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# UNDER CONTRACT: COMPARATIVE AND RELATIVE RISK IN LIVESTOCK PRODUCTION CONTRACTS

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## Abstract

The poultry industry is widely recognized as setting the pace for livestock production. The particular aspects of poultry production, from its technologies to its contract model and farmer payment mechanisms, are now being adopted globally on the heels of an increasing trend in meat consumption. The model for production contracts evolved in poultry production the United States in the southeast. In this thesis I assess the experience of farmers from this region. My goals are to explore gaps in existing literature about risks that farmers face in broiler production contracts. My focus is to expand the discussion where applicable, and thus my research is primarily exploratory, and intended to broaden the issue rather than reach singular conclusions. I have conducted a case-study analysis, interviewing 12 farmers and 8 experts in 7 states in 2015. In addition to interview data I have collected and analyzed copies of actual contracts from 3 different major integrators, as well as settlement data which has enabled me to assess such factors as variability in pay and declining revenues for farmers over time. In this thesis I will use this data to assess the hypothesis that: A broiler production contract is a stable, implicitly long-term and low-risk investment for a farmer who is a good manager.

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## Acronyms and Terminology

AFBF = American Farm Bureau Federation

FSA = Farm Service Agency

GIPSA = Grain Inspectors Packers and Stockyards Administration

TCE = Transaction Cost Economics

RAFI = Rural Advancement Foundation International

**Flocks** = one batch of chickens provided to a farmer by an integrator to raise

**Liveability** [as it pertains to chickens] = the percent of chickens accepted for sale by integrator in live weight

**Mortality** [as it pertains to chickens] = dead chickens resulting from disease or catastrophe

**Settlement** [pertaining to raising chickens] = farmer's data provided by the integrator about their pay and rank in competition with other growers.



## Chapter 1 - Introduction

### 1.1 Background

The poultry industry is widely recognized as setting the pace for livestock production. ZHENG AND VUKINA (2006) state that “the poultry industry is often considered a precursor of future trends in the organization of agriculture” (2006 p.844). The unique aspects of poultry production, from its technologies to its contract model and farmer payment mechanisms, are now being adopted globally on the heels of an increasing trend in meat consumption.

According to the UN Food and Agriculture Organization (FAO) per capita meat consumption doubled between 1980 and 2005 in developing countries alone, and consumption of eggs more than tripled (DELGADO ET AL, 2004). This surge in demand represents both opportunities and challenges for farmers in developing countries. On one hand, as DELGADO ET AL (2004) state clearly, “a critical issue raised by these trends is that for once a sector that the poor are heavily involved in is growing. If the poor fail to participate, they are condemned to even worse immiseration.” (2004, p. 97) Thus, ensuring appropriate farmer participation in the growing meat industry is important.

Livestock production systems are therefore receiving more attention than usual, especially from journalists, non-profits and farmer organizations. Claims and “whistleblower” stories are emerging in the media documenting animal welfare abuses, environmental pollution, and exploitation of farmers (see “*Cock Fight: Meet the Farmer Blowing the Whistle on Big Chicken*,” by Fusion TV). These reports attempt to call into question the efficiency and sustainability of the current model for meat production.

Some academics have begun to raise questions of their own. A perfect example of the burgeoning market trend is the sudden growth of chicken consumption in India. Dr. Chidananda, Associate Professor of Poultry Science at the University of Agricultural Sciences in Bangalore explained in an interview conducted in person that the surge is part of a broader transition in India’s food economy. “Now we have Metro, we have Food World,

we even have Walmart coming to India. The potential in the Indian food industry is very huge,” he said.

As Dr. Chidananda’s comment indicates, this revolution is more than just rising incomes and changing diets. It is equally important to recognize that growth is not fueled by demand alone. In addition to the surge in demand, technology, genetics, and organizational models for livestock production have evolved to be highly efficient, enabling a volume of production unheard of in the previous decades (DELGADO ET AL 2004).

Dr. Chidananda’s research has focused on the emergence and impact of production contracts in the poultry industry in India. He sees advantages to the contract model, but he also has reservations regarding the adoption of production contracts because of potential risks posed to farmers.

A farmer in Karnataka (who preferred to remain anonymous) who raised poultry under contract with an integrator for 7 years before being terminated, described the type of business relationship he experienced: “We do not get a copy of the contract,” he said. When asked if he could negotiate or discuss his costs with the company, he said “We are scared to negotiate because they would stop bringing birds.”

He described a process of going to an office in town and signing 50 or 60 pages of agreements without being able to read or understand the details. He also explained that in order to build his 2 poultry houses, he had taken out a significant loan. Now 10 years later, he has only paid a small portion of the loan and is still struggling under the debt. Where he used to house 20,000 chickens, he now rents his houses as empty sheds to a sculptor of Ganesh statues and a dog-care facility.

Dr. Chidananda says that this farmer’s story is not unusual “In reality the farmers are not happy,” he said. “If I raised a loan and started production, I would never be able to pay off the loan. Rather I would continue doing a job, slave to pay the interest on the banks side, and grow the chickens for the companies, and I remain stuck in the middle.”

## 1.2 Problem Statement

The increasing prevalence of production contracts in the international meat market exposes both a potential problem, and an opportunity to take a closer look at the experience of poultry farmers in the United States. The potential problem is that in a world of globalized markets with increasing concentration of power, farmers may risk either exclusion or exploitation as a result of losing bargaining rights. The ability of agricultural contracts to govern farmer/integrator business relationships could provide an opportunity to guarantee a role for farmers in rapidly changing markets, such as that of poultry in India. However if the model for contracting with farmers is predicated on exploitative practices and unfair relationships, the use of contracts will only deepen the dilemma that farmers face.

The model for production contracts evolved in the United States in the poultry industry, and has been implemented for the longest period of time with independent farmers in the southeast. Assessing their experience may provide critical lessons to shape forward moving policy recommendations regarding the implementation and regulation of production contract relationships.

## 1.3 Research Objectives and Questions

Despite the potential value of research and empirical studies on the impacts and extent of use of production contracts in the US, the field remains largely unexplored (HUETH, LIGON AND DIMITRI, 2007).

*My **general objective** in this thesis is to investigate this gap in the literature specific to farmer risk in production contracts by conducting a case-study analysis regarding farmer experience of such contracts in the south-eastern US.*

*In light of that, my **specific objective** is to assess the reliability of the generalized assumption that the broiler production contracts are low-risk and stable investments for farmers by*

*identifying farmer perception and experience of risk factors in their contract relationships.*

*My work will be guided by the following research questions:*

- 1) What benefits do farmers receive from gaining access to the growing poultry market through a production contract?*
- 2) What limitations or disadvantages do they experience that are specifically related to their having signed a production contract?*
- 3) What are thus the common risk factors that farmers experience, and should consider when signing a production contract?*

## **1.4 Description and Relevance of the Case - Context**

My research takes place in the southeast of the United States. The poultry industry today in the US is one of the most vertically integrated in all of agriculture, according to GOODWIN (2005). He explains that the industry is rapidly advancing to become the most concentrated as well. In 1950 there were 250 firms competing in the broiler industry, though today there are fewer than 50 firms. Using data from a Watt PoultryUSA survey of nearly 100% of the integrators operating in the US, GOODWIN (2005) establishes that the top four firms increased their share of the broiler market from 27.9% in 1982 to 48.2% in 2002. It is interesting to note that in terms of overall meat production, the top four companies, (Tyson Foods, JBS, Cargill and Smithfield Foods) controlled 85% of the market for beef, chicken and pork in 2014 (LEONARD, 2014). GOODWIN notes that the rapid expansion of the broiler market was due to “processing efficiencies, changing consumer tastes and preferences, and product developments” which increased per capita consumption by 250% between 1965 and 2005 (2005, p. 344).

In terms of global competitiveness, the US exports are challenged by increasing efficiency and competition from Brazil, Argentina, China and Thailand, while South American production is already cheaper. GOODWIN (2005) notes that these countries will likely become the frontier of poultry production in the future, as they will expand rapidly to meet the increasing foreign demand. He expects that US production will level off, and continue to serve US demand.

In an article by MARTINEZ (1999) at the USDA, he stated that 88% of poultry production

happens under contract with an integrator in the US. It is likely that this number is much higher today. Considering thus the US history of leadership in poultry production and the predominance of production contracts in the broiler market, the location is appropriate for researching farmer risk and experience in contract production. My goal is to assess the available data from this region for lessons learned, and contribute to the existing literature thus by expanding the dialogue about the impacts of production contracts in poultry.

## Chapter 2 – Theory and Literature Review

### 2.1 Theoretical Perspective and Framework

The present status of the poultry production contract is a sort of “phenomenon” according to many economists. In an interview with National Public Radio’s reporter Dan Charles, Agricultural Economist Tomislav Vukina of North Carolina State University explained why he believes the poultry contract and its payment mechanisms are so unique:

"It is really brilliant," says Vukina. It solves problems that academic economists have examined with high-powered theory. Problems such as how companies can make sure workers do a good job when they can't be monitored, or how to convince independent contractors to invest in new equipment.

"This thing has phenomenal, theoretically correct design features that [the industry] came up with knowing absolutely nothing about contract theory," Vukina says, chuckling. "It's actually remarkable! Totally mind-boggling!" (CHARLES, NPR, 2014).

In theoretical terms, one approach to explaining the existence of poultry production contracts is through the framework of transaction cost economics. A keystone in the theory is the work of COASE (1937) who proposes that transaction costs can explain the existence of certain organizations and firms. He proposed that if external transaction costs are higher than internal, the firm will grow in a style of vertical integration, and begin internal production, and vice-versa.

In the particular case of poultry production contracts, transaction cost economics as a lens has certain advantages over neoclassical forms of economic analysis. For example, transaction cost economics (TCE) assumes bounded rationality, which allows for a discussion of opportunism and moral hazards inherent in contracting relationships (WILLIAMSON, 1991).

Even more significantly though is the ability of TCE theoretically to incorporate the true costs of contract enforcement through considering the transactions involved. As FURUBOTN



AND RICHTER (1991) explain that for decades the field suffered from a lack of attention to the costs involved in enforcement: “there was faith that ... all contracts would be guaranteed perfectly and costlessly by the functioning of the legal system” (1991, p.7-8). It has become evident that this is highly unrealistic. As a result, TCE has evolved to consider that there are transaction costs to enforcing contracts, which are problematic, and not negligible costs. In terms of production contracts, this may pertain to costs involved in renewing contracts frequently, delays in adopting the most efficient contract solutions, or costs incurred by one party as a result of limited or asymmetric information.

The dynamic nature of contracts in general means that these costs will always be present to some degree. The inability of a contract to fully predict every possible contingency and outcome has been theorized already: GROSSMAN AND HART (1986) have written about the challenges resulting from incomplete contracts. In many instances, it is impossible to accurately specify every detail of a service or product in a contract, especially if the production will extend beyond one cycle or if uncertainty is present. GROSSMAN AND HART (1986) explain how this can lead to expensive transaction costs in re-negotiation of contracts and a loss of efficiency in the period when the contracts are maladapted to their context. And in particular, the expectation of future re-contracting may lead to additional costs as a result of the parties exhibiting ex ante pre-positioning in expectation of ex post bargaining.

For my particular purposes, I am interested in the ability of TCE to assess costs and efficiency regarding risk and uncertainty in contracting. A useful definition of risk for this analysis is provided by YATES AND STONE (1992) defining risk as “the possibility of loss” (1992, p.4). The reason this is useful is that loss can be a subjective term, as well as costs (WILLIAMSON 1991), which allows for risk to be perceived beyond simply the threat of financial harm.

In TCE it is important to note that risk is differentiated from uncertainty. While risk is something that may be characterized and counted on given particular probabilities, uncertainty is completely unknown (CHILES AND McMACKIN, 1996.) WILLIAMSON (1991) describes uncertainty as “disturbances” to the economic structure. A disturbance could be something such as bad weather conditions, or behavioral changes in agents, which may result

in increased transaction costs.

There is much discussion in the literature regarding the lines between “risk” and “uncertainty.” The reason this debate is relevant to this research, is because the common use of the word “risk” involves in fact both concepts. In discussing risk with poultry growers, inevitably both economic concepts of risk and uncertainty are part of the discussion. KNIGHT (1921) provides a definition of uncertainty that is also useful: “the essence of the situation is action according to *opinion*, of greater or less foundation and value, neither entire ignorance nor complete and perfect information, but partial knowledge” (1921, p.199). What is clear in his description of uncertainty is that it applies to a situation in which agents in a contractual relationship have limited information and must act according to opinion or partial knowledge.

What KNIGHT’S (1921) description precipitates is a consideration of the problems that may arise in the case of asymmetric information in contract relationships. It has been established that more information about a purchase or agreement reduces risk (AKERLOF, 1970). Asymmetric information in a contract relationship can give rise to problems such as adverse selection and moral hazard, which can lead to costly inefficiencies for either party.

Transaction cost economics as a framework was first applied to the context of contracts and contract choice by CHEUNG (1969). In analyzing sharecropping contracts, he argued that because of the presence of internal transaction costs, and especially because of the benefit of risk-sharing, sharecropping models were actually efficient. It is further interesting to note that CHEUNG’S (1969) analysis depends on an assumption of farmers’ risk aversion. The risk aversion of a farmer supposes that he would prefer to be compensated based on a stable income rather than variability or instability.

Building on CHEUNG’S (1969) work, STIGLITZ (1974) examined sharecropping in India, and assessed that risk sharing was the main reason for the evolution of this arrangement, as opposed to the use of wage-based or rental-based contracts. He states that sharecropping was “adopted because of its incentive effects (when direct supervision is costly or ineffective) and because of its risk-sharing features” (1974, p. 251). He explains that the contract model is in this form a way to reduce the internal transaction costs of supervision.

From the discussion of land tenancy, the modern dialogue about agency theory and contract choice was born. In later writing, STIGLITZ (1987) states that the sharecropping model is one of the origins of an underpinning paradigm of contract relationships, called the principal-agent problem. He notes that “a principal-agent problem arises when there is imperfect information, either concerning what action the agent has undertaken or what he should undertake” (STIGLITZ, 1987, p.241). In addition, the principal may be expecting the agent to take action based on information or data that only the agent has access to. In this literature, the inherent costs related to asymmetric information takes form within contractual relationships, and through the lens of increased transaction costs.

Using this principal-agent paradigm, STIGLITZ (1987) demonstrates how this trade-off between risk and incentives impacts contract arrangements beyond sharecropping. For example, in the case of credit, “a bank cannot monitor perfectly the actions of those to whom it lends money,” and even in the case of an employer, he “cannot travel on the road with his salesman, to monitor precisely the effort he puts into his salesmanship” (1987, p.241). Therefore, appropriate contracts are applied in each of these situations which, in theory, limit the risk of the principal as a result of asymmetric information, and reduce transaction costs such as oversight or inefficiency as a result of risk.

Another risk emerging from the presence of asymmetric information in contractual relationships that is discussed in the literature is the presence of moral hazard, especially in sharecropping contracts. ALLEN AND LEUCK (1999) stated that “Because farmer effort is unobservable and because there is uncertainty in farm production, there is moral hazard in any contract for which the farmer receives less than 100% of the crop” (1999, p.707). In other words, the agent may have an incentive to work less hard than the principal would like, given a scenario where the principal faces asymmetric information about the agent’s efforts. According to their research, this “shirking” can be mitigated by an agreement that ties the agent’s payment directly to the outputs, but then this creates a highly variable situation for the agent (ALLEN AND LEUCK, 1999). Thus OTSUKA ET AL (1992) conclude that the point of efficiency, is the balance in between: “being risk averse, the agent prefers a certain income to

an uncertain income. The optimum contract selects a balance between providing work incentives for the agent and alleviating his exposure to risk” (1992, p.1967).

The language used here by OTSUKA ET AL (1992) is common in the realm of contract theory, and reflects the original premise suggested by CHEUNG (1969). ALLEN AND LEUCK (1999) point out that the description of farmer behavior as risk averse has become almost routine. The more risk averse a farmer is, the more likely the contracts will be share contracts or will share the outputs, and the less risk averse a farmer is the more likely the contracts will reflect market variability and not introduce shared risk aspects.

An additional complexity to contract relationships is the notion of the assets involved. Asset specificity has a particular relevance to this research. In the realm of TCE, asset specificity may lead to risks because it may open the door to opportunism (WILLIAMSON, 1991). Modern broiler production is dependent on physically specific assets, location specific assets, and human capital specific assets on behalf of both growers and integrators. This mutual risk as a result of asset specificity is discussed theoretically by WILLIAMSON (1979) as a situation called “hold-up.” In theory, two parties could receive the highest returns and most efficiency by both investing in the specific assets. However, they hesitate because of concerns over opportunism or moral hazard on the other party’s behalf.

WILLIAMSON’S (1979) remedy in a hold-up situation was to suggest that vertical integration would increase efficiency. However, if that were a sufficient remedy for the poultry industry, we would expect that broiler farms would be fully integrated into the companies. An alternative remedy that may better explain the existence of poultry contracts is offered by GROSSMAN AND HART (1986). They suggest that to overcome hold-up problems, the ownership of the most significant asset is what is important. They discuss the concept of *residual rights* in a contract. Essentially, in a hold-up situation, they state it may be most efficient for one firm to buy or completely own the key asset of the other (GROSSMAN AND HART, 1986). In poultry production, the integrators have retained ownership throughout the chain of the saleable asset – the chickens themselves.

Considering GROSSMAN AND HART’S (1986) proposition for an asset-ownership remedy to

hold-up, and taking a transaction cost approach to assessing the economic structure of a poultry integrator, we can thus arrive at one explanation for why the poultry contract exists and the farms are not owned under management of the companies: the model is efficient this way because the contract arrangement reduces transaction costs.

It is worth noting however that there are several criticisms of TCE that may be useful to keep in mind while examining poultry production contracts. An assumption in transaction cost economics is that the invisible hand of the market selects organizational structures that are most efficient in the long run (CHILES AND McMACKIN, (1996), WILLIAMSON (1979)). In the TCE framework, it is assumed that the surviving and successful organizations are therefore efficient, and thus have established models that exhibit low transaction costs. Two potential criticisms of this approach are 1) that existing markets and economic structures may not actually be operating in an efficient manner, depending on the inclusiveness of the definition of efficiency, and 2) that the reasons for these firms' survival may not have been because of low transaction costs in a competitive marketplace.

One approach to the first criticism comes from the field of organization theory. DOW (1987) points out that it is inconsistent to allow bounded rationality in the analysis of contract structures or governance structures, but then to assume that rational and efficient decisions are made by the firm. WILLIAMSON maintains that an economic structure such as a firm or contract arrangement "for which no superior feasible alternative can be described and implemented with expected net gains is presumed to be efficient" (1996, p.7). However if agents exhibit bounded rationality, DOW argues, this is in contrast to the idea that they can figure out the most efficient organizational structure (DOW, 1987). In addition, referring back to KNIGHT's (1921) definition of uncertainty in which it was established that asymmetric or partial information is a cause of uncertainty, a further question of possible contract efficiency arises. DOW's criticism is thus deepened given bounded rationality and the possibility for the presence of uncertainty or asymmetric information in contract decision-making.

Another criticism of transaction cost economics focuses on the assumption of competition itself in the marketplace. While there is room in TCE for intermediate inefficiencies, the concept is that competition will restore efficiency through selection of the models with the

least transaction costs. Thus, the concept of competition is essential to the functioning of models in transaction cost economics.

However, when applied to a real world context, competition is not necessarily a given assumption. One example can be seen in the 2010 report from the High Level Group on Milk, a task force organized by the EU Commissioner for Agriculture and Rural Development in response to weakness in the milk market. In the summary report key findings were that competitiveness is a serious problem in the market. Large firms dominate the markets, and interestingly the spur for innovation is weak in many Member States. A major focus of the report was on the lack of bargaining power afforded to producers given market concentration. The report directly explains the distortion that this power dynamic might have – stating that “this imbalance can lead to unfair commercial practices, in particular farmers not knowing what price they will receive for their milk when delivering” (HIGH LEVEL GROUP ON MILK, 2010). In the report they also advocate for the adoption of written contracts, as a mechanism to increase transparency for producers and reduce unfair practices.

What this example indicates is that despite the apparent financial and marketplace success of brands producing milk in Europe, they do not necessarily represent an efficient economic structure and may in fact be generating inefficiencies with negative externalities for the general population. The European milk market is an example in which successful firms with powerful market presence are in fact engaging in inefficient contracts (HIGH LEVEL GROUP ON MILK, 2010). The reliance on the “invisible hand of the market” or the presence of competition (and thus the theoretical functioning of anti-trust laws) to ensure the outcomes of efficiency is thus a questionable premise.

Given these criticisms, a transaction cost framework may explain the existence of production contracts as long as considerations for marketplace competition and adequate attention to issues of transparency, cultural trends, and other contextual impacts on the perception of risk and uncertainty are taken into account.

## 2.2 Defining a Broiler Production Contract: Evolution and Key Components

It is essential to clearly define the components of a modern poultry contract, and understand why those elements have come to be so common.

The form of production organization that many agricultural companies use today is often casually referred to as “contract agriculture.” In recent years this term has become politically and socially charged with different meanings. In contradiction to this generalization, there are many typologies of contracts employed in agricultural production and a variety of economic organizational structures. ROE ET AL (2004) have documented a variety of forms of “contract” agreements, ranging in complexity from what some call the “farmer handshake,” meaning verbal agreements based on relationships and trust, to highly complex marketing and production contracts.

The use of contracts with poultry growers started in the United States in the 1940s and became overwhelmingly prevalent, coinciding with dramatic growth in the industry. Poultry was decades ahead of other livestock in terms of contract relationship development – the broiler industry was the main user of production contracts from 1950 until 1980. The hog industry did not start to follow suit until 1970, and the beef industry was even farther behind (VUKINA, 2001). Until the 1940s the United States’ chicken production was still largely decentralized, and the majority of chicken farms were backyard or independent operations (PEW, 2011). As is displayed in **Figure 1**, over a 10-year period until 1950, the US marketplace saw a decrease in the number of chicken farms by 98%, and a simultaneous increase in the sales of poultry by 1,400% (USDA, 2007).

### U.S. Broiler Farms: What They Produce

	1950	1978	1987	1997	2007
Farms <sup>10</sup>	1,636,705	31,743	27,645	27,737	27,091
Chickens	581,038,865	3,062,154,490	4,361,975,630	7,366,526,456	8,914,828,122

Source: USDA Census of Agriculture

**Figure 1: USDA Census, Number vs. Production of broiler farms**

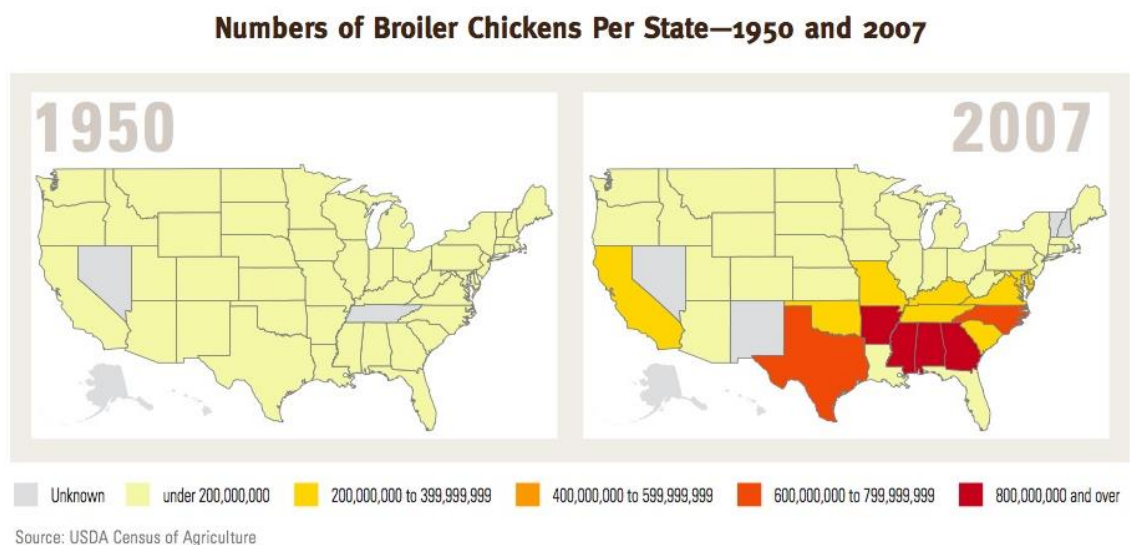
As VUKINA (2001) indicates, the sudden changes were driven by two trends – increasing production thanks to technological development, and the beginnings of vertical integration and consolidation in the industry. As production levels increased and there was more value in the chicken market, segments of the value chain began to separate into specialized independent businesses. Feed mills, hatcheries and farms that raised chicks until slaughter-age became distinct units, and processors began to exist separately and trade with one another in open, usually localized markets. Feed dealers saw an opportunity to expand the market even further by extending credit to the farmers who were raising chickens, thus enabling them to get feed they needed to raise larger flocks. Farmers would then pay the dealers back when the birds were sold farther up the evolving supply chain to the processing plants (PEW, 2011). This was the first practical step toward a “vertically integrated” supply chain.

At this point, the use of contract agreements between actors in the supply chain began to evolve as well. Feed mills and processors merged to form what would eventually become known as “integrators,” or large livestock firms. These changes were fueled further by the introduction of the Confined Animal Feeding Operation – known now as the CAFO. The CAFO is an indoor “house” that is designed to be also a feeding system, and today can manage 30,000 to 40,000 birds in a single structure (PEW, 2011).

The introduction of the CAFO allowed exponential growth in the industry but it also created a logistical problem. As higher volumes of chickens were produced and higher quantities of inputs, such as feed, were required, transaction costs of maintaining a spread-out value chain



became a major issue. A lot of fuel is required to ship the inputs and outputs of industrialized chicken production from place to place, and a lot of time is spent in negotiation of individual agreements. Transaction costs can be seen as one of the major drivers of geographical redistribution of the industry, from being relatively dispersed all over the country to being concentrated specifically in the southeast (USDA, 2007). This allowed integrators to reduce their transportation and organization costs during production. **Figure 2** displays the geographical reorganization of the major production of poultry.



**Figure 2: Regionalization of Broiler Industry**

GOODWIN (2005) provides additional analysis of the reasons for the location of poultry in this region, which is that five factors combined to create the ideal location: “feed costs, community attitude towards broiler production, availability of potential growers, unemployment rates and wage rates” (2005, p.340). He explains that for example, in the Ozarks and Southern Appalachians, the industry rapidly became dominant because land quality was poor, unsuitable for other crop production. At the same time, there were low levels of employment and education, which meant few alternatives and low labor costs (GOODWIN, 2005).

This modern poultry value chain, unlike its predecessors, consisted primarily of one principal (the integrator) in specific and limited relationships with other distinct actors and agents (such as feed mills, hatcheries and grow-out farms.) Overtime the integrators enveloped the feed mills, hatcheries, processing facilities, breeding processes, and all links of the value chain except the farm.

To govern this one remaining outsourced step in production, the modern poultry contract was born. MARTIN (1994) has tracked the evolution of poultry contracts. Overall what can be seen is a trend starting from fixed payments and moving increasingly toward higher variation based on outputs and use of company provided inputs.

The first poultry contracts were known as *open account contracts*, and were based simply on loans given by banks or feedmills. Farmers raised the chickens, and returned interest on the loan. At the second stage of their evolution contracts were called *guaranteed-price contracts*, referring to agreements where the farmers were paid a certain price per bird at the end of a growing cycle. These were widespread in use in the 50s and 60s. There was a wave of new poultry growers after WWII that signed on to these contracts as a way to return to farming (VUKINA, 2001). From there the contracts evolved to become *flat-fee contracts*, which were more specific to output in that they paid a per-pound rate, and thus rewarded farmers for raising fatter birds. At this point the relationship between grower and integrator also evolved, so that integrators were providing farmers with the required inputs (feed, medicines, etc.) and maintained ownership of the birds throughout the grow-out phase. A problem of low incentive compatibility also evolved – there was a concern that farmers may have been encouraged to overuse inputs in order to generate highest outputs, in other words to “shirk” in their effort to use inputs efficiently where possible (VUKINA, 2001).

Therefore, processors were spurred to create a further evolution of the contract, creating a unique mechanism for payment calculation to include more specific efficiency and output incentives, by basing payment on an input-conversion to poundage ratio. The *basic feed-conversion* contract was thus created, tying payment especially to the use of the most costly input, feed (VUKINA, 2001).

There are two main mechanisms in the modern poultry contract that should be considered in analysis: first, the means for dividing responsibility regarding inputs, decision-making, practices and equipment, and secondly the means for calculating the payment to the grower. Within the first mechanism, it is generally uniform across the poultry industry (referring to both broilers and turkeys in the US) that the farmer agrees to provide the capital sources including the labor, land and housing utilities and utilities (including electricity and water). Repairs, maintenance, clean-up, and mortality (meaning the cost and responsibility for disposing of dead chickens) is also the farmer's job. The integrators generally provide the chicks, along with feed, medication, veterinary services and technical support in the form of supervisors that regularly visit farms (VUKINA, 2001).

The second mechanism, the method for determining the farmers' payment, is more subtle and complex. The majority of poultry contracts that dominate the market in the US use what is called a *two-part piece rate tournament* as payment calculation (VUKINA, 2001). This system relies on determining the average cost of a grower to the integrator based on inputs provided, than determining the grower's rank in a competitive pool with other growers. A price per pound is attributed to each grower based on their rank. KNOEBER AND THURMAN (1995) explain that this value is calculated as follows:

“It is not a grower's absolute performance that determines his pay, though; it is his relative performance. The typical contract (and one used by the growers we examine) calculates an average settlement cost for flocks harvested at the same time (typically within a two-week period) and then determines a grower's relative performance as the difference between his actual settlement cost and this average. A grower receives a base-per-pound payment (3.4¢ for our growers at the end of the period we examine) plus a per pound bonus if his performance is above average, or a per pound penalty if his performance is below average. For our growers, the size of the bonus or penalty was equal to the measure of his relative performance. So, if a grower's settlement cost was 0.3¢ below average, he received a payment equal to the base pay plus a 0.3¢ bonus, or 3.7¢ per pound. Similarly, a grower who performed worse than the average by 0.2¢ received a per pound payment of 3.2¢” (1995 p.487-488).

The existing literature generally attributes significantly improved efficiency in broiler production to the fine-tuned payment mechanisms in these contracts, which in theory provide farmers an incentive to increase output with a focus on efficient and cost-effective use of inputs (VUKINA, 2001). VUKINA has also written about the success of the poultry industry in

dominating the competitive meat market since the 80s. He cites the increases in efficiency and improved product offerings as reasons for poultry's increased market share over other meats and points to the evolution of the contract relationship as the tool that has allowed the industry to advance this far.

Using a transaction cost approach in their analysis, ZHENG AND VUKINA (2006) show that these contract mechanisms, and especially tournament payment, explain why vertical integration with outsourcing through production contracts, rather than complete vertical integration and internal production, dominates the industry:

“Poultry production is characterized by a high degree of uncertainty and the importance of relationship-specific assets (chicken houses, feed mills, processing plants), both of which make spot markets uneconomical. However, the anticipated need to adapt to a changing or uncertain future should lead to vertically integrated production, yet contracts with individual farmers became nearly universal. The explanation for this puzzle lays in the adoption of tournaments based compensation mechanisms for contract growers. (2006, p.844).

They cite three reasons for this. The first is that the transaction costs involved in contracting are reduced, because integrators can revise the pay scale [offering per-pound supplements or increase in base pay for example] to incentivise upgrading technology, which precludes the necessity of revising or renewing the contracts each time the value chain needs to be updated. This eliminates one of the major transaction costs that would create a bias toward internal production and complete vertical integration.

Secondly, ZHENG AND VUKINA (2006) also mention that a significant portion of risk is shifted to the integrator through tournament payment (this theoretical risk shifting is explained in further detail below, KNOEBER AND THURMAN (1995)) without the need to establish contingency clauses or expect re-contracting.

Third, as is acknowledged widely in the literature (GOODHUE (2000), KNOEBER (1989), KNOEBER AND THURMAN (1995), VUKINA (2001)) the asset-specificity required in the investment on the farmer's part makes the contracting procedure long-term, and (at least in theory) induces some kind of self-selection for high-ability growers. Furthermore, the

personal nature of the capital used to obtain these assets may function to eliminate the potential problem of opportunism that risk-averse growers would express. In other words, the fact that farmers often put up family land or their house or farm to secure a loan to build a chicken house binds them to the contract terms.

If the contract and its terms are the reason for a poultry firm's success, it is interesting to note that for the farmer, VUKINA (2001) proposes that poultry contracts have been a problem-solver and a benefit as well. In a historical article regarding the rise in market power of the industry, he bases the assumption that contracts are "popular" among American farmers on their prevalence. He points to access to cash-flow and diversified income opportunities as benefits stemming from production contracts. However, he also acknowledges that farmers have lodged many complaints with federal regulatory bodies regarding their experience of production contracts – in particular in terms of their revenues (VUKINA, 2001).

Another consensus in the literature (VUKINA (2001), GOODWIN (2000), MARTINEZ (1999)) seems to be that the advancements of the poultry industry have led to an overall increase in welfare, growing the industry and reducing the cost for consumers. The rapid advancement of technology led to a decrease in costs of production, coupled with an increase in productivity. The resulting welfare gains were partially passed on to the consumer in the form of a reduction in the price of poultry meat. MARTINEZ (1999) conducted a study in an attempt to isolate the magnitude of the industry's gains as a result of technology, in which he simulated the retail price of whole broilers holding technology constant and varying only production and marketing costs based on input prices. He then compared these results to the actual prices in history. His study shows gains passed on to consumers (MARTINEZ, 1999).

## 2.3 Risk in Broiler Contracts

With a clearer understanding now of what the components of a poultry contract are and how the mechanisms function, it is possible to continue to a specific review of the literature regarding risk. Risk in broiler contracts has been explored primarily through a few generalized factors, in two main categories: production risk and price risk.

Production risk is discussed as having two forms, either idiosyncratic, meaning pertaining to the individual farmer's conditions, or common, meaning shared across a pool or region of farmers. Production risk is noted by many authors to be a source of uncertainty in the industry because of the threat of weather, disease, and other natural occurrences (KNOEBER (1989), KNOEBER AND THURMAN (1995), GOODHUE (2000), ZHENG AND VUKINA (2006)). Another major source of risk that is discussed in broiler production is price risk – pertaining both to the output price of poultry products and the variability of the price of feed. Many authors such as KNOEBER (1989) and GOODHUE (2000) discuss the price of feed and the implications this variability may have for the integrator. Variability in other integrator provided input prices (chicks, medicines, etc) are not generally discussed. In addition, variability in input price that remains with the farmer (labor, land, fuel, electricity) is not mentioned in the literature reviewed or considered in the discussion of price risk.

What follows is a summary of various works, highlighting the main points of key authors contributing to broiler production risk literature:

One significant study is that of KOHLS AND WILEY (1955). Because the data is old, the types of contracts and relationships farmers had with their integrators in this study are no longer relevant today. However, one thing that makes this work interesting is that it was conducted in Indiana in a time when it was still possible to have two territories for comparison. The first was still dominated by independent poultry producers, and the other was largely producing under feed-dealer contracts, in which the dealers owned the title to the birds and also did the marketing. KOHLS AND WILEY (1955) found that many variables in production, such as the feed conversion ratios, were the same despite the different production models. Where they found differences are areas that are particularly relevant to the changing role of farmers. In the independent territory farmers were able to buy from different input sellers, use multiple chick dealers, and use different breeds of chickens. For this reason, farmers were able to reduce their costs through the more competitive market. In this time, there were still as many as 18 feed dealers in area A and 17 feed dealers in area B. This is a drastically more competitive market compared to today's statistics, however KOHLS AND WILEY (1955) still found evidence of the negative impacts of monopoly and monopsony on competition and on

farmer's income. The feed cost was \$97.46 in the non-integrated area and \$105.71 in the integrated area; a difference of \$8.25 per ton.

In addition to increased costs, contract farmers received generally lower income. KOLHS AND WILEY (1955) considered many circumstances before making this point about income, including location of the sellers (near metro areas or not), transportation costs, etc. In the end they reached the conclusion that "in any event, growers in Area B [the integrated area] received less income per bird than did growers in Area A and this difference was largely attributable to the integrated nature of the broiler industry in Area B" (1955, p.86).

KOHL'S AND WILEY'S (1955) research provides a perspective on how the relationship initially began to form and evolve between farmers and integrators. They describe how new farmers were attracted to credit opportunities in the integrated area, and then maintained their loyalty. They mention that a personalized relationship with salesmen clearly contributed to farmer loyalty. "A feeling that "he has taken care of me in the past and will in the future" seemed to exist" (1955, p.86). However on the other hand, the researchers found evidence that growers under contract were encouraged to stay in debt in order to prevent them from changing to other dealers. In addition, farmers were quoted as saying that they feared canceling their contract, because they did not believe they would have a market to become independent sellers if they did.

In a more recent and majorly significant work regarding risk sharing in broiler production, KNOEBER AND THURMAN (1995) claim that 97% of price risk and production risk is shifted from the grower to the integrator in the contract model of broiler production, in comparison to independent growers. Their study was conducted using settlement data from 75 farmers, all part of one small integrator, over a period from 1981 to 1985. They applied the assumption that the growers were "quite risk averse" as a means to explain their theoretical choice of signing a production contract.

The risks they consider in this study are price risk, and both idiosyncratic production risk and common production risk. They state that "price risk is by far the most important contributor to income variability" in overall poultry production (1995, p.487). In fact they find that price

risk alone for inputs and outputs accounts for 84% of the total risk. The remainder is divided between 3% common production risk, 3% idiosyncratic production risk, and 10% a mixture of the three factors. They state that only idiosyncratic production risk remains with the farmer, as a result of the contract features (KNOEBER AND THURMAN, 1995.)

To better understand how that price risk is shifted off the growers, they look closely at the mechanism of tournament payment. KNOEBER AND THURMAN (1995) refer to tournament payment as a proxy for “relative performance.” As KNOEBER (1989) explains in a separate article regarding the tournament: “the best performers receive the largest prize; the worst performer receives the smallest. As in professional golf, it is only a player’s rank that matters” (1989, p.155).

Given this mechanism of payment, KNOEBER AND THURMAN (1995) indicate that grower pay is dependent on their production outcomes but not price outcomes, and thus growers do not bear price risk. Also, they find that since payments are relative to other growers in their pool, this mechanism removes common production risk. They theorize that if extreme temperatures were to reduce production outputs in an area, this risk would be shared by all growers in that area. But their pay would be calculated based on their output relationship to each other, not total output individually. Thus they would not suffer the equivalent losses of having less output. In this way, they state that tournament payment removes common production risk.

They further propose that there are some reasons why this risk shifting makes sense for the value chain. For one, they note that the integrator has a significant role to play in the production risk, as they provide the inputs. They state that: “With uncertainty, incentives are improved if those who can most readily affect uncertain outcomes also bear the risk associated with these outcomes” (1995, p.488). In previous writing, KNOEBER (1989) has documented that integrators have a direct impact on production risk, because of their decisions regarding chick genetics and feed. Thus the theory presented is that the integrator is better positioned to address risks related to price of quality outputs and supply and demand of outputs, because they can control the quality of inputs.

In addition, in considering how this risk is managed by the firm, they note that it is better in



terms of overall welfare if the party that can manage the risk cheaper is carrying it. In 1990, over half (53%) of the total broiler production was represented by 10 companies which were publicly owned and traded (this included at the time ConAgra, Pilgrim's Pride, Sanderson Farms, Tyson Foods and Golden Poultry to name a few of the major players.) They point out "the cost of bearing risks that are shifted to the integrator companies is reduced in the publicly traded companies because shareholders can hold diversified portfolios of income-producing assets" (KNOEBER AND THURMAN, 1995, p.487). They also add that even for private companies, such as Cargill, their portfolio of products is widely diversified which helps to absorb price risk related to broilers and poultry products.

TSOULOUHAS AND VUKINA (1999) expand on the reasons why tournament payment has been adopted in the poultry industry, in relation to the concept of price risk experienced by the integrator. They look at optimal contracts between three different industries: broilers, turkeys and hogs. They base their study on a model generated from industry information and previous literature. Specifically they look at the peculiar fact that in hog production, a fixed performance standard is used as a comparison for farmers' performance in establishing farmer pay, in contrast to the broiler model. Interestingly, the turkey industry used a mix of the two forms. They look at output price volatility and firm size in the different industries. Interestingly, they note that the dominance of large firms in the broiler industry generates a small output price volatility, as opposed to the smaller firms in the hog industry (at the time) which, with more competition, experience a higher output price volatility. They note that this increased price stability in poultry facilitates the use of tournaments in the broiler industry.

Their model employs assumptions that have already been discussed and are consistent in most of the literature: it assumes a risk neutral firm, utilizing the contracts as a way to provide insurance to risk-averse growers. They assume that the problem of opportunism on the part of the growers is minimized by grower's asset-specific investments. They point out that a problem of incentives and asymmetric information regarding grower ability for the integrator still remains, since the integrator provides the feed but cannot supervise the growers. Thus, the contract goal must be to incentivize effort from the farmer in efficient use of feed. Their conclusion is that if bankruptcy of the firm is not a problem, then tournament payment is the optimum option for incentives and remuneration (TSOULOUHAS AND VUKINA,

1999).

A topic of much discussion that is mentioned by TSOULOUHAS AND VUKINA (1999) is the heterogeneity in farmer ability level, and the corresponding asymmetric information the integrator faces regarding their effort. In further research into the mechanism of tournament payment and farmers' interactions with it, KNOEBER AND THURMAN (1994) use the same 1980's data set that they revisit in their 1995 study to compare two tournament payment to Linear Relative Performance Evaluation (in which the unit rate of pay is still differentiated based on calculated performance, but relative to a linear position rather than relative to an established group average.) They find a negative correlation between the mean output for an individual grower over time (which they take as a general measure of grower performance), and the variability in pay for that grower (which they take as a general measure of the grower's risk taking.) They thus maintain that tournament calculation is a measure of grower ability, and that "less able players will adopt riskier behavior," implying that the better farmers will have more consistent, less variable tournament paychecks (1994, p.178).

They also note, interestingly, that they found evidence that farmers are not assigned to tournaments randomly. This makes sense from a theoretical perspective, as it may be in the best interest of the integrator to "sort" growers by ability so that, in theory, the high ability growers would not be able to take advantage of disincentive effects that result from mixed-ability tournaments. They find that integrators do practice handicapping and sorting to some degree in order to pre-determine efficient tournaments (KNOEBER AND THURMAN, 1994).

ZHENG AND VUKINA (2006) also addressed the potential motivation for sorting to avoid heterogeneous tournaments in response to adverse-selection and disincentives in their study using KNOEBER AND THURMAN's (1994) data:

"Low-ability contestants attempt to contaminate high-ability pools, resulting in adverse selection. With full knowledge of abilities, rank-order tournaments with heterogeneous agents still suffer from incentives problems requiring handicapping or sorting to secure efficient competition within the same organization. The intuition behind these results is straightforward. Because of the natural advantage that high ability contestants possess, they will not compete hard enough because they are likely

to win anyway. Similarly, the low ability types will not compete hard enough because they know that they are likely to lose no matter how hard they try” (2006, p.858)

However, in contrast to some of the other literature, they note that due to this motivation for potential sorting on behalf of integrators, it is actually hard to tell if heterogeneity in farmers (still using output as a proxy for “performance”) is based on ability levels or on variability in quality of inputs (ZHENG AND VUKINA, 2006). They generally note that tournament allows the integrator to gain efficiency by: “being able to increase output and by reducing the average grower payment. On the other hand, some of the contract growers gained and some lost depending on their realized productivity shocks” (2006, p. 858). It is interesting here to note that the increased efficiency in the model is correlated with the integrator’s ability to reduce overall average grower pay through the tournament system.

In another approach examining risk sharing in poultry contracts, GOODHUE (2000) focuses on the nature of the risk that is shifted from farmers to processors. Building on the premise of risk-shifting established by KNOEBER AND THURMAN (1995), she states: “Farmers exchange decisions over marketing and/or production management decisions for a guaranteed price” (2000, p.606). She also indicates that the remaining risks farmers face are common and idiosyncratic production risk, and any variability that might be caused by the inputs provided by the integrator.

Interestingly, GOODHUE (2000) makes a key assumption in the beginning of her study regarding the nature of the contract agreements. She recognizes that the “legal” and “implicit” nature of the contracts are two different things. As she puts it, “While the legal contracts may be terminated after one flock, they are almost always renewed” (2000, p.607). She does not indicate that this dynamic may introduce a risk for farmers. Quite the opposite, she sees the fact that the contracts require that growers invest significant amounts in specific assets as evidence of consistency in the “implicit” nature of the agreements. She explains, “These observations suggest that growers and processors enter a stable implicit long-term contract” (2000, p.619).

While this view is shared by many others, LEEGOMONCHAI AND VUKINA (2005) present a slightly different view, though maintaining that, for the most part, the relationships are long-

term. They do however recognize the legal terms of the contract as short-term, and they state: “The reason for the prevalence of short-term contracts in repeated business transactions is the unwillingness or the inability of parties to commit to long-term relationships” (2005, p.850). They further note that this may lead to complications. They imply that the flexibility in the contract is a benefit for the integrators, allowing them to adjust supply in the marketplace.

“By delaying or speeding up the delivery of new flocks to growers, the integrators can manipulate supply in response to market signals. In most instances, after one flock is harvested, the contract gets tacitly renewed, and within a couple of weeks the grower receives a new flock. The cases of unilateral contract terminations are quite rare and are typically caused by the grower’s massive violation of contract stipulations (e.g., gross negligence or theft of feed or birds) or by the company’s closing down a particular division, or bankruptcy. It is not unusual for the contract growers to spend their entire career growing chickens for the same company” (LEEGOMONCHAI AND VUKINA 2005, p.854.)

They do not mention any contradiction between the implication that integrators may speed up or delay production for farmers, and the implication that the contract agreement is stable and low-risk for farmers, nor do they specifically explore the concepts of marketplace competition inherent in an integrator’s ability to control aggregate supply of a product.

GOODHUE (2000) takes this a step further in her research, and states that the number of flocks a grower receives from an integrator is intentional, and an indication of grower performance as well. She states: “The number and size of flocks processors assign vary across growers; better growers are provided with more flocks over a given period of time” (2000, p.607).

Based on this premise, she proceeds to use an agency framework to analyze the processor’s choice of relative compensation. She draws on data from her previous research. She also assumes that growers are risk averse and thus seeking insurance and stability through contracts. She finds that a major cost to processors in regards to grower compensation is a result of asymmetric information. Essentially, she explains that growers with high ability are being paid information rents for their skill level, which she describes as a loss of profits for the integrator.

The reason she identifies for this loss in profits, is that integrators use an estimator in

calculating grower costs (feed costs in particular), which is then used to determine grower pay. She finds that this estimator does not fully reflect the systemic production shocks the integrator experiences. It is this estimator that also absorbs input price risk in the tournament calculation. She posits that increasing the uncertainty experienced by growers by using a more variable estimator for calculating their pay, and thus reducing some of the risk-sharing built into tournament, will increase processor profits (GOODHUE, 2000).

Thus far the literature has established in theory that integrators are able to in time sort farmers into tournaments to equalize performance and thus increase efficiency.

LEEGOMONCHAI AND VUKINA (2005) approach the integrator control of production from the other end – the inputs. Using a similar hypothesis to GOODHUE (2000), they test whether processors supply inputs in a discriminatory fashion as a strategy, either giving increased quality to high-ability producers inducing a *careers concerns* scenario, or through a pattern of compensation thereby producing a *ratchet-effect* by giving higher quality to low-ability producers (LEEGOMONCHAI AND VUKINA, 2005). They state that their study is conducted in response to “documented evidence regarding broiler contract growers complaining about the unfair distribution of variable quality inputs (feed and chicks) they receive from their principals” (2005, p.850). They test settlement data from a data set provided to them by integrators themselves, which they acknowledge contains some missing flock information.

LEEGOMONCHAI AND VUKINA (2005) conclude that based on existing theory that if an integrator were to discriminate in the quality of inputs, it would be to induce *career concerns* for high-ability growers. However they establish that there is not evidence to confirm that this happens. As rationale for the negative response to their hypothesis, they state that the transaction costs associated with this kind of discrimination in input quality would be too high, a statement that GOODHUE (2000) also notes in her rationale for why integrators do not provide inputs of different qualities. In other words they theorize that it would be time consuming and expensive for an integrator to organize and ensure that higher quality inputs went to one farm and lower quality went to another farm. Secondly they sight the potential “loss of goodwill and reputation” as a reason that integrators would not provide unequal qualities of inputs (LEEGOMONCHAI AND VUKINA, 2005 p.874). However it is worth noting that they do not directly respond to the claims made by farmers, as to whether or not

integrators have discriminated in the provision of quality inputs. They acknowledge this in a sense by adding as a final statement: “More empirical research is surely needed to answer this question” (2005, p.875).

Another explanation for the existence of production contracts as a form of economic organization is discussed by GOODWIN (2005). He explains that the capital invested by growers “greatly limit the amount of capital necessary to provide slaughter-weight birds” on the part of the integrator (2005, p.340). GOODWIN indicates that farmer investment is roughly ½ of the total investment involved in opening a processing plant. He estimates for a complex of 500 chicken houses, a total investment to produce the 1.2 million chickens per week of \$180 million is necessary – and roughly \$90 million will be invested by the farmers in themselves in building the chicken houses.

In terms of looking at the overall revenues from poultry contracts for farmers, GOODWIN ET AL (2005) have produced the most recent work. The authors note that in general in the field of broiler contract theory, there is limited primary data accessible. They look at data from 16 complexes representing 150 – 200 farms each, and calculate the production costs involved in the poultry houses – including the investment in the houses, interest, equipment, support equipment (such as partial use of a tractor), and an estimate for additional costs such as fuel. They calculate costs for two labor scenarios: hired labor or unpaid family labor.

GOODWIN ET AL (2005) base their study on a few specific assumptions that are important to observe. First they state that family expenses are expected to be subsidized by off-farm income, rather than from the poultry business itself. They do not address whether this is the trend in the industry or not. This assumption is important considering that the net farm income scenarios for an investment debt of \$538,315 for 4 poultry houses is only \$10,208 in year 1 with hired labor, or \$23,643 with unpaid family labor *before income tax* (GOODWIN ET AL, 2005). For perspective on what this would mean for farmers whose primary occupation is poultry farming - a minimum wage income of one person full-time in Johnson County, Arkansas, would be \$15,080 – a living wage, defined as the necessity for basic needs by the Massachusetts Institute of Technology calculator, would be \$19,468.80 for one person (accessed online: [livingwage.mit.edu](http://livingwage.mit.edu)).

Other assumptions included in the study are that the farm operation is not paying for their land, and that “no significant technological changes requiring major grower investment will occur during the period for which the analysis is based” (GOODWIN ET AL, 2005, p.114). In other words, these estimates only apply if no upgrades are required by the company.

Based on these assumptions, GOODWIN ET AL (2005) show net farm incomes as high as \$131,655 for unpaid family labor scenarios and \$102,967 for paid labor by year 21. They indicate that contract broiler production “continues to be competitive with other farming operations, especially compared with options available for small family farms” (2005, p.114). They mention in particular that raising chickens has lower volatility than other options for small farmers, which makes it an attractive option.

In an alternative approach to considering poultry contract revenues, TAYLOR AND DOMINA (2010) reference the Alabama Farm Business Analysis Association records, which contain economic data of poultry operations from 1995 – 2009. They stress that this is a unique data set as it was actually established with a focus on management, in a survey conducted separate from industry input. Using this data they show that annual net returns to operator management and risk for a five-house operation was negative for 10 out of 15 years from 1995 – 2009. Total losses averaged \$182,000. In this study a \$7/hour estimate for family labor was included. **Figure 3** is a visual display of the data from TAYLOR AND DOMINA’s (2010) report.

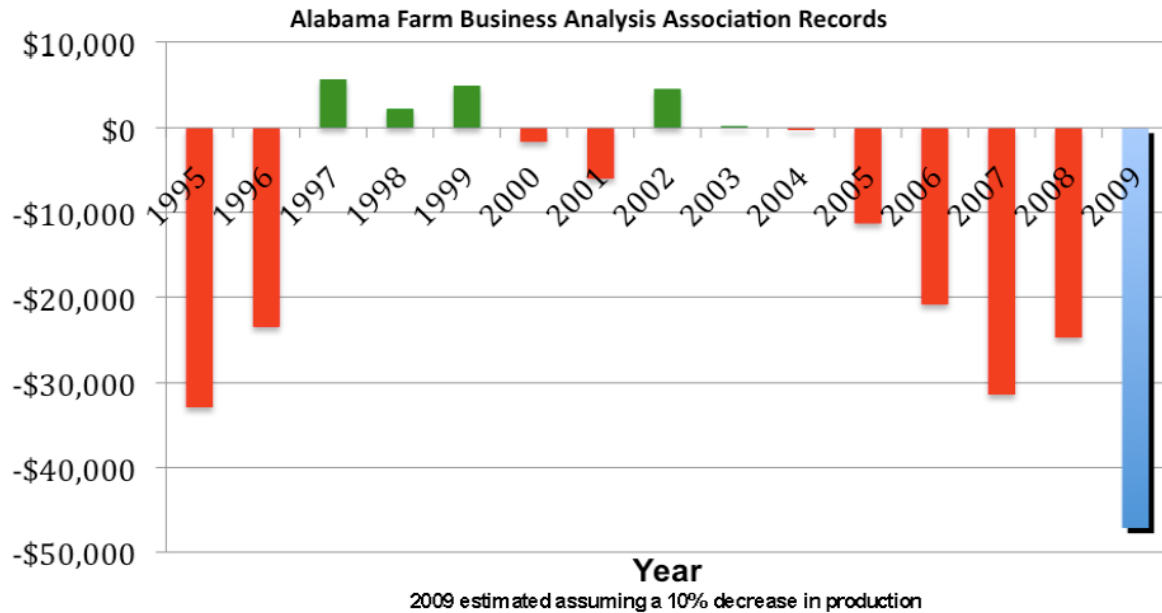


Figure 3: Poultry Farmer Net Revenue

TAYLOR AND DOMINA (2010) also note that “AFAA records show gross contract payouts are somewhat above average for the area. Thus the economic plight of the average contract grower is worse” than what is show in **Figure 3** (2010, p.10).

TAYLOR AND DOMINA (2010) and GOODWIN ET AL (2005) both discuss the per pound unit rate that growers are paid. GOODWIN ET AL (2005) show that for their complexes in Missouri, Arkansas and Oklahoma, farmers received a gross revenue per foot increase from \$0.84 in 1979 to \$1.62 in 1999, unadjusted for inflation. Once adjusted for inflation, the per square foot revenue payments were \$1.69 in 1979, \$1.48 in 1989, and \$1.62 in 1999, showing that real pay has not increased but in fact has decreased slightly, and has been variable over the years. They explain that the downturn in 1989 can be attributed to “inflationary pressures that adversely affected capital-intensive operations, such as broiler production” (GOODWIN ET AL, 2005, p.107).

TAYLOR AND DOMINA (2010) looks at the trend in farmer pay using CUNNINGHAM’s 2006 data from the University of Georgia Cooperative Extension Service, which contained a 20-year analysis of data. They find that while nominally, payments to growers seem to be increasing, in real pay, they actually follow a decreasing trend. **Figure 4** shows the



comparison from TAYLOR AND DOMINA's report (2010, p.11). They state that “while poultry contracts may cash flow (i.e. pay bank loans and put some money in the growers pockets), contract pay has not generally been sufficient for growers to earn a competitive return” (2010, p.15).

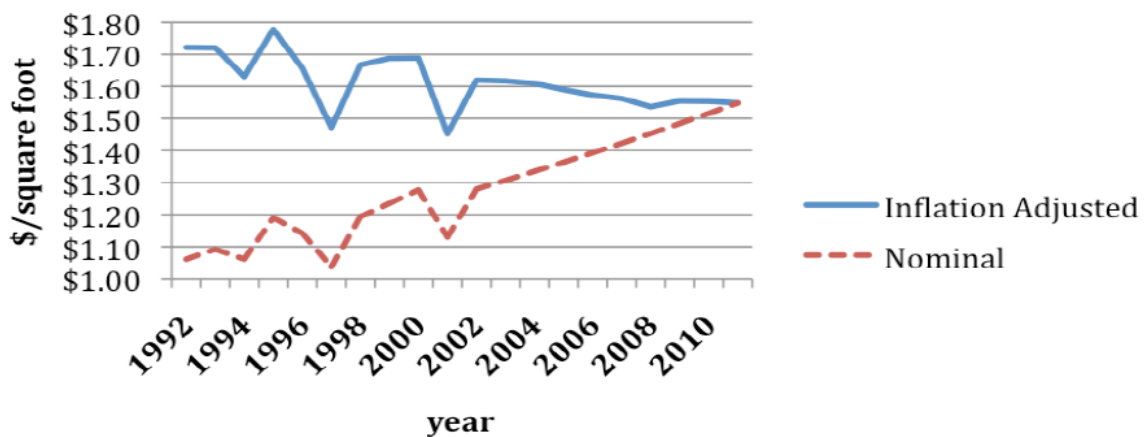


Figure 4: Pay Per Pound for Poultry Farmers Over Time

Beyond revenues, TAYLOR AND DOMINA (2010) raise concerns about other risks in the contract relationship. They mention asymmetric information as well, but in contrast to the other literature, not in regards to integrator knowledge of farmer effort. Instead they point out that both sides to a transaction should theoretically have symmetric information, but that farmers do not have access to knowledge of the buyer market – such as average grower pay or integrator profits.

They also note that because of the power dynamic, the theoretical “risk shifting” as described by KNOEBER AND THURMAN (1995) does not lead to a stable and less variable income for growers. They look at multiple settlement payments for one grower and chart the variability.

**Figures 5 and 6** show the tournament rankings of an individual grower's flocks, and the payments. The point TAYLOR AND DOMINA (2010) make is that variability is not removed by tournament payment – it is in fact accentuated. The farmer, his skills and knowledge, the house and equipment are all the same from flock to flock in this data. However the variability in tournament outcomes fluctuates. They state that “often a growers ranking changes because of factors controlled by the integrator rather than by the grower's management” (TAYLOR

AND DOMINA, 2010, p.18). They propose that if growers were paid a fixed unit price per pound, they would have still a natural incentive to be good managers because they would want to ensure high outputs. However under the tournament system, growers are “doubly penalized” – in the event of a loss, they receive a lower unit price than the base pay as well as having lower output (TAYLOR AND DOMINA, 2010).

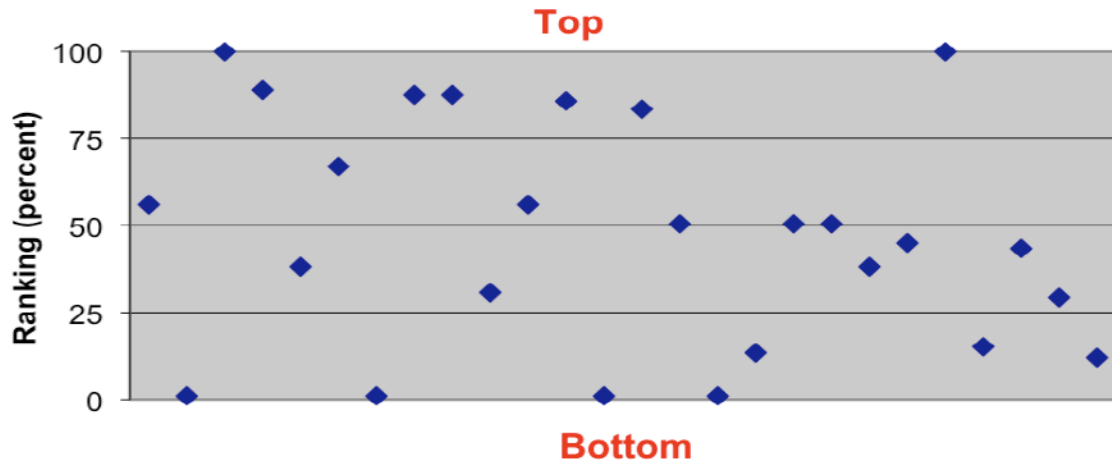


Figure 5: Individual Farmer Ranking in Tournament Over Consecutive Flocks

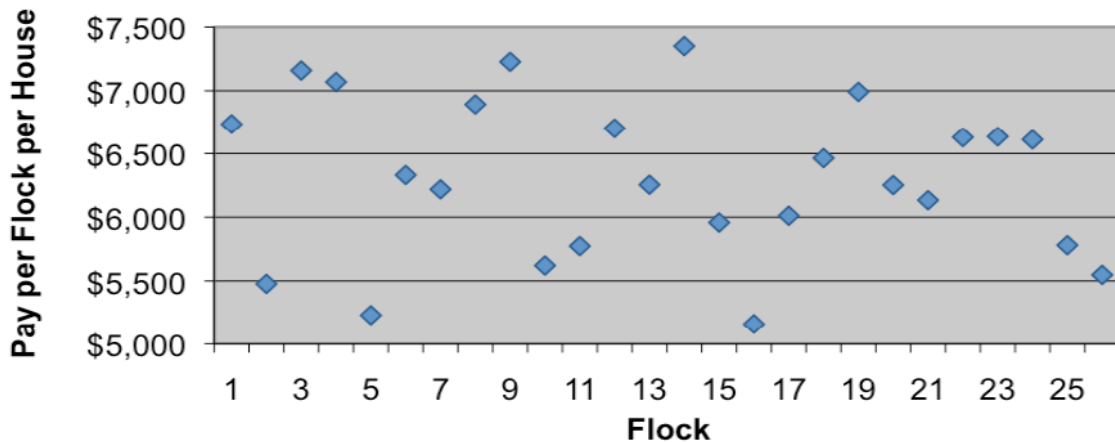


Figure 6: Individual Farmer Payments Over Consecutive Flocks

JENNER (1997), an economist with the American Farm Bureau Federation (AFBF) has written about his experience working with poultry growers. The AFBF held a conference in March 1997 in Alabama with participants from 19 states including growers, integrator representatives, and members of the Farm Bureau in order to collect information regarding what JENNER (1997) described as “new elevated levels” of concerns and issues regarding the

relationship between growers and integrators (1997, p.1). Unlike the conclusions drawn based on theory, JENNER (2001) writes that tournament payment is not an adequate proxy for grower performance. He points to two reasons. The first is that the integrator controls and provides the inputs, as well as significant decisions about production. He develops two contrasting lists identifying which issues are managed by the company and which by the growers, which are displayed in **Table 1**.

<b>Company Decisions</b>	<b>Grower Performance</b>
<ul style="list-style-type: none"> <li>• Genetic line</li> <li>• Chick quality</li> <li>• Bird age variability</li> <li>• Feed variability</li> <li>• Medication</li> <li>• Timing of deliveries and/or pickups</li> </ul>	<ul style="list-style-type: none"> <li>• Access to water</li> <li>• Access to feed</li> <li>• Temperature control</li> <li>• Clean environment</li> <li>• Mortality management</li> <li>• Manure management</li> </ul>

**Table 1: Variables Impacting Farmer Flock Payments**

JENNER’S (2001) point is that grower pay depends on all of these factors, both those controlled by the grower and those controlled by the company. Thus it is not always possible that a grower’s outputs and average costs will reflect grower performance. In the study conducted by LEEGONMONCHAI AND VUKINA (2005), their focus was on whether integrators purposefully discriminated in the provision of inputs. However JENNER (2001) in contrast points out that inevitably, some inputs will be lower quality than others, and thus an integrator cannot avoid providing differentiated quality of inputs, whether purposeful or not. A perfect example of this is the age of the chicks. Flocks given to farmers in a settlement group are not always the same age. He notes that a difference of just 4 or 5 days in the age of the chicks may change the feed conversion ratio by a few tenths of a point. This can have a significant impact in competition with other growers, and is not a reflection of the farmer’s performance (JENNER, 2001). He acknowledges that a company’s best interest is uniformity, and thus the integrator would in theory work to avoid such discrepancies. However he points out that “lower level company personnel have less incentive to take responsibility, because the growers will get feed and chicks regardless” (JENNER, 1997).

A second reason he cites is that because of the ranking system in tournament, inevitably  $\frac{1}{2}$  of the growers will be considered below average regardless of actual performance. Thus even if all growers in a settlement have record success, half of them will still be considered low performers.

In contrast, he states that in fact the main benefits of tournament payment are received by the integrators, because overall it simplifies their production cost accounting (JENNER, 2001).

This is a point that was also raised by TAYLOR AND DOMINA (2010), who explained that:

“Because of the way in which the grower pay “tournament” is typically structured by the integrator, the cost of broilers to the integrator is the same for almost all flocks produced in a given week. Week-to-week variability in actual flock costs to the integrator is only due to feed cost changes, and not due to changes in grower pay in the aggregate” (2010, p.19).

## 2.4 Summary: Transaction Cost Framework as Explanation for Efficiency in Broiler Production Contracts

In looking at the broiler production literature specifically, there are divergent opinions around risk for farmers in broiler contracts, and significant gaps in the existing data. Many of the risks farmers may face have not been explored in empirical research. **Table 2** provides a summary of the literature concerning broiler contracts and risk reviewed here, with the main points regarding farmer risk extracted.

However what is clear is that for the majority of the theoretical literature, a transaction cost framework can be applied as an explanation for why broiler production contracts increase efficiency. The simple explanation is that these contracts reduce a variety of costs related to the contracting process, making contracting more efficient for the poultry firm than internal production. The main costs discussed included an asymmetry of information and moral hazard on the part of the farmer regarding his effort level in efficient use of inputs, which according to the research of VUKINA (2001), KNOEBER (1989), KNOEBER AND THURMAN (1995), and GOODHUE (2000) was reduced through the mechanism of tournament payment, specifically tying farmer pay to a competition based on a feed cost ratio. This in theory increases outputs provided to the integrator while reducing costs of excessive use of inputs.

Secondly, the costs of lost time and inefficiency in renewing or renegotiating contracts is significantly reduced by two mechanisms. First, tournament payment builds in a preference for upgrades to the newest technologies (VUKINA, 2001), and penalizes growers who fall behind in modernizing. Secondly the asset specificity and personalized nature of collateral binds farmers from their side to an implicit long-term agreement (GOODHUE, 2000, VUKINA 2001), reducing concerns of ex ante prepositioning on their part and negating bargaining or negotiation costs.

Finally, the contracts shift marketing and market price risk to integrators, who are best prepared to manage this because of their diversified portfolios and the absorption of risk amongst shareholders for publicly owned companies (KNOEBER AND THURMAN, 1995) thus enabling risk-averse farmers seeking stability to choose production contracts. This shift is theoretically accomplished through tournament payment. Transaction costs related to contingency agreements in the event of drops in market price are thus unnecessary. A secondary aspect of this is that the integrator control of inputs ensures efficient supply in the marketplace. The integrator has the ability to adjust the quantity of chicks provided to a farmer and the frequency of flocks, thus enabling the integrator to adjust supply (ZHENG AND VUKINA, 2006). This further reduces costs related to the price risk factor for the integrator, as they can reduce supply if overabundance is a problem.

These mechanisms are highly regarded by researchers as best examples in livestock production. Hog contracts, cattle contracts and international value chains are adopting this model in rapid form. Thus, viewing the modern poultry production contract through a lens of transaction cost economics we can arrive at WILLIAMSON's (1996) conclusion of efficiency: a firm or contract agreement "for which no superior feasible alternative can be described and implemented with expected net gains is presumed to be efficient" (1996, p.7)

Authors and year	Mention of Farmer benefit	Mentions of Farmer risk factors	Notes and main arguments pertinent to risk
<b>Kohls and Wiley, 1955</b>	<ul style="list-style-type: none"> <li>• Access to credit</li> <li>• Business opportunities in post-war market</li> <li>• Positive relationship with integrator</li> </ul>	<ul style="list-style-type: none"> <li>• Encouraged to stay in debt to prevent switching integrators</li> <li>• Revenues less than independent farmers</li> <li>• Input charges (feed) higher than for independent farmers</li> </ul>	<ul style="list-style-type: none"> <li>• Conducted study in two territories, integrated and un-integrated, compared farmer incomes and experience in both.</li> <li>• Found that outputs, feed conversion ratios and other production qualities were similar in both territories.</li> <li>• Found that revenues were less under contracts, feed and other inputs were charged at a higher rate under contracts</li> <li>• Mentioned concerning practices in integrated territory, example farmers being encouraged to stay in debt to prevent switching integrators</li> <li>• Poultry plays dominant role in meat market because of efficiency of contracts</li> <li>• Almost all contracts in the market today are two-part tournament system payment, based on feed conversion ratio</li> <li>• Tournament shifts common production and price risk to integrators</li> <li>• Asset specificity induces self-selection of high-ability growers</li> <li>• Personal nature of the capital involved keeps growers in long-term agreements</li> </ul>
<b>Vukina, 2001</b>	<ul style="list-style-type: none"> <li>• Access to cash flow</li> <li>• Diversifying income opportunities</li> </ul>	<ul style="list-style-type: none"> <li>• Acknowledges that there have been several complaints filed, with particular attention to revenues</li> </ul>	<ul style="list-style-type: none"> <li>• Conducts statistical test of 75 growers from same integrator. Finds variability for tournament payment.</li> <li>• Creates modeled simulations for independent market returns, and for payment without tournament (based on a different calculation that is still input-use dependent.) Finds that tournament is less variable.</li> </ul>
<b>Knoeber, 1989</b>	<ul style="list-style-type: none"> <li>• Variability in pay is reduced through tournament compared to independent marketing</li> </ul>	<ul style="list-style-type: none"> <li>• Acknowledges that integrators do affect idiosyncratic risk because of control of inputs (quality)</li> </ul>	<ul style="list-style-type: none"> <li>• Conducts statistical test of 75 growers from same integrator. Finds variability for tournament payment.</li> <li>• Creates modeled simulations for independent market returns, and for payment without tournament (based on a different calculation that is still input-use dependent.) Finds that tournament is less variable.</li> </ul>
<b>Knoeber and Thurman, 1995</b>	<ul style="list-style-type: none"> <li>• 97% of overall risk is shifted to integrator, price risk and common production risk</li> <li>• Tournament is a rewards-based performance system</li> </ul>	<ul style="list-style-type: none"> <li>• 3% of overall risk retained is idiosyncratic production risk</li> </ul>	<ul style="list-style-type: none"> <li>• 97 percent of overall risk is shifted to the integrator (price and common production risk)</li> <li>• Companies are better equipped (publicly held, diversity of portfolio) to handle price risk</li> </ul>
<b>Zheng and Vukina, 2006</b>		<ul style="list-style-type: none"> <li>• At times hard to tell if heterogeneity in grower ability is due to actual ability or difference in quality of inputs supplied by integrator</li> </ul>	<ul style="list-style-type: none"> <li>• Using Knoeber and Thurman (1994) data set, compare rank-order tournaments model to ordinal tournaments model. Found that switching to a cardinal tournament <i>increases efficiency</i>.</li> <li>• Integrator gains by increasing output and <i>reducing overall grower payment</i>. Some growers gain and others lose.</li> <li>• Contract design reduces bias for vertical integration because it reduces integrator's transaction costs. It does this by: reducing the need for re-negotiation over upgrades, because upgrades are part of the pay scale.</li> </ul>

- |   |   |   |
|---|---|---|
| <b>Goodhue, 2000</b>                              | <ul style="list-style-type: none"> <li>• Farmers exchange decision making over marketing and production for guaranteed price</li> <li>• Tournament is a rewards-based performance system</li> </ul> |   |
| <b>Leegomont<br/>hai and<br/>Vukina,<br/>2005</b> |   | <ul style="list-style-type: none"> <li>• Quality is not stipulated in the contract</li> <li>• Acknowledge farmer complaints documented about poor quality inputs affecting pay</li> </ul> |
| <b>Tsoulouhas<br/>and Vukina,<br/>1999</b>        | <ul style="list-style-type: none"> <li>• Integrator provides insurance to risk-averse farmers through contracts</li> </ul>  |   |
| <b>Goodwin,<br/>2005</b>                          | <ul style="list-style-type: none"> <li>• Farmer bears only idiosyncratic and management risks (16%) of total risk, not price risk</li> </ul>  |   |
- 
- Heterogeneous tournaments lead to adverse selection problem as low-ability growers know they won't win and high ability don't try hard enough
  - But, you can't always tell if heterogeneity is because of grower effort or because of integrator input quality
  - Capital investments mean growers "reveal" their intent to remain in implicit contracts, contracts are long-term because almost always renewed.
  - Processors face asymmetric information in establishing farmers' ability levels. As a result of this, they pay unnecessary information rents to high-ability growers. Could increase profits by using a more variable estimator for pay calculation.
  - Heterogeneity in grower effort is a source of cost because of asymmetric info and thus potential non-compatibility in incentives
  - Test whether integrators purposefully supply inputs in a discriminatory manner to induce high effort
  - Find using theoretical model that it would be too expensive (transaction costs) for integrator to discriminate in giving inputs
  - Contracts are short term because of unwillingness to commit. Result is integrators may adjust supply by reducing flock numbers. Most farmers grow with one company whole career, terminations are result of farmer mismanagement.
  - Note that further empirical research should be done on this topic
  - Assuming risk neutral firm and risk-averse growers, the integrator faces problem of opportunism (with use of feed) and asymmetric information (regarding effort level).
  - For the concentrated broiler industry with mostly large firms, tournament is the optimal solution for incentives and remuneration – because there is low output price volatility, the firms do not face bankruptcy (compared with hogs or turkeys, which is more volatile b/c of more competitive marketplace)
  - (Heterogeneity in grower effort is a source of cost because of asymmetric info and thus potential non-compatibility in incentives)
  - The industry is one of the most concentrated in US agriculture
  - Farmer investment represents roughly 50% of total investment in a complex with processing facility for the production of chickens

<b>Goodwin et al, 2005</b>	<ul style="list-style-type: none"> <li>• Farmers have less variable income than in many options offered small farmers</li> <li>• Revenue is competitive with other small farming options</li> </ul>	<ul style="list-style-type: none"> <li>• Based on the assumptions that land is paid for, no upgrades are required, there is additional off-farm income (especially in the first years) – then poultry farming revenues are positive</li> <li>• Net farm income begins around 10k to 20k depending on hired labor but is estimated to be as high as 130k or 120k given the assumptions</li> </ul>
<b>Taylor and Domina, 2010</b>	<ul style="list-style-type: none"> <li>• Downward trend in real pay for farmers</li> <li>• Returns are sub-competitive and often negative</li> </ul>	<ul style="list-style-type: none"> <li>• Long-term profitability for growers is declining because of downward trend in pay. They often receive negative returns despite the large investments.</li> </ul>
<b>Jenner, 1997 and 2001</b>	<ul style="list-style-type: none"> <li>• Covering costs of production under tournament variability</li> <li>• Tournament is not based on performance alone</li> </ul>	<ul style="list-style-type: none"> <li>• Tournament is not a proxy for performance because of integrator provided inputs and the impact of integrator decision making on settlement rank, as well as because the ranking mechanism means no matter what 50% of farmers are “below” average</li> <li>• Variability in pay as a result of tournament may increase risk that farmers are not able to budget or pay costs of production</li> </ul>

**Table 2: Summary of Broiler Risk Literature**



## 2.5 Hypothesis

It is clear that there are some controversies and gaps in the existing literature about broiler contracts. What stands out in the review is the lack of primary data and neutrally accessed data. Specifically considering farmer risk, certain areas (namely production risk and price risk) have been widely addressed by researchers, while other areas – such as their own input price risks, debt burden, and long term profitability – have been less explored. For example TAYLOR AND DOMINA (2010) mention the existence of a problem of asymmetric information on the farmers side of the agreement, which is unexplored in the theoretical literature.

What does seem to be supported by the theory, is that the use of production contracts can be explained as a response to transaction costs. The unique construction of the poultry production contract has removed the bias toward vertical integration, because of features such as tournament payment and integrator control of inputs, including the major production asset of the chickens themselves.

In general, the benefits mentioned for farmers in the reviewed literature include primarily:

- Access to credit
- Business opportunities, or opportunities to diversify income
- Access to cash-flow
- Reduced variability in pay compared to independent marketing
- 97% of overall risk is shifted to integrator, price risk is removed – only idiosyncratic production risk remains
- Payment based on performance in competition with other growers, effort is rewarded
- Exchange of decision-making and marketing, receive guaranteed price (or insurance)
- Long-term contracts (stability is implied)
- Revenue competitive with other options for small farmers

The risks mentioned for farmers include primarily:

- Cycle of debt
- Low or non-competitive revenue
- Lack of control over performance because integrator's impact on variability in quality of inputs, quality not stipulated in contracts
- 3% of overall remaining risk, idiosyncratic production risk
- Downward trend in real pay

Given that the majority of the literature focuses on farmer benefits and risk sharing, it is possible thus to reach a hypothesis.

**H1: A broiler production contract is a stable, implicitly long-term and low-risk investment for a farmer who is a good manager.**

Other hypotheses could be possible based on the literature. However, this is a highly relevant hypothesis because it closely reflects the language in the advice that farmers hear from extension agents, academics and industry representatives. For example, the University of Georgia Extension website offers a *Guide for Prospective Contract Broiler Producers*. This is linked directly from Tyson's recruitment website, where farmers might look to find out what a poultry contract would be like for them. In their description of what to expect, they state:

“The contract system has advantages and disadvantages. One of the key advantages for producers, however, is the shift of a significant portion of production and market risk to the integrator. Contract poultry producers are somewhat insulated from price fluctuations in the poultry markets and, since they do not own the birds, have less capital at risk” (UGA EXTENSION WEBSITE, Oct. 2, 2014).

Similarly the National Chicken Council states that:

“Growout contracts that broiler companies have with family farmers have allowed thousands of people to get into farming, diversify and/or expand their farming operations, and more securely lock-in a stable income flow. The contract with a broiler company allows new farmers to begin farming and current farmers to grow” (NATIONAL CHICKEN COUNCIL, 2009).

Thus the hypothesis I have formulated likely mirrors the hypothesis that many farmers may reach after their own assessment of the information available to them.

## Chapter 3 – Methodology

### 3.1 Justification of Approach and Originality

Agricultural contracting has been identified as urgently needing further research. The first to identify this need were MIGHELL AND JONES (1963) who issued a call for research, published in the 60s. HUETH, LIGON AND DIMITRI (2007) point out that despite their call, the topic did not receive much attention in academic journals until the 1990s. They note that KNOEBER AND THURMAN (1994, 1995) were among the first to explore the topic in-depth in recent literature.

HUETH, LIGON AND DIMITRI (2007) compiled a literature review of existing contract studies. They note that the methodological approaches to agricultural contracts are still developing. According to their review, the existing methodologies are primarily:

- 1) Modeling based on the contents of one contract
- 2) Observing outcomes across multiple agents in a given time period, rather than deep analysis of a single or full contract (This category reflects the majority of the existing literature around agricultural contracts, including those used in this thesis (KNOEBER AND THURMAN (1994), ZHENG AND VUKINA (2006), GOODWIN ET AL (2005)).
- 3) Cross sectional observation of discrete contract characteristics (example: comparing how certain contract terms vary across regions)

Within the three methodologies, there are two types of data that HUETH, LIGON AND DIMITRI (2007) explain as being valuable. The first are case-study descriptions, the second is survey data. The case-study data allows researchers to document “typical” contracts for that industry, and better understand the production structure and contractual dynamics involved. Survey data on the other hand allows for documentation of variation in the industry, and charting the implementation of contract characteristics.

In my thesis, I completed a case-study analysis, collecting data from farmers in different states in the southeast of the US including: North Carolina, Tennessee, Alabama, Virginia, West Virginia, Mississippi, and Arkansas. In addition, I collected and analyzed five

production contracts from major integrators in different states, as well as accompanying documentation. This type of data matches the needs specified by HUETH, LIGON AND DIMITRI (2007).

An underlying goal of my research was to explore the acknowledged gaps in the existing literature to better understand the full scope of impacts production contracts have on farmers. Thus my research was exploratory in nature, and my results are intended to broaden the discussion rather than provide singular conclusions.

### 3.2 Interview Sample and Interview Method

For this research I personally interviewed 12 farmers in April, 2015. Their demographics are summarized in **Table 3** below.

Number	State	Integrator	Operation Scale	Status of contract	Duration of contract(s)
1	NC	Perdue	4 houses	Current	23 years
2	NC	Pilgrim's Pride	3 houses	Current	16 years
3	NC	Pilgrim's Pride	5 houses	Canceled 1990's	10 years
4	MS	Tyson	10 houses	Terminated 2015	9 years
5	NC	Perdue and Case Farms	3 houses	Relocation of slaughterhouse	7 years Perdue, 3 years Case Farms
6	NC	Perdue	2 houses	Court settlement, 1980	10 years
7	TN	Tyson	5 houses	Court decision 2010	7 years
8	WV	Pilgrim's Pride	4 houses	Current	11 years
9	WV	Pilgrim's Pride	3 houses	Current	12 years
10	VA	George's	4 houses	Current	20 years
11	AR	Tyson	6 houses	Terminated in 2012	25 years
12	AR	Tyson	3 houses	Current	10 years

**Table 3: Farmer Demographics and Summary**

In January and February 2015 I worked to identify and make arrangements to visit each of the farmers I interviewed. There are many challenges to identifying poultry farmers willing to speak about their experience freely (see limitations below). Thus, to reach them, I used the snowball technique. I started from building a connection to one farmer whose contact information I obtained through the Rural Advancement Foundation International, in North Carolina. RAFI is a non-profit organization that works to support family farmers in many capacities throughout the south. RAFI provided the contact of the first farmer willing to explain his conditions working under a broiler production contract.

This farmer is also a leader in the larger farming community, with connections to many other farmers and their respect. Through him, I was able to connect to other growers. As a rule, I pursued every contact that I received. Out of 36 growers that I contacted, these 14 were those willing to talk about their experiences. As my primary goal was to speak to as many farmers as possible in that time and collect as much data as possible, I did not prioritize having a geographically or demographically balanced sample.

In addition to farmers, I also spoke with academics and other experts who are knowledgeable about the poultry production system. The purpose of these interviews was to get a broader perspective off the farm and understand how farmers' stories fit into the bigger picture – legislatively, economically, in terms of legal cases and regulations. These 8 additional interviewees were purposively selected based on the person's experience or knowledge. I contacted these interviewees initially by email through their university or professional websites, and visited each of them in person. Despite attempts to reach staff or field technicians of integrators, in particular representatives of Tyson and Prestage to whom I had the closest contacts, I was unable to speak directly with anyone working for an integrator. In addition to the farmer interviews I spoke with:

- Agricultural economists
  - H.L. Goodwin, Professor of Agricultural Economics and Agribusiness, Poultry Economist, University of Arkansas
  - Robert Taylor, Professor of Agricultural Economics, Auburn University
  - Daryll Ray, Professor of Agricultural Economics and specialist in subsidies, University of Tennessee
- Regulatory officials

- Dudley Butler, previous head of Grain Inspectors Packers and Stockyards Administration (GIPSA)
- Farmer organizations or associations
  - RAFI-USA staff members
    - Scott Marlow, Executive Director
    - Michael Sligh, Just Foods Program Director, farmer organizer for 25 years
    - James Robinson, Policy Analyst
- Industry experts
  - Christopher Leonard, Schmidt Family Foundation Fellow at New America think-tank in DC, AP journalist covering agribusiness, author of *The Meat Racket*

I conducted semi-structured interviews. I used as a guide for discussion the elements of risk as defined in the literature. However, as my goal was to allow the interviewee to guide me toward elements of risk that I had not already identified, most of the interview took form as collecting their stories rather than remaining focused on a pre-determined questionnaire. This was import as it allowed farmers to self-identify their experience of risk and what elements they felt had an impact on their contract relationship, and it allowed the experts with diverse opinions to share their perspective in their own vocabulary.

Successful incorporation of open-ended interviews into empirical and even theoretical economics has been demonstrated and explained by PIORE (2004). He has used open-ended interviews with hundreds of workers and managers in factories as a basis for studying migration and labor markets. He explains that his preferred process is also a case-study method, in that he builds a more complete picture of the relationships and dynamics involved through collecting extensive data. By allowing respondents to tell their stories in their own way, he states that truth and honesty are more present in the interview. He points out that in his experience, questionnaires and surveys led to short and uninspired interviews, and did not yield accurate or detailed information. He adds: “One of the advantages of open-ended interviews is that the respondents often answer questions you would not have thought to ask” (PIORE 2004, p.5). As this is a central focus of my objective, to identify gaps in the dialogue about elements that impact farmer risk, then open-ended interviewing is an appropriate fit.

Nonetheless, I did not go into the interviews without a guiding framework. I used a chart of risk elements identified from the literature to ensure that the interview covered core topics.

The development of this chart is described in the following section. Each interview was thus recorded, transcribed, and analyzed.

### 3.3 Development of Risk Elements for Analysis and Interviewing

In section 2.4 I developed the following hypothesis:

**H1: A broiler production contract is a stable, implicitly long-term and low-risk investment for a farmer who is a good manager.**

Given that my specific objective was to explore the gap in the literature around farmers' risk in contracting, I needed a means to organize interviews around topics of risk, and a premise to analyze interviewee's responses regarding risk. Thus I developed the following chart as a tool. I concluded that if my hypothesis were found to be true, then I would expect that farmers' statements would largely confirm the benefits described in the literature.

I identified the risks and benefits farmers may face in entering a broiler contract according to the existing literature. Based on that list of benefits described for farmers, I would expect statements confirming that:

- The business was not high paying, but stable income (based on KNOEBER AND THURMAN (1995), GOODWIN ET AL (2005) etc)
- Poultry contract provided a means to build equity (based on UGA Guide for Prospective Contract Growers, VUKINA (2001))
- Pay under contract terms is responsive to effort level in the tournament (based on GOODHUE (2000), KNOEBER (1989), GOODWIN (2005), regarding farmer control over pay through "good management")
- Access to credit and access to market otherwise unavailable (VUKINA (2001))
- General experience of farmer is that it is a low-risk investment (National Chicken Council, UGA Guide to Prospective Contract Broiler Producers)
- Requiring only part-time labor investment (National Chicken Council)

Also from the literature review, the following topics were primarily mentioned regarding farmer risk:

- Cycle of debt (based on KOHLS AND WILEY (1955))

- Low or non-competitive revenue (based on TAYLOR AND DOMINA (2010), mentioned by VUKINA (2001))
- Lack of control over performance because integrator's impact on variability in quality of inputs, quality not stipulated in contracts (based on ZHENG AND VUKINA (2006))
- 3% of overall remaining risk, idiosyncratic production risk (based on KNOEBER AND THURMAN (1995))
- Downward trend in real pay (based on TAYLOR AND DOMINA (2010))

From these lists I generated a simple chart of the overall risk “elements” which would correspond with each of the above statements, both benefits and risks. I chose to refer to the topics that I reduced from the lists above as “elements” because each one represents an individual component of the farmer’s overall experience of risk. If the farmer experiences mostly benefits regarding an element, that status would be reflected by positive comments. If the farmer experiences uncertainty and risk regarding an element, that status would be reflected by negative comments.

If in the course of the interviews I identified additional risk elements that were not described in the literature, I added them to the farmer’s chart and cross-analyzed the other interviews for overlap during analysis. I also used these risk elements as discussion points in interviews with the experts.

**Table 4** is a blank example of the chart of risk elements that I developed. Completed charts from each farmer and expert are attached in **Appendix 1**.

<b>Risk elements</b>	<b>Comments</b>
Debt	
Profitability	
Variability in pay	
Quality of inputs	
On-farm production risk	
Access to credit	
Equity	
Other:	
Other:	
Other:	

**Table 4: Sample Blank Risk Element Chart**



### 3.4 Contracts

The most significant documentation that I collected in addition to interviews were full copies of contracts. In the literature to my knowledge, there is very little published about the actual contents and language in poultry production contracts.

To analyze the contracts, I created an excel sheet organized by risk elements. For this excel sheet, I used the risk elements identified in the literature as well as those that were identified by farmers and experts in the interviews. I then reviewed each contract line-by-line to identify how the risk elements were handled in the language. This complete excel file is attached in **Appendix 4**.

This approach allowed me to establish how the various integrators treated risk elements on paper in the contract relationships.

### 3.5 Settlement and Revenue data

In a few cases farmers were able to provide their information regarding their performance in the tournament over a period of time. I received this information in different formats, some farmers were able to provide actual settlement sheets and others were unable to, due to company restrictions on sharing this information or fear of retaliation for doing so.

Settlement data specifically allowed me to explore some of the risk elements essential to the hypothesis, especially variability. Thus with the information that I had, I created an excel sheet in which I compiled the data for each farmer and generated a comparison of their pay under tournament, with what their pay would have been under a fixed unit price scenario. The graphs and outputs of this work are attached in **Appendix 3**.

In one particular case, a farmer was able to work with an accountant in order to identify his annual revenues from only the poultry houses compared to annual expenses. This process

involved assigning expenses specifically, including shared expenses for machinery and other components. With the guidance of his accountant, a two-year comparison of revenues to costs was produced. Similar to the settlement data, this information was specific to one case only (a different case from the settlement data in fact), but it allowed me to further explore the discussion in the literature around revenues and returns, and the corresponding risk elements.

### 3.6 Cross Analysis of Data

In order to synthesize the different types of data into one set of conclusions, I conducted a Cross Analysis in which I generated full characterizations of each risk element based on multiple data sources.

It is from this final organization of the data that I was able to draw my conclusions regarding the presence of risk elements in the farmers' experience of poultry contracts.

### 3.7 Limitations

There are some significant limitations to mention in connection with this research. The first is that my sample is not necessarily representative of all poultry farmers in the southeast, for various reasons, some of which are described below. Limitations on collecting a representative sample included time and accessibility of farmers. Most of the interviews involved traveling by car several hours into rural areas. The interview process typically included a full visit of the farm and time spent reviewing secondary materials, thus typically lasted at least half a day.

Many of the farmers willing to speak were near the end of their contract cycle or had already been terminated or quit their contracts. This is logical because they were no longer concerned, or were less concerned, about the risk of losing their contract if they spoke to an outside researcher. Since the farmers self-selected, it raises a concern that they may have done so because they wanted to share a negative experience. However, it is for this reason that I

interviewed the experts, in order to explore whether the topics that arose in conversation with these 12 farmers were limited to their personal situations or were indications of a wider farmer experience. Because of the cross-analysis process at the end, my findings thus reflect issues that were relevant to multiple farmers and that were confirmed to have relevance beyond my sample, though to what extent is unclear and would require additional research.

There are also two major limitations that apply to this research which would apply to any research conducted with poultry growers. The first is that much of the critical information needed to formulate conclusions about the contract dynamics is considered proprietary information by the integrators and is not made public. Farmers are generally restricted or made to feel restricted from sharing contracts and supporting documentation. This is a challenge that is clearly felt by other researchers as well. It is noticeable that much of the existing literature is based on models and simulations (KNOEBER, 1989), or utilizes other researchers' existing data (ZHENG AND VUKINA 2006, using KNOEBER AND THURMAN 1994), with a significant exception being GOODWIN ET AL (2005). HUETH, LIGON AND DIMITRI (2007) write about this challenge as well, stating that:

“Although there have been a number of recent research efforts, most have been theoretical or based on a proprietary data source that does not permit access by other researchers. Perhaps this is not surprising given the proprietary nature of most forms of contracting. In the end the best we can do may be to exploit what access we do have to proprietary data to the fullest possible extent” (2007, p.1277).

As they allude to in their comment, researchers are often limited to accepting what data is provided or made accessible to them by the industry. An example of this would be a study conducted by GOODWIN (2002) in which Arkansas growers were surveyed to establish costs and returns. He states that “participating companies approved of the project and provided the names of at least four contract growers. Growers names submitted were from the top one-third of each production complex based on their past performance and record-keeping practices” (2002, p.2). The fact that researchers depend on company participation and management of access to growers may significantly limit the depth of research into farmer experience of contract poultry production.

The second major limitation facing researchers of broiler contracts is the culture of retaliation that is present in the industry in the United States. This is a topic that is not discussed in the literature, however it is well documented outside of the literature. It is important to mention that retaliation in the form of intimidation occurred to a farmer during my research, which is why I feel it is critical to mention that this limitation is real.

In the process of arranging an interview, a farmer informed his integrator that he would be speaking with me. First we were asked to meet certain bio-security protocols in arranging the visit, which was not a problem. All protocols were agreed to and an interview plus visit was planned. Then one week before the visit, the farmer heard through a grapevine of other farmers and field technicians that the integrator would not be picking up his livestock as a result of our planned interview. This would have been a massive loss for the farmer, and with no intentions to damage his contract relationship we cancelled the interview and I avoided further contact.

This limitation contributes significantly to the small size of my sample, as out of 36 farmer contacts only 12 were willing to be interviewed, even when given the option for interviews conducted anonymously.

## Chapter 4 – Results

### 4.1 Farmer Interviews

A chart following the example given in Methodology was completed for each farmer, using quotes from their interviews. These charts are attached in **Appendix 1**. What became evident during the interviews is that the scope of risk elements identified from the literature was too narrow, and that several of the risk elements initially identified had sub-elements that were critical. A new list was created to encompass all the issues that came up. The following **Table 5** identifies the risk elements that were discussed with farmers. Risk elements are fully characterized and discussed in the Cross Analysis section 4.6. In addition, a chart identifying how farmers generally responded to each risk category (positive, negative or neutral) is attached in **Appendix 2**.

Category	Risk Elements	Short Definition
<b>Debt</b>	Length of Contract	Whether contracts were actually implicitly long term, and if this was a benefit.
	Asset specificity	The extent to which assets had value outside of the contract
	Upgrades	Frequency, expense, and optional or required nature of equipment upgrades
	Access to Credit	Ease and accessibility of necessary credit compared to alternative farming options
	Equity	Opportunity to generate equity in property or business assets
<b>Profitability</b>	Input price risk: Fuel	Feasibility of covering varying fuel expenses through fixed rate supplements or income
	Revenues over time	Actual annual or long-term revenues compared to costs of production
	Labor investment	Returns to family or managerial labor, sufficiency of income to cover hired labor
<b>Tournament Payment</b>	Variability in pay	Consistency and reliability of income compared to costs of production
	Quality of inputs	Consistency and impact of feed, chick and technical support provided by integrator
<b>On-farm Production Risk</b>	Biological	Uncertainty in weather, catastrophes, losses due to disease and other biological threats
	Environmental	Penalties or expenses related to environmental damage or pollution
<b>Symmetric Information</b>	Messaging and Recruitment	Transparency and validity of new farmer recruitment

<b>Business Relationship Dynamics</b>	Access to production information	Accessibility of necessary information regarding inputs and market for business decision making
	Business ethics	Equality of relationship with integrator or presence of coercion or intimidation
	Retaliation	Freedom from direct sabotage-like response to independent grower actions
	Autonomy and control	Status of grower as primary decision maker for their farm, in control of their business decisions and financial future
	Regulation and enforcement	Ability of growers to rely on enforcement of contract terms

**Table 5: Chart of Risk Elements from Farmer Interviews**

## 4.2 Expert Interviews

Expert interviews were transcribed and analyzed for contextual information regarding farmer responses to each of the risk indicators. In general, experts were knowledgeable about farmer experience in several risk elements, and were able to provide validation of farmer statements, or alternative perspectives. Quotes and information from expert interviews have been used in the Cross Analysis in section 4.6, and contribute to the discussion in Chapter 5.

## 4.3 Contract Comparison and Analysis

Following the interview analysis, I completed the comparison and line-by-line analysis of actual contracts. Evident in this process is the striking similarity in construction, issues covered and language between all the contracts reviewed. There were still some significant differences between integrators. However, in situations where contracts from more than one geographic region belonging to one integrator were reviewed, the language was nearly identical.

The full Excel sheet with contract excerpts is attached in **Appendix 3**. The review of contracts allowed for a closer examination of how the risk elements already identified in the farmer interviews were defined in a legal context. In addition, a few extra risk areas surfaced which may not have been specific topics of discussion for farmers, but that appear to have an

impact on farmer risk. Further results regarding how contract language contributes to the characterization of each risk element is discussed in the Cross Analysis section 4.6.

The following additional risk-elements in **Table 6** were added specifically from the contract comparison:

Category	Risk Elements	Short Definition
Business Relationship Dynamics (Debt) Asset Specificity	Confidentiality and Transparency	What data and information a farmer is allowed to share either with legal counsel, business partners, or general public
	Transferability	The extent to which the assets maintain their value in the course of farm sale, death of the farmer or disability

**Table 6: Additional Risk Elements from Contract Comparison**

#### 4.4 Settlement Data – Tournament Variability Analysis

The available settlement data came from multiple farmers from three different integrators – Perdue, Pilgrim’s Pride and George’s. There are several pieces of information provided to farmers in a settlement sheet that are useful for understanding the calculation method. I considered data on the following variables:

- Number of chicks placed at farm
- Number of lbs. moved from farm (output)
- Liveability (total chicks placed *minus* mortality)
- Average weight of chickens when picked up by integrator
- Total (standard) cost of farm to integrator, consisting of:
  - o Feed cost per lb. of chicken produced
  - o Chick cost per lb. of chicken produced
  - o Fuel cost per lb. of chicken produced (IF applicable)
  - o Medicine cost per lb. of chicken produced (IF applicable)
- Average cost for the tournament\*
- Base pay (cents per lb.)
- Farmer’s tournament rating – a bonus or deduction
- Premium house pay or adjusted base pay, or upgrade incentives (IF applicable)
- Energy allowance (IF applicable)

*\*A note about the average cost for the tournament: Different integrators calculate this cost in different ways. The basic procedure would be to take a mean or median of all farmers in the*

*settlement. This number becomes the comparison point from which the integrator determines if a farmer receives a bonus (if their costs were lower than the average, they are ranked above it) or a deduction (if their costs were higher than the average, and thus they are ranked below it.) However, one integrator, Perdue, used a slightly different system by placing a floor in the tournament, and excluded lowest ranking farmers. This meant that if farmers had average costs that were very high, their average costs were excluded and not included in the generation of the comparison point. These farmers were paid a fixed minimum payment instead. In the settlement sheets examined, this practice tended to lower the overall average cost comparison points – making it more likely that the other farmers had higher costs than the average.*

Using this data I generated a series of comparisons. My goal was to compare the outcome of farmers' pay under the tournament system with two alternatives for a fixed-unit payment. The first alternative was the **base pay rate plus adjustments** – including energy allowances or increases in base pay for housing premiums or upgrade incentives. This allowed for simulation of how much variability was attributable to the tournament ranking variable itself.

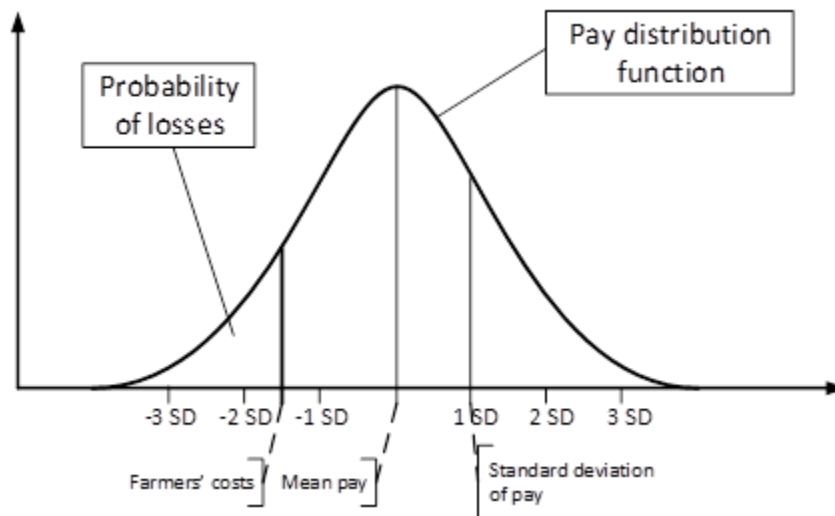
The second alternative I used was a **weighted average of pay per lb. divided by total pounds produced for the settlement**. This created one unit payment and simulated the scenario if farmers were paid equally, with the variability being purely based on output in pounds of chicken produced.

To create a means of comparison, I calculated the three forms of payment using **chick placement** as a unit. Establishing pay per chick placed allows for a consideration of liveability, which is an important component in efficiency of production and influences the variability in income. This also enabled comparisons without having to know exact farm size and type.

Using the pay per chick data under the three payment scenarios, I was able to calculate the mean, standard deviation and coefficient of variance for each scenario. By examining which of the different payment scenarios had the higher coefficients of variance, I could better understand how they would impact the variability farmers experience in their income. Because I had data from multiple settlements, farmers, states and integrators, I was able to check for the possibility of consistency.



Finally, I was able to use this data to calculate a probability of the risk that farmers would earn an income below their costs of production under each of the payment scenarios. This is calculated by using the means and standard deviation for each settlement. By knowing the costs of production for a farmer, I could calculate the probability that this farmer would receive income (per chick placed) lower than his costs. Graphically the calculation would have the following representation, seen in **Figure 7:**



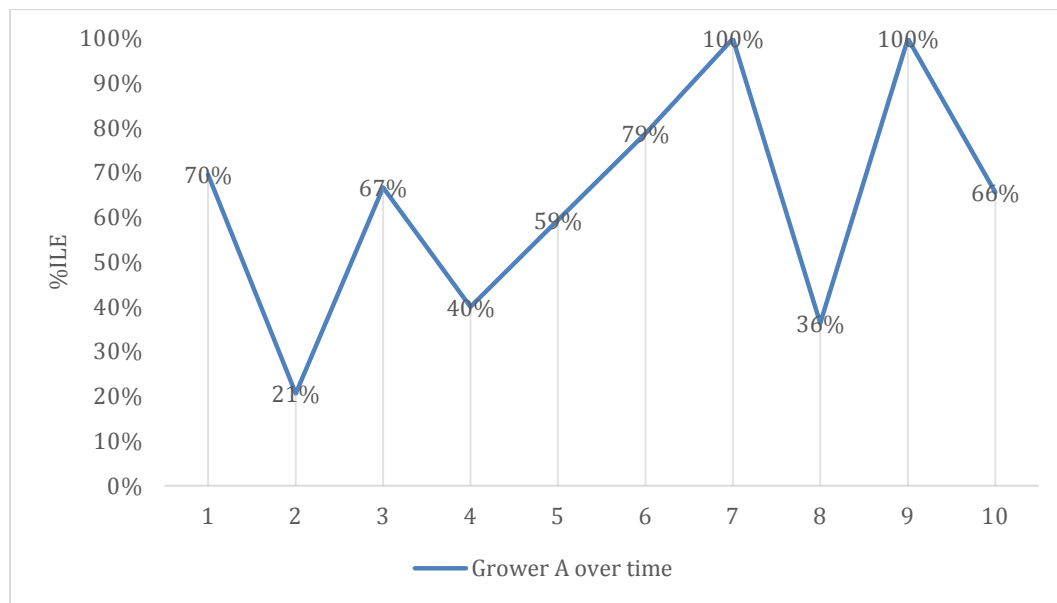
**Figure 7: Methodology for Calculating Probabilities of Risk**

In order to establish a useful threshold for one example, I worked with one farmer who provided the 8 consecutive settlements. His costs of production were estimated to include electricity, machinery (such as cake-out machines to remove litter), equipment costs and maintenance for the houses, his own labor or that of hired help, and mortgage or debt payments. This came to an average of \$24,000 per flock for his farm.

Costs of production will vary widely for different farms, depending on the size of the farm, equipment, house-type and current fuel costs. Therefore, it is not possible to use this farmer's estimate as a proxy for other farms on a whole.

#### 4.4.1 Single Farm Variability over Time

One farmer was able to provide his ranking in data (in terms of percentile) in 10 consecutive tournaments in 2014-2015. Tournament settlements do not always consist of the same, or same number of farmers, thus the actual rank number is less significant. Since the outcomes of tournament payment are taken as an indication of farmer performance, it is interesting to look at the percentile ranking of a farmer over consecutive flocks. The following **Figure 8** demonstrates the results, which show a wide variation in the percentile ranking.



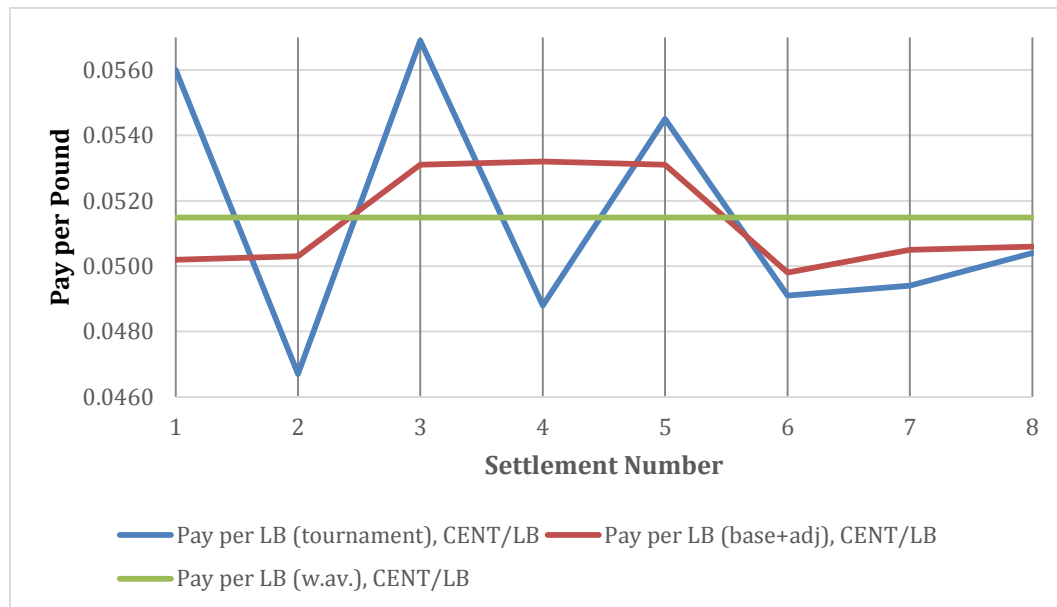
**Figure 8: Grower A Ranking in Tournament over 10 consecutive flocks**

Next, using the 8 consecutive settlements from the first farmer in 2014, and his corresponding tournament rankings from one individual farm with Perdue, I was able to establish the variability the farmer experienced in income over a 1.25 year period, and estimate the variability under fixed-unit pay scenarios. **Figure 9** below depicts the results in the variability in pay per pound between the different settlements.

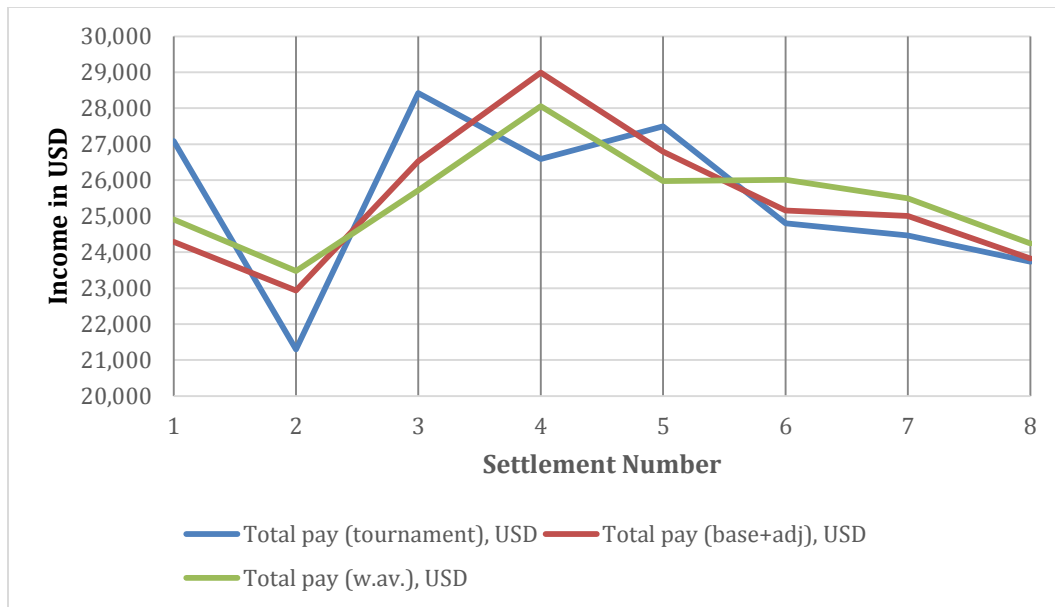
Intuitively, the weighted average would remain fixed. The red line, indicating the base pay plus adjustments, highlights the impact per pound of upgrade incentives and housing premiums which were both part of this settlement. For comparison, the blue line represents the tournament payment (actual payment) per pound the farmer

received, demonstrating the variability in pay per unit of output a farmer may experience under the tournament payment system.

To visualize how this fluctuation in unit of output pay impacted the farmer's actual income, the following **Figure 10** depicts the farmer's actual settlement income for each of the tournaments.



**Figure 9: Payment Per Pound for Individual Grower Over Time: Perdue**



**Figure 10: Total Pay Variability for One Grower Over Time**

In settlement 4, the farmer's actual outputs reached his highest level for this time period. From the raw data I can confirm that the total pounds of output for settlement 4 were the highest out of all 8. The farmer's total feed costs for settlement 4 were \$0.0001 higher than the previous settlement, not a significant difference. This farmer ranked lower in this tournament however, and received a penalty of \$0.0044 per pound despite his own output peak. This is an example of a scenario in which a farmer could not predict the outcomes based on his own performance or effort.

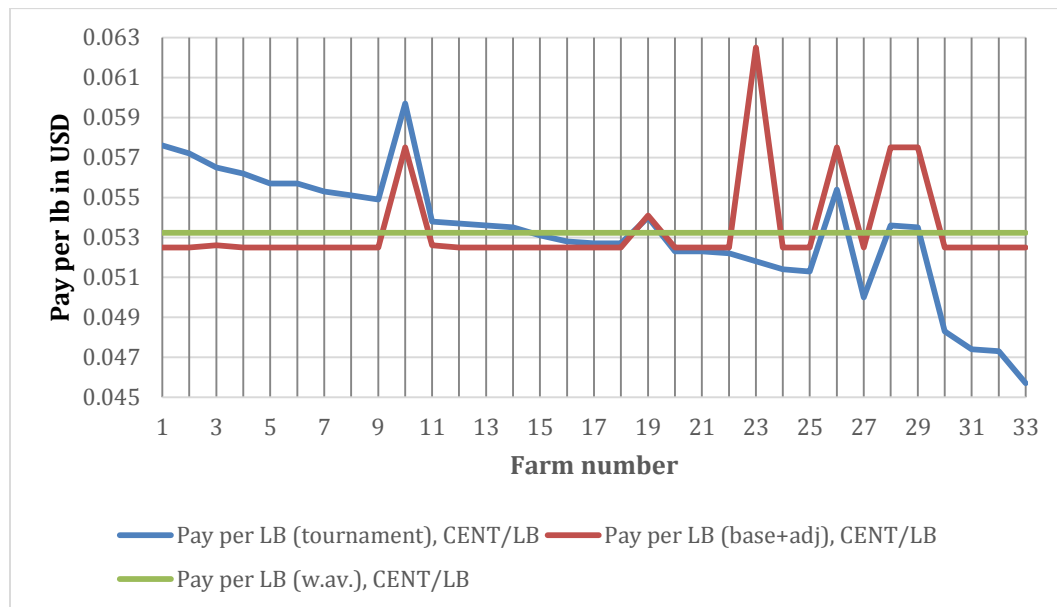
It is also valuable to note that the range in the farmer's pay in the tournament scenario is \$7,131.60. The changes in the fixed-unit pay scenarios are less extreme. Therefore, the tournament payment amplified the variability in pay that this farmer experienced.

Finally, using the average \$24,000 for costs of production in each flock, I was able to estimate probabilities of risk that the farmer would have total income less than his average costs, based on these settlements. Under the tournament pay scenario, there was a 26.35% risk of being below this cost of production. For the other scenarios it was significantly less – 22.8% for base pay plus adjustments, and 13.9% for the weighted

average fixed-unit pay. This calculation characterizes the risk component in increased variability in pay, indicating that farmers stand a higher chance defaulting on debt under the tournament payment scenario.

#### 4.4.2 Variability within Whole Settlements

In total, five full settlements were analyzed for comparisons. Graphic representations of the full five settlements are available in **Appendix 3**. A representative example for discussion is a settlement from Pilgrim's Pride in 2010, which provides data on the payments and rankings made to 35 farmers. **Figure 11** shows the variability pay per pound as it is spread over the 35 farms. This provides a visualization of the variable impact of adjustments. Multiple house types competed in this tournament, ranging in base pay from \$0.0505 to \$0.0605.



**Figure 11: Variability in Pay Per Pound for Pilgrim's Pride Settlement A**

**Figure 12** shows the variability amongst the farmers in pay per chick placed. This graph best represents the effect of tournament. Clearly, variability in pay is established first by output level, by looking at the calculated pay for weighted average. The

comparison with tournament payment highlights the fact that the tournament process amplifies the outcomes for the high and low ranges, adding significant variability into the spread of income compared to the two fixed-unit pay scenarios.

For further analysis, **Figure 13** provides a histogram of the farmers' pay per chicken placed. Significantly, while all three payment scenarios generate at least one paycheck in the high ranges, the low range for tournament extends significantly farther than in the fixed payment scenarios. This type of histogram was created for each of the five full settlements analyzed and the results were consistent.

A possible explanation for this is the nature of poultry production itself. The liveability rates of most farmers today are very high - 97.8% for this tournament. It is possible to have an efficient and high output, but only up to 100% liveability is possible. On the other end, catastrophes, weather events, poor quality feed or diseases in chicks as well as other uncertainties can lead to deep drops in liveability rates. In the tournament payment scenario, a farmer with low output, because of a disease, will also have a low unit pay per pound because they will likely rank low in the tournament. This double negative shows that these farmers were more likely to have extreme low payments under the tournament system than under the other two fixed-unit scenarios.

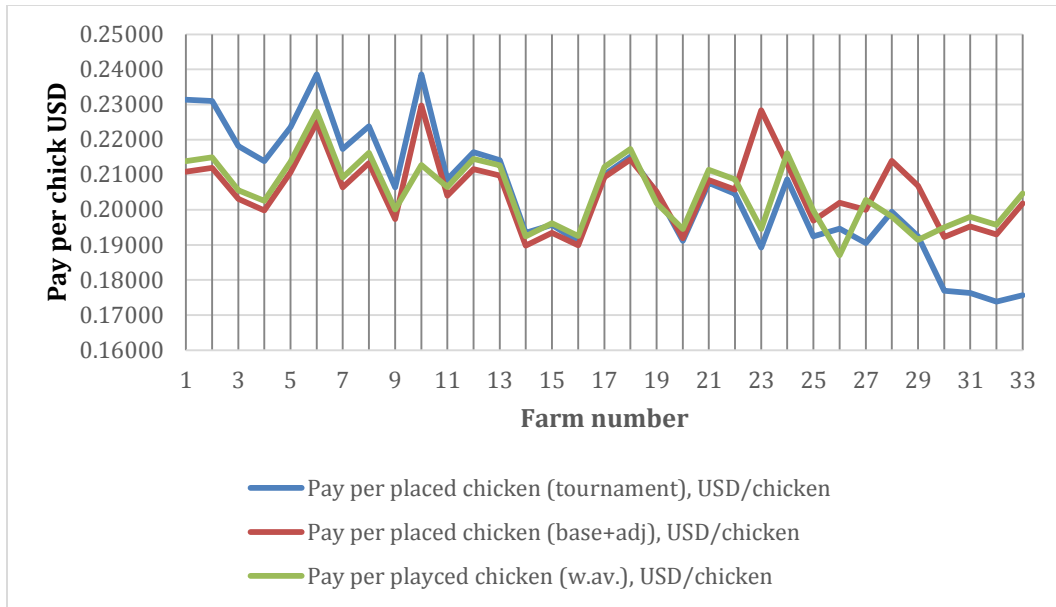


Figure 12: Variability in Pay Per Chick Placed for Pilgrim's Pride Settlement A

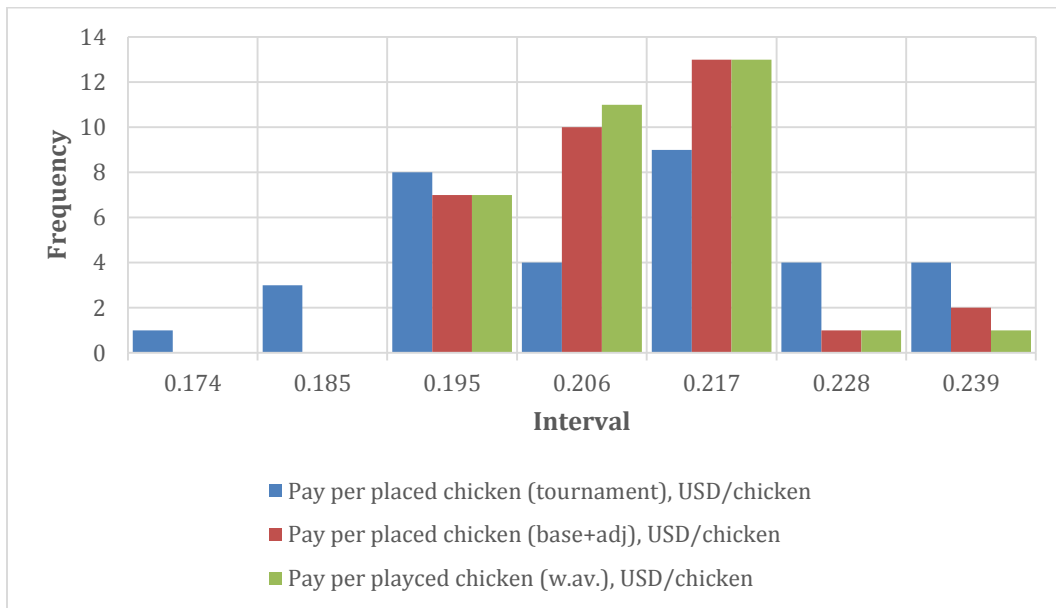


Figure 13: Histogram of Pay Per Chick Placed in Pilgrim's Pride Settlement A

#### 4.4.3 Comparison of 1975 Settlement with 2014 Settlement

One farmer had an old 1975 settlement from previous family members' farms. While much of the industry has changed, much of the same data was available for comparison. **Table 7** shows the comparison between a broiler farmer's pay for Rockingham Poultry 1975 and for Pilgrim's Pride in 2014.

Farmer settlement	Feed conversion ratio	Total pounds moved	Total payment to producer	Producer payment per lb. (unadjusted)	Total Pay, Adjusted for Inflation to 2014	Pay per lb., Adjusted for Inflation to 2014
2014	1.6734	350,064	\$20,723.79	0.0592	\$20,723.79	\$0.06
1975	1.89	119,470	\$7,048.73	0.059	\$31,016.51	\$0.26

**Table 7: Comparison of 1974 Settlement to 2014 Settlement, Virginia**

The most significant columns to notice in this example are the producer payment per pound, and the pay per pound adjusted for inflation. I used the CPI Index calculator to adjust for inflation. These settlements come from the same region, decades apart. The current farmer's payment per lb. includes a tournament penalty and base pay adjustments for premium housing, which nearly equal each other out. It is highly significant to note that the nominal pay to farmers per pound has not significantly increased in this example. It is also enlightening to realize that in 1975 farmers were earning the equivalent of \$0.26 per lb. today, which may explain why many previous generation poultry growers assured newer growers that it was a good business.

The feed conversion ratio has increased in modern production. More output comes from less feed. In addition, house size has increased, so farmers are moving a lot more pounds out of their farms in each settlement. Unfortunately, for producing almost 2.5 times the amount of meat as the farmer in 1975, today's farmer earned comparatively less.

Another factor for consideration that is not represented is the flock placement and the number of days of grow-out period. The 1975 flock indicated that the birds were picked up at 52 days. The 2014 flock was picked up at 39 days. The amount of time for rearing a flock has decreased thanks to genetics and technology. This should in theory allow for more flocks



placed on a farm in one year compared to 1975. However flock placement is not a fixed schedule. This is discussed further in Chapter 5.

## 4.5 Total Revenues

In collaboration with his accountant, one farmer was able to provide a detailed overview of his costs of production, (different from the costs of production established for described calculations in 4.4), compared to his revenues for two consecutive years. The process involved portioning out percentages of machinery and assets used, to ensure that only the poultry operation was represented in the totals. **Table 8** below displays the results.

Expense	2013	2014
<b>Machinery hired</b>	\$23,122	\$18,626
<b>Fuel</b>	\$31,362	\$26,155
<b>Farm Insurance</b>	\$5,089	\$5,174
<b>Repairs</b>	\$5,296	\$6,181
<b>Dues (to farmer organization)</b>	\$237	\$100
<b>Poultry House Expense</b>	\$37,757	\$32,217
<b>Office</b>	\$713	\$375
<b>Farm Power</b>	\$19,882	\$12,524
<b>Phone &amp; Alarm System</b>	\$1,353	\$1,931
<b>Property Tax</b>	\$1,797	\$1,866
<b>Farm Labor</b>	\$7,800	\$7,800
<b>Health Insurance</b>	\$3,722	\$1,939
<b>Mortgage</b>	\$18,000	\$18,000
<b>Total Cost</b>	\$156,430	\$132,888
<b>Pilgrim's Pride Revenue</b>	\$140,302	\$112,272
<b>Total Revenue:</b>	<b>(\$16,128)</b>	<b>(\$20,616)</b>

**Table 8: Revenues Comparison for NC Farm**

This farm has older houses, and thus does not receive the premium house bonus in the base pay adjustments. Yet, having reviewed settlement sheets from this farm, it was evident that on many occasions this farm ranked above new farms in the tournament. In general the farm's tournament rankings were not unlike others as seen in the previous settlement results. Despite the older houses, there was no evidence that this farm was performing poorly in tournaments.

## 4.6 Cross Analysis of Data

In order to present complete results of farmer experience regarding risk elements, I undertook a process of cross analysis comparing farmer statements, contract terms, quantitative results (where available), drawing on interview data from expert interviews for validation and context.

In this section I present the final characterization of each Risk Element defined in my research. They are organized in order by category.

### Length of Contracts (Debt)

In general, farmers perceived the short-term nature of the contracts as a source of risk. In total, three of the 12 farmers interviewed were terminated by their integrators. The reasons were different in each case – the re-location of a slaughterhouse for Farmer #5, inability of Farmers #11 to make required upgrades, and low tournament performance coupled with a frustrating relationship for Farmer #13. In the third case, the termination was mutual. Significantly, in the first two cases, neither were informed of their termination with more than one flock's notice, and in both cases the farmers' performance was in the top percentile of their complex. These farmers were vehemently opposed to the idea that contracts were implicitly long-term.

Farmers also expressed distress over what seemed a constant risk to their farm and livelihood. Farmer #1 described his concerns about the ability of the integrator to close down the complex without warning: "it can happen to any of us tomorrow... I think about it constantly."

Several farmers, especially #8, #6 and #12, mentioned frustration with the ability of the integrator to change the contract terms mid-stream and without notice, thus requiring a new contract signature. Farmer #6's business and job arrangement depended on the terms spelled out in the contract he had already signed when Perdue informed him he would be changing to a different type of chicken, with different revenue and labor investment. He says, "I said a

contract has no value if you can come in and dictate to me that I have to sign it... it's not worth toilet paper."

Farmer descriptions of the flock-to-flock nature of the contracts were confirmed by the review of actual contract language. All five contracts were flock-to-flock. An older Pilgrim's Pride contract from 2009 expressed first having a fixed term, and beyond that term defaulting to flock-to-flock. But the majority were designed, as Purdue's 2015 contract states: "for the convenience of not having to initiate a new agreement after each flock."

As noted, a significant portion of farmer's concerns regarding the term of the contracts was related to the threat of termination. For Purdue and both Pilgrim's Pride contracts, a valid reason the company may terminate a farmer at any time was "economic necessity." Purdue's 2015 contract defined this as including but not limited to "threat of economic and/or financial harm." Scenarios in which an integrator may utilize this option could be variation in the market price of chicken, as a means to reduce supply – a scenario that farmers #11 and #6 described.

A final significant note regarding termination in the contract language was the evolution of the language between older contracts, such as George's 2008 and Pilgrim's Pride 2009, and the three newer contracts. The older contracts stated the company right to pursue immediate termination, or as George's indicated, allowing farmers 7 days notice. The newer contracts all included language providing 90-days notice to farmers. However, as Purdue's 2015 contract clearly states: "once written notice of termination is provided, Purdue shall not be required to deliver chicks to Producer's farm during the 90-day time period once a flock is removed from Producer's farm." In essence, if the notice is served a few days before the end of a farmer's current flock, the 90-days is purely theoretical and not implemented. Contract terms regarding this notice are left more vague in Pilgrim's Pride and George's document.

### **Asset Specificity (Debt)**

The limited value of the poultry house and equipment outside of a poultry contract was perceived as a serious risk for almost all farmers. Part of the reason this is such a concern is

the magnitude of the investment. Professor H.L. Goodwin of the University of Arkansas explained in his interview that when an integrator establishes a new slaughterhouse with 500 farms to service that facility, the total investment may be around \$180 million. Of that amount, roughly half is invested by the farmers, generally in the form of collateralized loans to construct poultry houses.

The magnitude of debt a farmer takes on to build a chicken house has changed over time according to the farmer interviews. Farmer #5 grew chickens with Perdue in the late 70s, at which time their houses were between \$78,000 and \$86,000 to construct. Farmers #11 built 4 new houses in the 90s, which required an investment of \$600,000 at that point. The farmer with the most recent investment was #13, whose loan came to over \$1.3 million.

A second reason these investments are so important for farmers, is that the loans generally require collateral, which tends to be of a highly personal nature. Farmer #6 who also works with other farmers in bankruptcy stated that 90% of the poultry farmers he sees have put their house on the loan as collateral. Farmer #5 noted that in order to build three chicken houses, they had to put half their farm property and their farmhouse on the loan. Their land has been in their family since 1746, the farmer's kids are the 10<sup>th</sup> generation on the farm.

Farmer #6 has witnessed the appraisal process of farms with chicken houses after Pilgrim's Pride cut off growers in bankruptcy. He described that "once that company was gone... the value changed \$455,000" for the property. Farmers #11 have tried to repurpose their empty chicken houses, raising independent free-range chickens following their termination by Tyson. They explained that the houses had no value without contracts in the eyes of the insurance agencies either, who refused to give them insurance for independent chicken houses.

Given the high dollar value of the debt, the personal nature of the collateral, and the potential for complete loss of value in the event of termination, it is not a surprise that farmers repeatedly linked the asset specificity with their concerns about the flock-to-flock nature of the contracts.

### Transferability (Debt)

Directly connected to the risk element of asset specificity is the question of transfer rights. Professor Robert Taylor of Auburn University described the non-transferable status of most poultry contracts as “exit barriers” for farmers. All five contracts reviewed state that the contract is non-transferable without written permission from the integrator. Perdue and Pilgrim’s Pride add that this also applies in the case of farmer death (thus it is not transferable to family members), and George’s further adds in the case of farmer disability.

In addition, both Pilgrim’s Pride contracts clearly stated the right of the company to “require that there be improvements or upgrades to poultry houses or to equipment on such farm before the company gives consent to any transfer.” This was a topic that several of the farmers actually mentioned. Farmer #9 stated that they were sure that if they ever tried to sell their property, they would not be able to sell it with the contract because they have slightly older houses, and Pilgrim’s Pride would require so many upgrades of the new farmer that it would actually detract from the value of the land. Farmer #9 still has a loan on the houses, and assumes that a sale would mean a loss.

### Upgrades (Debt)

The most significant risk element in the topic of debt is that of required and frequent upgrades. All but one farmer had serious concerns about the future of poultry farming regarding this topic. Given the typical scenario described by the farmers regarding their debt load, additional mandatory investments was perceived as a serious risk to their ability to pay off the debt. Professor Taylor explained that a transition occurred in the industry in the 90s, when integrators began requiring updates to newer technologies. Professor H.L. Goodwin added that it is possible that the industry has not researched well enough whether farmers are able to pay off these upgrades.

Farmer #10 described the scenario in relation to the debt load of today’s \$250,000 poultry houses: “In today’s financial situation, you can’t pay it in 15 anymore, you go out 20 years. You’re not going to have that paid off before you already have to replace the equipment.” He

further highlighted a frustrating loss of control that most other farmers echoed. “You say, if you really want it come out and pay for it and I’ll put it in. They say it’s your farm, it’s our birds, but you need to do this.”

Farmer #7 was asked by Tyson to put in extra feed bins. He described frustration realizing that the feed bins did not actually increase his efficiency, but may reduce the amount of transportation required of feed for Tyson. Feeling that the benefit was mostly on Tyson’s side, he refused to pay the \$30 or \$40,000 for the new bins. He and other farmers in his complex were told if they did not add the feed bins, they would lose their contracts. In the end, Tyson withheld birds from farmer #7 as a result of his refusal. He said, “All these contracts are long-term just because the company can keep these people under a debt treadmill, that’s what I call it... your loan is 10 or 15 years, then they change their contracts in the 15<sup>th</sup> year.” He felt the company gave farmers no choice.

Professors Taylor and Goodwin described the general increases in efficiency that result from upgrades. Individual farmer experiences did not reflect this, which may be because the upgrades do not increase efficiency equally for every farm. Farmer #2 works with local universities to develop technologies for litter incineration and other advancements, but he did not feel he had benefited from company-mandated upgrades. “You know, 90% of these upgrades don’t amount to a hill of beans. But they don’t care because the growers are the ones that pay the money for it.” Farmers #2, #3 and #7 said roughly the same statement.

The enormity of required upgrades resulted in the termination of Farmers #11 from their Tyson contract. With 3 years left on their loan payments, they were in their early 60’s. Tyson informed them that if they did not update all 6 of their houses to new specifics, they would be terminated. With their lender, Farm Credit, they established that they could update 4 houses – but Tyson refused to negotiate for time or reduced upgrades. If they had refinanced their loan, they would have renewed with \$500,000 in debt and a loan extending into their 80’s. “We would have been out there in our wheelchairs,” they said. They received a termination letter with less than 1 flock notice in 2012, and are currently in bankruptcy court. In the process of assessing the refinance, they discovered that the premium payment Tyson would have offered them would not have been enough to pay for the required upgrade in less than 20

years. “We built the last three houses in 2000, and in 2002 they were wanting updates... the addendum was half a cent a pound more in pay.”

The fact that the integrator’s incentives for upgrades are insufficient was also voiced by farmer #13, who is also in bankruptcy court presently after a mutual termination in 2015 from Tyson. He explained “Tyson was making these incentives, if you’ll do this you’ll get paid, we’ll increase your contract to a premium contract... [which offers a higher base pay] So I started investing... Not to know that you had to kind of keep up with them or they would step you down.” He described being bumped down from the premium contract after a short amount of time when the next round of updates was required.

A fear that many farmers and experts (Ray, Taylor, Leonard, and Marlow) voiced repeatedly was that this “treadmill of debt” was facilitated by the influx of new growers into the system, in a kind of cycle. Farmer #6 explained: “They can cut a grower off because they don’t have to have his production. They’ve got another facility... They’ll never miss this guy.”

Two farmers directly experienced this. Farmer #5 refused to make significant upgrades to 3 houses with Case Farms. Her houses were older, but she was in the top 3 of her complex. However, she was terminated for not making the upgrades, because new growers came in with new houses. She described that state funds from the NC tobacco settlement were arriving, and growers were being encouraged to invest these in new poultry operations. As a result, a wave of older growers with older houses were terminated in favor of new growers, leaving Farmer #5 \$300,000 in debt.

To summarize, the four main points the farmer’s stories brought to light about the risk element of upgrades: 1) Upgrades are more frequent than is sustainable with a debt burden and are mandatory, sometimes accompanied with threats of loss of the contract. 2) Farmers are frustrated by the nature of the upgrades and the loss of decision-making about their farm, and doubt that they actually benefit from any efficiency increases. 3) The incentive programs offered by integrators are not sufficient to offset the increased debt burden of farmers who complete the upgrades, endangering their loans. 4) The preference for the constantly updated

equipment puts preference on new growers, creating a cycle, pushing older, debt-laden growers out.

In the contracts themselves, every contract bears the same language, in bold text and underlined, “Additional large capital investments may be required of independent grower during the term of the agreement.” However the contracts do not specify what to expect in terms of expense, frequency, time a grower may have to implement the upgrade, or other such information.

### Access to Credit (Debt)

The only risk element that was unanimously identified as a positive was the ease with which farmers could access credit for poultry operations compared to other types of farming. However, despite confirming this was feasible, not all farmers agreed that this was a benefit to the industry. Many farmers, particularly the older growers, voiced concerns about the amount of new loans granted. Four growers specifically mentioned the fact that the Farm Service Agency (FSA), a part of the USDA, will guarantee bank loans up to 95% for poultry operations in many cases. Scott Marlow, Executive Director of RAFI-USA explained that this practice was typical and that it encouraged banks to give out more loans than would be sustainable.

Farmer #6 who works with other farmers in bankruptcy explained what he saw as the cycle related to FSA guaranteed loans: 1) Banks are willing to grant larger loans because they are guaranteed. Farmers cannot get that kind of money for anything else in agriculture. 2) Banks have agreements with integrators, who send a farmer’s check first to the bank, or automatically deduct a farmer’s mortgage payment – so they know they will receive payments. 3) The FSA guarantee means that if a farmer goes bankrupt, the bank will be bailed out of the debt by FSA and will be able to foreclose on the farm for the remainder, making the loan disproportionately low risk for the bank compared to other agricultural loans. 4) As a result farmers are encouraged in many ways to view poultry production under contract as an entry-level opportunity into farming, and as “secure” because it is “FSA guaranteed.” 5) In Farmer #6’s experience, he has witnessed banks granting new loans on



previously bankrupt operations with the same integrator. As he put it this is “throwing good money after bad money.” He states the influx of new growers encouraged to sign up increases the cyclical nature of the financial risk.

### Equity (Debt)

The final risk element in the debt category concludes the complex picture of debt burden described by the farmers. Multiple farmers mentioned that a selling point for the contracts was the opportunity to build equity. Two farmers experienced this benefit. For Farmer #8 and Farmer #12, the poultry operation allowed them to buy their farm, but the farmers did not were unable to build any equity in the poultry houses themselves because of upgrades.

### Input Price Risk – Fuel (Profitability)

While many major inputs are typically provided by integrators, fuel is in transition. Farmer #6 described that more integrators are shifting the responsibility to cover fuel expenses to the farmers, rather than provide it as part of their input.

Farmers described facing dramatic fluctuations in fuel prices at times, which overwhelmed their income from the poultry operation. Farmer #13 described a scenario in which an ice storm created a fuel shortage and resulted in a \$17,000 fuel bill. He called Tyson asking to delay the delivery of birds because he could not afford to pay for the expensive fuel and was denied.

Farmer #9 states that if birds are sick in winter, the field technician’s recommendation is often to open the vents but also run the heaters at maximum to keep the birds warm and to cycle out the air. She explains that with a sick flock farmers generally lose money because of low tournament payment. Adding high fuel expenses is frustrating.

### Revenues over time (Profitability)

Farmer satisfaction with revenues from the poultry operation varied within the sample and seemed to depend on initial expectations. Farmer #9 noted her ability to pay her bills due to low expectations for income. She and her husband both work full-time jobs outside of the poultry operation. Farmer #10 said that the main benefit for his farm was a contribution to cash-flow, and that this was a significant benefit. However he cautioned, “if you’re diversified and everything is carrying it, then you’re OK. However I make less than the minimum wage, not even close to it.”

Many farmers described an arc in the long-term revenues from the operation. Farmer #1 said things went well at first, enabling him to pay off two of his houses. He said that things began to change when upgrades started for him. Farmers #2 and #3 also described that the first 7 or 8 years were good for business with satisfactory income. Farmer #2 pointed out that during these years the farms were also writing depreciation of the new equipment off of their taxes, and receiving significant tax breaks which made the income look better.

Farmers whose incomes relied more heavily on the poultry operation expressed greater frustration. Farmer #13 stated, “I never invested \$1.3 million to make so little money,” but as a farmer he was accustomed to hard work and was not concerned about the revenue at first.

One detail in regards to revenue that was analyzed in the quantitative section was the comparison of a 1975 settlement to a 2014 settlement. The fact that in both, the base pay was the same, was a fact that many farmers brought up. Farmers #11 noted that during their first 10 years with Tyson they did not receive a raise of any sort, not even an adjustment for inflation. Thus their pay was steadily falling behind the increase in their updates and expenses. When they did receive a ¼ of a cent increase in 2006, they said it did not suffice to catch up with what they needed.

### **Labor Investment (Profitability)**

For the most part farmers did not mention any negative risks regarding the labor investment of the actual work. Farmer #1 explained, “this is 7 days a week, 24/7 that we are on call if birds are in the houses... the guy at the chicken council said it only took 20 hours a week to

manage these farms, I've read brochures that it's part-time work. It's part-time pay, but it's the fullest part-time job you'll ever get."

Farmer #2 noted that he had to stay home from his daughter's wedding because he could not leave the chickens. He had to make significant sacrifices or pay for help, which he did not feel reflected part-time work. Farmers #11 also noted that the requirement to be available for inspections and delivery often conflicted with their need to work off the farm for income. They claimed that they were written up for being off of the farm when inspectors or field technicians came by unannounced. The requirement that farmers are present during delivery of chicks is stated in all five contracts.

#### Variability in Pay (Tournament payment)

All farmers brought up tournament payment in their stories. The two risk elements that farmers perceived in this category are interconnected – the uncertainty associated with variability in pay and the quality of inputs provided by the integrator, which has an impact on that variability.

In the quantitative analysis of farmers' settlements, it became evident that the tournament system amplifies the extremes of farmer payment in a ranking as compared to a fixed-unit pay, especially at the low end of the extremes. This was described by Professor Taylor:

Farmers described the impact of this function. Farmer #9 compared tournament to a potential fixed-unit rate and noted that if you're paid a fixed rate, "you know if you have a big loss, you're going to have less pounds going to market, you're going to have less money. But people could at least pseudo-budget."

Farmer #6 described the potential impacts he had seen of this variability on farmers' financial status. He explained that if a check came in below the costs of production for that flock, because the margins were already so thin in this business for farmers, they frequently could not pay bills such as propane and electricity. He explained "so there are times when credit scores for poultry growers are not good because they've got a lot of 30, 60, 90 day pays that

have gotten behind before they can get caught up.” The variability and accentuated low payments in tournament essentially increased the likelihood of this happening.

Farmers #11 explained: “It was all over the place. The tournament system, it’s the most unfair thing possible. If the company had everything on their end working, in other words if you had the best chicks, the best feed and all that, then maybe so.” This is where the variability in pay links directly to the farmers’ experience of risk in receiving consistent quality of inputs. Farmers #11 said that in the inevitable event that the quality was inconsistent, the tournament was not a proxy for farmer performance. They further mentioned that they felt this was true “especially when the complexes start having problems and they can’t supply everybody with the same, then they pick and choose.”

The contracts demonstrate clearly that tournament is considered a proxy for performance. All contracts contained an explanation of a performance review or probation period for unsatisfactory performance of growers. For example, Pilgrim’s Pride refers to the program as a “Cost Improvement” program for high-cost growers. Probationary periods are triggered by farmers’ having a high cost average of 6 flocks, or if a farmer performs poorly for 3 flocks in a row. Failure to improve is explained as valid reason for the integrator to terminate the contract.

### **Quality of Inputs (Tournament Payment)**

This was perceived strongly as a risk element for 10 out of 12 farmers. The reason was not an overall average that was negative, but the fact that they had received at times batches of diseased chicks, weak chicks, poorly mixed feed, or other such errors that directly impacted their “performance.” The major frustration discussed by all 10 of these farmers was that if there was a problem at a hatchery or feed mill, the farmers were the ones who suffered – and three of those interviewed wound up on performance reviews as a result of “poor performance,” which they felt was actually a consequence of inadequate inputs rather than their own management.

Farmer #10's complex was receiving very poor quality feed from George's for consecutive flocks one winter. When he and other farmers approached the integrator, they were eventually told that they would have to wait until the contract the integrator had for the raw ingredients in that feed ran out. In the meantime farmers' pay was not adjusted to compensate for the acknowledged inadequate inputs.

Contracts all reflected explanations of what integrators would provide farmers in terms of chicks, medicines, feed, etc. But there are no quality control minimums or procedures in the event of low quality inputs.

### Biological Risk (On-farm production risk)

Farmers confirmed that they do carry the on-farm production risk related to biological uncertainties. Farmers described catastrophes due to weather and disease. However, the negative scores in this section on the overall farmer chart should be interpreted carefully. Farmers were generally not implying a higher-than-normal risk of biological incidents in poultry farming. Those who had negative responses were commenting on the *additional* risks related to biological uncertainties that they experienced specifically because of the contract relationship. The accentuated risks as described took two forms: 1) Added biological risks due to integrator control of inputs and responses, and 2) Increased sensitivity to natural disasters or catastrophes.

For example, Farmer #10 has a diversified farm and also raises crops and cattle. He explained that biological uncertainty is normal in farming and that when weather catastrophes occur or diseases get onto the farm, farmers have to be creative to respond. However, his experience as described above regarding the inadequate feed highlights what he felt was an added biological risk – the inability to respond with his own knowledge, change feed, and address biological risks stemming from integrator control in his chicken houses.

Farmer #6 described a story of an ice-storm that caused lots of poultry houses to cave in. He explained that if these growers had been independent, they might have had insurance on the flock (as with crop insurance, for example). In addition, if the supply suddenly fell in the

local marketplace, their remaining chickens would have fetched a higher price and this would have helped farmers recover from losses. However given tournament payment, those who had the worst damage received accentuated low payments or minimum payments. In addition many lost their contracts because they had lost their houses and could not afford to rebuild. He explained that the price of chicken in the regional marketplace did rise, due to the 10% loss of supply, but that this benefit was absorbed by the integrator – he claims that the amount of increase in price for the remaining 90% of supply more than compensated them for their losses, but no support was offered to the farmers, many of whom lost their farms and homes as a result.

### **Environmental Risk (On-farm Production Risk)**

Three farmers mentioned a risk-shifting taking place in poultry contracts in which the expenses and risks entailed in managing waste from a highly productive system is disproportionately placed on the farmers. The waste output is the chicken litter, which is high in phosphorous. Professor Taylor explained that in fact phosphorous is an additive to the chicken feed, because it strengthens the bones, which enables easier processing.

High phosphorous litter can be very useful for many farmers. Farmer #10 explained that a benefit of adding poultry houses to his diversified farm operation was being able to use the litter as a fertilizer for his crops. For some farmers, such as farmers #2 and 3, they were able to sell the litter. They noted that it was not a reliable source of income because of transportability and demand, but they were able to get about \$10-\$11 per ton from most flocks.

The usefulness and sale value of the litter was definitely a function of geographic region and farm size for it can also become a burden and an environmental hazard.

In the contract language regarding litter is an evolution of environmental language in the indemnity clauses. First, it is standard that in multiple places in the contract the responsibility to obtain permits and follow all federal, state and local laws is specified. For the question of litter this refers to farmers establishing a Nutrient Management Plan that is approved by local authorities, which specifies how much litter they are allowed to spread on their land.

What can be seen as an evolution in the recent Perdue and Pilgrim's Pride contracts in particular is that in the indemnity clauses, specific language has been added: "grower agrees to indemnify, defend and hold the company and its officers [etc]... harmless against... matters including but not necessarily limited to... emission complaints, disposal complaints, or pollution complaints."

### **Messaging and Recruitment (Symmetric Information)**

The most commonly reported negative risk element pertained to the farmer's perception of the information which informed their decision to start a poultry contract. All 12 farmers mentioned this as a risk, because they felt they agreed to something that did not materialize for a wide variety of different reasons. The common connection in their statements was a sense of having been deceived, or having not been told the full story when they were recruited.

There were different narratives that the farmers felt had been misleading: 1) the low-risk and stable nature of the operation, 2) the actual impact of their knowledge and effort on the profitability of the operation, and 3) the potential for building a long-term investment through the operation.

Regarding low-risk and stable nature of the business, many farmers (#6, #8, #9, #1, #13, #11, #2 and 3, #10) mentioned this aspect specifically. For example farmer #6 stated "the media that came out on the radio was – come grow with us, we are growing companies... it was that chickens were an insulated [from risk] crop." This contrasts with his experience working with farmers in bankruptcy as a result of accentuated biological risks.

Regarding the farmer's perception that this would be a performance-based rewards system, many farmers described believing that if they worked hard they would be able to make decent money. Farmer #1 pointed out that in all the recruitment material he received from Perdue, which I reviewed, it mentioned bonus payments and incentives for performance, but the penalties in tournament payment were never explained. In addition the material assured farmers that the highest quality inputs were provided equally to all.

Regarding the long-term investment potential, Farmers #11 stated that the risk of losing the investment due to upgrades is too high to believe that this business is actually a long-term investment despite the messaging.

An issue that emerged as acutely urgent for farmers #6 and #12 was the impact of this potentially deceptive messaging on new and immigrant farmers in particular. Farmer #6 stressed the risk for new farmers who are seeking entryways to agriculture who are told that loans are easy to get, and that they can build equity through this business. He noted that these individuals would likely be trying to buy a farm and build new houses at the same time, thus taking on tremendous debts and likely placing family land and houses on the loans as collateral, placing them in the heart of the risk elements identified in the Debt category.

Farmer #12 described that the messaging circulated to immigrant communities is particularly generalized and thus potentially deceptive. He explained that the waves of Vietnamese and Hmong immigrants moving to the south to buy chicken farms are hearing from other family members about the opportunity. When they approach the banks and integrators in the south, they are granted large loans and do not receive a full explanation of the risks involved, often because of a language barrier. He told a story of 5 families that pooled all their resources to buy a 10 house farm, with a loan over \$2.5 million. He believes they did not understand the marginal income of the business. As a result the scenario at this site was that the children were working in the houses, there was no food to eat, and eventually the families went bankrupt and walked away from everything.

### **Access to Production Information (Symmetric Information)**

A related risk element that roughly half of the farmers experienced was relative limited access to production information. For most farmers who mentioned this, the stories were about feed, chicks, and outputs. Farmer #9 had trouble establishing the actual weight of her chickens on a few tournaments. She was given averages for outputs that did not make sense. When she asked to be present when her birds were weighed, she was put off by Pilgrim's



Pride managers, who insisted that estimates from the catch-crew regarding the total number of birds picked up must have been wrong. She lost significant money in these tournaments.

On the other end of production, Farmer #7's court case against Tyson demonstrated the frustration of several farmers over their inability to ascertain exactly the weight of feed they were delivered (and charged for in tournament calculation), and the weight of their birds. Farmer #7 was denied entry to the processing plant when he requested to watch his birds be weighed. At the same time when he bought scales to place on the feed bins on his farm, he was told by Tyson that if any scales were put up on farms the farmer would no longer receive chickens.

Professor Daryll Ray of the University of Tennessee explained that limited access to production information goes beyond inputs. It includes also that there is very limited public data regarding poultry production and pricing. USDA is unable to track a "farm gate" wholesale price for chickens, because the data is primarily managed internally in the integrators.

The contract language in part highlights the asymmetry of production information in the relationship. George's contracts for example stress that farmers must keep good records and must be willing to provide these records to the company at any time. Furthermore all contracts clearly state in different sections that the company has the right to enter the farmer's property at any time they see fit to inspect the poultry operation.

### **Business Ethics (Business Relationship Dynamics)**

The second most discussed risk element overall was a risk in facing unethical business practices when dealing with the integrators. These statements took many different forms – some farmers described bullying or coercion, such as the stories from farmers #11 and #7 regarding intimidation to force upgrades. Farmer #13 described a changing relationship with a field technician who actually told the farmer that he had been "sent to the farm to build a case against him."

Another form of unethical practices discussed in this element was the inability to negotiate, bargain, or even discuss contract terms with integrators. Multiple farmers I interviewed had tried this on different occasions, either alone or in a group setting, and all shared frustrations over uncooperative or non-responsiveness from the integrator. Farmer #8 who tried to add an addendum to his contract stipulating quality of feed and inputs as a minimum for his own terms, was told that it was a company policy of Pilgrim's Pride not to negotiate with farmers – the contracts were “take it or leave it.”

Furthermore, some of the farmer stories exhibited practices that were targeted at inhibiting farmer's freedom of association. Farmer #10 who tried to approach George's with a group of concerned farmers regarding the inadequate feed was directly told by the manager that “George's will not answer any questions fielded in a group setting.” Additional stories of this nature are discussed in the following section regarding retaliation.

Certain language in the contracts alludes to an aggressive stance that the integrators may take in the relationship. Perdue's 2015 contract deliberately states that farmers waive their right to start or join any class action against the company in court. Farmers may only bring matters to court on an individual basis.

### **Retaliation (Business Relationship Dynamics)**

In connection with the risk element above regarding business ethics, some farmers shared stories that exhibited deliberate actions by the integrators to sabotage or penalize farmers in response to their actions. Farmer #7 said he experienced repeated subtle retaliatory actions from Tyson such as miscalculated feed, repeated bad batches of sick chickens, and other such practices once he became the president of his farmers' association and attempted to file a complaint with the GIPSA Administration.

Farmer #13 felt deliberately tricked into paying for excessive propane by Tyson in one incident, and felt that this was response for his speaking out in a group meeting about the tournament payment system. Farmer #1 has spoken to the media recently about farmer and animal welfare under Perdue's required practices. As a result he was immediately placed on

the performance review program despite having performed in the top of his complex. He received 23 unannounced visits from inspectors from Perdue, at all hours of the night and day. He was told in harshly worded memorandums that he had “staged” the animal welfare scenario on his farm, and that he was actually a bad manager.

Farmer #6 was informed by Perdue that “they would not do any business with [farmer #6’s] heirs” after his son had already received verbal commitment and had invested \$200,000 in building new houses. This was in response to a court case regarding stolen feed that farmer #6 initiated and won against the company in settlement.

### **Autonomy and Control (Business Relationship Dynamics)**

In addition to loss of autonomy and control, farmers repeatedly mentioned that they felt like “employees” rather than independent contractors. “No other employee goes and borrows \$1.3 million to work for you” Farmer #13 said. Farmer #1 seconded this opinion, citing the extensive guidelines that they were to follow, and the “supervisory” role that the field technicians played.

In reviewing documentation for both Perdue and Pilgrim’s Pride contracts, I was able to also review guidelines and biosecurity and animal welfare programs. What was clear was that every detail – including the exact temperature and humidity readings, exact number of hours of light and settings for computers, timings for feed rations and water, etc – were laid out in detail in the guidelines. However the contracts themselves all stress the “independent contractor” status of the farmer.

### **Confidentiality (Business Relationship Dynamics)**

A related issue to both Autonomy and Business Ethics were the confidentiality clauses that have been added to newer contracts (especially Perdue 2015) and addendum communications sent by Pilgrim’s Pride in 2014.

Perdue's language specifically states: "Producer understands and agrees that Perdue's express written permission is required prior to taking photographs, images, audio and/or video recordings of the chickens and/or Perdue representatives. Furthermore, the distribution, transmission or posting to the internet (including but not limited to email, picture or video messaging and/or use of social networking or photo sharing websites) of photographs, images, audio and/or video recordings of the chickens and/or Perdue representatives without prior express written permission is strictly prohibited."

This language is followed in a later section discussion Termination with: "This agreement may be immediately terminated by Perdue at any time upon... i) The producer makes any public statements or comments regarding Perdue or its brands that are false or defamatory... k) the producer takes or allows others to take photographs, images, audio and/or video recordings... etc."

These additions to the contract seem like rather evident responses to recent grower "whistle-blower" actions with journalists in the media, calling attention to animal welfare and farmer welfare issues.

In addition Pilgrim's Pride sent farmers a notice in 2014 stressing that: "your grower agreement also imposes a confidentiality obligation pursuant to which you are prohibited from disclosing any and are obligated to protect all proprietary or confidential information of Pilgrim's to which you are exposed... As such, failure to comply with these obligations is not only a terminable offense but, in the event Pilgrim's suffers damages as a result of your breach of these provisions, you would be liable to Pilgrim's for such damages."

Professors Taylor and Ray both mentioned a lack of transparency in the industry as a major obstacle to research. Farmer #1 believes that confidentiality policies of integrators such as these are overreaching and inhibiting farmers' right to freedom of speech, and are intended to intimidate farmers from sharing their real experience with researchers, other farmers, and the general public.

Regulation and Enforcement (Business Relationship Dynamics)

The final risk element originating from the interviews was the lack of reliability of legal and regulatory supports to enforce contract terms or protect farmers from overreaches or unethical practices.

Farmers #8, #9, #7, #1, #6, #10 and #12 mentioned experiences and attempts to register complaints regarding unethical practices. Farmer #7 attempted to utilize the anonymous complaint system established by the GIPSA Administration. However he found that when he registered a complaint, the Tyson managers at his local plant knew about it – thus the anonymous protections did not work.

When Farmer #7’s case came to court, it reached the level of the supreme court, and was thrown out by a federal judge. The ruling was that in order to file a case against Tyson, Farmer #7 would need to demonstrate that the company’s actions were causing harm to competition in the industry as a whole. This is the result of the judge’s interpretation of the Packers and Stockyard’s Act.

According to Dudley Butler, previous head of the GIPSA Administration, this decision has been emblematic and has informed the decisions of courts in other farmer’s cases against poultry integrators. He explains that he feels the agency both lacks political will and resources to adequately investigate farmer claims or file cases. He believes that significant political pressure over congress has been exerted by poultry industry lobbyists, which has limited the scope and impact of GIPSA activity. He further explains that beyond GIPSA, there is no regulatory authority that has jurisdiction over poultry companies.

4.7 Summary of Results

To briefly summarize the cross analysis results, I have created a final chart, displayed in **Table 9** which clearly shows each of the risk elements and their treatment in corresponding data sources. Farmer interview scores from the chart in 4.1 are presented. Under the column for the contract analysis, a “+” indicates that the language implies benefits for farmers, and

“–” indicates that the language implies potential risks for farmers, as was presented in the cross analysis. Elements for which the contract language did not appear to present a significant impact, or that may have had both positive and negative effects, are left blank.

In order to better understand which areas of risk were most important to the farmers, I calculated a total score for each category as a whole. As a result it is easier to notice that risks related to business relationship dynamics and debt are of the most concern to the farmers, whereas on-farm production risks are the least.

Category	Risk Element	Farmer Interview Score	Contracts Review (counts as weight 1)	Aggregate “score” of category
<b>Debt</b>	Length of Contracts	-7	–	-24
	Asset Specificity	-10		
	Transferability		–	
	Upgrades	-11	–	
	Access to Credit	+12		
	Equity	-5		
<b>Profitability</b>	Input price risk – Fuel	-6	–	-14
	Revenues	-4		
	Labor Investment	-3		
<b>Tournament Payment</b>	Variability in pay	-8	–	-20
	Quality of inputs	-10	–	
<b>On-farm production risk</b>	Biological	-7		-12
	Environmental	-4	–	
<b>Symmetric Information</b>	Messaging and recruitment	-12		-19
	Access to production information	-7	– +	
<b>Business Relationship Dynamics</b>	Business Ethics	-12	–	-35
	Retaliation	-7		
	Autonomy and Control	-8		
	Confidentiality		–	
	Regulation and Enforcement	-7		

Table 9: Overall Risk Elements with Score

## Chapter 5 – Discussion

### 5.1 Testing Hypothesis

I established the following as a hypothesis, based on the majority consensus of existing literature which matches the message farmers generally receive:

**A broiler production contract is a stable, implicitly long-term and low-risk investment for a farmer who is a good manager.**

Based on my results, I cannot confirm that my hypothesis is correct. Instead, my results imply that there may be significant risks that farmers face when signing poultry contracts.

What I found is that most farmers described an arc experience in their contracts. At the beginning all the farmers said things went well for a while. For this reason sections such as profitability reflect a diversity of farmer responses – at first (with the premium payment status, newest houses, depreciation write off in taxes) they made money to pay their bills. In the initial years many farmers said they had high hopes for the future of their investment. But then, for many there was a transition in their satisfaction with the contract relationship when upgrades were required of them, which they did not wish to invest in, and which often threatened their financial sustainability. For others a negative experience involving supplied inputs, or a growing frustration with revenues and tournament payment changed the dynamic of their relationship. Through the course of their stories and the review of their contracts, I thus identified 20 repeating risk elements.

Given that I conducted a case-study analysis and that my sample is small, I would not be able to generalize about overall farmer experience in production contracts. A further consideration would be that the majority of the farmers I interviewed had been in contracts for more than 10 years, and many had older equipment. Almost all had significant loans involved. The risk elements may have looked different if I had interviewed farmers in the first 5 years of their contracts. In addition, the snowball sampling method put me in touch with farmers who were connected at least indirectly, which may have limited my results to one group of more like-

mindful interviewees. In the few instances where I was put in touch with farmers through contacts outside of the poultry world, there was not sufficient trust for them to feel comfortable with me including their interviews. It was critical to have the introduction of another farmer or a trusted individual, which may impose a filter on my research data.

However, while I cannot conclude exactly how broad, my research did give me sufficient reason to believe that my results reflect the experiences of a broader population of farmers than this sample alone. I base this conclusion on two aspects: the other farmers regularly mentioned by those interviewed, and the validation of farmer stories by the experts interviewed.

The first of these aspects occurred in almost every interview. Very seldom did farmers describe their experience in a bubble. In fact some of those interviewed were either part of farmer associations or leaders in them. They described meetings with dozens of other farmers experiencing similar dilemmas, but they explained that these others were not willing to speak out or be interviewed as a result of fear of risking their contracts. This experience of intimidation, regardless of whether directly linked to integrator behavior or perceived, was the number one reason farmers were unable or unwilling to participate in interviews.

Also, by interviewing the experts, I was able to verify if the farmers' stories were singular or had emerged as more common grievances. For example, when considering farmer responses regarding elements in the category of profitability, I was able to draw on information from multiple experts.

Professor H.L. Goodwin has published multiple articles about the revenues of poultry growers, and has personally interviewed growers. He explained that to make ends meet as a poultry grower, "you need an off-farm income, an off-farm employment for your benefits, and if you're paying for land, you better have another job because your land payment is going to eat up all your returns, completely. You also must stay up on all the latest management."

Christopher Leonard is the author of a recent book about livestock production, and also covered the poultry industry as a journalist specialized in agribusiness for the Associated



Press. He has also interviewed hundreds of growers. He explained that “from personal experience I can tell you I would describe the typical poultry farmer as someone who owes \$500,000 to \$2 million on their farm, lives flock to flock or paycheck to paycheck... the most successful are the ones who have a diversified operation, or they have a job in town. For the people who rely entirely on this business for their income they are living certainly on the edge of bankruptcy.”

The descriptions of these two experts actually match, and help to qualify my data. On the one hand Leonard describes a reality he has seen, and which many of the farmers I interviewed experienced, which is that engaging in poultry production as a primary source of income is unstable and insufficient. Goodwin’s description of the successful growers highlights the need to have off-farm and diversified income in order to compensate for the risks of variability and marginal revenues.

Based on this kind of cross analysis, I can reasonably conclude that the risks in terms of profitability and revenues that these 12 farmers described would likely be relevant beyond this sample. Even if the extent to which that is true is unclear, I feel my results and my inability to confirm the low-risk hypothesis warrants further research into each of these risk areas.

## 5.2 Comparison of Results with Literature

In Chapter 2 section 2.4 I established that a transaction cost approach could theoretically explain the existence of poultry production contracts because they increase efficiency by reducing costs related to contracting. Costs such as asymmetric information, re-contracting related to technological updates or short-term farmer commitment were discussed in the theory as being reduced for the integrator, making the contract model admirably efficient. What I found in my results however suggests that while risk-shifting in contracts was confirmed, many of the transaction costs were not actually reduced overall for the value chain, but rather were re-arranged. In my results I found stories that implied that in some cases transaction costs related to risks of uncertainty and variability may have been reduced for the integrator, but were shifted to the farmers.

It is certain that farmers are relieved of many transaction costs related to broiler processing and marketing as a result of the agreement. They do not make arrangements for the final product sale, oversee, plan, or pay for transportation or processing of the birds. In theory, the combined production of many farmers allows the integrator to access competitive markets at scale. Working as a team they increase mutual welfare. For this reason multiple farmers expressed that this was a benefit of the business. Farmer #10 explained that he didn't mind if the integrator made more money than him, because he felt they took on market liability. Farmer #6 stated that he thought the poultry business could have been the best thing to come to eastern North Carolina, because of the many farms in need of a market opportunity without access to large amounts of land. The shifting of marketing costs to the integrator, and the associated benefits of access to an industry that would otherwise be prohibitive to enter as an independent farmer was evident in the farmer interviews. Only one of the farmers interviewed grew chickens independently before signing a poultry contract. Without the integrators they would likely not have entered the market. My results are thus in line with the description of benefits of access to business opportunities described by VUKINA (2001) and the market risk shifting described by KNOEBER AND THURMAN (1995).

However, the interviews revealed that several other risks may have actually been transitioned back to the farmer in the agreement. To provide one example, we can look at the key contract mechanism that makes poultry unique compared to previous agricultural contracting: the integrator's maintained ownership of the critical asset, the birds themselves. GROSSMAN AND HART (1986) established theoretically how a cross ownership of key assets could create a solution to the problem of economic hold-up described by WILLIAMSON (1990). GROSSMAN AND HART (1986) also point out that this ownership is necessary for efficiency given the incomplete nature of the contracts. Poultry production involves a great deal of uncertainty and asset specificity, a combination that presents high-risk scenarios. If farmers provided and sold their own birds to integrators for processing, the uncertainty and fluctuations of supply would lead to costs, on top of contracting costs for contingency agreements. Instead, integrators maintain ownership of the birds and retain the right to adjust the frequency of flock placements and the size of flocks. They are thus able to increase or decrease production as needed, with the response time of one flock.

While this significantly reduces integrator supply uncertainties, it increases the uncertainty for farmers who are no longer in control of their production levels. Multiple farmers mentioned frustration with delays in flock placements (Farmer #12), back-ups at processing plants (Farmer #9), receiving half or short-flocks (Farmers #2 and 3), all of which affected their income. Farmer #6 described the negligible cost that one farmer's production makes on the supply of a complex – he said that if he is cut, the integrators can easily increase the production of other farmers slightly to compensate, or the production of a different complex. With integrator flexibility and response time to control supply built into the contracts, in this way, the uncertainties of shifts in the market and levels of production are actually shifted to the farmers.

A similar shift seems to take place regarding the costs and quality of inputs. In the story from Farmer #10 regarding George's low quality feed one winter, the response from the management was that farmers would have to wait until the end of the integrator's contract with the provider of the raw ingredients. Given the flexibility of production if an integrator owns multiple complexes, low outputs in one could possibly be compensated in another area. But for a farmer, as they described, receiving bad feed or chicks means a minimum or low tournament ranking, and a larger risk of making less than their costs of production.

Professor Goodwin noted in his interview that it would not make sense for an integrator to provide inputs of different qualities to farmers on purpose, because standardization is critical to the efficient functioning of their processing infrastructure, and they need the outputs of the farmers. However as JENNER (2001) pointed out, it is not possible to actually create 100% high quality outputs. Hens of different ages lay chicks, and chicks are not sent to all farmers on exactly the same day. Feed is not always fresh and perfectly mixed, farmers stories of over salted feed confirm that mistakes happen (Farmer #9). Thus it is not reasonable to assume that all farmers always get equal quality inputs from the integrator. There is a disproportionate experience of this risk in quality of inputs between the farmer and integrator. In this way, the contract system has also shifted the inherent risk of quality of inputs and related variability in production to the farmers.

Another example of this risk shifting involves the capital required for poultry production. GOODWIN (2005) noted that a major benefit is that integrators do not need to provide 100% of the capital for this business, as farmers invest roughly half. The major form of capital that farmers contribute is land. For an integrator to fully organize vertically and own their own production, they would need to own vast amounts of land. Land ownership entails its own risks and burdens related to its appraisal and valuation, taxes, interest rates, etc. The second most discussed category of risk elements in my research was that related to the debt burden the farmers took on. The risk shifting related to the land and poultry house investment was evident in Farmer #6's story of the ice-storm, in which the integrators were better insulated from loss of investments following the devastation of a natural disaster. In this case they were able to sign on new farmers, increase production elsewhere, and slightly increase their prices to recoup output losses, yielding a net profit when the disaster had ended. The farmers on the other hand experienced a disproportionate risk of losing their farms and homes in bankruptcy, which was the case for many.

The uncertainty of biological risk in agricultural production may be more than just a marginal risk factor that farmers face. In the literature, it was generally described as representing 3% of overall risk in the form of idiosyncratic production risks, or as being negated through the tournament system as common production risk (KNOEBER AND THURMAN (1995), VUKINA (2001)). In interviewing Tyson executives, Leonard explained that he asked: "the company owns everything except the farm. Why would this one piece remain off the balance sheets? A Tyson top executive told me that with a contract model they could get the benefit of controlling the farm, but they wouldn't have to sink their capital into what is really a crummy investment."

Leonard's perception of Tyson's motivations, though it sounds simplified, may not be unrealistic, based on research by ALLEN AND LEUCK (1998). They studied the formation of factory farms in agriculture, noting a significant change in the role of the family farm. They state that firms have mostly engaged in business at the beginning (feed, inputs, seeds) or the end (processing, marketing) of the value chains. In the case of poultry it is at both ends. They point out that "accordingly, the family farm has abandoned these stages and now controls only the purely biological growth states of farm production" (1998, p.365). Based on their

research they find that it is the inability to control for unexpected shocks due to biological risk that prevents firms from fully integrating the farm. “Because the critical “grow-out” period of a chicken’s life, even using modern technology, is subject to highly random forces of disease and weather, large companies routinely contract out growing services to small, family-based growers” (ALLEN AND LEUCK, 1998 p.372). In this way, a significant motivation for the poultry contract arrangement may be explained by the presence of biological uncertainties and risks, which the contracts enable integrators to leave with farmers.

In general, the different aspects that affect variability in pay are transferred to the farmers through the tournament system. As was demonstrated in the work of TAYLOR AND DOMINA (2010) and discussed by JENNER (1997), the integrator benefits from tournament by being able to stabilize farmer costs at a nearly consistent amount for each flock. The variability is thus passed along to farmers who compete for the fixed amount of payment in the tournament mechanism.

The reason variability in pay poses a significant risk for farmers is because of the low margins of their revenue, which have been shrinking due to decreasing value of their base pay over the years. I have assessed the accentuated extremes in pay variability as a result of tournament in my results. While I only had access to limited settlement data to examine, my results are similar to those of TAYLOR AND DOMINA (2010) and match the statements of JENNER (2001). I also provided an example of how a grower’s pay per pound in one region of Virginia has remained the same without adjustment for inflation since 1975. Multiple farmers mentioned that they had not received a raise – farmers #11 received a \$0.025 increase to their base pay between 1996 and 2006, without an adjustment for inflation.

One point that should be mentioned regarding decreasing value of base pay is that technological advances have allowed for a higher density of chickens placed, and larger houses. Thus while farmers make less per pound, they move more pounds per year. However, in the square-footage averages reviewed by GOODWIN ET AL (2005), a slight downward trend can be seen once adjusted for inflation, even when accounting for increased outputs. Farmer expenses on the other hand have at a minimum increased with inflation, if not increased in

value as well. Many farmers I spoke with said that the costs of production have gone up with new technologies added (for example running lights in the daytime in tunnel houses rather than using natural lighting from curtains, described by Farmers #11.) This decreasing revenue shrinks the margin of profitability for raising chickens. Average overall low revenues were documented by GOODWIN ET AL (2005) in the first years of the business, and negative revenues were documented by TAYLOR AND DOMINA (2010) over an average of Alabama growers. The fact that the GOODWIN ET AL (2005) study did not account for upgrades, which is something that all the farmers in my interviews mentioned was a problem, implies that the positive revenues they estimated in the later years of production may be unrealistic for many farmers. In summary, even if there is not a consensus on the exact margin of poultry farmer revenue, there seems to be consensus that it is a small margin. The small margin is reflected in the concerns of the majority of the farmers I interviewed. It is for this reason that the accentuated variability of tournament payment poses an increased risk for farmers.

In recent years other risks have been transitioned to growers, as I saw in the comparative review of the contracts. Only Perdue, based on the interview with Farmer #1, continues to carry fuel as an input factored into farm cost in tournament, whereas the other integrators have over time transitioned to paying supplements or bonuses correlated to output. Thus the risks related to variability in fuel costs necessary for the production phase are now mostly shouldered by farmers in the industry.

Another significant transition evident in the contracts was the shifting of environmental responsibility. This poses a valid risk, as the industry is very large and generates a hazardous quantity of waste. In regions such as that of farmers #8 and #9, the overproduction of waste requires that farmers spend a significant amount on transporting waste. The alternative is breaking the law, and piling the excess waste out of sight. GOODWIN (2005) explained that the reason poultry farms are regionally located is the transaction costs reduced by clustering farms around a feed mill or slaughterhouse. This localizes production, but it also concentrates production of waste materials. As Farmer #8 explained, he was unable to apply  $\frac{3}{4}$  of his waste to his land because it was already oversaturated with phosphorus. GURIAN-SHERMAN (2008) with the Union of Concerned Scientists documented the damages and costs that

general society bears as a result of overproduction of manure and associated pollution. It is generally not a problem of one farm, but a problem of a concentration of many farms. Thus it is the integrator's localization of production that directly leads to regional environmental damages and pollution.

In 2010, the Attorney General of Oklahoma actually formally sued Tyson, George's, Peterson's, Cargill and other integrators. In this case, Oklahoma AG presented that integrators had localized a high concentration of poultry farming operations in the Oklahoma and Arkansas area, burdening the watersheds and creating significant and expensive damage that the state was obliged to cleanup (CASELAW.COM, 8/8/2015). The integrator's responded that in their contracts, the farmers are responsible for meeting environmental responsibilities, which is consistent with what I found in my results. MOLNAR ET AL (2002) state that "Asymmetrical power relationships shift waste management responsibilities to growers in a number of ways... Corporations 'pass the cluck' when they shift responsibility for achieving regulatory compliance to the farmer who then must seek technical and financial assistance from public agencies. Poultry integrators 'dodge pullets' when they retain ownership of live animals, but dead birds become the farmer's property and disposal problem" (2002, p.88-110). By making farmers the responsible party for the main waste output of the entire industry, integrators shift the risk of environmental responsibility and the burden of expensive cleanup to farmers – despite the low revenues they are paid.

The transactions costs described here are not the only costs shifted to farmers, however they are prime examples for analysis. Others can be understood by reviewing my results description. Some other examples would include variability in labor markets, interest rates and leverage of capital for initial investment. It is unclear from my results to what extent these costs impact all poultry growers, however what is clear is that for at least some poultry growers these risk elements entail significant transaction costs which may threaten the financial sustainability of their farms and livelihoods. It also appears from my literature review that these risk elements have not been adequately covered in empirical or theoretical research. As a result, I believe further research is urgently necessary to quantify and better characterize the nature of these risk elements, in order to describe a full and practical picture of risk distribution in poultry production contracts.

### 5.2.1 Farmer Risk Aversion – A problematic assumption?

If there were so many risks involved for farmers in raising chickens, why would farmers sign poultry contracts? This seems to be a circular question in the dialogue about poultry production. Based on my results I can make some suggestions regarding potential farmer decision-making. I presented the unanimous frustration of farmers I interviewed that the information they received in recruitment did not match their experience. Some farmers said tournament was never explained to them, others said they felt the messaging was deliberately skewed to the positive side. Given the assumption of bounded rationality, we can assume that farmers make decisions to sign contracts based on their opinions, cultural context, and partial or asymmetric information. It is thus not reasonable to assume that farmers always choose contracts based on complete information.

The question of whether farmers have access to complete information about the business is part of a regular, and tense, dialogue regarding ethical practices and concentration in the industry. In 2010 the Department of Justice and the USDA held joint hearings regarding concentration in agriculture. They held one specific hearing for the poultry industry, in Alabama. In footage from the hearing a representative of the National Chicken Council asks to farmers in the audience who had just testified, “With all due respect, I’d like to ask a question... why, knowing what you know, at least from your comments, would you get into a business that you feel is not a good business?”

A farmer from the Contract Poultry Growers Association of the Virginias stood up to respond. “I bought the largest poultry farm in West Virginia and Virginia five years ago. And I can tell you the reason why I got into it is, the company lied” (RAFIUSAVIDEO, accessed 8/8/15). Only one of the farmers I interviewed felt that he had been “lied” to by his integrator. However many used words such as “deception” or “misrepresented,” and all expressed a general lack of trust in their integrator.

In looking to the literature for an answer to why farmers sign contracts, the most common explanation for farmer choice is that farmers are risk averse (GOODHUE (2000), VUKINA



(2001)). I discussed in my literature review how this assumption has a long history in contract theory, extending back to the work of CHEUNG (1969) and STIGLITZ (1974). However, based on my results, I would suggest that specific to broiler contracts in the United States, this assumption may actually skew research as it may not be a complete picture of why farmers sign poultry contracts. I suggest this because inherent in the assumption of farmer risk aversion is the idea that farmers actually have choices in the marketplace, because thus their choice would reflect a confirmation of their risk preferences.

Farmers #5 and #11, after being terminated by Case Farms and Tyson respectively, have faced the challenge of raising chickens independently. For both the biggest challenge is finding a market at all to sell to. As there is virtually no independent broiler market in existence in the US, the scale of integrator production ensures such a low price per pound that no individual farmer could compete. Thus those who go independent must access restaurant, niche organic or local farmers markets. The reason farmers suffer when they lose their contracts is because there are generally few or no alternatives in the broiler production marketplace. Farmer #4 described what would happen if he tried to raise his own birds, saying that he would not be able to process his birds, because there is not an independent processor within hours of driving. In fact, Professor Taylor explained in his interview that because virtually all poultry transactions are contained within the vertically integrated supply chains, even USDA cannot track a wholesale price for chickens in the US.

A secondary limiting factor on farmer choice in the broiler market is territorial division between integrators. GOODWIN (2005) explains that a reason for regionalism in broiler production is the transaction costs involved in transporting live birds and feed – by default integrators prefer to have tight circles of production, with farmer complexes clustered around a slaughterhouse or feed mill rather than spread far apart. This regionalized production may work against farmer's access to options in the buyer market. Farmer #5 explained how after Perdue closed a processing plant that left her farm and hundreds of others without a contract, the company actively prevented a different integrator from buying it. That left her with one option, Case Farms, and hundreds of thousands of dollars in debt, and highly specific assets. If a farm is already in debt, continuing a contract relationship or signing on with a new integrator may not reflect a "choice." TAYLOR AND DOMINA (2010) discuss this dilemma,

noting that “collusion of integrators can suppress grower switching and “police” producers. Even without collusion, the Hobson’s choice facing a grower is between a bad arrangement with her current integrator and an equally bad arrangement with another one” (2010, p.5). Other farmers (#10, #4, #5) described limited options in the buyers market.

If farmers both lack symmetric information and are unable to make free choices due to monopsony in the market, than risk aversion is unlikely to be a satisfactory explanation of farmer choice in broiler contracts. Its inclusion as an assumption may further distance the researcher from farmers’ real motivations in signing contracts, or from a focus on farmers’ exposure to actual risk and integrator risk aversion in risk shifting.

My suggestion about the risk aversion assumption actually reflects the research of ALLEN AND LEUCK (1999) who were surprised to find that traditional risk models did not fit crop contracts in North America. They state “our tests provide robust evidence that forces besides risk sharing are more important in shaping agricultural land contracts” (1999, p.728) They further suggest that the traditional single margin risk model, which considers only the farmers’ moral hazard, may be an inappropriate fit for contract analysis. In their work they find that even the variable of land ownership allows for moral hazard of the landowner as contractor. My results suggest that integrators do have significant margin for moral hazard and opportunism in the broiler contract relationship.

### **5.2.2 – Impact of Monopsony and Concentration on Contract Relationships**

In addition to questioning the role of the risk aversion assumption, I can suggest two possible explanations for why the risk elements I found may not have appeared as significant in previous literature.

The first reason has to do with relative experience of risk. On average tournament payments are normally distributed, the assumption is that in the long run the occasional extreme values will even out. But the farmer’s risk related to variability in pay is realized on a short-term, real-time basis, as discussed above. Farmers may not have the luxury to wait 6 or 12 flocks

for a positive average, they would need to be able to pay their bills with each flock. As Farmer #6 described, many poultry farmers wind up with credit problems and low scores as a result of delayed debt payments in the relative short term.

A second example of the relative impact of risk stems from the discussion of price risk. The integrator's market price risk is far larger in scale than what farmers take on. But as KNOEBER AND THURMAN (1995) actually explained, this is in part because they are able to manage this risk. On the other hand, farmers experiencing fluctuations in gas prices in a hard winter may suffer a great deal more, relatively speaking. A sudden spike in prices, like the one that resulted in a \$17,000 gas bill for Farmer #4 for one flock, could put a farmer behind on their debt and leave them without cash flow for living expenses. The tight margin of revenue is appropriate to keep in mind here again, as established above. The point is that, on average, fluctuations in gas prices may be less compared to fluctuations in grain or inputs that the integrator deals with, making the farmer's overall percentage of the farmers' risk burden look low. But in this way, real relative risk experience is lost in the aggregates and models. That does not make it any less of a risk for the individual farmer, and results depicting poultry farming as low-risk as a result of these studies may be misleading.

A second possible explanation for the incongruity is that many of the elements excluded in the existing literature are risks that are exacerbated or caused by a lack of competition and increasing concentration in the industry. The reason may be because of a core assumption in transaction cost economics, which is marketplace competition. In looking at WILLIAMSON'S (1991) definition of an efficient structure, we can see that transaction cost economics implies that competition will select over time for the most efficient structures. Assuming that competition is present in the market for production contracts implies that farmers choose between different contracts and integrators, and integrators compete to offer the best farmers good options. This kind of competition would validate the suggestion made by ZHENG AND VUKINA (2006), that an integrator's reputation as a result of discrimination in inputs or other unethical business practices would damage their supply relationships with growers.

In fact in my results I found mixed responses regarding competition. While one farmer initially experienced recruitment from multiple integrators (Farmer #4), others shared stories

of limited options, if any. The reputation of an integrator did change Farmer #8's mind when he bought his farm, as he switched from Cargill-Rocco to Pilgrim's Pride. But for most, the integrator's reputation was not really the point, as they were likely the only integrator available to work with. Furthermore, multiple farmers stated that they were discouraged from speaking with other farmers about their experience. (For example, settlement data including payment is considered confidential information by Tyson, and farmers with Tyson reported that they are not supposed to share this with neighbors or other farmers, or anyone else for that matter.)

One aspect of a lack of competition that has already been discussed is the absence of farmer choice in the buyer marketplace. The monopsony power that integrators thus hold in an area prevents grower bargaining. In the stories from Farmers #10, #8, #4 and #1 regarding attempts to discuss problems with integrators, the responses were generally limited, insufficient, or blatantly neglectful. In the moments when farmers #10 and #8 attempted to approach as representatives of a group of farmers, they were turned away on the basis that they represented a group – and group discussions were unacceptable. The frustrations these farmers feel were compounded by the fact that they had no other option to turn to. In a truly competitive market, the integrators would not be able to conduct such practices without fear of losing their better growers.

TAYLOR AND DOMINA (2010) explored some of the reasons for this concentration and found that there are significant barriers to entry into today's processor market as a result of concentration. Two practices serve as sharp examples of these barriers. One is known as "slotting fees" – these are extra fees that a brand-holder should pay to a retailer to ensure that their products are placed in the best spot in the supermarket, or at all. This is one example of many trends in the retail marketplace that favor the larger suppliers, and make it hard for new businesses to gain entry. A second issue, which is directly connected to the experience of farmers, is the increasing trend of processor and retailer "long-term fixed-price contracts." TAYLOR AND DOMINA (2010) explain that these are 12-18 month contracts on average, and they have a potential price fixing effect on the marketplace.

For the integrator, this significantly lowers their price risk. The 84% of overall risk that KNOEBER AND THURMAN (1995) estimated may no longer be as significant with the introduction of this practice. This practice was supported by a story told by Farmer #4, who explained that the first time he asked about tournament payment in a meeting with his local management, he was told “those chickens are sold before they come to your farm.” For this farmer, it was then that he says he realized that Tyson could use the tournament payment mechanism as a form of insurance. TAYLOR AND DOMINA (2010) explain that given fixed contracts, if demand shifts, the farmers will experience an exaggerated change in production levels compared to a market in which price responds to demand. If demand is reduced, a larger decrease in production will be necessary to compensate under a fixed retail contract. I have already explained that the contracts give integrators the ability to reduce production levels of farmers and complexes quickly. Thus “long-term fixed-price contracts between retailers and integrators may make the grower the shock absorber for the industry” (TAYLOR AND DOMINA, 2010).

In my results I pointed out that multiple contracts included an “economic necessity” clause as a valid reason for immediate (or 90 day, given contract interpretation) termination of a farmer. In 2010, Pilgrim’s Pride Corporation went bankrupt as a result of having just bought GoldKist Poultry, losing a retail contract and increasing feed prices happening at the same time. In bankruptcy court Pilgrim’s Pride shut down entire complexes with 200 or 300 growers in each. As these are tightly regionalized, the towns were decimated. According to TAYLOR AND DOMINA (2010), Pilgrim’s Pride stated in court and in public that they were shutting down complexes in order to increase prices in the marketplace. For some this is already a violation of monopoly and anti-trust laws. Furthermore, Pilgrim’s Pride actively prevented other integrators from buying the shut down complexes and re-signing the growers, because that would represent competition to Pilgrim’s Pride. This example is a stark reminder that without legal enforcement of anti-trust laws and marketplace competition, anti-competitive practices will lead to manipulated markets. The farmers are the ones who truly went bankrupt in the end, Pilgrim’s Pride “emerged from bankruptcy court with stock plus \$800 million from JBS” (TAYLOR AND DOMINA, 2010).

If competition is included as an assumption, then research may overlook the ability of integrators to exhibit unethical practices such as coercion or bullying, actively preventing grower associations or unions, or direct retaliation against growers who speak out. If competition is assumed, these practices may be considered aberrations, or the farmers that speak about them may be considered “complainers,” because the assumption is that over time and on average the market will correct those behaviors. In stark contrast, almost all the farmers I spoke with described behavior and practices that they perceived as unethical on the part of their integrators, and many farmers explained that they had no where to go to follow-up on these aggressions.

### 5.3 Conclusions

My goals have been to explore gaps in existing literature about risks that farmers face in broiler production contracts. As my focus was to expand the discussion where applicable, my research is primarily exploratory, and intended to broaden the issue rather than reach singular conclusions.

My research was guided by three research questions that provided the foundation for my hypothesis. The first question was: *What benefits do farmers receive from gaining access to the growing poultry market through a production contract?* In response to this I found that the 12 farmers I interviewed gained access to an industry otherwise prohibitively exclusive, and they did not have to worry about or bear the costs of marketing, processing, or inputs coordination. Contrary to the majority of existing literature on the topic however, I did not find that the farmers I interviewed gained stability in income as a benefit of their contract experience.

My second research question was: *What limitations or disadvantages do farmers experience that are specifically related to their having signed a production contract?* My findings are in contradiction with the mainstream message in existing literature, which has typically found that farmers take on a low-risk burden in poultry contracts. I found that many risk elements described by farmers are linked to their contract relationship, and may entail significant costs.

This is directly related to my third research question, which was: *What are thus the common risk factors that farmers experience, and should consider when signing a production contract?* I found 20 repeating elements that farmers consistently mentioned as origins of risk, uncertainty, and unexpected costs or anxieties. I grouped these individual elements into broader categories, which were: debt, profitability, tournament payment, on-farm production risk, symmetric information and business relationship dynamics.

In analyzing my findings, I found a significant number of unexplored risks described by farmers that had negative impacts on their financial sustainability and livelihoods. This meant that I was unable to confirm my initial hypothesis, that: **A broiler production contract is a stable, implicitly long-term and low-risk investment for a farmer who is a good manager.** My findings instead implied that farmers do encounter significant risk in production contracts, and that proliferation of messaging about the low-risk status of contracts pending further research may be misleading for farmers.

In further analysis I found that my results implied that some of the fundamental assumptions used in previous research may have skewed the focus away from farmer risk. Assuming that farmers are risk averse implies a farmer “choice” which may not exist in the marketplace as a result of widespread concentration and localization trends in the industry. Furthermore, assuming that the industry is competitive allows the transaction cost approach of modeling efficiency in poultry production contracts, but this assumption does not reflect the reality in the industry. In fact an uncompetitive poultry industry may explain why the number one category of farmer perceived risk was “business relationship dynamics,” in which many farmers described unethical, misleading or retaliatory practices on behalf of integrators. As expert interviews confirmed, problems such as a lack of political will and resources to apply existing regulations or form new policy may have led to a regulatory climate that does not enforce fair business practices.

Given the limitations in my sample I cannot generalize about the nature of all farmers’ experience in poultry contracts. However I can demonstrate that these risks may be experienced by a larger population of farmers than my sample alone, and thus warrant further research.

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## Appendix 1 – Farmer Risk Charts

### Farmer #: 1

**Location:** NC

**Integrator:** Perdue

**Type of birds:** small broilers, 4 houses

**Time under contract:** 23 years (current)

**Financing situation:** still paying loan. Original 10 year loan was expanded to become 21 year loan (mostly because renewed to upgrade the 2 older houses)

**General description:** Started out very well, had paid off first two houses and decided to build 2 more. Things went fine until 1994 when upgrades required that the 2 houses he built in 1992, which were 2 year-old houses, had to be remodeled – thus the loan went through refinancing. Did not want to make upgrades to tunnel houses because he felt they were unnecessary and inhumane but could not decide for himself without losing contract. Also replaced all fans in all 4 houses in another required upgrade, despite the fact that the fans were working fine. Has had problems with biological risks due to sick chicks. Spoke to press about inhumane conditions, was placed under “performance review” and received 23 visits from field techs to inspect his farm unannounced. Still under performance review. Does not have good relationship with integrator, but does have good relationship with primary field tech.

#### Risk elements

#### Comments

- It doesn't matter if a contract says it's 100 years, they can be terminated at any time, they're all flock to flock. That's what you're guaranteed, the first one. (Regarding long-term “implicit” contracts – evident that farmer feels uncertainty/risk in ability of integrator to terminate contract)
- The areas where complexes shut down...that is when the true economic cost to a farmer is realized..and it can happen to any of us tomorrow..most don't think about it or even realize it..I think about it constantly..

#### Upgrades:

- I actually had my farm paid off, but I went and borrowed \$100,000 to do the upgrades. (This was in 2007, in addition to existing debt.)
- 1992 I built the first two, 94 I built the second two, completely paid off in 2004. But then in spring of 06... – it was the brand-new cooling system, new fans, etc. “did you feel like you needed that?” Nope. (The 10 year loan became a 21 year loan because 2 year old houses were suddenly deemed out-dated and required upgrades. Equipment that was replaced was not dysfunctional.)
- For a lot of these guys the solution is run back to the bank and borrow more money... I had a guy tell me if he died he might as well owe a million instead of owe nothing, and I told him what if he dies before his wife does

#### Debt (Cycle of debt)

#### Asset Specificity, and personal value of assets

- what can you do with an empty chicken house... oh all kinds of stuff... a honkey tonk... nothing that would generate income. You've got two options, stay in it or lose your farm.
- And if you've got somebody over that kind of pressure... who is more productive that guy, or a guy that feels a part of something, the guy that wakes of dreading to come or the guy that can't wait to get there... they've never invested in the farmer, there's no goodwill there
- But 94 is when I went from 2 houses to 4 houses, and the expenses way more than doubled but the money didn't double. That was my “oh crap...” But then you're knee deep in it, you just have to try to make the best of it

#### Profitability

- I started another business to support my chicken habit.... (The chicken operation was losing money)

#### Labor investment:

- This is 7 days per week and we are on call 24/7 if birds are in the houses

- I got small kids, the guy at the chicken council said it only took 20 hours a week to manage these farms (I've read brochures that said it's part time) it's part time pay. It's the fullest part-time job you'll ever get... you'll be thinking oh crap this isn't part-time... (how many hours a day are you doing chicken stuff?) you mean everything, the books, the houses etc.... 8 or 9 hours easy... definitely more than 20 per week

#### Regarding tournament:

Variability  
in pay (and  
quality of  
inputs)

- the base pay is 5 cents...but the floor is 4.2...whatever the base has been the floor has always been 0.8 below..but that 0.8 is about \$4000..
- If the person's FCR means their pay is 1.2 cent per pound... that's a long way from 4.2, if they left it like this Perdue would have to bump this to 4.2, cut the profit. So what they do is shift the average to the left a little, everybody makes a little less. (He is describing the practice of cutting certain growers out of the average cost calculation who are below a floor, his point is it negatively effects the outcomes for all farmers)
- That's pretty much everybody's story. I've been good grower, I've been bad grower, and everything in between. I'm the same grower on the same farm.... I go from bottom of the barrel to top of the food chain in two flocks. (Does not see link to performance in tournament payment determination.)
- (so what is it that has made the change between flocks?) oh gosh you can have all kinds of things like bad feed etc, 95% of it has to do with the chicken. It's hard to mess with mother nature...a million things but at the end of the day I've changed nothing.
- frequency steady, amount all over the place. (could you ever plan?) no. you can't budget these things, god knows I've tried... I could tell you how much I've spent every second for my whole career, but I couldn't tell you what it's gonna be tomorrow (Budgeting is a challenge and a drawback.)
- (having the internet has been a game changer?) ... well, I've got access to stuff that we heard, everytime a bird died it was a farm condition, a farm condition a farm condition. Some of the birds got LT, which is a pretty bad virus, and I didn't know what it was. I knew I hadn't seen it before. I had the service guy down there, he hadn't seen it before. So I got back to the computer and looked it up... I thought of the other things I've had over the years and pulled them up... hatchery conditions, that's it, nothing else.

Quality of  
inputs

#### Biological risk

On-farm  
production  
risk

- Mortality: that birds about 30 cents, I've got a little bit of feed in him that's a penny, .... So he's costing me 4 times... but that's beautiful if you're on the other side of the fence.... I'll clean up their trash when they come in here and pick it up it's gonna be good (He describes frustration of picking up dead birds in a flock that came with a disease to his farm because of the added expenses of dealing with the mortality)
- Litter: it's a nuisance to me, there's way more here than I can use, that's another thing they didn't tell us. I've got hay fields so I only apply it like one time every other year... there's 600 tons probably here... I got a guy in SC generally comes and gets it. I don't see this much as an asset... I make a little money off of it but not much

Access to  
credit

- They're still giving out tons of chicken loans, laying on the gas pedal.. that's how you could change that very quickly, is cut out FSA guaranteed loans... when you had a house over here sitting there empty with an FSA guaranteed loan, and you're building another one over here with an FSA guaranteed loan... it's throwing good money after bad (describing loans being given regardless of assuredness of good investment)

Equity

(mentioned the investment in reference more to debt than in terms of equity in this interview.)

Retaliation

- When they saw I was speaking out - first of all they said I'm a "bottom 10%

(undue or  
unfair  
practices)

farmer, etc” – then the accusation about staging it started... completely flipped my world upside down. I was number 1 in that tournament. (He was accused of staging conditions in his houses when he allowed journalists to see his chickens because of concerns over animal welfare.)

- He was written up for having dirty light-bulbs and other small details that were not the case in order to make a point
- ok am I going to stand up and stand side by side with compassion in world farming, and take my family down and lose my farm, hell no, they're not worth it. (quote regarding the risk he takes in speaking out and whether he would pursue it farther – the point is he feels he would “take his family down” if he spoke publicly what he thinks about the chickens.)
- They had a thing in the paper, the local paper, saying Perdue was looking for some smart growers to raise our birds... the rest was indentured servitude
- This is what they sold, this is the salesman's handwriting. You find out if you can see anywhere where they say they take away pay if you do bad... well, it talks about how many flocks you're going to get per year. But the thing that really stands out is your producer payment. It mentions bonuses... but it doesn't explain it, the discount on the other end.... It does not explain tournament. (He points out that tournament is not fully explained in the contracts or in the recruitment materials – it is sold as pay for performance with incentives, and a base rate)
- you can have as much as 50 – 60% between the top and the bottom... see base is a kind of deceptive term because anywhere else in the world base means base, except in a chicken contract... when I think base I think ok that's the least that I'm going to make but it doesn't work that way
- you figure contract, you figure security, you think this'll pay out in 10 years. (Farmer expectation based on recruitment materials and information from banks, extension)
- how do they determine base pay? Your guess is as good as mine... I've never had that question answered but I've asked it. (He describes it is unclear how base pay is calculated or determined, or if it is expected to cover costs of production.)
- they come out, they presented me with the income projections... and the next thing was to go get a letter of commitment from the bank. Once that was done, then that's it, we started constructing the houses. Then we got the contract... I signed a contract on the hood of my truck when they delivered the birds.... I had already signed the deal, I was 200,000\$ in debt, at that time my faith in human nature was a lot more than it is now. (Took out \$200,000 loan before contract was signed. Had to sign contract on the hood of the truck – no opportunity to review terms or negotiate for sure.)
- I've had a dozen meetings, going up pretty high, and they don't ever follow up and it's just disrespectful.
- we have solid wall houses which I hate, I hate it. (Also see quote in “debt” regarding being forced to make upgrades he didn't feel were necessary).
- it's not like I can say “aight I'm gonna quit perdue and go over here to Tyson” – unwritten sister agreement you don't mess with my farmers I don't mess with yours... cause if I was the best farmer in the USA at raising chickens, my phone would never ring.
- Can you operate independently in the market? The snag is processing, that's what holds you back. It's got to be inspected, it's huge costs... there are some processing facilities around but it's like 2 hours away. I can only legally do so many birds here on the farm... wasn't enough to make a living on... here you're in the poorest county in the state, it's gonna be hard to sell a chicken for 3\$ a pound when they can turn around and buy Tyson for 99cents, I'd have to go market to Raleigh.

Artificially  
created  
asymmetric  
information

Power  
imbalance in  
relationship

Loss of  
autonomy  
and control

Lack of  
competition  
in the broiler  
market  
(monopsony)



## Farmers #: 2, 3 (joint interview)

**Location:** NC

**Integrator:** Farmer 2, Pilgrim's Pride and Farmer 3, Turkeys

**Type of birds:** Farmer 2: small broilers, 3 houses. Farmer 3: 5 turkey houses.

**Time under contract:** farmer 2: 16 years (current). Farmer 3: 10 years, past.

**Financing situation:** Farmer 3 is no longer under contract. Farmer 2, still paying loan.

**General description:** Farmer 2 with Pilgrim's Pride has older houses, 29 years old. As his colleague put it, he has worked so hard to keep everything running well, he might have 15 more years worth of investment in those houses. (Farmer 3 did not keep his houses up to date after 1994.) Both described that in the beginning there was good cash flow and the income looked good. Farmer 2 described the first 7 years looked good, but noted that this was also because depreciation on the equipment led to tax deductions. Farmer 2 had particular challenge with upgrades – having to essentially “lose” his investment in turkey houses when the company decided the turkey market was low and switched to growing chickens, he had no option, so he re-invested in chicken houses and extended the loan. Farmer 2 had a particular frustration regarding low returns, and having to have a second job to pay for losses on the chicken business despite ongoing debt from upgrades.

### Risk elements

#### Comments

- Used to be that houses could be paid off in 1 or 2 years. Farmers would build them from wood. They'd borrow money for... equipment, feed lines... but they were hand feeding so they had a wheelbarrow. They didn't have all these other things in the houses, there wasn't much in the houses. They'd build one pay it off in a couple years then build another one.
- There was a 4-house open house on a farm this week, I was told it was a little over \$1 million for those houses.
- They key to it is the financial industry. If the financial industry did not continue loaning to a system that was actually .. if the integrator actually had to talk to the farmers, the farmers would have a better chance to make a living (He describes the way that farmers can't negotiate because of the guaranteed loans, farmers getting loans for a bad business over and over)
- Why, if it's so good, doesn't the integrator own the houses and hire someone to do it? Explain to me why the integrator owns the chick, he owns everything, he owns the processing plant... I'll tell you why... he knows, and the company knows, you cannot hire labor to do what a man that's got his life savings invested in a farm in his work will do. You can pay them 100\$ an hour and they still won't do what I'll do to make sure that it works...

### Debt (Cycle of debt)

#### Upgrades:

- When growing turkeys there was thousands of dollars spent, upgrading, doing the things the companies wanted done... whenever there's a new technology that comes out that might help our birds, they want that new technology implemented. But they don't want to cost share, they want the farmer to pay for it. So it all falls back to the farmer.
- It just keeps getting the farmer deeper and deeper in debt. Then when the turkey company left, they said there'd be no more turkeys grown in our area – we could either convert over to grow chickens, or we weren't gonna grow poultry any longer. I spent \$350,000 again to convert the houses that I had, over, to grow chickens. It cost me more to convert to chickens than it did to build the building and put the turkey equipment in.... started growing chickens in 1999/2000... the turkey market was bad. That's the way growers are treated. Growers are an expendable resource in this country. They just said, no more turkeys.
- It doesn't always help the birds. But the companies force the growers to implement this.... I don't have any problem paying for something that'll generate me more income. But just to be spending money to be spending money, that won't generate any more returns, who in their right mind would want to do this?
- There's not much time that goes by that they don't want something else done, it's



kind of like trying to keep you in debt... It's kind of like dangling an ear of corn in front of a mule that you've got a plow hooked to. You just keeping pulling, keeping pulling, while that debt's out there, you keep trying to pay that debt off, you keep pulling.

- The first loan for the turkeys was 10 years, the contract was 7 years. Why would a bank want to loan money on a contract that will not reach out far enough to make sure that debt is paid? We went out to 15 years when we switched to chickens.

#### **Asset Specificity, and personal value of assets**

- **What's the value of an older house, one that you've paid off?** If you can't get a contract, it's worth nothing. As a matter of fact the land is worth more without the poultry houses... it is because it cost probably in the neighborhood of \$5,000 to destroy a house and get rid of it.
- For the first seven years, your depreciation comes in and it offsets your taxes... so it actually makes you look like you're making more money than you really are. Once that depreciation runs out it's another ballgame. And that happened to me.
- When actually, your equipment is going down... costs are going up...
- Payments are \$26,000 a flock...
- Somebody's making money but it probably ain't the farmer.
- I read, 71% of poultry growers are living below the poverty line, they can actually go apply for welfare.
- I like to keep things up. If I see a problem, I like to fix it right away, I spend the money if I have to. And yet, I've got older houses, so I get paid less money. I'm on a lower paid contract. I've got posts in my houses – we had a snowstorm last year, there were 15 houses... all clearspan houses, no posts, they all caved in. **(But the companies pay more for clearspan houses?)** They pay a higher base rate for clearspan houses. **(he gets 4.65 cents per pound but the other growers get 4.95 cents per pound, and if you have a new premium house it's 6.2 cents per pound)** They won't even let me upgrade my houses. They wouldn't even give a new contract on my houses if I tried to sell my houses. And yet these post houses grow better chickens in a lot of cases than the new houses. I've settled ahead of the new houses in the tournament... I got a real problem being paid less money to grow a better chicken.

Profitability

#### **Labor investment:**

- I'm on call 24/7, sometimes I have to go to the chicken houses at 3 o'clock in the morning... I have someone that helps me, my back is not as good as it once was... I go first thing at daylight and make sure everything's like I want it to be, takes an hour or an hour and a half depending on what I'm doing. Then I go back over there during the day periodically to check. We pick up the dead, that doesn't take very long when they're not dying, but when you're talking about picking up 75 dead chickens per house it gets to be a pretty big job.... I've got them on my mind every waking hour.
- My daughter is getting married next month, I can't go to the wedding... she's getting married on the beach.... Those chickens, they could all be dead in 30 minutes or something (you don't trust somebody else to do it)

#### **Regarding tournament:**

- **Regarding tournament calculations he notes (as stated in profitability) that it's frustrating to be in a tournament pool with growers of different house types. He gets paid less because he has older houses (base pay) – but he wonders, when he settles higher in a contract with a lower grade house, the company owes all the farmers less, is there any purposeful discrimination in having the newer houses settle lower in the tournaments than older houses?**

Variability in pay (and quality of inputs)

Quality of inputs

On-farm production risk

#### **Biological risk**

- As long as it's alive it's their chicken. Once it's dead it's my chicken.

Access to credit	<ul style="list-style-type: none"> <li>• It seemed to be a wonderful thing to do. The contract itself stood on it's own, they would loan money on the contract by itself... lending institution was aware of the contract. It was a generic contract, so they knew what it was better than the farmer... there wasn't any problem getting funds.</li> </ul>
	<ul style="list-style-type: none"> <li>•</li> <li>• Loans are structured differently. So you pay mostly interest, you don't pay the principal... then they make you change the equipment. But they say in a Tyson contract that you're building equity in the houses. I don't understand how they can say that. It is on their website. When actually, your equipment is going down... costs are going up... (see comment in profitability – he is describing that because of the nature of the loan, you get 7 years into the loan and you have depreciated the assets (which are the specific equipment in the houses), but you have not paid down the principal of the loan, only interest. By the time there is less value in the houses you're still paying the original value. )</li> </ul>
Equity	<ul style="list-style-type: none"> <li>• Just the wear and tear of the houses, it depreciates – the posts in the ground will rot, the metal... on the roof it rusts... where's the accrual of equity... yet they're using that as a means to talk people into borrowing money to build poultry houses. But on Tyson's website it states, you will need an outside source of income in order to grow poultry for us. In other words, you need another job, to pay money to grow our chickens.</li> <li>• (See comment in Debt about value of a house once paid off – if it's an old house and not up to company specs anymore, thus you can't get a contract, then it's worth nothing.) Will a company pick up an old house that is existing and put a new contract on it? Not unless they would build it now. Not unless they would gut it, build it to new specs... who'd wanna take an old house and spend that amount of money.</li> </ul>
Power imbalance in relationship	<ul style="list-style-type: none"> <li>• They're very smart. They'll take a tenth of a cent of energy reimbursement away from you if you do somethin' they disagree with.</li> <li>• They have made servants out of farmers. They get cheap, and I'm talking about cheap labor out of growers</li> <li>• I am told exactly what to do, every move to make, I have no say about how the chickens are grown. An independent contractor... you hire me and I do the job the way I want to do it, you don't stand over me and tell me how I have to do it, that's the difference.</li> </ul>
Loss of autonomy and control	<ul style="list-style-type: none"> <li>• They provide you the medicines, they tell you when the lights have to be on and when the lights have to be off, they have full program that you gotta follow all the way through.</li> <li>• The air quality, the litter quality, they even force people to put out litter treatment when it will not work...</li> <li>• You've got guidelines stapled on every house, they want to make sure you follow this day by day. The temperature needs to be here, run time on the fans needs to be here, amount of milliliters of water needs to be at this range for this week, this range for the next week, everything is told</li> </ul>

## Farmers #: 4

**Location:** MS

**Integrator:** Tyson

**Type of birds:** first large broiler then small broiler, 6 houses, 10 houses for a while

**Time under contract:** 9 years with 6-house contract with Tyson, years before that with other smaller integrators

**Financing situation:** bankruptcy, lost house and farm

**General description:** Started growing large broilers (8lb) with a smaller integrator but had a problem because they used a flock schedule that didn't allow down-time. He considered leaving and was recruited by another small family-owned integrator. He had 6 houses at the time, and things were going very well with them. He bought a new farm with another 4 houses – and at this point the small integrator said they couldn't take the new 4 houses. Tyson approached him in 2002 and made promises, and said they wouldn't only take the new 4 houses – it was all 10 houses or nothing. Required switching to a smaller bird, 6.4lb – which had some profit losses but he was OK with it because of more time for better management. Working split farm on 10 houses was too much, he eventually sold the new (4 house) farm and built a new house for his family on the 6-house farm and moved there, also had a small cattle business. Over time things went bad for various reasons – the smaller bird lowered pay, he refinanced. He got the newest upgrades but couldn't keep up with the premium pay upgrade requirements. He got diseased birds repeatedly from the company, Rio. In a bad winter the company forced him into taking a flock that was a losing deal. Eventually his relationship with the integrator soured and he began to experience what he calls targeting or retaliation, they wanted him to quit. He quit his contract 3 weeks before the interview and faces bankruptcy and losing his farm and house.

### Risk elements

#### Comments

- **His first debt problem was linked to Tyson changing from a large bird to a small bird, and he was no longer to keep up with the original assignment on his loan (which was based on bigger #s). He had to refinance:** This is the assignment that I have with the finance company and that's what I needed to come down. I needed the assignment to come down. Of course I knew my pay wasn't gonna go up. So how do we do this? Well we stretch this loan out. You know, you financed for 12 years, tell you what, we're gonna finance you for 25. Well in layman terms, first you hear that, well this ought to cut it in half. 'Cause you got twice as many years. It doesn't. It cuts it by 10%. So now you're really hooked. So now it's really bad now because I had no choice but to extend the length of the loan.
- But it leaves you where you are and you have to deal with it and so here I am with this long term debt and a short term contract that at any given day they can roll up out here just for whatever reason, ever what they see fit. They could say look we don't need you anymore. Here's your 90-day notice. We're done with you.
- 

### Debt (Cycle of debt)

#### Upgrades

- I invested even more money here to renovate because at that time Tyson was making these incentives, if you'll do this, you'll get paid, we'll increase your contract from a standard contract to a premium contract. So I started investing and I get the premium contract. Not to know that you had to kind of keep up with them or they would step you down. **(He is describing the fact that the premium payment status did not stay for the duration of the upgrade you invested in – you had to keep getting new upgrades to keep the status)**
- In good faith...so all you've done is help the company because it's yours but it's their asset. They're using it, their the ones vetting the benefit from it – you work at it.
- **He is not in the super-premium pay category anymore because he did not make the most recent upgrade for fans. When he went to get the fans, they required copper wire for installation which was as expensive at the time as the fans – so he didn't do it and lost the high-ranking base pay.**

### Asset Specificity, Personal value of assets

- For you to become approved for a loan, you have a debt-income ratio ... You gotta have a cash flow here to make this work. Well, when mine was figured, everything was gonna be new – the property, the houses, everything – and the numbers were crunched and it was questionable. So I was called in and asked, you know, it's pretty thin here. So to make up for that, what you do is you take your own assets... So when you start laying your own assets there, it makes this scheme look a little nicer.
  - That's where I got trapped because it didn't matter what assets I brought, it's not gonna offset the overhead versus the income. So here I am, kind of, you know the more you lay here the better it looks, so and I've done committed and made this decision so, I start laying everything I have. Everything I have. 'Cause this is my new future. So lay everything.
  - 
  - When I started with first integrator, I was growing an 8 lb chicken... that's twice the pay for a 4lb chicken. When I started the numbers were looking good.
  - So a few years of that, you know a couple years, it was good. Wasn't what I expected. I never invested \$1.3 million to make so little but it was working.
  - They changed their processing plant to handle a 3-80 chicken and a 4-20 chicken. So all of us who were on the big bird contract are now growing at 4-20. And there are some that grows 3-80. So what that did, that cut my pay by, what, quite a bit.
  - **He describes the numbers that resulted from the propane + Rio crisis as described below:** I am sitting here on a farm that is work \$1.3 million. I worked this farm myself. I have hired help that helps me work this farm. I burned \$17,000 in propane. I used approximately \$3,000 in electrical costs. When I sold and my integrator send my check to the bank for me because I don't have enough cents to pay my bills, they pay them for me, they sent me a check for \$879. And I had over \$20,000 in utilities to pay from this.
  -
- Profitability

### Labor investment

- And it was an awful lot of work. It was every day of the week, all day long. About 10, 11 months of that.
- 

### Regarding tournament:

- **Describing an alternative to tournament payment:** They paid no more and no less, they just paid you differently. You didn't have to wait the whole flock. You would get money on the birds you placed. You would get money the day you sold. And then you would get money after the day you sold and how that would work is they would pay you initially a square foot price. Okay. And it wasn't a lot, but so when they put the birds in, the pay you a square foot price. Okay when you sold, they would pay you what they consider would be an average pay, less the square foot, which would have been additional amount of money. You follow? Okay, now if you did above average, which in this company most of us did because they really helped us, then you would get that additional money. So it was like every three weeks or so, there was a check in the mail and you had bills coming, you had propane costs and different things, electricity.
  - So first think you're gonna do, you're gonna work harder to maintain and to take care of them and you're gonna lose more money. And if you get an excellent flock of birds, then you're gonna work less 'cause they're gonna perform like they should, according to the equipment that you have to make them do that. You're gonna work less and you're gonna do better. So that in itself is the craziest thing and not only that, it is a no lose situation for an integrator. It's an insurance that they built themselves and they use the term standard cost. Okay. Earlier it was mentioned contract growing is supposed to be a no risk for me, that this company takes all this risk.
  - 
  - **He describes an intersection between the issue of tournament payment and quality inputs – his chickens had Rio:** This disease was Rio. And what it does, it's just a poor
- Variability in pay (and quality of inputs)
- Quality of inputs

quality chicken. It's poor quality. It's not gonna perform and they're real small and they're real weak and just terrible. And in Tyson, Rio was pretty rampant. It was gonna be your turn, you were gonna get them. So it came my turn and I got them. And now we get into performance. You have to maintain a level of performance to stay off the whipping post. Well when you get Rio, you're going to the whipping post. So for someone to kind of, how is that fair? You know, this is nothing of my doing. Fact is, this is something of your doing. You are more aware of what I'm getting than I am because you have records that this breed of flock, this particular farm over here that we get these chicks from, they have a history of Rio chicks. Well then apparently it's at the breeder. Oh okay, so this time we're gonna give this grower this Rio flock and next time we're gonna give this grower, and they just spread it around.

- Thus he describes a "performance review" type practice that happened as a result of his Rio flocks: If you're 40 points below average... if you increase the cost by 0.4 tenths of a percent, they consider that their high 40. So their policy in their contract is... then you will come in for a meeting, they will assess what the problems were and how we're gonna deal with these problems and so forth. Terrible, terrible. I mean, despite the fact that I've already lost, now I've gotta be treated like I was in the third grade. Come on, I'm doing the best I can for this company. They're doing absolutely nothing for me...

- 
- 

On-farm  
production  
risk  
Access to  
credit  
Equity

#### Biological risk

- 
- (yes it was easy, 1.3 million loan)
- 
- Because believe me, I'm not in this by myself. I am here with you today by myself but these feelings and these problems, all of this, every grower. It's just, they're just not going to stand up and do it because they seem as though they can't afford to. Teh way I see it? They can't afford not to.
- Statement that best represents fear. Describing how things turned into what he felt was undue surveillance and bullying, this is what his field tech said: He real short with me, which was out of character. I think I asked him like three different times and the third time he turned and he looked at me and I could tell he was mad or you know, out of character for him. And he says - look, they have sent me out here to build a case against you. That's what I'm gonna do. I'm gonna do my job. I see him go to the back of the house and he snaps a picture. He goes around to the other side, he snaps a picture. I thought, boy this is crazy. So when he makes it back to the front. I said, now what have I done. "Well, I don't know. It's not for me to decide." I'm telling you, I was sent out here to build a case against you and that's what I'm gonna do. I've heard of this, they call it targeting or retaliation or different things I've heard. It's my turn. you know, I could lose 27 years of hard work right here because someone has handed it down to take him out. Okay, and they can. I'm very aware of that.

Retaliation  
(undue or  
unfair  
practices)

- 
- (There were multiple integrators in his area, one of which was Tyson. He was growing for a smaller integrator that was rushing farmers through flocks, not leaving the 2 weeks down-time in between. Tyson wanted his farm, because it was new and updated, so they came to him and recruited him away from the other integrator by promising 2 weeks down-time between flocks.) And assured me, you'll make more money.
- So again by doing that, it was like a double edged sword and they cut you one way coming across, and by your own hand you cut yourself and you really don't know that until after the fact. (Here he is talking about the extension of his loan to 21 years from 10, the bank assured him it was a good thing, the company assured him it was a good thing.)
- Two kinds: not telling farmers how tournament works BEFORE contract, and also – indicating that the price risks are not as uncertain as is stated in literature: And at one

Artificially  
created  
asymmetric  
information

particular meeting, we're there and they have all the knowledge so you just sit and listen but I brought up the question, what about this tournament system? Tell me, I don't think I have a good idea how this goes. Can you explain this to me? And this guy, he should be intelligent enough not to give me too much information. But I guess he felt he needed to boast. So he told me in entire how this works. And his words were, when we place chicks on your farms, those chickens are sold. Otherwise they would not place them.

- They figure what average money is for that week. So the pay pool is already pre-determined. Now, it's up to me to compete with my neighbor to get his money. Because there's no more gonna come from – the pay pool has been predetermined. It was determined from Day One. So now it's grower against grower. Okay, know having said all that, if you're in that week and you have a diseased flock of birds or anything like that, where do you think you're gonna be? You're gonna be on the bottom. Everyone else is gonna get your money.
- Describing the fact that a neighbor came to him and asked how he is doing since he was switched to a smaller bird, because another integrator is cutting back older house growers to smaller birds: They're taking a lot of the 8,9,10 year old farms and they're taking them off of that larger bird and they're gonna put them on the small one to entice people to build farms and make room for that larger bird because there is more money made there. You follow what I'm saying? You would not go out here today and build a three million dollar facility to raise a 4 pound chicken. It would be a fool. But if they showed you the numbers on an 8 pound chicken, you'd say - that would work.

Power  
imbalance in  
relationship

- Points out – you can't grow for two integrators. He did for a short period of time, with the 4 houses under his brother's name – and Tyson and the smaller integrator found out and made him choose.
- And as every grower knows, when you're financed, you have an assignment on your money. In other words, your check that you've worked hard for, that the integrator is holding, they do your business for you. They send your send your check to the bank to pay your finances and they send you the remainder.
- It was hard to do. Because I've always prior to coming into this business, I've always kinda been in control of my destiny and it was all about work ethics and management and that's what kind of drives us and gets us through. You throw all that out. Your future now is in someone else's hand and whatever they're doing and they will not allow you to know what they're doing.
- Describing what things would be like if it were a competitive market and he could own the information rents for being a good grower: It gives me the power to make these decisions, you know. To manage, okay? This starter feed is 11 cents a pound, that starter feed is 12.5 cents a pound. Someone might say well that's big whoop - big deal. That's a lot of money and but it would be on me to make these decisions. And it would give integrators a taste of freemarket enterprise. And then we'll see if their having billion dollar profits and I bet they won't and therefore that's why we are where we are. So by me explaining this to you I have just told you how these profits are being made and why they're being made because they are in complete control.
- He says he believes they bring you to the point of wanting to break the contract because your houses are getting older: And of course, they're already wanting to break the contract with you. So, how do they do this? They send servicemen to your farm at 4:30 in the mornings. They send servicemen to your farm on weekends, at 5:30 in the mornings. And what are they doing here? Are they here to help me? No, the step out of the truck with a camera and they want to go in and find something wrong.

Loss of  
autonomy  
and control

Lack of  
competition  
in the broiler  
market  
(monopsony)

- He comments that this is not free market and describes the way it would work if there was competition and growers still had choice: I have my farm where I think it should be then there are three companies right here. I should be able to pick up the phone and call company X and say - hey, how much are your baby chicks? And they say you know sir they're 9 cents a piece or 10 cents a piece - Okay. And then I should be able



to call company Q and say - how much are your baby chicks - and they tell me. And then I'd be the one to determine, you know I'm gonna buy these cause I think they have a better quality. So I make a decision and I buy these chicks and at the same time I can call all three integrators - their feed mill and say - how much is starter feed? You know, per pound or ton and let them tell me. And I may choose the chicks from this integrator but I may choose the feed from this one...

- (If you did raise chickens by yourself in the houses you have. Where could you take them? Could you take them anywhere?) Today? Nowhere. Nowhere. (Is there any independent processing?) Never. If there was, it wouldn't be large enough to take the number of animals we could send.
- 
- So I mean, it's a no lose situation and propane costs, does that effect my integrator? None whatsoever. It could be \$6 a gallon, it matters not to them
- Our economic structure, energy costs and utility costs rises and falls quite a bit.
- Dealing with propane risk in winter mixed with integrator power imbalance – Tyson was backed up because of a propane crisis in rural MS, needed farmers to take birds: So at first, I said, well I'm not quite ready but I can get ready. Well do what you gotta do and call me back. So I called the propane company. Paul, sorry we can't get you propane. Our trucks are snowbound north of here. Oh my goodness. So I call the integrators back and say hey can't get gas. The exact phrase was if you don't take birds Monday morning, you won't have any more, you're done. You have no choice. I've done put you down for Monday. You're taking birds Monday. So I call the propane company and tell them my situation. Yes sir, we can get you propane. \$3 a gallon. I housed 4,000 gallons. So they fixing to bring me \$12,000 worth of propane. So I make the call back to Tyson and I say look, I'm not taking them. I can't afford to take them. With what's going on right now, it's impossible... Oh yeah, you're gonna taken them. So then I have to deal with, well am I gonna lose everything I've ever worked for for this \$12,000 load of gas? And you're not gonna believe what kind of birds I got. I got a *Rio* flock of birds.

Input price  
risk –  
propane/fuel

## Farmer #: 5

**Location:** NC

**Integrator:** Perdue

**Type of birds:** small broilers, 3 houses

**Time under contract:** 10 years – 7 with Perdue, 3 with Case

**Financing situation:** Terminated first by Perdue because of closing a slaughter house and second by Case for not having upgraded to a new house – they finished with \$300,000 in debt and had to rebuild an independent business to repay it.

**General description:** The farmer's family raised tobacco, corn and soybeans, and some cattle and hogs. In the 1970s they quit raising hogs because the scale in the hog business changed as hog farmer came under contract with large integrators. The big profit was in tobacco, there was lots of variability with hurricanes and droughts. Perdue offered a steady paycheck, promised no worries about chickens dying. Built 3 chicken houses in 1985 with Perdue which required putting up half the farm and the house as collateral. At that time the houses were around 78,000 to build, with a 10 year loan that they began to pay off. However they had to do some expensive upgrades to keep up. When Perdue decided to close one local slaughter house, they were cut off with \$250,000 in debt. The only other integrator in the area was Case Farms. In order to use the houses and pay off the debt, they signed with Case – which required \$100,000 in upgrades. Case wanted them to build new houses but they first wanted to pay off existing debt and be in a better financial position before taking on anything else. They got only a flock-to-flock contract as a result of having old houses. At the time, the tobacco settlement money was coming through for tobacco farmers. Integrators were encouraging farmers to use that money as investment in chicken houses, many older farmers (50's and 60's) were encouraged to put up new houses, very expensive ones. There was a wave of new chicken houses put up. Despite the fact that their houses were in the top 3 producers for Case, they were cut off after 3 years because there were new houses that Case signed on. They ended with \$300,000 in debt. They had to start an independent business – the independent market they could access were a couple small grocery stores and a connection to New York City. They built their own market.

### Risk elements

### Comments

### Debt (Cycle of debt)

- It's gonna end that way for everybody eventually. You're gonna keep debt, you think one day you're gonna have those chicken houses paid... but that's not going to happen. That rides gonna end. You need to know that rides gonna end, you need to have off farm income and your spouse needs to have off farm income.
- My dad had a floating interest rate on the loan. When the interest rate went up, oh my god we were losing money. He managed to get it refinanced and then we did ok.
- They decided the slaughter house was not good for production. They drew a circle – if you were in that circle, you could keep growing chickens. If you were outside of that circle, you were cut off. We were 5 or 7 miles outside of that line. There were roughly 200 houses, maybe 100 producers that go cut off. My dad was devastated, they just said – this is your last flock.
- He did get a severance package, and that was good. Not every farmer got it, some farmers got it. My dad got it. I think it would have been a huge PR scandal for Perdue if they hadn't offered some of those packages.
- He had \$250,000 worth of debt that he was paying on – that was his income to pay that, it was supposed to be his retirement and everything. The severance package helped pay off some of the chicken houses, but it wasn't enough to get him out of debt and it wasn't enough to go toward retirement.

### Upgrades:

- Of course we knew there'd be some things like new feed lines etc. But the initial houses, the initial loan, would have been paid off in 10 years.... For us it was putting in cool cells and tunnel fans. We also



put in a computer system and other stuff... but when you have to make upgrades, you have to refinance... you don't really have a choice. They come in and they tell you, this is what's being done and we're going to offer you a half a cent or whatever. You don't really have a choice because, what are you gonna do.

- Perdue was pretty good about giving us a period of time, they'd say other guys are doing this and you need to do it to compete better. Eventually everybody is going to do it, you should do it before everybody else does so you can reap some of the early benefits.
- **After the Perdue cut off** – Case was the only business in town. So my daddy switched to growing for them, but to do that, he had to spend right at \$100,000 to put in equipment that was very specific for them – black out curtains, chick mates, etc. It was \$33,000 a house. He grew for them for 2 years and then they let him go.
- **Case contract was flock to flock** – there was no new growers contract because these were not new houses... they wanted us to put in new houses, and daddy said not right now I've got to get out of debt, show me what you're going to do as a business partner first... They wanted him to put in a 4<sup>th</sup> house. He said I've gotta get back on my feet first.
- **Case cut them off after 3 years because a wave of new chicken farmers came in building new houses. Despite the fact that they were producing in the top 3.**

#### Asset Specificity, and personal value of assets

- My mom, this was her granddaddy's farm. My great grandmamma and granddaddy had this farm. This land has been in my family since 1746. My kids are the 10<sup>th</sup> generation on this farm.
- We had to put up one of the farms **[half the property]** and this house to build the 3 chicken houses... The first 2 were 78,000 to put up, the third one maybe 86,000. That was before cool cells etc... today they're 250,000. You could pay for houses in 10 years and pay off the original loan.
- There were some variables, fuel and expenses, but they told you kinda what you could expect to get paid. And honestly those houses weren't as expensive as today...
- They know what you need to break even and they will keep you as close to that break even point as they can.
- Back in the 80s you could see yourself paying off 70 or 80,000\$. But a \$250,000 house? And 4 houses? I can't fathom having \$1 million in debt with that kind of pay.

Profitability

Variability in pay (and  
quality of inputs)

(see below)

Quality of inputs

- You have no control over the quality of the chicks and feed. If you got chicks from a pullet flock they're smaller. And they vaccinate those chicks before they come to you. It happened a few times with perdue, they over vaccinated those chicks, so they run a fever, and they're sickly and overheat, they tend to pile up – ultimately the farmers the one who suffers because of that, because your mortality is higher.
- Sometimes you had chickens that were supposed to go out this week and because of whatever is going on at the slaughter house you get bumped to next week. That really hurts, when you've got a full grown bird and you've got all that feed in it – if you lose that bird, it really just knocks you flat.
- When hurricane floyd came through in 99, the water went through 2 of those chicken houses – we lost all the birds in one house and part of the birds in another house. We had to go in there in waders and pick

On-farm production risk

out the dead birds.

- We dug a huge trench to get rid of those chickens, Frank Perdue came out. They were his chickens, but now they were dead so they were our chickens. – they gave us a couple thousand \$\$ to pay labor, to go in there and dig a hole to bury chickens – roughly 32,000 chickens. It was a fair thing. They paid us on our flock average, 6 or 8 flock averages, so we didn't lose the flock. But they weren't really out anything for this, they filed it on their insurance policy, they were their chickens – it was something they should have done anyway, it wasn't the farmer's fault, an act of god.

### Biological risk

Access to credit

Equity

Retaliation (undue or unfair practices)

(see debt)

(see debt)

Artificially created asymmetric information

- It looked like a good investment because it's a steady check. You were growing – big birds, 6 or 7 flocks a year, small birds, 8 flocks a year. And you weren't gonna be out of chickens more than 2 weeks at a time. They told you what you could kinda expect to get paid.
- You didn't know what was in the feed, you don't know how much feed they brought you. You couldn't question that kind of stuff.
- Don't buy what a company tells you. You need to spend ample amount of time talking to people who have been growing for them, etc. If they're a newer company, if they're Sanderson Farms, go talk to them in Texas – go talk to the growers in the Delmarva Peninsula. Don't just talk to who they tell you to talk to. Take your time to do your research. Don't talk to the guys with the show houses. Talk about fuel costs and cut offs and required updates and loans and contracts. They don't talk to you about those things. It's like a used car salesman, do not buy it based on the brochure.

Power imbalance in relationship

Loss of autonomy and control

(see Case attempt to force upgrade, ended in termination)

Lack of competition in the broiler market (monopsony)

- **After the Perdue cut off** – Case farms came in and were looking to sign on farmers. Actually a third integrator was trying to come in too, they wanted to sign on that whole group of farmers that were cut off by Perdue. Perdue would not sell the Robersonville plant – there's this whole thing of not getting in other people's territory. They ended up not coming in. So Case became the only business in town, no other options....
- **After the end of contract production** – if somebody's getting out of contract production, it's hard with broiler chickens because, chicken is so cheap. I can compete somewhat with beef, with grassfed beef. But I can't compete even with house-raised organic chicken... the house-raised chicken is riding on the backs of the farmers... We were getting up at 3 in the morning and driving up to Philadelphia, we burned up a transmission in a truck just to keep a market open to NY... I cannot imagine somebody with \$1 million or \$2 million ever managing to do what we did.
- This farm because of all the debt we had, all the work we did, doesn't pay my dad a salary, doesn't pay me a salary. My husband teaches school and I work. In addition to the farm. The work I do for the farm is until we get all this debt paid off. Until we get this debt paid off, all the work I do with farmers markets and everything, that is just for this debt.

## Farmers #: 6

**Location:** NC

**Integrator:** Perdue

**Type of birds:** first 3 week birds, then switched to day old – grew both small and large broilers. 4 houses

**Time under contract:** 10+ years

**Financing situation:** Completed, see court cases explanation below.

**General description:** He grew birds for Perdue for many years. He started working in the company then invested when Perdue still sent farmers 3-week old birds instead of day old chicks. After they switched to day-old chicks, he tried to back out, because he said it was no longer a part-time job. But he had had to re-invest money in order to adjust the houses to chicks – curtains and heaters mostly. He said things were good for a while, he thought: “I think it could have been one of the best things to come into Eastern North Carolina for small growers because with limited access to acres, you could come in and you could stay on the farm and you could participate in agriculture. And it could have been coming in, growing with a growing company. It was a growing company then but it didn’t materialize to be that relationship. It looked like it was going to be, it was advertised as a partnership relationship and that’s not what it ended up. It ended up being a dictatorship relationship.” In 1978 he was forced to change contracts multiple times and notes the frustration of having a contract and being told it is worthless, but being forced (with the threat of no new birds) to sign a new one with different terms, and having no power to enforce previous contract terms. (He went to the Attorney General of NC to try to enforce terms under the Business Opportunity Sales Act, which governed franchise regulations, as his contract had been described as a franchise. The AG sent a letter to Perdue finding them not in compliance, but eventually came back to him and said they would not pursue anything against Perdue because they were intimidated by the big company.)

**Court cases:** In addition – for his farm, when their feed conversion started to fall apart suddenly, he eventually realized truck drivers were stealing feed from him and several other farmers. A friend working at the plant told him. He found out Perdue had already had a private investigator come down to investigate this, and had filed charges against the truck drivers – but they had done nothing to inform or compensate the farmers who had lost significant pay as a result of low feed conversion ratios from stolen feed. In the end, in court, it came out that Perdue’s plant had a list of the farmers that had been affected and were fully aware of the damage. Thus this farmer was able to settle for damages against Perdue, but in the end the company still did not do anything for the other 16 farmers in the list. Following this his son updated and prepared 5 houses for a contract with Perdue which verbally the field supervisor had approved and said Perdue would grant the contract. At the last minute Perdue said they would not grant a contract to any of farmer 6’s heirs. This also went to court and was decided against Perdue.

**Secondary experience as a farmer advocate:** Farmer 6 stopped growing for Perdue in the 80s and has worked since as an advocate for other farmers. Thus this interview includes stories about his experience in other cases.

### Risk elements      Comments

- He describes a practice he saw while working with Hmong growers in Arkansas, where checks were sent from the company to the bank – and the bank would take a percentage rather than an assignment/payment from the check: We went into Arkansas working for some Hmong farmers, and a lot of that was structured on a percentage of the check was going to the bank. A percentage was going to the bank. Not a payment, it was a percentage of that flock settlement was going to the bank. It was even more dire than that. The whole check was going to the bank and the bank would send that percentage, farmers got their check from the bank, not from the company. Because in that flock assignment, the whole check went to the bank and then it was set up on a percentage. A percentage of the funds were going back to the farmer. In those cases, you should’ve seen the feeding frenzy that was out there on these Hmong growers. The bank was telling these Hmong farmers... having some trouble communicating, I mean they were very intelligent, hard working people but very trusting people. The bank told them – go ahead and pay for your expenses even though you don’t have any money in your account, we know the check is coming to us. They knew the check was coming, but they charged them insufficient

Debt (Cycle of debt)

funds and still got the check.

- **See Hmong story in asymmetric information – bank activity that is questionable in order to get FSA loans.** I looked at some that it was the same bank and they were positioning themselves and trying... and a lot of what they went in then for was to get guaranteed loans because that really, they started to feed on that where they could insulate themselves from risk. The banks could insulate themselves from risk even more. So they were showing projections of income that was being presented to FSA to get the guaranteed loans that far exceeded what the history of that operation was. what I saw was scheduled F's in the files. And so those scheduled F's were in the file and were documented. I mean it was literally documented what the income of that farm had been. But when they were presenting that to get the guarantee, it was much higher than what the history of that farm had been.
- **He describes cycle that results from FSA guaranteed loans.** 1) farmers can't get that size of a loan for other things in agriculture, they hear good things about the business. 2) banks have special agreements with companies on one hand regarding checks, but also – banks get FSA guarantee, which means taxpayer \$ will bail them out of the debt if the farm goes under. Thus, they are encouraged to give out those loans. 3) Because of this, banks will give new loans on houses that already went bankrupt – also the emphasis in the industry that tournament is about "performance" and that going bankrupt is about "performance" enhances bank ability to put a new loan on a previously bankrupt house. 4) Thus there are lots of new loans available, it's easy to get in, and many farmers are signing up, which further makes the farmers who have older houses on the other end more dispensable. I don't like the way that the poultry industry has been able to come in and maneuver and have an over sought supply of production where they can be so domineering over farmers by having this over potential of production where they can at their whims, they can cut a grower off because they don't have to have his production. They've got another facility and got enough owned that they can just increase them a little bit. They'll never miss this guy. It's like the hogs in North Carolina. All the farmers were really fussing about the moratorium, I said, heck and we're telling the poultry growers, we ought to be trying to get it on poultry not just on hogs. **At the end he is describing a major difference btw poultry and hogs in NC – b/c of the moratorium on hog lagoons, there is more competition for the existing hog growers and companies cannot terminate growers as easily to find new ones.**
- **He also describes the fact that FSA guaranteed loans – if a farmer goes bankrupt, the bank gets the guarantee from FSA, but the farmer is responsible for that \$ to FSA no matter what. If he gets another job, for example an hourly wage job, he may even have direct deductions from his pay – until he has paid back FSA:** A farmer that's already lost his farm and in some cases lost his home but he's still gonna end up with a debt that he can't manage. There's no way for him to pay that kind of debt. But the FSA will come in, they will do what's called a treasury offset. So if there is any government payment that you're getting, they can start offsetting a portion of that. They'll take all of your – if I went, if that person had gone and got an off-farm job so he had a job and he's gonna get a tax refund.

#### **Asset Specificity, Personal value of assets**

- Because if you'll go back and look when the facility has every one of those houses that went through Tyson and through Pilgrim's, if you look back at what the value of those facilities were, the contract is actually the only thing that had value because once that company was gone and closed down and that facility was sitting there on its own without a contract and I've got a contract that I looked at that... one person, the contract of what the facility was worth and you know, within months, when they announced that they were closing, they were the ones that lost. The value changed \$455,000. So that's what the value of the contract was. 'Cause the facilities were only worth what the real estate was underneath it.
- His home is most of the time, 90% of the ones we deal with the home is up for security also for poultry.

Profitability	(See Hmong stories in debt – linked to profitability, see propane/fuel price risk explanation, linked to profitability)
	<b>Labor investment</b>
Variability in pay (and quality of inputs)	<b>Regarding tournament:</b> (See explanation of propane/fuel risk, see quality of inputs below regarding how these actually affect tournament payment and variability in farmer pay)
Quality of inputs	<ul style="list-style-type: none"> <li>Whether you settle above average or not is not all in your control. You know, that's the fallacy of being on a performance contract is what it is because you know, we don't have control of the flock age, which is one of the big factors, etc (other inputs)</li> </ul>
	<b>Biological risk</b>
On-farm production risk	<ul style="list-style-type: none"> <li>He describes a part of uncertainty/risk to farmers due to weather – an ice storm that caused bankruptcies for many farmers – but significantly he describes how the concentration in the industry insulated integrators from their share of loss due to lower outputs in this crisis, because of their ability to adjust prices: There were ice storms a few years ago and it came up through the south, crushed houses went down and the media was how much lose it was to the poultry industry. It was not a loss to the poultry industry. The growers lost money because they didn't get – and they're on contract so they were getting paid for the pounds that were going to the market.  <b>You don't own the birds so you couldn't insure them.</b> So you didn't have insurance on it. So they lost. They were saying 10% of the birds in the southeast were lost. And they was right. But if you took 10% away and looked at what, with the media that was going on, they were able to go into the market place and immediately do this now, with a price increase on the existing birds that they had. So they still had 90% of the flocks were still there. If you figured up what they increased in price – and I've got those numbers somewhere 'cause I sat down and figured, and said this is a bunch of bull what's coming out because it was another win for profit for the companies. It should've been saying not poultry industry, poultry farmers. And that's not what it was saying but it was the poultry farmer that was losing the money.</li> <li>They didn't pay the grower for the time he had been indebted. They had nothing invested there. They didn't have to slaughter them. If you took all that out, they made win full profits because of the disaster.</li> </ul>
Access to credit Equity	<ul style="list-style-type: none"> <li>(See debt discussion above, in particular Hmong story)</li> <li><b>Regarding pressuring farmers out of the business:</b> They'll tell him he has to sell his facility, if you ahead and sell your facility today, trying to get him out of the business – we will give a contract on it, if that person's qualified, we will give a contract on that house. If you don't do this by this time or that we won't give a contract on that house. (making it value-less, see asset specificity above.)</li> </ul>
Retaliation (undue or unfair practices)	<ul style="list-style-type: none"> <li><b>After initial court case regarding stolen feed and settling with Perdue, the farmer bought another farm, had it fully updated (investment), and his son was going to start with 5 houses with Perdue. He was told:</b> They wrote the letter back and what they actually said—and they wrote this in the letter: We will not have any contractual relationship with any of Benny Bunting's heirs. So they were telling my son that because it was addressed back to him. And so that's what we went into court with and like I said, went in with—there's several laws that would apply to that. Unfairness trade practice because they allowed us to do that work. They knew it.</li> </ul>
Artificially	<ul style="list-style-type: none"> <li><b>His farm experience:</b> The propaganda. The media that came out on the radio was -</li> </ul>

created  
asymmetric  
information

Come grow with us a growing companies. They were an insulated crop. I was actually working for the company at that time. I was shop foreman for the maintenance in the company when I built the houses. (at first) I could work away from the facility with three week old birds because I didn't have much time in there but as soon as they got enough facilities they changed that because it was costly with day old birds. And that's when it first started with my problems with them because I said wait a minute, this is not what I signed up for. This is not what you courted me with, you know with this part time work. (he is describing how he first invested when Perdue was still sending 3 week old birds to farmers, but they changed their practices to sending day old birds to farmers after he was already under contract.)

- He describes not being allowed to see his birds be weighed, even under circumstances in the court case about stolen feed where they were supposed to allow him to verify the weight of his birds.
- Yeah the company, you know, they advertise that they are mitigating the ups and down swings for the farmer. They're taking a lot of that risk out of it. No.
- SEE HMONG story in Debt, plus he describes questionable bank practices in appraisals of the value of chicken houses. Same bank dealing with the same house that went out of business already, being valued based on the market value (thus interest of other farmers) and not on the income statements of previous farmers, and this thus being marketed to Hmong immigrants coming in to Arkansas: The Hmong were a very hardworking people that had moved in but they were people with land. They were farmers and so they'd come into California and Minnesota were some of the big populations, but all of them were looking for opportunities to get back on the farm and so it was looked at that poultry seemed to be that mecca they were looking at. So there were growers, existing growers, with a bank that were not making money. So it was an opportunity to serve that facility. So the facilities were overvalued because they were just playing, you can look at the appraisals, they were overvalued, except for one item. In the appraisal there's three methods – there's income, there's cost and there's market value. (And this is the appraisal before the loan is granted?) Right. And so the market value was the only thing that it was but it was being driven because there were those people had such a desire to come in and they came in where they were pooling money together. The family would pool money and then it would go back and help somebody else get out but they pooled money so every one of them were coming in, we looked at I didn't see anything under \$100,00 cash come in to put as a down payment and a lot of them were in the \$200,000 range to put cash on the thing. And so that got the banks back into a positive equity position where they were underwater because if they were foreclosed on that facility, but no contract had been sold, they would've been very low.
- Regarding practices such as the questionable bank charges in the Hmong story in debt, or retaliation: when you sign the bottom line allowing something and a lot of times not taking into consideration the chances that it doesn't change, than you've made it legal. When you sign it, you make it legal and you agreed to it.
- Being forced to accept new contract terms in a new contract despite existing one, by threat of no new birds, no ability of farmer to enforce contract: I had a contract, I had already been changed from those three week old birds to day old birds so I had it all Perdue contracts that I wanted to deal with already. So when they came in and wanted to change I said - I've got a contract, I said, this says I'm gonna get birds. So you put birds in here, I don't care what kind of birds you put in here whatever you pay me is what I'm gonna get. But I said a contract has no value if you can come in and dictate to me that I have to sign. I said, I said, it's not worth toilet paper. Toilet paper has a specific purpose and that's exactly what I told him. this contract has no purpose and so they showed me. They, if i don't sign a contract, they didn't put birds in.
- When NC AG found Perdue to be out of compliance with business practices but did

Power  
imbalance in  
relationship



not pursue the case because of Perdue's power in the market: (Why were they out of compliance?) Because they cut my contract off and I had a 7-year contract with them and they had, I had bought a "franchise." So there were a lot of parameters they had to go through before they could just cut me off ... He was the representative of the state but I get a call from him and expected I'm gonna be getting chickens for sale to presume and then I get a call from him and he says look, he said we can't do anything else to help you. And it was just that quick and hung up. And told me, he said, I'll tell you something and I'll have to deny it later. He said that when my boss comes in and tells me that I've got to cease and desist action on this case, he says I've got to stop. He said when Monk Harrington who is a legislator that's in Louiston, and that's where the company happened to be sitting which was the biggest employer in his district, comes in and has a friendly sit down dinner and chat with my boss who was Rufus Edmiston, and Rufus Edmiston comes in and tells me I have to stop, he's my boss, I've got to stop.

Loss of  
autonomy and  
control

- When you get birds, it's based on the company's needs, not your needs. When those birds go out, it's based on what size the bird the company needs to move, not you. You have no control. You don't feed them. You don't increase. You don't change feed rations to change the growth rate of those birds. Everything is supplied by the company and you have no choice in it. You don't know what breed you're getting. You don't know.

Lack of  
competition in  
the broiler  
market  
(monopsony)

- In addition to the broiler market, broiler companies (Tyson, JBS etc) have market control in beef and pork markets. Chicken companies grew bigger and bought other meats – chicken has taken over market share from other meats, he explains why: They can react a whole lot quicker than the hogs or the cattle can. A chicken is up to 6 lbs in 49 days... hogs is 18 months...
- Results in un-enforcement of regulations for fair business practices. See story about the AG's direct intimidation in his case under Power Imbalance.
- He describes a risk shift taking place – many integrators used to provide fuel as well, and are beginning to transition that to the grower. They pay a cent or two more (reflected in PP base pay being higher than Perdue for example), but they do not take the risk of fluctuating prices: The real risk is not taken out of it (the contract). The real risk, because those growers (in the ice storm) lost everything. The risk is shifted to them because, so depends on, the companies have different contracts but who's paying for the fuel?
- So if they factored in actually your contract pay, the amount that they're paying per pound is less because they factor that fuel in. So the ones that you're seeing that re in the 4-cent range, they were actually where the grower themselves are responsible for the fuel cost. Perdue is one of the companies that in the past, and we've been talking to the growers for a long time, realizing that that probably was gonna change. 'Cause that's one of the big things I've worked with in poultry growers that are in trouble is because of their fuel cost.
- But if you're on the bottom side and when you're on below side – let's say it's an average but you're on this bottom side here, you don't have enough money left after the money is taken and it automatically goes, the flock deduction says it automatically goes to the creditor. And so you don't have enough left to pay your electricity bill, your propane bill, what labor you've had to get, shaving costs, all these other costs. And something goes wrong. And something goes lacking. **So there are times when credit scores for poultry growers are not good because they've got a lot of 30, 60, 90 day pays that have gotten behind before they can get caught up.** And the main thing I see is causing a lot of this is where that the company's have transferred that fuel cost to the grower.

Price risk of  
fuel/propane

**Farmers #: 7** (A.T. Terry. As his court case is concluded and the decisions are public, this farmer did not wish to remain anonymous.)

**Location:** TN

**Integrator:** Tyson

**Type of birds:** small broilers, 5 houses

**Time under contract:** 5 years

**Financing situation:** Contract was terminated by Tyson, court case followed regarding retaliation in termination. Farmer is still under the debt.

**General description:** This farmer was the president of a farming association in his region. He became interested in growing when looking at a nearby farm for sale. An experienced broker, he decided to research first – he found few complaints registered with GIPSA compared to the size of the industry, he asked the plant manager about those complaints and was assured – thus he bought the farm and signed on with Tyson. He states that after a year, which was a good year, that things changed when there was a management change – and Tyson required upgrades that he felt were not helpful for farmers. When other farmers in his association were having problems, he compiled their data and registered a formal complaint with GIPSA. He also wrote letters to congressmen. Particular instance was over the required upgrades for feed bins, which he did not feel were a contribution to his farm's efficiency, nor did farmers in ½ of his complex. Tyson responded by saying if they did not put in feed bins, they would not have chickens, and that they would change the contract to make it mandatory. He did not put in the bins, believing that the current contract was valid. They did not give him chickens, he complained to GIPSA – got chickens back for one year, Tyson changed the contract to have mandatory feed bins. When not getting response to his complaints, the farmer compiled documentation to sue Tyson. The case went up to the Supreme Court, and was thrown out by a federal judge – but not because the farmer's claims were inaccurate. Instead, it was because of the judge's interpretation of the regulations for poultry integrators. The Packers and Stockyards Act contains language about a series of unfair business practices, separated by the word "or" which are prohibited. The judge's interpretation was that these actually must all be evidenced (in other words, that the "or" was an "and") in order to bring a case using that act. This meant: that regardless of how Tyson treated that farmer, the farmer would have to prove that Tyson was damaging competition in the industry with their actions. Obviously, actions that damage one farmer do not necessary damage the whole industry – regardless of how unfair they are. That interpretation has been used in other cases farmers have brought against integrators. Without Packers and Stockyards, there are no other legal protections for farmers.

Opinion from the appellate court that decided in favor of Terry before it went to supreme court:

<http://www.ca6.uscourts.gov/opinions.pdf/10a0127p-06.pdf>

Risk elements	Comments
Debt (Cycle of debt)	<b>Upgrades</b>
	<ul style="list-style-type: none"> <li>Before, the feed part of the operation would deliver the feed to your feed bins, so they would have most of the storage... they had a continuous operation so it kept the feed fresh for the chickens... When they started making farmers pay for extra feed bins, they transferred that cost of operating the feed part of the system from their operation over to the farmers.... It was estimated at 10-15,000 per house and I had 5 houses... They did not share in the cost... The feed bins weren't a part of making the farm more efficient, no. It was a part of making the transaction of feed for the integrator more efficient.... Actually it might mean the feed was, the feed was sitting in there longer on the farm... they just changed the contract. (His point being that it was not an added efficiency for farmers, but if they did not upgrade with new feed bins they would lose their contract. They had to finance the increased infrastructure which reduced costs for the integrator, not for the farmer.)</li> <li>It was something that like - give me a red carpet or you're going to lose your contract. Get me this value or you're going to lose your contract.</li> <li>You see, they may compensate you a little bit and say "well we'll give you a quarter of whatever" but you have to refinance to get the feed bins. So you're the one on the line, and there's tournament with newer growers, and they just offer you a yearly contract, so next year they're going to say: "you're not under contract anymore with</li> </ul>



us" but you just spent 30,000 or 40,000 \$ on the feed bins. Now I have no problem with putting in something more efficient if the company thinks it's efficient and they can pay for. If I think it's efficient I can pay for it. But that's not what happens.

#### Asset Specificity, Personal value of assets

- It had more to do with that company store type mentality where you get these farmers back into having these large loans where they have to give up their [asset] value to Tyson, you know they had to work for Tysons completely during this time or you lose your farm, you lose your mortgage, you lose your house and you go bankrupt. (see comment regarding industry capture of farmer capital in "monopoly/monopsony" section.)
- All these contracts are long-term contracts just because - The company can keep these people under a debt treadmill, that's what I call it, for 10/15 years, and then change their contracts on the 15<sup>th</sup> year. And re-bondage everybody back to their system.
- Regarding the pressure to stay under contract due to personal assets involved, plus he describes integrator intimidation: So what they told these farmers look you have to have these feed bins or you're not going to have a contract. I wanted my complaint with GIPSA to go through before I had to pay for feed bins for them without any compensation, and I didn't wanna do another mortgage for Tyson. I didn't wanna be on the hook for their operational expenses, I didn't them transferring their cost over to me without me being compensated for it. So they told all these farmers that the next contract they wouldn't get chickens if they didn't do these feed bins. The next contract came around, and I read the contract, (I was a mortgage broker in California for a number of years, I am used to contracts) and it had nothing about those feed bins in it. So they were lying to these family farmers, so these family farmers would get into this mental condition of giving them things whenever they asked for. But I signed the contract, and then they did not give me chickens anymore ; when they said "you didn't do the feed bins" I said "it wasn't in the contract." GIPSA to their credit did make them give me chickens back for another year .. the next contract they had the feed bins in it. So they're able to threaten the farmers, get whatever they want by almost everybody and whoever doesn't do it is just gonna be cut off.

#### Regarding tournament:

Variability in pay (and quality of inputs)

- And so they wanted to maintain the control of how much that feed weighed, where it was going to, and not be accountable in any manner for that, so that they could adjust the tournament formula to what they wanna accomplish and not what was real. Real efficiency is what they claimed but that's not what in practice was happening and the farmers couldn't make real complaints. (He is describing the impact of company provided and measured feed on tournament "performance." Note – this is asymmetric information (can't weigh own feed) combined with question of quality of inputs (actual quantity and quality of feed) which impacts the variability in farmer pay.)

Quality of inputs

- He describes having problems with quantity of feed delivered to feed bins, quality of feed, and quality of birds. He describes getting multiple batches of "skeleton chickens" with a particular disease that is hatchery based once he had begun making complaints to GIPSA.

On-farm production risk

#### Biological risk

- (Mentioned in connection with input quality.)

Access to credit  
Equity

(yes, easy)

Retaliation

- I realized this problem at the very beginning. Tyson would go after the leaders of

(undue or unfair practices)

the organizations or people trying to start a union. (He describes getting multiple batches of sick chickens after filing the complaints with GIPSA.)

- He compiled documentation on the retaliation after he became president of his grower's association, which was part of his case against Tyson in *Terry v. Tyson*. The following is from this documentation: Following the meeting, Tyson delayed its placement of birds on Terry's farm for a full flock rotation, costing Terry \$30,000 in lost compensation. When Terry met with Tyson's managers again on March 28, 2005, they informed him that Tyson made a "company decision" to discontinue the placement of birds at his farm after he made the weighing complaint. Terry asked for, but was refused, compensation for the damages he sustained as a result of the missed flock.
- On January 11, 2006, Tyson notified Terry that his contract would not be renewed, allegedly because of his confrontational behavior toward Tyson's representatives and his failure to make "costly and unnecessary" changes to his poultry operation, despite the fact that Terry was a successful poultry producer and was "well above average" in the grower rankings. Terry avers that "[t]he reasons provided by Tyson for termination of [his] contract were false and pretextual to disguise Tyson's real reason, which was to thwart [his] efforts to organize growers, and in retaliation for [his] complaints to the Packers [and] Stockyards Administration." Terry subsequently advertised his farm for sale, but claims that he has been unable to sell it due to Tyson's demands for costly upgrades as a condition to the continued placement of poultry at the farm. This lawsuit followed.

Artificially created asymmetric information

- There was a farmer that wanted to sell his farm and retire out of it and I bought his farm... I looked at previous years of income on the farm... And when I was researching this, I researched the complaints that GIPSA had published... they had very few complaints compared to the size of the industry... but I was a little concerned about what was happening in the market and then I looked at the packers and stockyards act, and I asked questions that pertained exactly to this market, questions that whether or not I'd be treated well and I'd have to be given what I'm investing, this is a large investment. [Plant manager] told me that all the farmers are treated the same, that the tournament system pays based on who is the most efficient in growing chickens with the inputs that Tyson gives. What I didn't know is that they could manipulate those inputs and that they weren't all equal.
- It's kinda like you go to a Casino and they are changing the rules so that they always win and you gotta keep playing. Because your house is more important you just keep playing, only for the farmers they didn't wanna get into a Casino operation, they wanted to get in a business producing food for millions of people.
- One of the reasons is that they come up with these sell speeches on what they're doing. And they tell all the farmers their sell speech: "the feed bins will improve the efficiency "
- Describing that farmers are not allowed to put scales on their own feed bins, which were a required upgrade by the company (see debt). The feed company actually keep records on how much feed they're running and how the feed going out to the farms; they were required by the rules that GIPSA made out to give feed tickets to tell the farmers exactly how much feed they will be giving at any time. When they have these feed bins, and extra feed storage on the farm, they can dump another 20,000 to that guy and say that they gave it to you, and nobody will know that you didn't get the 20,000 pounds and the other guy did. Why can't you track it? Because it they would not let you put any type of scales on the bins. We tried. They said "You won't have chickens if you put any type of scales on your bins".
- He describes a story regarding not being allowed to watch his birds be weighed. This language from the documentation he submitted to *Terry v. Tyson*, which the appellate court decided in Terry's favor: Meanwhile, Terry became concerned that his poultry was not being weighed promptly upon arrival at the Tyson plant, as required by his contract and federal regulations. In August and December of 2004,

he went to Tyson's plant to watch his birds being weighed, but he was denied access. He complained to a federal official and requested that a letter be sent to Tyson. On February 13, 2005, Terry followed a truck loaded with his poultry to Tyson's processing plant. When he arrived at the plant at 2:00 a.m., he was told that his chickens would not be weighed until after 4:00 a.m. When Terry returned at 4:00 a.m., he was once again denied access to the plant. Plaintiff called an agent with the Grain Inspection Division of the Packers and Stockyards Administration, who told Terry that he was in route to the plant and would find out why Terry was not allowed to observe the weighing of his poultry.

Power  
imbalance in  
relationship

- 
- See feed bin upgrade story in debt – they changed the contract, farmer had no ability to enforce previous contract or negotiation, because of debt they had no choice but to go into further debt.
- Regarding lack of enforcement of fair business practices: When you make complaints to GIPSA they're gonna go nowhere. We have such a political system that you have no remedy.

Loss of  
autonomy and  
control

- (see comment in feed bins under upgrades – no power to determine investments, or use of assets in the business, because of treadmill of debt)
- He points out, Tyson spent \$21 million on lobbying in one year based on his research into it. He notes that the industry funds the National Chicken Council. He connects the lack of response to his complaint at GIPSA and to his letters to congressmen to the immense lobby that the industry has, compared to the powerlessness of the farmers.
- He describes lack of political will to protect whistleblowers, even complainants, despite regulation: Now I can in theory complain to GIPSA as an anonymous complaint on that particular issue, of course they never did anything about it: there was no investigation .. Everytime that I made a complaint to GIPSA, Tyson would know about it. So the all anonymous system that former secretary James Baker had worked at and had told me about was completely degraded by who was running GIPSA.
- So really what's happening behind the scenes is that they're able to manipulate everything and making appear as they have their honest business when in fact that's just not.

Lack of  
competition in  
the broiler  
market  
(monopsony)

- And they are manipulating the inputs, and anytime there is any push to prove it, when you ask GIPSA to come and investigate a particular situation like I did, they tell Tyson; and therefore if GIPSA inspectors come out, Tyson already knows they're coming out, so they're either gonna make sure that they do it correctly at that time or that they can manipulate that federal inspector. (He is describing frustration over the failure of the anonymous protections for complainants, as well as the dysfunction of the regulatory inspectors to actually follow up on complaints about discrimination in inputs)
- Now, when I have started all my complaints to GIPSA I asked what can you do about this? Is there any power that you actually have over these guys [integrators] or you're just a puppet agency? And they said "no we are federal agents, we can carry a gun and everything", and to me internally I just started laughing, because this is not about carrying a gun, it's about doing things and enforcing things. You don't have to have a gun to threaten a farmer, you can just have a contract. With a contract, you change the farmer, you can just tell them what you want them to do. Even without a contract really. And so these farmers are being threatened to be able to handover value to these corporations, which are using that to create a competitive advantage in the market, and when all the large companies are doing the same practices, it gives them a barrier to entry. Anybody then might compete with them, has to do the same practices to those farmers. So we don't have a market for the farmers anymore, we have the system that the farmer gets to be manipulated to be able to give all that value back to the corporations.

## Farmers #: 8

**Location:** WV

**Integrator:** Pilgrim's Pride

**Type of birds:** small broilers, turkeys before that, 4 houses

**Time under contract:** 11 years, current

**Financing situation:** Loan is nearly completed

**General description:** The farmer initially bought a farm with turkey houses, which was under contract. However the integrator was bought by Cargill-Rocco. The farmer didn't want to grow for Cargill-Rocco because he had heard bad things – so he decided to switch to Pilgrim's. When he moved to the farm and tried to switch, Cargill-Rocco tried to intimidate both him and the previous owner with threats of fining the previous owner \$35,000 because of his switch. He began growing turkeys with Pilgrim's, but Pilgrim's did not give good advice and eventually they closed down their turkey plant. He lost 20-30k annually while growing turkeys despite trying everything the company advised. Once they closed the plant he had to invest \$200,000 to convert his houses to grow chickens. He has refused to make upgrades because he wants to finish his loan and get out of the business. He is also the president of his regional farmers association. He also regularly ranks low in the tournament now, compared to previously – before he was representing the association. He works with local universities to conduct experiments in litter treatment, he has built revolutionary litter incinerators on his farm, he hosts groups of students as a training farm, and he has collaborated with the EPA on studies to transfer litter out of the local drainage basin. He says he is recognized as a knowledgeable and skillful grower, but tournament performance reflects the opposite.

### Risk elements    Comments

- **Regarding length of contract:** I'd have to pull it out and look it was either 1 year or 5 years. I'm not sure. But and they used to do that back then and they still today, they'll give somebody a contract and it'll say 10 years on it. But their game is the first time they have to make an amendment to their contract, when you sign your new contract there is no length of time. So you're back to flock to flock. At least that's the way Pilgrims had done it.
- **He describes when Pilgrims shut down the turkey facility, they cut off hundreds of growers in the region. They did it basically overnight despite whatever foresight the company may have had.** "They didn't send growers a letter and say you know, a year from now we're going to be shutting this thing down. They got a letter saying the flock you have now is the last one you're gonna get... they just had to keep scratching and gouging to keep their farms... Most of them had to go work off the farm somewhere to pay off their poultry operation, some of them are still trying." **He describes a general economic depression and desperation in the area as a result of loss of hundreds of jobs and foreclosures on farms.**

Debt (Cycle of debt)

### Upgrades

- The companies on a regular basis come around and say you have to do this upgrade or that upgrade and if you don't, you're not gonna get chickens anymore. There's been a couple of times they've come around and said we're gonna require this upgrade or that upgrade and I said, when you've sent it here on my step I'll put it in. That's what I've told them. You pay for it, I'll put it in. That's the last I'll ever hear of it. And if everybody'd do that, that'd be the same way. You know, 90% of these upgrades that they require don't amount to a hill of beans. But they don't care because the growers are the ones that pay the money for it. So it doesn't matter if it works or not, the grower pays for it anyway, don't cost us nothing.

## Profitability

- and in the beginning it was worth it but... it was the turkey division of Pilgrim's Pride, when they bought another smaller integrator, it was turkeys and chickens. So Pilgrim's just bought it all when they bought it but unfortunately for me they didn't know anything about raising turkeys. Course I didn't either, I was new to the game. And I went through 3 years of them trying to show me how to do it and they had no idea how to do it. And I was subsidizing this here operation out of my own pocket to the tune of \$20,000 to \$30,000 a year.
- And I got tired of that and I start talking to folks raising broilers and it seemed that the money was better that the cash flow was better. So I spent an initial \$200,000 converting my houses to broiler chickens to Pilgrim's specifications. And when I first started out with them the money was pretty good but that was 11 years ago and it hasn't changed a bit. (He is referring to the actual pay – which hasn't increased in 11 years once adjusted for inflation, despite steadily increasing costs.)
- It wasn't more than I expected but it was enough to pay the bills. You know that's all I was really looking for was enough for the farm to pay for itself. And like I said with turkeys it wasn't doing that because they had no idea how to run turkeys. And they ended up shutting down the processing plant that I was growing for.
- Regarding why industry would say that this is a good and profitable business to congress: Well what they hear from is what I call the ten percenters. 'Cause the companies have about 10% of the growers they cultivate. They always get good chicks, they always get good feed, 'cause they have to have somebody they can parade in front of Congress or the news media or wherever. They're not stupid. They know that's a necessity for them so they do that. And they actively work at that. And then they have people like me who constantly complain about them and I'm one of their worst producers now. Which I didn't used to be but now I am.
- A lot of chicken growers can't pay the bills from their chicken operation so they have to work off the farm, to pay for the chicken investment.
- It worked for the first 3 or 4 years. Then he notes that with inflation and increasing prices, what he made didn't even pay the bills, and he was taking money out of his pocket again to pay the bills on broilers. He and other growers in his association found that they were not making money. They documented their cases. They took this to the administration of the processing plant. Pilgrim's brought someone from their headquarters in Texas to hear their complaints. They had even asked us to get our numbers together... taxes, insurance, whatever expenses we had, so that they could review it. Which we did, we had 10 growers together, and they even had to admit that our guel costs here were higher than other complexes. But the VP of live production who sat there and listened to all this, said "well, expenses are going up for us too." And that was it. What a waste of my time. That's the way they look at it, they're going to suck every dime they can out of you.

**Labor investment**

- I have a hired hand out here. By the time I pay him, it costs me more than what I make from the poultry business. I don't have to hire him. But from day 1 I was still working... But I had to have somebody here... when you've got chickens you have to have somebody here 24 hours a day
- Back then they weren't espousing this 3 hours a day \*\*\* like now. I confronted them about that, I said – you have the audacity to tell people they should go out and make a 1\$ million investment in your business, but then you turn around and tell them – you can't feed your kids off this, you have to go out and get a second job? That's shameful.... Right now the birds I have are young, so 3 hours a day might do it. But it depends on how old they are... and it's still 24 hours a day. I have an alarm system out there, I have to get up in the middle of the night or whenever for problems... I'm scared if I don't have my hired hand here, and I have to go to [town] for 2 hours, I'm worried about them... And I've had disasters where I've lost whole batches.

**Litter, is it a benefit?**

- It's about 400 tons a year, and I get \$10/ton. So that's \$4,000. What a tremendous economic benefit. That's a typical thing they would tell somebody if they were trying to get them to build a poultry shed. But it just cost me \$2,500 to have my fields

fertilized... (See environmental risk – has to pay for different fertilizer because of oversupply of phosphorous in soil, too much litter.)

Variability in  
pay (and  
quality of  
inputs)  
Quality of  
inputs

(see retaliation regarding his tournament rankings – again, connected to quality/control of inputs.)

#### Equipment risk

- He describes that with the computerized system there can be mistakes. His hired hand once flipped the wrong switch and it shut down the computers for just an hour. But with the fans and everything running on the computers – he had market weight birds, and they overheated in that hour. He lost 30,000 chickens. You don't have any time to react. On that settlement he lost \$12,000. Company did not assist with removal of the dead birds, did not help with his loss. Point to make here is relative risk, that remaining idiosyncratic production risk has a huge impact on a farm – misleadingly represented in the literature.
- When I initially bought this place under my nutrient management plan I could apply 3 tons per acre. My current plan says 1 ton because phosphorous levels were getting so high. I made the decision on my own to just not apply it. I don't know what continued long-term exposure to the soil is going to do to it, but I don't want to ruin it.... So I would have to have 400 acres available to spread this on to use it all myself... in this area here there's not many farmers that can use it all themselves, most people have to try to sell it.... (What happens if they can't sell it?) I've had to give it away before, I've been in situations where my litter shed was full... they just pile it in the woods I think, unfortunately...
- Our farmers association took on a study to figure out how to transfer the litter out of here, farther into WV or over into Ohio... The farmers are actually the ones organizing this... should be the other way around. It says specifically in the contract that the litter is your responsibility. As far as I know all the companies do that.

On-farm  
production  
risk

#### Biological risk

- Regarding the loss described above: Mortality is expensive... I had to pay to get the trucks in here, and I ended up having to compost them all in my litter shed. That took a ton of work...
- Some of the farmers that are big enough that get to keep the litter to spread it on their own fields, it's more of a benefit than for farmers like me. One of the problems with that is, the phosphorous content in litter is so high it doesn't take many years to bring the phosphorous levels in the soil up. That's what's happened here, when this was a turkey farm the previous owner didn't have any cattle or fences here, he just dumped as much turkey litter as he could out on these fields. It was way over applied, it should have never been done that way. I've used some but I can't use much. Just this year I bought fertilizer, which was just nitrogen basically. (because there's too much phosphorous.)
- I've been selling mine out of the drainage area for several years, farmers over there need it, so that works. But not everybody does that.

Environmental  
Risk

Access to  
credit  
Equity

Retaliation  
(undue or  
unfair  
practices)

- They have definitely retaliated. I used to be the number one grower, for years in a row. But I haven't been for three years. If I get average, I'm surprised. I'm not making nearly as much money. Me speaking out like I do probably costs me between \$30,000 to \$40,000 per year.
- I keep all documentation. I can document all of it. (A lot of growers don't do that?) No. Because they want to keep their contract. They're scared... I keep doing this because what I have out here costs \$1 million to build today. When I bought this I was relying on this as a supplement to my retirement. It's a bad business.



Artificially  
created  
asymmetric  
information

- Well, buying this farm is what got me into it. We bought this place in '01, we'd been looking for a farm I was still working at the time and we wanted to come back here to retire. But this was home anyway and we wanted to farm. My granddad was a farmer, my dad was a farmer in his younger days, I guess it's in my blood. I knew I wanted to do that because everywhere we'd ever lived we had horses or we had cows, our own beef cows or whatever. I bought it being a turkey farm, I bought it because the extra income could allow me to buy more land and a nicer farm than what I probably could have.
- **Regarding the initial promise and recruitment messages from the integrators:** They're constantly trying to get people to sign up... I'm surprised at how many people are building houses... I have a copy of a prospectus from Sanderson farms sent out, North Carolina growers back 5 or 6 years ago trying to get them to build rearing facilities to support a new processing plant they built down there and it was for a facility very similar to mine. Flock sizewise and everything. So I knew what kind of revenue they could expect that thing to generate, well it clearly indicated and this is 5 or 6 years ago that they would gross 60 to 80,000 dollars a year more than I ever have and those are the kinds of lies that those poultry companies tell the farmers and the existing growers to get them to build new houses. Unfortunately.
- **This is the message told by the integrator at the beginning, which creates a false pretext – mixed with (asset specific investment) and the reality of (variability in pay) due to (quality of inputs.)** You expect me to invest this kind of money in your company but you don't want to give me any insurance I'm going to be able to at least pay off my mortgage? They don't have an answer to that – oh, you'll do ok. You'll make money. And when they come, the people with the prospectus they tell them well this is what the average guy will make but if you work hard you can make a lot more than they do. And that's a lie too because regardless of how much work you put into it, it's their chickens, their feed. So if you don't get good feed or good chicks there is nothing you can't do anything with them.

Power  
imbalance in  
relationship

- **This also goes to monopsony power and the territorial division of the integrators. When he bought the farm it was under an older integrator, which was bought by Cargill-Rocco. He had heard this was a bad integrator, so he decided not to stick with that contract, and to switch to Pilgrim's. He was approached by Cargill-Rocco, they said:** It's pretty interesting what happened then because some of their people came to me and said you can't do that. I said, you know my name's on the deed for this farm, not yours. Don't tell me what I can do and what I can't do. Well we have an agreement. I said yeah but that was with the previous owner. So they went to the previous owner and said if he doesn't continue to raise our turkeys on that farm, we're gonna charge you what it costs us for the poults, like \$35,000, for the poults that they couldn't place on this farm because I refused to continue to raise turkeys for them. They threatened him, yeah. They threatened him with that. **(Also note for retaliation and unfair practices.)** He should have just said go piss up a rope because there's no way they can enforce that, but he came to me and he was whining, well they're gonna charge me all this money if you don't do this. I said alright, I'll agree to raise one more flock of turkeys for them. So I drew up an agreement, saying that they would agree to bring me the highest quality poults that they could, the highest quality feed, everything else. And they showed up over here with a contract for me to sign. I had my agreement. I said you sign these amendments to your contract and I'll sign your contract. "Well we don't do that." I said why not? Well we don't make those kinds of agreements and we don't make amendments to our contract. I said well I guess this conversation is over. There's the road. They left, that's the last I've seen of them. **(company policy of not negotiating or having discussions with farmers.)**
- They needed the production. So they didn't want to lose a grower. But instead of coming to me and saying hey you know we'll do this, we'll do that, they decided threat and intimidation was the way to do it and that's the way the poultry industry

runs. Not by cooperation and getting along with people and making accommodations for whoever. It's threat and intimidation. Exactly how they run things.

Price risk for  
input of  
fuel/propane

- You get 2 tenths of a cent in energy allowance which is supposed to offset your energy costs. That pays maybe, 25%. It's based on your production too. (He describes that if you get a bad flock, you run heat or more energy, you actually get paid less for the fuel allowance.)
- His complex is in the mountains, they have high energy costs. But they are paid under the same system as other areas, thus their profitability is so marginal that it is generally negative.
- When I first started growing broilers, they had a different fuel allowance system set up. In the winter months you got paid more than in the summer. It wasn't long after I first started they wanted to go to this straight per pound thing. That's another thing they lied to us about. They said growers are going to make more money getting paid by pound instead of getting an allowance, different rates different times of year. So, we thought all that was OK and we didn't really sit down and put a pencil to it, unfortunately. Which we should have done because it resulted in about a 6 tenths of a cent per pound decrease in pay. I was the last grower here in WV to sign that agreement because I knew it smelled. They called me into the office because I was the last hold-out. I said I want you to show me how this will make me more money. They wrote a bunch of numbers and lied like hell, I said alright because – I was in between a rock and hard-place. If I lost my contract I'd loose my farm. Sometime later, I looked at all the numbers and figured it out, and realized I was actually losing money. When I went to show them this first thing they said was – no it wasn't that much. They knew they'd lied to me, they didn't deny knowing it was going to be a loss...



## Farmers #: 9

**Location:** WV

**Integrator:** Pilgrim's Pride

**Type of birds:** small broilers, turkeys before that, 4 houses

**Time under contract:** 8 years

**Financing situation:** Still paying loan

**General description:** Farmer #9 and her husband both work off farm. She works for a propane company that provides fuel to many poultry farmers. Her family members used to own the poultry farm, and it went bankrupt. This put her family in the position of losing valuable personal property, long standing family land. Thus she and her husband bought her family members out of the bankrupt poultry farm, and are trying to revitalize it and save it. She describes multiple frustrations with quality of birds and feed, and dissatisfaction with the payment system.

Risk elements	Comments
Debt (Cycle of debt)	<ul style="list-style-type: none"> <li>• My farm property is not tied up in the chicken business. But, if the chicken property goes under, and if the business goes bad, the bank would foreclose on that and I would have to pay the difference. I would have to sell my farm and my house if I lost the chicken houses or the contract. So not only are you in bankruptcy you're still going to lose your home. Many of these people their home is collateralized on the loan.</li> <li>• This is why you see family farms and not an actual factory farm, because it would be too much of an investment for them. And they don't have to take on that investment, so they don't. If it was a good investment they'd be doing it. They'd have paid employees, etc. Doing it this way they can throw all their expenses on us, we can expand for them and provide the capital, and if they can keep everybody scared then they don't have to worry about anybody speaking up and ever having to change that.</li> <li>• (I was talking to Farm Credit and saying, look you shouldn't be giving out all these loans. When they talk somebody into building a new house, they cut off an old grower. They said "well if they've got the equity and the land, then we almost have to make the loan" and I said, you won't make them unless FSA guarantees them right? He didn't have an answer.) The FSA shouldn't be doing these guaranteed loans anyway because these contracts, they're not real. We went through Farm Credit and got a guaranteed loan through FSA. Then we went to FSA and got some low interest money. The first thing they said is they needed a contract, I said – we haven't been given a contract yet. They went ahead and gave us the money anyway. If they would demand that Perdue or Pilgrims or anyone else, actually produce a contract, it would be different... and if it was a loan for the length of the contract – but they can do what they want, the banks keep lending the money and the taxpayers keep making up for the foreclosures.</li> </ul>
Profitability	<ul style="list-style-type: none"> <li>• As far as market fluctuations go, you're kind of shielded by that but – if you pay attention to the money the integrators are making, they make record profits, they don't share that with the people helping them to make that money.</li> <li>• We've been able to meet all our payments, so far so good. We didn't need to make much money off of it.</li> <li>• I would never in my life have imagined that raising chickens was such a cut-throat business.</li> <li>• None of these integrators are required to provide insurance for the growers. You can't get insurance...</li> <li>• It looks like we're making a lot of money. I made \$119,000 last year, but I shell out \$85,000 right off the top to the mortgage holder. And then on top of that you have fuel and electricity and then even if you don't pay yourself you have maintenance and repairs – and generally at the bottom line, it's negative.</li> <li>• For me and my husband changing the waterlines was too big a job, it's a hell of a job.</li> </ul>

	<p>This stuff had to be done. My bill for that one maintenance was \$8,700 – there’s half a chicken check right there, just for one maintenance. This winter was tough on the roads, we had to work on our roads, that was \$3,000 – because the chicken trucks drive in there all the time.</p>
Variability in pay (and quality of inputs)	<ul style="list-style-type: none"> <li>• Tournament: it’s very complicated, there’s no shortcuts to explaining it... with the GIPSA rule it would have been better. They were going to fix it at a base price, not tournament. So if you know you’re going to be paid \$0.058 per lb. So you know if you have a big loss, you’re going to have less pounds going to market, you’re going to have less money. But people could at least pseudo-budget anyway. Pilgrims said to me, “well you get paid for every pound that goes to market.” I agree with that, but it’s <i>how</i> you get paid for those pounds... if you skew my numbers, you’re paying me less and I have no control over that, and that makes a difference in if I can pay my gas bill this month or my mortgage next month</li> <li>• You can’t budget if you never know what you’re gonna get. Like I said, \$30,000 then \$13,000.</li> <li>• <b>Complex was having a big issue with a disease – dermatitis</b> – “at one point we were losing 600 big birds a day. Let me tell you it taxes you to have to pick up 600 6.5 lb birds everyday. At that time I had a meeting with the powers that be down at the processing and of course they didn’t want to have any ownership of that. It was all because we weren’t picking the birds up enough or we were out amongst other people and we brought it in there, or whatever. And I told them, these houses sat empty for 3 years <b>[during a transition period where they quit growing turkeys, left the houses for 2 years, then spent 1 year remodeling them to get ready to grow chickens]</b> there was no disease in those houses. If there’s disease in there now, you brought it to me.... Doing a little investigation into that, it starts from another problem called [disease], and if they were vaccinating the chicks for [disease] you wouldn’t have late onset dermatitis... it’s not just a Pilgrim’s issue it’s an industry issue. They didn’t really want to address it, they don’t want to spend the money to do the vaccinations.... The little green men from mars come up. Somehow that got into my houses but it wasn’t their fault... once they started vaccinating the chicks in the houses it was gone... they knew how to eliminate it all along but they didn’t want to spend the money because the losses were coming from us...”</li> </ul>
Quality of inputs	<ul style="list-style-type: none"> <li>• One time, they put too much salt in the feed. It was winter. On Christmas day my husband and I were out there and we picked up 3,800 4-day old chicks in one house alone. So they poisoned their own birds... In 3 days we picked up 8,000 chickens... They took that feed out of our house, who knows who they took it to, but you still have to wait for all the chickens to die out...</li> <li>• Company field tech said, I think it’s a litter problem. I said, tell me why you think I would be so stupid that I wouldn’t spend \$200 on litter amendment to avoid losing all these chickens everyday. I might be dumb but I’m not stupid...</li> <li>•</li> <li>• <b>Mentioned a study that was apparently commissioned by Pilgrims or by the industry that says that 97% of the grower’s pay depends on the inputs provided by the integrator?</b> <ul style="list-style-type: none"> <li>• <b>(biological risk, linked to quality of inputs and performance discussion, see above)</b></li> <li>• The answer why it makes sense for them to send the bad birds to growers is because they don’t lose anything, they don’t have to pay for cleaning them up or getting rid of them. The farmer will do that, they just move the batch through, they won’t even have to pay that farmer much to clean them up and deal with the mortality because anyway they will do poorly in the tournament.</li> </ul> </li> <li>•</li> </ul>
On-farm production risk	
Access to credit	<p><b>(See discussion of FSA guaranteed loans in debt.)</b></p>
Equity	<ul style="list-style-type: none"> <li>• In theory the idea that you can accrue equity is right. But equity depends on where you are... in DC it’s great, here in WV it’s maybe \$3,000 an acre... I can’t foresee any real estate boom happening here in my lifetime. Unless there’s a prospect for growth, I don’t see any equity accruing.</li> <li>• When we purchased this farm, appraisers are bought and paid for as well, but we needed it to appraise for X amount of \$ so we could get a mortgage for that value. At</li> </ul>

that time it approached for \$1.3 million. In reality, it's not worth half that. If you tried to sell it today you might be able to sell it for \$500,000. But the problem with that is if we wanted to sell, the prospective buyer would have to approach Pilgrim's Pride, and discuss getting a contract with them. And when that happens, that's when Pilgrim's Pride says well, if you want to do that, you'd have to make this change, this change, this change – and that would raise the cost. In reality it would be really hard to sell... If it's somebody that wants the value of the poultry business on the land, it would be really hard to do. (Upgrades and debt – affecting the “equity” claims that the company makes, limiting exit opportunities for farmers)

Retaliation  
(undue or  
unfair  
practices)

- When you start speaking up, they start doing these subtle things. And then you have to prove it's retaliation. It's on you. First you have to find an attorney that even understands the industry to represent you. And then you'd have to pay for it, or get them to do it for free.
- Regarding culture of intimidation and fear that suppresses transparency and farmers speaking out: It's cause they're scared, they won't talk. We go to these meetings and people complain and complain, but they won't step up. We're still here, we still have our farm, but if more people would talk, the less likely we'd be to have to worry about these things. It's gonna take enough people standing up and saying, enough is enough. Consumers don't know, they don't realize the abuses that happen to the farmer.
- A lot of the farmers I know that have this problem, they do it based on the numbers they were given, that they were going to get bigger and make a lot of money. Sometimes it's bad money management, but a lot of them it's that they thought they were gonna set the world on fire and make great and wonderful money, it should cash flow but it doesn't and – when that's you're only source of income, you're in trouble.
- I had one flock that went to market and, as the trucks come in they weight them all, that's how they determine the average weight. At the end you get a weight ticket. My average weight at the bottom of the paper was less than the overall weight on there. I said to them, it's mathematically impossible to come up with an average weight lower than your lowest weight. They wouldn't give an inch, they never would correct that or pay me the difference.
- They say, the number of birds that the catch-crew estimates on the truck is never right. But if they're never right, half the time they should be too much and half the time they should be too low – but it's always too low.
- In the beginning they tell you projections – its all based on an average and they don't explain that. Nobody's always going to be average, that's just not going to happen, and you're never going to always be above average no matter how hard you work. It's deception that they don't tell you that.

Artificially  
created  
asymmetric  
information

Power  
imbalance in  
relationship

- A lot of the people we deal with on this level and in management, they have a job, and part of that job is to be a jerk... some of the things they do are so blatant and so obvious, they know that they are doing it. Any conscious person would know.
- They won't ever answer anything. They just stop talking.
- I've been in the propane business for 26 years, and I've dealt with poultry growers. I've heard them come in and complain, oh they sent me bad birds – and I'm thinking, how are they doing that? But I never realized that growing chickens could be this cut-throat.

Loss of  
autonomy  
and control

- See quality of inputs. Farmer unable to control health or treatment of chicks, can only deal with the results of what the company provides, and suffer the consequences when they make mistakes.

## Farmers #: 10

**Location:** NC

**Integrator:** George's

**Type of birds:** small broilers, 4 houses

**Time under contract:** as part of family, 35 years

**Financing situation:** Still paying loan refinanced because of upgrades on 2 newer houses

**General description:** Bought a 4-house poultry operation that had lost its contract, learned from his family while working. He described a changing relationship over time. When he started the operation he had a connection to the integrator, he said the paperwork was “almost a gentleman’s contract” – and that it’s “proceeded now to I don’t even know how many pages” and a lot of legal charges to review. He said it was good at the beginning when under a smaller integrator which was then sold to Tyson, and then sold to George’s. He has frustrations regarding upgrades that do not seem important for his farm, nor that he needs, but that he has to finance.

### Risk elements

#### Comments

- There was a huge building program going on in the 90s, a lot of these houses around here were built in the 90s... The farm I built, the houses were built in 67 69. I replaced the first ones in 96, so that’s 30 years. The mortgage I have now is for 25 years – are they gonna last that long? I don’t know. You’ve got a building standing that might not stand up to the mortgage.
- With the equipment my integrator wants, it’s about 750,000 to 900,000 for 2 houses to be built

#### Upgrades

- In today’s financial situation you can’t pay it in 15 anymore, you go out 20 years. You’re not going to have that paid off, before you already have to replace equipment... equipment is probably better than ½ the cost of the house
- One thing I have heard over and over since we signed this is, we have to be fair. You have to put up new feed bins, because we have to be fair. You can’t sit out three weeks because, we have to be fair to the other farmers...
- You say if you really want it, you come out and pay for it and I’ll put it in. But they say it’s your farm. But it’s our birds, and you need to do this...
- I run very few medicines on my farm, I have not run medicines in a while. But I was just made to put in about \$4,000 in medicators, and I don’t use them! But, “we have to be fair, we made everybody else put them in, we have to make you put them in”...
- They had a list that came out and they ran this check on every building.... To reach premium standard pay you had to have static pressure, certain kind of lights, and these medicators... did they pay for them? Well you can make more money if you had them in, but if you calculate the dollars it took to put them in, it’d take years for you to pay off the money you had to take out to put them in.

### Debt (Cycle of debt)

#### Asset Specificity, Personal value of assets

- I am also in business to make money. They say farmers are not in business to make money, but I am. I don’t need to make as much money as you do because I don’t want as much liability as you have but I do need to make money, and if you be fair about it it’ll be great.

### Profitability

- The litter was a good thing – we wanted it because we had pasture.
- When I started growing– it took 56 days to raise a 4lb chicken, and they made 20cents per bird (so 5 cents per pound) in 1980.... We played with a couple different programs, we were on large bird or small bird, but if you look back, we are making right now the same price per head that we were making in 1980. We are now growing them in 35 days, which is 20 days less, which is incredible. (He describes thus that the profitability depends on having as many flocks as possible,

it depends more now on the company giving you flocks)

- If everything is carrying it and you're diversified, you're ok. But also I make less than the minimum wage, not even close to it if you try to figure out what we are making.

#### Labor investment

- Poultry farming and dairy farming – they're both 7 days a week, but poultry farming is a little more flexible.
- There are certain times of year when I have more time to work on raising chickens... sometimes I can try to spend more time and see if I make more money... but this is the only business I know of if you're working harder, you're making less money. The harder you're working you start to get depressed because you know things are not right. If you walk in there and things are good things are dusty and you pick up one or two chickens, you know you're going to make money.

Variability  
in pay (and  
quality of  
inputs)

#### Regarding tournament:

- 
- We're dealing right now with high mortalities. Some in the company don't have this, but their neighbors do and they're worried... (he described a disease that was hatchery based that has been affecting many farmers in his complex, causing high mortality rates, lots of labor, and low payments for many but not all because it depends on who got the sick chicks)
- They have the control to make you better or worse. They do know what their breeder farms are doing, they could load you with birds that are not going to perform
- They can control you 1000% and they will do it. Do they do it, I don't think they do it to me, but then why do I have two buildings that are exactly what they want, and those two buildings are doing average or better, and then I have two buildings that they would like to see me update, and those two buildings are doing squat...
- (following comment about group meeting, see retaliation) At the end of it he basically said, we're into a contract, it runs out in such and such date, when we get rid of that contract our feed will change. Basically, it's what we've got, it's what you're going to use, it's the cheapest thing on the market right now, so deal with it...

Quality of  
inputs

#### Biological risk

- Mortality – our day to day operation is composting. It's theirs til it's dead. If we start to get a higher mortality we'll do it off farm.
- I've had to pay to be able to take the birds to the landfill. They're not my birds but I have to pay to take care of them when they're dead.

On-farm  
production  
risk

Access to  
credit  
Equity

- 
- 
- He describes meeting with a group of farmers to discuss mutual problems, and being retaliated against because of the meeting.
- "we met at a church out close to my farm and that's how they knew I was a main organizer. We were having the worst winter you can ever imagine... it was like raising ducks, the birds didn't want to move it was slimy in there... we met to discuss what was going on. we put together a concerned questionnaire about what is going on in this business and why are we having to deal with this. Everybody agreed that's what we wanted to present to them... the first statement out of his mouth was "I will not field any questions that have come from a group setting"
- I got into it to diversify. I was a young man coming out of the military. I wanted to come back to the farm, there wasn't a lot of money, we needed a way to increase money so I could farm... so we picked up on a small 4 house farm.
- At that time it was an accepted way of farming, an accepted practice, there wasn't a lot of government intervention, we thought the more you work the more you

Retaliation  
(undue or  
unfair  
practices)

Artificially  
created  
asymmetric  
information

made. It seemed like a good way of life.

Power  
imbalance in  
relationship

Loss of  
autonomy  
and control

Lack of  
competition  
in the broiler  
market  
(monopsony)

- If you go back to why young people in the late 80s came back and wanted to farm and got chickens – that’s one of the things that was sold, that’s the way the companies sold it in the 70s and 80s. Then they start coming out and saying, if you have 4 houses, this is not a part-time job, you are responsible somebody has to be here all the time.
- I was actually traded off. (He described that two integrators actually worked to switch him from one integrator to the other without his consent – he was dropped from one that was smaller without justification, who would not take his contract back, and he had no choice but to go to the other.)
- Contract is not worth the paper it’s written on. They make us sign a piece of paper saying we signed the contract, it’s all about signing – it’s all lawyer stuff, way bigger than what we are.
- They were making us wash our buildings, and some people still do, wood and water are not meant to be together and you add the ammonia from the chicken litter and all... so I just have never done it, I’ll disinfect but I won’t wash it, no matter what they say
- No they don’t let you be a farmer. Basically we’re given a format on what they want you to do, how they want you to do it.
- The thing that happens in this business is, the company has a spy. I don’t have a supervisor, I own my farm I bought my farm, I am my own boss. But the company wants to say they have a “flock supervisor” that comes around – but we call them the company spy. If I’m running my lights a little dimmer or if I give them a little more sleep, we try everything because we are competing. Well the supervisor is out here saying “hey look, he’s doing really good lets see what he’s doing.” If somebody put in a generator... (He describes that the company will see advantages farmers develop and make them mandatory for all farmers, including technical practices or upgrades). You say if you really want it, you come out and pay for it and I’ll put it in. But they say it’s your farm. But it’s our birds, and you need to do this...
- Poultry farming in our area started with farmers have a few chickens... integration started when a couple people realized if they bought a small processing plant, we could take all our chickens there and the job is done. Those got bought up by larger and larger and larger.
- There’s no longer any heart and soul in it, it’s just about the almighty dollar
- See comment in power imbalance about being “traded off”



## Farmers #: 11

**Location:** AR

**Integrator:** Tyson

**Type of birds:** 6 houses built over time

**Time under contract:** 25 years, terminated by Tyson in 2012

**Financing situation:** bankruptcy, fighting potential loss of house and farm

**General description:** Started growing with 3 houses in the 80s. Had heard from older generation of growers that it was a good business. In 99/2000 they added 3 more houses, following Tyson's commitment to stay focused on chicken and their recruitment messaging. They described that older growers started retiring and getting out of the business when upgrades became mandatory – in the 90's. Once they had all 6 houses, they were in dept \$600,000 and didn't have the option to get out. In 2002, Tyson already expected updates on even the new houses. They describe the frustration of having built this investment on sentimental land (3<sup>rd</sup> generation family farm) which meant they couldn't sell it, they had to get out from under the debt somehow, which meant they had to try to keep up with the upgrades despite increasing debt and expenses. Tyson wanted around \$250,000 in upgrades for their 6 houses. They figured out the loan details and would have needed to extend another 15 years. At the time they were in their 50s and 60s, and did not want to have a new 15 year, \$500,000 debt over their heads – to be raising chickens under contract at age 80. They had 3 years left on their loan. They asked if they could just finish out the 3 years, Tyson said no. They worked with their bank [Farm Credit] to make a plan to upgrade 4 of the houses, and shut-down 2, to reduce the amount of debt they would be in. Tyson said no, it was all 6 houses or nothing. When they didn't make the upgrade their contract was terminated with no negotiation. Others in the area were also terminated as a first-wave, example making. After that first wave Tyson needed the production and could not continue shutting off contracts, some farmers were allowed to switch complexes and continue growing without the upgrades.

### Risk elements      Comments

- They describe that older growers had said it was a good business partially because the older generation of poultry growers didn't have debt from \$250,000 houses. They describe the transition when older growers retired because they knew it was going bad. Specifically the transition point was "when they started wanting updates." And it, we had knew some people, the people that was most successful benefited was a generation before us. I grew up around it. As a matter of fact I caught chickens the summer before I graduated high school and it was a pretty good deal. If, you could get out of debt, of course those people got out of debt because they just didn't take as much to get in it and they continued to grow, even a lot of them [were still in it] when we was started and we had all the debt and was competing against them. And it originally was a pretty good deal. I've talked to older growers that grewed in it and they were saying they could see when it started going bad and most of them retired and they said that they got out of it just in time. The bad thing about it is when you get into this you just can't get out because if you do, if you build it on sentimental land like we did, you can't get out. (personal asset specificity.)

Debt (Cycle of debt)

### Upgrades

- We started in 1987 and grew till they shut us off over the premium contract dates that we had to do that we couldn't do. We couldn't start over at 60 year olds and go back in where we was in the beginning and we like I said we'd grown for 25 years.
- When they started wanted updates. When they started wanting... well we gotta have this, you gotta have that. You gotta have. It started out, first it was nipple drinkers, and then it went to tunnel houses and then it went to black out curtains on the south side, then it went to blackout curtains on the complete house, then it went to fully enclosed house, then it went to computerized houses and it just kept snowballing into more stuff, more stuff, and all this more stuff ended up costing more than our original building was.
- We built, the last three was built in 2000 and 99, about 2002 they were wanting

updates, they were giving addendum pay increase for people that updated and built and then built new houses to new specs when the addendum was half a cent a pound more in pay. And my houses was built to Tyson's specs at 2000, 99 and 2000 and two years later they were considered minimum spec'd houses.

- The whole concept of it is that you get out of debt. All this money that you're putting in just mortgage, it's going to be yours one day, that's what keeps you going. On 110 degrees days you've worked with chickens and all that - chickens are dying from disease and whatever and you come out and you just think man you keep looking at that it's the light at the end of the tunnel. Really, that's what motivates you. Oh man, I've got two more years. I've got three more years. I've got five. That's all I gotta do is go five more years. And then I'll see some decent money and when we went into this last time and built the three we sat down and figured it out, we looked to see how long it would take to, we took all those things into consideration. They refocused to chicken, what our age was, how long it would take to pay those out. I mean it wasn't a spur of the moment deal. We did know what the pay was but we was trusting independently on the management knew what they said and we done that and we was what 3 years from getting completely out of debt. And... And they shut us off.
- They come up with all this deal and updates and all that, it's going to take us about \$250,000 to do everything... You know we were going to be back in debt some \$500 something thousand dollars, the only thing we could work it out you had to roll that over into one big loan, and start all over again. It's like it was 15 years ago almost.
- Starting over at 62 or 3 which I was coming up on and you still owe 500 to 600 thousand dollars it's going to take a 15 year note, it did. It's just starting over. We'd be out there in wheel chairs trying to pick up the chickens. (They tried to arrange a way to upgrade 4 houses to reduce the debt, Tyson said no – all or nothing. They couldn't manage the loan, so Tyson cut off their contract and would not negotiate.)
- You know when Tyson shut us off the check quit going from Tyson to Farm Credit and you can't possibly make those big payments. We couldn't and it just run it's course. Here comes Farm Credit on foreclosure and it just led to bankruptcy, we had to file, we ended up filing a chapter 12 bankruptcy which gives us 5 or 6 years to try and get it paid off, try and get a new business, try and get something started where we can make the payments. (They have been in a battle with Farm Credit, which tried to force them to foreclose rather than pursue other business opportunities. Farm Credit tried to claim their cattle business as collateral despite the fact that the cattle had never been on the loan in the first place. They have been in an intense fight to preserve their farm and home, carrying the debt of the chicken houses.)

#### **Asset Specificity, Personal value of assets**

- The way I see it, it's a pretty easy deal to understand, they gonna keep you in debt because what we was talking about the generation before us that got into it the pay was a lot better. Then money motivated you. It's either gotta be motivated by pay or debt. So they've lost the pay edge then they've got to fall back on the debt to keep you in debt. The older growers, so if they can do a 7 year update or a 10 year update they've got those people locked in for that many years and it's just basically collateral, it's their collateral that they can depend on the growers to keep growing and then they don't really have to worry about the pay, the motivation, or the profit agreed that would keep you in the business.
- Once you lose your contract with Tyson then chicken houses is valued at 0. Even though you've got tin, you've got stuff you can sell, no value anymore. They won't even give me insurance on them, it's you know, they are worthless. (They tried to get insurance on the houses as part of their new business raising chickens independently, and can't, because there is no precedent of value without a contract.)
- My mother lives right up there, I want to be able to take care of her. I want my kids to be able to come back home.



## Profitability

- Important piece of profitability connected to upgrades – see mention above, new houses built in 2000 became minimum spec houses in 2002 when upgrades were required. Upgrade and new houses were given a boost in base pay, but not enough to pay for the actual cost, and if in only 2 years this boost could be downgraded then certainly not for long enough time. Regarding how debt cycle becomes a source of motivation and thus pay does not have to be: And they don't have to worry about paying. They can just string you along just enough to survive and that's it.
- In 2006 they got the first pay raise in 10 years, which was one quarter of a cent. (Pay had NOT been adjusted for inflation during that 10 years, this was an actual and only increase of ¼ cent.)
- The way the checks always worked is they the lender that you're with you set up an amount they take out a percentage like 50%, 52%. When you get your check the lender get's his straight off the top. It goes straight to the bank we never see it. Then if you got any gas that you bought through Tyson, their gas company. Then that gets taken off at a set amount that you say you want taken out every batch and if that doesn't come up to pay for your the gas that you've got it was what you do, pay out of your own pocket. Then after all that is taken out then you get your check. If there is any left. If there is any left. Sometimes you'd get enough to buy a six pack of coke. (In addition to this though there are other expenses not taken out of the check – electricity, labor, maintenance, etc, which are not covered and are generally out of pocket.)
- Well Tyson grew to be the number one chicken producer during all this time and making all this amount of money, one year their top five execs got the highest paid salaries in the state of Arkansas. 2003 I believe. While we got 0 raises.

## Labor investment

- They always liked the grower to be at the farm when they came. They even marked it on the—they had a deal whether you was present or not. And they claimed it didn't make any difference if that was the case but they have the checklist. But they did like to see you involved in it and the only bad thing about that, most people had to go off and make a living, help make a living at something else (Contradictory to the National Chicken Council proposal that this is 3 hours a week part-time, low commitment job.)
- Nearly every chicken grower had to have an outside income. Most of them worked, both of them worked and had hired help to take care of the, or the kids.

## Regarding tournament:

## Variability in pay (and quality of inputs)

- Specifically regarding the “performance” consideration in tournament. This links to – avoiding paying farmers information rents for ability levels, standardizing the whole system, but then at the same time claiming to pay based on “performance.” They was solid walls and that's the reason that I know that it's more than performance. They talk about performance and it's all motivated by performance but it's, you can do the same thing with a fraction of the money and they went in and just done a lot of overkill on the houses. It was quite apparent that they was trying to run the cost up just as high as they could. They was putting a computer in it and the vent doors and they wanted the solid walls and more fans but you can put in the vent doors, two more fans and put the monometer, the static controller in it that's not computer, and achieve the same thing that they was... if they was gearing it toward cooling the chicken, the temperature of the chicken. It could have been done for a fraction of the cost but they went in and they just, it was like they went in and they looked at everything they could that they can think of for you to do to drive that cost up.
- General variability: Well it was all over the place. The tournament system it's, it's the most unfair thing possible. If the company had everything on their end working,

in other words, if you had the best chicks, the best feed and all that, then maybe so, it worked. But the way the variety that we was seeing, it allows management to pick and choose. Especially when they're having problems. When the complexes start having problems and they can't supply everybody with the same, then they pick and choose who gets what. (link to quality of inputs. Link to Rodriguez/Goodwin study, regarding financial justification for placing discriminatory flocks amongst growers depending on who is high cost and low cost in tournament.)

- But on the tournament system, on the pay system, they'll pretend well if you take care of your chickens, if you do good you stay at the top, you can make some money. That's what you gotta do. You gotta stay at the top. But that system is not set up that way. That's the deception. The system is set up if everybody grows the perfect chicken that week, everybody would make average pay. That's the way, their cost is fixed for that week what they're gonna pay the growers. Now if you do good and get up there at the top, somebody at the bottom that's gonna be taken away from somebody at the bottom, down the deal. It's not like if everybody grows perfect chickens, that everybody's gonna get that top pay.

Quality of  
inputs  
On-farm  
production risk  
Access to credit  
Equity

- (see above, and the link to the discussion about "performance" in tournament.)

#### Biological risk

- (see debt.)
- (see debt, also an issue of misrepresentation)
- Tyson made a "recommitment" to chicken that convinced these farmers to invest in 3 more houses in 99 and 2000, they had 3 already.
- It was sold as a long term investment. Basically you work for that for 10 years you get the litter, you do pretty good you can make a few bucks, the whole goal is it's sold as a long-term investment, that's how it was to us. You get out and then you're going to see this money, all your sweat equity, all your debt and all that you know, that's going to come out to you and you're going to have this facility that if you take care of that you can just grow forever.
- Didn't get the pay raise that we was led to believe was gonna do, that the management was gonna solve all these problems and we was gonna refocus on chicken and basically get good, what their specialty was. (They describe a disconnect between the company promising growers a recommitment and improvements, then actually moving on and buying IBP and moving into beef, which collapsed, and leaving the growers behind.)
- (See tournament comment regarding deception. The tournament is explained in a way that implies that working hard means you'd stay on top and get the top pay, but in fact it doesn't work that way. Tournament is not explained adequately to the farmers.)
- Basically that's what they do. They just don't, officially that's how it works they just don't renew your contract and of course they did send us a termination letter, they did actually do that but they also let other growers that didn't update go to a different complex and still keep growing too. (What do you think that was about?) Because they can get growers to build houses, they didn't have enough houses up and going because they cut everybody off. (How many people in this area were cut off by that?) We don't know exactly because we don't have access to that but I think we came up with about 15 to 18 growers and all of them senior growers. (They are describing a sort of intimidation and bullying practice to force upgrades on growers. Tyson announced the mandatory upgrades in 2010 in a letter saying by the next contract, you must have made these upgrades or no more chickens. Those that protested were cut off in a first wave as examples. When they actually needed production, a second wave were allowed to switch complexes. Meanwhile they gave preference to new growers coming in under new loans with new updated houses.)
- 

Artificially  
created  
asymmetric  
information

Power  
imbalance in  
relationship

Loss of  
autonomy and  
control

- When I started the ticket that they filled out about my houses called supervisors, they had supervisors, they come in and told you what to do and how to do it. They controlled everything feed, water, the whole shabang.

Lack of  
competition in  
the broiler  
market  
(monopsony)

- They took away what any rights we've had they've done their best to take that away from us and instead of the government protecting me the first number one job of the government is supposed to protect me, that's what the founding fathers intended. But instead I, as a grower don't matter as a person, the big corporations matter. I think you can go look at the rules and the regulations and the laws and stuff and they look like they're pretty hard to figure out.

Input price risk  
– propane/fuel

- At one point they used to give us a gas bonus, all that. The gas bonus they quit doing that when the gas prices went up they quit giving us gas bonuses to help us.

## Farmer #: 12

**Location:** AR

**Integrator:** Tyson

**Type of birds:** small broilers, 3 houses

**Time under contract:** about 10 years

**Financing situation:** 3 years left on loan, does not want to upgrade

**General description:** The farmer fought with the Americans in the Vietnam war. When the Hmong people of Laos were being killed in the jungles by the Vietnamese Army, the US offered amnesty visas. The farmer initially arrived in Chicago, where a larger population of the Hmong community is. He worked 32 years with an aluminum company, he says it was 7 days per week work, too hard. He saved money, he wanted to be a farmer again. He found a farm in AR that was cheap that had chicken houses on it. He got a loan for the land, planning to make money from the chickens to pay off the land. His pay ranges \$10,000 - \$15,000 on three houses each flock – fuel costs are extracted directly by Tyson’s fuel company and the mortgage is extracted directly. He also has some cows, sometimes he has to sell the cows to pay the bills. He hopes to finish the 3 years left on his loan and quit, and he is hoping to avoid making an expensive upgrade to computers – which would cost him around \$30,000 total and would require refinancing for longer. He is a member of the immigrant community that is growing rapidly in rural AR. He describes an influx of Vietnamese, Laotian and other Asian immigrants who are moving from other parts of the US to try to return to farming. He describes families pooling all their cash resources saved from working hourly wage jobs elsewhere in order to make downpayments on brand new chicken houses. He says now Tyson wants large sites, 7 or 14 house sites – so these are very large loans these groups are negotiating, most likely with AR Farm Credit. He describes one group he knows of 5 families who bought land and 2 old chicken houses from a bankrupt chicken farmer, then built 8 new houses and upgraded the 2 old ones. Their loan was over \$2 million. They pooled all their resources in five families to get it. The children were working in the houses, everyone was, and there was no money even for food – because they did not understand that they would not receive a high return on that large of an investment at first. After a couple years they quit and walked off leaving everything behind, the bank foreclosed. Immigrant populations moving to chicken farming are a critical component in the cycle of debt and cycle of new and old farmers.

### Risk elements

#### Comments

- When I pay off the land over here, I quit.
- When one makes no good [goes bankrupt] they quit, comes in a new one....  
(regarding bankruptcies) I think, it hurts for the government. But they don’t care about government hurt. The bank too, they don’t care about government.
- When I first started – not many people growing chickens, and it was cheaper too.  
He bought 56 acres land and 3 houses for \$300,000 when he started. Now, you buy a land, the house – they don’t need 1 or 2 houses, they need 7 to 14 houses right now. New grower, they don’t know.
- I put down 30% down.
- Every 3 year or every 1 year you sign a new contract, sometimes their system changes, new guys coming. My contract is 3 years. They’ve got to check my house, make sure everything OK. I spend a little bit maybe \$3 or \$4,000 update. They checked the fans good, motors good, most is good, alarm system good, everything – but if no good you’ve got to fix it before they give you the contract again.
- I signed loan 15 years.

### Debt (Cycle of debt)

#### Upgrades:

- My chicken houses are 1978 right now. No computer. They don’t serve me [many chickens] because they’re old.
- If they say it, I have to do it. (regarding upgrades.)
- Just computer, about \$3,000 per house for computer and setup is \$10,000 per house. I don’t need it, I am not computer. I check the chickens. I know how to feed them.

- I've got 3 more years on my loan.
- This year it maybe computer, next year a new one coming. Does computer make anything? No, people make everything. Computer is down, chicken dead. I can handle the chickens.
- A lot happening, older growers leaving new growers coming in. They're coming, they're building maybe a lot.

#### Asset Specificity, and personal value of assets

- If they cut me off, how can I pay the chickens, the money for the farm? You can tell the bank, they take your farm.
  - His flock income was less than \$10,000 in one settlement he showed me. He showed how the fuel, mortgage and other deductions were taken out first – he explained this is what he lives on, so that is his income for 2 months.
  - If you try to make a million, you can't. If you have a million you can make a million. If you have a hundred you can't make a million.
  - Chicken farming has some risks, for some. For half it is bad.
  - I've got car, I've got bills – sometimes I have to sell the cow to pay for the bills.
  - Chicken is not a safe business for everyone. Not everyone, just someone. If you've got money, you can buy, OK.
- Profitability

#### Labor investment:

- The American people, they don't like raise chickens... too much work for them. Nobody likes raise chickens. But it's OK for Asian people.
- Variability in pay (and quality of inputs)
- It is OK, it is hard work, you can make money. But it is the flocks, if you get a bad flock...(see below)
- Quality of inputs
- If chickens come good, good, good all the time it's ok. If in 3 flocks, they come no good one time, you have a problem. One year is 6 flocks, if 6 flocks win then you're good. If you have 3 bad flocks, it's no good. You got to spend a lot of money.
- On-farm production risk
- Access to credit
- Equity
- (see debt)
- He bought the chicken house because he needed to buy land to have a farm again, and he found a farm for sale for cheap that had chicken houses on it.
  - New grower, they heard from somebody, with chicken houses you can raise money. They get poor you know, they build 7 to 14 chicken houses. 3 houses, about \$600,000. If you have money, put down half, that's OK. If you don't have \$300,000 now, no, don't do that. Maybe halfway through you quit, they stop you. Before 20% down you can't do anything, don't do it.
  - The new people, they are mostly Laos and Vietnamese. Vietnam maybe, they don't stay long, maybe a couple years and they will quit. They hear by people. One guy, Vietnamese coming here, got 7 houses. They hear from other people. They tell the Vietnamese to come in. They get 14 houses and 21 houses. Loans do not include land.
  - I don't know how they get the money for the downpayment.
  - New family, five families, got 10 houses there. They had nothing, they invest everything. They had to invest \$2 million. Five people shared \$2 million. They had nothing, no money for food nothing. They quit. They are fooled. I don't know what the bank is thinking, they can make the government hurt, they don't care. They don't care about the farmer.
- Artificially created asymmetric information

Lack of  
competition  
in the broiler  
market  
(monopsony)

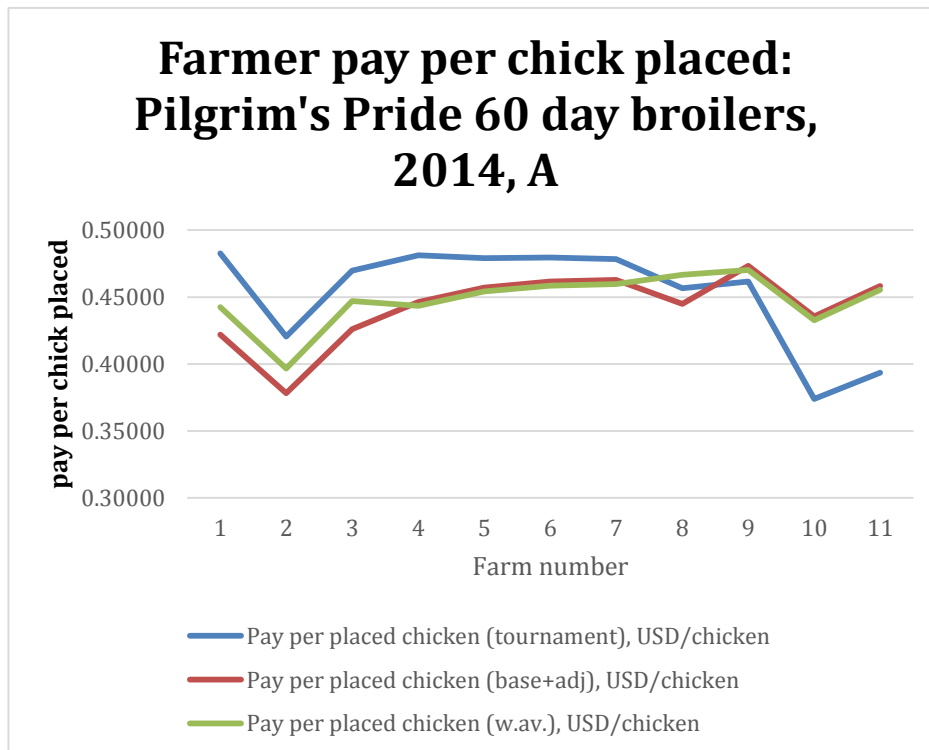
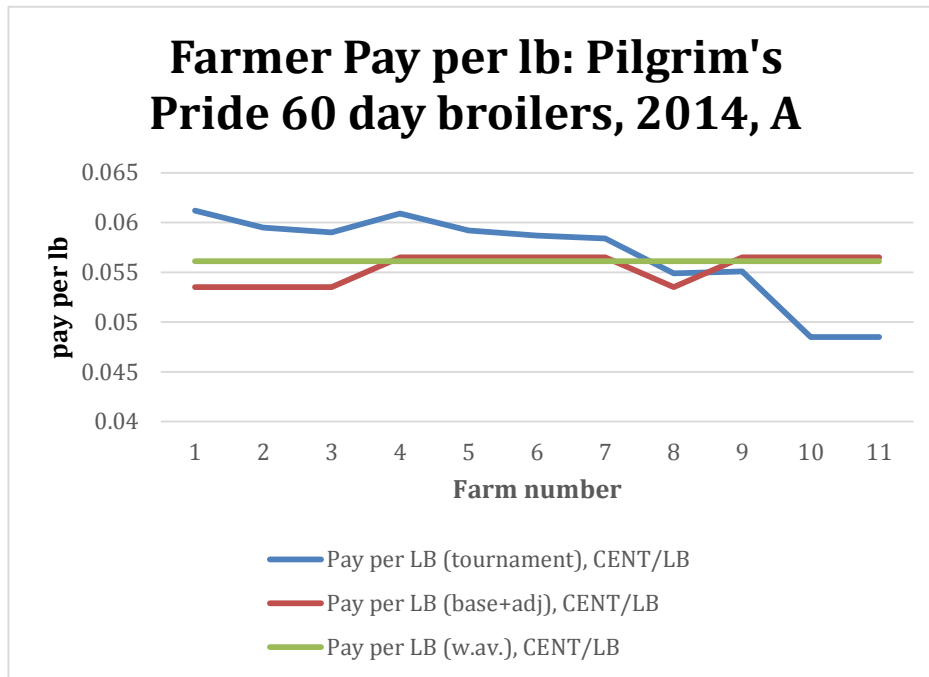
- The immigrants now coming, they have a lot of kids – the kids are working (in the chicken houses?) yes.
- The Hmong here now they have food stamps. I don't know how or why, I don't have food stamps, but with kids – they have food stamps. (He is describing the need for government support for the immigrants living under the poverty line, using food stamps, because they can't make a living raising chickens.)
- They are coming and asking me, I want to buy a chicken house. I am saying, how much money you have – you don't have enough money. You're working 3\$ an hour? You can't buy \$250,000 chicken house. You got \$50,000 in the bank? You can go, you can buy \$100,000 farm, ok. You can't buy 7 chicken houses. Couple years, and you're gone, and that's it.
- Before it was OK, before you raise chickens and you have the chickens, it's your farm. Now, a lot of companies – a lot of names. OK Farms, Tyson... so many companies now, they don't care about growers.
- I think, it hurts for the government. But they don't care about government hurt. The bank too, they don't care about government.
- I heard in my town, they say – the farmers are the backbone of the nation – the government should help the farmer. Not like Tyson, cheats the farmer. (he described that OK farm passed through government support money to help farmers, but Tyson did not.)

## Appendix 2 – Overall Farmer Response Chart

Groupings by topic	Risk Elements	1	2 & 3	4	5	6	7	8	9	10	11	12	SCORE
Debt	Length of contracts	–	Neutral	–	–	–	Neutral	–	Neutral	Neutral	–	–	-7
	Asset specificity	–	–	–	–	–	–	–	Neutral	Neutral	–	–	-10
	Upgrades	–	–	–	–	–	–	–	Neutral	–	–	–	-11
	Access to Credit	+	+	+	+	+	+	+	+	+	+	+	+12
	Equity	–	–	–	–	–	Neutral	+	Neutral	Neutral	–	+	-5
Profitability	Price risk inputs - fuel	n/a	–	–	n/a	–	–	–	–	n/a	–	Neutral	-6
	Revenues over time	+ –	–	+ –	+	–	Neutral	–	Neutral	+ –	–	+ –	-4
	Labor investment	Neutral	–	Neutral	–	+	Neutral	–	–	+	–	+	-3
Tournament payment calculation	Variability in pay	–	–	–	Neutral	Neutral	–	–	–	Neutral	–	Neutral	-8
	Quality of inputs	–		–	–	–	–	–	–	–	–	–	-10
On-farm production risks	Biological	–	Neutral	Neutral	–	–	–	–	Neutral	–	–	Neutral	-7
	Environmental	–				–		–					-4
Symmetric Information	Messaging and recruitment	–	–	–	–	–	–	–	–	–	–	–	-12
	Access to production info	–		–		–	–	–	–		–		-7
Business Relationship Dynamics	Business Ethics	–	–	–	–	–	–	–	–	–	–	–	-12
	Retaliation	–		–		–	–	–	–	–			-7
	Autonomy and control	–	–	–	–	–				–	–		-8
	Regulation or enforcement	–				–	–	–	–	–		–	-7

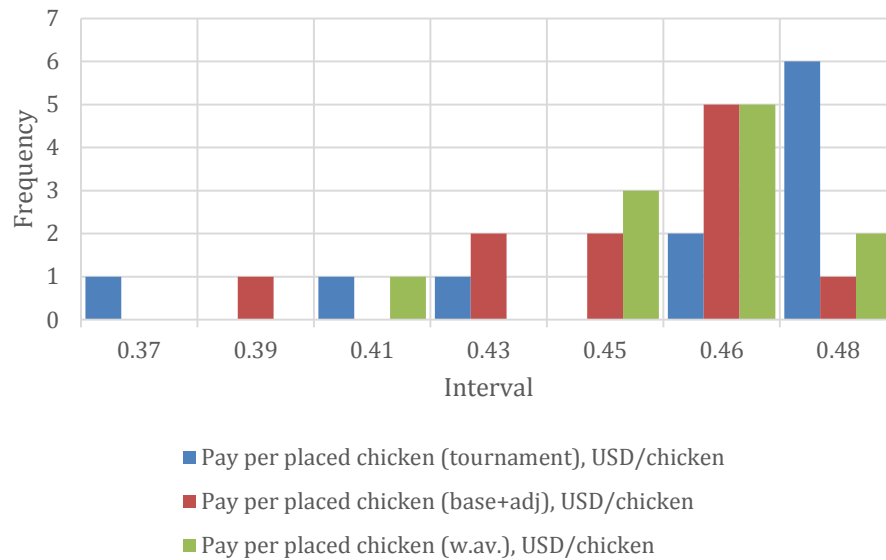
Farmer responses are characterized by a positive, neutral or negative experience of the risk elements. This is indicated by “+” if the element provided benefits to their experience and “–” if the element was linked to risks that they experienced on their farm. If the farmer did not experience benefits or risks in particular related to an element, “neutral” is entered. In some cases farmers experienced both positive and negative attributes for an element, in which case + – is indicated. If an element is not relevant to that farmers’ situation, n/a is entered. If a topic was not discussed or did not come up, the element is left blank

## Appendix 3 – Additional Charts of Settlement Data

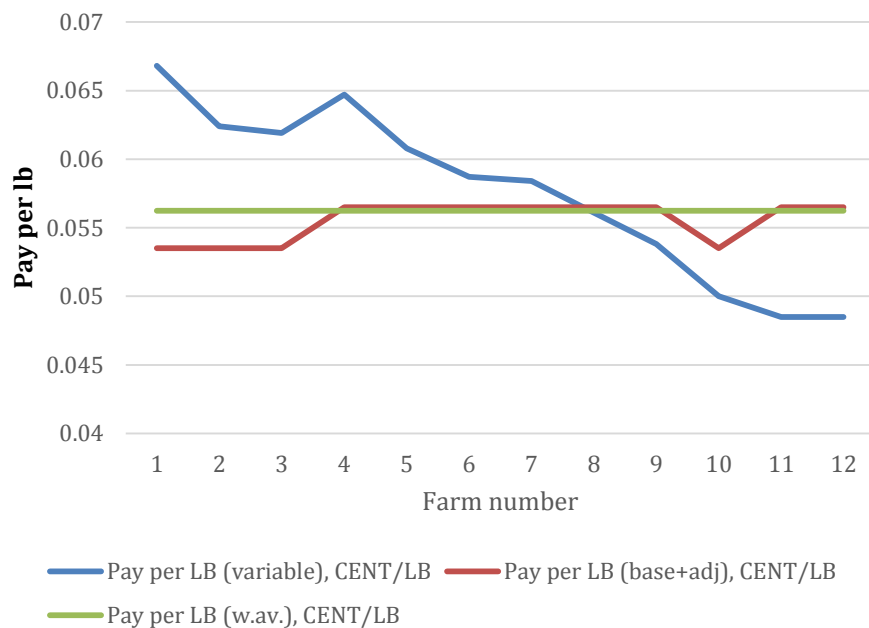




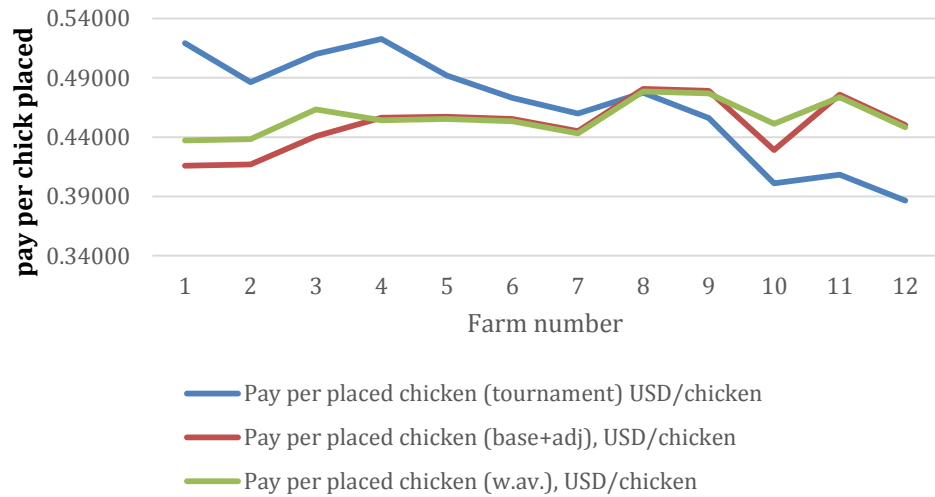
### Farmer Pay per chick placed: Pilgrim's Pride 60 day broilers, 2014, A



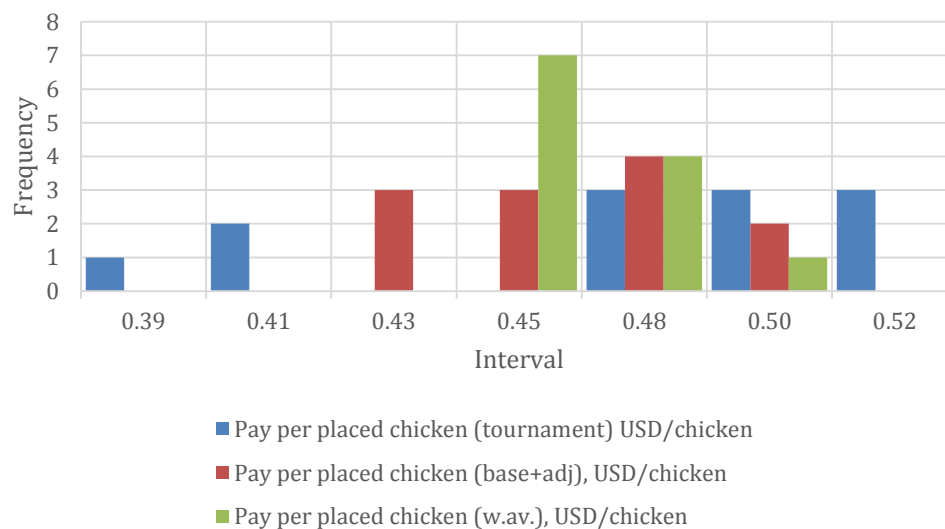
### Farmer Pay per lb: Pilgrim's Pride 60 day broilers, 2014, B



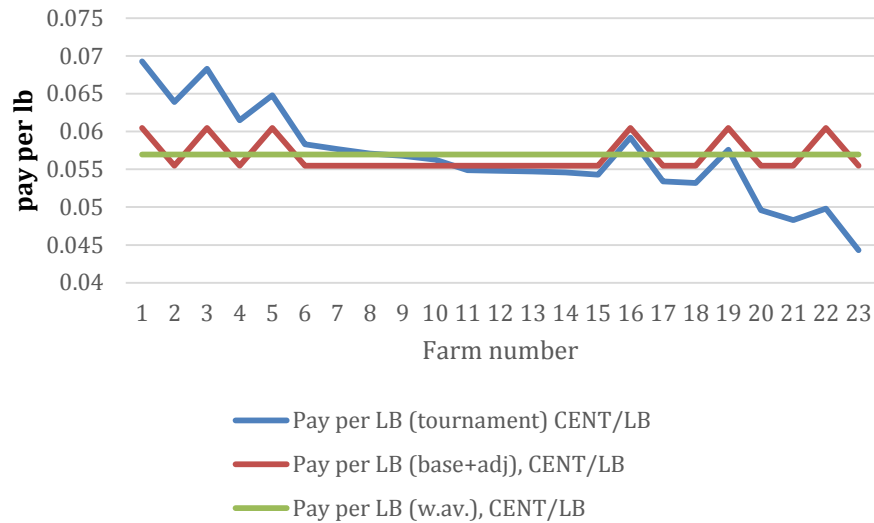
### Farmer pay per chick placed: Pilgrim's Pride 60 day broilers, 2014 B



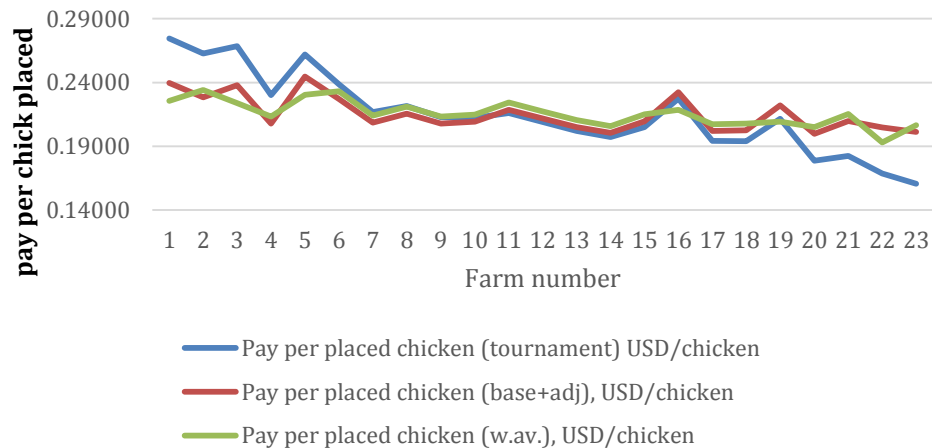
### Farmer Pay per chick placed: Pilgrim's Pride 60 day broilers, 2014 B



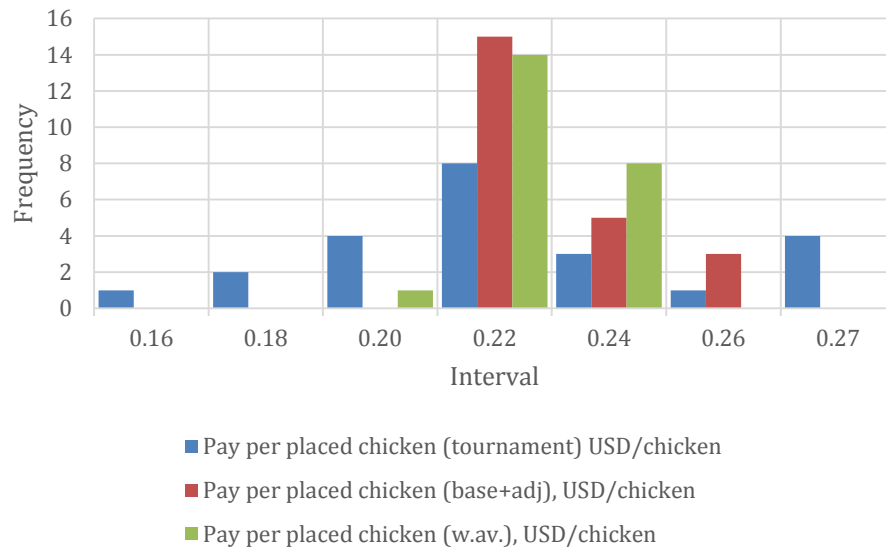
### Farmer Pay per lb: Pilgrim's Pride 30 day broilers 2014 B



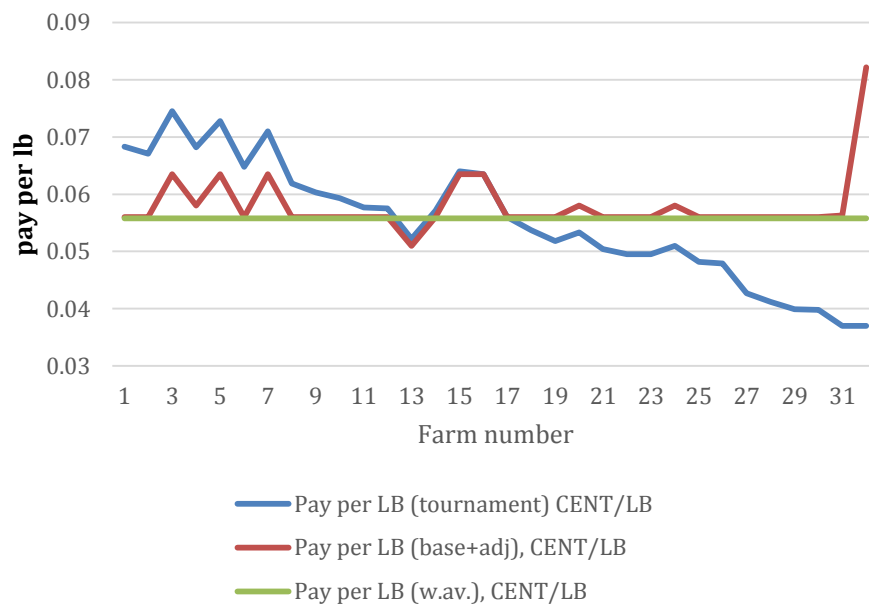
### Farmer Pay per chick placed: Pilgrim's Pride 30 day broilers 2014 B



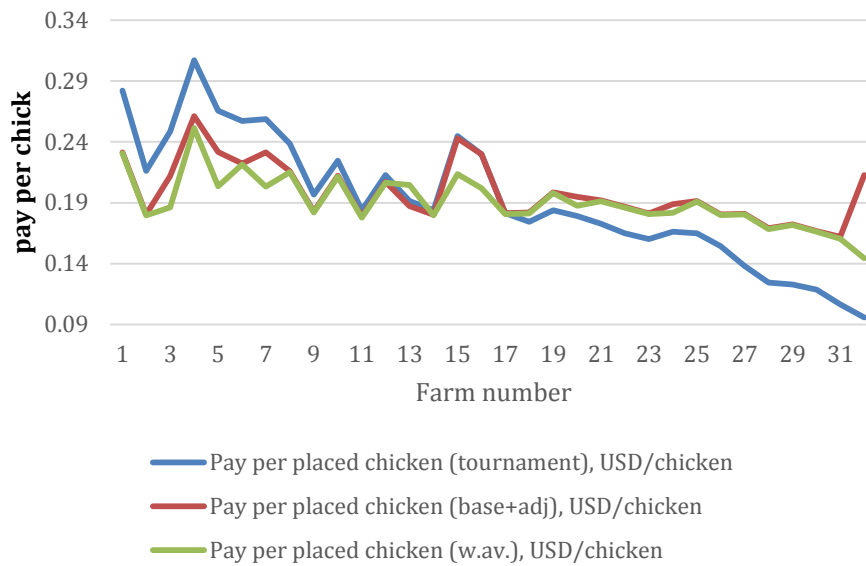
## Farmer Pay per chick placed: Pilgrim's Pride 30 day broilers 2014 B



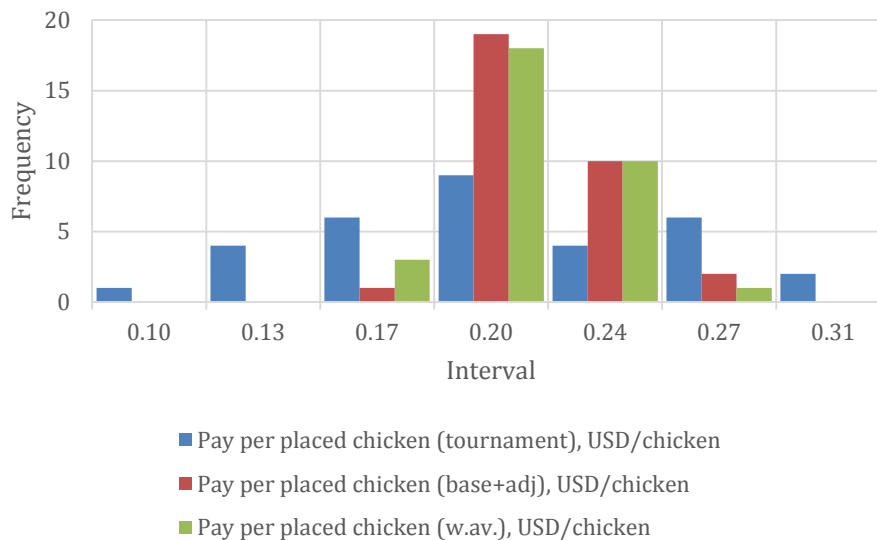
## Farmer Pay per lb: George's 2015



### Farmer pay per chick placed: George's 2015



### Farmer pay per chick placed: George's 2015



(This is an excel sheet that is very large. It cannot be merged into a word document easily. I recommend viewing it on the computer with the zoom function if possible.)

elements	Bardue 2015	Bilgin's Bride 2000	Bilgin's Bride 2012	Georac's 2000	Georac's 2010
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[illegible]





			<p>Confidentiality and Biosafety Addendum went to greater to 2014: ... "Even if reasonable practices and safety measures are taken, the fact of the matter is that permitting non-confidential personnel into the facility increases the potential for the transmission of diseases. It is for this reason that your compliance with this obligation is an integral component of the services which you have been retained by Pflizer's to provide... In addition to your obligation to comply with biosafety measures, your 'green' agreement also imposes a confidentiality obligation pursuant to which you are prohibited from disclosing any and are obligated to protect all proprietary or confidential information of Pflizer's to which you are exposed... As such, failure to comply with these obligations is not only a breach of these but, in the event Pflizer's suffers damages as a result of your breach of these provisions, you would be liable to Pflizer's for such damages."</p>	
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