

INSTITUTIONAL ENVIRONMENT AND CONTRACTS: A CASE STUDY IN THE AGROINDUSTRIAL SYSTEM OF BROILER FACTORY FARMING IN THE WEST OF THE STATE OF PARANÁ, BRAZIL

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Abstract: Discussing contracts is part of the agenda of researchers not only in law and economics but also in other areas related to agribusiness. Contracts are basic tools for coordinating negotiations in the various agroindustrial systems. This article examines the limiting content of most contracts used in broiler farming in the west of the state of Paraná. Specifically, it focuses on the contract models that broiler farmers and agroindustries frequently use to identify, through economic analysis, bounded rationality and opportunism in establishing provisions to meet the economic requirements of the involved parties in an imperfect institutional environment.

Keywords: Contracts. Governance. Rationality. Institutional environment. Agroindustrial system.

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INTRODUCTION

A contract, in essence, is a tool to settle individual interests, allowing the parties involved to move closer to achieving a particular interest in a business environment that, in theory, would have zero cost. Economically speaking, in a free-business environment, adjusting interests will lead to the best possible allocation of resources, maximising results to the parties and, if one chooses to address more than individual interests alone, a better result to society.

Given the complexity of economic relationships, the nature of the contractual category itself has been modified, mostly due to the need to expedite and the globalisation of businesses. It is noteworthy that in standard contracts, or the ones offered in mass, the expression of the interests of at least one of the parties is very limited, often only to accepting or rejecting the terms presented by the other party.

The imbalance between the parties demonstrating their interests and the prevalence of one of the parties in charge of the legal relationship is part of a context of economic and often cognitive disparity. On the other hand, the possibility of refusing the offer presented is also affected by related factors, for example, the specificity of the desired relationship and the competition in that particular market.

In agribusiness, producers and agroindustries often establish a legal relationship in which the contracts are seldom negotiated, in the broad sense implied, but are instead limited to the acceptance of the models the companies use. The established relationships are essential to establishing production flow mechanisms and maximising profits, ensuring

investors reasonable rates of return.

The contracts will be accepted and repeated, with a certain independence of the limited content, much more so because of the customariness of the negotiation, lack of option, and even the convenience of the parties involved than because of the justice or completeness of the contractual instrument.

The aim of this study is to identify, on one hand, the norms to which contracts between producers and agroindustries are subordinated, and on the other, the bounded limitations in the integration contracts between broiler farmers and agroindustries. This assessment must consider the externalities associated with business to indicate what can be done to mitigate conflicts in an attempt to improve the system, reduce transaction costs, and promote efficiency in this important agroindustrial system.

The potential increase in efficiency is essential to the survival and improvement of broiler farming in the countryside of the state of Paraná and for the development of the local economy.

1. AGROINDUSTRY IN PARANÁ

Agribusiness contributes significantly to total Brazilian production. Its various activities are directly involved in regional development (KUHNS et al., 2006).

Among agroindustrial systems, broiler farms stand out because of the high production of meat, with 12.5 million tons expected in 2010. They generate 5 million direct and indirect jobs. Production is concentrated in the states of Paraná, Santa Catarina, Rio Grande do Sul, and São Paulo, reaching a total of 7.1 million tons of chicken meat in 2009 (MENDES, 2009). Paraná stands out in poultry slaughter and meat production because it has a high concentration of resources and skilled labour and it provides leadership and promotes regional

development where the agroindustries are located.

The technology available to improve efficiency has developed at a reasonable rate. In 1960, eight weeks were needed to produce 1.5 kg of chicken meat, with a feed conversion rate of 2.5:1 (in other words, 2.5 kg of feed per kg of meat). Currently, to produce the same amount of meat requires 30 days, and the conversion rate is 1.76:1. All of this technology required high investments and consistently strong management of the resources used in the broiler farm industry.

Despite the magnitude of the numbers and investments involved in broiler farming, various challenges prevent chicks from becoming meat available to consumers. Therefore, it is essential to develop governance structures to mitigate the problems arising from transactions that do not take place.

This study focuses on the governance structure adopted by broiler farmers and the agroindustry in integration.

Due to the volume of resources and the competitiveness of producers in other countries, there is a growing demand for efficiency in the agroindustrial system that results in a reduction of processing costs (a sum of production and transaction costs) in order to avoid derailing the maintenance and growth of the system.

In the effort to mitigate the problems resulting from behaviour and uncertainties in the economic environment where this kind of business is conducted, the governance structure of the contract is vital to reduce displays of opportunism of the parties involved with regard to appropriable quasi-rent in the transactions at hand. Contracts, however, will be necessarily incomplete, in spite of the never-ending search for unreachable perfection.

In addition to regulating the private interests directly related to the negotiation, well-elaborated and correct contracts help to form an environment that favours economic development and, consequently, ensures levels of freedom

compatible with well-being.

2. THE TOOLS OF NEW INSTITUTIONAL ECONOMICS

New Institutional Economics (NIE) is a relatively new field of study in economics. Since the 1970s, more researchers have been concerned with organisations and institutions. NIE became transdisciplinary; in addition to the economic analysis of transactions, it embraced such areas as business and law. Based on the assumptions that there are costs when the price system is used, that the transactions take place in a structured institutional environment, and that institutions influence agents' decisions and property rights, NIE concentrates its efforts on the study of how institutions affect organisations and how organisations are in turn affected by institutions.

In the beginning of the twentieth century, companies merged, giving rise to questions that were dismissed by conventional microeconomics. In 1937, the researcher Ronald Coase, in his work *The Nature of the Firm*, set forth a question that could not be answered solely from the classic analytical point of view: "If production is regulated by price movements, production could be carried on without any organization at all, well might we ask why is there any organization?" (ROCHA JÚNIOR, 2004, p. 302). When the company is looked upon only as means of production, how can we explain the emergence of many organisational structures with different attributes and uses? What is the economic importance of property rights, the asymmetry of information, governance mechanisms and institutional structures? Upon seeing that classical microeconomics lacked answers to these questions, Coase thought that a change in the concept of companies was needed; a company, according to him, should be treated as a complex contract with the role of organising the economic

agents inter- and intra-company.

The governance structures to be chosen (hierarchy, market, or mixed management) are those that bring greater efficiency to the transaction and thus provide a higher sense of achievement to the parties involved. According to Fagundes (1997, p. 2), "the search for a more efficient production reflects on the agents behavioral patterns and on how economic activities are organized and coordinated".

These transactions, however, generate costs; otherwise, agents would be indifferent to adopting or rejecting a different governance, such as market or vertical integration. The existence of transaction costs, therefore, is the reason a certain form of governance is chosen. To Coase, transaction costs relate to economic agents involved in gathering information about the deal and also about the negotiation and contracts. Farina (1999), complementing Coase, defined transaction costs at four levels: the first has to do with the costs of negotiating and elaborating contracts; the second relates to expenses agents incur when measuring and monitoring property rights; the third refers to the costs of making and running contracts inter- and intra-company; and the fourth addresses the costs agents incur in adapting to environmental changes.

North (1994) identifies four variables with a direct influence on transaction costs: 1 - The costs of quantifying attributes of goods and services, evaluating not only the physical dimensions but also the property rights involved in the transaction; 2 - The size of the market, including the level of knowledge of the counterpart: if transactions take place with an unknown partner, there is nothing to stop a party from taking advantage; 3 - The implementation of the commitments, that is, the development of the legal system, impartial and supervisor, which is crucial to the development of a complex contractual system that promotes efficiency; 4 - Ideologies and insights: the way people see the institutions, formal as well as informal,

and how they behave towards them.

Williamson (1996) continued the study Coase had started four decades before and gave it greater academic content. According to Williamson, most people cannot identify transaction costs because they are related to the behaviour of the agents involved and their behavioural attributes. To this end, there are two basic behavioural assumptions of agents in the transaction, bounded rationality and opportunism, which cause transaction costs and somehow camouflage them in the layman's eyes.

According to the assumption of bounded rationality, individuals present rationality, but it is of a limited nature because the capability of agents to raise, process, and assimilate information from the environment is limited. Therefore, individuals cannot fully develop their cognitive ability. Entrepreneurs (the broiler farmer, the owner of the agroindustry and other roles) make decisions that are satisfactory to them within their limited rationality. However, they could make different decisions if their rationality level was higher. Consequently, according to Farina et al. (1997, p. 73), instead of the optimal decision (that would have been made according to classic precepts), the agent, seeking satisfaction, is happy with a suitable decision that is part of a set of decisions equally suitable, indistinguishable from each other due to the limits of rationality.

The other assumption in NIE is that economic agents are opportunists. Individuals will act unethically to benefit themselves. Although not all individuals are opportunists, only one is needed to make control measures necessary. This assumption opposes orthodox economics, which, according to Farina et al. (1997, p.78), "does not foresee the possibility of unethical behavior either because of moral restriction or, more commonly, on the premise that the provisions in the contract are always reinforced". In a world where information is perfect

and totally available to agents and where agents have both full rationality and the necessary legal support, it would be reasonable to assume that contracts are followed. However, in the real world, these conditions do not hold; therefore, agents behave, or have the capability to behave, opportunistically while trying to appropriate benefits.

Opportunism is temporally divided into two classes: *ex-ante*, also known as adverse selection, in which the buyer or seller of a certain good behaves unethically before the transaction takes place; or *ex-post*, called moral risk, in which one of the parties takes advantage for the sake of profit after the transaction takes place.

Given the existence of bounded rationality, transaction costs, and opportunism, no contracts can be complete and safeguard the parties involved in all possible ways (ROCHA JÚNIOR, 2004, p. 304). Thus, the cognitive limitation of the human being and the possibility that one of the agents will behave unethically for advantage cause contractual gaps and omissions. Consequently, institutions support conflicting situations when property rights are questioned. In the words of Rodrigues (2007, p. 128), "it is in the interest of the individual to have mechanisms that restrict personal freedom so as not to have to comply with commitments, exploring opportunistically the good-faith of others". Therefore, institutions supply safety to transactions.

Transactions, however, are not all identical. A transaction between a pig-slaughtering agroindustry and an integrated pig farmer in charge of fattening the animals till slaughter is different from the transaction between the farmer and the producer of feed for pigs. Characterising transactions to make them comparable, Williamson (1996) presented attributes or dimensions that add quality to the agreements. Such attributes, including asset specificity, frequency, and uncertainty, are the reasons agents choose a certain governance and reject another.

Therefore, dimensions are important to characterising transactions, thus enabling agents to choose a system that reduces transaction costs.

The assets cannot be reused in a third activity without losing value. Therefore, the level of the asset specificity is related to its alternative use. Higher specificity of assets means higher risks and more problems during the transaction. Asset specificity is considered the most important dimension of the transaction and can be subdivided as follows: a) specificity of physical assets: the versatility of the use an asset has. The more limited the use of an asset, the more specific it is; b) location specificity: related to the geographical position of the asset, either where it is performed or where it needs to be taken. The greater the geographic distance between the two, the greater the specificity of an asset; c) temporal specificity: the time an asset takes to lose its attributes. The shorter the time, the more specific an asset is; d) brand specificity: the power of a brand, or the reputation of an agent or its product in the market. The greater the power of the brand, the more specific an asset is; e) specificity of human asset: the investment in human capital to perform an activity. The higher the investment and the more difficult it is to hire specialised workers, the more specific the work is; and f) specificity of dedicated assets: only takes place bilaterally. It refers to investments an agent places in another so that a certain activity takes place. The larger the investment and the greater the irreversibility, the higher the asset specificity is.

The second transaction attribute, frequency, has to do with the regularity with which a transaction takes place (i.e., the number of times an economic agent makes transactions). This dimension proves to be important because there can be a reduction in costs due to the use of a complex mechanism (contracts, for example) in many transactions, in addition to agents building their reputation with the transaction

(consequently, creating a specific brand asset) through deeper knowledge of each other.

Uncertainty is the unpredictability of the attitudes of economic agents from the moment a contract is set, so as not to allow a precise calculation of the future of the transaction *ex-post*. Uncertainty differs from risk because risk can be measured and safeguarded in the provisions of contracts. According to Farina et al. (1997, p. 91), the risk "concerns the variance of a given distribution of probabilities". In this sense, uncertainty implies that it is impossible to determine the statistical distribution of a possibility. Its main role is to disclose the limits of human cognitive ability, given limited rationality, indicating the incompleteness of contracts.

3. CONTRACTS AND EFFICIENCY

The incompleteness of contracts, a result of bounded rationality, is both inevitable and undesirable. Contracts that do not satisfactorily equalise the interest of the parties involved because either the economic imposition of one of the parties or the bounded rationality of the parties will result in transaction costs that will eventually affect the final economic outcome, leading to lower efficiency. Zero-sum games are models with very limited application in real society (NORTH, 1994). Efficient contracts demand some form of investment that will emerge either at the time of drafting or in its enforcement.

When elaborating the contracts, the parties involved try to gather as much information as possible on the object of the contract and its legal whereabouts to increase their history and experience in that kind of business (AXELROD, 1984, 139) as well as the likelihood of reaching the expected results. According to the eventual contractual shortcomings, delay, or non-compliance to the full object, it is necessary in enforcement to resort to coercive means that consider, among

other things, the structure the society provides to settle disputes, the legal framework, the appropriateness or otherwise with regard to the existing rules, and the choice of conventional or alternative means to settle litigation.

Total transaction costs are uncertain either because of the costs of contract drafting or because of its unpredictability in the future (POSTEL, 2004). In a market with reasonable offers, closing a business depends on the expectation of a good or at least satisfactory outcome. In principle, the more stable the market, the higher the probability of businesses that will ensure the needed dynamics to the economy. When the outcome is not satisfactory, there is the possibility of drafting a new more or less efficient contract that will lead to results, also more or less efficient, for not only the parties involved but also society at large.

The individual measure of a contract can be parameterised in an equation in which efficiency (E1) is measured according to the cost of information (I), the access rate to relevant information (IR), and the possibility of replacing the business (S). This equation is mirrored in another (E2) consisting of the sum of the intended result (R) and the costs of enforcing rights (D):

$$E1 = f(I, IR, S)$$

$$E2 = f(\sum R + (-D))$$

In the equation, there are variables that will have an essential impact on the results. The cost of information the parties have (I), for example, depends on the agent's ability to fully understand the negotiation; the access rate (IR) is linked to the amount and quality of the information available; and replacing the business (S) is more closely related to the institutional environment.

In the second equation, the variables lie in the profitability ratios used (more or less equity in the results) and in the costs of using the court or arbitration.

4. CONTRACTS AND DEVELOPMENT

However, in addition to the efficiency of individual contracts, when they are essential to the economy of a specific region, there are other aspects of social efficiency that lead to the expectation that an analysis identifying limits of contractual models could be important in the pursuit of the economic development of a country.

Development is not measured only by the production levels and purchase power of a country (SEN, 2000) but also helps to form a developed society and, most importantly, to improve social matters.

Unbridled industrialisation and development has led most countries around the world to concentrate on promoting GDP (Gross Domestic Product), neglecting quality of life. Economic growth was seen as both the means and end of development.

All evaluation of a country's growth is through relative criteria. Growth is associated with income, for example, and the criterion used has as a parameter, the purchasing power of the population.

The evaluation of development can come from other parameters (SEN, 2000), particularly the valuation of available substantive freedoms that can involve, for example, political freedom, economic amenities, social opportunities, assurances of transparency, and protective safety. It is worth noting that the expansion of freedom is the end as well as the main means of development, consisting in the removal of restrictions that reduce people's choices and opportunities to exercise reason.

Some freedoms promote other freedoms, such as the social opportunities that come with health and education, which complement individual opportunities to participate economically and politically and prompt individual efforts to overcome hardships.

According to Sen, "we usually have excellent reasons to want more income or wealth, not because the reasons themselves are desired, but because they are the means to have more freedom to live the kind of life we value; wealth is the base and means to reach the desired life" (2000, 28). It is unquestionable that economic development plays an important role towards that end.

Development tied to economic growth does not automatically decrease social differences; growth without the distribution of wealth can even worsen differences. Development beyond the economic level can be valued based on the opportunity a person has to pursue freedoms.

The greatest question of the economic analysis of law might be to identify the right tool to reach redistribution goals. Cooter and Ulen (2010, 27) pointed out public policies and how the mutual cooperation between economics and law can contribute to the needed efficiency. They reject the use of private law for this purpose, disapproving of private institutions such as property and contract.

However, though a distinction is made between purposes within public institutions (institutions making public policies) and private law (essential to the existence of the market as property and contract), drafting efficient contracts cannot be disregarded, at least in theory, when it comes to decreasing transaction costs, a process that is an important aid to the development of the economy in the region, especially in the agribusiness analysed. An efficient economy associated with public policies to distribute wealth supports development in the sense intended by Sen.

5. IMPERFECT CONTRACTS AND THE ECONOMIC ANALYSIS OF LAW

Different factors that interfere in the efficiency of a

business are related either to the institutional environment or to the tool used in the implementation, the contract.

In the field of contracts, the business orientation to project to the future and the uncertainties it carries adds to the disparity in information available to the parties or in their capability of processing such information. It prompts maximising solutions to be drawn from a line of thought that associates the excellence of economics and law.

A question of interest in the economic analysis of law specifically addresses how contractual gaps are to be dealt with by law or in court¹. As previously stated, transaction costs are always positive in covenants; in other words, the greater the intent to draft the perfect and flawless contract, the greater the cost, which can make a deal less beneficial for the parties involved.

Moreover, because of bounded rationality, it is practically impossible to foresee all possible variations in a contract, and thus, the gaps are both predictable (despite the high transaction costs to avoid them) and inevitable (because of bounded rationality) (RIBEIRO; GALESKI, 2009).

As a result, when conflicts reach the court, the economic analysis of law suggests that the court simulate a hypothetical negotiation of how the contract between the parties should have been made to find the most efficient solution.

Cooter and Ulen (2010, 226) present the following

¹ " Detected the gap or omission, the legal system, in general, and contract law, in particular, have the role to eliminate or at least repair it, restoring the conditions in the model and adapting its content to what the parties agreed upon (a reproduction of the market). The economic analysis of contract law studies if the norms fit the conditions according to which a contract can be considered perfect. It also deals with the legal remedies to overcome the imperfections that lead them away from the goals of efficiency or fairness. Only in an ideal model we have the concept of 'perfect agreement'. In the real world, due to high transaction costs, only contracts that are not fully specified are closed. The parties only agree with the issues that usually come up and tend to leave the cases that cannot be foreseen to the legal system" (GUESTRIN, 2004, P. 457).

example to illustrate the contractual gap in court. A family hires a construction company to build their house. The company is aware that the cost of copper pipes can vary by \$2,000 with a probability of 0.5, a predictable variation of \$1,000 at the end of the work. Supposing that the company could have avoided this variation at a cost of \$400, it would have generated a profit of \$600, if risk had been avoided. On the other hand, the family has no means of foreseeing such variations. When the house is finished, the price of copper pipes has changed, and the company charges the family \$2,000, which was neither in the division of risks provision in the contract nor in a provision where one of the parties assumed the risks. In court, a decision is based on how the negotiation should have taken place, in other words, a hypothetical simulation of the negotiation. Considering that the construction company is responsible for drafting the contract and is aware of the variation in prices, it should have included a provision foreseeing compensation for the risks taken. As this provision was not included, there should not be any additional cost to the family.

Given these considerations, we conclude that the economic analysis of law focused on contracts can minimise the risks (uncertainties), generating more incentive for the cooperation of the parties involved², suggesting a better way to

² An interesting question about contracts is that of post-contractual responsibility, a theory in which even after normal compliance and after the contract is finalised, the parties still have to comply with contractual loyalty. This theory has found and still finds strong resistance from classic legal contractual theory, but it is fully justifiable from the point of view of the economic analysis of Law, as the responsibility of the parties is based on efficiency and not on the contractual terms and termination. In other words, the duty once promised must be ensured by the contracting parties independent of deadlines or time definitions. Rogério Ferraz Donnini discusses three cases where German jurisprudence accepted the use of the post-contractual responsibility theory, though based on contractual good faith: "The first case refers to a purchase and sale contract of a land with a beautiful view to a mountain. The seller (defendant) before the contract was signed, in the pre-negotiation, assured the buyer (the author) that the view of the mountain would not be taken away, as no

ensure compliance, and dealing with contractual gaps resulting from transaction costs and bounded rationality.

6. ANALYSIS OF CONTRACTS IN AGRIBUSINESS IN PARANÁ

In this study, broiler farmers in western Paraná were interviewed. From the analysis of the integration contract between the agroindustrial cooperative (which, in this research, assumes a similar position to the agroindustry, as it intermediates the operation that starts with chicks being sold and ends with supplying the poultry ready to slaughter) and the broiler farmers (who are responsible for fattening the chicks), a set of questions was formulated to ask people who willingly participated in this project.

The interview with broiler farmers took place in August 2010. There was some minor difficulty finding interviewees to join the project, most probably because they were not accustomed to undergoing studies searching for scientific results; there was even a certain fear that participation might

buildings could be built in between the land sold and the mountain, proving the fact by displaying an urbanization plan. [...] After some months, the same seller (defendant) bought the area between the land sold and the mountain, requested and was able to modify the urbanization plan, and, soon after that, built in the area, jeopardizing the view of the mountain the purchaser had [...] the second case in the German jurisprudence refers to a person (the author) who manufactured and sold coats for women. She hired two people (the defendants) to manufacture 120 fur coats they had designed as requested. After the deal was done and the parties had fulfilled their deeds, the defendants, without the author's consent, offered to a competitor the same model. In the contract defendants and author had signed, there was no provision stopping them to offer the same product to a competitor or any provision to exclusivity. [...] the third case chosen from the German jurisprudence deals with the purchase of a big rug (carpet) by a person who then started to work in a hotel. The buyer (defendant) bought the carpet from the seller (author) who indicated a third person to set it in place, what did happen. After some days, there were stains in the rug caused by the glue used to set it in place. The defendant did not pay the agreed amount because of the stains. The author opened the lawsuit to collect. The defendant won the claim in court review" (DONNINI, 2004, p. 87-89).

have a negative influence on them professionally.

The interview was based in open questions that were asked throughout a conversation with the broiler farmers.

Basically, we wanted to make sure broiler farmers were aware of the provisions in the contract they signed and the impact it had on their daily farming routine.

6.1. QUESTIONNAIRE

In the questionnaire, contract models commonly used in this kind of economic activity were analysed. The legal analysis consisted of identifying the terms in the writing, particularly the potential inaccuracies and risks resulting from the lack of specificity.

The present study was preceded by an article presented at Encontro Nacional da Associação Brasileira de Direito e Economia - ABDE (National Meeting of the Brazilian Association of Law and Economics) in the city of São Paulo in 2009. After presentation of the synthesis of the legal subject applied to the economic-relationship focus of research, two contract models were compared, and potential inaccuracies were identified that might generate additional costs to the parties, especially under conditions of incomplete compliance with the content. In the discussion following the presentation of the paper, it was suggested that in a second phase, the authors should look for data identifying the real grounds of conflicts related to the inaccuracies found in the first study.

Therefore, the questionnaire used in the interviews was based on the first study and on the identification of potential problems resulting from the writing in contracts. It was designed to establish the existence or absence of conflicts resulting from inaccuracies and the impact of these inaccuracies on the economic efficiency of the activity developed. The questionnaire examined five aspects the

authors selected as relevant: I. Social-economic; II. The content of contracts between the cooperative and the broiler farmers regarding the duties of the cooperative; III. The content of contracts between the cooperative and the broiler farmers regarding the duties of the broiler farmers; IV. Specific understanding concerning certain conditions in the contracts signed; V. Questions related to the institutional environment in which the economic transaction takes place.

Regarding the socio-economic data (I), the personal names of interviewees were noted during interviews (a). To assess the economic condition of the interviewees, notes were taken on the size of the property (b), its location (c), and the amount of people involved in the activity (d). To identify the greater or lesser specificity of the economic activity the interviewees performed, the exclusive activity of fattening birds and the harmonisation of other economic activities in the same space were surveyed (e). In the case of shared activities, the prevalence of broiler farming (fattening) over the rest was examined (f) to assess the degree of dependence on broiler farming, because the level of dependence should influence the behaviour of farmers towards the cooperative and their ability to bargain regarding the conditions imposed by the cooperative. In this phase of the interview, the interviewees had the opportunity to speak freely about the contract signed with the cooperative, their knowledge of what was in the contract, and how important it was to have a contract; in other words, they were given the opportunity to share their knowledge about the integration formalised through the contracts commonly closed with the cooperative. The interviewers created a relaxed environment to encourage interviewees to speak freely so that the interviewers could understand their level of knowledge of the bond established between the contracting parties, especially those aspects of the bond referring to duties and obligations imposed in the contract

model the cooperative presented.

In the second phase of the interview, the main concern was the content of the contract in terms of duties imposed on the cooperative (II). To evaluate the effectiveness of the conditions previously imposed in the contracts, questions were asked about deadlines set for the delivery of day-old chicks, feed, and technical support, which were foreseen in the contract to be requested by the broiler farmers (a). Regarding the specific provisions in the contract models to which access was previously granted, questions were asked about the 4-30 days replacement of a day-old chicks, how the interviewees felt about delayed deliveries (30 days at most) and the payment for removals (b); in this phase of the interview, interviewees were encouraged to speak freely about the impact of the flexible replacement time frame established in the contract on their activity. Afterwards, the interviewees were asked about the access of the cooperative to the property to oversee farming and check the premises as well as about the real impact of this access (c) on economic activity. It was also asked whether the interviewees agreed or not that the cooperative should have this right (d).

In the third phase, the main topic was the broiler farmers' duties (III). Questions were included about the behaviour of the interviewees towards non-compliance with technical norms and hygiene and what measurements were taken to solve any resulting problems (a). Regarding the fairness (or not) of the contractual conditions, questions were asked about the feasibility and appropriateness of the term to return the broilers, established as 35 to 60 days (b). In addition, to determine the fairness of the contractual terms, the broiler farmers were led to speak about maintenance duties, building the broiler farm, and the responsibility for the labour force, which fall solely on the interviewees in the partnership established by contract (c). The payment was the main concern

of the next phase, including its sufficiency as expressed in the contract (d), if the payment for efficiency meets the needs (e), if the rates established by the cooperative are plausible (f), and the interviewees' personal opinions about the losses of points for problems of a technical nature. Another subject in the questionnaire was the exclusive delivery of the broilers (g) and the reasons that bond the interviewees to the contract and to the cooperative. At this point, the interviewees were again encouraged to speak about their main annoyances or disagreements with the integration system resulting from the contracts signed (h).

In the fourth phase of the interview, some key aspects to understanding the efficiency of the contracts signed were highlighted as evidence to evaluate the potential development of economic activity in the integration structure. Questions were asked about the indefinite term of the contracts, with the possible termination with a 15-day notice (a), and about the compensations and remuneration specified in the contract (b). The interviewees were further encouraged to speak freely at this point, even about their perception of good and bad faith of the contracting parties that interfered in the continuity of the contracts.

In the fifth and final phase of the interview, the primary focus was the institutional environment in which negotiation occurs and in which the contracts are drafted and become valid. In this phase, we sought information on the specific market, specifically on the fattening process, and on the opportunity of the interviewees to choose their partners, based on either the level of competition or the offer of the activity in question (a). To test the level of information the interviewees had, questions were asked about the number of similar companies in the area that they could choose as partners and the feasibility of changing partners without costs impairing the business (b). With the reverse intent in mind, the interviewees were also

questioned about other broiler farmers in the area with whom cooperatives could replace them in case the interviewees breached the contract or in any way did not want to continue the current bond (c).

6.2. RESULTS

The interviews took place at the broiler farms.

All interviewees showed a simple life standard, compatible with life in the country and with no signs of precariousness. Houses were well structured and held enough comfort to eliminate any sign of restriction. As a means of transport, all owned a car and/or motorcycle, less common in similar economic activities in urban settings.

Encouraged to talk about their economic situation, the interviewees spoke about their discontent with the gradual reduction of the final price paid for a lot of broilers, but they demonstrated a strong understanding of the general wage levels compared to other economic activities, having as base the average payment in cities and their income over a cycle of approximately 45 days during which broilers are taken to slaughter.

The outcome of the interviews showed that the broiler farmers have only a partial understanding of the environment in which their economic activity takes place, as the restrictions in the market do not allow easy replacement of the legal relationship to improve the conditions agreed in the contract. They neither showed any intent to effect a change in their economic environment nor foresaw any effective means to correct their points of dissatisfaction with the conditions in the contracts.

The integrated broiler farmers surveyed have worked for more than ten years in broiler farming; in fact, one of the farms was a pioneer in the development of the integration model,

which is the basis for this research, in the state of Paraná at the end of the 1970s. The contracts analysed, therefore, are long-lasting bonds compatible with a high level of stability in the relationship of the parties involved.

As to the raw material (feed and chicks, as well as technical support) supplied, they were unanimous in stating that the duties of the cooperative were met regularly, on a normal basis, but there were times when feed was late. They pointed out that the contract establishes that when it comes to feed, the broiler farmers must inform the agroindustry 48 hours before it ends, but the supply does not always arrive in due time. The lack of feed can seriously compromise the growth of broilers at certain stages, increasing losses in that batch, and broiler farmers must reach the indexes stipulated by the company's standard. As the lack of feed supply is infrequent, the interviewees were not convinced of the flaw in the current system in the contracts.

In regard to the duties of the agroindustry, the interviewees stated they have no means to check whether the amount of feed received is the amount agreed upon in the contract. The amount is on the bill, but they do not have any means to know if the physical load matches the amount stated on the document. In this regard, a typical situation of the asymmetry of information occurs, open enough to allow opportunist attempts from both sides, breaking the harmony of the rights that, in theory, should be provided by the contract.

About technical support, they said it was always efficient and made their daily lives easier. The output of the batches is closely related to market demand, and in times of depressed markets, there has been an increase in the term of batches, so that one lot was lost throughout the year.

Taking into consideration the payment criteria established in the contracts, the interviewees were encouraged to speak about the possibility of a depreciation of the batches.

Oligopsony may exacerbate the underpayment for the removed batch due to the use of the demanded standard system, depreciating the batch with potentially significant discounts. An example of discounts often used in the field analysed is the *pé de calo* (foot callus), a depreciation of about 500 reais per batch when approximately 5-10% of broilers present the problem. If the broiler farmer has 0% broilers with the problem, he will have a bonus of only 120 reais. The allegation is that this type of problem should not occur.

Still addressing the content of contracts, the interviewees were asked about the provision that deals with technicians visiting the farm, at any given moment, to monitor. They did not see any problems with this provision.

When asked about the stability of the partnership based on the contract between them and the agroindustry, the interviewees reported that it is possible to change the buyer. Therefore, the farmers are aware that the contract can be terminated, but because agroindustries have the same standards, a change would not lead to improvement. They also showed awareness that maintaining stable contracts generates an environment of trust that is helpful for them to perform their activity.

However, regarding a rescission of the contract on the part of the agroindustry, the interviewees said that as long as the feed conversion rates are reached and there are no serious crimes such as theft of food or other criminal conducts, there are no greater risks of termination. The interviews made it clear that the contracts signed are more a tool to safeguard the interests of the agroindustries and to avoid possible labour claims than to exhaustively regulate the negotiation.

Clearly, broiler farmers know little about the content of the contract; nevertheless, they say they are happy with it.

Through the interviews, environmental situations were identified, as there were statements that the more active broiler

farmers are not encouraged to claim rights or modifications in the integration model because of precedents and because of the risk of retaliation or exclusion from the productive process. Therefore, based on the data acquired, the agroindustry concentrates the power in the market (working with similar contracts and thus eliminating real competition, as broiler farmers have no other choice), assisted by the small specificity of the hired activity, as broiler farmers fear losing the legal bond if they attempt to change and the risk of being excluded from the productive process and replaced without a meaningful increase in costs to the agroindustry.

Though it may generate an expectation of stability, the situation reported, the contract for an indefinite term and subject to termination without cause, is overwhelmed by the poor specificity of the object of the contract for the broiler farmers. Because there is no possible economically feasible replacement for the agroindustries in the market, the factual conditions of negotiation between the parties involved in the contracts are removed, dramatically reducing the broiler farmer's bargaining power to set the content of contracts. Displacing the real conditions of negotiation tends to lower the efficiency of the negotiation to promote economic development not only of individual broiler farmers but also of the region where the activity takes place.

7. CONCLUSIONS

This study is a refinement of the work presented in the ABDE in 2009.

By considering limitations, this research developed theoretical concepts regarding the role of contracts in establishing legal relationships that contribute to the search for economic development and that are in practical use in the specific agribusiness in the west of the state of Paraná.

Based on theory, the conclusion is that there cannot be real development without its also being linked to freedom. In the situation analysed, the freedom of broiler farmers to choose and act is compromised because of the concentration of power in the agroindustries that work with uniform contracts, hindering the competition that would allow broiler farmers to choose whom to hire. Therefore, the interviewees are aware that little can be done to improve the economic relationship established. The concentration of economic power tends to minimise the possibilities for real development in the sector, jeopardising the local and, consequently, the national economy.

According to the importance of contracts and to the establishment of stable bonds, this research shows that the hired parties perceive a correlation between reputation and staying in the market in question.

As to the content and binding contracts in the case analysed, it was possible to evaluate the parties' asymmetry of information, as well as the situation of dependence and economic restriction that discourages investment and consequently raises the costs, in information of adequate contracts and the perception of their consequences.

Therefore, the accuracy of interests, the main reason for having efficient contracts, is overwhelmed by the prevalence of forces in the market where the agroindustry wields monopsony over the broiler farmers, who, in a way, become hostages of the process because of the high specificity of the asset (broiler farms), with little possibility of replacing an efficient buyer. On the other hand, the company uses contracts more as a protection against labour lawsuits that might take place because of the integration system rather than because of their content.

Regarding the environment, the characteristics of an emerging country contribute very little to the possibility of replacing the activity with a more profitable one. Producers are not clearly aware of this situation, a result of low investment in

science and technology. Minimal access to information, including the content of contracts and rights, generates an environment that enables opportunism and opposes economic efficiency.

It can be seen that interdisciplinary studies can combine the functionality of economics and the institutional support provided by law and, together, foster the development of economic activity.

The economic analysis of law allows the association of skills. The present study is an example of the tools that law can offer in association with the theories in economics to improve studies whose background includes economic agents' making effective use of the contracts and the economic and social environment in which they are inserted.



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