

Biases on Competition Courts Rulings: Evidence from Chile¹

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Abstract

What do specialized competition courts base their decisions on? In contrast to traditional courts, competition courts are generally considered very technical, dealing with sophisticated economic and statistical analysis. In this study, we develop an empirical model in order to identify the main determinants of the rulings of the competition courts, taking Chile as a case study. We develop a probabilistic analysis of fourteen years of unique statistical data on antitrust decisions, and our results show that the probability of being sanctioned is higher in industries with high concentration. There also is a high probability of being convicted in sensitive industries, and cases of collusion. In the same way, decisions are more likely to be influenced by the definition of the relevant market, rather than by the presence of an economic report from the prosecution, or the different parties involved.

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1. INTRODUCTION

There is long-standing literature pointing out that judges when issuing their decisions, vote ideologically (De Figueiredo and Tiller, 1996; Segal 1997; Cross and Tiller, 1997). In particular, the mainstay of the empirical and theoretical literature in this field has held that case decisions are driven by judges' backgrounds, party affiliation, ideology, attitudes toward the law, and the desire to leave a lasting impression on decisions.

These biases are less evident in the context of competition courts, considering that there is not abundant literature that supports this point, and the fact that competition trials usually are more complex, with sophisticated economic and statistical analysis, see Baye and Wright (2011). Indeed, some authors (e.g., Baker & Breshnahan, 2006; Baker, 2003) rely on the assumption that technical analysis (e.g., relevant market definition and economic tests) is very important for efficient (unbiased) antitrust enforcement.

In this context, and despite the more technical approach, it would be of interest to analyze the biases, if any, of competition courts. According to Kovacic (2014), concerning antitrust enforcement, "it is not surprising that a regulatory system rich in prosecutorial power and discretion has some connection with the political process." In the same line, the scarce empirical evidence suggests that competition authorities focus their efforts on industries with high concentration (Eckbo, 1992; Gao, Peng & Strong, 2017).

Through a probabilistic analysis of fourteen years of statistical data on antitrust decisions, we take a step forward and find empirical evidence in order to identify the main determinants of the rulings of the competition courts, taking Chile as a case study. The Chilean case is exciting because, since 2003, there is a new dual-agency system in place, with a National Economic Prosecutor's Office (FNE by its anachronism in Spanish), which is the supervisory body, and a Competition Court (TDLC by its anachronism in Spanish), which imposes sanctions. The FNE and the TDLC are institutions with a high level of specialization, dedicated exclusively to protecting and promoting competition in Chilean markets.

Despite this, we found that, in practice in Chile, there is an essential number of cases where there is no relevant market definition, where market concentration is not measured at all, and even economic reports are not provided. Thus, some elements of discretion could be present in the decisions of the competition authority that, by definition, must consider technical, economic, and legal grounds for adopting them.

Our econometric results show that the probability of being sanctioned is higher in industries with high concentration. There also is a high probability of being convicted in sensitive industries instead of others. In the same way, decisions are more likely to be influenced by the definition of the relevant market, rather than by the economic evidence formally presented at trials, such as the economic reports of the prosecution and the different parties involved.

This paper is structured as follows. Firstly, in section 2, the literature on intervention by competition authorities is reviewed. Secondly, in section 3, a brief review of the particular characteristics of the dual-agency model that defines Chilean competition policy is provided. Thirdly, in section 4, the methodology is shown, and the results of the study are discussed in section 5. Finally, some conclusions and future research are presented.

2. LITERATURE REVIEW.

For decades, increased market concentration has been the focus of attention by antitrust agencies; revealing its original structuralist view, see Sawyer (2019) for an interesting historical perspective for the US case. Thus, many publications have explored the rationale behind the incentives for antitrust enforcement, concluding that market concentration is particularly essential for the effective prosecution and resolution of antitrust cases.

However, competition policy must typically address several different concerns, including cartels, mergers, and monopolistic practices. Each of these raises issues of effective enforcement. In this context, antitrust enforcement would be considered inefficient because public agencies ignore serious planning of antitrust interventions (Posner, 1970), or because of a lack of precision in the decision to intervene or not (Kwoka, 2012), or as an example of strategic abuse (McFee and Vakkur, 2004).

As Baker (2003) points out, there is no evidence to precisely determine how strict antitrust enforcement should be, although empirical evidence shows that firms have often exercised market power during relaxed antitrust enforcement (Ghosal and Gallo, 2001).

One of the most important criteria used to estimate the effectiveness of antitrust enforcement is that "deterrence" is a desirable goal of enforcement (Baker, 2003; Eckbo, 1992), but a challenging goal in itself because of future uncertainty about anti-competitive practices, and thus the incremental effect of the policy is more difficult to isolate (Kwoka, 2012).

Thus, the specialized literature is based on the following conclusions. First, a good test of the effectiveness of antitrust measures is whether the market concentration has been reduced following competition policy intervention (Stigler, 1960). Second, there are mixed results of effectiveness measurement, i.e., antitrust authorities use their resources for antitrust research in concentrated industries, which is very efficient, but does not always work in favor of consumer welfare (Gao et al., 2017). Third, antitrust enforcement benefits are highly speculative, but there is consensus that they always outweigh the likely harms (Baker, 2003). Fourth, the activity of antitrust cases is counter-cyclical, i.e., antitrust violations tend to increase during economic crises (Ghosal & Gallo, 2001).

In this context, companies may choose to accommodate a variety of strategic options in the face of a more or less complicated legal scenario, since each legal dispute is a business problem that affects the risk/benefit ratio of a given company (Bagley, 2008). Thus, individual strategic decisions, such as implementing compliance programs in antitrust, can make the difference between avoiding a penalty versus submitting to multiple lawsuits (Yoffie and Kwak, 2001).

On the other hand, the costly nature of antitrust suits and the fact that it is usually cheaper to file a lawsuit than to defend against it makes antitrust cases a strategic tool (Casarin, 2015). However, competition authorities do not always express clarity about their decision variables, which can potentially impact the design of a litigation strategy and, in turn, the costs of implementing it.

Although concentration is essential for antitrust intervention, there is no evidence in the literature on some other factors that can contribute to efficient and impartial antitrust intervention. Some publications consider that antitrust authorities' decisions may be influenced by political reasons (Kovacic, 2014) or by technical reasons (Baker and Breshnahan, 2006). However, the literature on antitrust has focused on this issue of selection, abandoning an analysis of decision variables that affect the actual outcomes of cases.

Thus, while traditional models do not usually take into account the ideology of judges at the time of the resolution of cases, judicial policy models (which do consider the ideology of judges) do not usually take into account the selection of cases (Epstein and King, 2002; Revesz 2002). Also, as Hillman and Hitt (1999) and Baye and Wright (2011) point out, the difficulties courts have in interpreting complex scientific or technical evidence increase the uncertainty of legal judgment.

Therefore, it is clear that understanding the probability that certain relevant variables impact the outcome of a trial by a competition authority is a first step in understanding the design and adequate implementation of a legal strategy, as for the competition authority as for firms.

3. ON THE CHILEAN COMPETITION COURTS.

Chile is one of the Latin American countries with the most experience in competition law, mainly due to its advances in legislation, jurisprudence, and professional specialization. Taking as a reference to the Sherman Act of the United States, the first provisions tending to sanction monopolistic practices as a way of protecting competition were approved in Chile in 1959, although Decree-Law no. 211 of 1973 and its subsequent amendments ("DL 211") establish the main legal framework for antitrust matters in Chile.

Article 3 of DL 211 states that whoever carries out or enters into, individually or collectively, any conduct, act, or agreement that "impedes, restricts or hinders free competition or that tends to produce such effects," will be sanctioned with the measures contemplated therein. In that sense, any conduct with horizontal or vertical effects, both unilateral and coordinated, that lessen free competition may be sanctioned. There is no definition of free competition in DL 211.

Authorities in charge of the enforcement of antitrust law and regulations are the Competition Court (Tribunal de Defensa de la Libre Competencia, "TDLC") and the National Economic Prosecutor's Office (Fiscalía Nacional Económica, "FNE") are responsible for enforcing Chilean antitrust laws within their scope of authorities.

The TDLC is a specialized and independent court of law composed of three lawyers and two economists and subject to the Supreme Court's supervision. Its role is to prevent, correct, and sanction anticompetitive conduct to decide all cases the FNE or private persons may submit to its consideration. The TDLC is also in charge of issuing general guidelines for the enforcement of competition law. The TDLC's final judgment is subject to judicial review by the Supreme Court.

Also, the FNE is an independent administrative entity in charge of investigating conducts that may constitute antitrust infringements, representing the public interest before the TDLC and seeking enforcement of resolutions, decisions, and instructions issued and passed by such Court.

Then, Chilean antitrust enforcement has a hybrid nature, i.e., dual-agency system. The FNE and the TDLC are institutions with a high level of specialization (i.e., they represent sophisticated legal and economic activities) dedicated exclusively to protecting and promoting competition in Chilean markets. Therefore, it is exciting to observe the enforcement interaction between them, mainly because the nature of antitrust enforcement is separate from the pursuit and adoption of decisions leading to sanctions in cases of collusion or abuse of dominant position.

Despite the DL 211 providing a slightly open frame regarding the admissible evidence and its assessment by the TDLC, the standard of evidence is not established in the DL 211. Given the difficulties to find direct evidence of anticompetitive behavior, there is a common understanding

that the antitrust standard should be ubicated in between the "preponderance of the evidence" (civil matters) and "beyond all reasonable doubt" (criminal matters) standards, then, the standard tends to be more flexible.

Thus, the Chilean system is a suitable space to observe a natural experiment that differentiates between the activities of auditing and, of deciding on cases of free competition, since the independence between both activities, would allow arriving at more precise conclusions on the decision biases present in the Court's decision.

4. METHODOLOGY AND DATA DESCRIPTION

Our empirical analysis is based on several papers that use econometrics models to understand the determinants of court rulings, see for example Landes and Posner (1975), Hayo and Voigt (2007), and Fiorino et al (2015). In these, Probit analysis is classically used to describe a relationship of a variable to a presence or absence response. Also, in multivariate Probit analysis, a continuous cluster variable is assumed to control the joint response over the other variables statistically. In our Probit model, we characterize the probability of sanctioning the competition authority in the presence/absence of certain variables that shed light on potential biases in antitrust enforcement intervention.

The dependent variable is modeled as a dichotomous choice, i.e., each decision that incorporates a sanction by the TDLC, the competition court, takes a positive value, and each decision that does not incorporate a sanction takes a value equal to zero. Given the fact that the variable of interest is dichotomous, we assume that there is a latent variable, Y^* , which represents the utility for the court to rule in favor of a conviction in the case. Since the gross Probit results are difficult to interpret in terms of the probability of the sanctioning decision as a consequence of the judge's motives, our methodology considered the evaluation of the marginal effects of the variables on the probability that a decision is sanctioned. The marginal effects are additive *approximations* of effects in non-additive models, so a marginal effect corresponds *approximately* to a percentage point increase.

Our main hypotheses are:

- **Hypothesis 1.** Probability of sanction in concentrated industries. It is more likely that there will be a sanctioning decision in industries with higher levels of concentration.
- **Hypothesis 2.** Likelihood of penalty in cases where there is a sensitive market. Penalties are more likely to be imposed in sensitive markets.
- **Hypothesis 3.** Likelihood of penalty depends on the type of conduct examined, for instance abuse of dominance position versus collusion. There is a bias in court decisions to punish cases of collusion.
- **Hypothesis 4.** Likelihood of penalty in cases where there is a relevant market definition. There is a bias in court decisions when the relevant market definition is present.
- **Hypothesis 5.** Likelihood of penalty in cases where there are economic reports. There is a bias in court decisions when formal economic evidence is present.
- **Hypothesis 6.** Likelihood of penalty in cases where the National Economic Prosecutor (FNE) is involved. There is a bias in court decisions when FNE is present.

While hypotheses 1, 2, and 3 are more likely to focus on political and social biases, hypotheses 4, 5, and 6 can be seen as proxies that the authority is giving higher weight to technical analysis. In all cases, we will analyze potential interaction terms between the variables of interest. These interaction terms allow us to isolate the marginal impact of one variable, for example, the

combination of concentrated and sensitive industries, and the presence of relevant market definition and economic reports.

In terms of data, we collected 163 resolutions from 2004 to 2018 from the TDLC dataset. In order to assess potential trends in antitrust enforcement, information and data on the other stages of the regulatory process, such as prosecutorial intervention, are combined with market data (i.e., economic concentration) to produce a comprehensive picture.

With respect to the type of anticompetitive abuse, decisions can involve abuse of dominant position, collusion, and other types of descriptions such as unfair competition, predatory pricing, and barriers to entry. The statistics in Table 1 show that the vast majority of TDLC's decisions concern abuse of dominance and collusion, accounting for almost 60% of the total.

Table 1.- Type of conduct in TDLC's Decisions

Type of conduct	Cases	Percent
Abuse of Dominant Position	63	39%
Collusion	30	18%
Unfair Competition	19	12%
Non-compliance with Resolution	10	6%
Refusal to Hire	3	2%
Predatory pricing	6	4%
Acts of Authority	17	10%
Barriers to Entry	11	7%
Others	4	2%
TOTAL	163	100%

Source: Data base on TDLC's decisions,

Available in: https://www.tdlc.cl/nuevo_tdlc/estadisticas-causas/ (Hereinafter TDLC Statistics)

Table 2 statistics show that 71 percent of cases have a relevant market definition, 46 percent of cases have private economic reports, 47 percent have an FNE economic report, and 33 percent of cases show a concentration analysis. Following González & Micco (2014) a market is sensitive if its products are considered essential goods or the vast majority of the population consumes them.

Table 2.- Information considered in the process

	Relevant Market Definition		Private Economic Report		FNE Economic Report		HHI Analysis	
	Cases	Percent	Cases	Percent	Cases	Percent	Cases	Percent
Yes	116	71%	75	46%	76	47%	54	33%
No	47	29%	88	54%	87	53%	109	67%
	163	100%	163	100%	163	100%	163	100%

Source: TDLC Statistics

According to statistics in Table 3, 58% of cases decided by TDLC are absolved, 39% are sanctioned and, other types of resolution finished 3%. In the same table, we can see that the main sectors with more competition cases are Telecommunications (21), Pharmacist (13), Transport (14), and Retail (11), all of them belonging to the sensitive market category. The most sanctioned markets are Transport (12), Telecommunications (8), Retail (5), Pharmacist, and Health (4), again all belonging to the sensitive market category.

Table 3.- TDLC type of decisions by sensitive markets

	Sensitive market	Total Decisions	Absolved	%	Sanctioned	%	Other	%
Airport	No	1	0	0%	1	1%	0	0%
Food and Beverage	Yes	7	5	3%	2	1%	0	0%
Fuels	No	9	7	4%	1	1%	1	1%
Computing	No	1	0	0%	1	1%	0	0%
Concessions	No	11	8	5%	3	2%	0	0%
Publisher	No	3	3	2%	0	0%	0	0%
Education	Yes	2	1	1%	1	1%	0	0%
Electronics	No	4	4	2%	0	0%	0	0%
Electric	No	7	4	2%	2	1%	1	1%
Entertainment	No	1	1	1%	0	0%	0	0%
Pharmacist	Yes	13	9	6%	4	2%	0	0%
Financial	Yes	7	5	3%	2	1%	0	0%
Gambling	No	1	1	1%	0	0%	0	0%
Toys	No	1	1	1%	0	0%	0	0%
Construction materials	No	3	2	1%	1	1%	0	0%
Sanitary Works	No	2	1	1%	1	1%	0	0%
Others	No	20	12	7%	8	5%	0	0%
Port	No	5	3	2%	2	1%	0	0%
Social Welfare	Yes	2	1	1%	1	1%	0	0%
Waste	No	6	2	1%	3	2%	1	1%
Retail	Yes	11	5	3%	5	3%	1	1%
Clothing and footwear	No	2	2	1%	0	0%	0	0%
Health	Yes	5	1	1%	4	2%	0	0%
Tobacco	No	2	0	0%	2	1%	0	0%
Telecommunications	Yes	21	13	8%	8	5%	0	0%
Transport	Yes	14	1	1%	12	7%	1	1%
Motorized Vehicles	No	2	2	1%	0	0%	0	0%
TOTAL		163	94	58%	64	39%	5	3%

Source: TDLC Statistics

We compile all existing TDLC decisions over fourteen years, and then produce additional information and data on industry conditions, and the agency's decision with respect to each case, including the results of the decision, considering variables such as:

- (i) The existence of a relevant market definition prepared by the TDLC, **Relevant market definition (1=YES, 0=NO)**. This means that, the TDLC develop a relevant market definition into de decision and he exhibit the economic considerations about market definition applied to the case.
- (ii) The existence of economic reports provided by the FNE and/or the parties to the lawsuit: **Private economic report (1=YES, 0=NO), FNE economic report (1=YES, 0=NO)**.
- (iii) The existence of a quantification of economic concentration in the TDLC's decisions. **Concentration (1= If market is highly concentrated, 0=If market is not highly concentrated)**. This means that, there is a quantitative analysis of market concentration into

de decision and the market is highly concentrated (i.e., $HHI > 2500$). **The popular Herfindahl-Hirschman Index (HHI) is also included in the analysis.**

- (iv) The condition of the sensitive market that the case is considered to be subject to the TDLC's decision, **Sensitive Market. (1=If market is sensitive, 0= If market is not sensitive).**

This unique database developed for this study is the base of our empirical analysis presented in the next section.

5. ECONOMETRIC RESULTS.

Tables 4 to 8 present the results of our Probit estimates. In each of our regressions, the dependent variable is "TDLC Impose Sanctions," an indicator that equals one if the court sanctions the behavior and zero otherwise. In each outcome table, the top number in each cell is the regression coefficient, which indicates the magnitude and direction of the relationship between each variable and the TDLC decision. A negative coefficient indicates that a variable reduces the probability that a TDLC decision will deliver a guilty outcome; a positive coefficient indicates that a variable increases the probability that a TDLC decision will deliver a guilty outcome.

Also, the table reports the standard errors for each coefficient and the statistical significance set forth as follows: *Significance at 10%; ** significance at 5%; *** significance at 1%. However, since Probit results are difficult to interpret in terms of the probability, we present the marginal effects of the variables on the probability of the sanctioning decision.

Firstly, we analyze model (1) and (2) that explore the relationship between the sanctioning decisions of the TDLC (competition court) and the presence of concentrated and sensible markets. Table 4 reports the Probit results for three regressions that regress the court's decision on concentration and sensitive markets. Let us remember that this *Concentration* variable measures whether the trial considers a concentration measure for the market under consideration and if it considers whether this was high. We control by the participation of the National Economic Prosecutor (FNE) in the trial, and whether or not the Lawsuit is for collusion. The results show a positive relationship between the TDLC's sanctioning decisions and the existence of concentrated markets, in the first two regressions but only at 10% of statistical significance.

On the other hand, the fact that the trial is in a sensitive market is not significant in any three regressions, which means that the probability of a sanction is not affected. In the third regression, an interaction term between concentration and the sensitive market is not significant either. The control variables *FNE becomes party* and *Lawsuit is for collusion* are statistically significant for the three models at 10% and 1%, respectively.

Table 5 shows a similar regression, but this time the concentration variable is directly HHI. Since only a reduced number of cases present this measure, the database is reduced to less than half of the observations compared with the models above. Nevertheless, the results are more precise, pointing out that the level of concentration positively affects the probability of getting a sanction. In this case, the sensitive market variable is significant at 5% in the first model, so the interaction term with concentration. Again the control variables *FNE*

becomes party and *Lawsuit is for collusion* are statistically significant for the three models, but this time both are at 1%. In sum, it is possible to assert that the probability of a conviction increases when a market is concentrated and when the market is a sensitive one. Therefore, there is evidence to confirm hypothesis 1 and hypothesis 2.

Table 4.- Model (1) - Multivariate analysis of factors influencing the probability to be sanctioned: concentrated and sensitive markets. Marginal effects.

VARIABLES	(1) TDLC impose sanctions	(2) TDLC impose sanctions	(3) TDLC impose sanctions
Concentration	0.907* (0.496)	0.887* (0.498)	0.756 (0.513)
Sensitive Market	0.275 (0.245)		
Concentration*Sensitive Market			0.249 (0.253)
FNE becomes party	0.443* (0.268)	0.494* (0.263)	0.456* (0.266)
Lawsuit is for collusion	1.263*** (0.334)	1.282*** (0.330)	1.250*** (0.334)
Constant	1.337*** (0.337)	1.322*** (0.331)	1.335*** (0.336)
Observations	135	135	135

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 5.- Model (2) - Multivariate analysis of factors influencing the probability to be sanctioned in concentrated and sensitive markets. Marginal effects.

VARIABLES	(1) TDLC impose sanctions	(2) TDLC impose sanctions	(3) TDLC impose sanctions
HHI	0.000636*** (0.000194)	0.000560*** (0.000204)	0.000587*** (0.000193)
Sensitive Market	1.579** (0.699)	-1.646 (2.049)	
HHI*Sensitive Market		0.00113 (0.000738)	0.000616** (0.000252)
FNE becomes party	1.390** (0.671)	2.201** (1.062)	1.755** (0.767)
Lawsuit is for collusion	2.330*** (0.803)	2.599** (1.014)	2.486*** (0.906)
Constant	-3.963*** (1.149)	-3.873*** (1.346)	-3.998*** (1.234)
Observations	45	45	45

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 6 reports the Probit results for six regressions that observe the statistical variations of the interaction between the court decisions and the type of conduct under investigation, particularly collusion and abuse of dominant position. The six models' results indicate a statistically significant positive relationship between the TDLC's sanctioning decisions and whether a case of collusion is being judged. Interaction terms are evaluated for collusion and abuse of dominant position considering concentration and sensitive markets, but none of them are significant from a statistical point of view.

It is interesting to note that there is no statistically significant relationship if the case concerns to an abuse of dominant position, the second most popular competition case to take into court. In practice, this could mean that, since collusion is more exposed to public opinion and the press, the court and economic prosecutors place more emphasis on winning this type of case, selecting cases more carefully and/or undertaking more thorough preparation for trial. In any case, hypothesis 3 is confirmed, there is a bias in court decisions to punish cases of collusion.

Table 6.- Model (3) - Multivariate analysis of factors influencing the probability to be sanctioned. Influence of he type of charge: Collusion and Abuse of Dominant Position. Marginal effects.

VARIABLES	(1) TDLC impose sanctions	(2) TDLC impose sanctions	(3) TDLC impose sanctions	(4) TDLC impose sanctions	(5) TDLC impose sanctions	(6) TDLC impose sanctions
Lawsuit is for collusion	1.152*** (0.294)	1.267*** (0.313)	1.299** (0.525)	1.263*** (0.318)	0.931** (0.442)	1.271*** (0.317)
Lawsuit is for abuse of dominance	0.156 (0.229)	0.184 (0.232)	0.184 (0.232)	0.149 (0.592)	0.177 (0.232)	0.504 (0.319)
Concentration		0.513* (0.294)	0.528 (0.359)	0.500 (0.357)	0.507* (0.297)	0.530* (0.295)
Sensitive Market		0.424** (0.215)	0.425** (0.215)	0.424** (0.215)	0.321 (0.235)	0.691** (0.283)
Concentration*collusion			-0.0464 (0.624)			
Concentration*abuse of dom				0.0399 (0.620)		
Sensitive M*collusion					0.608 (0.570)	
Sensitive M*abuse of dom						-0.637 (0.432)
Constant	-0.529*** (0.161)	-1.199*** (0.341)	-1.213*** (0.390)	-1.187*** (0.384)	-1.137*** (0.347)	-1.361*** (0.362)
Observations	159	159	159	159	159	159

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 7 presents the Probit results for four regressions that try to see if the probability of being sanctioned is affected by having an explicit definition of the relevant market and the presence of economic reports from the FNE and other parties involved.

The results of the four models indicate that there is a statistically significant and positive relationship between the TDLC's sanctioning decisions and whether there is an explicit definition of the relevant market.

On the other hand, results indicate that there is no statistically significant relationship between the TDLC's sanctioning decisions and the presentation of economic reports. The control variables confirm that concentration, sensitive market, and collusion are statistically significant variables that influence the court's decisions. It is essential to report that several interaction terms were tested without any statistically significant result.

Table 7.- Model (4) - Multivariate analysis of factors influencing the probability to be sanctioned: cases with explicit relevant market definition and the presence of economic reports. Marginal effects.

VARIABLES	(1) TDLC impose sanctions	(2) TDLC impose sanctions	(3) TDLC impose sanctions	(4) TDLC impose sanctions
Relevant market definition	1.039*** (0.273)	0.887*** (0.321)	1.099*** (0.278)	1.168*** (0.293)
Private economic report	0.140 (0.215)	-0.325 (0.594)	0.298 (0.233)	0.199 (0.249)
Relevant market*Private report		0.545 (0.639)		
Concentration			0.602** (0.291)	0.899*** (0.323)
Sensitive Market			0.445** (0.217)	0.421* (0.226)
Lawsuit is for abuse of dominance				-0.0125 (0.251)
Lawsuit is for collusion				1.217*** (0.337)
Constant	-1.117*** (0.244)	-1.010*** (0.268)	-1.962*** (0.420)	-2.417*** (0.467)
Observations	159	159	159	159

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

In sum, it is possible to conclude that technical motivations may influence the court rulings (e.g., relevant market definition); however, in the presence of relevant economic evidence, the probability of sanctioning does not increase.

In particular, the four models show that the probability of being sanctioned is importantly increased by the presence of an explicit definition of the relevant market. Given that hypothesis 4 is confirmed, there is a bias in the court decisions when the relevant market is defined. Hypothesis 5 cannot be confirmed; in other words, court decisions are not affected by the presentation of an economic report. Interestingly, this result shows specific orientation in the competition authority decisions that are important for facing a legal strategy.

These results could have two possible interpretations. Firstly, since the definition of the relevant market represents a proxy of technical analysis, this conclusion goes in the same direction that the literature, as there are abundant opinions about the relevance of economic evidence in the decisions of a competition authority. On the other hand, the question remains: why is the relevant market not always presented in a competition case? Although from the legal point of view, this could be justified for reasons of procedural economy, the literature is based on the assumption that the impartiality of the decisions must have adequate technical foundations and, therefore, their absence could leave spaces of discretion that are difficult to manage in the seat of second instance judicial review.

Table 8 presents the results of the importance of the court decisions when the National Economic Prosecutor (FNE) is involved in the case. The table shows that the three models indicate a statistically significant and positive relationship between the TDLC's sanctioning decisions and that the economic prosecutor, FNE, becomes a party in the trial. Whether the FNE starts or not, the trial is not relevant.

Table 8.- Model (5) - Multivariate analysis of factors influencing the probability to be sanctioned: cases where the National Economic Prosecutor (FNE) is involved. Marginal effects.

VARIABLES	(1) TDLC impose sanctions	(2) TDLC impose sanctions	(3) TDLC impose sanctions
Concentration	0.709** (0.329)	0.709** (0.328)	0.802** (0.339)
Sensitive Market			0.382 (0.256)
Lawsuit is for collusion	1.430*** (0.346)	1.474*** (0.368)	1.503*** (0.377)
Lawsuit is for abuse of dominance		0.0955 (0.269)	0.141 (0.272)
Relevant market definition	1.517*** (0.356)	1.505*** (0.359)	1.546*** (0.371)
FNE (prosecutor) start the trial	-1.124 (0.688)	-1.118 (0.687)	-1.128 (0.690)
FNE becomes party	1.588** (0.682)	1.590** (0.681)	1.548** (0.684)
Constant	-2.412*** (0.505)	-2.450*** (0.518)	-2.766*** (0.577)
Observations	135	135	135

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

The results also suggest that in the presence of the FNE in the trial, a sensitive market's role loses force in TDLC's decisions, which might suggest that the FNE precisely choose cases of sensitive markets. Also confirm hypothesis 6, since it can be concluded that the presence of the economic prosecutor increases the probability of a condemnatory sanction importantly. This result coincides with González, and Micco (2014).

Engaging in the last regression of our analysis, regression (3) in Table 8, we found that when the market is concentrated, the case is about collusion, a relevant market definition is established, and the FNE became a party in the trial, the probability of a condemnatory sanction is exceptionally high. Of course, we cannot venture a causal explanation of the relationship between the TDLC's decisions and these variables. Hence, our analysis does not allow us to say that the court's decisions are entirely discretionary; however, it reinforces the idea of very well defined biases in the court rulings.

6. CONCLUDING REMARKS

There is not abundant evidence in the legal and economic literature of biases or trends in competition courts. Our study tries to fill this gap, with a focus on the Chilean experience. Indeed, in this article, we develop an empirical model in order to identify the main determinants of the rulings of the competition courts, taking Chile as a case study.

Our Probit analysis of fourteen years of unique statistical data on antitrust decisions shows that the probability of being sanctioned is higher in industries with high concentration. We also find that there also is a high probability of being convicted in sensitive industries. Our results also indicate that there is a statistically significant positive relationship between the TDLC's sanctioning decisions and whether a case of collusion is being judged. We speculate that this bias could be understood since collusion is more exposed to public opinion and the press, and hence the court and economic prosecutors could place more emphasis on this type of case, rather than others such as the abuse of dominant position.

In the same way, we find that decisions are more likely to be influenced by the definition of the relevant market, rather than by the presence of an economic report from the prosecution, or the different parties involved. These results could have two possible interpretations. Firstly, since the definition of the relevant market represents a proxy of technical analysis, this could indicate the court's technical spirit. On the other hand, the question that remains is why the relevant market is not always presented in a competition case?

In general, we have found in our econometric analysis that when the market is concentrated, the case is about collusion, a relevant market definition is established, and the FNE became a party in the trial, the probability of a condemnatory sanction is extremely high. These results could suggest the idea of very well defined biases in the court rulings. Since authorities are legally obliged to base their decisions in technical analysis, these biases must tend to be eliminated in time.

The economic evidence and the behavior are relevant in any case of antitrust; our results allow us to generate a space of interpretation that forces us to be more cautious before the uncertainty of the foundations that influence the court's decisions. In this sense, it is worth remembering that companies make strategic decisions based on the legal environment, then understanding the areas of discretion and potential biases of the competition authority allows firms to engage in nonmarket strategies to gain competitiveness, which is very dangerous in a market economy.

Some pending tasks to be investigated are: (1) To get a better understanding of the authority's biases considering other variables of analysis in the decision process, e.g., barriers to entry and potential for new entrants, continuity of behavior over time and magnitude of the harm, among others, and, (2) To get a better understanding of the design of nonmarket strategies considering the perceptions of those who litigate before the competition authority.

7. REFERENCES

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