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LAW AND ECONOMICS OF ANTITRUST ENFORCEMENT IN RUSSIA

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LAW AND ECONOMICS OF ANTITRUST ENFORCEMENT IN RUSSIA[3]

Law enforcement by regulatory authorities on complaints may replicate not only advantages but also disadvantages of both public and private enforcement. In Russian antitrust enforcement there are strong incentives to open investigations on almost every complaint. The increasing number of complaints and investigations decreases both the resources available per investigation and the standards of proof. It also distorts the structure of enforcement, increases the probability of both wrongful convictions and wrongful acquittals, and lowers deterrence. Statistics of antitrust enforcement in the Russian Federation, including Russian regions, highlight the importance of complaints for making decisions on whether to open investigations and the positive dependence of convictions on the number of investigations.

JEL Classification: K21, K42.

Keywords: antitrust, Russia, public enforcement, complaints, legal errors.

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Introduction

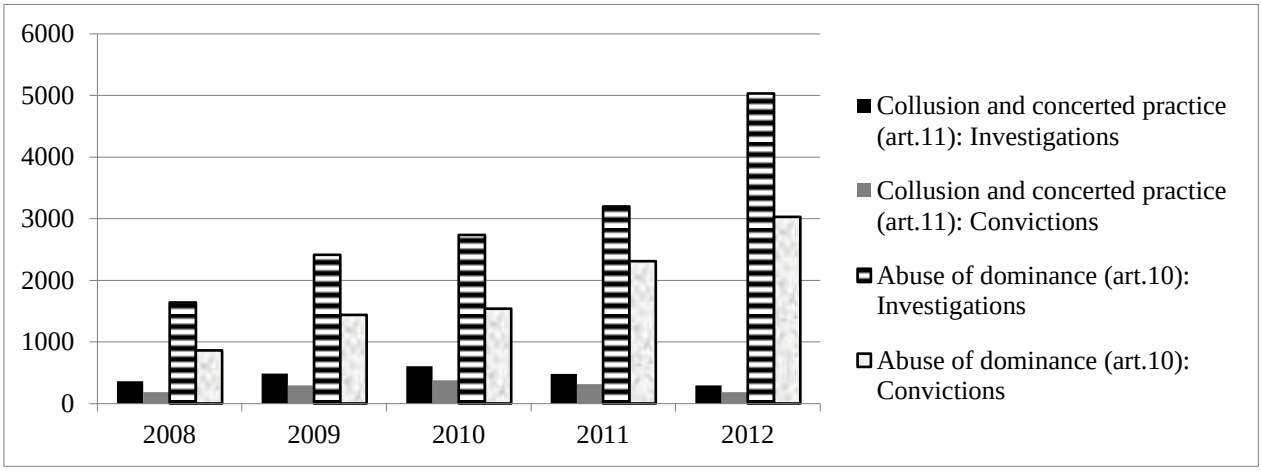
The Russian competition authority is currently among the largest in the world. According to the Global Competition Review 2012 [Rating Enforcement, 2012] in 2012 the number of officers in the Federal Antitrust Service of the Russian Federation (FAS[4]) exceeds 3,000. This number is nearly 1.5 times that of the amount of officers in the Antitrust Division of the US Department of Justice and Federal Trade Commission. In comparison to that of the next largest competition authority, Australia, the number of employees in the FAS is more than three times higher.

The scale of enforcement in the Russian competition agency is assessed as very high according to international standards, and in some areas even as extremely high. For instance, in 2012 the FAS opened about 5,000 investigations on abuse of dominance, is several times higher than that opened by any other authority in the world. In 2011, Ireland, the second largest antitrust authority according to the number of cases on abuse of dominance [Rating Enforcement, 2012], trailed behind the Russian competition authority more than thirty times – about 100 cases compared to about 3,000.

The Authority's statistics show not only a large, but also a growing amount of enforcement (Fig.1). The number of cases of illegal practice regarding abuse of dominance, collusion, and concerted practice, found in articles 11 and 10 of the law 'On the Protection of Competition' (Law on Competition hereafter) is steadily growing. The ratio of convictions to investigations is also increasing: in 2008 in every second case the market participants were found guilty by the enforcement agency after investigation, while in 2012 two of three companies under investigation were found guilty.

[4]Here and throughout the paper the data (especially statistical data) on Federal Antitrust Service activity refers to the Federal Antitrust Service as a system containing the central and regional divisions of the Service (except for cases when otherwise mentioned).

Fig. 1. Scale of enforcement of the Russian competition agency.



Source: Statistics of the Federal Antitrust Service

The scale of enforcement seems to be even higher if we keep in mind the very broad area of responsibilities of the Russian competition agency. In addition to antitrust provisions (prohibition of collusion and concerted practice, abuse of dominance, and ex-ante merger approval), FAS is responsible for public enforcement of the rules on unfair competition (about 1,000 cases annually), on restrictions of competition by public authorities (about 5,000 cases annually), on the control over public procurement, on the Law on Advertising, on sector-specific regulatory provisions in such different industries as electricity and retailing, and on the approval of foreign investments in strategic companies.

The large scale of enforcement in cases of antitrust threatens the quality of the decisions made. The application of the antitrust legislation requires deep economic analysis in every case. The excessive number of cases to be decided by competition authorities suggests insufficient efforts in the interpretation of the evidence available and therefore high probabilities of legal errors (wrongful convictions, or Type I errors and wrongful acquittals, or Type II errors). In turn, high probabilities of legal errors limit the effectiveness of the enforcement in terms of the deterrence effect.

We cannot present direct evidence of the efficiency of antitrust enforcement in Russia. But expert estimates, as well as a general assessment of the investment climate in Russia, and even surveys of enterprises [Tsukhlo, 2012] suggest that competitive pressure ceased to grow over the past years. Survey result seems to be all the more strange if we keep in mind that antitrust enforcement in Russia has only recently become potentially effective – from 2007-2008. Before this, the very low level of fines (about 500,000 roubles, which is less than 15,000 euros at most) made market participants non-sensitive to the threat of antitrust investigations and conviction decisions from the competition agency. Only after the introduction of turnover

penalties in 2007 (up to 15% of the turnover of the violator in the market affected) could the deterrence effect of antitrust enforcement in Russia be seriously considered. The simultaneous increase in strength of antitrust enforcement and the weakening of competition in the Russian market may be a coincidence, but even in this case the paradox of very limited effects of large-scale and powerful enforcement need an explanation.

One explanation common for both Russian and international experts is the low standards of evidence used by the competition agency in the course of investigation. Many scholars [see, for instance, Girgenson and Numerova, 2012] consider three main weaknesses of the Russian antitrust enforcement, namely the excessive level of enforcement, objective of enforcement not related to the promotion of competition, and the marginal role of economic analysis in the investigations of the competition authority. Not only international experts, but also judges in the Russian commercial courts (*arbitrazh)* are dissatisfied with the level of analysis presented in the decisions of FAS. Recently about 35-40% of the decisions of the authority are reversed by the commercial courts in the first instance.

However, all these features are only symptoms of the disease, but not the causes. There are different explanations of the non-satisfactory state of affairs in Russian competition policy, but as we see it, none of them are sufficient. First is that decisions of FAS are inspired by political reasons. It is not a mystery that many high-profiled cases on the violations of antitrust law were opened under direct orders of the prime minister and/or president of the Russian Federation. One recent example is the case against the 'Big Four' domestic oil companies – LUKOIL, Rosneft, TNK BP, and Gazprom Neft [Avdasheva et al, 2012]. Yet political order cannot explain the more than 3,000 decisions on the abuse of dominance annually. Moreover, FAS is guided by pure political agreements to a lesser extent than many other authorities in Russia, partially because of the very special position of executive power in the Russian system. FAS initiates cases against federal and regional authorities for restrictions of competition, there are 3,000—5,000 cases under these specific provisions of the Russian competition law annually. The opposition of FAS for many actions of regional government and federal authorities, as well as the extensive experience of legislative initiatives aimed at changes in regulation does not provide complete independence, but at least limits the possibilities of direct lobbying by both public executives and companies.

A second possible explanation of the limited deterrence is the point that rent extraction and coercion over business [Gans-Morse, 2012] is the objective of enforcement, as opposed to deterrence. However, evidence does not provide strong support for this explanation. The FAS is accused of corruption much less than many other executive authorities, and there is not any evidence of antitrust investigations being opened or closed for reason of corruption. An indirect

but important indicator of the fact that the activity of FAS is not driven by corruption is information openness of the authority and its decisions, which is not common for Russian executive authorities.

A third possible explanation for the limited effects of antitrust enforcement is the low qualification of officers in the competition agency. However, we consider this explanation to be not generally valid. The staff at the Russian competition agency is relatively young (33 years in average, with an average tenure in the competition agency of 4 years, according to the Global Competition Review 2012). This could be considered as an advantage, taking into account that people with a modern economic education are almost absent among older public servants. Again, indirect but important evidence is that FAS became the first public agency in Russia certified by ISO 9001-2008.

The high ratio of questionable decisions cannot be explained by the weaknesses of the antitrust legislation itself. Most provisions of Russian competition law were borrowed from European rules on competition. Economic and legal scholars assess the description of illegal activity in the Law on Competition as being very close to the European description. Most errors made are caused by incorrect interpretations of internationally recognized provisions in the enforcement, not by specific descriptions of illegal activity in the Russian antitrust law.

So, the question to be answered is how it happened that competition enforcement by large, incorrupt, qualified staff, empowered with a relatively harmonized definition of illegal practice and high standards of fines, brings so questionable outcomes.

This paper offers explanations for all the mentioned features of the Russian antitrust enforcement, which are:

- excessive scale of enforcement in terms of cases investigated;
- low level of deterrence;
- selection of cases for investigation not related to the restriction of competition;
- weak economic analysis and, as a consequence, large number of enforcement errors.

In the heart of the explanation presented are the incentives created for officers in the competition authority, companies in the market, and potential law violators by the national rules of administrative regulations. These rules make refusal to open investigation on the complaint relatively risky for the officer in the executive authority. General administrative rules to proceed with complaints registered were designed for control and supervision in the areas where evidence of non-compliance are relatively easy to detect. When these rules are extended over antitrust, they induce an enormous number of complaints by market participants, decreasing resources dedicated for every investigation, and distort the structure of investigations towards cases with high individual harm at stake (in contrast to social welfare loss), causing an increase in the

probabilities of both Type I and Type II errors and reduce deterrence effects. Giving priority to complaints as a reason to initiate investigation, Russian competition enforcement combines the weaknesses of both public and private models of enforcement.

In contrast to many papers devoted to the weaknesses and adverse effects of law enforcement in Russia [see, for instance, Gans-Morse, 2012], we show that the structure of incentives in decision-making is sufficient to explain the relatively poor results of law enforcement, without taking into consideration corruption or the low level of skills of officers in the executive branch.

This paper is organized as follows. Section 2 is devoted to a brief review of the comparative advantage of public and private enforcement and a discussion of the nature of public enforcement in the Russian competition agency. Section 3 explains administrative rules regulating antitrust enforcement in Russian and develops a theoretical framework explaining the errors under a specific model of public enforcement (we called it *reactive* public enforcement hereafter in the text) and argue that most types of enforcement errors by the Russian competition agency are made in favour of the authors of the complaints, including law-abusing complaints. Section 4 provides analysis of enforcement statistics of the FAS and its regional subdivision that support the framework developed. Section 5 discusses the reverse impact of the enforcement model on the development of Russian competition law. The main findings are reiterated in the conclusion.

Causes and effects of wrongful convictions under private and public antitrust enforcement

The literature on public versus private enforcement starts with Becker and Stigler [Becker, Stigler, 1974], who argue that private enforcement could achieve deterrence as efficiently as optimal public enforcement. The general conclusion of the discussion is that both private and public enforcement can exhibit comparative advantages in different settings [Polinsky, 1980; Polinsky, Shavell, 2000].

However, in our opinion, from the perspective of comparative law, the literature on private and public enforcement misses one important aspect, namely the artificial limitation placed on the models of enforcement under comparison. Insufficient attention is paid to the model where public authorities select cases for investigation and enforcement based on the complaints of victims as a distinct type of enforcement. In some legal systems and fields of legislation, this type of enforcement plays an important role. Today in Russia this enforcement

model is considered as a desirable direction for reforming public control and supervision. In this paper we call this *reactive* public enforcement, trying to stress that targets for investigation and prosecution are chosen neither by any risk-based principle nor randomly, but rather under the complaints of actual or alleged victims. It is unclear, however, if this type of enforcement system is preferable from a social point of view or from the point of view of a given group of participants in the enforcement system. In contrast to the perspective advanced by McAfee et al [McAfee et al, 2008], which is that public enforcement on complaints can replicate the advantages of both private and public enforcement, we concentrate on conditions where it replicates the shortcomings of both models.

A comparison of private and public enforcement of antitrust legislation attracts special attention in the literature [for a survey see Segal, Whinston, 2006]. Taking into consideration the deterring effect of fines, if punitive penalties in private suits are applied, private enforcement is able to outperform public enforcement because it is closer connected to the gains from violations. Higher penalties that provide a stronger deterrent effect in comparison with public enforcement were found in enforcement against international cartels [Connor, 2006], as well as in a large number of cases of private antitrust litigations in the US [Davies, Lande, 2012].

However, there is a widespread view that private enforcement exhibits significant drawbacks in comparison to public enforcement because of the specific sources of Type I errors, or over-enforcement [Rajabiun, 2012]. There are at least two sources of over-enforcement. The first one is when the litigant can be law-abusing, suing only in order to impose additional costs on the defendant and thus affect its behaviour [McAfee, Vakkur, 2004]. The second determinant of Type I errors is when the litigant makes its decision by assessing only its own cost and benefits, but not the effects of practice on welfare. The second explanation does not imply opportunistic litigation, in contrast to the 'self-serving' nature of the claim. Underestimation of the welfare effect of practice may cause wrongful convictions in cases where the positive effects on welfare are combined with a redistribution of gains among market participants.

Attention to Type I errors (*wrongful convictions*) in antitrust litigation is explained by the effects of enforcement errors, which may be extremely strong for several reasons. In addition to the ethical cost of wrongful conviction, an additional direct cost imposed on the person convicted, and lower deterrence [Garoupa, Rizzoli, 2012], wrongful convictions in antitrust enforcement imply that welfare-improving practices are considered illegal, narrowing the business opportunities and probably suppressing an upgrade. The negative impact of the ban on welfare-improving practices could be very high.

In this framework, the determinants of enforcement errors are important. The probability of enforcement errors may be considered as exogenous as a result of limited cognitive ability.

However, they could be considered as endogenous, explained, for instance, by the standards of evidence [Rizzoli,Saraceno, 2011]. The specific approach of this paper implies focusing on how the probability of Type I errors depends on the enforcement model. Another important difference between our framework and the existing literature is an explanation of the origin of enforcement errors, taking into consideration mistakes of executive authority, and the related conclusion on the interplay between the probabilities of Type I and Type II errors. Errors are endogenous, and they are predicted simply by exogenous budget constraints of authorities responsible for control and supervision. An assumption of the exogenous budget allocated between investigation and prosecution cases (which are predicted by the independent choices of victims, be they actual or alleged) corresponds well to the reality of civil law that is enforced by public control. One important outcome of this assumption is that the main prediction of both Type I and Type II error probabilities is the number of complaints. An increasing pressure of complaints causes an increase of both types of errors and a corresponding lowering of deterrence effects under the given legal rules and prescribed standards of evidence. Moreover, in this setting the increase of penalties may provide just the opposite effect to the one expected: expected gains from filing a complaint will increase, the number of complaints and cases under investigation will increase, as will the probability of errors, but the deterrence effect will decrease.

Reactive Model of Public Enforcement as a Source of Enforcement Errors

Enforcement of Antitrust Legislation in Russia: Legal Framework

Support of the rights of complainants in Russian administrative law

Enforcement of antitrust legislation in Russia is organized within the universal model of control and monitoring (*kontrol'no-nadzornaya deyatel'nost)*. In this framework, authorities inspect compliance with the legal requirements either on their own initiative or on the basis of complaints received. The recent concept of the development of control and monitoring in Russia attaches great importance to the response of complaints. Official strategic documents consider re-orientation of the control and supervision from the discretionary action on the investigations opened by complaints as a desired direction of reforming administrative law enforcement. A special law 'On the procedure of considering complaints of citizens of the Russian Federation' (2006) requires the authority responsible to consider every complaint and within thirty days to either open an investigation on a complaint or to provide a motivated refusal to do such. The

administrative regulations of the FAS allow it to extend the period necessary to make a decision, but for not more than three months.

Authorities and officers are responsible both for the delay in decision-making and the unjustified refusal to open an investigation on a complaint. Citizens as well as companies can sue authorities and officials for harm as a result of inaction. The number of court cases against government agencies decided for plaintiffs in Russia is high and growing [Trochev, 2012]. Remunerations and promotions of civil servants on every level, including the heads of authorities, negatively depend on the number of accusatory commercial court decisions on the inaction of the authority responsible. Officer compensation depends on delays in the proceedings and 'unjustified refusals to open inspections' in a very strict way: it reduces quarterly bonuses, which are the great part of the total salary of civil servants. On the contrary, the decision to open investigations never leads to any sanctions against the officer or agency. The system of incentives does not seriously take into account any credence to allegations put forward in the complaints, or the subsequent costs of the investigation, or the level of the standard of proof. In other words, if there is any positive probability that a court can qualify the subject of the complaint as a violation of law and the refusal to investigate bringing harm, the expected payoff of the officer is always higher when opening investigation. Among other fields of control and monitoring of administrative law in Russia, antitrust enforcement is most likely to suffer from the design of incentives because of the complexity of cases, as well as a lack of legal certainty in a sense of predictability of the court's decision.

Antitrust law as an imperfect substitute for sector-specific regulations

The high demand for antitrust enforcement, measured in terms of complaints submitted, is partially explained by the excessive complexity of the responsibilities of the Russian competition authorities. In addition to traditional areas of antitrust enforcement (collusion, vertical restrictions, dominance abuse, and mergers), Russian competition law is applied in cases against anticompetitive actions of public authorities – a unique case in the world – and also for conflict resolution in regulated industries. The Law on Competition legally prescribes the first direction of enforcement. The second direction is more or less compelled: Sector-specific regulations in Russia include enforcement mechanisms and sanctions very rarely. That is why from the beginning of the 1990s almost the only option to punish an incumbent company in a regulated industry for refusal to provide access (interconnection) or for deviation from standards of service provision was to accuse it of dominance abuse. According to the annual reports of the FAS the share of cases against natural monopolies exceeds ¾ of the investigations according to Article 10 (abuse of dominance). Conflict resolution between customers and incumbents and

between new entrants and incumbents in regulated industries contributes a lot to astounding statistics on cases of dominance abuse in Russia.

Broad areas of responsibilities not only increase the workload for Russian competition authorities, they also contribute to the distortion of standards of proof in antitrust cases. Both with authorities and in courts two 'types' of cases can be found: 'easy' and 'complicated'. In cases on the restriction of competition by authorities and in most cases regarding access (interconnection) and service provision by regulated companies, it is relatively easy to separate legal actions from illegal ones. In contrast, cases on collusion and concerted practice as well as abuse of dominance in non-regulated industries are 'difficult' ones, requiring extensive application of economic analysis. However, there is no legal standard to separate these two types of cases from each other. Both competition authorities and commercial courts often use 'overly complicated' analysis and reasoning for very simple cases and even more often they apply 'overly simplistic' analysis in cases requiring much higher standards of proof.

In addition to standards of proof, the developed tradition of Russian antitrust law enforcement in the field of regulated industries contributes to supporting complainants both directly and indirectly. Direct support of any complainants exhibits the interpretation of any of them as the 'weak party in the contract', which Russian antitrust law seeks to protect. This interpretation, which is more or less justified for regulated industries, is extended to all complainants. Sometimes the rhetoric of 'supporting the weak party in a contractual relationships' is replicated in cases where the complainant is a company much larger than the assumed infringer.

'Inquisitorial' patterns with increasing standards of penalties

Together with legal uncertainty, rules on considering complaints almost guarantee that an investigation will be opened based on a complaint. According to FAS data, several thousand investigations (together in 'traditional' antirust areas such as collusion, vertical restraints, and dominance, as well as in unfair competition, advertising, and restriction of competition in procurement) are opened annually based on complaints, and this number is growing. The number of investigations initiated as a direct response to complaints is growing even faster: In 2008 more than half of the investigations concerning the violations the Law on Competition were opened on the initiative of competition agencies (about 3,500 out of a total of about 6,500), while in 2012 this ratio decreased to 38% (3,800 thousand out of 10,000 investigations).

Competition authorities investigate cases themselves and decide on penalties. Decisions of law violation and the amount of penalties can be appealed in commercial courts (*arbitrazh*). An increasing number of cases under investigation and a large ratio of cases where authorities

find a violation of the law are typical for many executive-branch bodies that perform control and monitoring in Russia. Competition authorities differ first of all by high standards of penalties. The complaints are motivated therefore by a large expectation of sanctions against the law violator.

Both companies as legal persons and their managers are responsible for the violation of antitrust law. The FAS by its decision can impose a fine on a company. Starting from 2008, the total amount of fines collected by the FAS has tripled every year. In addition to fines, companies can be subject to remedies. The most part of remedies imposed by the Russian competition agency is behavioural, as companies are prescribed to follow certain rules of price-making, contracting suppliers and customers (dealers), or allocation of output across different markets (for instance, export and domestic markets). Remedies on companies that are found guilty are applied more and more often, and sometimes market participants consider them as a greater threat than a fine itself. Since the beginning of 2012, Russian competition authorities have began to use specific instruments of warning and precautions. Warnings and precautions were introduced in order to insure the rapid cease of violations without opening an investigation. About 1,500 warnings and precautions were issued in 2012 alone, and they contain conditions that could be considered as 'soft remedies', such as instructions to sign a contract with a specific partner, apply a specific type of contract for a specific party, to provide good or service on a non-discriminatory basis, and so forth.

The credibility of sanctions against managers of a company as physical persons is also increasing. The sanctions for company managers are dual: The liability is administrative and criminal. Administrative liability can include a fine or disqualification of a manager. Criminal liability can also include a fine (much larger than when dealing with administrative liability) but also imprisonment up to seven years with or without further disqualification.

The increasing standards of sanctions together with legal uncertainty in the sense of relatively low predictability of decisions from both the FAS and the courts increasingly incentivize several groups to complain. The first group consists of persons both physical and legal who consider themselves as suffering harm by violations of antitrust law. Provisions of the abuse of dominance in the Russian Law on Competition (Article 10) prohibit both the actions of the dominant seller restricting competition and imposing individual harm. In the latter case, the claimant can easily consider as abusing those actions that are also socially beneficial and cannot be recognized as illegal according to the legal rules in force. One typical example is price discrimination: In spite of the fact that commercial courts have confirmed many times that quantity discounts are not discrimination as an abuse of dominance, small buyers continue to complain. From a social welfare point of view, the individual effects of actions drive their

claims, while social effects are not taken into account. This is a typical source of Type I errors under private antitrust enforcement [Rajabiun, 2012], but in Russia they induce enforcement by the agency. There is, however, another group of claimants who perfectly realize that there is no violation of antitrust legislation, but in the presence of the agency's enforcement errors, complaints could induce an additional burden on counterparties or competitors. Antitrust enforcement, including investigation and possible sanctions due to an agency's errors serves as a tool in strategic interaction [McAfee, Vakkur, 2004], thereby strengthening the bargaining power of a claimant.

The above features of Russian antitrust enforcement – legal and informal support for complainants, distorted standards of proof, together with high penalties – complement and reinforce each other. Complainants are almost certain that their complaints will lead to the opening of an investigation without any cost to them. Opening an investigation, a typical official responsible for control and supervision in Russia's competition authority will try to find evidence of law breaching. Every investigation can result in faulty conclusion, but under an increasing number of investigations and distorted standards of evidence, the proportion of mistakes in the decisions of Russian competition authorities is high and seems to be increasing. Since competition authorities cannot distinguish between 'honest' and 'law abusing' complainants, and considering the high penalties, antitrust proceedings can become an efficient tool for blackmailing. The high probability of a wrongful conviction distorts the deterrence effect, decreasing the expected gains under legal behaviour. Moreover, the efforts of competition authorities are skewed towards investigations opened by complaints in contrast to investigations on cases opened by the FAS on its own initiative, and this has resulted in an increased probability of Type II errors (under-enforcement of law versus restrictions on competition). In this way the system of antitrust enforcement becomes socially expensive and simultaneously provides a very limited deterrence effect. Expensive enforcement involves an excessive number of investigations, which are performed with limited standards of economic analysis. A conceptual framework that explains the unsatisfactory outcomes of the legal protection of competition in Russia is provided in the next section and is based on the negative dependence of the probability of enforcement errors on the resources dedicated for one investigation.

Incentives of the parties in the enforcement of antitrust legislation

In this section we briefly describe the framework in which we explain enforcement errors in 'reactive' enforcement as a special type of public enforcement.

Competition Agency. The competition agency receiving the complaint makes the choice between two options: either to open an investigation or to prepare a motivated refusal to open an investigation. There are no other options according the Russian administrative law: A 'non-reaction' option is considered as a violation of administrative procedure and the authority and/or given officer can be charged for not reacting to a complaint.

The choice between the two options depends on a comparison of expected net gains from the motivated refusal and opening an investigation. Key performance indicators for the Russian competition authority are based on the number of cases closed and do not take into account the welfare effects of the decision. There is no any 'penalty' either for a case opened without any evidence of potential welfare improvement, or for a case closed due to the absence of satisfactory evidence, or for a wrongful conviction. However a 'penalty' is possible for refusal to take a case if the motivation proves to be unsatisfactory. Therefore, the cost of the analysis at the initial stage of a case investigation is higher for the 'motivated refusal' option in comparison to the 'opening the case' option. Without being strictly compelled to open an investigation on every complaint, an officer in the competition agency prefers to do that.

As a result, in light of the increasing number of complaints, the limited resources of the agency (including financial, human, and time resources) are allocated among a growing number of cases. A decline of resources dedicated to a given investigation, together with the growth of the ratio of the cases opened by complaints, increases the probability of both Type I (wrongful conviction) and Type II (wrongful acquittal) enforcement errors.

The probability of wrongful conviction increases because of two reasons, which can be separated for 'genuine', or 'non-abusing', and 'abusing' complainants.

The first group of complaints is inspired by a desire to change the business practices of the offender. Even a 'genuine' complainant, however, cannot assess if his complaint is reasonable in the sense that there is specifically an antitrust violation. But in any case, the assumption of the complainant that a violation has occurred is based on the overestimation of individual effects in comparison with social welfare. The second group of complaints is inspired by the intention to induce an additional cost on the offender. The complainant presumably knows that there is no antitrust violation but expects that there is a probability of wrongful conviction by the competition authority.

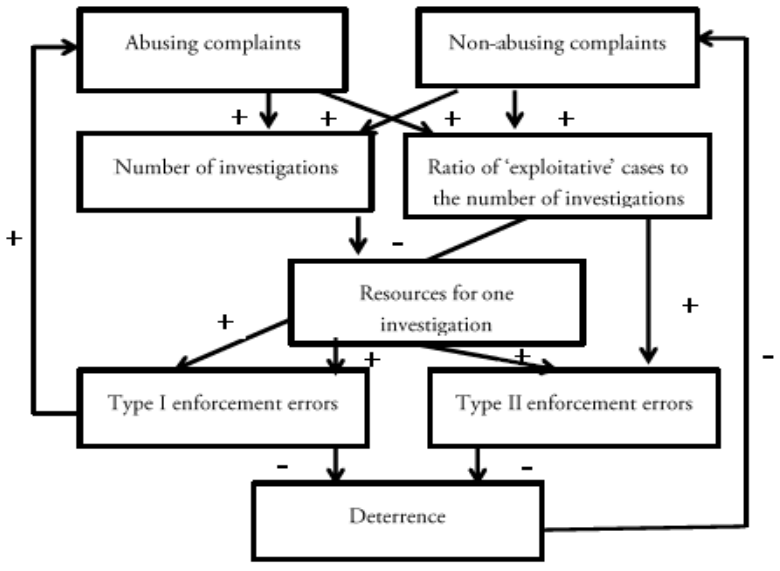
Complainants. Both groups of complainants make a decision to file a complaint by comparing the expected gains with the cost of filing. The cost of filing can be considered as minor. Expected gains differ: For the first group, these are gains from the offender changing its business practices, while the second group expects gains from the wrongful conviction of an alleged offender. The number of complaints from the first group generally increases with a

decrease in deterrence, while the number of complaints in the second group increases with the growing probability of Type I errors.

Potential Violator. A potential offender makes the decision to follow or to violate antitrust rules by comparing gains from two options [Becker, 1968]. An increase in the probability of a wrongful conviction decreases the gains from behaving legally. An increase in the probability of a wrongful acquittal increases the gains from violations. Therefore, increasing the number of complaints and decreasing the resources per investigation, correspondingly increases the number of wrongful decisions that distort deterrence.

The logic of interaction between the main actors in the model of 'reactive' public enforcement is presented in Fig. 2. Both non-abusing and abusing complaints increase the number of investigations and shift the structure of investigation by the competition authority towards cases on 'exploitation' in contrast to 'competition restrictions', with the latter increases the probability of Type I enforcement errors. The growing number of investigations decreases the resources available for any one investigation, and decreasing resources increases the probability of both types of enforcement errors. Type I enforcement errors make abusing complaints more profitable, but both types of errors lower deterrence. As a result law violations become more probable, creating the causes for (non-abusing) complaints.

Fig. 2. Determinants of enforcement errors under a'reactive' model of public enforcement.



Under ‘reactive’ public antitrust enforcement, an increase in the standard of penalties imposed by the competition agency provides just the opposite effect to the one expected: as the anticipated gains from filing a complaint increase, the number of complaints and cases under investigation increase, as does the probability of errors, and the deterrence effect decreases accordingly. The framework developed allows us to explain the ambiguous outcomes of efforts aimed at expanding the power of the FAS and increasing sanctions for violations of competition law. The escalation of legal errors has supressed the positive impact of the reform of fines from 2007. Increased penalties were expected to enhance the deterrence effect due to higher expected sanctions for breaching the law. However, increasing penalties made competition authorities more powerful and made complaints more attractive as a mechanism of putting pressure on a counterparty without violating the law. The growth of complaints and the probability of being wrongfully accused and punished in fact decreased the expected gains from non-violation, thereby distorting deterrence.

Complaints, Investigations, and Appeals in Russia and the Russian regions

Complaints and Scale of Enforcement after Penalty Reform

Statistics of enforcement provides limited though nevertheless important support for the framework developed. The Federal Antitrust Service of the Russian Federation consists of the central office and regional subdivisions. The responsibilities between central and regional offices are divided according to the boundaries of the markets affected. The share of the central office in the overall number of cases is limited from 1% to 2% of the total number of investigations. In order to explain trends in enforcement, we analyse statistics from the regional subdivisions. However, we first present a general description of the outcomes of investigations for the whole FAS system (Tab. 1). Data on the number of complaints and investigations are available only from 2008, and aggregated statistics of the Supreme Arbitration Court are only available from 2009. However, this is not accidental. 2008 was the first year after the introduction of turnover penalties for antitrust violations. From this year the threat of being punished motivated corporations to appeal convictions by antitrust authorities. It is a sharp increase of appeal cases in commercial courts of the first instance that explains that the statistics of the Supreme Commercial Courts of the Russian Federation identified claims where competition authorities are involved separately.

Tab. 1. Enforcement of the Law 'On Protection of Competition': Complaints, Investigations, Decisions, and Appeals: 2008-2012

	2008	2009	2010	2011	2012
Complaints registered*	10704	16595	23048	27063	27347
Investigations opened*	6541	9664	11431	11276	10009
Convictions*	3993	6864	8168	9064	8173
Decisions appealed in the commercial courts of the first instance**	n.a.	2657	3770	4434	5746
Plaintiff's claims granted in the commercial courts of the first instance**	n.a.	1057	1390	1708	1935
Decisions of the courts of the first instance appealed in the appeal commercial courts	n.a.	1900	2090	3984	4926
Plaintiff's claims granted in the commercial appeal courts**	n.a.	272	437	545	625
Decisions of the commercial appeal courts appealed in the commercial cassation courts**	n.a.	1568	2198	2224	2780
Plaintiff's claims granted in the commercial cassation courts**	n.a.	224	293	268	306

Source: * Federal Antitrust Service, data include central unit and regional subdivisions

** Supreme Commercial Court of the Russian Federation

Notes: * Data on investigations are applied for all types of violations of the Law 'On PC', including collusion, abuse of dominance, unfair competition, and restriction of competition in procurement, restriction of competition by public authorities, and merger approvals. Data on complaints are not applied to a specific type of violation.

After increasing penalty standards, the number of the complaints in the competition authority more than doubled from 2008 to 2010. The number of investigations follows the increase in complaints. The exception is 2012 when warnings and cautions replaced a significant portion of investigations and convictions under Article 10 (abuse of dominance). In addition, competition authorities were subject to sharp criticism by the government, business associations, and expert community for its involvement in many small cases not affecting competition.

The ratio of decisions on law violations steadily increased over the course of five years, from about 60% to 80%. Of course, data on appeals – including successful appeals – cannot be considered as perfect or even satisfactory evidence on legal errors made by the competition

agency only. Every participant of enforcement procedures, including executive authorities, companies involved, and courts, from the courts of the first instance to the Supreme Court of the Russian Federation, makes mistakes. This is not unique for the application of antitrust rules in Russia: Experience of antitrust enforcement worldwide provides numerous examples of legal errors, many of them recognized only decades after the decisions were made [Easterbrook, 1984; for more recent examples see Manne, Wright, 2010].

Among the numerous convictions, wrongful decisions should take place. Even if the proportion of Type I errors in the decisions of competition authorities is moderate, the large scale of enforcement makes the probability of being wrongfully convicted for a company under investigation relatively high.

Statistics of appeals and the results appeals in commercial courts support the conclusion on the high probability of mistakes in enforcement of the competition authority. Parties convicted consider the chance to challenge the decision of the competition authority as relatively high[5]. The ratio of appeals to the decisions of competition authorities was about 1/3 in 2009 and increased to more than 2/3 in 2012. The ratio of claims granted to the plaintiff in the courts of the first instance decrease moderately, from 40% in 2009 to 34% in 2012, but nevertheless this indicated a high probability of errors in the decisions of authorities.

Finally, the involvement of appeal and cassation instances in the resolution of cases of antitrust law violations is also very high. The ratio of decisions reversed by the higher instance steadily decreased from the first instance to cassation, but remains to be at least moderate. However, the statistics of appellation and cassation instances tells us substantially less about the probability of being wrongfully convicted, since filings in higher instances are almost equally distributed between convicted companies (which seek to appeal a decision by competition authorities in the highest court) and competition authorities trying to reverse acquittals by the courts of the first instance.

Statistics of the enforcement of the 82 regional subdivisions by FAS (Tab. 2) also support the hypothesis on the decisive impact of complaints on the structure of enforcing Russian competition law. In spite of the big differences between regional subdivisions, there is a common trend. Until 2011 the number of investigations and convictions follows the increase of complaints registered. In 2012 this trend changed, presumably because of the introduction of warnings and precautions that partially replaced investigations on specific cases.

[5]It should be noted that not only convictions but also decisions on non-violations are registered in the statistics of commercial courts. However, appeals on conviction decisions are at least 90-95% of the overall appeals. The second feature of the commercial court statistics that complicates interpretation of the data officially reported is that not only appeals to decisions on the law 'On the Protection of Competition' but also to the decisions on other laws, including the Laws on Advertising, on Public Procurement and on Trade. According to expert estimates, however, decisions within the law 'On the Protection of Competition' accounts for at least 2/3 of all decisions. The reason for this is much the higher level of penalties for violations of the Law on Competition.

Tab. 2. Enforcement statistics of the regional competition authorities: 2008-2012 (N=82)

	Complaints registered					Investigations opened					Convictions				
	mean	**st.dev**	**Median**	**max**	**min**	**mean**	**st.dev**	**Median**	**max**	**min**	**mean**	**st.dev**	**Median**	**max**	**min**
2008	124.27	108.38	94	483	1	78.22	72.13	60	421	0	47.59	51.12	34.5	389	0
2009	193.12	160.22	157	777	4	115.12	93.28	85.5	468	12	81.82	71.44	61.5	401	11
2010	253.92	215.99	180.5	927	7	137.26	106.43	105	594	20	98.15	80.88	72	434	15
2011	295.23	265.53	210.5	1254	9	134.43	99.80	97	590	17	108.54	83.51	78	499	13
2012	301.96	298.49	229	1747	8	120.23	92.92	88.5	542	15	98.39	79.85	69.5	448	8

Source: Federal Antitrust Service, data for regional subdivisions.

Empirical hypotheses and results

A comparison of the data on regional competition authorities allows us to test three hypotheses related to the conceptual framework presented above:

H1. *The number of investigations increases if the number of complaints increases*

In spite of the fact that this proposition seems evident from the descriptive statistics at both national and regional levels of competition regulation, the causal link between the number of complaints registered and investigations opened may be questioned. Confirmation of H1 would support the main element of the explanations of the features and results of Russian antitrust enforcement, and that this activity of the agency is driven by the individual interests of the complainants. Alternative hypothesis is that number of investigation is explained by the economic welfare and structure of gross regional product in terms of groups of industries.

Fig. 3 provides evidence on the interdependence of the number of complaints registered in the regional subdivision and number of investigations on the compliance with the Law on Competition. Generally, those subdivisions with a higher number of complaints at the same time open more investigations. However, in regression analysis it is necessary to exclude the impact of unobservable variables specific for the regional divisions, namely the quantity and qualification of available staff, as well as specific problems in the regions that may cause intensive complaints and reasonable investigations. It is also reasonable to control for economic well-being in the region (using Gross Regional Product variable as well as Gross Regional Product per capita with one year lag, deflated to prices of 2007) and for share of manufacturing in regional product. Among other industries manufacturing is considered as exposed to abusive practices of large suppliers more likely.

H1 is tested for the total number of investigations opened by regional subdivisions and for the investigations opened by the initiative of competition agencies, without the reference on the complaints.

Fig. 3. Number of complaints (X axis) and investigations (Y axis) in the regional subdivisions of the Federal Antitrust Service: 2008-2012

H2. *An increase of the number of opened investigations leads to an increase in the ratio of convictions to the cases under analysis*

Descriptive statistics support this hypothesis. However, the effect of the growing number of investigations should be separated from the impact of other determinants, including unobservable ones. An alternative explanation for the increase of the share of convictions in decisions of the FAS from 2008 to 2012 would be the 'learning-by-doing' effect: experience in a large number of investigations allows one to better select cases for investigation, such that the share of convictions increases with time. We expect, however, that the specific experience of regional agencies is connected with their individual characteristics, and after the exclusion of individual characteristics there is no reason to believe that the positive dependence of the probability of conviction on the number of investigations is explained by better selection of cases. In this type of analysis we also should divide investigations opened by the own initiative of competition agency and investigations with the reference on the complaints registered. We do that using variable that indicates the share of investigations opened by the own initiatives of regional competition agency.

In the framework developed above, the increasing share of convictions with the number of investigations contributes to the explanation of links between excessive enforcement and a low deterrence effect. Even under the given proportion of wrongful convictions in the decisions of the competition authority, the probability of being wrongfully convicted increases with the number of investigations. Increasing the number of investigations opened decreases the deterrence effect in this case.

Fig. 4. Number of investigations opened (X axis) and the share of convictions in the decisions (Y axis) of the regional subdivisions of the Federal Antitrust Service: 2008-2012

The descriptive statistics (Fig. 4) do not provide an unambiguous conclusion on the link between the number of investigations and the share of convictions in the decisions of the FAS. Thus, deeper analysis is necessary.

H3. *The higher is the number of guilty decisions made by competition authorities, the higher the number of complaints submitted to the authority in the next year*

Third hypothesis is not directly predicted by descriptive statistics. However, it is important in the developed conceptual framework. To file a complaint, a market participant should know that the probability to that the accused party will be punished is high enough. This

is crucial both for non-abusive and abusive complainants. In turn, the expected probability depends on the scale of enforcement (the higher the number of investigations, the higher the expected probability that the competition authority will open an investigation based on a given complaint) and the ratio of convictions to decisions on investigation (the higher the probability that after the investigation the party will be punished, the higher the expected probability of punishment on the given complaint). We suppose that, in contrast to the link between complaints and investigations, there is a time lag in the influence of the scale of enforcement on the incentive to complaint.

Therefore the hypothesis tested is divided into two parts:

H3.1. *The higher the number of investigations opened by the competition authority in year t-1, the higher the number of complaints that will be filled in year t.*

H3.2. *The higher the ratio of convictions to investigations opened in year t-1, the higher the number of complaints that will be filled in year t.*

All the hypotheses are tested using panel data analysis. The choice between fixed and random effects regressions is made following Hausman test.

Tab. 3 and 4 present the results of testing for the first hypothesis. The results imply significant contribution of complaints to the overall number of investigations performed by Russian competition authorities. In the framework developed, complaints increase the probability of being punished for actions that provide high individual effects. A wrongful conviction can be punishment for the actions that do not restrict competition (when illegal activity implies restriction of competition) or for actions whose positive effects exceed its negative ones (when illegal activity implies prohibition of harm without the need to prove restrictions on competition).

Wrongful convictions, in turn, distort the deterrence effect in several ways. The first one is the increase of the probability to punish the innocent, decreasing the expected gain from non-violation of the law. The second one is a further distortion of the standards of economic analysis and presenting the evidence in antitrust cases. In this sense, one wrongful conviction in a system with a short tradition of enforcing competition law can contribute to the escalation of erroneous decisions.

Tab. 3. The Determinants of Investigations Opened by the Regional Subdivisions of the FAS: 2008-2012 *(Fixed Effects Regression)

Dependent Variable =Number of investigations opened (in logarithms) in year t

	1	2	3	4
Independent variables (std. errors in the parentheses)				
COMPLAINTS (logarithm)	0.86*** (0.05)	0.86*** (0.05)	0.86*** (0.05)	0.86*** (0.05)
GROSS REGIONAL PRODUCT (logarithm)		0.11 (0.28)		
GROSS REGIONAL PRODUCT PER CAPITA (logarithm)			0.03 (0.28)	
MANUFACTURING				0.17 (0.89)
Y=2009	0.10* (0.05)	0.10 (0.06)	0.10 (0.06)	0.10 (0.06)
Y=2010	0.05 (0.07)	0.05 (0.07)	0.05 (0.07)	0.05 (0.07)
Y=2011	-0.09 (0.07)	-0.09 (0.07)	-0.09 (0.07)	-0.08 (0.07)
Y=2012	-0.19*** (0.07)	-0.20*** (0.07)	-0.20*** (0.07)	-0.19*** (0.07)
Intercept	0.18 (0.21)	-1.19 (3.42)	0.05 (0.07)	0.15 (0.26)
Summary statistics				
Number of regions	82	82	82	82
Observations	410	410	410	410
F-Statistics	125.00***	104.06***	103.99***	104.00***
R^2	0.58	0.58	0.52	0.48

Notes:

COMPLAINTS – number of the complaints filled in the regional subdivision

GROSS REGIONAL PRODUCT – deflated to 2007 prices, with one year lag

MANUFACTURING – share of manufacturing in Gross Regional Product, with one year lag

All regressions incorporate regional dummy variables.

***, **, * indicate significance at the 1%, 5%, and 10% levels, respectively.

Tab. 4. The Determinants of Investigations Opened by the Regional Subdivisions of the FAS: 2008-2012 *(Fixed Effects Regression)

Dependent Variable =Number of investigations opened by the initiative of competition agencies (in logarithms) in year t

	1	2	3	4
Independent variables (std. errors in the parentheses)				
COMPLAINTS (logarithm)	0.37*** (0.11)	0.36*** (0.12)	0.35*** (0.12)	0.37*** (0.12)
GROSS REGIONAL PRODUCT (logarithm)		-0.63 (0.53)		
GROSS REGIONAL PRODUCT PER CAPITA (logarithm)			-0.86* (0.51)	
MANUFACTURING				-0.04 (1.06)
Y=2009	0.37*** (0.11)	0.39*** (0.11)	0.41*** (0.11)	0.37*** (0.11)
Y=2010	0.31** (0.13)	0.33*** (0.12)	0.35*** (0.13)	0.31** (0.13)
Y=2011	0.14 (0.14)	0.17 (0.14)	0.19 (0.14)	0.14 (0.14)
Y=2012	-0.14 (0.13)	-0.09 (0.14)	-0.07 (0.11)	-0.14 (0.14)
Intercept	1.62*** (0.52)	9.34 (6.34)	-0.06 (0.14)	1.64*** (0.60)
Summary statistics				
Number of regions	82	82	82	82
Observations	402	402	402	402
F-Statistics	12.28***	10.49***	10.76***	10.20***
R^2	0.13	0.01	0.07	0.14

Notes:

COMPLAINTS – number of the complaints filled in the regional subdivision

GROSS REGIONAL PRODUCT – deflated to 2007 prices, with one year lag

MANUFACTURING – share of manufacturing in Gross Regional Product, with one year lag

All regressions incorporate regional dummy variables.

***, **, * indicate significance at the 1%, 5%, and 10% levels, respectively.

Tab. 5 presents the results of testing hypothesis H2 for the impact of the number of investigations on the share of convictions in decisions of competition authorities. Together with the increase of the share of convictions with time, the results weakly confirm the positive dependence of conviction decisions on the scale of enforcement. This result supports the framework developed. Ratio of convictions to the decisions is substantially higher for the investigations opened by the initiative of competition agencies, as compared with the investigations opened on the complaints.

Tab. 5. The Determinant of Convictions: 2008-2012 (Random Effects Regression)

Dependent Variable = Ratio of Convictions to Investigations Opened in year t

	1	2	3	4	5	6
Independent variables (std. errors in the parentheses)						
INVESTIGATIONS (logarithm)		0.017* (0.009)	0.007 (0.009)			0.015 (0.011)
SHARE_FAS			0.158*** (0.036)			0.138*** (0.039)
GROSS REGIONAL PRODUCT (logarithm)				-0.015* (0.009)		-0.014 (0.010)
MANUFACTURING					-0.025 (0.089)	
Y=2009	0.110*** (0.019)	0.100*** (0.019)	0.095*** (0.019)	0.110*** (0.019)	0.110*** (0.019)	0.092*** (0.019)
Y=2010	0.115*** (0.019)	0.101*** (0.020)	0.107*** (0.019)	0.116*** (0.020)	0.115*** (0.020)	0.101*** (0.020)
Y=2011	0.207*** (0.019)	0.193*** (0.020)	0.207*** (0.020)	0.207*** (0.019)	0.206*** (0.019)	0.201*** (0.020)
Y=2012	0.205*** (0.019)	0.194*** (0.019)	0.214*** (0.019)	0.206*** (0.019)	0.205*** (0.019)	0.208*** (0.019)
Intercept	0.600*** (0.015)	0.531*** (0.040)	0.498*** (0.040)	0.778*** (0.040)	0.605*** (0.105)	0.653*** (0.040)
Summary statistics						
Number of regions	82	82	82	82	82	82
Observations	410	410	410	410	410	410

F-Statistics	159.95*** (0.000)	165.20*** (0.000)	189.93*** (0.000)	165.20*** (0.000)	159.93*** (0.000)	192.92*** (0.000)
R^2	0.230	0.231	0.271	0.231	0.231	0.281

Notes:

INVESTIGATIONS – number of investigations

SHARE_FAS – share of investigations opened by the initiative of competition agencies

All regressions incorporate regional dummy variables

***, **, * indicate significance at the 1%, 5%, and 10% levels, respectively.

The results of testing for the third hypothesis are presented in the Tab. 6. Not only do complaints induce an investigation immediately, but the number of investigations opened by competition authorities as well as the number of convictions also induces complaints submitted in the next year. An increase of the scale of antitrust enforcement clearly reported in Tab. 2 explains in turn the increase of complaints. No characteristics of regional economy influence the number of complaints.

Tab. 6. The Determinants of Complaints Submitted to the Regional Subdivisions of the FAS: 2008-2012 (Fixed Effects Regression)

Dependent Variable = Number of Complaints Submitted in year t

	1	2	3	4	5
Independent variables (std. errors in the parentheses)					
INVESTIGATIONS $_{t-1}$ (logarithm)	0.22*** (0.03)	0.21*** (0.04)	0.21*** (0.04)	0.21*** (0.04)	0.21*** (0.04)
CONVICTIONS $_{t-1}$		0.40*** (0.13)	0.42*** (0.13)	0.42*** (0.13)	0.40*** (0.13)
GROSS REGIONAL PRODUCT (logarithm)			-0.18 (0.24)		
GROSS REGIONAL PRODUCT PER CAPITA (logarithm)				-0.15 (0.24)	
MANUFACTURING					-0.34 (0.93)
Y=2010	0.17*** (0.04)	0.14*** (0.04)	0.13*** (0.04)	0.14*** (0.04)	0.13*** (0.04)
Y=2011	0.28***	0.25***	0.25***	0.25***	0.24***

	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)
Y=2012	0.25*** (0.04)	0.17*** (0.05)	0.18*** (0.05)	0.18*** (0.05)	0.17*** (0.05)
Intercept	3.98*** (0.13)	3.77*** (0.17)	5.92** (2.97)	4.53** (2.97)	3.85** (0.22)
Summary statistics					
Number of regions	82	82	82	82	82
Observations	324	324	324	324	324
F-Statistics	59.98***	44.35***	36.96***	36.92***	36.86***
R^2	0.32	0.29	0.00	0.15	0.23

Notes:

CONVICTIONS – share of convictions in the decisions of competition agencies

All regressions incorporate regional dummy variables

***, **, * indicate significance at the 1%, 5%, and 10% levels, respectively.

However, data generally fit the impression that there are complaints that support the increase of the scale of enforcement as a 'self-sustaining' process. Consider competing interpretations. Can the widespread restrictions of competition in Russian markets themselves be the cause of the increase of complaints? It is doubtful, because the number of complaints and antitrust investigations opened on complaints began to grow only after the introduction of turnover penalties, which is after a sharp increase of standards of penalties. This means that complainants take into account the possible punishment on the party accused in violation. So these are the incentives of the complainants that explain the growing antitrust enforcement. In this respect, data on investigations and convictions of the regional subdivisions support the conceptual framework developed. However, we cannot empirically distinguish the impact of penalties and rules of enforcement on the incentives of non-abusing and abusing complainants. Expected punishment is important for both types to make a decision to complain. We only can mention that descriptive statistics on the appeals and successful appeals to the decision of antitrust authorities in commercial courts support the hypothesis at least on the large and increasing number of wrongful convictions in the decisions of antitrust authorities. In turn, we cannot divide the impact of the authority's scarce resources and of abusive complaints on the ratio of Type I errors, as this requires additional statistics that are currently not available.

The Reverse Effect of the Reactive Public Enforcement Model on Legislation

Outcomes of the 'reactive' model of antitrust enforcement provide a significant reverse effect on the development of Russian competition law. Changes in procedural as well as substantial norms in recent years are explained by the intention to limit the individual and social cost of Type I errors in antitrust enforcement.

Many changes were made to the rules on penalty standards. After turnover penalties were introduced in 2007, almost all amendments to these rules were motivated by the desire to avoid 'excessive fines', referring first of all to the penalties on the innocent. The first step was to introduce a penalty cap equal 3% of turnover, instead of 4%, for specialized companies (with 75% of the company's overall turnover coming from sales on the market affected). The second step was the recent introduction of warnings and precautions as a way to cease law violation without additional cost for both authorities and market participants. The third step, which was not fixed by any rule, was the wide use of settlements in investigations of Russian competition authorities. Before 2007, settlements were extremely rare; today they are applied more and more often.

Not only procedural, but also substantial rules are driven by the intention to limit the effects of wrongful convictions. Initially, radical reform of the Russian antitrust legislation by the adoption of the new Law On Competition (2006), which replaced the law 'On competition and the restriction on monopolistic activity in the commodities market' (1991), was inspired by the intention to harmonize the Russian competition rules with those of Europe. Before the changes and amendments made to date, the text of the law contained clear signs of this intention. Main concepts of illegal practice are borrowed from European competition law and enforcement, including, for instance, the division between anticompetitive agreements and concerted practice as explicit collusion and coordination, definition of the dominant position, description of the types of the abuse of dominance, and so on. In a case when the origin of the concept is not European competition law, it is a law of a member state. For instance, the basic definition of collective dominance is borrowed from German competition law [see Avdasheva et al, 2012].

However, the subsequent changes and amendments in the law made the gap between Russian and European competition law deeper. Not discussing every amendment mentioned, we can explain the way the legal rules changed by the burden of enforcement errors. Both business and legislators understand the detrimental effects of wrongful convictions and all adopted or

discussed amendments to the law are intended to reduce the likelihood of the mistakes or the cost of the market participants convicted by mistake.

In many areas of competition law we can give examples of both types of changes. For concerted actions as coordination without explicit agreement, one source of wrongful conviction was the confusion of pure price parallelism (or even a 'price umbrella') with conscious coordination. The burden of wrongful conviction was extremely high because of the possibility of criminal sanction (including imprisonment) for the concerted actions. Recent changes to the legal rules limited the probability of errors by an amendment that concerted actions should involve not only pure parallelism, but also the 'explicit announcement of prices' in advance, and also decreased the cost of wrongful conviction by abolishing criminal penalties for concerted practice.

Most of the changes and amendments to competition law are concentrated around the definition of 'exploitative' types of practice in contrast to 'exclusionary' ones. The explanation is rather simple in the framework presented above: public enforcement as a reaction on complaints induces a higher number of errors exactly in the applications of rules on 'exploitative' practice, because companies are complaining exactly on the actions that lead to the redistribution of welfare. Two recent examples are standards of evidence for 'high monopolistic price' and 'discrimination'.

There are several dozens of cases annually on high monopolistic prices in Russian competition policy. The concept of 'high monopolistic price' survived several reincarnations in Russian competition law. Initially, 'high monopolistic price' was defined as a price exceeding the price on a comparable competitive market. Then the criteria to consider the market as a comparable was narrowed and the alternative definition began to be applied, namely a 'price exceeding the sum of cost and profit necessary for production.' This definition under dispute raised very difficult (and essentially unresolvable) questions on the calculation of profit necessary for production as a component of 'economic cost'. To avoid this problem, in many cases, including the cases against the 'Big Four' oil companies accused in the abuse of collective dominance [Avdasheva et al, 2012], the evidence of 'high monopolistic price' included any increase of price that is greater than the increase in the cost of production (according to the accounting profit and loss statement) or, as an alternative for exporting companies, an 'asymmetry' of price dynamics: when prices in external markets increase, the domestic price increases at the same rate, when prices fall in external markets, domestic price fall at lower rate. It is difficult to assess the ratio of the cases on 'high monopolistic price', where Type I errors were made, but the criteria applied the guarantee that this ratio is very high. As of late the competition agency is considering working with our 'criteria of fair prices assessment', which

uses a comparison of domestic prices with prices in world markets as a possible solution to the problem. Not discussing the correspondence of this rule to the 'correct' concept of high monopolistic price, which is doubtful as every attempt to define excessive price [see Evans, Padilla, 2005], we should only mention that the application of such a rule restores a kind of price regulation with many negative externalities hardly predictable in every given market.

Discrimination is a typical reason for complaining, according to Russian competition law. In cases involving discrimination, which annually number in the several hundreds, the FAS tends to consider the pure variation of contract terms for different buyers and suppliers as discrimination [Avdasheva, Shastitko, 2012]. Another occasion to complain about discrimination is any reason to refuse to contract a counterparty that is contracting another one. Most convictions contain at least some elements of Type I errors. During the last four years there have been heated discussions among competition authorities, lawyers, and economists on the 'justified' reasons for contract term variations and for selection of a counterparty. For now, the approach suggested by competition authorities for companies is to elaborate formalized 'trade practices' or 'trade policies' as a document that should contain a complete set of criteria for the eligibility of business partners, procedures for signing contracts, and choosing contract terms, including price variation as well as conflict resolution. Not discussing the comparative advantages of this approach, we should at least mention that it imposes an additional burden on many sellers and buyers and is capable of unduly restricting applied business practices.

In both cases, the subjects of discussions seem very strange for international experts in competition law. Prosecution for 'highly monopolistic' (in terms of European competition law – 'excessive') prices or for discrimination (especially outside regulated industries) are very rare in most jurisdictions, and even if they attract a lot of attention by economists and lawyers, the probability of being accused of this practice is very low for almost every company. It is not the case in Russia, however. One possible explanation is not only underdeveloped competition in the Russian market, which gives 'extra' market power for most sellers. An important explanation is that every variation of contract terms among counterparties (for instance, quantity discounts) creates a disadvantage for somebody (in contrast to purely uniform contract terms), and therefore induces incentives to complain.

Another dark side of this trajectory of competition law and practice improvement is that the most important problems of competition protection – protection from collusion and entry prevention – are evidently underestimated. In contrast to 'exploitative' practice when gains of certain market participants are at stake, entry prevention affects those who have an option just not to enter the market.

In summation, patterns of 'reactive' enforcement of competition law are not neutral for the development of legislation. Both substantive and procedural rules are affected by a desire to limit the scope of wrongful convictions, as well as the cost of wrongful convictions for parties. However, both types of changes provide an ambiguous effect on deterrence. Changes and amendments of substantive rules in Russian competition law are concentrated around 'exploitative' practices (first of all within the scope of Article 10, which regards the abuse of dominance), since wrongful convictions in the application of these rules affect a higher share of market participants. This track of changes inevitably diverts attention from the main objective of antitrust enforcement that is preventing restrictions of competition. In turn, the desire to limit the severity of punishment in order to reduce the cost of wrongful convictions inspires changes in procedural rules, which decrease the deterrence effect for violations.

Following the framework developed, we can conclude that the purpose of many recent amendments to Russian competition law would be achieved not by changing legal rules, but by changing the criteria of assessing the effects of antitrust enforcement. Applying criteria for the impact on total welfare – even imprecise and incomplete – would prevent the competition agency from opening many investigations where only individual effects are at stake. Priority should be given to the part of procedural rules that determines the incentives of enforcers, in contrast to describing illegal actions and norms for punishment.

Conclusions

This paper attracts attention to the outcomes of antitrust enforcement organized within the logic of 'control and monitoring', with the very important role of complaints as a driver of investigations. The specific model of 'reactive' antitrust enforcement induces large-scale enforcement as well as low deterrence, because the probabilities of enforcement errors increase together with the number of cases under investigation. Increasing probability of Type I errors incentivises 'law-abusers' to complain, especially under growing fines for law violations. Another negative effect of the 'reactive' model is the distortion of cases under investigation of competition authority towards alleged violations with high individual effects, in contrast to the effects on social welfare. As a result, an 'over-enforcement' emerges that is typically considered as a weakness of private, but not public enforcement of antitrust law.

Statistics on the enforcement of the law 'On the Protection of Competition' from 2008-2012 provide support for the framework developed, although being indirect. After the introduction of turnover penalties, which increased the fines imposed on the violator of competition law, the number of complaints in competition authorities began to grow

dramatically. The scale of enforcement (measured by the number of investigations) follows the complaining activity, and expected decisions on investigations shifts towards convictions.

The suggested approach explains distortions not only on the level of enforcement, but also on the level of making rules. Recent changes and amendments to the competition law of the Russian Federation have been inspired by the desire of market participants to avoid the burden of wrongful convictions. At the same time, some of them limit the expected punishment for a violator and therefore limit the deterrence effect.

This paper also highlights the importance of effect-based public enforcement, and of the impact that incentives for the regulating agency have on the outcomes of enforcement, as well as on the motivation of market participants. Generally, the fruitful idea of involving market participants in the absence of motivation for the competition agency on the welfare effect of enforcement can degenerate easily, especially in countries with weak traditions of enforcing competition law. Distorted incentives lead to over-enforcement and lower deterrence, even with non-corrupt and high-skilled officers in the agency.

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