

SHOULD I GO TO COURT? AN ASSESSMENT ON THE ROLE OF THE JUDICIARY IN DISPUTES BETWEEN CATTLE RAISERS AND MEATPACKERS IN BRAZIL

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Abstract

Applying the concepts of the New Institutional Economics, the main objective of this perspective paper is to analyze the role of the Judiciary in resolving conflicts between cattle raisers and meatpacking firms in Brazil. The article specifically seeks to: (i) analyze the characteristics of the transaction between cattle raisers and meatpacking firms, (ii) assess the pattern of conflicts brought before the courts, and (iii) investigate the degree of farmers' confidence in the judiciary. The empirical analysis focuses on the producers' confidence on court in the face of non-payment for the animal delivered to slaughter. A logit model is estimated to validate some hypotheses: the low confidence in Justice is enhanced in the presence of past conflicts (H1), in the recurrence of non-payment events (H2) and in the presence of recent defaulting (H3). The results show that producers have low confidence in court and this assessment is enhanced by recent problems faced by farmers, the number of times non-payment events occurred and personal non-payment historical.

Key words: Institutions, Judiciary, guarantees, beef chain

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1. Introduction

In the early 2000s, the Brazilian meatpacking industry went through a huge expansion process. During this period, the largest Brazilian meatpackers have issued shares in the stock market, internationalized their activities and diversified their business by incorporating other activities besides slaughtering and beef processing. In 2008, due to a severe economic crisis, part of the meatpacking industry collapsed. Because they were highly leveraged and with a significant portion of their debts listed in U.S. dollars, many Brazilian meatpackers went bankrupt. Consequently, a number of cattle raisers have not been paid for the animals delivered to the slaughterhouses in 2008.

It is worth noting, however, that the problem of non-payment in the meatpacking industry is not new. Regardless of the 2008 crisis, the history of fraudulent bankruptcy in the meatpacking industry is always vivid in the memory of economic agents that operate within the industry (CALEMAN, 2010). The relationship between cattle raisers and meatpackers in Brazil is thus characterized by a traditional rivalry. Considering spot market transactions, the main conflict concerns the producer's risk of not receiving payment of the animal sold for the slaughterhouse. Accordingly, the lack of guarantees for the supply of cattle for slaughter is a latent problem in the agribusiness sector in Brazil. The bankruptcy of meatpackers generates a mass of farmers who become creditors and may eventually go to court in order to get paid for the animal delivered to the slaughterhouse. In this regard, the Judiciary may, once again, play a major role in reducing transaction costs in the agribusiness sector.

The main objective of this perspective paper is to analyze the role of the Judiciary in resolving conflicts between cattle raisers and meatpacking firms. Looking at the transaction for the acquisition of cattle for slaughter in the state of Mato Grosso do Sul (central-western region of Brazil)¹, the present study focuses on the role of formal institutions (i.e., the courts) to resolve conflicts in the beef agribusiness system. Specifically, the article seeks to: (i) analyze the characteristics of the transaction between cattle raisers and meatpacking firms, (ii) assess the pattern of conflicts brought before the courts, and (iii) investigate the degree of farmers' confidence in the judiciary.

¹ Mato Grosso do Sul is a state located at Midwest of Brazil which shows great importance to the Brazilian beef production and exportation.

The paper is structured as follows: 1. Introduction; 2. Theoretical background; 3. Description of the transaction pattern; 4. Assessment of legal disputes; 5. Econometric evidence, and 6. Conclusions.

2. Theoretical background

The institutional economic analysis offers the theoretical bases to addressing this research. Coase (1991) is the seminal author to understand the importance of institutions and transaction costs. He argues that, in opposition to common sense, there are costs to operate on the market and those are called *transaction costs*. Thus, cooperation and transaction costs are related. The concept of transaction cost was further operationalized by Williamson (1985). The author considers that the problems of economic relations are contractual problems. Therefore, the functioning of the economy is not free from frictions which account for the costs of operating the market. They occur both *ex ante*, including the costs of drafting, negotiation and establishing contract safeguards and *ex post* as a result of necessary adjustments in order to attend environment contingencies, the governance structures cost and the disputes that arise after the hiring. Thus, the efficiency of economic relations is related to the necessary reduction of transaction costs.

Based on North (1991), institutions and cooperation are integral parts of the same model and both are fundamental to promote a cooperative environment. Institutions are the rules of a game, setting limits to human interactions formally through laws, property rights and regulations, for instance, and informally through traditions, taboos and customs. Institutions provide incentives for human relations, being those political, social or economic. According to the author, the role of institutions is to organize the business environment, to reduce uncertainty and, together with other economic instruments, to define a set of choices, creating a favorable environment for the decision-making process. Thus, institutions provide a structure of incentives, contributing to the economy's performance. Applying the reasoning of game theory, North (1991) states that cooperation becomes difficult when the relationship or the *game* is not repeated over time, when there is asymmetry of information and also in the presence of a large number of players. Thus, institutions play an important role in promoting cooperation as they contribute to the reduction of transaction and production costs, making the potential gains from an economic transaction feasible. Moreover, to understand the role of institutions, it is crucial to discuss some concepts related to property rights and Barzel (1997) gives a good path to connect rights and transaction costs.

According to Barzel (1997), the study of property rights is the starting point for the understanding of transaction costs, which are closely related to the cost of information. The point is that the process of transaction requires an exchange of information, but it has a cost. Barzel (1982) states that transaction costs should be defined as the resources used to establish and maintain

property rights, including the costs involved with the protection and the capture of such rights. In other words, transaction costs are the costs of ensuring property rights and the choice of institutional arrangements is directly related to the need to provide protection to the exchanged rights. Barzel (2001) argues that the degree of difficulty in measuring the information determines the types of relationships between agents. For the author, property rights must be considered from two dimensions: the legal right and the economic right. Legal rights are those which the state recognizes, guarantees and protects, but complete protection is prohibitively expensive. The economic rights can be defined as the value of the exchange after the deduction of capture and protection costs of the good or service transacted. Individuals seek to maximize their economic rights.

From property rights lenses, the analysis of economic efficiency could be done based on two basic approaches: i) one which is strictly related to economic argument and; ii) other one which also includes social and political arguments. In accordance to economic approach, Demsetz (1967) argues that the transaction value is not due to the product or to the service itself, but to the value of the set of the rights that are transacted. The delimitation and the guarantee of property rights are fundamental to promote economic efficiency, because the failures in protecting the rights generate externalities opening room for value capture in the exchange process. For the author, the property rights generate incentives to internalize externalities. Since the externalities, positive or negative, are related to economic inefficiency, the greater the delineation and the security of property rights more efficient is the exchange. Moreover, the incentive for the definition of property rights increases as the resources become more valuable.

Thus, from Demsetz's perspective (1967) the structuring of a legal property right system is strongly rooted in economic arguments and the "internalization of externalities" is a result of a comparative analysis of marginal gains and costs of the property rights allocation. According to Eggerstsson (1990), the State doesn't has a passive role, as proposed by Demsetz, as it has a clear role of generating economic efficiency. In face of high transaction costs, the state maximizes the wealth when it allocates and ensures the rights of ownership directly to individuals or through the redefinition of a legal framework. By setting specific regulations, standards and norms the transaction costs are reduced and as a consequence the wealth increases. Williamson (1996) enhances the importance of contracts as a way of reducing transactions costs by adding safeguards that could be guaranteed by courts.

For Williamson (1996), the existence of incomplete contracts accounts for a significant part of the problems faced by the economy of organizations. On the assumption of opportunistic behavior and bounded rationality, the presence of contractual safeguards becomes an important factor in understanding how to go on trading in a long-term perspective. Once the agents are limited

in their cognitive skills, contracts are necessarily incomplete. The opportunistic behavior of agents implies the possibility of *ex post* contract disruptions, making room for the occurrence of moral hazard and hold-up² events, hence the need to provide *ex ante* contract safeguards.

It is worth noting that the problem of safeguards, or its absence, is treated by Williamson (1996) in the “simple contracting schema”. This model proposes that the role of contractual safeguards (s) should be understood from three possible solutions, depending on the existence of specific assets (k). In transactions where $k > 0$ and $s = 0$, or in other words, there are quasi rents to be captured and there aren't contractual safeguards to protect the rents, the agents face contractual instability. In this situation, there is room to contractual breaches and value capture. According to Williamson (1985) this situation can't last for a long time and the option might be not adopting specific technologies ($k = 0$), being the market and formal institutions (courts) the guarantees or the agents might adopt safeguards ($s > 0$) as contracts and private mechanisms (reputations or firms) as guarantees for the transactions.

Moreover, Williamson (2000) proposes four stages for the investigation of institutional environment, considering that they are all interrelated and interdependent. At the first level there are informal institutions characterized by the social, cultural and religious relations. The formal institutional environment, represented by the rules and laws, including property rights and political rights, is the second level whose purpose is to shape the economic environment in order to reduce costs. The third and fourth stages involve, respectively, the governance structures (contracts and other coordination mechanisms) and the microeconomic environment in which resources are allocated through prices, quantities and incentives. Each stage is characterized by its duration which is defined as the time required for the occurrence of changes in the economic and organizations pattern.

In sum, the institutional analysis is a key variable to be considered in the understanding of efficient economic transactions.

3. The supplying of cattle to the meatpacking industry

The present paper investigates the transaction carried out between cattle raisers and meatpacking firms in the spot market in Brazil.³ In the majority of Brazilian states, the animal price to be paid to cattle raisers is established for each 15 kilograms of the animal.⁴ The price is related to animals' dead weight – i.e., the price depends on the weight of the carcass (flesh and bones) after slaughtering the animal.

² Situation where one party has advantages forcing the other to renegotiate the terms.

³ This study does not investigate transactions involving quality contracts in which specific investments are made.

⁴ 15 kilograms of cattle is called *arroba*.

In general, cattle for slaughter are traded through direct sales or through brokers. In the case of direct sales, the cattle raiser comes in contact with meatpacking employees to get information on prices and to negotiate the amount of animals to be slaughtered as well as the price and payment terms. Spot prices are usually paid within 2 to 3 days after the slaughtering and it usually incorporates a discount rate of 3% to 5%, depending on previous negotiation. After the agreement, the animal is loaded on the farm. The transport of the animals is typically performed by the meatpacking's own truck or by private contractors hired by the company.

Meatpacking firms can also outsource the purchasing of animals to independent brokers. In some situations the brokers not only mediate the purchase of livestock, but also escort the shipment and watch over the animal slaughter. There are four types of animal intermediation.

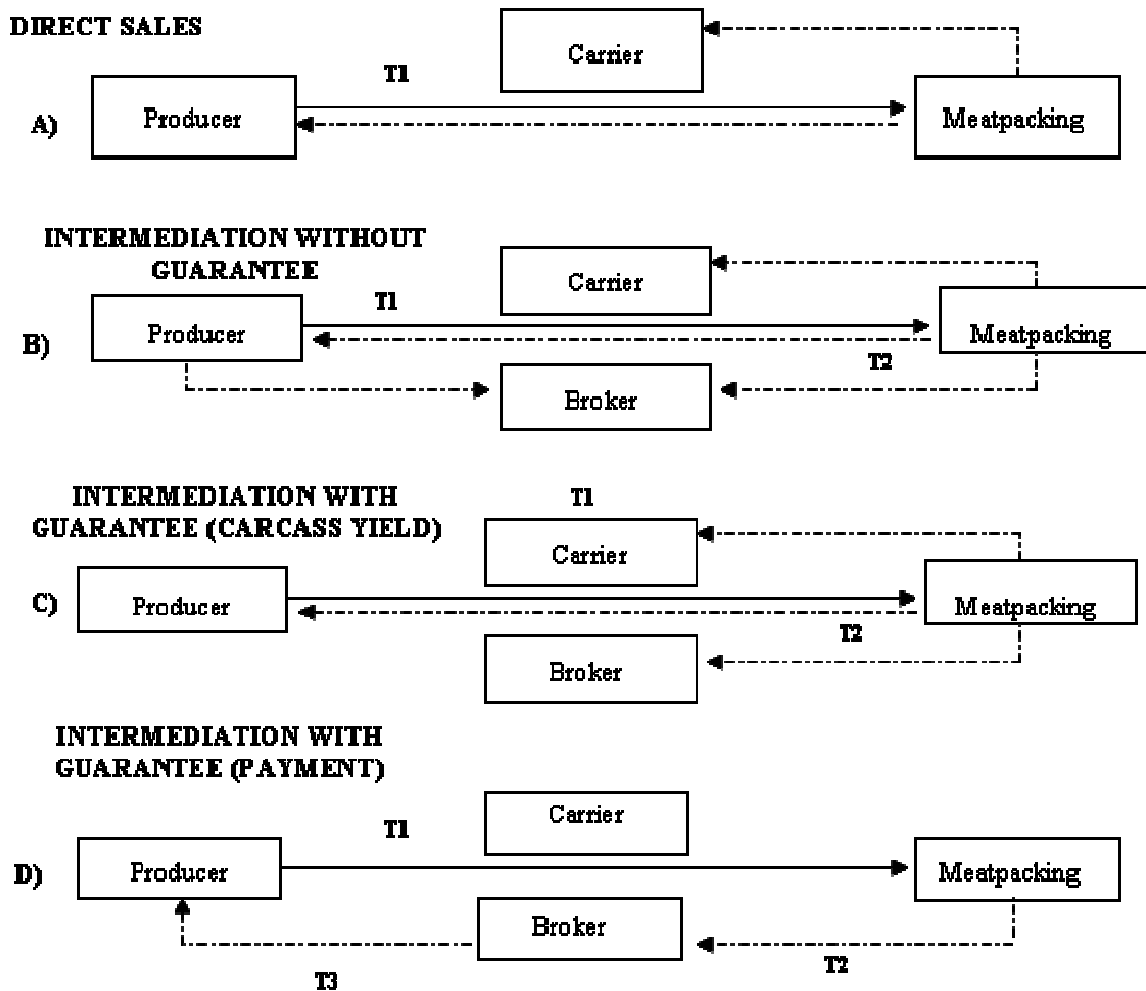
The broker may be a buyer's representative with exclusive relationship with the meatpacking firm. Under this condition, the representative's commission is usually paid by the company. In another case, the broker may work as an independent professional who represents different meatpacking companies. In this case, the producer trusts the broker as they have a long term relationship. The broker brings information on market conditions and he may eventually supervise the animal slaughtering process. The commission of independent brokers is typically paid by the cattle raiser (in this case, the intermediation occurs without guaranteeing the transaction, i.e., the broker does not guarantee the payment of the animal sold neither the carcass yield).

A third type of animal intermediation involves the establishment of guarantees. The broker may ensure part of the transaction (e.g., the carcass yield) or the whole transaction (e.g., payment in advance). In the case of guaranteeing carcass yield, the broker assumes the risk of the variation in the carcass performance when comparing the animal weight at farm and at the slaughterhouse. The broker assumes a risk position because his payment only occurs if the carcass yield at slaughterhouse is higher than at farm.

In the case of guaranteeing the whole transaction, the broker advances the payment to cattle raisers based on the animal weighting at farm and sells the animal to the slaughterhouse. The broker's remuneration results from the positive difference achieved on buying and selling the animals. This type of intermediation is usually performed by specialized brokerage firms. Because this intermediation mode involves assuming the total risk of the transaction it is not very usual.

Finally, the broker may work as a dealer (*marchand*). He buys the animals from cattle ranchers, slaughters them in an outsourced manufacturing plant and sells the meat to retail. Figure 1 illustrates the main types of intermediation described above. The dashed arrows represent the flow of funds and the filled arrows represent the flow of product.

Figure 1 - - The mode of supply of cattle to meatpacking firms



Considering payment term, generally it occurs 30 days after the animals' slaughter and carcass verification. To guarantee the payment, the slaughterhouse issues a Rural Promissory Note (RPN) on behalf of the farmer. The RPN provides a collateral security, which is usually signed and guaranteed by an employee of the commercial department of the firm who does not hold legal liability. Following the timetable, the company makes the payment in the farmers' bank account. In case one needs to advance the payment, the producer may discount the RPN in the accredited bank.

There are two types of RPN discount: i) RPN guaranteed by law decree 167/1967 and ii) NPR discounted in the parallel, *i.e.* without the support of a Brazilian decree law that deals with rural credit. The discount under Decree Law is under the bank's responsibility because the appeal is granted on a credit line that the slaughterhouse has with the bank. Thus, the bank assumes the operation risk. In the case of parallel discount, the bank enables a triangle operation to discount the RPN. Actually, it is a personal credit transaction which responsibility rests with the producer and not with the RPN issuer - the meatpacking industry. This method is called *discount in parallel* and in this operation the risk is assumed by the producer.

In any case, there are no formal guarantees for the payment due by the industry because the animal is delivered to the slaughtering house before the issuing of the RPN receipt. Moreover, producers deliver the animal without even a guarantee of the effective weight of the animals since that the weight carried at the farm balance is just a reference that will be further validated in the balance at the slaughterhouse. The accurate information about the animals' yield and the amount owed by the slaughterhouse will be defined only after the slaughter and carcass evaluation. It is only at this stage that the producer receives a formal document, the Rural Promissory Note, which qualifies him as a creditor of the company. We identify, therefore, an important gap regarding a lack of guarantee in the Brazilian Beef Chain.

Although formal data about the share of each type of intermediation is absent, one can say that the most observed type is the intermediation without guarantee and the least representative is the intermediation with payment guarantee. It is worth emphasizing that the problem analyzed in this paper – i.e., the conflicts between cattle raisers and meatpacking firms – is more acute in the case of direct sale, when the broker is a representative of the meatpacker and when the broker is an independent agent. In either case, farmers are at risk of not receiving payment from the meatpacker. If this does occur, the farmer may file a lawsuit against the meatpacker. The next section examines this issue in the state of Mato Grosso do Sul (Central-Western region of Brazil).

4. Legal disputes: an overview

The examination of legal disputes in the state of Mato Grosso do Sul is based on a survey of lawsuits filed from November, 2002 to December, 2010. The survey was developed with the explicit purpose of identifying the conflict pattern that comes to court regarding cattle producers and meatpacking companies.

As shown in table 1, the highest number of court trials occurred in 2003 when 11 cases were brought to court. Throughout the period there were a total of 50 trials at the Court of Mato Grosso do Sul. According to data, the main reason for conflict between cattle raisers and slaughterhouses involves the claim of non-payment of the animals sold to slaughter. Based on the survey, one may note that 78% of the legal claims are related to the general situation in which the producer does not receive payment of the animal sold for the slaughterhouse. Therefore, the lack of guarantees seems to be the conflict pattern in the beef chain in Mato Grosso do Sul. Considering that the transaction pattern in the beef chain is almost the same within the country, the conflict is of great relevance for the efficiency of the Brazilian beef sector.

Table 1 – Lawsuits brought to court (cattle raisers and meatpackers): Mato Grosso do Sul, 2002 – 2010

Legal claim	2002	2003	2004	2005	2006	2007	2008	2009	2010	Total
Producers request the bankruptcy of the meatpacker		4								4
Meatpacker claims that animals were not delivered according to specifications agreed between the parties					1					1
Producers request a revision on discount applied to contract price		1	1							2
Discussion between the parties on the amount paid								1	3	4
Farmers claim non-payment of the animals delivered to the meatpacker	4	6	3	5		5	7	4	5	39
Total	4	11	4	5	1	5	7	5	8	50

Source: Court of Justice of Mato Grosso do Sul/Brazil – Elaborated by the authors.

Specifically in the case of non-payment of the animals, the authors investigated the allegations underlying this litigation (table 2). Based on the judge notes in each litigation, the predominant reason for the lack of payment is the bankruptcy of the meatpacking firm or the evidence of potential bankruptcy, which represents 62% of legal claims regarding non payment. Another important cause of conflict is the debt payment made to third parties which has not been formally accredited as a creditor – e.g., cattle auctions and cattle brokers, represented by 38% of these same legal claims

Table 2 – Legal claims brought to court under the claim of non-payment of the animals delivered to the meatpacker

Description	2002	2003	2004	2005	2006	2007	2008	2009	2010	Total
Discussions about formal aspects of documents and the guarantor liability	1		1	1		1	2			6
Producers request the attachment of a property as collateral for payment	3	1								4
Payment was made to a 3 rd person who is not accredited by the creditor/farmer		1	2	3		2	3	1	3	15
Producers request the blocking of beef stock		1								1
Producers request the property confiscation		3				1	1	3		8
Company is under bankruptcy				1		1	1			3
Questions about responsibility on outsourcing slaughter									1	1
Questions about payment prescription									1	1
Total										39

Source: Court of Justice of Mato Grosso do Sul/Brazil – Elaborated by the authors.

It is interesting to note that bankruptcy in the meatpacking industry may be related to a fraudulent initiative. According to a lawsuit filed by State General Attorney⁵, one is able to identify complex ownership relations among different slaughterhouses, featuring a practice by which the legal title of the meatpacking firm (*de jure* property) does not correspond to actual possession (*de facto* property). Under this practice, it becomes difficult to apply penalties to the company and in the case of bankruptcy the creditors are prevented from receiving the debts. The explanation is that the *de facto* owner is usually a low income person who does not have any property to give as a guarantee to the transaction. If this is the case, the producer may not receive any financial amount even if the judge confirms the producer's right in receiving the debt.

There seems to be an important relationship between the number of lawsuits in court and the occurrence of bankruptcy, as shown in table 3. The table presents a list of meatpacking companies in Mato Grosso do Sul that went bankrupt, asked for bankruptcy protection, or are under judicial recover between 2003 and 2010.

Table 3 – Meatpackers under bankruptcy or insolvency, Mato Grosso do Sul

Meatpacking firms	Status	Year	Municipality/MS
Frigorífico Pedra Bonita Ltda	Bankruptcy protection	2003	Itaporã
Frigorífico Ponta Porã Ltda	bankruptcy	2003	Ponta Porã
Torlim Produtos Alimentícios Ltda	Verge of bankruptcy, but currently in operation	2008	Amambaí Itaporã
Frigorífico Bonifácio Ltda/Frigorífico Boi Verde Alimentos Ltda/ Frigorífico Boi do Centro Oeste (*)	Bankruptcy in industrial plants lease		Rio Verde
Frigorífico Garantia	Plant closing	2008	Amambaí
Campo Oeste Carne Indústria, Com., Imp. e Exp. Ltda	Bankruptcy	2008	Campo Grande
Frigorífico Margem Ltda	Judicial recovery	2008	Paranaíba/ Três Lagoas/ Coxim
Friogestrela S.A	Judicial recovery	2008	Ribas do Rio Pardo
Independência Alimentos S.A	Judicial recovery	2009	Nova Andradina/ Anastácio/Campo Grande
Frialto	Judicial recovery	2010	Iguatemi
Fribrasil Alimentos Ltda	Judicial recovery	2010	Caarapó/Eldorado

(*)The litigation 2007.006092-8/0001.00 (April, 16th, 2007) presents a full description of the fraudulent relationship between the three meatpacking firms (Frigorífico Bonifácio Ltda, Frigorífico Boi Verde Alimentos Ltda and Frigorífico Boi do Centro Oeste) where owners make use of partners "orange firms" to cover up tax debts and commit acts which harm farmers.

In order to further examine the role of the judiciary in resolving conflicts between cattle raisers and meatpacking firms, the next section presents a quantitative analysis. The purpose is to investigate producers' confidence in the Judiciary and its role in arbitrating the conflict of non-payment of the cattle sold to slaughter.

⁵ Litigations 2007.006092-8/0001.00 and 2003.012226-5 – www.tjms.jus.br

5. The confidence in Judiciary

This empirical section starts with a description of the survey which serves as a basis for the examination of the producers' confidence in the Judiciary regarding the conflict of non-payment of the cattle sold to slaughter. The data was collected through 107 questionnaires applied on March, 2010. This is a non-probabilistic sample since part of it is characterized as a self-generated sample (52% of the questionnaires). The random composition of the sample (48% of the questionnaires) is composed of farmers from a list of producers that sold animals for slaughter during January and February, 2010. The list was made available by the State Bureau of Animal and Plant Health Protection (IAGRO/MS). The interviews were conducted with the farmers in charge of making decisions about the animal trade.⁶

Table 4 summarizes the profiles of the interviewed producers. More than half of respondents have a high degree of education and has worked in the production of cattle for over 20 years. In addition, producers present a strong income dependence on the cattle production and the average producer is characterized by an intermediary technological level (slaughtered steers between 20 and 36 months of age, the use of feed supplementation in the dry season and the use of artificial insemination for breeding animals).

Table 4 – Respondents' profile

	Number of producers	%		Number of producers	%
Time in cattle production activity			Level of education		
1 to 10 years	11	10.3	Basic education	17	16.2
11 to 20 years	26	24.3	High School	15	14.3
21 to 30 years	40	37.4	College (or more)	73	69.5
More than 30 years	30	28.0			
Family tradition in cattle production			Production capacity (slaughter/year)		
1 st generation	22	20.5	Less than 500	35	34.0
2 nd generation	37	34.6	501 to 2,000	46	44.7
3 rd generation	22	20.6	2,001 to 5,000	14	13.6
4 rd generation or more	26	24.3	More than 5,000	8	7.7
Percentage of income related to cattle production			Production Technology		
Less than 50%	17	16.0	Pasture	48	45.3
51% to 99%	24	22.6	Supplementation (dry season)	35	34.0
100%	65	61.4	Feed lot	22	20.7
Slaughter age			Use of artificial insemination		
Up to 20 months	1	1.0	Yes	53	50
20 to 36 months	78	73.6	No	53	50
More than 36 months	27	25.4			

Source: Research survey

⁶ The questionnaires were performed preferably by phone (67.29%) or through personal interviews (27.10%). Also, interviews were conducted via e-mail (5.61%).

Table 5 summarizes the conflict's pattern in the transaction between producers and the meatpacking industries. More than half of the interviewed producers reported problems of not being paid for the animals sold to slaughterhouses, and of these, nearly half reported that the problem occurred more than once and half farmers reported that it happened in the last five years. It is noteworthy that among those respondents who reported problems of non payment less than half turned to justice as a way to review their rights and less than 20% of them said that the judicial mechanisms were effective to solve the problem. Overall, 63% of respondents say they have low confidence in justice. The main reasons for the low confidence are: i) the justice slowness; ii) the current legislation does not prioritize the payment of cattle suppliers; iii) the low effectiveness of the justice results; iv) the existence of legal but not *de facto* shareholders; and v) the attorneys' fees.

Table 5 – Conflict's pattern

	Number of producers	%		Number of producers	%
Level of confidence in justice			Non payment historical?		
High	12	11.21	Yes	64	59.81
Average	27	25.23	No	43	40.19
Low	68	63.55			
Number of times / non payment			Last non payment		
Once	35	54.69	< 5 years	31	48.44
2 times	11	17.19	5 to 10 years	14	21.88
3 times	12	18.75	> 10 years	19	29.69
> 3 times	6	9.38			
Judicial mechanisms?			Is the judicial mechanism effective?		
Yes	30	46.88	Yes	5	15.63
No	34	53.13	No	27	84.38

Source: Research survey

The empirical analysis will focus on the producers' confidence on the Justice in the face of non-payment for the animal delivered to slaughter. The survey was conducted based on three main hypotheses: the low confidence in Justice is enhanced in the presence of past conflicts (H1), in the recurrence of non-payment events (H2) and in the presence of recent defaulting (H3).

Table 6 shows the variables included in the econometric model, their relationship with the research hypotheses and the expected sign to explain the phenomenon of confidence in Justice to solve the problem of non payment.

Table 6 – Econometric variables description and research hypotheses

General hypotheses/	Variable Description	Detailed hypothesis	Variable type	Sign
	[conf_just] - Level of Confidence in Justice (high/ low)	Dependable variable	Dummy	
H1 - The role of past conflicts (<i>path dependence</i>)	[probl] - The occurrence of the event of “non payment for the cattle sold to slaughterhouses	H1: the low confidence in Justice is enhanced in the presence of past conflicts.	Dummy	-
	[probl_jud] - To have had problem of not being paid for the animal sold to abattoir and to have gone to Court.	H1: the low confidence in Justice is enhanced in the presence of past conflicts.	Dummy	-
H2 - The role of the number of non payment events	[probl_vez] – the number of time the event occurred	H2: the low confidence in Justice is enhanced in the recurrence of non-payment events (<i>frequency</i>)	Continuous	-
H3 – The role of recent event defaults	[probl_temp] – the last time the event (“non payment”) occurred	H3: the low confidence in Justice is enhanced in the presence of recent events default (<i>path dependence</i>)	Continuous	+

Source: Research survey

Considering the estimation of a logit model, the dependent variable takes two values: *0* in case of producers’ low confidence in Justice and *1* for high confidence in Justice. The results encompass two regressions: **Regression 1** (Table 7) relates to the sample of 107 producers and **Regression 2** (Table 8) relates only to those producers who faced the problem of non payment, representing a total of 64 producers.

Table 7– The Producers’ confidence in Justice – Regression 1

<i>Dependable variable</i> [standard error in blankets]	<i>Confidence in Justice (0 = low; 1 = high)</i>				
	[1]	[2]	[3]	[4]	[5]
Prob_vez	0,1	0,1			
	[0,17]	[0,17]			
Probl_temp	0	0	0,04	0,05	0,05
	[0,03]	[0,03]	[0,04]	[0,04]	[0,04]
Probl_jud	-0,57	-0,63	-0,03	0,09	0,08
	[0,56]	[0,58]	[0,56]	[0,59]	[0,59]
Probl_jud_sol		0,44	0,45	0,55	0,6
		[0,98]	[0,98]	[1,006]	[1,01]
Problem			-1,02	-1,16	-1,15
			[0,57]***	[0,59]***	[0,60]***
Number of properties				-0,1	-0,1
				[0,17]	[0,17]
Slaughter capacity				0	0
				[0,00]	[0,00]
College degree					-0,18
					[0,49]
Constant	-0,52	-0,52	-0,13	0,07	0,177
	[0,28]***	[0,27]***	[0,30]	[0,43]	[0,52]
Log likelihood	-69,63	-69,53	-68,03	-64,44	-64,37
LR chi2	1,11	1,31	4,31	5,62	5,75
Prob > chi2	0,77	0,86	0,36	0,46	0,57
Pseudo R2	0,0079	0,0093	0,0307	0,0418	0,0428

* significance 1%; ** significance 5%; *** significance 10%;

Source: Research survey

Regression 1 suggests that the non payment for the cattle sold to slaughterhouses (variable Problem) is the fundamental aspect which shapes the producers’ confidence in the Judiciary. The existence of the problem itself indicates a negative relationship with the confidence in courts, even considering elements of scale (number of properties and slaughter capacity) and education (college degree).

Table 8– The Producers’ confidence in Justice – Regression 2

<i>Dependable variable</i>	<i>Confidence in Justice (0 = low; 1 = high)</i>			
[standard error in brackets]	[1]	[2]	[3]	[4]
Prob_vez	0,48	0,5	0,41	0,39
	[0,23]**	[0,24]**	[0,24]***	[0,25]
Probl_temp	0,07	0,07	0,08	0,08
	[0,04]	[0,04]	[0,04]***	[0,05]***
Probl_jud	-0,42	-0,53	-0,63	-0,63
	[0,61]	[0,64]	[0,70]	[0,70]
Probl_jud_sol		0,72	0,41	0,45
		[1,00]	[1,03]	[1,05]
number of properties			0,31	0,33
			[0,25]	[0,26]
slaughter capacity			0	0
			[0,00]	[0,00]
College				-0,18
				[0,88]
Constant	-2,14	-2,2	-2,78	-2,64
	[0,71]*	[0,72]*	[0,89]*	[1,10]*
Log likelihood	-36,13	-35,88	-33,95	-33,93
LR chi2	5,58	6,07	6,79	6,83
Prob > chi2	0,13	0,19	0,34	0,44
Pseudo R2	0,0717	0,078	0,0909	0,915
* significance 1%; ** significance 5%; *** significance 10%;				

Source: Research survey

Regression 2 suggests that the number of times that the non payment has occurred is an important aspect which shapes the producers’ confidence in the Judiciary. If the problem of non payment is recurrent in time, the producer tends to be more confident in the outcome of the legal process. Moreover, the more the problem is in the past, the higher the confidence of the producer in the judiciary.

6. Conclusions

The main objective of this paper is to analyze the role of the Judiciary in resolving conflicts between cattle raisers and meatpacking firms. Looking at the transaction for the acquisition of cattle for slaughter in the state of Mato Grosso do Sul, this essay focuses on the role of formal institutions (i.e., the courts) to resolve conflicts in the beef agribusiness system. Specifically, the article: (i) describes the characteristics of the transaction between cattle raisers and meatpacking firms, (ii) examines the pattern of conflicts brought before the courts, and (iii) investigates the degree of farmers’ confidence in the judiciary.

The results show that in average producers have low confidence in court and this assessment is enhanced by recent problems faced by farmers, the number of times non-payment events occurred and personal non-payment historical.

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