



CPI Antitrust Chronicle

March 2013 (3)

Methods for Setting Fines for
Cartels in Russia and the
Deterrence Effect as Compared
to the United States and the
European Union

Alexander Egorushkin
New York University

Methods for Setting Fines for Cartels in Russia and the Deterrence Effect as Compared to the United States and the European Union

Alexander Egorushkin¹

I. INTRODUCTION

Over the last 10-20 years, the regulation of fines for antitrust violations has been amended several times in the United States and the European Union, significantly increasing the amount of imposed fines. Within the same time period, antitrust regulation and policy have spread across the globe and, as an enforcement tool, antitrust fines have also been introduced in many jurisdictions. Russia is not an exception; in 2006 the new Russian Competition Law was enacted and in 2007 turnover-based fines for antitrust violations were introduced.

Combating cartels is one of the main motivations for further developing antitrust policy, as collusion among competitors is one of the most egregious antitrust violations. Currently we are seeing antitrust authorities all over the world impose huge fines for cartels. In 2008, Saint Gobain was fined EUR 896 million by the European Commission for participation in a car glass cartel.² The U.S. Department of Justice conducted a "vitamin investigation," which resulted in a \$500 million fine imposed on F. Hoffmann-La Roche Ltd, a major participant in the vitamin cartel.³ The largest fine for a cartel agreement in Russia was imposed in 2011 on JSC United Trading Company, a leading chemicals trader, for participation in the caustic soda cartel in the amount of RUB 912,033,950 (approximately \$30 million)⁴.

At first, the amount of these fines seems incredible and one can conclude that they are sufficient to deter any potential cartelists. However, the monetary size of a fine alone cannot be an objective indicator of whether or not such fine deters competitors from entering into cartel agreements and, therefore, is the optimal sanction for a cartel. The mechanisms for calculating fines and enforcement policy also play significant roles in the assessment of deterrence effect of fines.

This article focuses on analyzing the deterrence effect of the Russian fining system based on theoretical and practical approaches used in the United States and the European Union. The antitrust fines in the United States and the European Union, and comparison of their deterrence

¹ Russian Practitioner, currently an Associate at Dechert and LLM Candidate at New York University.

² Cartel statistics published by the European Commission DG Competition:
<http://ec.europa.eu/competition/cartels/statistics/statistics.pdf>

³ This fine is the largest fine ever imposed in any Department of Justice proceeding under any statute so far:
<http://www.justice.gov/atr/public/4523e.htm>

⁴ Report of the Russian Federal Antimonopoly Service:
http://fas.gov.ru/netcat_files/225/164/h_eb904a5e5e3beef9cf346d41ac4af934

effect have been widely discussed,⁵ while there have been almost no studies on Russian anti-cartel fines and their deterrence effect.

II. Theoretical Framework

Gary Becker was one of the first researchers who analyzed the problem of optimal penalties for crimes in general. In his 1968 paper he showed that crimes would be deterred only provided that the benefit gained by violators as a result of such crimes was lower than the harm caused. Therefore, the penalty for a crime must be equal to the violator's benefit, subject to adjustment for the probability of the conviction factor. The less probable the conviction for a crime, the higher the penalty should be — the penalty for a crime should exceed the violator's gains received as a result of the crime in proportion to the probability of the violator being convicted for the crime.⁶

William Landes elaborated on this thesis from an antitrust perspective. His general idea about optimal sanctions for antitrust violations can be illustrated by Figure 1:⁷

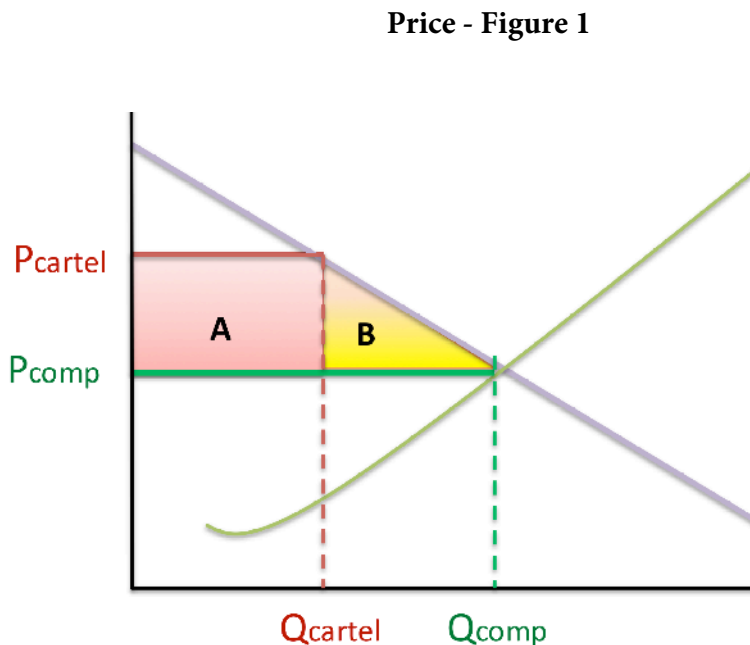


Figure 1 shows the change in the demand and the supply of a hypothetical product in the market where prices and output are competitive (P_{comp} and Q_{comp}) after the formation of a cartel in such market, i.e. when, to maximize their profits, market participants refuse to compete with each other. The market participants that form the cartel increase prices to the cartel level (P_{cartel}), and price-sensitive consumers decrease their consumption of the product or completely stop

⁵ See, e.g., Robert D. Blair & Christine P. Durrance, *Antitrust sanctions: deterrence and (possibly) overdeterrence*, 53(3) THE ANTITRUST BULLETIN Vol. 53, No. 3/Fall, 643 [2008]; or Emmanuel Combe & Constance Monnier, *Fines against hard core cartels in Europe: The myth of overenforcement*, 56 THE ANTITRUST BULLETIN: (2011).

⁶ Gary S. Becker, *Crime and Punishment: An Economic Approach*, J. Political Econ. 76, 180-185 (1968).

⁷ William M. Landes, *Optimal Sanctions for Antitrust Violations*, 50 U CHI L. REV. 652 (1983).

buying it. Consequently, the volume of the product supply is decreased (Q_{cartel}). As a result, cartelists increase their profits per product unit. As compared to the profits received in a competitive market, their overcharged surplus represents rectangle A, highlighted in red. The yellow triangle B represents the social cost or the so called "deadweight lost," i.e. the product volume that was withdrawn from the market by the cartelists.⁸

Following Becker's logic, the fine for a cartel must correspond to the cartel surplus (rectangle A in Figure 1) multiplied by the inverse of the probability of being convicted. However, as shown in Figure 1, the cartel's overcharges (red rectangle A) are not the only negative consequence of a cartel. According to Landes, the deadweight loss (yellow triangle B) is the social cost of a cartel, which also represents the harm to persons other than the cartelists. Therefore, the fine must correspond to the net harm of a cartel, which includes both the cartel overcharges (or surplus) and the deadweight loss.⁹ Some authors do not take the deadweight loss into consideration when determining optimal fines for antitrust violations, only using the cartelists' overcharges.¹⁰

The probability of convicting a cartel is a hotly debated topic. First, the probability of conviction *de facto* consists of two elements: (1) probability of detection, and (2) probability of successful conviction. Determining the latter is generally almost impossible due to, *inter alia*, the lack of information on cartels that are not prosecuted by antitrust authorities for different reasons.¹¹

The probability of detection is more likely to be established. Different methodologies are used to compute the probability of cartel detection¹² and the results, even within the same jurisdiction, differ significantly, with a probability of 50 percent to 13 percent.¹³ The average probability of cartel detection in the United States and the European Union, which is accepted by antitrust authorities, usually ranges from 13 percent to 33 percent.¹⁴ In view of this, the optimal fine for a cartel must not be less than three times the cartelists' overcharges and probably even more than that given the deadweight lost.

⁸ Evgenia Motchenkova, *Optimal Enforcement of Competition Law*, Ph.D Dissertation, Tilburg University, 18 (2005).

⁹ See Landes, *supra* note 7, at 653.

¹⁰ See Emmanuel Combe & Constance Monnier *supra* note 5, at 246; or John M. Connor & Robert H. Lande, *The size of cartel overcharges: Implications for U.S. and EU fining policies*, 51(4) THE ANTITRUST BULLETIN: 986 (2006).

¹¹ See Emmanuel Combe & Constance Monnier, *supra* note 5, at 253-256.

¹² Some researches use surveys carried out among antitrust lawyers: Alan R. Beckenstein & H. Landis Gabel, *Antitrust Compliance: Results of Survey of Legal Opinion*, 52 ANTITRUST L.J. 459 (1983). Others rely on historical information on the duration of already discovered cartels: Peter G. Bryant & Woodrow E. Eckard, *Price Fixing: The Probability of Getting Caught*, 73 REV. ECON. & STAT. 531 (1991).

¹³ Some authors argue that the estimation of such probabilities "presents a formidable, perhaps an impossible, task, because we don't know how many antitrust violations escape detection": See RICHARD A. POSNER, *ANTITRUST LAW*, 2ND ED. 316 (2001).

¹⁴ See Emmanuel Combe & Constance Monnier, *supra* note 5, at 256.

III. ANALYSIS OF THE METHODS FOR SETTING FINES

As discussed above, the deterrence effect of the fine on a cartel depends on its size. The size of the fine is usually based on two factors. The first factor is the fine cap, i.e. the maximum fine that can be imposed on cartelists. In the United States, the maximum fine is \$100 million¹⁵ or a fine equal to twice the gain to the cartel or twice the loss to the victims.¹⁶ In the European Union, the fine that can be imposed by the European Commission is capped by 10 percent of the company's total turnover in the preceding year.¹⁷ The Russian Code of Administrative Violations provides that the fine for a cartel cannot exceed 4 percent of the cartel's total annual turnover.¹⁸

The second factor is the base fine that is used by antitrust authorities to calculate the basic fine size, which is then adjusted by the relevant culpability as well as aggravating and mitigating modifiers in order to calculate the final fine size or range for each particular case. In all three jurisdictions the base fine is generally the specific percentage of the volume of sales affected by the cartel in question.¹⁹

Some authors believe that the approach to setting fines based on a specific percentage of a violator's turnover or the affected volume of sales decreases the deterrence effect of a fine for a certain type of violators. If the violator's turnover or volume of sales is used for calculating a fine, companies that have a diversified product assortment face higher fines than companies that have a narrow focus in their core business, i.e. for whom the affected revenue in the relevant market is not very different from the total revenue.²⁰

This problem with anti-cartel fines in the European Union is well described by Bos Iwan & Schinkel Maarten Pieter in their article²¹ prepared right after the European Commission published the new fining guidelines in 2006 (the "EC Guidelines").²² In their article, they showed that, in reality, the fine cap (10 percent of the violator's annual total turnover) significantly decreases the final fine for cartelists whose anticompetitive arrangement affects the sale of product that represents a relatively substantial share of all their sales.

The base fine, as mentioned above, is a core of the final fine and, under the EC Guidelines, the base fine usually equals the relatively high percentage of the cartelists' volume of

¹⁵ Section 1 of The Sherman Antitrust Act (1890).

¹⁶ 18 U.S.C. 3571(d).

¹⁷ This cap was set out by Council Regulation 17/62 (1962).

¹⁸ Article 14.32 of the Code of the Russian Federation on Administrative Violations.

¹⁹ See Kathleen M. Beasley, *Application of the Federal Sentencing Guidelines to Organizations in Antitrust Cases: a Practical Guide*, Haynes and Boone LLP (2010), available at http://www.haynesboone.com/icw_guidelines; and Factsheet prepared by the EU Commission, *Fines for breaking competition law* [2011], available at: http://ec.europa.eu/competition/antitrust/compliance/factsheet_fines_nov_2011_en.pdf

²⁰ Vasiliki Bageri, Yannis Katsoulacos, & Giancarlo Spagnolo, *The Distortive Effects of Antitrust Fines Based on Revenue: materials for 2012: Seventh European Conference on Competition and Regulation*, ADVANCES IN THE ANALYSIS OF COMPETITION POLICY AND REGULATION (2012), available at: <http://www.cresse.info/default.aspx?articleID=12578&heading=Publications%20&%20News>

²¹ Bos Iwan & Schinkel M. Pieter, *On The Scope for the European Commission's 2006 Fining Guidelines Under The Legal Maximum Fine*, 2(4) J. COMPETITION L. & ECON., 673-682 (2006), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=940107

²² Commission of the European Communities, *Guidelines on the method of setting fines imposed pursuant to Article 23(2)(a) of Regulation No 1/2003*, OFFICIAL J. OF THE EUROPEAN UNION, 01-09-2006, C 210/2.

sales affected by the cartel. If the aggravating factors are also present, this percentage may be further increased. As a result, for a one-year cartel, the high end can be up to 110 percent of the affected volume of sales (taking into account all of the relevant aggravating factors). For a cartel that lasted a number of years, several times the value of the annual effected sales can be set as a fine under the EC Guidelines.²³

It is obvious that these large numbers will be decreased more than ten times by the above mentioned 10 percent fine cap if the effected volume of sales is the same or close to the same as the total volume of sales of a cartel. Therefore, the idea is that the more dangerous cartels are (in the sense of duration and other aggravating factors), the more likely they are to be protected by the fine cap (by way of decreasing the final fine). Bos Iwan & Schinkel Maarten Pieter conclude that, as a result of such mechanics for calculation of fines, it can be difficult to meet the EC Guidelines' overall objective to deter breaches of competition rules. In addition, these mechanics lead to asymmetry in the liability of international groups with diversified business activities and specialized companies that sell relatively undifferentiated products.²⁴

The Russian fining system has a similar problem. However, the calculation of a base fine in Russia differs significantly from the European method; the analysis of the Russian system is provided below.

A. Calculation of a Base Fine in Russia

A base fine is the base penalty imposed on a violator in the absence of any aggravating or mitigating factors (the "BF"). The BF is a mean of the maximum and minimum amount of the fine envisaged for a cartel ("F_{max}" and "F_{min}")²⁵, i.e.

$$BF = \frac{F_{max} + F_{min}}{2}$$

B. Determination of F_{max} and F_{min}.

According to the Methodological Recommendations on Setting Turnover-based Fines for Competition Law Violations, adopted by the Russian Federal Antimonopoly Service²⁶ (the "Methodological Recommendations") the following two criteria shall be considered when determining F_{max} and F_{min}:

(1) *The type of the fine scale that is used by the antitrust authority in certain cases.* There are two types of fine scales. The first type: 1-15 percent of the cartel's annual revenue from the sale of goods or services in the market affected by a cartel (the "Affected Revenue" or the "AR"). The second type is 0.3-3 percent of the Affected Revenue. The use of each scale depends on several factors set out by the Russian Code on Administrative Violations²⁷ and summarized in the table below.

²³ See Bos Iwan & Schinkel M. Pieter, *supra* note 21, at 678.

²⁴ *Id.* at 673-682.

²⁵ Note 4 to article 14.31 of the Russian Code on Administrative Violations.

²⁶ Letter of the Russian Federal Antimonopoly Service No. IA/1099 dated January 19, 2012.

²⁷ Article 14.32 of the Russian Code on Administrative Violations.

Fine Scale Type	Two Alternative Factors for Application of the Scale		Maximum/Minimum fine for the Relevant Scale
	Ratio of the Affected Revenue to the cartelists' total annual revenue from all its sales (the "Total Revenue" or "TR")	Cartel takes place in the market where prices are regulated by the state ²⁸	
Scale 1-15 percent	$AR \leq 0.75 TR$	No	$F_{max} = 15$ percent of AR $F_{min} = 1$ percent of AR
Scale 0.3-3 percent	$AR > 0.75 TR$	Yes	$F_{max} = 3$ percent of AR $F_{min} = 0.3$ percent of AR

(2) *Binding legal maximum or a cap fine.* As mentioned above, the cap fine for cartels is 4 percent of the Total Revenue. The Methodological Recommendations provide that this 4 percent fine cap must be applied in terms of determining F_{max} , which is ultimately used for calculating the BF. This means that should the value of F_{max} at the levels of 15 percent and 3 percent of the AR when applying the 1–15 percent or the 0.3–3 percent scales, respectively, be higher than the fine cap value of 4 percent of the TR, the final value of F_{max} shall be decreased to the cap fine value. The cap fine criterion is very important for calculating the BF, since the decrease of F_{max} value will lead to decreasing the BF as well. This feature distinguishes the Russian fining system from the European one, as the latter does not take into account the fine cap for calculating the base fine.

Having said the foregoing, it is important to note that the 4 percent cap fine is not applicable to the 0.3–3 percent scale, because this legal maximum will never decrease F_{max} , which equals 3 percent of the AR. The 0.3–3 percent scale is applied when the $AR > 0.75 TR$. Therefore, the monetary equivalent of the fine cap will always exceed the monetary equivalent of the maximum fine for the 0.3–3 percent scale, because 4 percent of the TR is always a number greater than 3 percent of at least 0.75 of the TR. These specifics are not applicable to a cartel in a market where prices are regulated by the state (see the table above). However, this article does not discuss fines for cartelists operating in such markets, as such topic deserves a separate analysis. The BF for the 0.3–3 percent scale is always 1.65 percent of the AR (calculated as $(3+0.3)/2$).

Based on the above mentioned two criteria for determining the F_{max} , F_{min} , and, ultimately, the BF, it is clear that the asymmetry in fines for companies with a diversified product assortment and narrowly focused companies also takes place in Russia. Moreover, Russian law expressly sets out different F_{max} and F_{min} (which directly affect the BF) for cartelists, depending on the ratio between their AF and TR. For narrowly focused companies (whose $AR > 0.75 TR$) the size of F_{max} is 5 times less than for companies with a more diversified product assortment. However, apart from this conclusion, which lays on the surface of the Russian fining system, additional

²⁸ As a general rule, this factor relates to several highly concentrated and socially sensible markets such as power and water supply.

interesting findings can be seen as a result of the analysis of the correlation between the 4 percent fine cap and the 1–15 percent scale.

C. Correlation Between the Cap Fine and the 1–15 Percent Scale

For the purpose of calculating the F_{\max} at the 1–15 percent scale, it is necessary in each specific case to identify when the 4 percent cap fine decreases the F_{\max} initially calculated as 15 percent of the AR. It is required to check when 4 percent of the TR is less than or equal to 15 percent of the AR. Hence, the following inequality should be applied (the "Inequality"):

$$0.15AR \leq 0.04TR$$

First of all, the AR should be expressed in terms of the TR, based on the fact that the 1–15 percent scale is applicable if the cartel's AR does not exceed 75 percent of its TR:

$$AR = (0.75 - x)TR, \text{ where } x - \text{any positive number less than } 0.75$$

Therefore, when the AR is expressed in terms of the TR, the Inequality shall be presented as follows:

$$0.15(0.75 - x)TR \leq 0.04TR$$

Once x is identified, it will be possible to determine the AR fraction of the TR, which would comply with the Inequality. For this purpose, x shall be subtracted from 0.75 (i.e., 75 percent).

$$0.15(0.75 - x)TR \leq 0.04TR$$

$$0.15(0.75 - x) \leq 0.04$$

$$0.1125 - 0.15x \leq 0.04$$

$$0.0725 \leq 0.15x$$

$$\frac{0.0725}{0.15} \leq x$$

$$0.483 \leq x$$

Then, as discussed, the x value (which equals 0.483) must be subtracted from 0.75 (i.e. 75 percent), resulting in 0.267. Hence, the Inequality $0.15AR \leq 0.04TR$ works only when $AR \leq 0.267TR$. Therefore, if the AR exceeds 26.7 percent of the TR, F_{\max} (15 percent of the AR),

will always be decreased by the 4 percent cap fine. That is to say, the 4 percent cap fine will always "cut off" the value of 15 percent of the AR exceeding this cap fine.²⁹

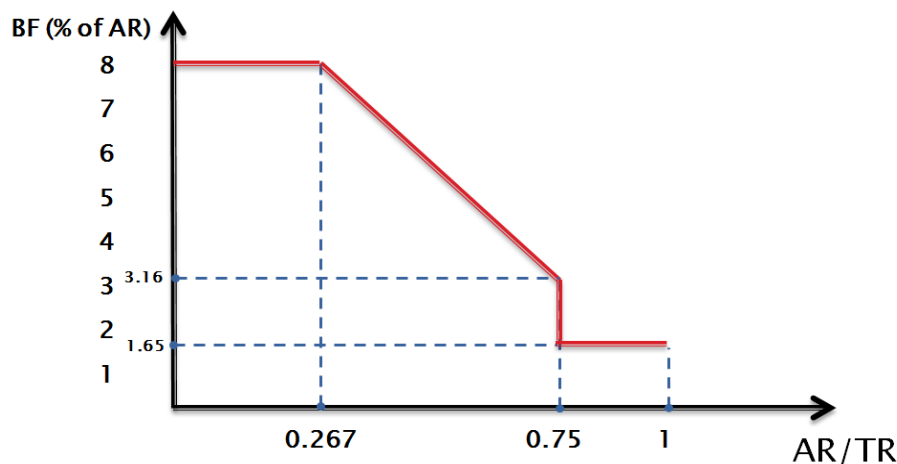
D. Implications for the BF

Now let us get back to the calculation of the BF. The formula is as follows:

$$BF = \frac{Fmax + Fmin}{2}$$

The BF equals to 8 percent of the AR (calculated as (15 percent + 1 percent)/2), if the AR is less than 26.7 percent of the TR. In case the AR exceeds 26.7 percent of the TR, the BF percentage rate is less than 8 percent of the TR. In fact, the greater the AR fraction of the TR, the less the BF as a percentage of the AR. When the AR is 26.7 to 75 percent of the TR, the percentage of the BF is decreased to as much as 8 percent to approximately 3.16 percent of the AR. The correlation between the AR fraction of the TR and the percentage of the BF schematically is presented below in Figure 2.

Figure 2



In summary, the Russian fining system is even more favorable to companies with narrowly focused business activities than the European one. It should be noted that the above calculations are only made with respect to the BF, i.e. to the basic fine before application of multipliers corresponding to aggravating and mitigating factors. However, these multipliers, unlike the U.S. and the EU fining systems do not double or triple the base fine in Russia. The multiplier increases or decreases the BF by the size of such multiplier for each aggravating or mitigating factor respectively. The size of the multiplier is calculated according to the following formula:

$$(Fmax - Fmin) \times 1/8$$

²⁹ These calculations were made by the author in his article that was published in Russian only: Alexander Egorushkin, *Characteristics of Calculating Turnover-Based Fines in Russia*, CORPORATE LAWYER JOURNAL (October, 2012).

Since this formula deals with F_{\max} and F_{\min} , it also gives rise to the same issue of decreasing the value of F_{\max} by the 4 percent fine cap as was discussed with respect to the BF. In addition, there are not so many aggravating factors in the law, which could, in sum, significantly increase the BF (6 aggravating factors in total). Finally, the fine for a cartel cannot exceed F_{\max} set out for the 1-15 percent and 0.3-3 percent scales.³⁰

In view of the above, there are solid grounds to believe that the effect of the Russian fining system on the companies with the narrowly focused business is far from ideal in the sense of deterrence. However, one can argue that the asymmetry in liability of companies is a fair concept, because in absolute terms (monetary amount) equal fines are imposed on cartelists. For example, 15 percent of the AR for a cartelist with a diversified business could represent the same monetary amount as 3.16 percent of the AR for a narrowly focused cartelist, which is why such asymmetry is quite fair.

This position is based on a very narrow approach and does not take into consideration the fact that the same monetary amount could have different weight for different cartelists. As was mentioned in Section 2 of this article, the optimal fine from the deterrence perspective must correspond to at least the cartel overcharges or surplus. The cartel overcharge is a volume of goods or services sold by cartelists, multiplied by the excessive price set by the cartel. Therefore, the overall cartel profit of a company that entered into a cartel in its major market should exceed the cartel profit of a similar company (in the sense of size and pricing policy in the affected market) for which the market affected by a cartel represents one-third of its total revenue. This is because the volume of goods and services sold by the first company will most likely exceed the same volume of the second company, hence the overall cartel overcharges of the first company will be higher. Consequently, the fine cap *de facto* protects the cartel overcharges from being confiscated from cartelists, thus decreasing the deterrence effect of the fine.

With respect to the deterrence effect of a fine for cartels set out in the Russian Code of Administrative Violations, it is not clear that this fine is optimal even for diversified companies, which are not protected by the 4 percent fine cap. A full-fledged analysis of the current anti-cartel enforcement practice in Russia is not feasible, because, as of now, there have not been many pure cartel cases in Russia, and the Russian Federal Antimonopoly Service is not fully transparent, so that some decisions are not published.

However, at least a preliminary assessment can be made based on the analysis of the United Trading Company case mentioned in Section 1 of the article. This case is a good example, because it is recent, the cartel initiator (JSC United Trading Company) is a company with diversified product assortment, and, finally, the fine imposed on this company is the highest one ever imposed on a cartelist by the Russian authority to date.³¹ This case is briefly discussed in the next section of the article.

³⁰ Note 4 to article 14.31 of the Russian Code on Administrative Violations.

³¹ Press Release of the Russian Federal Antimonopoly Service in English *is available at:* http://en.fas.gov.ru/news/news_32192.html

IV. UNITED TRADING COMPANY CASE

In 2005, the producers and traders of liquid caustic soda entered into an agreement setting out the allocation of the wholesale market of liquid caustic soda. The allocation was based on sales volume, sellers, buyers, and territory, as well as the method for setting prices of liquid caustic soda. The initiator and supervisor of this agreement was JSC United Trading Company ("UTC"), a major Russian chemicals trader. Other participants agreed to pay UTC a fee in the range of 2-6 percent of the revenue from the sale of liquid caustic soda. Manufacturers of liquid caustic soda agreed to carry out most of their domestic and export sales through UTC³² while the other sales were to be through other traders subject to agreement between each other and UTC on prices, volumes of manufacture and supply, customers, and territories of sale. UTC played the role of a formal intermediary and, in fact, neither received caustic soda nor shipped it to customers; manufacturers shipped the products directly from their facilities. According to the Russian Antimonopoly Service, the agreement was also used to export large amounts of liquid caustic soda (many export sales were below cost) in order to maintain high prices in the domestic market. For its participation in the cartel agreement UTC was fined RUB 912,033,950 (approximately \$30 million).³³

UTC's total revenue from the sale of liquid caustic soda in 2010³⁴ was RUB 6,060,222,000 (approximately \$200 million). Therefore, the fine to UTC corresponded to 15 percent of the Affected Revenue in 2010, which is the highest possible fine that may be imposed on a cartel with a diversified product assortment under Russian law (taking into account the duration of the cartel, the role of the cartel, and other aggravating factors). The Total Revenue of UTC in 2010 was RUB 25,517,182,000 (approximately \$823 million), the fine equaling approximately 3.6 percent of UTC's Total Turnover.³⁵

Unfortunately, there is no data on the excessive prices set out by the cartelists and cartel overcharges in the decision on the UTC case. There are also no studies analyzing average cartel overcharges in Russia. Therefore, the assessment of the fine in the UTC case needs to be based on figures used in other countries. The U.S. Sentencing Guidelines follows a rather conservative approach and suggests that the average cartel overcharge rate should be 10 percent.³⁶ The mean overcharges in European-wide cartels range from the 28 percent to 54 percent.³⁷

Hence, even if we rely on 10 percent as the U.S. average cartel overcharge rate, the 15 percent fine imposed on UTC does not correspond to UTC's overcharges in this case at all. First, the fine in the UTC case is based on the Affected Sales in 2010; however, the caustic soda cartel lasted for at least 5 years (since 2005) resulting in total overcharges of 50 percent. Second, as mentioned in Section 2 of the article, the cartel detection/conviction rate should also be taken into account in setting fines for cartels, and the EU and U.S. competition authorities accept this

³² Sales through UTK in 2006-2010 represented 77.2 - 62.5 percent of all liquid caustic soda sales of all cartelists.

³³ Decision of the Russian Antimonopoly Service on the case No. 1 11/139-11 dated December 27, 2011, available in Russian at: http://fas.gov.ru/solutions/solutions_33856.html.

³⁴ The authority used the 2010 revenue to calculate the fine.

³⁵ 2010 UTC Annual Report, available at: <http://www.etk.su/node/6>.

³⁶ U.S. Sentencing Guidelines (2R1.1, Application note 3)

³⁷ See John M. Connor & Robert H. Lande, *supra* note 10, at 1020-1021.

approach. Given that the detection/conviction rate is 30 percent, the total overcharges must be multiplied by 3. In this case, this means that the cartel overcharge is 150 percent.

Finally, UTC received a payment from other cartelists for playing the leading role in the cartel; this factor also increases the profitability of the cartel for UTC. In view of this, the optimal fine in the UTC case should be at least ten times higher than the fine imposed in the case by the Russian Antimonopoly Service.

V. CONCLUSIONS

The above analysis expressly shows that there are obvious signs of under-deterrence in the Russian fining system as compared to its U.S. and EU counterparts. Even the highest fine imposed on a cartel in Russia (UTC case) looks under-deterred. The asymmetry in anti-cartel fines for companies with a diversified product assortment and narrowly focused companies also undermines the overall deterrent effect. Although this asymmetry issue resides in the European fining system as well, its effect on fines imposed by the Russian antitrust authorities is even more obvious and probably more severe. In this regard, the U.S. cap fine (\$100 million or a fine equal to twice the gain to the cartel or twice the loss to the victims) seems more reasonable, as it does not stick to the violator's turnover, and consequently, does not give rise to asymmetry in liability.

The Russian Federal Antimonopoly Service declares combating cartels as its highest priority.³⁸ However, it seems that without increasing the size of a fine for cartels and amending the Russian Code of Administrative Violations accordingly, this aim can *hardly be* seriously pursued.

³⁸ See press release of the authority in English at: http://en.fas.gov.ru/news/news_32151.html.