

Antitrust Compliance Programs from an Economic Perspective

by Yajing Jiang, Stephanie Riche, and Isabel Tecu¹⁵⁷



This article analyzes the economic principles and trade-offs of Antitrust Compliance Programs (ATCPs). While we need to abstract from the specific facts to which an individual ATCP may be tailored, economics allows us to look at three “big picture” questions: (1) how can ATCPs solve compliance problems within the firm? (2) How much should a firm invest into ATCPs? And (3) should the government encourage firms to establish ATCPs by granting fine reductions?

For most of this article we assume that the firm has no incentive to commit an antitrust violation but that antitrust violations are committed by employees against the interest of the firm.¹⁵⁸ This allows us to focus the discussion on “effective” ATCPs, namely those that actually reduce a firm’s number of antitrust violations, rather than programs that are set up to hide antitrust violations or to appease authorities. However, in reality antitrust violations often benefit the firm in addition to individual employees, which may weaken or even eradicate the firm’s incentives to establish an effective ATCP. We explore this case at the end to caution against fine reductions for ATCPs in all cases.

I. ATCPs within the Firm

Antitrust violations are ultimately committed by individual employees. Even if it is not in the firm’s interest to commit an antitrust violation - as we assume here - employees may violate antitrust laws out of ignorance or because they perceive a personal benefit from doing so. ATCPs function to align employees’ decisions with the firm’s goal of antitrust compliance primarily by (1) providing information, e.g. via education and training, and (2) influencing incentives, e.g. via monitoring and compensation schemes.¹⁵⁹

¹⁵⁷ Yajing Jiang and Stephanie Riche are both Senior Associates, and Isabel Tecu is Associate Principal in the Competition Practice of Charles River Associates (CRA) in Washington, D.C. The views expressed herein are the views and opinions of the authors and do not reflect or represent the views of CRA. We are grateful to Joanna Tsai, Vice President at CRA in Washington, D.C. for comments, and Audrey Mang, Analyst at CRA in Washington, D.C., for research assistance.

¹⁵⁸ Whether antitrust violations are in fact in the interest of the firm is an empirical question that we do not address here. The answer depends, among other factors, on the “expected fine”, i.e. the probability of detection times the fine upon punishment. If the firm’s gain from a violation is smaller than the cost imposed on society, socially optimal fines are high enough to render antitrust violations net unprofitable to the firm. See, e.g., Gary S. Becker, *Crime and Punishment: An Economic Approach*, 76 *Journal of Political Economy* 169 (1968), and the resulting economic literature. Similar to our discussion, Beckenstein and Gabel assume that antitrust violations occur against the firm’s interest, see Alan R. Beckenstein & H. Landis Gabel, *The Economics of Antitrust Compliance*, 52 *Southern Economic Journal* 673 (1986).

¹⁵⁹ Firms may also structure their internal decision-making processes to promote antitrust compliance, such as restricting the set of decisions that an employee can make. Beckenstein & Gabel, *supra*.

A. Information

Possibly more than in other areas of law, employees may have imperfect information about which of their contemplated actions break antitrust laws and which ones do not. This may lead them to inadvertently commit antitrust violations. Educating employees about antitrust laws thus can reduce these unintended violations.¹⁶⁰

Educating employees about antitrust laws can reduce unintended violations, and can even increase profitable and legal actions they take.

Providing this education is costly to the firm. How exactly to provide information in the most efficient way will depend on the specific situation of each firm. As a general principle, education should be targeted to those employees where it will have the greatest effect. For example, ATCPs frequently involve a “basic” antitrust training for all employees and more intensive, one-on-one training for executives in positions that are particularly prone to antitrust violations, such as heads of sales.

If done well, antitrust education can even increase the number of profitable and legal actions that employees take. This would be the case if, in the absence of antitrust training, employees abstain from innocuous actions that would increase the firm’s profits out of fear that these actions could constitute antitrust violations.¹⁶¹ Educating employees about how to discern legal from illegal actions can thus not only reduce unintended antitrust violations but also increase the number of competitive (and profitable) initiatives undertaken that are in compliance with antitrust laws.

B. Incentives

Setting imperfect information aside, employees may willfully engage in antitrust violations if the perceived benefits from doing so outweigh the perceived costs. ATCPs programs can both increase the costs and reduce the benefits in this calculation and thus reduce the likelihood that an employee commits an antitrust violation.

ATCPs can increase the probability of detection by implementing monitoring mechanisms, for example via internal audits and whistle-blower hotlines. They can also increase the punishment for detected violations by taking disciplinary actions against employees caught committing violations.¹⁶² Both an increase in the probability of detection and an increase in the punishment upon detection increase the cost to the employee of committing the violation in the first place.¹⁶³

¹⁶⁰ However, hard-core cartels frequently involve high-level executives who knowingly violate antitrust laws. See, e.g., William J. Kolasky, Dep. Ass’t Att’y Gen., Antitrust Div., Antitrust Compliance Programs: The Government Perspective, Remarks Presented at the Corporate Compliance 2002 Conference (July 12, 2002), <https://www.justice.gov/atr/speech/antitrust-compliance-programs-government-perspective>, Andreas Stephan, *Hear no Evil, See no Evil: Why Antitrust Compliance Programmes may be Ineffective at Preventing Cartels*, CCP Working Paper (2009). Thus, education alone is rarely sufficient to establish antitrust compliance.

¹⁶¹ Beckenstein & Gabel, *supra*.

¹⁶² Individual fines imposed by the government or criminal prosecution of individuals involved in antitrust violations are also important elements of deterring antitrust violations, but they are part of public enforcement efforts and not of firm-internal ATCPs. See Stephan, *supra*.

¹⁶³ An increase in the probability of detection further allows the firm to stop the violation early and make use of leniency programs that grant amnesty to the first firm to report a cartel. Kolasky, *supra*. However, firms could also use the information that they gather from an ATCP’s internal monitoring to cover up violations that occurred. Beckenstein & Gabel, *supra*.

Another aspect of ATCPs can be employee compensation schemes that promote rather than undermine antitrust compliance.¹⁶⁴ Compensation schemes address “principal agent problems”, namely how to design an employee (the agent)’s compensation such that they will act in the employer (the principal)’s interest, even if it is costly for them to

ATCPs can reduce employees’ net benefit of antitrust violations through monitoring and compensation schemes.

do so and the employer cannot directly observe their actions. The traditional solution is to let the employee share in the firm’s profits, for example through stock ownership or bonuses tied to firm performance. However, such incentive contracts may facilitate antitrust violations as employees stand to personally gain from the larger profits that result from a violation. For example, a compensation scheme that rewards employees if they meet a target that is only obtainable under collusion can serve to stabilize collusion between firms.¹⁶⁵ Employees may also be incentivized to obtain excessive profits by colluding instead of

exerting effort.¹⁶⁶ On the flip side, appropriately structured compensation schemes may also serve to discourage antitrust violations. For example, if employees’ performance expectations are set at a level that is obtainable without an antitrust violation, or if employees are rewarded for growth in market share in addition to profits, employees may be more focused on gaining profits and shares by competing, rather than colluding, with competitors.¹⁶⁷

However, there is an inherent tension between incentivizing employees to exert effort and not incentivizing them to break antitrust laws.¹⁶⁸ If employees can, unobserved to the firm, replace exerting effort with violating antitrust laws, it may be impossible to set incentive schemes that reward effort and at the same time do not reward antitrust violations. In this case, the firm may be able to implement monitoring mechanisms to distinguish effort from antitrust violations on the employee’s part and make violations more costly than exerting effort.

II. Firm’s Optimal Investment into ATCPs

ATCPs are costly to a firm, in terms of money and opportunity. Assuming that these investments are spent in the most efficient way internally, how does a firm, acting as a rational agent, choose the optimal level of investment in ATCPs?¹⁶⁹

The firm’s problem is to choose a level of ATCP investment that maximizes the benefits of the ATCP less its costs, possibly subject to budgetary constraints.¹⁷⁰ The firm benefits from the ATCP in the form of avoided fines, which are the reduction in the probability that the firm (unwillingly) commits an antitrust violation, multiplied by the “expected fine” associated with an avoided violation. The firm should then invest into an ATCP up to the point where the marginal cost of the ATCP equals the marginal benefit, i.e. the marginal expected fine avoided due to the ATCP (assuming this lies inside the firm’s budget).

¹⁶⁴ See, e.g., Daniel Herold, *Compliance and Incentive Contracts, in Competition Law Compliance Programs, An Interdisciplinary Approach* (Johannes Paha ed., 2016).

¹⁶⁵ See, e.g., Chaim Fershtman et al., *Observable contracts: Strategic delegation and cooperation*, 32(3) *International Economic Review*, 551 (1991), Giancarlo Spagnolo, *Stock-related compensation and product-market competition*, 31(1) *The RAND Journal of Economics*, 22 (2000).

¹⁶⁶ See, e.g., Cécile Aubert, *Managerial effort incentives and market collusion*, TSE Working Paper (2009).

¹⁶⁷ Herold, *supra*.

¹⁶⁸ Aubert, *supra*, Herold, *supra*.

¹⁶⁹ Here we assume that a firm will invest into ATCPs to obtain the greatest possible reduction in antitrust violations and that greater investments imply greater reductions in violations. This presumes again that the firm has no incentives to violate antitrust laws but that violations are committed by employees against the interest of the firm.

¹⁷⁰ The discussion in this section follows Geoffrey P. Miller, *An Economic Analysis of Effective Compliance Programs*, N.Y.U. Law and Economics Working Papers 396 (2014).

The question of how much a firm should invest in antitrust compliance is thus tied to the strategies of antitrust enforcement agencies, as these determine the “expected fine” associated with an antitrust violation. The “expected fine” is the probability that the antitrust violation is detected and punished, times the fine upon punishment. These parameters are set by the government, for example via sentencing guidelines and enforcement budgets.¹⁷¹

If the government sets the expected fine for antitrust violations to minimize the social costs of these violations, firms are automatically incentivized to invest in ATCPs in a socially optimal way.¹⁷² As explained above, firms invest into compliance up to where the marginal cost equals the marginal fine avoided due to the ATCP. If the agency were to minimize the social cost of the violation, the marginal expected fine avoided equals the marginal social cost avoided. Firms thus choose the socially optimal level of investment into ATCPs in the sense that they internalize the social cost of antitrust violations.

In addition, if firms are risk-averse (i.e. if they prefer small fines with a high probability over large fines with a low probability), the optimal government policy trades off public with private enforcement costs. Absent ATCPs, a standard recommendation is for the government to spend little on enforcement but enact large fines to reduce public enforcement costs while incentivizing firms to comply. However, with ATCPs in play, this extreme policy may not be optimal, as firms will invest heavily into ATCPs to avoid antitrust violations “at all costs”. The unnecessarily high compliance costs will be passed on to consumers and/or investors and may eventually increase the overall social costs. Nonetheless, the optimal policy will likely have firms invest into ATCPs to some extent, as firms’ ATCPs likely prevent antitrust violations at lower costs than public enforcement.

ATCPs help the government to achieve better social outcomes by preventing firms from violating antitrust laws in the first place and by replacing public enforcement with cheaper private enforcement.

In summary, society is better off with ATCPs because they allow firms to reduce the social costs of antitrust violations, both by preventing them in the first place and by replacing public enforcement with cheaper private enforcement. This is because ATCPs allow firms to prevent (unintended) antitrust violations at a cost below the social costs of these violations. However, this does not indicate that, for a given level of ATCP effectiveness, governments should encourage or mandate investments in ATCPs above the level of investment that profit-maximizing firms would choose – a question that we explore in the next section.

III. Should firms be granted fine reductions for ATCPs?

As we saw above, under certain circumstances the government can set enforcement parameters to incentivize firms to make socially optimal investments into antitrust compliance. This may suggest a basis for granting fine reductions for firms with ATCPs, as is sometimes discussed.¹⁷³ In particular, fine reductions may be an attractive tool when the government faces nontrivial challenges of detecting cartels, while firms enjoy an information advantage to internally prevent antitrust violations.

In the US, companies are usually not granted fine reductions for ATCPs that existed at the time of a violation, but they may be credited for ATCPs that are implemented after a violation is detected if they “reflect in some way genuine

¹⁷¹ Optimal cartel fines were discussed by Michelle Burtis and Bruce Kobayashi in the previous edition of this newsletter.

Michelle M. Burtis and Bruce H. Kobayashi, *Regarding the Optimality of Cartel Fines*, ABA Cartel & Criminal Practice Committee Newsletter 2 (2017).

¹⁷² In reality, it may be difficult to determine the social cost of a violation and thus the socially optimal fine.

¹⁷³ See, e.g., Florence Thépot, *Can Compliance Programmes Contribute to Effective Antitrust Enforcement?*, in *Competition Law Compliance Programs, An Interdisciplinary Approach* (Johannes Paha ed., 2016), Wouter P. J. Wils, *Antitrust compliance programmes and optimal antitrust enforcement*, 1 Journal of Antitrust Enforcement 52 (2013).

efforts to change a company's culture."¹⁷⁴ In the UK, fine reductions may be granted for ATCPs that were in place at the time of violation, under certain conditions.¹⁷⁵ There are several economic reasons cautioning against a policy of granting fine reductions for ATCPs that were in place at the time a violation occurred.

First, even if society is better off with more effective ATCPs, this does not necessarily mean that, for a given level of ATCP effectiveness, the government should subsidize ATCP investments through reducing fines. As we have seen, expected fines can be set in a way so that firms have incentives to make socially optimal investments into ATCPs. If governments partially pay for these investments by reducing fines, firms may over- or under-invest in ATCPs relative to the socially optimal level.¹⁷⁶

Furthermore, a fine reduction for ATCPs that were in place at the time of the violation only credits firms that are caught violating antitrust laws despite an ATCP. While even the most effective ATCPs may not be able to prevent all antitrust violations, the fact that a firm commits a violation suggests that, all else equal, its ATCP is less effective. It is unclear how subsidies for marginally less effective ATCPs could be socially optimal.

More fundamentally, we need to consider the possibility that firms may not have an incentive to prevent antitrust violations in the first place. In this case, firms may be motivated to adopt "puppet" programs that allow them to enjoy fine reductions but do not result in any improvement in antitrust compliance. In fact, it may be precisely those firms with the least incentive to comply with antitrust laws that have the greatest incentive to set up phony programs to shield themselves from high fines. Agencies recognize these potentially perverse incentives by requiring ATCPs to

Firms may have perverse incentives to adopt "puppet" ATCPs to earn fine reductions.

meet certain standards in order for firms to receive any credits for them.¹⁷⁷ However, in practice, it may be challenging for an agency to discern whether an ATCP is effective or not.¹⁷⁸

If an agency has well-trained staff to investigate and verify the programs and has full discretion as to whether or not it will reward a company for its ATCP at the time of violation via a fine reduction, then this may incentivize a firm to set up an effective ATCP. This, however, hinges

on the agency's ability to distinguish effective ATCPs from "puppet" programs.¹⁷⁹

IV. Conclusion

To conclude, in this article we explored how effective ATCPs detect and prevent antitrust violations internally by sharing information and aligning compliance incentives between the firm and its employees. We then discussed how the government can minimize the social costs of such violations by incentivizing firms to invest optimally into ATCPs. Lastly, we delineated economic thoughts on fine reductions for ATCPs.

¹⁷⁴ Brent Snyder, Dep. Ass't Att'y Gen., Antitrust Div., Remarks Presented at the Sixth Annual Chicago Forum on International Antitrust (June 8, 2015), <https://www.justice.gov/opa/speech/deputy-assistant-attorney-general-brent-snyder-delivers-remarks-sixth-annual-chicago>.

¹⁷⁵ Thépot, *supra*.

¹⁷⁶ This, however, does not mean that the government should not encourage ATCPs in general. For instance, if agencies provide information to help firms improve the efficiency of ATCPs, social welfare can be increased as more antitrust violations can be prevented at a lower cost.

¹⁷⁷ See, e.g., Snyder's Remarks, *supra*.

¹⁷⁸ Wils, *supra*.

¹⁷⁹ Thépot, *supra*.