



The Draft Fining Guidelines and the future of antitrust fines in China

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ABSTRACT

Fines are a major part of the punishment and deterrence in China's enforcement of its Antimonopoly Law. China has been drafting antitrust fining guidelines in the past several years and the current version is believed to be close to final. One natural question is: will the antitrust fining guidelines lead to harsher antitrust fines in China's future enforcement? We attempt to answer this question by assessing whether fine recipients in China's historical antitrust investigations would have received higher fines according to the Draft Fining Guidelines. Based on a large number of historical non-merger case decisions issued by China's antitrust agencies through September 2019, our quantitative analysis shows that higher future fines should be expected in the future. We also explore several factors that might explain why historical fines were below the level predicted by the Draft Fining Guidelines.

KEYWORDS: antitrust enforcement, antitrust fines, antimonopoly law, horizontal agreement, vertical agreement, abuse of dominance

JEL CLASSIFICATIONS: K21, L41, L42

I. INTRODUCTION

There have been only a dozen years since the start of the enforcement of China's Antimonopoly Law (the AML) in 2008,¹ yet China has already become a major jurisdiction in the global antitrust arena. From the start of the enforcement of the AML, Ministry of Commerce (MOFCOM), the agency charged with antitrust review of mergers, acquisitions and joint ventures, has published decisions when such transactions were rejected or approved with conditions. Since 2013, the other two agencies tasked with antitrust enforcement of non-merger cases, National Development and Reform Commission (NDRC) and State Administration of Industry and Commerce

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1 See Antimonopoly Law of the People's Republic of China, <http://www.gov.cn/flfg/2007-08/30/content_732591.htm> last accessed 10 October 2020. The English translation of the AML in this article follows the Appendix to Nate Bush, 'The PRC Antimonopoly Law: Unanswered Questions and Challenges Ahead', *The Antitrust Source*, October 2007.

(SAIC), started publishing regularly their antitrust decisions. In 2018, under the Chinese government's reorganization plan, the antitrust functions of these three agencies were moved to the newly established State Administration for Market Regulation (SAMR). Since then SAMR has become the sole agency to issue antitrust decisions.

Deterrence of anticompetitive conduct is a major goal of enforcing the AML, and punishment is an important mechanism to achieve the right deterrence effect. In China's legal and economic context, fines are a major part of the punishment toolbox for deterring anticompetitive conduct. In an effort to make antitrust fines more objective and transparent, China has been drafting antitrust fining guidelines in the past several years and has reached an advanced stage. The most recent public version was released for comments in June 2016 (hereafter 'Draft Fining Guidelines').² When the Draft Fining Guidelines are finalized and implemented in the near future, it is expected that the fining decisions in antitrust cases will be made according to more transparent and quantifiable criteria, which should provide better guidance and certainty to companies as to what to expect from committing antitrust violations in China.

There have been very few systematic and quantitative studies of antitrust fines in China. Lin and Gan (2016, 2017) and Huang, Wang and Zhang (2018) provide important statistics on the types of cases, industry distribution, the results of the fines, mitigating situations and other important characteristics of Chinese antitrust cases where fines were issued, based on the decisions published by the Chinese antitrust agencies.³ Using regression methods, Zhang and Sun (2019) study how the factors in Draft Fining Guidelines affected antitrust fines in past cases in China, and whether these effects are consistent with the formulaic provisions in the Draft Fining Guidelines.⁴

In this article, we ask a different question: will the implementation of the Draft Fining Guidelines lead to harsher antitrust fines in the future? We attempt to answer this question by assessing whether fine recipients in China's historical antitrust investigations would receive higher fines based on the Draft Fining Guidelines.

In the following, we first provide a brief description of the legal background of antitrust fines in China and the relevant content of the Draft Fining Guidelines. Next, we assess China's antitrust fines in historical cases and project the would-be fines for these cases if the fines had been determined according to the provisions in the Draft Fining Guidelines. We predict higher future fines based on the gap between the

- 2 See 'Anti-Monopoly Committee of the State Council's Guidelines for Identifying Illegal Gains from Undertaking's Monopolization Conduct and Determining Fines (Draft for Comments)', available in Chinese at <https://www.ndrc.gov.cn/hdjl/yjzq/201606/t20160617_1165959.html> last accessed 10 October 2020. We understand that the Draft Fining Guidelines have changed little since this 2016 version.
- 3 Wen Lin and Mi Gan, 'Big Data Analysis Report on China's Administrative Antimonopoly Enforcement, 2008-2015', *Jingzheng falv yu zhengce pinglun* (Competition Law and Policy Review), 2016, No 2; Wen Lin and Mi Gan, '2016 Report on China's Administrative Antimonopoly Enforcement', *Jingzheng falv yu zhengce pinglun* (Competition Law and Policy Review), 2017, No 3; Yong Huang, Elizabeth Xiao-ru Wang and Roger Xin Zhang, 'A Decade in Review: Antitrust Enforcement by China's NDRC and SAIC', *Antitrust Source*, August 2018.
- 4 Chenying Zhang and Su Sun, 'What Determines Antitrust Fines in China?' (2019) 40(2) *European Competition Law Review* 47-62.

projected fines and actual fines. We then attempt to identify some factors that might explain this gap. We use an illustrative case to further demonstrate the above systematic analysis. Finally, we conclude by summarizing our findings.

II. FINES AS STIPULATED IN THE AML

The AML lays out the general antitrust fining principles. Chapter 7 of the AML provides the rules regarding antitrust fines. The first three articles in this chapter, Articles 46–48, describe different fining principles for three different types of antitrust violations: monopoly agreements, abuse of dominance, and merger-related violations. The focus of this study is on non-merger administrative fines issued by SAMR and its predecessors. We do not include merger-related fines described in Article 48 since they are determined with quite different rules and considerations.⁵

Article 47 provides general punishments for conduct deemed to be an abuse of dominance: ‘If the undertakings abuse their dominant market positions in violation of relevant provisions of this Law, the Antimonopoly Law Enforcement Authority shall order the undertakings to stop such illegal act, confiscate their illegal gains, and impose a fine of no less than 1% and no more than 10% of their sales in the preceding year’. Article 46 on monopoly agreements contains the same language. Confiscation of illegal gains is not common in China’s antitrust enforcement, and there has been little recourse through civil remedy. The 10% cap may be appropriate for abuse of dominance violations given the higher uncertainty in determining the violation correctly, and it may be justified for vertical agreement violations given the potential efficiency reasons behind such agreements. However, for horizontal agreements, the 10% cap seems too low. It might be based on the assumption that the price overcharge from a cartel is typically no more than 10 per cent. This assumption is likely an understatement of actual overcharges.⁶ In addition, given that the probability of detection is less than 1, the penalty needs to be larger than the overcharge to have sufficient deterrence effect.

Article 46 also addresses three more issues that are specific to monopoly agreements. The first is for unimplemented monopoly agreements, the fine will be no more than RMB 500,000. The second is a leniency provision: ‘If the undertakings, on their own initiative, report to the Antimonopoly Law Enforcement Authority information concerning the conclusion of monopoly agreements and provide important evidence, the Antimonopoly Law Enforcement Authority may reduce the penalty imposed or grant exemption from penalty after weighing the relevant circumstances.’ The third issue is related to trade associations: ‘If trade associations organize undertakings within their respective industries to conclude monopoly agreements in violation of this Law, the Antimonopoly Law Enforcement Authority may impose a fine of no more than RMB 500,000; if the circumstances are serious, the authority in

5 Merger-related fines are generally related to gun-jumping incidents and violations of antitrust remedies imposed by the antitrust agency when approving the mergers.

6 For example, one prominent study shows that the median average long-run overcharge for all types of cartels over all time periods is 23.0 per cent, and the average is more than double of this figure. John M Connor, ‘Price-Fixing Overcharges: Revised 3rd Edition’, 2014, <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2400780> last accessed 10 October 2020.

charge of registration and administration of social organizations may revoke the registration of the trade organizations in accordance with the law.’

Article 49 provides some general guidance on the factors that may affect the final fines: ‘The Antimonopoly Law Enforcement Authority shall take into consideration the nature, extent and duration of the illegal act and other factors in determining the specific amount of the fines set forth in the Articles 46, 47 and 48 of this Law.’ However, this guidance does not provide detailed instructions for calculating fines, which are to be provided in detailed guidelines currently being drafted.

On 2 January 2, 2020, SAMR published the Draft Amendments to the Antimonopoly Law (‘Draft AML Amendments’) to solicit public comments.⁷ Related to fines, undertakings which have no turnover in the preceding year or have concluded but have not implemented monopoly agreements may be fined no more than RMB 50 million. This proposed cap is 100 times higher than the current cap of RMB 500,000 indicated above. In addition, the proposed amendments would be applicable to those organizing or assisting other undertakings to conclude monopoly agreements.⁸ There are some other new provisions in the Draft AML Amendments that similarly signal a tendency to provide a stronger deterrence effect through higher fines.

III. DRAFT ANTITRUST FINING GUIDELINES

Parallel to the efforts to amend the AML and under the general principles laid out in Article 49 of the AML, the Antimonopoly Commission of China’s State Council has been drafting detailed guidelines on how to determine illegal gains and fines. After a number of drafts, the 14th version of the guidelines was released for public comments in June 2016. For the purpose of our study, we focus on the determination of fines, which have been issued much more broadly in China’s antitrust investigations than the confiscation of illegal gains.⁹

Chapter 3 of the Draft Fining Guidelines provides specific and quantitative guidance on how to calculate the fine amount. The fine amount is computed by multiplying the preceding year’s sales of the undertaking that was affected by the anticompetitive conduct by a fine percentage.

The Draft Fining Guidelines first provides a base fine percentage between 1 per cent and 3 per cent for three types of illegal conduct: horizontal agreements, vertical agreements and abuse of dominance. The base fine for horizontal agreements and abuse of dominance is either 3 per cent or 2 per cent depending on the nature of the horizontal agreement or where the dominance comes from. The base fine for vertical agreements is 1 per cent. See [Table 1](#) below for a summary. These differential base fines reflect the recognition that anticompetitive harm may be different depending on the nature of the conduct involved, and some conduct, especially those involving

7 See ‘Public Notice of SAMR to Solicit Public Comments Regarding Draft Amendments to the Antimonopoly Law’, 2 January 2020, <http://www.samr.gov.cn/hd/zjdc/202001/t20200102_310120.html> last accessed 10 October 2020.

8 *ibid*, Draft AML Amendments, art 53.

9 As [Table 7](#) below shows, only 30 out of the 202 fine recipients in our data received confiscation of illegal gains.

Table 1 Base fine as provided in draft fining guidelines

Type of conduct	Nature of conduct	Fine (%)
Horizontal agreement	Price agreement	3
	Quantity restraint	
	Market division	
	Restraint on purchase/development of new tech/product	2
	Joint boycott	
	Other	
Vertical agreement		1
Abuse of dominance	Dominance comes from laws and regulations	3
	Dominance comes from market competition	2

vertical agreements, often have some offsetting efficiency and thus should start with a lower base fine.

After the base fine percentage is determined, the antitrust enforcement agency considers the duration of the illegal conduct, aggravating factors and mitigating factors to adjust the base fine, as described in Articles 23–27. Table 2 is a summary of these provisions.

Articles 28–30 allow some flexibility to adjust the fines further by considering the severity of the offense and whether the leniency policy is applicable.¹⁰ The final fine percentage is not to be higher than 10 per cent.

Overall, the Draft Fining Guidelines have a lot of resemblance to the European Commission's methodology for setting the antitrust fines. Both start with setting a base fine, and adjusting this base fine based on aggravating and mitigating circumstances, and then performing further adjustments and allowing for leniency.¹¹ The US Sentencing Guidelines similarly suggests a base fine with further adjustments.¹² The factors for consideration set out in the Draft Fining Guidelines are also similar to those that have been found to be important in academic studies.¹³

IV. WILL THE GUIDELINES BRING HARSHER ANTITRUST FINES IN CHINA?

One natural question to ask is how the Draft Fining Guidelines, if issued as they are, would affect antitrust fines in China in the future. Of course, the future has not come

10 For detailed description of these articles in the Draft Fining Guidelines, see Chenying Zhang, 'Administrative Penalty Guidelines against Monopoly in China – An Empirical Analysis', *Antitrust Chronicle*, March 2018.

11 See Damien Geradin and Katarzyna Sadrak, 'The EU Competition Law Fining System: A Quantitative Review of the Commission Decisions between 2000 and 2017', *TILEC Discussion Paper*, DP 2017-018, April 2017.

12 See '2016 Guidelines Manual', at <<https://www.ussc.gov/guidelines/2016-guidelines-manual>> last accessed 10 October 2020. Also see 'Primer on Antitrust', March 2018, at <https://www.ussc.gov/sites/default/files/pdf/training/primers/2017_Primer_Antitrust.pdf> last accessed 10 October 2020.

13 See, for example, Margaret C Levenstein and Valerie Y Suslow, 'What Determines Cartel Success?' (2006) 44(1) *Journal of Economic Literature* 43–95.

Table 2 Adjustments to base fine as provided in draft fining guidelines

Consideration	Nature of conduct	Adjustment (%)
Duration	Every one year	+1
	Between half year and one year	+1
	Less than half year	+0.5
Aggravating factors	Leadership role	+1
	Multiple illegal conduct	
	Promoting government monopoly	
	Continuation of illegal conduct despite order to stop	+0.5
	Other	
Mitigating factors	Coerced by others	-1
	Coerced by administrative body	
	Cooperation with antitrust agency	
	Voluntarily taking action to eliminate harm	
	Voluntarily taking action to reduce harm	-0.5
	Providing evidence to another investigation	
	Other	

yet. Thus, we answer this question by comparing fines issued by China's antitrust agencies in the past to the level of fines that would have been issued if the Draft Fining Guidelines were followed in those cases.

Data description and summary statistics

We collected all antitrust investigation decisions published on the NDRC, SAIC and SAMR web sites as of September 2019.¹⁴ These decisions were related to horizontal conspiracies, vertical price agreements and abuse of dominance claims. In a case involving horizontal conspiracies, there were multiple companies found liable for violating the AML and thus fined. For such cases, the agencies generally published one decision for each fine recipient separately, except in a small number of cases, where multiple fine recipients were included in the same published decision. These investigation decisions generally provide rather detailed description of the case, including discussions of the factors considered in reaching a fine.

From these decisions, we excluded the following instances where they fall into special categories of fines or where important information such as the duration of an offense cannot be gathered from the decisions, which makes it impossible to reconstruct a hypothetical fine based on the Draft Fining Guidelines:

- If a monopolistic agreement was never implemented, the agencies oftentimes just gave the relevant parties a warning without fines. Even when there was a fine, it

14 Some decisions were published by the local agencies. Though antitrust cases may be investigated at the central level or at the local level, the local level investigations are generally supervised by the antitrust agencies at the central level.

was in a fixed monetary amount not exceeding RMB 500,000 based on Article 46 of the AML.

- A member of a cartel might be a whistleblower to be the first to alert the agencies and provided important evidence. Its fine would be exempted.
- Sometimes a suspected antitrust violation might have occurred, but it would require extensive resources to investigate. Given the capacity constraint faced by the agency and for efficiency reasons, if the relevant parties made commitments to eliminate the antitrust concerns, the agency might terminate the investigation without issuing a fine.
- There are some instances where a fine with a total fixed amount up to the statutory cap of RMB 500,000 was issued to a trade association based on Article 46 of the AML.
- There are some cases (mostly fines imposed on small companies or even individuals) where the published decisions did not provide the fine as a percentage of the revenue, and there is no reliable way to make an inference.
- There are a small number of instances where the duration of the violation is not provided in the published decision or otherwise known, including the NDRC's investigation of Qualcomm.

Our final data include 202 fine recipients in 46 antitrust investigations whose decisions were published from 2013 to 2019. The data cover a large number of industries such as insurance, accounting firms, public utilities, auto parts, car sales, ocean shipping, pharmaceuticals, software, among others. A case may involve a single fined company (as is the case for almost all abuse of dominance and vertical cases) or may involve multiple companies (as is the case for all horizontal cases). We reviewed these case decisions and tried to identify the considerations provided in [Table 1](#) and factors listed in [Table 2](#).

[Table 3](#) provides a breakdown of these cases and fine recipients by three types of the alleged antitrust violations, and for NDRC, SAIC and SAMR, respectively. The number of fine recipients are predominantly related to horizontal conspiracies. However, this is due to the fact that multiple participants were fined in each horizontal case.

There are a couple noteworthy observations regarding [Table 3](#). First, there is one NDRC case under the abuse of dominance category with two fine recipients. This is a case where two Chinese pharmaceutical companies were determined to have abused their dominance in Isoniazid active pharmaceutical ingredients (APIs) by charging excessively high prices and supplying their products exclusively to a single downstream firm. This is a rare case where dominance was established based on joint dominance of two firms whose market shares summed up to be more than two-thirds of the relevant market.¹⁵ However, no horizontal conspiracy was alleged. Secondly, there is a vertical case investigated by NDRC where three wholesale

15 See NDRC Administrative Fining Decision [2017] No 1 at <<http://www.competitionlaw.cn/info/1057/25267.htm>> last accessed 10 October 2020, and No 2 at <<http://www.competitionlaw.cn/info/1057/25266.htm>> last accessed 10 October 2020.

Table 3 Types of fined antitrust offenses and issuing agencies

Type	No of cases				No of fine recipients			
	NDRC	SAIC	SAMR	Total	NDRC	SAIC	SAMR	Total
Abuse of dominance	1	18	1	20	2	18	1	21
Horizontal	7	9	3	19	67	87	18	172
Vertical	7	0	0	7	9	0	0	9
Total	15	27	4	46	78	105	19	202

companies on behalf of the Chinese consumer electronics maker Haier signed distribution agreements with downstream retailers setting minimum resale prices.¹⁶ No horizontal conspiracy was alleged probably because these three companies were not considered independent entities.

Our key variable of interest is the fine as a percentage of the preceding year's sales in mainland China of the fined company for the products affected by the offense. [Table 4](#) shows that most of the fined companies received a moderate fine percentage. The median fine was only 2 per cent for abuse of dominance and horizontal cartel cases, and 3 per cent for vertical cases. The averages were only slightly higher. It's worth noting that fine percentages for two alleged conspirators in one horizontal case are only 0.1 per cent and 0.55 per cent, respectively, which are below the 1 per cent minimum specified in the AML. These are two special situations where the fine recipients were the second and the third to approach and confess to the agencies about the cartel, and thus their fines were greatly reduced.¹⁷ As explained below, these fine recipients are excluded in further analysis constructing their would-be fines according to the Draft Fining Guidelines.

[Table 5](#) shows the number of each type of fines over time in our data. Note that NDRC and SAIC began publishing case decisions in 2013, and in 2018, SAMR became the sole agency publishing antitrust decisions.

Having provided some basic descriptions of the historical fines data, we next turn to predicting whether or not the antitrust fines will be higher in China in the future based on these historical data.

Will antitrust fines in China be higher in the future?

We investigate whether the antitrust fines will be higher as a result of the issuing of the Draft Fining Guidelines. Because the future cases are unknown, we tackle this question by looking at historical case decisions and asking what level of fines would result if the Draft Fining Guidelines were strictly followed in these cases? We are able to do this because the past case decisions provide reasonably detailed information about each case related to the factors specified in the Draft Fining Guidelines

16 See Shanghai Development and Reform Commission Administrative Fining Decision [2016] No 2520160009 at <<http://fgw.sh.gov.cn/jghzcfjd/20160812/0025-34716.html>> last accessed 10 October 2020.

17 See NDRC Administrative Fining Decision [2016] No 8 and No 9 at <http://www.gov.cn/xinwen/2014-09/02/content_2744373.htm> last accessed 10 October 2020.

Table 4 Summary of fine percentage

Type	Count	Mean	Median	Min	Max
Abuse of dominance	21	2.8	2	1	7
Horizontal	172	3.0	2	0.1	9
Vertical	9	3.1	3	1	6

Table 5 Number of fines issued in each year

Type	2013	2014	2015	2016	2017	2018	2019
Abuse of dominance	1	4	2	9	4	0	1
Horizontal	32	19	36	38	29	16	2
Vertical	0	1	0	8	0	0	0

that are taken into account in setting and adjusting antitrust fines (as shown in Tables and Table 2).

One factor that is important in affecting fines but the effect is difficult to predict is leniency. Leniency recipients had their fines reduced, but not according to an explicit formula specified in the Draft Fining Guidelines. To base our fine predictions entirely on the formulaic provisions in the Draft Fining Guidelines, we exclude nine fined companies that received leniency treatment. This leaves us a total of 193 fine recipients.

For each of the 193 antitrust fine recipients, we calculate the projected fine percentages based on the type of the offense, the duration of the offense, and the presence of aggravating factors and mitigating factors. The average actual fine percentage is 3.0 per cent, while the average projected fine percentage is 5.9 per cent, meaning overall the fines would have been 2.9 per cent higher on average if the Draft Fining Guidelines had been in place and strictly enforced since 2013. The following figure shows the actual and projected fine percentages in each year in our data of 193 antitrust fine recipients.

Figure 1 shows that, for example, if the Draft Fining Guidelines were in place in 2013, the fines would have been on average 5 per cent higher that year. The generally persistent gap shown in Figure 1 implies that once the Draft Fining Guidelines are adopted and implemented, the fines will be higher. In addition, this gap in fines became somewhat smaller over time, but not monotonically. In particular, the gap became even larger in 2018 than in 2013, possibly because 2018 was the year the Chinese antitrust agencies had a reorganization when the antitrust functions of MOFCOM, NDRC and SAIC were merged into the newly created SAMR.¹⁸ This drop was temporary and the actual fine percentage in 2019 went back up and was even quite similar to what was projected based on the Draft Fining Guidelines.

18 For example, if the staff wanted to close the cases quickly during the transition, they might be more willing to issue lower fines so that there would be less resistance from the fine recipients. Future research may shed more light on this issue.

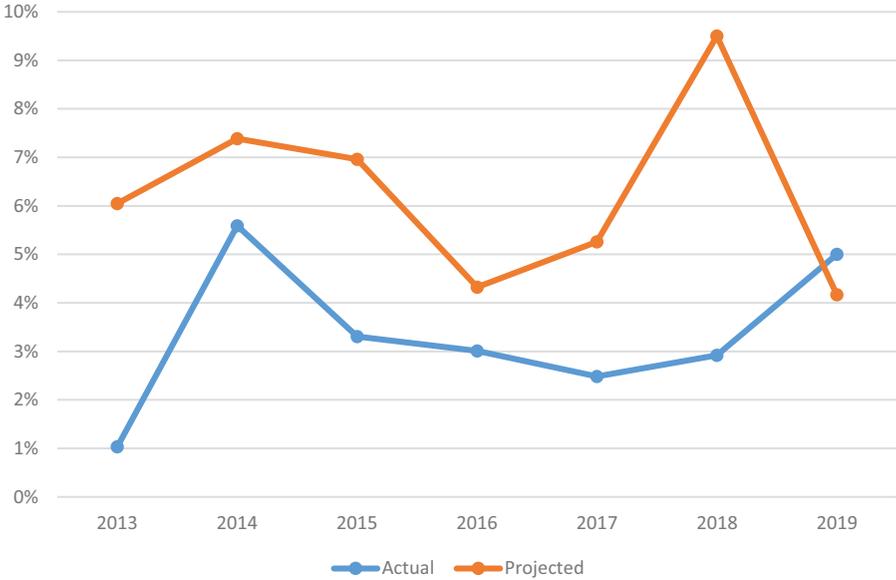


Figure 1 Actual fine percentage and projected based on Draft Fining Guidelines.

It should be noted that our prediction of higher antitrust fines in the future is not in absolute terms, but based on a comparison of the actual historical fines relative to the projected fines for these cases according to the Draft Fining Guidelines. In other words, compared to the future fines according to the current trajectory, we predict higher future fines when fines are issued according to the Draft Fining Guidelines, other things equal.

In the next section, we study what might explain the gap between the actual and projected fines that we observe from the historical data.

What explain the gap in fines?

We have seen from above that actual fines issued historically were generally lower than implied by the Draft Fining Guidelines, which might reflect the cautious attitude China’s antitrust enforcers held during their first decade of antitrust enforcement. We have also seen this deviation varied by year, and at a more granular level, possibly by characteristics of the cases and fine recipients. To better understand the variations in such a gap, we use a regression model to study a number of potential factors that might affect the fines issued historically.

The regression model is specified as follows:

$$Y_i = \alpha + \beta X_i + \varepsilon_i.$$

The dependent variable Y_i is the difference between the actual fine percentage and the projected fine percentage, or the gap in fines, for fine recipient i . α is the intercept and represents the base difference. X_i is a vector representing a set of independent variables that may affect the level of this difference for company i but are

not factors considered in China's Draft Fining Guidelines. Finally, ε_i is a random error term capturing the variation in the dependent variable that is not explained by the factors included in the model. β are the set of parameters we would like to estimate. In particular, β reflect the changes in the gap between actual and projected fines associated with a change in the independent variables.

The independent variables in our regression model include:

- which agency issued the fines, to test the hypothesis that different agencies issued the same fines (NDRC is used as the benchmark agency);
- the preceding year's sales affected by the offense (in logarithmic form), to test the hypothesis that the fine percentage was not affected by the size of the affected commerce;
- whether there was confiscation of illegal gains at the same time, to test the hypothesis that the fine was not affected by whether the fine recipient's illegal gains were confiscated or not;
- whether the fine recipient was a Chinese company or a foreign company, to test the hypothesis that companies were fined the same regardless of nationality;
- annual trend, to test the hypothesis that the gap in fines did not change over time; and
- year 2018 as a dummy variable, which was the year antitrust functions under three Chinese antitrust agencies were merged into the newly established SAMR.

These factors are not included in the considerations in the Draft Fining Guidelines, but nonetheless might affect the magnitude of the fines in practice and thus the deviation from the projected fines based on the formula in the Draft Fining Guidelines.

Table 6 shows the results from this regression.¹⁹

Looking at the agency effects, the parameter estimate for the SAIC dummy variable is 1.05 and highly significant (at the 1 per cent level), indicating that SAIC issued fines that were about 1 percentage point higher than NDRC's fines relative to the level implied by the Draft Fining Guidelines. Table 6 further indicates that SAMR issued even bigger fines—about two percentage points higher than NDRC's fines, though with less statistical significance due to a smaller number of observations of fines issued by SAMR since 2018.

The AML calls for both confiscation of illegal gains and collection of revenue-based fines against antitrust violations. Thirty fine recipients in our data also had their illegal gains confiscated. The two means of punishment are generally considered complementary, but nonetheless might be treated as substitutive in practice. Table 6 shows that while the size of the affected commerce (Log Sales) did not have an impact on the gap in fines, whether or not the fine recipients' illegal gains were confiscated had an impact. The regression indicates that the presence of such confiscation of illegal gains on average reduced the gap in fines by 1.66 percentage points.

19 These results are generally consistent with Zhang and Sun (2019) using a different approach and a somewhat smaller dataset without some latest case decisions. See Zhang and Sun (2019), Tables 14 and 15.

Table 6 Regression model estimates

Variable	Parameter estimate		Standard error
SAIC	1.05	***	0.40
SAMR	1.99	*	1.15
Log sales	-0.02		0.07
Confiscation	-1.66	***	0.39
China	-2.29	***	0.46
Annual Trend	0.67	***	0.10
Year 2018	-7.04	***	1.18
Constant	-2.22		1.43
R^2			0.46
N			193

*Significant at 10%;

**significant at 5%;

***significant at 1%.

Table 7 Confiscated amount as per cent of preceding year's revenue

Type	Count	Mean (%)	Median (%)	Min (%)	Max (%)
Abuse of Dominance	9	7.9	3.7	0.7	28.0
Horizontal	21	158.8	57.9	0.6	2092.3
Vertical	0				

It seems to suggest that antitrust enforcers might have exercised some restraint in fines when they used confiscation as another means at the same time to punish the alleged antitrust offenders. Table 7 below shows that confiscation was applied to abuse of dominance and horizontal cases, but not vertical cases. The confiscated amount is on average quite high as a percentage of the fine recipient's sales, especially in horizontal cases.²⁰

Table 6 also shows that when the fine recipient was a Chinese entity, the fine was two percentage points lower than what a foreign entity received and was further apart from the fine it should get according to the Draft Fining Guidelines. Although this seems to suggest bias by nationality, there are some potential explanations for this difference. For example, all thirty fine recipients whose illegal gains were confiscated are Chinese companies and no foreign company was subject to confiscation, which was substantial, as shown in Table 7. Thus, looking at fines alone does not provide a complete picture.²¹

Finally, the gap between the actual and projected fines was shrinking by about two thirds of a percentage point each year, as indicated by the parameter estimate of

20 It is not clear how the decision to confiscate illegal gains from antitrust violations is made. The data shows that NDRC never used confiscation as an instrument for penalty, while SAIC and SAMR did.

21 Zhang and Sun (2019) also find this potential bias and provide more detailed discussions on potential explanations. See Zhang and Sun (2019), 57.

the ‘Annual Trend’ variable in Table 6. Since antitrust agencies had participated in the drafting process over the past several years, it is likely the Draft Fining Guidelines have affected the fining practice at the enforcement agencies. Thus as the guidelines was drafted, the antitrust fining practice might have become more aligned with the Draft Fining Guidelines. One exception is 2018, when the agency reshuffling seemed to have affected the enforcement and reduced the fines significantly—a seven percentage point drop in the gap in fines shown in Table 6.

It should be noted that the regression results in Table 6 show an *R*-squared statistic of 0.46, meaning that the regression model explains less than half of the variations in the gap in fines and suggesting that more unobserved idiosyncratic reasons were behind individual fining decisions. For example, Table 2 shows that there are unspecified aggravating and mitigating factors in the Draft Fining Guidelines that may move the fine up or down by half percentage point.²² In addition, Articles 28–30 of the Draft Fining Guidelines allow further adjustment of the fines by considering the severity of the offense.

V. AN ILLUSTRATIVE CASE: THE ESTAZOLAM CARTEL (2016)

In this section, we first describe briefly the Estazolam cartel case decisions issued by NDRC in 2016.²³ We then show how the actual fines are compared to the fines that would be issued according to the Draft Fining Guidelines.

Estazolam is a drug commonly used to treat anxiety and insomnia. Huazhong Pharmaceutical (Huazhong), Shandong Xinyi Pharmaceutical (Xinyi) and Changzhou Siyao Pharmaceutical (Siyao) were producers of estazolam tablets in China. They were also three of the only four companies with a license to produce estazolam APIs in China, and the fourth one was inactive at that time. NDRC investigators found that the three companies met multiple times in a hotel in the city of Zhengzhou from September to October 2014. NDRC also uncovered minutes from these meetings. The three companies allegedly continued their coordination through April 2016. The three companies allegedly agreed with each other to refuse to supply estazolam APIs to other estazolam tablet manufacturers and agreed to raise their respective estazolam tablet prices. According to the NDRC, the three companies did not reach an agreement on specific price levels, but Huazhong proposed that the price be raised to RMB 0.1 per tablet, providing a reference point for the other two companies’ price expectations. Later price increases from these companies were consistent with this proposed price level. Huazhong also sent its price adjustment notice to its customers to Xinyi.

According to NDRC, the anticompetitive impact from the cartel was quite significant. Before the cartel was formed, the three cartel members sold estazolam APIs to 16 other estazolam tablet manufacturers, but stopped doing so since 2015. As a result, 14 of them were forced to stop making estazolam tablets. The weighted average price increase of estazolam tablets by the three cartel members ranged from 88 per

22 However, we do not observe clear indication of such ‘other’ factors in case decisions.

23 For these three decisions, see NDRC Administrative Fining Decision [2016] No 5 at <<http://finance.china.com.cn/zgfb/bwlj/20160727/3834156>> last accessed 10 October 2020, No 6 at <<http://finance.china.com.cn/zgfb/bwlj/20160727/3834154>> last accessed 10 October 2020, and No 7 at <<http://finance.china.com.cn/zgfb/bwlj/20160727/3834152>> last accessed 10 October 2020.

cent to 329 per cent.²⁴ Thus the agreement foreclosed other estazolam tablet manufacturers' access to an essential ingredient, drove up the price of estazolam tablets, and harmed competition and consumer interest. NDRC did not accept Siyao's attempted justification of its participation in the joint boycott on estazolam APIs that it had capacity constraint.

According to NDRC decisions, Huazhong was the ringleader of the cartel and was fined 7 per cent of its 2015 sales of estazolam tablets. Xinyi was a follower in the cartel and voluntarily told the NDRC about the cartel meetings. The cooperation occurred after the NDRC obtained important evidence, thus it was not qualified for leniency. However, the cooperation was given credit and Xinyi was only fined 2.5 per cent of its 2015 estazolam tablet sales. Siyao was also a follower in the cartel, and it voluntarily corrected its conduct to reduce harm. As a result, it was fined 3 per cent of its 2015 estazolam tablet sales.

What would the fines be if they were determined based on the Draft Fining Guidelines? The cartel fines would start at 3 per cent for forming price agreements on estazolam tablets and 2 per cent for joint boycott on estazolam APIs, then would increase by 1.5 per cent for its duration, which was just under one and half years, 1 per cent for committing multiple offenses including price agreements and joint boycott, and 0.5 per cent for continuing the offenses when they were investigated.²⁵ These would add up to 6 per cent.

For additional adjustments, Huazhong was the leader and coordinator of the cartel, thus the fine to Huazhong would be increased by 1 per cent to a total of 7 per cent. This is indeed what Huazhong actually received. Xinyi proactively cooperated with NDRC during its investigation and thus would be subject to a 1 per cent deduction of the fine. Xinyi would be fined 5 per cent according to the Draft Fining Guidelines. Finally, Siyao voluntarily corrected its conduct to reduce harm and would be subject to a 0.5 per cent deduction of the fine. Its final fine would be 5.5 per cent. Compared to fines based on the Draft Fining Guidelines, Xinyi and Siyao's actual fines were lowered by an additional 2.5 per cent.

Because this investigation was conducted by NDRC in 2016, and no confiscation of illegal gains was involved, only two factors in [Table 6](#) may be relevant to explaining the gap between the actual and would-be fines: the China factor would reduce the fine by a little over 2 per cent, and the trend factor would increase the fine by about 2 per cent—approximately a wash.²⁶ Thus our regression analysis underlying [Table 6](#) does not seem to explain why Xinyi and Siyao received substantially lower fines than implied by the Draft Fining Guidelines, though the fine to the alleged cartel leader Huazhong seemed to be 'just right'.

24 These price overcharges are clearly higher than the maximum fines of 10 per cent provided by the law, showing lack of deterrence effects.

25 See [Tables 1](#) and [2](#) for fine percentages based on these factors.

26 The base year in the regression underlying [Table 6](#) is 2013. 2016 is three years after 2013, leading to an increase in fine by 0.67 per cent *3=2 per cent, approximately offsetting the 2.29 per cent decrease from the China factor.

VI. CONCLUSION

In the past more than a decade since the AML became effective, China's antitrust enforcement agencies have investigated many cases and have issued numerous fines. Meanwhile, the enforcement authority has drafted antitrust fining guidelines to institutionalize the perceived best practice and to provide a more desired level of deterrence. The quantitative nature of the Draft Fining Guidelines calls for quantitative studies of its potential impact.

Based on published enforcement decisions through September 2019, we attempted to predict the degree of China's future antitrust enforcement by projecting the fines that would have been issued according to the Draft Fining Guidelines in past cases and comparing them to the actual fines. We found that actual fines were significantly lower in the past than those implied by the Draft Fining Guidelines, which suggests that future fines would be significantly higher if the Draft Fining Guidelines were adopted and followed closely. Though the existence of a 10 per cent cap means fines may be far lower than illegal gains from antitrust violation under some circumstances, as shown in the Estazolam cartel case discussed above, to the extent higher fines based on the Draft Fining Guidelines provide better deterrence effects in future antitrust enforcement, they are still to be welcomed.

We tested the gap between the actual fines and the projected fines against several potential factors. We have found the gap in fines was different among issuing agencies and between Chinese and foreign fine recipients, with caveats. We have also found that confiscation appears to be somewhat substitutive to fines, albeit their complementary nature by design. Finally, except during 2018 when the antitrust enforcement agencies were reorganized, the gap in fines has been shrinking year after year, seemingly reflecting the enforcement that has become stronger and more in line with the Draft Fining Guidelines over time.