unsatisfactory explanation, (d) pressure to adopt housing improvements and equipment upgrades, (e) questionable accuracy of weighing chicks and feed, (f) timing and frequency of flock placements, (g) inadequate contract dispute resolution procedures, and (h) retaliation for joining grower associations.

Regulation of Contracts

The main federal legislation concerning contracts in agriculture is the Packers and

Stockyard Act (P & S Act), originally enacted in 1921 and enforced by the Grain Inspection, Packers and Stockyards Administration (GIPSA) of USDA. Its role is to prohibit activities that might adversely affect fair competition. Originally, the P & S Act did not directly consider contracts between poultry processors and contract growers. However, in 1987, the definition of "a live poultry dealer" in the P & S Act was changed to include the company who owns the birds and arranges for growers to raise and care for live poultry. This change brought broiler contracts under the P & S Act. From that time on, the USDA has passed regulations providing more detailed requirements covering contractual relationships in the statutory provisions.

Another federal law affecting integrator-grower relations is the Agricultural Fair Practice Act (AFPA) of 1967. Under this law, the right of contract poultry growers to decide freely whether or not to join the associations of growers is protected from interference by poultry companies. In general, attempts to persuade growers to join or dissuade growers from joining producer associations are unlawful if they involve coercion, discrimination, or intimidation of any kind. However, the AFPA does not require that a poultry company deal with growers who are members of an association as long as this decision is not based on membership in the association. This means that a poultry company could defend itself against the claim of violating the AFPA by showing that it had another lawful reason for the decision not to deal with the grower (FLAG 2001).

Due to many existing loopholes in the current regulation, there were several attempts at the federal level to regulate broiler contracts in recent years. In 1997, in an advanced notice of proposed rulemaking, GIPSA announced that it is considering "the need for issuing substantive regulations to address concerns in the poultry industry with respect to contract payment provisions tied to the performance of other growers" (Federal Register, p. 5935). In 1998, the National Commission on Small Farms recommended that the Secretary of Agriculture evaluate the need for federal legislation to provide uniform contract regulations for all growers engaged in agricultural production contracts. In reference to poultry contracts, the recommendation specifically focused on the factors used in ranking growers and determining performance payments (USDA, 1998). No concrete regulatory actions were taken as the result, but the pressure

¹ Farmers' Legal Action Group, Inc. (FLAG) is a nonprofit law firm based in St. Paul, MN, which provides legal assistance to farmers, farm advocates, attorneys, and organizations working to help individual farmers stay on the land and to defend the family farm system of agriculture.

Table 2. Top 10 Broiler Contract Production States in 2002

State	Production: # of Broilers	Broiler Contracts: # of Farms	Egg Contracts: # of Farms	Pullet Contracts: # of Farms
Georgia	1,286,408,810	2,708	448	205
Arkansas	1,181,903,903	3,441	552	253
Alabama	1,050,807,706	2,508	411	172
Mississippi	749,052,989	1,806	155	66
North Carolina	739,554,718	2,427	408	215
Texas	495,428,765	816	218	81
Maryland	287,080,129	789	21	9
Kentucky	271,162,663	517	71	33
Virginia	265,682,369	717	113	56
Delaware	255,868,231	816	8	3
U.S. Total	8,330,584,759	20,778	3,408	1,622

Source: USDA, NASS (2004, table 37, pp. 514-516).

from the growers' circles to do something continued.

In 1999, Representative Marcy Kaptur (Ohio) introduced in the House of Representatives two bills. Bill H.R. 2829 ("Poultry Farm Protection Act of 1999") sought to amend the P & S Act to provide the Secretary of Agriculture with administrative authority to investigate live poultry dealers. H.R. 2830 ("Family Farmer Cooperative Marketing Amendments Act of 1999") would amend the AFPA to provide for the accreditation of associations of agricultural producers, promote good faith bargaining between such associations and the poultry companies, and strengthen the enforcement authorities to respond to violations of the AFPA. Both of those attempts were stalled in various subcommittees in the House Committee on Agriculture.

In 2000, Senator Tom Harkin (Iowa) introduced bill S. 3243 ("Agricultural Producer Protection Act of 2000.") The bill would set minimum standards for agricultural contracts, requiring good-faith negotiation between integrators and grower associations. In 2001, Tom Daschle (South Dakota) proposed the same kind of legislation called "Securing a Future for Independent Agriculture Act of 2001," (S. 20). Both bills were read twice and referred to the Committee on Agriculture, Nutrition, and Forestry, with no further action taken.²

Out of concern for growers' discontent with broiler contracts, a number of states have considered legislation to protect growers. In Southern states, such legislative proposals

generally failed as integrators voiced strong opposition. For example, in 1993, the North Carolina Legislature considered a bill to restrict the types of contracts that growers and integrators could sign. The bill specifically prohibited payments to a grower based on his performance relative to other growers (Vukina 2001). Legislation with provisions that protected the rights of growers to organize and create associations was also defeated in Alabama and Louisiana (Hamilton 1995). However, various forms of legislation aimed at regulating contracts without explicitly targeting tournaments were passed in Minnesota, Wisconsin and Kansas in the early 1990s (Lewin-Solomons 2000).

In 2000, Iowa Attorney General Tom Miller has proposed a new legislation aimed at protecting contract growers called the Producer Protection Act (PPA). The main concern behind the proposal was the great disparity in bargaining power and marketing information between the contractor companies and individual producers. In the absence of federal legislation on the issue, PPA draws on a variety of proposals and statutes from various states and is designed to serve as a comprehensive model legislation that states can adopt. The model was endorsed by the Attorneys General of sixteen states. Their joint statement said they did not necessarily agree on every single provision of the PPA and that the legislation would need some customization for each state.³

² All federal legislative information is freely available to the public on the Library of Congress website called Thomas: <http://thomas.loc.gov/>

³ PPA was endorsed by Attorneys General of Colorado, Indiana, Iowa, Kentucky, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, North Dakota, Oklahoma, Vermont, West Virginia, Wisconsin, and Wyoming. The entire text of the proposal and specific legislation and statutes proposed or passed in other states are available at the *The New Rules Project* website: <http://www.newrules.org/agri/protect.html>

Theories of Regulation

The rationale for the existence (or absence) of regulation governing the broiler production contracts can be found in two economic theories. The *public interest theory* emphasizes the role of regulation in correcting market imperfections. Within the realm of this theory regulators are viewed as benevolent maximizers of social welfare. On the other hand, the *economic theory of regulation* emphasizes the role of pressure groups in the creation of regulation. The existing regulation is viewed as the product of competition among groups exercising their political influence to seek economic rent.

Public Interest Theory

As stated in the *First Theorem of Welfare Economics*, a perfectly competitive equilibrium is Pareto optimal. The price of any commodity will reflect its social cost of production as well as each consumer's individual valuation. Any government intervention that interferes with the proper functioning of the perfectly competitive economy will decrease social welfare because regulated agents are constrained and cannot fully exercise their available trading options. Unfortunately, the assumptions behind the competitive market model are frequently violated. Market failures are usually classified as originating from market power, imperfect information, externalities, and public goods. In all such cases, government intervention can be justified to restore efficiency.

According to the public interest theory in its purest form, government intervention is the response of the government to public demands to correct inefficient or inequitable market practices. Consequently, "[B]ehind each scheme of regulation could be discerned a market imperfection, the existence of which supplied a complete justification for some regulation assumed to operate effectively and without cost." (Posner 1974, p. 336). Government can correct market failures by enacting laws that prevent economic agents from certain types of behavior or by imposing taxes or granting subsidies.

Revisiting the list of grower complaints about broiler contracts and ignoring the complaints which would qualify as outright criminal activities (such as tempering with scales and cheating when counting birds) the rest of the complaints fit into one of the following categories: (a) the problem of hold-up, (b) the

problem of commitment, and (c) the moral-hazard problem. All of those are to a certain degree caused by the integrators' monopsony power on the market for grower services and/or the asymmetric information.

(a) Given that existing business between processors and contract growers is governed by short-term contracts whereas the underlying relationship is inherently long-term due to the specificity of investments involved in the production of birds, the claim that growers could be held up by processors when contracts are up for renewal is reasonable. One empirically testable implication of holdup is the underinvestment problem. The theoretical rationale for this argument lies in the property rights (incomplete contracting) theory of the firm. A party to the contract fearing holdup would try to prevent holdup from occurring. Such action could result in a suboptimal level of investment compared to the first best. The severity of the problem is larger in noncompetitive market structures. Vukina and Leegomonchai (2006) tested this theory using the cross-sectional national survey data of contract broiler growers. They found some evidence of a systematic relationship between the number of processors in a given area and the size of grower investment as measured by the number of chicken houses under contract. They also found that growers tend to invest less when asset specificity is high but only in markets where the number of integrators offering contracts was small.

In a related theoretical study, Lewin-Solomons (2000) predicted that when the market for grower services does not clear, which happens in regions where not all prospective broiler growers can find contracts, integrators will force high levels of asset specificity onto growers. This may be manifested in the frequent request for upgrades of existing housing facilities and equipment. Vukina and Leegomonchai (2006) tested this proposition by looking at the relationship between grower payoffs and the number of upgrade requests and integrators' market power. The results seem to support the hypothesis that the increase in asset specificity enables a fall in grower compensation rates, but only in monopsonistic environments.

(b) As mentioned earlier, contract growers frequently complain about the unfair distribution of variable quality inputs, notably chicks and feed, they receive from their principals. The retained ownership of these critical production inputs by the integrators leads to the necessity to use variable piece rates (e.g.,

tournaments) as compensation devices. Growers also point out that the disproportionate number of these tournaments is won by the same growers. In this context it is reasonable to ask whether a disproportionate number of settlements are won by the same growers because they are truly better than others, or because they were, for whatever reason, given superior quality inputs.

The strategies for uneven distribution of production inputs arise in dynamic contracts where the integrator does not commit to even distribution of inputs, which in turn creates implicit incentives for the growers to reveal or hide their types. Implicit incentives arise when a principal has some *ex post* capacity to respond to an agent's performance and when the agent's current performance is informative about his future performance. If high-ability growers can use high-quality inputs more effectively than low-ability growers, but their performances are indistinguishable when both use low-quality inputs, then it makes sense to give high-quality inputs to high-ability growers and low-quality inputs to low-ability growers. In contrast, if high-ability growers can somehow salvage low-quality chicks from performing very poorly, whereas the high-quality chicks will perform well no matter who tends them, then it makes sense to match high-quality inputs with low-ability growers and low-quality inputs with high-ability growers. Leegomonchai and Vukina (2005) tested whether broiler processors, after observing their contract growers' abilities in repeated short-term contracts, strategically allocate production inputs of varying quality. The results showed no significant input discrimination based on grower abilities.

(c) The crux of the growers' complaints about using tournaments to settle broiler production contracts lies in what has been termed the *league composition effect*, which Levy and Vukina (2004) define as the change in the distribution of tournament payoffs from an exogenous assignment of players to heterogeneous groups in which they compete. They demonstrated that in a sequence of contract settlements, league composition effect can make piece rates more attractive than tournaments when the composition of leagues is fixed. Their empirical analysis of broiler contracts revealed that the estimated variance of common shocks exceeded the variance of the growers idiosyncratic shocks. Therefore, the payments to growers under a tournament have less variance than under a simple piece

rate contract for a single flock and for multiple tournaments when the composition of leagues is random. However, when payments are made over time with fixed leagues, a simple piece rate contract would offer less variance than any tournament given a long enough time horizon. These results show that broiler growers dissatisfaction with compensation schemes based on tournaments are substantive in the sense that the league composition effect is statistically significant. However, the evidence also suggests that the logistics of the delivery of flocks to growers leads to rapid dissipation of settlement groups (leagues) over time, i.e., tournaments groups are in fact random. Hence, the welfare importance of the league composition effect seems to be small suggesting that tournament settlements offer higher welfare to growers than piece rates.

To summarize, the existing literature on broiler contracts is not overwhelmingly supportive of the hypothesis that broiler production contracts could be plagued by some type of market failure. Therefore, the public interest theory is ambiguous when it comes to predicting whether we should observe broiler contracts be regulated or not. Therefore, we seek alternative explanations.

Interest Group Theory

The economic theory of regulation originated with Stigler (1971) and was subsequently modified and clarified by Posner (1974) and Peltzman (1976), among others. The theory is based on a simple but important insight that the coercive power of government can be used to give valuable benefits to particular individuals or groups. The expression of this power is reflected in economic regulation whose allocation is governed by laws of supply and demand. Viewing regulation as a product of supply and demand directs attention to factors determining the value of regulation to various groups and to factors bearing on the cost of obtaining regulation. Factors determining both benefits and costs of regulation can be illuminated by resorting to the theory of cartels. The theory teaches that the value of cartelization is greater, the less elastic the demand for the industry product and the more costly or slower the new entry is. The major costs of cartelization are the cost of arriving at an agreement on the price and output of each seller and the cost of enforcing the cartel agreement against nonparticipants and defectors (Posner 1974).

However, the economic theory of regulation is not the same as the theory of cartels. In addition to cooperative action of firms, which is sufficient for cartelization, favorable regulation requires the intervention of the political process. Some industries or groups may be able to influence the political process at lower cost than others. The political equilibrium in Stigler's model is one in which cohesive minorities tax diffuse majorities (Peltzman 1993). This outcome is the result of the democratic political decision process which is substantially different than the market process. For most voters, the stakes in the regulatory outcome are too small to make them informed supporters or opponents of the proposed policies. By contrast, for some, the stakes can be large enough to overcome rational ignorance. But this knowledge needs to be translated into action, which requires organizing to exert influence on the political process. Here, the compact groups have the advantage because they can more easily overcome the free-rider problem.

The best-known formalization of the economic theory of regulation is Becker's (1983) model of the competition among pressure groups for political influence. The central idea in this model is that individuals belong to particular groups, defined by occupation, income, geography, etc., that use political influence to improve the welfare of their members. Competition among these groups for political influence determines the equilibrium structure of taxes, subsidies and other political benefits. Political influence is not fixed but can be expanded by allocating real and monetary resources on exerting political pressure. In political equilibrium all groups maximize their incomes by optimal spending on political pressure, given the productivity of their expenditures and the behavior of other groups. The political game ends up being zero-sum in influence and negative-sum in taxes and subsidies because of deadweight costs. The model predictions can be summarized in the following four testable propositions: (a) the political effectiveness of a group is mainly determined not by its absolute efficiency—e.g., its absolute skill at controlling free riding—but by its efficiency relative to the efficiency of other groups; (b) policies that raise efficiency are more likely to be adopted than policies that lower efficiency; (c) politically successful groups tend to be small relative to the size of the groups taxed to pay their subsidies; (d) competition among pressure groups favors efficient methods of taxation.

From the previous description of federal and state attempts to regulate broiler industry contracts, we can derive two interesting observations. First, virtually all attempts at the federal and state levels to regulate broiler production contracts failed. Second, the push for regulation always came from growers, grower organizations, or small farm advocacy groups. Integrators never pushed any type of regulation, they were always on the defensive. In the rest of the paper we argue that the political equilibrium in which we observe virtually complete absence of regulation of poultry production contracts can be easily explained (predicted) by Becker's (1983) model.

To fit the basic structure of the Becker's (1983) model we treat poultry integrators and poultry growers as two groups that compete to receive favorable regulation or to prevent harmful regulation from being passed. Proposition 1 predicts that the relatively more efficient group would win favorable regulation, and Proposition 3 predicts that the politically successful group tends to be smaller than its counterpart. As clearly seen from tables 1 and 2, the number of integrators is very small relative to the number of growers. The total number of commercial broiler companies in 2002 was probably less than fifty,⁴ with the aggregate market share of the top ten firms of 71.32%, whereas the number of contract growers in the same year was 25,808. Higher efficiency in exerting political pressure of the broiler companies relative to the contract growers is not only the function of their smaller number, which leads to a less severe free-rider problem, but is also a function of their market size, ownership structure, and wealth. The largest poultry companies (like Tyson Foods) are huge even compared with firms from nonfood sectors. They are also highly diversified, publicly owned, and very well positioned to assume risk. On the other hand, contract broiler growers are typically small owner-operator farms, where the broiler contract frequently serves the purpose of providing supplemental income necessary to keep the farm business alive.

Since all politics is local, it is more important to analyze the relative political effectiveness of the two groups at the state level. The asymmetry in numbers between the broiler companies and the contract growers is even larger on the state levels than on the federal level. As seen from table 2, the number of contract growers

⁴ The WATT Poultry USA 2003 survey included 42 companies.

in states heavily involved in broiler production is in the thousands, whereas the integrator companies typically concentrate their production divisions in few states, such that the number of companies in any given state would never exceed five to ten firms. These companies become important corporate citizens of the state. They significantly contribute to the state total employment and tax revenue, which enables them to exert much larger political influence on the local and state legislatures than individual contract growers or their associations can. Local politicians will also find that these companies are a consistent source of campaign contributions.

In addition to being numerous, broiler growers are plagued with huge free-rider problems for other reasons. First, growers cannot freely join grower associations because they fear retaliation from the integrators, which aggravates the free-rider problem. Second, growers are less likely to organize themselves into efficient political pressure groups because they hold highly diverse views about the benevolence of their companies and their relative well-being within that company. For example, growers who complain about relative performance payment schemes are more likely to be low-performance growers. Since broiler contracts are generally settled as zero-sum tournaments, high-ability growers typically perceive them as efficient compensation tools, whereas for low-ability growers they are fraudulent schemes. Thus, grower heterogeneity effectively prevents the formation of effective alliances that would oppose and eventually ban tournament-type compensation schemes.

According to Proposition 2, policies that do not improve efficiency stand a lower chance of being adopted relative to those that raise efficiency. This proposition directly explains why most of the attempts to regulate various aspects of contracting in the broiler industry failed. As mentioned before, the problem of holdup may serve as a justification for regulation, but the existing empirical evidence of holdup is not overwhelming. The complaint about grower discrimination regarding the allocation of production inputs (chicks and feed) has been tested and virtually no statistically significant effects were found. Finally, banning tournaments and replacing them with absolute performance schemes would likely reduce efficiency. Since most of the broiler production divisions are fairly large (200–300 growers) and the production cycle is short (seven weeks),

the tournament groups dissipate rapidly (the leagues are not fixed but random), so tournaments welfare-dominate simple piece rates.

Finally, Proposition 4 predicts that among different types of regulatory proposals, the efficient schemes tend to be favored over inefficient schemes. Based on the limited number of successful regulatory proposals, one can see that these policies always directly or indirectly addressed the issues of integrators market (bargaining) power, which always exacerbates the holdup problem. For example, in Minnesota, regulation sets guidelines on contract cancellation by requiring a mediation clause in all contracts between growers and processors. Also, if a contract required a grower to invest in buildings or equipment having a useful life of five years or more, costing \$100,000 or more, the integrator may not cancel or terminate the contract until the grower has been given written notice of at least 180 days in advance and the grower has been reimbursed for damages (Lewin-Solomons 2000).

When it comes to banning relative performance compensation schemes (tournaments), as proposed by the PPA, it is interesting to note that swine production contracts do not use relative performance payment schemes. The fact that swine integrators contract with substantially fewer growers and that the production cycle is much longer than with chickens suggests that the industry tends to pick the efficient solution by itself. The most interesting case, however, is found in the turkey industry where some production contracts use tournaments and some use fixed performance schemes (Tsoulouhas and Vukina 1999). The size of the settlement groups in turkey contracts and the length of the production cycle are in between hogs and chickens, which quite nicely fits the argument advanced earlier, but also suggest that this may be a sector where banning tournaments could be efficient.

Conclusion

Two possible sources of market failure may require regulation of broiler contracts. In a bilateral contractual relationship, integrators may possess more bargaining power than growers since growers relationship-specific investments are governed by a short-term contract. Integrators could force growers to accept inefficient contract terms since it would be costly for growers to find new contracts. The

relationship is also plagued by serious imperfect and asymmetric information problems which prevents long-term commitment and requires payment schemes tailored to mitigate the moral hazard and adverse selection problems. Although growers have expressed many and frequent concerns about contract provisions (such as quality of chicks and feed allocations, pressure to adopt housing improvements, tournament settlements, etc.), processors have always opposed them. In the end, very little concrete regulatory actions have been taken so far.

We offer two explanations as to why there is limited regulation in broiler contracts. First, it seems like the empirical evidence of market failures is rather weak, which may justify the absence of regulation from the public interest theory's point of view, although not convincingly. On the other hand, the lack of regulation coincides quite nicely with the predictions from the economic theory of regulation. In particular, we argue that integrator companies are likely to be relatively more efficient in exerting political influence than contract growers because they are small in number and therefore each of them stands to gain substantially from opposing regulation. On the other hand, the number of contract growers is large and they are heterogeneous in their objectives which makes their costs of overcoming the free-riding problem very high. Therefore, the competition between these two pressure groups will result in regulation (or the lack of regulation) that favors poultry integrator companies at the expense of contract growers. This would be true even if a strong case for regulation to protect the contract growers' interests can be constructed on efficiency grounds.

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