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The role of collective redress actions to achieve full compensation for violations of European Union Competition Law

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3 THE EFFECTIVENESS OF PRIVATE ENFORCEMENT AND CLASS ACTIONS TO SECURE ANTITRUST ENFORCEMENT IN THE UNITED STATES*

Abstract:

The US system has relied heavily on antitrust class actions as a means of ensuring compensation and deterrence. Although this tool seems sensible in theory, the reality is that it remains highly controversial. On the one hand, commentators argue that class actions force defendants to settle cases lacking merit. Even if a settlement agreement is assumed to have a merit, class actions are accused of doing a poor job in compensating victims and deterring wrongdoers. On the other hand, the proponents of class actions claim that there is no reliable empirical evidence proving that class action schemes caused negative effects on antitrust litigation. The public debate about the effectiveness of class actions illustrates the controversial nature of American class actions fairly well. Therefore, using comparative insights from the predominant controversies, this Chapter will determine how well antitrust class actions fulfil compensation objectives, and to what extent they can facilitate deterrence.

Keywords: antitrust, class actions, enforcement, compensation, deterrence, controversy

3.1 INTRODUCTION

Private litigation has always played a major role in the antitrust enforcement of the United States. Even though private enforcement was meant to only complement public enforcement, in reality private claims far outstrip governmental actions. Private remedies are aimed at achieving either compensation or deterrence goals. When the American class action mechanism emerged, it became a very potent fixture to bridge the gap between both objectives. A primary purpose of the class action device is to enable large groups of victim to aggregate their claims and hence to claim damages or to seek injunctive relief as a result of the alleged violation. Throughout the development of these sorts of proceedings, the Supreme Court has given a broad remedial function for class actions to assure that the antitrust objectives are achieved. Yet the approach has recently changed in *Twombly*.¹ There, it was alleged that antitrust class actions can incentivize defendants to settle cases that lack merit.² Some critics characterize this phenomenon as a ‘blackmail settlement.’³ Despite the

* This material was peer-reviewed and published by SAGE in Žygimantas Juška, ‘The Effectiveness of Private Enforcement and Class Actions to Secure Antitrust Enforcement’ (2017) 62(3) *The Antitrust Bulletin* 603.

This Chapter is a revised version of the original published article. In order to address new developments, Chapter 3 includes amendments, summarised in the Appendix to the Chapter. Few changes are not shown in the Appendix. First, the introduction and conclusion have been changed to maintain the common approach of the PhD dissertation. As regards the introduction, it includes additional sections: A. Research question and scope; B. Methodology and limitations; C. Overview of research material; D. Structure. With regard to the conclusion, it is amended to answer the research question of the Chapter. Second, few structural amendments are not shown in the Appendix. Furthermore, the words ‘article’ and ‘paper’ have been changed with ‘Chapter’. In addition, the numbering of sections has been changed in accordance with the common structure of the thesis. To conclude, it should be stressed that the revised Chapter maintains the original journal standards: citation, style, punctuation and consistency.

¹ *Bell Atlantic Corp. v. Twombly* 550 U.S. 544 (2007).

² *Id.* at 558-559.

³ See e.g. John T. Rosch, Fed. Trade Comm'r, Designing a Private Remedies System for Antitrust Cases-Lessons Learned from the US Experience, Remarks before the 16th Annual EU Competition Law and Policy Workshop, 10 (June 17, 2011) (stating that treble antitrust class actions “can put tremendous pressure on the defendant to settle a case regardless of its merit, and can lead to extortionate settlements.”); Jonathan M. Landers, *Of Legalized Blackmail and*

Court's criticism, some commentators argue that the decision has no merit itself: it relies on the 'unsupported opinion of another appellate court judge' and no empirical study was performed.⁴ The public debate between these opposing views well illustrates the controversial nature of private antitrust enforcement in the United States. Ironically, even if the phenomenon of blackmail settlement would be assumed to have no ground, a series of additional controversies underlie the understanding on class actions, both in compensating class members and deterring the wrongdoers.

A. *Research question and scope*

The research question of this Chapter is as follows:

How well do antitrust class actions in the United States fulfil compensation objectives and to what extent can they facilitate deterrence?

The following steps are taken to address this question. The principal purpose is to assess the effectiveness of antitrust class actions in achieving antitrust enforcement in the United States. Using comparative insights from the predominant controversies, it examines the effectiveness of compensation and deterrence. The debate over compensation focuses on three major controversies: 1) class members obtaining little or no compensation; 2) the compensation mechanism being framed to (largely) overpay attorneys; 3) class actions failing to compensate the real victims. The discussion on deterrence analyses one major controversy: that class actions give little or no weight to deterrence. To give an additional nuance to the debate between critics and proponents, the optimal deterrence theory is applied to assess the role of class actions in deterring infringers.

As regards the scope, Chapter 3 does not analyse the EU approach, contrary to other chapters. Instead, it examines the US deterrence-based private antitrust enforcement mechanism, and more specifically antitrust class actions. Even if deterrence is not the primary goal of the EU's private antitrust mechanism, the analysis of the American mechanism is essential for two reasons. First, the US system—being much more forceful than EU-style collective actions and having much more experience in the field—gives a better response about the effectiveness of class actions in compensating victims. Second, it gives an overview about the potential of collective actions in contributing to antitrust enforcement through increased deterrence.

B. *Methodology and limitations*

In the first place, Chapter 3 performs a comparison of the empirical data, mainly quantitative sources. This approach was chosen with the expectation that the US class action system—counting more than 50 years of experience—will provide comprehensive data about the effectiveness of antitrust class actions. This expectation has been reinforced by the fact that legal empirical analysis has deeper roots in the US than in the EU.

Legalized Theft: Consumer Class Actions and the Substance-Procedure Dilemma, 47 S. Cal. L. Rev. 842, 843 (1974) (asserting that plaintiffs' attorneys are using class actions to "blackmail" businesses).

⁴ See Joshua P. Davis & Robert H. Lande, *Defying Conventional Wisdom: The Case for Private Antitrust Enforcement*, 48 Ga. L. Rev. 1, 67 (2013) (noting that the Court in *Twombly* cites Frank H. Easterbrook, Comment, *Discovery as Abuse*, 69 B.U. L. Rev. 635, 638 (1989)).

The comparison of quantitative sources is best suited in testing and validating the controversies mentioned above. It provides statistical analysis which helps to measure patterns of antitrust collective actions, for example what compensation on average class members receive. Therefore, by evaluating the comparative insights of quantitative data, the first part of the Chapter aims to assess the effectiveness of class actions in achieving compensation objectives. The second part deals with the impact of antitrust class actions on deterrence. The analytical approach is used as additional tool to analyse the contrasting views of critics and proponents of class actions and to assess the impact of different measures of class actions on deterrence. It also includes the evaluation of law and economics standards, such as the probability of detection and the probability of conviction.

Some limitations should be noted. In theory, the quantitative study is limited for at least two reasons: first, the hypothesis testing may not fully assess the generation of the phenomenon; second, the data provided may be too abstract to apply in specific situations.⁵ In this Chapter, the following shortcomings have been encountered. Even if the US has a longstanding practice of class actions, surprisingly just a few empirical studies have been conducted, and they provide a mere handful data about the compensatory effectiveness of antitrust class actions. This Chapter also associates the compensatory effectiveness with attorneys' compensation; in particular whether they are paid proportionally in the context of class recovery. On the one hand, empirical studies provide important data about class attorneys' total compensation in antitrust class actions. On the other hand, these studies provide limited and inaccurate data regarding the case-related costs of private attorney general and how often cases lead to a successful outcome. The latter information would allow estimating the actual ratio between attorney's risks and awards. Furthermore, the *cy pres* award (another form of compensation) is considered as an important element in assessing the compensatory effectiveness. However, only one relevant study has been found, which gives only a preliminary benchmark about the number of fraudulent *cy pres* distributions in antitrust settlements. As regards the assessment of deterrence, there are two main limitations. First, there is no reliable data for precisely defining the impact of antitrust class actions on the probability of detection. Second, there is no reliable data about the certification rates of class actions. More precise information would allow evaluating the role of antitrust class actions in the context of optimal deterrence.

Considering these limitations, there is no possibility to draw evidence-based conclusions about the compensatory effectiveness of US antitrust class actions. Nevertheless, the available material is sufficient for determining the existing patterns about the effectiveness of class actions. It may sound bold to say, but the conclusions made in this Chapter are unlikely to change, even if more precise and reliable data was available for antitrust cases. As will be shown, antitrust class actions are by their nature determined to produce much lower effects on compensating victims and deterring wrongdoers than is envisaged.

C. Overview of research material

At the outset, it should be underlined that this research was performed at Stanford University and the University of Michigan under the EU Fulbright Schuman scholarship during the academic year

⁵ Robert B Johnson, and Larry B Christensen, *Educational Research: Quantitative, Qualitative, and Mixed Approaches* (4th edn, SAGE Publications, 2010) 429.

of 2015-2016. The research material was chosen on the basis of recommendations from hosting supervisors prof. Deborah Hensler and prof. Daniel Crane, as well as from respective US scholars and practitioners in the research field. The research databases of hosting universities were of great value as they provided material that cannot be found in European libraries. In order to make analysis as broad as possible, additional material has been added during the revision of this Chapter. Even if an attempt to include every available literature has been made, surely some is missing. The experience in the US has taught that a comprehensive analysis about American (antitrust) class actions cannot be performed during a research stay of a few months. This is especially true for an EU academic/lawyer coming from the continental/civil law system. Nevertheless, it was sufficient to get insights for answering the research question in the PhD dissertation.

To sum up, Chapter 3 focuses on examining the contrasting views between the proponents and critics of class actions. As regards the positive side, the most prominent works are of Davis and Lande. With regard to the critical side, the publications of Cavanagh and Crane are of particular relevance. Other mutually opposing works are published by Gramlich, Hensler, Fitzpatrick, Gilbert, Pace and Rubenstein. The non-academic works Mayer Brown LLP and Consumer Financial Protection Bureau are also important. As regards the analysis of deterrence, the contrasting views are primarily compared with Davis and Lande on the one side, and Crane on the other. Works by Rubenstein, Schwartz, Ulen and Connor also guides the discussion. Furthermore, a lot of effort has been made to include all relevant court decisions, but some case-law may be missing due to a very extensive practice in the field. The most important decisions for framing the background of private antitrust enforcement (and class actions) are the following: *Pfizer v. Government of India*, *Hawaii v. Standard Oil*, *Coleman v Cannon Oil*, *Illinois Brick Co. v. Illinois*. Additionally, for a comparative perspective, the most important decisions of the Supreme Court of Canada are analyzed to assess the potential issues of indirect purchasers' actions in the US context.

D. Structure

The structure of this Chapter is as follows. Section 1 discusses the rationale for private enforcement and class actions in antitrust enforcement. Section 2 examines three key controversies underlying the compensation objective in small-stakes antitrust class actions. Section 3 considers the impact of class actions on deterring the wrongdoers ('rational actors') by applying the standards of optimal deterrence theory.

3.2 THE RATIONALE FOR PRIVATE ENFORCEMENT AND CLASS ACTIONS IN ANTITRUST ENFORCEMENT

The US policy of promoting competition is based on the Sherman Act of 1890⁶ and the Clayton Act of 1914.⁷ Section 1 of the Sherman Act prohibits any agreement in restraint of trade, while Section 2 forbids monopolistic behavior.⁸ The Clayton Act is far more detailed than the Sherman Act, expanding the provisions on price discrimination, exclusive dealings, and the ability for individuals to sue for damages.⁹ At the Federal level, the US Department of Justice ('DOJ') and the Federal

⁶ Sherman Antitrust Act, 15 U.S.C. §§ 1–7 (1890).

⁷ Clayton Act, 15 U.S.C. §§ 12–27 (1914).

⁸ Sherman Antitrust Act, 15 U.S.C. §§ 1, 2.

⁹ Clayton Act, 15 U.S.C. §§ 13, 14, 15.

Trade Commission ('FTC') have the authority to enforce antitrust laws. On the private side, US antitrust law permits enforcement by victims of antitrust infringements. In enacting the antitrust laws, private enforcement was meant to supplement public enforcement, which lacks sufficient resources to detect and prosecute antitrust violations. However, private claims have become much more prominent and far outpace government claims. Over 90 percent of antitrust litigation was filed by private plaintiffs between 1975 and 2004.¹⁰ More recently, in 2013, it was indicated that 98 percent of antitrust cases in federal courts were private actions.¹¹ In fact, private enforcement has become so powerful that private enforcers indeed fill in gaps of public enforcement of low detection and sub-optimal fines.

3.2.1 Two Interrelated Goals of Private Antitrust Enforcement: Compensation and Deterrence

The US Supreme Court has repeatedly held that the private right of action under the antitrust laws serves two purposes: compensation and deterrence.¹² As regards the first objective, the enactment of both the Sherman and Clayton Acts appreciated the compensation role of private claims. In order to facilitate the objective of compensation, federal antitrust law authorizes the award of *automatic* treble damages.¹³ In fact, treble damages are the main tool to provide compensation to antitrust victims.¹⁴ However, considering the complexities in compensating antitrust victims, treble damages are considered to provide only 'rough justice' to sufferers.¹⁵ Indeed, an overcharge can be so widespread that the estimation of actual harm may be an insurmountable burden.

Another viewpoint holds that private suits are necessary to deter potential wrongdoers.¹⁶ This concept is based on the idea that public authorities have insufficient time and resources to prosecute all the unlawful conduct and hence private litigators can secure additional layer of antitrust enforcement. Trebling ensures that infringers internalize the sufficient cost of the harm caused by anti-competitive behavior. In that regard, the Supreme Court noted that the 'treble-damages provision wielded by the private litigant is a chief tool in the antitrust enforcement scheme',

¹⁰ Sourcebook of Criminal Justice Statistics Online, *Table 5.41* (Antitrust Cases filed in U.S. District Courts, By type of case 1975-2004) (Aug. 01, 2016), <http://www.albany.edu/sourcebook/pdf/t5412004.pdf>.

¹¹ Federal Judicial Caseload Statistics, *Table C-2: U.S. District Courts—Civil Cases Commenced, by Basis of Jurisdiction and Nature of Suit, During 12-month Period Ending March 31, 2012 and 2013*, <http://www.uscourts.gov/Statistics/FederalJudicialCaseloadStatistics/caseload-statistics-2013.aspx> (last visited Aug. 1, 2018) (indicating that out of 776 antitrust cases in federal courts 762 were private actions).

¹² *See, e.g., Pfizer, Inc. v. Gov.'t of India*, 434 U.S. 308, 314 (1978) (stating that "[the Clayton Act] has two purposes: to deter violator and deprive them of 'fruits of their illegality', and "to compensate victims of antitrust violators for their injuries.") (citations omitted); *Am. Soc. of Mech. Eng'rs v. Hydrolevel Corp.*, 456 U.S. 556, 575-76 (1982) (asserting that "treble damages serve as a means of deterring antitrust violations and of compensating victims").

¹³ 51 Cong. Ch. 647, Jul 2, 1890, 26 Stat. 209, part 7 (1890). The private right of action provision was slightly modified in 1914 in Section 4 of the Clayton Act. 63 Cong. Ch. 323, 38 Stat. 73, part 4 (1914).

¹⁴ *See, e.g. Blue Shield of Va. v. McCready*, 457 U.S. 465, 472 (1982) (noting that treble damages "would provide ample compensation to victims of antitrust violations."). For further discussion, *see, e.g. Steven C. Salop & Lawrence J. White, Economic Analysis of Private Antitrust Litigation*, 74 *Geo. L.J.* 1001, 1051 (1986).

¹⁵ Edward D. Cavanagh, *The Private Antitrust Remedy: Lessons from the American Experience*, 41 *Loy. U. Chi. L.J.* 629, 632 (2010) (citing Robert H. Lande, *Are Antitrust "Treble" Damages Really Single Damages?*, 54 *Ohio St. L.J.* 115, 118 (1993)). Cavanagh provides a monopolization example where the difficulties occurred in reconstructing the "but for" test in the case *LePage's, Inc. v. 3M Co.*, 324 F.3d 141, 164-66 (3d Cir. 2003) (en banc), cert.denied, 542 U.S. 953 (2004).

¹⁶ *Blue Shield of Va. v. McCready*, 457 U.S. 465, 472 (1982). On this point *see, e.g. Antitrust Modernization Commission, Report and Recommendations*, 246-247 (2007), http://govinfo.library.unt.edu/amc/report_recommendation/amc_final_report.pdf (last visited Aug. 1, 2018).

because the fear of treble damages creates ‘a crucial deterrent to potential violators.’¹⁷ Moreover and most importantly, when trebling is combined with contingency fees, the attorney’s incentive to sue is raised to a maximum: there is a guarantee that he or she will reap a large award if the case is won or settled. In addition, the one-way-fee-shifting rule and broad discovery rules ensure a plaintiff-friendly climate. Together, these measures provide the necessary incentives for private attorneys to invest time and money in prosecuting lengthy, complicated, and expensive antitrust suits (the so-called ‘private attorney general’).

In case of a conflict between the antitrust goals, the Supreme Court seems to prioritize deterrence over compensation.¹⁸ One of the notable case was *Pfizer v. Government of India*¹⁹, in which the Court ruled that consumers benefited from the ‘maximum deterrent effect’ if trebling was applied to all infringers.²⁰ The other case is *Hawaii v. Standard Oil*²¹ where the Supreme Court ruled that the Congress’ incentive of trebling encourages potential private litigants to serve as ‘private attorneys general.’²² To sum up, the American system can justify the failures of compensation (for example, undercompensation of class members), given that the primary objective is to deter wrongdoers.

3.2.2 The Role of Class Actions in Antitrust Enforcement

In the United States, private actions can be brought on behalf of a class of plaintiffs under Rule 23 of the Federal Rules of Civil Procedure. The class action rule allows to consolidate multiple claims of victims who allegedly suffered harm from the alleged violation. Throughout the history, the antitrust enforcement mechanism has relied on antitrust class actions as means of securing compensation and deterrence. The US Supreme Court held that allowing these claims to proceed collectively enhanced ‘the efficacy of private actions, by permitting citizens to combine their limited resources and to achieve a more powerful litigation posture.’²³ Indeed, the consolidation is very effective when antitrust infringement causes scattered harm among a large number of injured parties. In turn, it facilitates economies of scale in relation to the savings in litigation and court administrative costs.²⁴ The actual benefits of class actions can emerge from two different types of claims.

First, there are classes with positive value claims (‘positive expected value claims’). In such groups, the potential award outweighs the anticipated expenses of litigation even if the plaintiff leads the case on his own. But with larger financial means, the class can litigate in a more efficacious way by employing more competent lawyers than victims would be able to do in individual cases. Therefore, the probability of winning the case increases exponentially. The aggregation is likely to also be beneficial for the defendants, where there might be a series of individual claims alleging the same

¹⁷ *Mitsubishi Motors Corp. v. Soler Chrysler-Plymouth, Inc.*, 473 U.S. 614, 635 (1985) (citations omitted).

¹⁸ The priority of deterrence was stressed in *Illinois Brick Co. v. Illinois*, 431 U.S. 720 (1977). See, e.g. Barak D. Richman & Christopher R. Murray, *Rebuilding Illinois Brick: A Functionalist Approach to the Indirect Purchaser Rule*, 81 S. Cal. L. Rev. 69, 90 (2007); William H. Page, *The Scope of Liability for Antitrust Violations*, 37 Stan. L. Rev. 1445, 1452 (1985).

¹⁹ 434 U.S. 308 (1977).

²⁰ *Id.* at 315.

²¹ 405 U.S. 251 (1972).

²² *Id.* at 262.

²³ *Id.* at 266.

²⁴ See, e.g. *Northwest Wholesale Stationers*, 472 U.S. 284, 295-297 (1985).

injuries. From a practical point of view, the defendant has an easier time in organizing the defense and investing in winning the sole case.

Second, there is a situation where the plaintiffs suffered harm but the cost of litigation exceeds the expected recovery ('negative expected value claims'). Therefore, these claims would not normally lead to litigation if not pursued by class actions. According to the US Supreme Court, class action litigation allows for low value claims to be heard.²⁵ In addition, class actions may be the only possibility to aggregate claims of small worth, especially when suing the wrongdoer individually would not be 'economically rational.'²⁶ In the end, class action litigation can be beneficial both for class members and for private litigators, who perform under a contingency fee agreement. An illustrative example:

Suppose that potential antitrust victims suffered an average harm of \$100 due to a price-fixing cartel. The resulting individual claims are economically worthwhile, because litigation costs would most likely exceed the expected award from positive judgment. But if there were 1 million class members, in theory the expected recovery could be up to \$300 million after trebling. Thus, the lawsuit would have significant financial strength. If we consider that contingency fees range between 20 and 33 per cent, there is great interest for an attorney to invest in the litigation, since his potential compensation can result in tens of millions.

This example would be very attractive for private litigants if the cartel was discovered by public enforcers. Therefore, plaintiffs can 'free-ride' on the efforts of government actors and use their findings in a subsequent private litigation. According to Chieua, the most popular antitrust class actions are follow-on price fixing cartel cases.²⁷

Although class action litigation allows for aggregating lawsuits that would otherwise be financially infeasible, the negative expected value claims remain highly controversial to this day. The main criticism is centered on the fact that very few cases go to trial, because defendants are pressed to settle cases lacking merit.

3.2.3 The Major Criticism of US Class Actions

Arguably, the certification is an essential part of the class action lawsuit. For the case to proceed as a class action, four threshold requirements must be met under Rule 23(a) of the Federal Rules of Civil Procedure: (1) numerosity; (2) commonality; (3) typicality; and (4) adequacy.²⁸ A court must

²⁵ *Blue Shield of Virginia v McCready*, 457 U.S. 465, 472 (1982).

²⁶ *Coleman v Cannon Oil*, 141 F.R.D. 516, 520 (1992).

²⁷ See Tiffany Chieua, *Class Actions in the European Union?: Importing Lessons Learned from the United States' Experience into European Community Competition Law*, 18 *Cardozo J. Int'l & Comp. L.* 123, 137 (2010).

²⁸ According to the Rule 23(a), all class actions have to fulfil the following requirements. First, the class is so numerous that joinder of class members is impracticable. Second, there are questions of law or fact common to the class. Third, the claims or defenses of the class representatives are typical of those of the class. Fourth, the class representatives will fairly and adequately protect the interests of the class.

also find at least one of the criteria listed under Rule 23(b).²⁹ The settlements generally fall into three basic categories:

- *Automatic distribution settlements.* Damage awards are automatically distributed to class members who do not exercise their right to opt out. Under this settlement category, class members are not required to submit claim forms so as to receive award. In order to proceed with this model, the entire class should be precisely identified. The awards are typically mailed to each of them. However, a substantial number of class members may not cash their checks.³⁰ Therefore, undistributed funds can be distributed via *cy pres* process (discussed below), or in rare cases returned to the defendant. The attorney receives a fee that is proportionally calculated on the total value of the settlement, regardless of how many victims actually received damages.
- *Claims-made settlements.* This scheme is utilized when there is no reliable data to list the identities of victims. As such, class members are required submit a valid claim in order to obtain award. Typically, the total payout to the class will be smaller than in an automatic payment settlement and thus depends on how many class members submitted claim forms. Indeed, there is a possibility that in some cases (for example, when submitting claim form is cumbersome) only few members will receive compensation. Despite this unsuccessful outcome, the attorney receives a percentage based on the potential value of the settlement, regardless of how many victims submitted a valid claim form. This may lead to an ironical situation: the attorney's fee can exceed the actual payout to the class.³¹ Uncollected funds are rare (only when issued checks are not cashed) and the surplus is either distributed to a *cy pres* entity or back to the defendant.
- *Cy pres settlements.* There is no direct compensation to class members, but an award is made to a charitable organization whose activities are as closely as possible related with the antitrust victims. In order to avoid abusive *cy pres* distributions, the *cy pres* relief has become closely scrutinized by courts.³²

Despite settlements being faster means of solving antitrust disputes, they are criticized for a variety of reasons. If the certification is formally approved by the court, it is well established practice that the vast majority of cases are settled.³³ Roughly estimated, less than 1% of certified private cartel

²⁹ In addition to the Rule 23(a), the district court must determine one of the findings under the Rule 23 (b). First, prosecution of separate actions risks either inconsistent adjudications which would establish incompatible standards of conduct for the defendant or would as a practical matter be dispositive of the interests of others. Second, defendants have acted or refused to act on grounds generally applicable to the class. Third, there are common questions of law or fact that predominate over any individual class member's questions and that a class action is superior to other methods of adjudication.

³⁰ See, e.g. Wytan M. Ackerman, *Class Action Settlement Structures*, Meeting of Federation of Defense & Corporate Counsel, 4 (March 2 - March 9, 2013), <http://www.thefederation.org/documents/13.Class%20Action-Structures.pdf> (last visited Aug. 3, 2018).

³¹ *Id.* at 8.

³² See, e.g. *Ira Holtzman, C.P.A. v. Turza*, 728 F.3d 682, 689–90 (7th Cir.2013); *In re Baby Prods. Antitrust Litig.*, 708 F.3d 163, 172–73 (3d Cir.2013); *Masters v. Wilhelmina Model Agency, Inc.*, 473 F.3d 423, 434–36 (2d Cir.2007).

³³ See, e.g. Rhonda Wasserman, *Cy Pres in Class Action Settlements*, 88 S. Cal. L. Rev. 97, 102 (2015) ((citing Thomas E. Willging & Shannon R. Wheatman, *Attorney Choice of Forum in Class Action Litigation: What Difference Does It Make?*, 81 Notre Dame L. Rev. 591, 647 (2006); Thomas E. Willging & Emery G. Lee III, *Class Certification and Class Settlement: Findings from Federal Question Cases, 2003-2007*, 80 U. Cin. L. Rev. 315, 341-42 (2011)).

cases lead to a final court decision³⁴, while around 99% are settled. The critical understanding of class actions was summarized by the former commissioner of the Federal Trade Commission, who considered antitrust class action suits ‘almost as scandalous as the price-fixing cartels that are generally at issue ... [the plaintiffs’ lawyers] stand to win almost regardless of the merits of the case.’³⁵ Similarly, Crane argues that antitrust class actions can be easily brought, but the defense expenses can be significant, and hence to force defendants to pay for settlement to get rid of the case.³⁶ In other words, the fear of ultimate loss, resulting in huge financial loss and reputational damage, might press the defendant to settle a class action wholly lacking in merit rather than to proceed to trial with unpredictable jury verdict. Indeed, the combination of measures may incentivize private attorney general to bring lawsuits lacking merit. If third-party funding—the financing of lawsuits by entities other than parties or their legal representatives—is utilized in class actions, Hensler refers to three assumptions, raised by the corporate community that may ‘produce a flood of frivolous class actions’: first, the defendants are forced to settle frivolous class claims because of the *in terrorem* effect; second, the jurisprudence allows easy access to courts for frivolous class actions; third, litigation funders will favor frivolous actions.³⁷ It can be argued that the same fears apply when legal representatives act as private investors through contingency fees, i.e. a predominant financing model in class actions. After all, there is little or no difference as regards financial incentives when a third party funder finances the antitrust class action lawsuit or a private attorney general. Three factors tend to strengthen this claim.

First, in contrast to the ‘American rule’ where each party bears its own litigation, US federal antitrust law entitles the prevailing plaintiff to recover not only treble damages, but also to obtain attorney’s fees as part of his costs of suit.³⁸ This provision is often referred to as ‘one-way fee shifting’, because defendants have no right to attorneys’ fees. The purpose of such a scheme is to encourage the class counsel to invest in private actions (especially for impecunious victims), while the interests of defendants are not the primary objective (even if they are found innocent). For the defendant, the only way to recoup his legal expenses is if the plaintiff was sanctioned under the inappropriate use of Rule 11 of the Federal Rule of Civil Procedure, which regards frivolous or improper pleadings.³⁹ However, the fact-intensive nature of antitrust actions highly complicates the task of discovering the violation under Rule 11.⁴⁰ If the case is settled, the one-way fee shifting is usually removed in settlement negotiations. In addition, if the class action is dismissed (for example, in a pre-trial stage) or if the plaintiff loses the claim, each party bears its own litigation

³⁴ John M. Connor and Robert H. Lande, *Not Treble Damages: Cartel Recoveries Are Mostly Less Than Single Damages*, 100 Iowa L. Rev. 1997, 2001 (2015).

³⁵ John T. Rosch, Fed. Trade Comm’n Comm’r, Remarks to the Antitrust Monetization Commission, 9-10 (June 8, 2006) (citation omitted), https://www.ftc.gov/sites/default/files/documents/public_statements/antitrust-modernization-commission-remarks/rosch-amc20remarks.june8.final.pdf (last visited Aug. 11, 2016).

³⁶ See e.g. DANIEL A. CRANE, *THE INSTITUTIONAL STRUCTURE OF ANTITRUST ENFORCEMENT*, 58 (1st ed. 2011).

³⁷ Deborah R. Hensler, *Third-Party Financing of Class Action Litigation in the United States: Will the Sky Fall?*, 63 DePaul Law Review 2, 510 (2014).

³⁸ Clayton Act, 15 U.S.C. §§ 15(a).

³⁹ See, e.g. *Wigod v. Chicago Mercantile Exchange*, 981 F.2d 1510, 1523 (7th Cir. 1992) (the attorney was sanctioned, because he failed to interview prior counsel and available witnesses).

⁴⁰ See, e.g. William H. Wagener, *Modeling the Effect of One-Way Fee Shifting on Discovery Abuse in Private Antitrust Litigation*, N.Y.U. L. Rev. 78, 1892-93 (2003) (claiming that multifaceted nature of antitrust action makes the application of Rule 11 very complicated. Wagener also refers to Daniel E. Lazaroff, *Rule 11 and Federal Antitrust Litigation*, 67 Tul. L. Rev. 1033, 1043 (1993)).

costs. It therefore means that defendants would never be recompensed for frivolous lawsuits brought by plaintiffs.

Second, discovery rules are designed disadvantageously to the defendants due to asymmetric discovery costs. As a general rule, the parties are entitled to request a broad range of the discovery material from the opposing party that would reveal the admissible evidence.⁴¹ The discovery rules require a responding party to bear the costs of the other side's requests. The issue of concern is that plaintiffs are able to propound extremely broad and burdensome requests without the fear of retaliation from the other side.⁴² This is notable because a defendant (for example, a big corporation) routinely holds a broad latitude of documents and items (hard copies, electronic information, transactions and etc.), which might be geographically dispersed and dating back a decade or even more. A wide-ranging discovery usually also involves a significant amount of interrogatories and depositions, thereby creating a substantial financial burden on the defendant.⁴³ In addition, the defendant receiving a broad discovery request will be forced to pay close attention to the details of every element, as the disclosure material needs to be produced in a consistent and organized form.⁴⁴ In contrast with the defendant, the lead plaintiff(s) have a relatively small number of responsive discovery material, because the resulting harm of a class member is usually of low value. As a consequence, the related evidence can be collected and produced with little burden or expense. Another concern for the defendant is that plaintiffs might benefit from a tangible discovery (both fact and expert) even prior to class certification briefing.⁴⁵ If the case is prolonged, the defendant should take into consideration that the discovery costs increase in relation with the increase of time lags. Yet, it should be stressed that there is a possibility for a portion or all of the discovery costs to be shifted to the plaintiff if the requests are unduly burdensome for the defendant.⁴⁶ However, in reality the defensive counterclaim is very complicated. The judge often struggles to screen frivolous discovery requests, because the plaintiff has the ability to structure an antitrust claim in a way that prevents adverse effects in the future.⁴⁷

⁴¹ The Federal Rules of Civil Procedure allows the disclosure for oral and written depositions (Rule 28–32), interrogatories (Rule 33), production of documents and electronically stored information (Rule 34), and requests for admission (Rule 36).

⁴² See, e.g. *Boeynaems v. LA Fitness International, LLC* 285 F.R.D. 331, 334–35, 341 (E.D. Pa. 2012) (stating that plaintiffs had “very few documents” in comparison with the defendant’s “millions of documents and millions of items of electronically stored information”).

⁴³ For example, under Federal Rule of Civil Procedure 33(a), a party may serve on any other party up to 25 written interrogatories. The responses should be submitted within 30 days after service (Rule 33(b)(4)).

⁴⁴ Wagener, *supra* note 40, at 1895 (referring to Fed. R. Civ. P. 34(b) that obliges the documents to be produced “as they are kept in the usual course of business”).

⁴⁵ See, e.g. Robert E. Bloch & Joseph R. Baker, *Legal and Practical Considerations Influencing Whether and When to Opt Out of a Class Action*, 6 (2012), <https://www.mayerbrown.com/files/Publication/40fdd8df-11a0-46f6-8406-700ac93bc21b/Presentation/PublicationAttachment/933b5357-d218-4c4d-b53d-79f275f39f1f/12278.pdf> (last visited Aug. 2, 2018)

⁴⁶ See e.g. *Boeynaems v. LA Fitness International, LLC* 285 F.R.D. 331, 334–35, 341 (E.D. Pa. 2012) (noting that “discovery burdens should not force either party to succumb to a settlement that is based on the costs of litigation rather than the merits of the case”). Eventually, the Court warranted a cost shifting under Rule 26; thus, the parties had to share discovery costs incurred prior to class certification. Another example of discovery cost-sharing is *Schweinfurth v. Motorola, Inc.*, 2008 U.S. Dist. LEXIS 82772 (N.D. Ohio Sept. 30, 2008).

⁴⁷ Wagener, *supra* note 40, at 1897 (also referring to Frank H. Easterbrook, *Comment, Discovery as Abuse*, 69 B.U. L. Rev. 635, 638-39 (1989)).

Third, defendants may encounter the joint and several liability for the aggregated (treble) damages caused by all violators, with no right to contribution from co-violators.⁴⁸ If for example the claim is brought against 5 co-violators, and if 4 of them settle, the unsettled violator is potentially subject to the combined damages of the violation (damages of 5 conspirators multiplied by 3). Indeed, this situation incentivizes each co-violator to settle as early as possible to avoid the situation when all co-infringers have already settled and hence the final co-violator remains responsible for the combined liability of all the damages caused by the violators.⁴⁹

The skeptical view of class actions has been confirmed by judicial decisions as well. Throughout the history of antitrust case-law, the Supreme Court has given a broad function for class actions to secure the antitrust objectives. However, this attitude has changed in *Bell Atlantic Corp. v. Twombly*.⁵⁰ The Court asserted that class actions can force defendants to settle cases lacking merit.⁵¹ Furthermore, it was ruled that the judicial system lacks confidence in screening meritless cases.⁵² A few years before *Twombly*, in *Verizon Communications, Inc. v. Law Offices of Curtis V. Trinko*⁵³, the Court stated that courts are incompetent to manage the daily monitoring of antitrust litigation.⁵⁴

Despite the Court's skepticism, Davis and Lande argue that the *Twombly* decision has no merit in itself, because there was no empirical study conducted.⁵⁵ The Court made a modification for pleading standard (without any reasonable ground) that conflicts with the Federal Rules of Civil Procedure.⁵⁶ To facilitate support for class actions, Davis and Lande performed two studies of recent large and significant antitrust class action cases, combining 40 cases in the first study⁵⁷ and 20 additional cases in the second one.⁵⁸ According to the results of the combined 60 cases, the fear of a blackmail settlement was considered as unjustified alert: a large majority of cases have merit. The main assessment relies on a test of a probability of success: the amount of over \$50 million was considered above the nuisance value of a frivolous case.⁵⁹ It was found that the recovery was more than \$100 million in 60% of cases, while in only a few cases led to significantly less than \$50 million, and the smallest was \$30 million. Furthermore, 88% of the cases studied received at least

⁴⁸ *Texas Industries, Inc., Petitioner, v. Radcliff Materials, Inc., et al.* 451 U.S. 630, 645-46 (101 S.Ct. 2061, 68 L.Ed.2d 500)

⁴⁹ Terra Hittson and Jonathan H. Hatch, *Multi-Defendant Antitrust Litigation: Lessons Learned from In re: Automotive Parts Antitrust Litigation*, Antitrust Law Blog (2017), <https://www.lexology.com/library/detail.aspx?g=78755b7b-4d5f-4e15-8e42-7e213c0f225a> (last visited Aug. 15, 2018).

⁵⁰ 550 U.S. 544 (2007).

⁵¹ *Id.* at 558-559.

⁵² *Id.*

⁵³ 540 U.S. 398 (2004).

⁵⁴ *Id.* at 414-415. See also Cavanagh, *supra* note 15, at 637.

⁵⁵ Davis & Lande, *supra* note 4, at 67.

⁵⁶ *Id.* at 3 (citing Joshua P. Davis & Eric L. Cramer, *Of Vulnerable Monopolists: Questionable Innovation in the Standard for Class Certification in Antitrust Cases*, 41 Rutgers L.J. 355, 399-400 (2009) (noting that the "Court arguably modified the pleading standard without following proper procedure").

⁵⁷ Robert H. Lande & Joshua P. Davis, *Benefits from Private Antitrust Enforcement: An Analysis of Forty Cases*, 42 U.S.F.L. REV. 879 (2008).

⁵⁸ Joshua P. Davis & Robert H. Lande, *Summaries of Twenty Cases of Successful Private Antitrust Enforcement*, Univ. S.F. Law Research Paper No. 2013-01 (2011), http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1961669 (last visited Aug. 2, 2018).

⁵⁹ Joshua P. Davis & Robert H. Lande, *Toward an Empirical and Theoretical Assessment of Private Antitrust Enforcement*, 36 Seattle U. L. Rev. 1269, 1279 (2013) (in this paper the authors are further clarifying the study on combined sixty cases).

one validation that the plaintiffs' case was meritorious.⁶⁰ Moreover, a federal judge approved all the discussed settlements as fair, reasonable, and adequate.⁶¹ In order to reinforce the results, Davis and Lande point to cases where class attorneys earned praise from judges and therefore were awarded significant amounts in damages.⁶² To a similar extent, Hensler argues that the *in terrorem* effect—when frivolous class action forces defendants to settle—lacks empirical proof, and if there is any impact, its magnitude is likely minimal.⁶³ She criticizes corporate lobbyists for disregarding the empirical data by the RAND institute and the Federal Judicial Center estimating that only around 12% of class actions against insurers resulted in class-wide remedies, and that 13% of all class complaints in federal courts led to a class certification and settlement. Hensler further supports her claim based on the following points. First, the attorney in *American Express v. Italian Colors Restaurant* stated that only 20% of 'putative class actions are certified.'⁶⁴ Second, the potential of frivolous actions is significantly diminished, because the Supreme Court has increased the requirements for proving certification.⁶⁵ It is important to stress that Hensler does not distinguish estimations for antitrust collective actions, which are the most relevant for a discussion in this Chapter. Nevertheless, there is no reason why the above-mentioned reasoning should be somewhat different for antitrust cases. History has shown that courts in antitrust cases apply equal (if not stricter) evidentiary requirements for class certification.⁶⁶

The public debate between these opposing views well characterizes the controversial nature of class actions in the United States. Ironically, even if a settlement agreement is assumed to have a merit, a series of additional controversies are claimed to occur in class actions: both in compensating victims/class members and deterring violators. The purpose of the following study is to determine how well antitrust class actions fulfill compensation objectives and to what extent they can facilitate deterrence of antitrust enforcement.

3.3 A CONTROVERSY OF COMPENSATION IN SMALL-STAKES CLASS ACTIONS: A PERSPECTIVE OF ANTITRUST

Private antitrust litigation, and especially class actions, is facing broad criticism for failing to fulfill its compensatory goal. First, victims receive little or no compensation from class action lawsuits, but the plaintiff bar is overpaid.⁶⁷ When victims do receive compensation, the distribution of the settlement fund can be financially worthwhile, because the administrative costs may consume the

⁶⁰ Davis & Lande, *supra* note 4, at 19-21. The types of validation of merits include the following (percentage of meritorious): 1) Criminal Penalty (28%); 2) Government Obtained Civil Relief (28%); 3) Defendants Lost Trial Related Case (25%); 4) Plaintiffs Survived or Prevailed at Summary Judgment or Judgment as a Matter of Law (23%); 5) Plaintiffs Survived Motion Dismiss (22%); 6) Class Certification for Litigation (60%).

⁶¹ *Id.* at 21-22.

⁶² Davis & Lande *supra* note 59, at 1282-1283 (mentioning *In re Cardizem CD Antitrust Litig.*, 332 F.3d 896 (6th Cir. 2003); *In re High Fructose Coin Syrup Antitrust Litig.*, 936 F. Supp. 530 (C.D. Ill. 1996); *In re Air Cargo Shipping Servs. Antitrust Litig.*, No. 06-MD-1775, 2011 WL 2909162 (E.D.N.Y. July 15, 2011); *In re Air Cargo Shipping Services Antitrust Litig.*, No. 06-MD-1775, 2009 WL 3077396 (E.D.N.Y. Sept. 25, 2009)).

⁶³ Hensler, *supra* note 37, at 511-512.

⁶⁴ Transcript of Oral Argument at 5, *Am. Express Co. v. Italian Colors Rest.*, 133 S. Ct. 2304 (2013) (No. 12-133).

⁶⁵ Hensler, *supra* note 37, at 512 (citing *Amchem Prods., Inc. v. Windsor*, 521 U.S. 591 (1997); *Wal-Mart Stores, Inc. v. Dukes*, 131 S. Ct. 2541 (2011)).

⁶⁶ See, e.g. *In Re Hydrogen Peroxide Antitrust Litigation* 552 F.3d 305 (3rd Cir. 2008).

⁶⁷ See, e.g. Edward D. Cavanagh, *Antitrust Remedies Revisited*, 84 Or. L. Rev. 147, 214 (2005) (stating that "[m]any class action suits generate substantial fees for counsel but produce little, if any, benefit to the alleged victims of the wrongdoing.").

entire recovery.⁶⁸ In addition, the class members usually recover only worthless coupons, or their award is distributed to unrelated charities.⁶⁹ As a counterclaim, the proponents of class actions assert that most criticism has been based on anecdotal evidence.⁷⁰ In order to contribute to the debate, this Chapter will assess the main controversies. The major criticisms that have been stated about private (class action) antitrust enforcement can be classified into three categories.

3.3.1 Class Members Obtain Little or No Compensation

According to the critical approach, there is no need to present empirical evidence of the failure of the compensation goal; it is predetermined that antitrust class actions generate little or no compensation to class members.⁷¹ One of the major issues is that indirect purchasers are prohibited from recovering antitrust damages at the federal level.⁷² By prohibiting these actions, the Court prevents a majority of financial victims from receiving compensation. The overcharge usually causes harm at different levels of distribution chain. The further down the chain, the smaller the harm is and thus there are less incentives to litigate individually. Therefore, it is programmed that many victims will be uncompensated, especially if they are end consumers.

Indirect purchasers, however, may recover damages in some state law actions.⁷³ But, it is highly debatable whether indirect purchasers have the ability to bring a lawsuit as financial victims. The potential problems can be well illustrated through the Canadian example. In 2013, the trilogy of Supreme Court's (SCC) decisions in *Pro-Sys Consultants Ltd v Microsoft Corporation*⁷⁴, *Sun-Rype Products Ltd v Archer Daniels Midland Company*⁷⁵, and *Infineon Technologies AG c Option Consommateurs*⁷⁶ ultimately affirmed the right of indirect purchasers to claim damages. Despite the new ability to proceed with class actions, indirect purchasers still face difficulties in proving their harm at the merits stage. An actual example of the complexity for indirect purchasers is underlined in *Sun-Rype*, where the SCC denied the certification of a class action, since there was no evidence that the indirect purchasers could self-identify. The claim alleged that the defendants engaged in a price fixing violation of high fructose corn syrup (HFCS) sold to direct purchasers, and that some of the overcharge was passed on to indirect purchasers, including end consumers.⁷⁷ The Court asserted

⁶⁸ See, e.g. Daniel A. Crane, *Optimizing Private Antitrust Enforcement*, 63 Vand. L. Rev. 675, 682-83 (2010) (asserting that "issuing them a check is often so expensive that administrative costs swallow the entire recovery").

⁶⁹ See, e.g. John E. Lopatka & William H. Page, *Indirect Purchaser Suits and the Consumer Interest*, 48 Antitrust Bull. 531, 554-55 (2003) (noting that "courts often turn to cy pres distributions of part or even all of the funds to worthy causes.").

⁷⁰ See e.g. Scott C. Hemphill, Janet L. McDavid, Andre J. Pincus & Ronald A. Stern, panellists, *Roundtable Discussion: Mark D. Whitener and Andrew I. Gavil, Moderators*, 22 Antitrust 8, 12-13 (2007) (The former ABA Antitrust Section Chair Janet McDavid noting that that "[the] issue [of class action abuse] was never directly presented in these cases, but many of the issues arise in the context of class actions in which the potential of abusive litigation is really pretty extraordinary"). However, the proponents of class actions critically reviewed this observation, given that any empirical study was set aside. For further discussion, see Davis & Lande, *supra* note 4, at 66.

⁷¹ See, e.g. Crane, *supra* note 68, at 678-90 (explaining the determined failures in static injuries because of a widespread overcharge in consumer cases and in dynamic injuries because of the complicated, if not impossible quantification of the dynamic efficiency loss).

⁷² *Illinois Brick Co. v. Illinois*, 431 U.S. 720, 729-31 (1977) (asserting that indirect purchasers claims based on the "passing on theory" may punish the defendants twice for the same infringement).

⁷³ See, e.g. *California v. ARC Am. Corp.*, 490 U.S. 93, 105-06 (1989) (allowing indirect purchaser actions at the state level).

⁷⁴ 2013 SCC 57, [2013] 3 S.C.R. 477.

⁷⁵ 2013 SCC 58, [2013] 3 S.C.R. 545.

⁷⁶ 2013 SCC 59, [2013] 3 S.C.R. 600.

⁷⁷ 2013 SCC 58, at 4-5, 33, 64-65.

that direct purchasers had used HFCS interchangeably and indistinguishably with liquid sugar, thus making it impossible to define which product was eventually sold to indirect purchasing consumers.⁷⁸ It was concluded that the evidentiary standard was too high, because an ‘identifiable class cannot be established for the indirect purchasers.’⁷⁹ The Canadian example clearly demonstrates that identifying and compensating indirect purchasers of an antitrust overcharge might be very complicated, if not impossible at times.

Even if the real economic victims may be identified, the individual recoveries are usually so small that the administrative costs tend to consume the individual recovery.⁸⁰ An illustrative example is the Augmentin settlement of indirect purchasers that yielded \$7.134 million and, as a consequence, sent notices to 800,000 potential injured consumers of the anti-depressant drug Remeron.⁸¹ However, only 65,000 submitted proofs of claim, resulting in an average payout of \$109. Given that this number amounts to only 8% of all potential members, the remaining victims, like 92% of the effected consumers ‘absorbed their losses.’⁸² Another example is the *El Paso* settlement of indirect purchasers, who consisted of 13 million California consumers and 3,000 businesses, in total generating the \$1.4 billion value of the settlement.⁸³ Due to the substantial administrative costs, the individual distribution was financially unfeasible. As a result, it was decided to provide gas rate reductions in California in the upcoming two decades.⁸⁴ The most criticized part of the effectiveness of distribution was that the range of consumers changed dramatically from the time of the infringement and through the rate-reduction term.⁸⁵

Coupon settlements have been used as another undesirable scenario that fails to provide meaningful compensation to class members. The criticism has stemmed primarily from the fact that the redemption rates are very low. For example, in *In re Cuisinart Food Processor Antitrust Litigation*,⁸⁶ the claim rate was only 0.54%, while the actual redemption was even lower.⁸⁷ In *Perish v. Intel Corp.*⁸⁸, 500,000 coupons offering a \$50 discount on microprocessors generated only 150 coupons for class members. Low coupon redemption rates are notable because the redemption process imposes many restrictions, so that very few coupons can ever be redeemed. The best illustration was in *In re Domestic Air Transportation Antitrust Litigation*,⁸⁹ where the class action claimed a price fixing conspiracy. The settlement provided \$50 million in cash and \$408 million was granted in travel coupons. The usage of coupons, however, had many limitations. First, class

⁷⁸ *Id.*, at 65 (stating that it was impossible to “know whether the particular item that they purchased did in fact contain HFCS”).

⁷⁹ *Id.*, at 80.

⁸⁰ See, e.g. William H. Page, *Indirect Purchaser Suits after The Class Action Fairness Act*, in COLLECTIVE ACTIONS: ENHANCING ACCESS TO JUSTICE AND RECONCILING MULTILAYER INTERESTS?, 295 (Stefan Wrba et al eds., 2012) (noting that “[i]t is very often impractical to distribute tiny individual damage awards to consumers at a reasonable cost”).

⁸¹ *In re Remeron End-Payor Antitrust Litig.*, Nos. Civ. 02-2007 FSH, Civ. 04-5126 FSH, 2005 WL 2230314, (D.N.J. Sept. 13, 2005). For further discussion, see Crane, *supra* note 68, at 684-85.

⁸² Crane, *supra* note 68, at 685.

⁸³ For further discussion, see, e.g. Robert H. Lande & Joshua P. Davis, *Benefits from Antitrust Private Antitrust Enforcement: Forty Individual Case Studies*, University of San Francisco Law Research Paper No. 2011-22, 77-78 (2008), <http://ssrn.com/abstract=1105523> (last visited Aug. 3, 2018).

⁸⁴ *Id.* at 84-86.

⁸⁵ Crane, *supra* note 68, at 686.

⁸⁶ 1983-2-CCH Trade Cas. 65,680 (D. Conn. 1983).

⁸⁷ See, e.g. THOMAS A. DICKERSON, CLASS ACTIONS: THE LAW OF 50 STATES, 9-40 (Lslf ed., 2016).

⁸⁸ No. CV-75-51-01 (Cal. Super. Ct. Santa Clara Co. June 22, 1998).

⁸⁹ 148 F.R.D. 297, 305, 308 (N.D. Ga. 1993).

members could not sell coupons to brokers or others willing to purchase them. In addition, tickets purchased with other promotions were excluded.⁹⁰ Second, the coupons were excluded during the blackout periods, such as Thanksgiving, Christmas and New Year's. Given such restrictions in place, less than 10 percent of the coupons were redeemed.⁹¹

As a counter-claim, the proponents assert that class actions usually result in substantial compensation to class members.⁹² For example, the Paxil and the Relafen settlements are taken as examples of producing significant recoveries for the class members.⁹³ As regards the claims of indirect purchasers, empirical analysis suggests that the administration costs amount to only 4.1%.⁹⁴ Moreover, if an abuse occurs it is mainly the fault of the judges, who should carefully exercise their control. Another interesting point is that individuals may not receive compensation not because of large attorney's fees, but because of inertia.⁹⁵ Neither critics nor proponents have provided sufficient empirical evidence that compensation issues are (un-)common or (a-)typical. Yet there have been some attempts to estimate the actual recoveries in small-value class actions.

A. An overview of empirical data on compensation in small-stake class actions

So far the existing empirical data builds up to a contrasting view on whether class action litigation and settlements provide meaningful compensation to victims. The discussion below summarizes the findings of the empirical studies in small-stakes settlements.⁹⁶ But it is aimed to crystalize the numbers that are applicable to antitrust cases. The results (summarized in Table 1) can be placed in three categories: showing (1) negative; (2) both positive and negative and (3) positive outcomes.

The studies tend to differentiate (directly or indirectly) between settlements with automatic distribution and those with claims-made settlement proceeds. Based on these studies, a distinction should also be made between the 'claiming rate' and the 'compensation rate.' The claiming rate (*CLr*) considers the number of class members who file claim forms to receive payments. The compensation rate (*Cr*) addresses when class members receive some kind of compensation, and usually applies to settlements with automatic distribution.

⁹⁰ *Id.* at 331.

⁹¹ See, e.g. James T. Power, *Comment: Tearing Down a House of Coupons: CAFA's Effect on Class Action Settlements*, 9 U. St. Thomas L.J. 3, 910 (2012) (citing Brendan J. Day, *Comment, My Lawyer Went to Court and All I Got Was This Lousy Coupon! The Class Action Fairness Act's Inadequate Provision for Judicial Scrutiny Over Proposed Coupon Settlements*, 38 Seton Hall L. Rev. 1085, 1100 (2008); James Tharin & Brian Blockovich, *Coupons and the Class Action Fairness Act*, 18 Geo. J. Legal Ethics 1443,1446 (2005)).

⁹² See e.g. Myriam E. Gilles & Gary B. Friedman, *Exploding the Class Action Agency Costs Myth: The Social Utility of Entrepreneurial Lawyers*, 155 U. Pa. L. Rev. 103, 131 (2006) (telling that a significant portion of a common fund goes to class members).

⁹³ Davis & Lande, *supra* note 4, at 46.

⁹⁴ Davis & Lande, *supra* note 59, at 1307-08 tbl.II.

⁹⁵ CLIFFORD A. JONES, *Deterrence and Compensation in New Competition Regimes: The Role of Private Enforcement*, in NEW COMPETITION JURISDICTIONS: SHAPING POLICIES AND BUILDING INSTITUTIONS, 177 (Richard Whish & Christopher Townley eds., 2012).

⁹⁶ This discussion is well observed by other authors. See Brian T. Fitzpatrick & Robert C. Gilbert, *An Empirical Look at Compensation in Consumer Class Actions*, 11 N.Y.U. J. L. & Bus 4 (2015). In this paper, the study of Fitzpatrick and Gilbert has been expanded upon by the author's own research.

Table 1. Small-stake cases compensation data (1986–2015)

Negative-Sided Study			
Name of the study	Type of rate	Number of class action settlements (available results)	Results
Gramlich Study	Redemption rate of coupon settlements	12 antitrust cases (10 of them were consumer cases)	1) The average redemption rate was 26.3%. 2) In 10 consumer cases the mean redemption rate was 13.1%.
Mayer-Brown Study	Claiming rate	6 (different areas)	Claiming rates were the following: 0.000006%, 0.33%, 1.5%, 9.66%, and 12%, and 98.72%.
CFPB 2015 Study	Claiming rate	251 settlements (claim rates are available in 105 cases)	The <i>unweighted</i> average claims rate was 21%, and the median was 8%. The weighted average claims rate was between 4% and 11%.
Both-Sided Study			
Hensler Study	Compensation rate	2 small-stakes settlements (out of 6)	1) 35% out of 4 million class members received an average payment of \$5. 2) 90% out of 60,000 received an average payment of \$134.
Pace-Rubenstein Study	Not clearly defined (tentatively both compensation and claiming rates were calculated)	<i>1st Part:</i> 6 (out of 31 settlements on the federal docket). <i>2nd Part:</i> 9 (out of 57 found on the websites of major settlement administration companies)	<i>1st Part:</i> In 4 ‘automatic’ distribution settlements, the compensation fractions ranged from 72% (of 7,400 class members with an average payout \$35) to 99.5% (of 200 class members with an average payout of \$2,000). In 2 ‘claims made’ settlements, the claiming rates ranged from 20% (of 3,500 class members; average payout \$1,000) to 4% (of 1 million class members; payout of software worth \$20). <i>2nd Part:</i> 3 settlements had rates between 1% and 5%, four cases had rates between 20% and 40%, and two cases were above 50%.
Positive-Sided Study			
Fitzpatrick-Gilbert Study	Compensatory and recovery rates	15 (disputes on bank overdraft fees)	An average compensation rate is 55% (in 13 automatic distribution settlements) and 5% (in 2 claim-form settlements). An average recovery rate is 38% (available only on 13 automatic distribution settlements).

Negative-sided category

This category critically overviews the effectiveness of compensation distribution to class members. The data demonstrates that small-stake class actions fail to deliver sufficient compensation to class members. The first study was led by Gramlich in 1986 (‘Gramlich Study’).⁹⁷ He studied 20 antitrust settlements where class members had been paid in coupons, but only in 12 cases was he able to redeem information from the settlement administrators and the parties. He found an average redemption rate of 26.3%. In 10 settlement cases the plaintiffs were consumers and the average redemption rate was only 13.1%.⁹⁸ The study did not report whether settlements were distributed automatically, or with claims-made proceeds.

The second study was done in 2013 by the law firm Mayer Brown (at the request of the US Chamber Institute for Legal Reform).⁹⁹ The results should be approached with caution, because each law firm has an interest in protecting its own and its clients’ interests. Coincidence or not, but the claiming rates are far lower than in other studies. Mayer Brown conducted a study of 148

⁹⁷ Fred Gramlich, *Scrip Damages in Antitrust Cases*, 31 *Antitrust Bull.* 261 (1986).

⁹⁸ *Id.* at 274.

⁹⁹ Mayer Brown LLP, *Do Class Actions Benefit Class Members? An Empirical Analysis of Class Actions*, (2013), <https://www.mayerbrown.com/files/uploads/Documents/PDFs/2013/December/DoClassActionsBenefitClassMembers.pdf> (last visited Aug. 3 2018).

putative class action lawsuits filed in or removed to federal court in 2009, forty of which ended in settlements. Of these forty settlements, the authors found data on distribution (claiming) rates in 6 of them: 0.000006%, 0.33%, 1.5%, 9.66%, and 12%, and 98.72% respectively. The ‘astonishing 98.72%’, however, is not representative for small-stakes class actions because it involved the ERISA litigation with an average payout exceeding \$2.5 million.¹⁰⁰ The final conclusion of the study was that most class actions are dismissed, and those that settle typically provide few, if any, benefits to absent class members.¹⁰¹ The authors, however, did not provide any valuable information on the average payout of these settlements, except for the ERISA litigation.

The last study was done by the Consumer Financial Protection Bureau (‘CFPB 2015 Study’).¹⁰² The Bureau searched for consumer class action settlements involving financial products between 2008 and 2012. Out of 419 settlements detected on the Federal court sheet dockets, the claiming rates could only be found in 105 settlements.¹⁰³ The analysis estimated that 11 million class members received \$1.1 billion in compensation over the 2008-2012 period.¹⁰⁴ In addition, the study reported that an average claiming rate was 21%.¹⁰⁵ Despite being the most comprehensive study so far, it has been strongly criticized for failing to abide its own stated methodology and for obscuring evidence of huge variation in claims rates across different case categories.¹⁰⁶ Furthermore, the Report was accused of presenting a ‘rosy picture’, because 21% seems highly unlikely in large class actions where consumers have to fill out forms to obtain award; rather it likely has to be lower than 5%.¹⁰⁷ One of the reasons for the lack of clarity of the CFPB study is that the reported rates are reflected in an aggregate average.

Both-sided category

This category reflects neutral results, whereas small-stake class actions can both provide proportionally sufficient and insufficient recoveries to class members. In 1999, prof. Hensler and her co-authors (‘Hensler study’) conducted a study where 6 class action settlements provided valuable information on compensation, yet only 2 of them were regarding small-stakes settlements.¹⁰⁸ In the first settlement, only 35% (out of 4 million) received compensation with an average payout of \$5. In the second one, over 90% of 60,000 class members received compensation with an average payout of \$134.¹⁰⁹ However, it is unclear what proportion of the harm victims

¹⁰⁰ See Final Order, *In re Beacon Assoc. Litig.*, No. 09-cv-777, 11 (S.D.N.Y. May 9, 2013) PACER No. 77-2. It represents the Madoff Ponzi scheme: a potentially huge individual claims can be made. In present case, the individual recovery on average was over \$2.5 million. It is unsurprising that 470 (98.72%) class members decided to submit a claim.

¹⁰¹ Mayer Brown, *supra* note 99, at 12.

¹⁰² Consumer Financial Protection Bureau, *Arbitration Study: Report to Congress Pursuant to Dodd-Frank Wall Street Reform and Consumer Protection Act § 1028(A)* (2015), http://files.consumerfinance.gov/f/201503_cfpb_arbitration-study-report-to-congress-2015.pdf (last visited Aug. 3, 2018).

¹⁰³ *Id.* at 30.

¹⁰⁴ *Id.* at 27–28.

¹⁰⁵ *Id.* at 30.

¹⁰⁶ Jason S. Johnston & Todd Zywicki, *The Consumer Financial Protection Bureau’s Arbitration Study: A Summary and Critique*, Mercatus Working Paper, 42-46 (2015), <http://mercatus.org/sites/default/files/Johnston-CFPB-Arbitration.pdf> (last visited Aug. 3, 2018).

¹⁰⁷ *Id.* at 43. The authors base their claim on other empirical studies that are also presented in their analysis (also discussed in this paper): Hensler study and Mayer Brown study.

¹⁰⁸ DEBORAH HENSLER ET AL., *CLASS ACTION DILEMMAS: PURSUING PUBLIC GOALS FOR PRIVATE GAINS* (1st ed., 2000).

¹⁰⁹ *Id.* at 184, 204–05, 310, 359, 549–50.

received. The study notes that settlements were distributed through automatic distributions in both cases.¹¹⁰

The second study was undertaken by Pace and Rubenstein ('Pace-Rubenstein Study').¹¹¹ The study searched for distribution rates in federal docket databases and found available information in 6 cases.¹¹² In 4 cases, where the monetary awards were distributed automatically, the compensation/fraction rate ranged from 65% (of 4,800 class members with an average payout of \$35) to 99.5% (of 200 class members with an average payout of \$2,000).¹¹³ In two 'claims made' settlements, the rates were far lower than in automatic distribution cases: 20% (of 3,500 class members; average payout of \$1,000) and 4% (of 1 million class members; average payout of \$30 in the form of software).¹¹⁴ The second part of their project sought to determine distribution data from settlement administration companies. Although 57 class actions were identified, relevant information was detected only in 9 cases.¹¹⁵ 3 settlements had rates below 5% (two of which were below 1%), 3 cases had claiming rates between 20% and 40%, one at 35% (with around one million class members), 2 cases were above 50%, one at 65% (with 431 class members receiving an average award of \$5,000), and one at 82% (with 350 class members receiving an average award of \$2,600).¹¹⁶ It was concluded that claiming rates tend to be far lower in cases involving large classes, with the sole exception of 35% in a case of one million class members.¹¹⁷ The Pace-Rubenstein Study, however, did not reveal information about average payouts in each case, nor if distributions were automatic.

Positive-sided category

According to this category, class members receive actual compensation with high proportional value. The only study that falls into this category was performed by Fitzpatrick and Gilbert ('Fitzpatrick-Gilbert study').¹¹⁸ The authors analyzed 15 class action settlements against the largest banks in the United States.¹¹⁹ In these cases, the number of class members ranged from 28,000 to almost 14 million, with a mean of 2.1 million. The settlement funds ranged from \$2.2 million to

¹¹⁰ *Id.* at 276. In the settlement where only 35% of class members received compensation, payment was automatic for current and recent customers of the defendant. Others were required to file claim forms.

¹¹¹ Nicholas M. Pace & William B. Rubenstein, *How Transparent Are Class Action Outcomes? Empirical Research on the Availability of Class Action Claims Data*, RAND Inst. for Civil Justice, WR-599-ICJ (2008), billrubenstein.com/Downloads/RAND%20Working%20Paper.pdf (last visited Aug. 3, 2018).

¹¹² *Id.* at 23.

¹¹³ *Id.* In the first case, the claiming rate was 72% (applied to 7,400 class members), but only 65 percent (out of 7,400) of potential recipients actually realized any payment at all, because they failed to cash their benefit checks by the expiration date. A cy pres recipient received the value of all unredeemed checks in that case, thus resulting in essentially 100 percent of the fund being consumed. In the second case, the claiming rate was 99.6%. Almost all (99.5%) members of that class ultimately received some payment.

¹¹⁴ *Id.* at 24.

¹¹⁵ *Id.* at 29.

¹¹⁶ *Id.* at 32.

¹¹⁷ *Id.* at 32.

¹¹⁸ Brian T. Fitzpatrick & Robert C. Gilbert, *An Empirical Look at Compensation in Consumer Class Actions*, 11 N.Y.U. J. L. & Bus 4 (2015).

¹¹⁹ *Id.* at 779. All 15 cases were brought under Rule 23(b)(3). 13 settlements arose in the *In re* Checking Account Overdraft Litigation multidistrict litigation ("MDL 2036"), which was consolidated before the United States District Court for the Southern District of Florida (626 F. Supp. 2d 1333 (J.P.M.L. 2009)). Other 2 settlements derived from related federal lawsuits that were not part of MDL 2036 ((*Trombley v. Nat'l City Bank*, F. Supp. 2d 179 (D.D.C. 2011); *Schulte v. Fifth Third Bank*, 805 F. Supp. 2d 500 (N.D. Ill. 2011)).

\$410 million, with an average payout of \$63 million.¹²⁰ Out of 15, 13 settlements were automatically distributed and two of them were claim-form settlements. In these 13 cases, around 55% of class members realized compensation.¹²¹ Contrary to other studies, the authors sought to provide data on the recovery rates; that is, the money delivered to class members in light of damages suffered by the class. Accordingly, the average recovery rate was 38% (of all the settlements), and 42% if two incidentally low recovery rates were not included.¹²² Notably, the compensation rates were very low in the claim-form settlements: 1.76% and 7.39% respectively. It remains unclear, however, whether the chosen type of class actions (MDL 2036) are the most representative consumer class actions, and especially in the case of antitrust, as they regard the issues of debit card transactions.

B. The compensation effectiveness: A study of antitrust

It appears that this empirical data covers a large majority studies that deal with consumer class actions. Given that there are at least 300 class actions in federal courts alone every year¹²³, or thousands of class actions both in federal and state courts¹²⁴, it is incomprehensible that so few studies have been performed to appreciate the issue. Indeed, there is no possibility to draw evidenced-based conclusions, but the above data nevertheless provides valuable insights into the effectiveness of compensation. In what follows, the antitrust litigation cannot be juxtaposed with some categories of small-stake class actions. In some studies, small-stake class actions were considered even if only few hundreds of victims were included in the class and the recoveries were very high (*see* Mayer-Brown and Pace-Rubenstein studies). For example, the law and economics literature estimates that the average duration of a cartel is around 8 years.¹²⁵ In the case of antitrust monopolization, the wrongdoer (typically a large corporation) engages in anticompetitive conduct, and by using its widespread market power harms a significant amount of consumers.¹²⁶ Therefore, a typical small-value antitrust class action should meet the following criteria:

- The number of potential class members should start from thousands (1,000-9,999), but more likely from tens and hundreds of thousands (10,000 – 999,999) or even millions in some disputes;
- The average individual damage in antitrust class actions should be a small-stake, and thus range between low (100\$-300\$) or very low (1\$-100\$) estimations;

¹²⁰ *Id.* at 780-81.

¹²¹ *Id.* at 787, tbl.3. The compensation rate ranges between 37.27% and 70.48%.

¹²² The significantly lower recovery rates used postcard-sized checks (14.16% and 6.61% respectively).

¹²³ *See, e.g.* Brian T. Fitzpatrick, *An Empirical Study of Class Action Settlements and Their Fee Awards*, 7 J. Empirical Legal Stud. 4, 818 tbl.1 (2010).

¹²⁴ Hensler, *supra* note 37, at 510.

¹²⁵ *See* Florian Smuda, *Cartel Overcharges and the Deterrent Effect of EU Competition Law*, Centre for European Economic Research, Discussion Paper No. 12-050, 19-21 (2012), http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2118566 (last visited Aug. 3, 2018).

¹²⁶ *See, e.g.* Consumer Federation of America, *Microsoft Monopoly Caused Consumer Harm*, (1999) (stating that “U.S. vs. Microsoft trial leaves no doubt as to the magnitude and scope of harm that Microsoft has caused consumers ... monopoly forced consumers to overpay, denied access to new and better products, and stifled overall quality improvements. These are the classic symptoms of a monopoly, which is so fundamentally abhorrent to the American consumer”) (citation omitted) <http://www.consumerfed.org/pdfs/antitrustpr.pdf>. (last visited Aug. 3, 2018); Thomas G. Krattenmaker, et al., *Monopoly Power and Market Power in Antitrust Law*, Airlie House Conference on the Antitrust Alternative (1987) (explaining, for example, Bainian market power and Stiglerian market power that lead to a determined consumer welfare loss), <https://www.justice.gov/atr/monopoly-power-and-market-power-antitrust-law> (last visited Aug. 3, 2018).

Following this approach, the next point to address is what the compensatory success would mean in such class actions. Given the fact that a large majority of class actions are settled, the successful distribution should cover one of the following points (*'success presumption'*):

- (1) *The actual compensation rate (ACr) is over 40% in automatic distribution settlements.*

The following proportion was determined after assessing the feasible sums available to class members. These amounts can be estimated when potential costs (administrative costs, attorney's fees and the costs related to inertia) are deducted from the actual settlement award. First, it should be acknowledged that many cases are settled for amounts closer to actual damages (award < 100%) rather than treble damages.¹²⁷ This is confirmed by an empirical study of Connor and Lande, which found that 80% of cartel cases generate less than single damages to victims and around 20% antitrust settlements produce initial (or more) damages in settlements.¹²⁸ Out of 71 cases studied, victims recovered less than 1% of damages in 4 cases and less than 10% in 12 cases. Only in 7 cases (10%) victims recovered more than double damages. The average recovery ratio was only 66%.¹²⁹ However, this study does not estimate what actual compensation victims receive after deducting attorneys' fees, administrative costs and other case-related expenses; only the total case recovery. According to the optimistic empirical study, administrative costs range only between 0.03% and 9.25%.¹³⁰ An average contingency fees range between 11% and 33%.¹³¹ The perceived costs of inertia include some unpredictable determinants (such as market changes, inflation and etc.), yet it would be fair to reserve the proportion of the settlement fund in a range between 5%-15%.¹³² Even though antitrust cases are rarely settled for higher than actual damages, the pursued compensation goal should aim for at least actual damages (award = 100%). Otherwise the compensation model is highly distorted and unjustifiable. Combining the upper limits of the estimates, the *realistic* effectiveness rate would be calculated under the following equation: $100\% - 9.25\% - 33.3\% - 15\% = 42.5\%$. Under this approach, at least 40% of combined damages should be available to class members, or roughly that 4 out of 10 class members should be able to recover the actual harm.

- (2) *The claiming rate is over 25% in claims-made settlements.* This is a different category because claims-made settlements estimate the number of class members who file claim forms to receive award. Therefore, claims-made settlements reflect the initiative rate that cannot be very high due the following reasons: (1) the preparation of claim form is burdensome and complicated, sometimes requiring notarization¹³³; (2) some class

¹²⁷ See, e.g. Cavanagh, *supra* note 15, at 644 ("Most cases settle for amounts that more closely approximate actual damages than treble damages"); DAVID BOIES, *COURTING JUSTICE: FROM NY YANKEES V. MAJOR LEAGUE BASEBALL TO BUSH V. GORE, 1997-2000*, 333 (1st ed., 2004) ("Although the antitrust laws provide for treble damages, most price-fixing class actions settle for some amount less than the actual overcharge").

¹²⁸ John M. Connor and Robert H. Lande, *Not Treble Damages: Cartel Recoveries Are Mostly Less Than Single Damages*, 100 Iowa L. Rev. 1997, 1998 (2015).

¹²⁹ *Id.* at 2009.

¹³⁰ See Davis & Lande, *supra* note 59, at 1307-08 tbl.II. Other commentators are much more critical and regard that the costs related with antitrust class action may consume a large portion of the settlement award (Crane *supra* note 68). Yet, it is assumed that optimistic results have ground.

¹³¹ See *infra* Section 3.2.3 for a discussion on the average rates of contingency fees.

¹³² There no evidence-based calculation to set this amount. Yet, the upper limit of 15% seems sufficient to cover the negative effects of consumer inertia.

¹³³ The U.S. introduced the complex scheme for the claim forms in order to prevent frivolous litigation, See, e.g. Ackerman, *supra* note 30, at 5.

members lost their proof of the purchase or forgot about the purchase. Thus, many class members have a lack of interest in preparing complicated claim forms for small awards, or they are simply unable to do so in practice. There is no well-grounded method to ascertain a compensatory success in such settlements. However, some useful insights may be derived from the Gramlich study that calculated redemption rates in coupon settlements. Although the report does not provide comprehensive material to set the success presumption, it is the only research study of claim rates in antitrust settlements. It was found that an average redemption rate is 26.3%.¹³⁴ In consumer cases, the average redemption rate was 13.1%. However, as previously, this Chapter takes into account the highest possible (realistic) amounts, even though estimates in consumer cases are lower. For the purpose of this analysis, it is instructive to set the lowest rate of 25% for the compensation success in claims-made settlements. There is no claim that this approach is ideal, but seemingly there is no alternative approach to define the success rate in antitrust claims-made settlements. After all, it would be difficult to declare the compensatory award as successful if the compensation is provided to less than 25% of victims.

The above-mentioned empirical studies estimated the compensation rates concerning how many members receive compensation (at least some kind), except for the Fitzpatrick-Gilbert study. After filtering irrelevant settlements for a typical antitrust settlement (either the payout is very high or the class size is very small), applicable compensation rates can be detected in 4 settlements, and in the Fitzpatrick-Gilbert study, encompassing 13 settlements. The first two were found in the Hensler study: 35% (of 4 million class members; average payout of \$5) and over 90% (of 60,000 class members; average payout of \$134). The other two were established in the Pace-Rubenstein Study: 65% (of 4,800 class members; average payout of \$35) and 35% (of over one million class members; the average payout is not defined). No part of the study sought to investigate *actual* compensation rates (*Acr*), i.e. how these payouts fared in comparison to the entire settlement fund. However, it is clear that compensation rates of 35% automatically fail to pass the presumption test, while the 65% rate is also unlikely to ensure actual compensation for 40% of class members. This can be explained by relying on the Fitzpatrick-Gilbert study that calculated both the compensation and recovery rates. The study found that the compensation rate is on average 59%, while the mean recovery rate is 43%.¹³⁵ As a consequence, the results fail to pass the success presumption test, since the *Acr* is around 24% on average.¹³⁶ Even the highest combined value of *Acr* (65% compensation rate and 57% recovery rate) fails to pass the success presumption test with the result of 39%.¹³⁷ The 90% compensation rate found in the Hensler study seems to be the only settlement result that could potentially fulfill the success test, since it is more realistic that 40% of class members would obtain actual compensation for harm suffered. However, the 90% is obviously an outlier rate. According to

¹³⁴ Gramlich, *supra* note 97, at 262-64.

¹³⁵ Fitzpatrick & Gilbert, *supra* note 118, at 787 tbl.3. The average proportion is not provided, but they can be easily calculated.

¹³⁶ In order to calculate the *actual* compensation rate (*Acr*), compensation rate (*Cr*) should be multiplied by the recovery rate (*Rr*). Therefore, the average $ACr=0,59\times 0,4=0,236$ ($\approx 24\%$)

¹³⁷ The highest combined values can be found in case No 8 (Fitzpatrick & Gilbert, *supra* note 118, at 787 tbl.3). Accordingly, $ACr=0,6475\times 0,5692 = 0,386$ ($\approx 39\%$).

some authors, the rates tend to get much lower where the case involves thousands of members and the mean award is low.¹³⁸ As mentioned before, large classes are very typical in antitrust cases.

From a broader perspective, the Fitzpatrick-Gilbert study sends a message to critics that some consumer class actions are not so ineffective: in fact, they do bring benefits to class members. The study is nevertheless primarily useful in small-stakes class actions relating to the disputes of overdraft bank fees, whereas the harm and the extent of that harm can be precisely identified via electronic services. But the same method is difficult to apply in antitrust cases where the ‘comfortable’ electronic format is rare. Notably, antitrust offenses are sophisticated frauds that make the quantification of overcharge very complicated even in the simplest cartel infringements.¹³⁹ In order to calculate an overcharge, economists should quantify the difference between the actual and the counterfactual scenario. Sometimes, there is no reliable data to precisely identify victims of overcharge. Thus, the automatic distribution of settlement fund is unattainable in practice. As a result, claims-made settlements are the second (and the last) option to directly compensate antitrust victims. However, the comparative empirical results show that the success test fails in this category as well. None of the studies found results that pass the success presumption, with one outlier in the Pace-Rubenstein study.¹⁴⁰ When settlements use claim forms, the representative rates range between 1% and 15%. Even in the Fitzpatrick-Gilbert study, where two claim forms settlements were analyzed in the context of overdraft fees, the results were only 7.39% and 1.76%. The next result to the success presumption is the CFPB study (21%), yet it was criticized for the claiming rate being too high.¹⁴¹ Needless to say, the extremely low claim rates in the Mayer-Brown study (0.000006% and 0.33%) seem to be possible in claim-form settlements. In fact, the rates can be very low when class members receive indirect notice about the possibilities to submit claim form, for example via media advertisements.¹⁴² Also, the rates can be negligible when obtaining the modest award requires producing years-old bills, notarization or mailing via postal services.¹⁴³ To sum up, claim-form settlements are principally framed to undercompensate class members.

The conclusion is that antitrust class actions fail to pass the test of success presumption. Even more disappointingly, the applicable rates are far away from the required proportions to achieve the compensation objective. Indeed, the compensation goal fails due to the complex nature of antitrust overcharge. First, it creates many difficulties in identifying and compensating class members. Second, administrating the case and distributing damages requires significant expenses. Third,

¹³⁸ Pace & Rubenstein, *supra* note 111, at 32 (noting that “[t]he cases with the highest claiming rates had very small class sizes (a few hundred class members), while those with the smallest distribution rates tended to have class sizes of several hundred thousand class members”).

¹³⁹ Patrick L. Anderson et al., *Damages in Antitrust Cases*, AEG Working Paper 2007-2 (noting that the overcharge in the simplest price-fixing violations “is not listed on the invoices nor shown on the accounting income statement.” The author also stresses that an “overcharge” is typical in price-fixing cases and monopolization, while “loss profit” is usual in predatory pricing, resale price maintenance and refusal to deal) (last visited Aug. 4, 2018), <http://www.andersoneconomicgroup.com/portals/0/upload/doc2066.pdf>.

¹⁴⁰ *Id.* at 32. The only case with large class (with around million class members) had more than a tiny distribution rate, i.e. 35%. The authors accept that this is an exception because the smallest distribution rates typically should “have class sizes of several hundred thousand class members.”

¹⁴¹ Johnston & Zywicki, *supra* note 106, at 43.

¹⁴² Alison Frankel, *A Smoking Gun in Debate Over Consumer Class Actions?*, Reuters (2014) (stating that the median claims rate for cases in the claims administrator (KCC) analysis was only 0.23%) (Aug. 4, 2018) <http://blogs.reuters.com/alison-frankel/2014/05/09/a-smoking-gun-in-debate-over-consumer-class-actions/>.

¹⁴³ See, e.g. *Redmond v. RadioShack, Corp.*, 768 F.3d 622, 628 (7th Cir. 2014) (Judge Richard Posner stating that “[t]he fact that the vast majority of the recipients of notice did not submit claims hardly shows ‘acceptance’ of the proposed settlement: rather it shows oversight, indifference, rejection, or transaction costs”).

settlement awards are usually very low and typically lower than actual damages. In such circumstances, antitrust class actions are programmed to provide very low proportional compensation to an insignificant number of victims.

3.3.2 The Compensation Mechanism is Framed to (Largely) Overpay Attorneys

The previous discussion has demonstrated that antitrust class actions fail to accomplish the stated goal of compensation for class members. This, too, might suggest that the remuneration of the class counsel should be adjusted accordingly. However, the practice is different.

Judges have a great deal of discretion in how they set fee awards in class action cases. Under Rule 23(e) of the Federal Rules of Civil Procedure, judges determine a reasonable fee that should be awarded to class counsel. Courts typically choose between two methods. One is the percentage-of-the-settlement method, according to which the judge bases the attorney's fee on the size of the settlement. The other is the lodestar approach, as a result of which the court calculates attorney's reasonable fee by multiplying the number of hours reasonably worked for the case by a reasonable hourly fee.¹⁴⁴ Throughout the years, the percentage-of-the-settlement approach (also referred as a 'contingency fee agreement') has been dominant over the lodestar method.¹⁴⁵ Indeed, the percentage method brings legal certainty and transparency. According to the Second Circuit Court of Appeals, this method 'align(s) the interests of plaintiffs and their attorneys more fully by allowing the latter to share in both the upside and downside risk of litigation.'¹⁴⁶ On the contrary, critics assert that the percentage method can yield outsized compensation to the lawyers who bring class actions.¹⁴⁷ It should be stressed that the Ninth Circuit adopted a presumption that 25% is the proper fee percentage in class action cases.¹⁴⁸ If we assume that the fee award is 25% on average, a contingency fee of \$2.5 million in a settlement of \$10 million does not seem so significant. But if the settlement award is in the hundreds of millions, the counsel can obtain very significant compensation. To that extent, the district court vividly explained that it would be 'generally not 150 times more difficult to program, try and settle a \$150 million case than [it would be] to try a \$1 million case'¹⁴⁹. In fact, the increase in the value of settlement depends directly on the size of the class rather than on the quality of counsel's legal services. Another concern is that few, if any class members have an appreciable incentive to monitor the behavior of the class counsel, because the harm is of low value. Furthermore, class counsel takes all litigation risks when he or she sign a contingency fee agreement. Thus, the lawyer is empowered to negotiate the terms of the settlement and to set own fees. It can be argued that there is no feasible mechanism to monitor attorney's compensation, unless the judge determines the fees to be excessive and rejects the settlement as unfair. However, they are often satisfied with the agreed settlement, because they clear complex

¹⁴⁴ See e.g. *Trans World Airlines Inc v Hughees*, 312 F Supp 478, 482 (S.D.N.Y. 1970); *City of Philadelphia v Chas. Pfizer & Co, Inc* 345 F Supp 454, 484 (S.D.N.Y. 1972).

¹⁴⁵ See, e.g. *Fitzpatrick*, *supra* note 123, at 832

¹⁴⁶ See *McDaniel v. County of Schenectady*, 595 F.3d 411, 419 (2d Cir. 2010).

¹⁴⁷ See, e.g. *Cavanagh*, *supra* note 67, at 214 (stating that "[m]any class action suits generate substantial fees for counsel but produce little, if any, benefit to the alleged victims of the wrongdoing").

¹⁴⁸ *Staton v. Boeing Co.*, 327 F.3d 938, 968 (9th Cir. 2003) (citing *Hanlon v. Chrysler Corporation*, 150 F.3d 1011, 1029 (9th Cir. 1998).

¹⁴⁹ *In Re NASDAQ Market Makers Antitrust Litigation*, 187 F.R.D. 465, 487 (S.D.N.Y. 1996) (Opinion Robert Sweet, District Judge).

antitrust class actions from the docket. But what does the empirical data tell about the real values that go to the plaintiff bar rather than class members?

A. An overview of empirical data on attorney’s fees in antitrust cases

Like in compensation effectiveness to class members, there is a lack of empirical data on the attorney’s fees. To my knowledge, there are three studies that provide handful points regarding attorneys’ fees in antitrust cases (Table 2).

Table 2. An overview of mean attorneys’ fees

Name of the study	Number of cases	Attorney’s fee percentage (average)	Actual recoveries (average in millions)
Lande-Davis study	30 antitrust	\$1<\$100 million – 28.3% (16 cases) \$100-\$500 million – 29.6% (9 cases) >\$500 million – 11.1% (5 cases)	\$1<\$100 million – 19.1 \$100-\$500 million – 56.5 >\$500 million – 183.3
Fitzpatrick study	30 antitrust (688 in total)	22% (no specific separation)	\$21
Eisenberg-Miller study	71 antitrust (689 in total)	25% (no specific separation)	\$15.1

The first case is a study of Lande-Davis that was able to ascertain the attorney’s fee percentage in 30 cases.¹⁵⁰ Accordingly, in cases involving recoveries lower than \$100 million, the courts awarded class counsel a percentage of the recovery that was between 30% and 33.3%, with two incidental exceptions generating 15% and 7%. For the recoveries between \$100 million and \$500 million, the awards ranged between 20% and 33.3%, with a mean of 29.5%. In cases over \$500 million, the court awarded a much smaller percentage of the total settlement value, with a mean 11.1%.¹⁵¹ The study did not provide the actual average recoveries by attorneys. But this average can be easily calculated, as all data necessary to make simple mathematical calculations is available. Thus, the mean actual recoveries are the following (respectively by the category): \$19.1 million, \$56.5 million and \$183.3 million.

The second study was done by Fitzpatrick, who calculated the attorney’s fees for all 2006-2007 federal class settlements.¹⁵² He claimed that (only) 15% of the settlement amount (or \$5 billion out of \$33 billion) went to the plaintiff bar in fees and expenses. But the figure for antitrust class actions is different. First, the mean fees were much larger during the same period, with an average of 25%.¹⁵³ Second, antitrust attorneys are the best compensated among other subject areas, with a mean of \$15.1 million per case. Even in securities cases—by far the most common class actions—the mean is \$13.1 million, while lawyers in other fields obtain much lower compensation, varying from \$0.11 million to \$2.26 million.¹⁵⁴

¹⁵⁰ Lande & Davis, *supra* note 57, at 902-03.

¹⁵¹ *Id.* at 911-12, tbl.7A,7B,7C (overviewing all the results).

¹⁵² Fitzpatrick, *supra* note 123.

¹⁵³ *Id.* at 831, tbl. 7.

¹⁵⁴ *Id.* The mean rewards represent the following numbers (in \$ millions): Labor and employment 2.25, Consumer 2.26, Employee benefits 2.2; Civil rights 1.1, Debt collection 0.11. The figures have been calculated on the basis of own calculations.

The third study of Eisenberg-Miller collected data from class action settlements in both state and federal courts, found from court opinions published in the Westlaw and Lexis databases between 1993 and 2008.¹⁵⁵ The study, in essence, demonstrates similar results to the Fitzpatrick study. Eisenberg and Miller found that the amount of recovery was 22% in antitrust cases. According to the study, the antitrust attorneys were second best paid (\$21.02 million) after the torts (\$30.15 million).¹⁵⁶

B. The evaluation of attorney's fees: risk and reward

The results suggest that antitrust class counsels are one of the most if not the most well paid practitioners among all legal fields. No study has yet managed to draw a line between over and underpayment of attorneys. The above-mentioned data debates for the percentage of the total settlement. However, the inaccuracies of the percentage method are well illustrated in the Visa/MasterCard case¹⁵⁷, where the class counsel received around \$250 million in recovery, but the fee percentage was only 6.5. Even though this is one of the largest antitrust cases in history, it does not change the fact that large cases are fixed to overcompensate the class counsel. Consequently, this Chapter argues that the counsel's compensation should be assessed under two key criteria: (1) how much attorneys spend; and (2) how much they obtain.

The existing empirical data does not provide the information needed to evaluate the total plaintiff's costs in antitrust class actions. Finding this information is probably hindered due to confidentiality restraints encompassing the relationship between the attorney and the client. However, this does not mean that the potential costs cannot be observed. First, in *In re Baby Products Antitrust Litigation* the Court approved the attorney's total litigation expenses to the amount of \$2.2 million, including the attorney's fees, expert fees and administration costs.¹⁵⁸ Second, defense attorneys report that average total costs for antitrust defendants typically range between \$5 million and \$10 million (even more in some cases).¹⁵⁹ As mentioned before, the plaintiff's expenses are much lower than the defendants' (largely due to broad discovery). Based on these observations, the following study will take into account the threshold of \$5 million, which seem to fairly reflect the maximum size of plaintiff's costs; larger amounts would equal the defendant's expenses.

It should first be observed that engaging in class action litigation is a risky step that demands significant investment, both in terms of resources and time. Indeed, not every action is successful. No information is supplied about how often attorneys lose. However, the plaintiff bar usually reaps significant awards. In fact, it is very complicated to define the appropriate risk-to-reward ratio. One option would be to set a cap that prevents attorneys from receiving too much compensation, but, at the same time, this cap represents the counsel's quality and ability to litigate antitrust case that involves substantial risk. The suggestion would be to limit the award that would be three times higher than the attorney's costs. The idea arises from the antitrust rule of automatic trebling, which permits tripling the amount of the actual damages. To the same extent, the plaintiff's counsel would

¹⁵⁵ Theodore Eisenberg & Geoffrey Miller, *Attorneys' Fees and Expenses in Class Action Settlements: 1993–2008*, 7 J. Empirical Legal Stud. 248 (2010).

¹⁵⁶ *Id.* at 262.

¹⁵⁷ See *Wal-Mart Stores, Inc. v. Visa USA & MasterCard Int'l*, 396 F.3d 96, 117 (2d Cir. 2005). See also Davis & Lande, *supra* note 59, at 1308; Lande & Davis, *supra* note 57, at 912 tbl.7C.

¹⁵⁸ 708 F.3d 163, 11 (3d Cir. 2013).

¹⁵⁹ Juska Z. (January 29, 2016) personal meeting with partners of Schiff Hardin LLP (Ann Arbor office).

be entitled to three times the costs he spent on litigation. It would allow a balance between risk and award: if the case is won, the class counsel may invest in two subsequent cases of the same magnitude. Therefore, a balance between costs and award would equal the ratio of 1:3, which could be regarded as a fair compensation presumption. For example, if the court approves the case costs of \$2 million, the plaintiff's lawyer could receive \$6 million.

However, the current remuneration scheme fails to pass the compensation test. First of all, it should be observed that contingency fee payments on average range between \$15 million and \$75 million.¹⁶⁰ If the *upper* threshold of plaintiff's expenditure (\$5 million) is applied, the goal of fair compensation can be potentially fulfilled in the Eisenberg-Miller study (\$5 million: \$15 million). Yet it can occur only in exceptional cases, given that defense costs of \$5 million are atypical. In the other two studies, the compensation ratios range from 1:4 to 1:15. Considering these results, it appears undeniable that the remuneration scheme is created to overpay attorneys. It is beyond the compensation rationale, because, as discussed before, class members are highly undercompensated. To sum up, it would be wrong to say that attorneys are *largely* overpaid, especially when they take cases that others are afraid of, but an element of overpayment can be identified.

3.3.3 Class Actions do not Compensate the Real Victims

When the settlement fund is distributed to the class members, either automatically or upon submission of claim forms, then victims receive compensation through a direct payment. However, there is a realistic possibility that settlement funds can be non-distributable or unclaimed by victims. First, a number of absent class members may not be able to be located, and a further distribution of award is impossible.¹⁶¹ Second, even when their identities are known, it might be financially unfeasible to distribute awards to class members, because the case costs outweigh the individual awards.¹⁶² Third, even where direct payments are feasible, absent class members may fail to submit claim forms.¹⁶³

Concerns surrounding these problems led US courts to introduce the *cy pres* mechanism that is used to compensate victims indirectly. Under this scheme, the unclaimed awards are disbursed to *cy pres* recipients (usually to a charity) whose activities relate 'as near as possible' to the interests of absent

¹⁶⁰ The lower threshold is based on the lowest amount found in the Eisenberg-Miller study. The upper threshold is based on the Lande-Davis study that estimates the average payments \$55.7 million in the settlement category of \$100-\$500 and \$183 million in the category of >\$500 million. Given that there are not many cases in the category of >\$500 million, it was presumed that \$75 million would be a fair amount for the upper threshold.

¹⁶¹ See e.g. *In re Cuisinart Food Processor Antitrust Litig.*, 1983 U.S. Dist. LEXIS 12412, 8-10, 20-21, 29 (D. Conn. Oct. 24, 1983) (approving the class of more than 1.5 million Cuisinart purchasers, but less than one million received information about the proposed settlement).

¹⁶² See, e.g., *Lane v. Facebook, Inc.*, 696 F.3d 811, 821 (9th Cir. 2012) (noting that objectors "concede[d] that direct monetary payments to the class of remaining settlement funds would be infeasible given that each class member's direct recovery would be *de minimis*") (quoting *Nachshin v. AOL, LLC*, 663 F.3d 1034, 1038 (9th Cir. 2011), cert. denied sub nom. *Marek v. Lane*, 134 S. Ct. 8 (2013) (mem.)); *Klier v. Elf Atochem N. Am., Inc.*, 658 F.3d 468, 475 (5th Cir. 2011) ("[T]here comes a point at which the marginal cost of making an additional pro rata distribution to the class members exceeds the amount available for distribution"). For further discussion, see Wasserman, *supra* note 33, 104.

¹⁶³ See, e.g. *In re Baby Prods. Antitrust Litig.*, 708 F.3d 163, 176 (3d Cir. 2013) (The Third Circuit Court of Appeals noted that "many class members did not submit claims because they lacked the documentary proof necessary to receive the higher awards contemplated, and the \$5 award they could receive left them apathetic").

class members.¹⁶⁴ While this solution sounds laudable in theory, the *cy pres* remedy is subject to much criticism in practice.

The *first* criticism is that *cy pres* distribution fails to serve the interests of the absent class members: the courts approve the distribution of unclaimed funds to *cy pres* recipients that bear little relationship with class members who were directly injured by the violation.¹⁶⁵ For example, in *In re Motorsports Merchandise Antitrust Litigation*¹⁶⁶ a class action suit was brought by NASCAR fans alleging the price-fixing infringement by vendors of merchandise sold at NASCAR races. The court approved a *cy pres* distribution to 9 charitable organizations, including the Lawyers Foundation of Georgia and the American Red Cross, which had no tangible relationship with the absent class members.¹⁶⁷ In another antitrust case concerning a price-fixing conspiracy in the modeling industry, the district court approved a *cy pres* distribution to charities with a focus on women's issues, yet only around 60% of the class members were women.¹⁶⁸

The *second* criticism is that *cy pres* distributions create a conflict of interest between the class counsel and the absent class members. The class counsel's fee is typically calculated as a percentage of the entire class award¹⁶⁹, so he or she will be paid the same regardless of whether the funds go to class members or to a *cy pres* charity. All the problems encountered are best illustrated in a widely publicized *cy pres* distribution in *In re Baby Products Antitrust Litigation*.¹⁷⁰ The district court approved the settlement of the claims for \$35.5 million, under which the class members, who submitted a valid proof of purchase, would receive 20% of the actual purchase price, and the ones who did not would receive only 5 dollars.¹⁷¹ The settlement agreement was appealed, because it turned out that most class members failed to submit proof of purchase and therefore would receive 5 dollars each (generating approximately \$3 million), while around \$14 million would be paid for attorney's fees and approximately \$18.5 million was reserved for *cy pres* recipients.¹⁷² In turn, the Third Circuit Court of Appeals vacated the lower court's decision. More specifically, the Court confirmed the issue of the potential for conflict between the counsel and class members in *cy pres* distributions:

¹⁶⁴ See *Miller v. Steinbach*, No. 66 Civ. 356, 1974 WL 350, 2 (S.D.N.Y. Jan. 3, 1974). This case was the earliest use of judicial *cy pres* remedy in class actions. See also *In re Airline Comm'n Antitrust Litig.*, 307 F.3d 679, 682 (8th Cir. 2002) ("[T]he unclaimed funds should be distributed for a purpose as near as possible to the legitimate objectives underlying the lawsuit, the interests of class members, and the interests of those similarly situated" (citing *In re Airline Ticket Comm'n Antitrust Litig.*, 268 F.3d 619, 625-26 (8th Cir. 2001))).

¹⁶⁵ See, e.g., *In re Lupron Marketing and Sales Practices Litigation*, 677 F.3d 21, 33 (1st Cir. 2012) (noting the failure to distribute *cy pres* funds to organizations that "reasonably approximate the interests of the class"); *Superior Beverage Co., v. Owens-Illinois, Inc.*, 827 F. Supp. 477, 479 (N.D. Ill. 1993) (stating that the doctrine of *cy pres* permits for courts to distribute funds for public interest purposes other than the purposes underlying their claims).

¹⁶⁶ 160 F. Supp. 2d 1392 (N.D. Ga. 2001).

¹⁶⁷ *Id.* at 1395 (explaining that the "[c]ourt has attempted to identify charitable organizations that may at least indirectly benefit the members of the class of NASCAR racing fans").

¹⁶⁸ *Fears v. Wilhelmina Model Agency, Inc.*, No. 02 Civ. 4911 (HB), 2007 WL 1944343, 36-44 (S.D.N.Y. Jul. 5, 2007). For further discussion, see Wasserman, *supra* note 33, 120.

¹⁶⁹ See, e.g., *In re Gen. Motors Corp. Pick-Up Truck Fuel Tank Prods. Liab. Litig.*, 55 F.3d 768, 821 (3d Cir. 1995) ("Courts use the percentage of recovery method in common fund cases on the theory that the class would be unjustly enriched if it did not compensate the counsel responsible for generating the valuable fund bestowed on the class").

¹⁷⁰ 708 F.3d 163 (3d Cir. 2013) (The case aimed to resolve two consolidated collective litigation cases brought against Toys "R" Us, Babies "R" Us, and manufacturers of baby products).

¹⁷¹ *Id.* at 170-71.

¹⁷² *Id.* at 169-70.

1. '*Cy pres* distributions also present a potential conflict of interest between class counsel and their clients because the inclusion of a *cy pres* distribution may increase a settlement fund, and with it attorneys' fees, without increasing the direct benefit to the class.'¹⁷³
2. '[T]he current distribution of settlement funds arguably overcompensates class counsel at the expense of the class.'¹⁷⁴

Thus, *Baby Products* is the best illustration of how the *cy pres* distribution can bring great rewards to the class counsel, but many class members remain largely undercompensated. Another undesirable class action settlement chosen by critics (although not concerning antitrust) is *Lane v. Facebook Inc*¹⁷⁵, in which class members received no compensation at all. The lawyers representing the class received about \$3 million and \$6.5 million of the funds were reserved for *cy pres* recipient(s).¹⁷⁶ There was no effort made to pay even a portion of the settlement fund to the absent class members. The most noteworthy criticism this decision attracted was that the *cy pres* award went to set up a new charity ('Digital Trust Foundation').¹⁷⁷ Ironically enough, Facebook's Director of Public Policy was one of three directors who ran the Foundation, and Facebook's attorney, together with class counsel, made up the Board of Legal Advisors. The settlement was affirmed by the Ninth Circuit, but not without controversy. Another anecdotal example is *Diamond Chemical Co. v. Akzo Nobel Chemicals, B. V.*¹⁷⁸, in which the court approved a *cy pres* award to create the Center for Competition Law at the George Washington Law School. The proposal was made by class counsel, an alumnus of the law school, who was later nominated by the Law School as a result of the *cy pres* award.¹⁷⁹

These cases clearly demonstrate that abusive *cy pres* awards occur in practice. However, critics routinely point to cases that attracted much reproach, but they remain silent as to whether frivolous *cy pres* awards occur in a high proportion of cases and whether they are typical. Thus, the proponents of class actions correctly note that if the figure is only true in 5% of the cases, the critics are overstating the issue.¹⁸⁰ This controversy can be assessed by establishing the presumption of failure, yet this approach requires reliance on some assumptions. First, it should be accepted that *cy pres* distributions would never be ideal. Second, fraudulent *cy pres* awards should be prevented from occurring more often than in incidental cases. Therefore, it seems feasible to establish a 20% failure cap (out of ten, more than two *cy pres* settlements are frivolous). While the one-tenth proportional failure seems to be the norm under the non-enforcement of unjust laws, another one-tenth can be justified due to the complexity in relating the nature of antitrust infringement to the activities of the *cy pres* charity. To sum up, the abusive *cy pres* awards are confirmed under two conditions: first, the *cy pres* entity is created solely for the benefit of the class counsel rather than for the benefit of class members; second, the money is distributed to a charity that is unrelated to

¹⁷³ *Id.* at 178

¹⁷⁴ *Id.* at 179.

¹⁷⁵ 696 F.3d 811 (9th Cir. 2012), *reh'g denied*, 709 F.3d 791 (9th Cir. 2013), *cert. denied sub nom.* Marek v. Lane, 134 S. Ct. 8 (2013).

¹⁷⁶ *Id.* at 817.

¹⁷⁷ *Id.* at 817.

¹⁷⁸ 517 F. Supp. 2d 212, 215 (D.D.C. 2007).

¹⁷⁹ See, e.g. Jennifer Johnston, *Comment, Cy Pres Comme Possible to Anything Is Possible: How Cy Pres Creates Improper Incentives in Class Action Settlements*, 9 J.L. Econ. & Pol'Y 277, 292-93 (2013); Sam Yospe, *Cy Pres Distributions in Class Action Settlements*, 2009 Colum. Bus. L. Rev. 1014, 1027-28 (2009).

¹⁸⁰ Davis & Lande, *supra* note 4, at 42.

the injured class members. Under such circumstances, the criticism is confirmed if one or another or both abuses occur in more than 20% antitrust *cy pres* cases.

In order to assess the controversy, the study of Redish and two others ('Redish study') should be discussed further.¹⁸¹ The study found that federal courts granted or approved *cy pres* settlements in 35 cases between 2001 and 2008, and that 16 settlements can be regarded as faux class actions.¹⁸² Under these type of distributions, the *cy pres* measure is primarily used for the benefit of the class counsel rather than the absent claimants. Under such circumstances, there is no intention to compensate the absent class members. However, it is not defined whether there is a direct correlation with the unrelated *cy pres* entity, yet it does not change the fact that attorneys were overpaid in 16 (45%) *cy pres* settlements at the expense of the class. Under the failure test, the abuse numbers should be even higher. In some cases, the class counsel may be not overcompensated, but settlement funds may be distributed to unrelated charities.

However, there is no possibility to draw definite evidence-based conclusions from this study alone. It does give a preliminary benchmark that at least one fourth (4 cases out of 16) of fraudulent distributions relates to antitrust settlements between 2001 and 2008: *In re Airline Comm'n Antitrust Litig*¹⁸³; *In re Motorsports Merch. Antitrust Litig*;¹⁸⁴ *In re Compact Disc Minimum Advertised Price Antitrust Litigation*¹⁸⁵; *Diamond Chemical Co. v. Akzo Nobel Chemicals, B. V.*¹⁸⁶ However, as far as I am aware, prior empirical studies (including the Redish study) have not examined how many antitrust *cy pres* settlements there were between 2001 and 2008. Such analysis would allow for a comparison of the overall numbers with fraudulent actions. Despite the absence of key data, it can be argued that there is a high potential for frivolous actions to occur in more than 20% of antitrust cases. This is notable because antitrust distributions cover the largest portion of announced frivolous settlements, showing that a wide nature of antitrust overcharge is predetermined to attract much abuse when settlements take the *cy pres* form.

3.3.4 Synopsis

For the purposes of this analysis, the presumptions of success and failure have been presented. Following this approach, each criticism has been approved to a greater or lesser degree, and they are broadly consistent with each other. First, applying the 40% success presumption of the actual compensation rate in automatic distribution cases, it was determined that antitrust class actions largely fail to provide actual compensation for at least 40% of class members. In claims made settlements, the 25% success presumption also failed, because the mean rates range between 1% and 15%. Second, the compensation mechanism is programmed to overpay antitrust class counsel. After the assessment of the risk-to-reward ratio, it was found that attorneys obtain disproportionately high rewards. However, large overpayments were denied due the high risk ratio. Third, among all subject areas the frivolous *cy pres* distributions are most often announced in antitrust cases. It therefore means that there is a high possibility that frivolous actions occur in more

¹⁸¹ Martin H. Redish, et al, *Cy Pres Relief and the Pathologies of the Modern Class Action: A Normative and Empirical Analysis*, 62 Fla. L. Rev. 3 (2009).

¹⁸² *Id.* at 654-57 (the best illustration is in Figure 2 and Figure 4).

¹⁸³ 307 F.3d 679 (8th Cir. 2002).

¹⁸⁴ 160 F. Supp. 2d 1392 (N.D. Ga. 2001).

¹⁸⁵ 2005 WL 1923446 (D.Me. 2205).

¹⁸⁶ 517 F. Supp. 2d 212 (D.D.C. 2007).

than 20% of cases. To sum up, the compensation goal in antitrust collective litigation fails to a large extent.

3.4 A CONTROVERSY OF DETERRENCE

Even if it may sound paradoxical, the failure of the compensatory objective can be justified. Those who believe in economic efficiency argue that the real goal of small-stakes class actions is to maximize deterrence.¹⁸⁷ The class action device furthers deterrence by aggregating small claims that are too little to pursue individually. If the suit aggregates claims that might not have otherwise been brought, the infringer is confronted with the ensured collective litigation and hence with the increased magnitude of the liability. This, in turn, forces defendants to internalize more of the negative effects caused by the anti-competitive behavior, thereby pushing deterrence closer to the optimal level. Furthermore, where a large number of victims are automatically included in the class, the collective action alerts the society about the real value of the harm that is actually caused by the wrongdoer. Finally, by aggregating small-stakes claims, the class can ‘exploit the same scale economies as the defendant.’¹⁸⁸

The same rationale applies to the *cy pres* remedy, whereas absent class members usually receive no direct benefit from settlements. By distributing the funds to charities, the courts ignore the objective of compensating direct victims. Indeed, the principal purpose is to punish the wrongdoer and therefore to facilitate the deterrence objective: ‘[t]here is no indirect benefit to the class from the defendant's giving the money to someone else. In such a case the ‘cy pres’ remedy ... is purely putative.’¹⁸⁹ Put more generally, *cy pres* relief is desirable to force the internalization of illegal gains from the violation.

Some studies have questioned the effectiveness of class action litigation as a means of strengthening the deterrence of US antitrust rules.¹⁹⁰ It is simply considered as an insufficient device to achieve deterrence. If this conclusion is true, and given the failure of the compensation, class actions would benefit only the plaintiff bar and thus would be hard to justify. The proponents of class actions, again, deny the critics’ assertions. In order to appreciate the controversy, the effectiveness of deterrence is further discussed by weighing both sides in the class action wars. A comparative overview is hereafter highlighted in Table 3, and further discussed in this Chapter.

¹⁸⁷ See, e.g. Brian T. Fitzpatrick, *Do Class Action Lawyers Make Too Little?*, 158 U. Pa. L. Rev. 2043, 2068 (2010) (“the only function small-stakes class actions serve is deterrence”); Myriam Gilles & Gary B. Friedman, *Exploding the Class Action Agency Costs Myth: The Social Utility of Entrepreneurial Lawyers*, 155 U. Pa. L. Rev. 103, 105-07 (2006) (describing deterrence as the primary goal of class actions); RICHARD A. POSNER, *ANTITRUST LAW*, 266 (University Of Chicago Press, 2d ed. 2001) (stating that compensation should be a “subsidiary” to deterrence).

¹⁸⁸ Bruce Hay & David Rosenberg, *Sweetheart and Blackmail Settlements in Class Actions: Reality and Remedy*, 75 Notre Dame L. Rev. 4, 1380-81 (2000); David Rosenberg, *Class Actions for Mass Torts: Doing Individual Justice by Collective Means*, 62 Ind. L.J. 561, 573 (1987) (claiming that class actions would “substantially diminish the cost advantage conferred on defendant firms by the private law, disaggregative process”).

¹⁸⁹ *Mirfasihi v. Fleet Mortg. Corp.*, 356 F.3d 781, 784 (7th Cir. 2004) (citations omitted).

¹⁹⁰ See e.g., Crane *supra* note 68, at 691-98; Jonathan M. Jacobson & Tracy Greer, *Twenty-one Years of Antitrust Injury: Down the Alley with Brunswick v. Pueblo Bowl-O-Mat*, 66 Antitrust L.J. 273, 277 (1998) (arguing that class actions are used as a weapon to harm competitors).

Table 3. A comparative overview of deterrence debate points

Components of debate	Low deterrence value (Critical approach)	High deterrence value (Proponents' approach)
Class certification	The complicated certification procedure discourages many class actions.	No counterargument
Settlement agreements	Most cases settle – the deterrence value is low	Settlement agreements held defendants liable for approximately \$34 to \$36 billion. In the same cases, the DOJ imposed fines of only around \$11 billion.
Treble damages	Treble damages are typically removed in the negotiate process of settlements	The rule of joint and several liability force defendants to appreciate the amount of settlement
Corporations' liability	Defendants admit no liability in settlements	No counterargument
The relationship between public and private enforcement	Private cartel litigation is mostly followed by public enforcement. Thus, there is no deterrence value in private enforcement.	Around half of the alleged cartel infringements are initiated by private attorney generals.
The behavior of cartel managers	Corporate managers are not deterred by private litigation, because the time lag between the beginning of anticompetitive behavior and the judgment is too long. This period ranges between 5 and 10 years in an ordinary case, and it lasts over 5 years in settlements.	The most important criteria are the time lags between each cartel decision until the judgment. The data suggests a lag of between 3 and 4 years.
The effects on stock prices	The filing of a public enforcement action lawsuit reduces a defendant's share by 6%, while bringing a private lawsuit drops it by only 0.6%.	The total 6.6% stock drop is mainly related with the ensured follow-on litigation following the public enforcement action.

3.4.1 Low deterrence value

The core element of the class action lawsuit is the seeking of class certification. Due to the defendants' aggressive defense, antitrust class actions may reach the certification stage and be denied on the basis of failing to meet the requirements under Rule 23. Most importantly, the courts utilize strict evidentiary standards for the class certification in antitrust cases. In the *In Re Hydrogen Peroxide Antitrust Litigation*¹⁹¹, the 3rd Circuit established that the class certification requires 'rigorous analysis' of factual and legal evidence.¹⁹² This examination extends to assessing the testimony of both defendant's and plaintiffs' experts.¹⁹³ In addition, the standards for meeting the requirements under Rule 23 must be met by a 'preponderance' of evidence, rather than by a mere 'threshold showing'.¹⁹⁴ Therefore, there is high chance that defendants may succeed in opposing the class certification. In such case, the class action rule serves no use. As mentioned before, if a court certifies a class action, the large majority of class action lawsuits are settled; very few certified class actions proceed to trial. Consequently, treble damages are typically removed from the negotiation process and, after all, defendants admit no liability for having violated antitrust laws. From this issue flows another concern; that the private attorney general mechanism is not the right tool to facilitate deterrence. Lawyers make huge investments in antitrust cases and are thus the ones who

¹⁹¹ 552 F.3d 305 (3rd Cir. 2008).

¹⁹² *Id.* 320.

¹⁹³ *Id.* 307.

¹⁹⁴ *Id.*

decide when and whether to settle the case.¹⁹⁵ The individual damages caused by antitrust wrongdoers are typically very small, so few if any class members have an incentive to monitor the settlement negotiations. As a consequence, defendants are satisfied to ‘buy off’ the attorney in exchange for a favorable settlement agreement.¹⁹⁶ The opposite may also be true that the class counsel may coerce defendants to go into settlements out of fear, regardless of whether the claim has merit or not.¹⁹⁷ Thus, the settled class action lawsuits undercut the deterrence of class litigation. From a cartel perspective, a majority of class actions follow successful government actions.¹⁹⁸ Consequently, private attorneys use the efforts of public enforcers for their own benefit, for example, by reducing their own costs in expensive fact discovery proceedings.¹⁹⁹ According to this view, private actions are unable to cure public shortcomings like, for example, a low detection rate.

Another critical argument is that corporate managers (who should be foremost affected) are not deterred by private litigation. First, the time period between the beginnings of anticompetitive behavior until the judgment is considered the important deterrence criteria against corporate managers. In a typical antitrust case, the period may last from at least 5 years to more than 10 years.²⁰⁰ It is highly unlikely that corporate managers and mid-level executives will still hold their positions at the time of the judgement.²⁰¹ In case of settlement cases, the early deterrent impact is also improbable, because, even if the day of judgement is speeded up, the average time from the planning of anticompetitive conduct to any settlement payout is still more than 5 years.²⁰² Second, corporate managers are unlikely to internalize the wrongdoing immediately after launching the antitrust claim. As mentioned before, empirical studies showed that government antitrust actions reduce the share value by 6% on average, and filling a private lawsuit by around 0.6%.²⁰³ Thus, ‘[a] half-percent drop in market capitalization’ is highly unlikely to cause negative impacts on corporate managers.²⁰⁴

¹⁹⁵ See, e.g. Kirkpatrick v JC Bradford & Co, 827 F2d 718, 727 (11th Cir. 1987) (noting that class counsel is the main actor in the litigation, while the lead plaintiff is put in a passive position. In addition, class counsel is more skilled professionally to succeed in the certification stage).

¹⁹⁶ Linda S. Mullenix, *Ending Class Actions as We Know Them: Rethinking the American Class Action*, 64 Emory L.J. 399, 421 (2014).

¹⁹⁷ See, e.g. Joanna C. Schwartz, *The Cost of Suing Business*, UCLA School of Law Research Paper No. 15-19, 10-12 (2015), at 20-25, http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2589208 (last visited Aug. 2, 2018); Thomas S. Ulen, *An Introduction to the Law and Economics of Class Action Litigation*, 32 Eur J Law Econ, 195-196, 201-202 (2011).

¹⁹⁸ See e.g., Tiffany Chieua, *Class Actions in The European Union?: Importing Lessons Learned from the United States’ Experience into European Community Competition Law*, 18 Cardozo J. Int’l & Comp. L. 123, 137 (2010) (stating that “majority of antitrust class actions are price fixing cases that typically follow a successful case brought by the DOJ or the FTC through public enforcement mechanisms” (citing Spencer Weber Waller, *The United States Experience with Competition Class Action Certification: A Comment*, 3 Canadian Class Action Review, 210)).

¹⁹⁹ See, e.g. William B. Rubenstein, *On What a “Private Attorney General” is – and Why it Matters*, 57 Vand. L. Review 6, 2150 (2006) (citing John C. Coffee “*No Soul to Damn; No Body to Kick: An Unscandalized Inquiry into the Problem of Corporate Punishment*, 79 Mich. L. Rev. 386, 435-436 (1981)).

²⁰⁰ Crane, *supra* note 68, at 691-92 (referring to Federal Court Management Statistics under which the average time from filing of the case to trial has steadily increased from around 18.5 months in 1996 to 24.6 months in 2007).

²⁰¹ *Id.* at 693.

²⁰² *Id.* at 696.

²⁰³ *Id.* at 695 (citing Kenneth D. Garbade et al., *Market Reaction to the Filing of Antitrust Suits: An Aggregate and Cross-Sectional Analysis*, 64 Rev. Econ. & Stat. 686, 686-71 (1982); John M. Bizjak & Jeffrey L. Coles, *The Effect of Private Antitrust Litigation on the Stock-Market Valuation of the Firm*, 85 J. Am. Econ. Rev. 436, 437 (1995)).

²⁰⁴ *Id.* at 695.

3.4.2 High deterrence value

While significant obstacles exist, proponents of class actions continue to claim that private antitrust enforcement provides meaningful deterrence. First and foremost, the supporters criticize theory-based assessments, which are more anecdotal than empirically based.²⁰⁵ The counterargument is supported by the empirical analysis. A comprehensive study on 40 successful antitrust class actions found that private recoveries are substantial enough to have significant deterrence power.²⁰⁶ Although the study attracted widespread attention on both sides of the Atlantic²⁰⁷, it was also the subject of much criticism.²⁰⁸ In order to reinforce the results, the authors performed a supplemental study of 20 antitrust cases.²⁰⁹ After the assessment of the total recoveries in 60 private cases through 1990-2011, the authors made the powerful claim that private antitrust enforcement probably deters more than the anti-cartel program of the DOJ Antitrust Division.²¹⁰ In a comparative context, it was found that victims received substantial compensation ranging from \$33.8 billion to \$35.8 billion, which is far higher than the combined DOJ criminal sanctions (corporate fines, individual fines, and criminal fines) totaling \$11.7 billion²¹¹, or \$15.4 billion if the deterrent value of a prison sentence is increased.²¹² Another study of over 100 international cartels prosecuted between 1990 and 2008 found similar results: a total of \$29 billion in announced private settlements, and \$7.6 billion for international cartel fines collected by the DOJ.²¹³ Contradicting to the critics' claim that class action litigation is usually preceded by government actions, the study revealed that out of 60 cases, 24 were not preceded by public enforcement and a further 12 had a different background than government actions.²¹⁴ Furthermore, in the first study, only 10 of 40 private cases were follow-ons to DOJ enforcement efforts, and 16 were discovered by private parties.²¹⁵ This figure, as authors observed, is consistent with another study, which found that only 20% of private cases were follow-on cases.²¹⁶ It may suggest that private enforcement precedes public enforcement as well.

²⁰⁵ Davis & Lande, *supra* note 4, at 7, 41, 43-46.

²⁰⁶ Lande & Davis, *supra* note 57, at 879-80.

²⁰⁷ See, e.g. Andrea Renda et al., *Making antitrust damages actions more effective in the EU: Welfare Impact and Potential Scenarios*, Final Report (2007), http://ec.europa.eu/competition/antitrust/actionsdamages/files_white_paper/impact_study.pdf (last visited Aug. 9, 2018); See also Judiciary Committee, *Open Access to the Courts Act of 2009: Hearing on H.R. 4115 Before the H. Comm. On the Judiciary*, 111th Cong. (2009) (written testimony of Professor Joshua P. Davis) (Aug. 1, 2018), <http://judiciary.house.gov/hearings/pdf/DavisO91216.pdf>.

²⁰⁸ See, e.g. Crane, *supra* note 68.

²⁰⁹ Davis & Lande, *supra* note 58.

²¹⁰ Davis & Lande, *supra* note 59, at 1272; Robert H. Lande & Joshua P. Davis, *Comparative Deterrence from Private Enforcement and Criminal Enforcement of the U.S. Antitrust Laws*, *BYU L. Rev.* 315, 315 (2011).

²¹¹ Davis & Lande, *supra* note 59, at 1277 (“[f]rom 1990 through 2011, the total of DOJ corporate antitrust fines, individual fines, and restitution payments totaled \$8.18 billion. Valuing each year of prison at \$6 million and each year of house arrest at \$3 million adds another \$3.588 billion in total deterrence from DOJ’s anti-cartel cases. This combined DOJ deterrence totals approximately \$11.7 billion” (footnote omitted)).

²¹² *Id.*, at 1278 (“instead of our assumed disvalue of \$6 million for a year in prison, one could use an estimated deterrence value of \$12 million for a year in prison, and \$6 million for the deterrence effects of a year of house arrest instead of our \$3 million assumption. Doing this would raise the total estimate of deterrence from the DOJ criminal enforcement program from 1990 to 2011 from \$11.7 billion to \$15.4 billion” (footnote omitted)).

²¹³ John M. Connor, *Cartels & Antitrust Portrayed: Private International Cartels from 1990 to 2008*, AAI Working Paper No. 09-06, 51 (2009), <http://ssrn.com/abstract=1467310> (last visited Aug. 1, 2018).

²¹⁴ Davis & Lande, *supra* note 4, at 30.

²¹⁵ Lande & Davis, *Comparative Deterrence*, *supra* note 59, at 346. Lande & Davis, *supra* note 57, at 893 (illustrating that \$7.631 billion to \$8.981 billion came from the 15 cases that did not follow any government enforcement actions).

²¹⁶ Lande & Davis, *Comparative Deterrence*, *supra* note 210, at 346 (citing John C. Coffee, *Understanding the Plaintiff’s Attorney: The Implications of Economic Theory for Private Enforcement of Law through Class and Derivative Actions* 86 *Colum. L. Rev.* 669, 681 (1986)).

Therefore, the threat of private enforcement might even coerce wrongdoers to confess to the DOJ through the leniency program.²¹⁷

Furthermore, the proponents assert that critics misrepresent the actual time lags. The most important determinant is the time from the latest cartel manager's decision to continue cartel until judgement. To that extent, the data suggests that the applicable range is less than four years.²¹⁸ From the perspective of the defendant's stock value, it is asserted that private antitrust actions have a far higher impact than is originally envisaged. Although the filing of private antitrust lawsuits reduces the value of defendant's shares on average by 0.6%, the total 6.6% stock drop is mainly associated with the inevitable private litigation following the government action.²¹⁹ This is notable because the anticipated private sanctions are four times as costly as sanctions from public enforcers. There is also a claim that an average stock drop of 0.6% is surprisingly high, given that government action is typically followed by private litigation.²²⁰

3.5 THE EFFECTIVENESS OF DETERRENCE: A STUDY OF OPTIMAL DETERRENCE

There is no common standard of how to estimate the impact of small-stakes antitrust class actions on deterrence. This phenomenon is interpreted differently by both sides. Critics argue that the complicated certification procedure and the successive inevitable settlement diminish any deterrence value of class actions. Proponents customize the criteria of significant financial value of settlements. To give an additional flavor to this debate, the impact of class actions upon the standards known to the optimal deterrence theory is further examined. However, before going to this analysis, the formula proposed by Simard on estimating the deterrent value of small-stakes class actions (or negative-value claims) should be presented.²²¹ According to the author, the following equation characterizes the deterrent impact of class actions for damages:

$$EL_{CA} * P_{CA} + EC_{CA} \geq I_{CA}$$

EL_{CA} stands for the expected aggregate loss to the class; P_{CA} represents the probability of being held liable for the harm caused to the class; EC_{CA} stands for the expected costs in defending against the class actions lawsuit; I_{CA} represents the potential investment in safeguarding the harm to the class.

This equation is useful in defining the standards of deterrence in small-stakes class actions. However, Simard applies this formula to all types of class actions, without any emphasis on antitrust. In fact, antitrust violations are unique and cannot be easily compared with other violations (such as contract or labor suits), because they typically generate a widespread overcharge (often across different supply chains) to victims. Antitrust scholars have developed the optimal deterrence

²¹⁷ Cavanagh, *supra* note 15, at 634 (referring to S. D. Hammond, Acting Deputy Assistant Att'y Gen., An Overview of Recent Developments in the Antitrust Division's Criminal Enforcement Program (Jan. 10, 2005)).

²¹⁸ *Id.* at 60 (citing John. M. Connor, *Private Recoveries in International Cartel Cases Worldwide: What Do the Data Show?*, AAI Working Paper No. 12-03, 8, 12 (2012)).

²¹⁹ *Id.* at 28, (quoting Connor, *supra* note 218, at 11 (“[O]f the 52 international cartels that were fined by the DOJ during 1990-2005, 100% were followed up with private damages actions”)).

²²⁰ *Id.* at 29.

²²¹ Linda S. Simard, *A View from Within the Fortune 500: An Empirical Study of Negative Value Class Actions and Deterrence*, Suffolk University Legal Studies Research Paper Series, Research Paper 13-32, 4 (2013), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2331676 (last visited Aug. 19, 2018).

theory with a reason. Under this theory, the total amount of the sanctions should be equal to the infringement’s anticipated ‘net harm to others’²²², divided by the multiplication of probability of detection and proof of the infringement.²²³ The representative equation of the optimal deterrence theory is the following:

$$\text{Optimal deterrence (sanction)} = \frac{\text{Net harms to others}}{(\text{Probability of detection} \times \text{Probability of conviction})}$$

In this Chapter, a theory of optimal deterrence (sanction) is primarily examined from the perspective of cartel violations. The generally accepted view is that cartel managers behave as rational actors who conduct a cost-benefit analysis to see the magnitude of a likely penalty and the probability of being detected.²²⁴ Optimal deterrence is considered to be achieved when the imposed penalty outweighs the expected benefits of antitrust violation. However, the achievement of optimal deterrence would not mean that there will be no cartel violations. Still, the possibility remains that some infringers would engage in cartel violations, even if total fines were raised to the highest possible level. Violators will always take into account that detecting cartels and proving their harm is very complex due to their covert nature. Nevertheless, it is clear that optimal sanction would reduce cartel agreements to a minimum.

In order to define the optimal sanction, the appropriate multiplier should be set, which would define the threshold for optimal deterrence. First of all, it should be recalled that this paper applies the most optimistic empirical data that is available. Following this logic, the most optimistic combined proportion for detecting and successfully prosecuting cartels should be applied in the context of optimal deterrence theory. In short, the best possible multiplier would be up to 1/3.²²⁵ This proportion comes from the fact that potentially up to 33% of all cartels (under the most optimistic scenario) are detected.²²⁶ However, it does not mean all detected cartels lead to successful conviction. But, again, this paper is optimistic and presumes that the most optimistic combined rate of detection and subsequent successful conviction is up to 33%, which corresponds to the multiplier of <1/3. When applying this multiplier in the equation of optimal deterrence, the optimal penalty is equal to (at least) three times the ‘net harm to others’. If this Chapter applied less optimistic rates, for example up 20% (<1/5) or up to 10% (<1/10), the optimal penalty would be equal to (at least) five or ten times the ‘net harm to others’. Even if lower multipliers are seemingly more realistic in practice, as 33% is an outlier rate, this Chapter applies the highest possible percentage to make the outcome more feasible. To sum up, *at least* three times the ‘net harm to others’ would correspond

²²² WILLIAM BREIT & KENNETH G. ELZINGA, *ANTITRUST PENALTY REFORM: AN ECONOMIC ANALYSIS*, 11-12 (AEI Press 1986) (explaining the “net harm to others” standard).

²²³ William M. Landes, *Optimal Sanctions for Antitrust Violations*, 50 U. Chi. L. Rev. 652 (1983). Landes built this theory upon concepts developed by Gary S. Becker, *Crime and Punishment: An Economic Approach*, 76 J. Pol. Econ. 169 (1968).

²²⁴ Int'l Competition Network, *Defining Hard Core Cartel Conduct, Effective Institutions, Effective Penalties*, Conference Paper, presented for the ICN 4th Annual Conference, Bonn, 6-8 June 2005, <http://www.internationalcompetitionnetwork.org/uploads/library/doc346.pdf> (last visited Aug. 5, 2018).

²²⁵ See Robert H. Lande, *Why Antitrust Damage Levels Should Be Raised*, 16(4) Loy. Consumer L. Rev. 329, 335-337 (2004) (stressing that the multiplier was determined “without much evidence” but one can show that the multiplier of 2 or 4 is possible).

²²⁶ See John M. Connor & Robert H. Lande, *Cartels as Rational Business Strategy: Crime Pays*, 34 Cardozo L. Rev. 427, 486-490, Appendix tbl. 3 (2012) (summarizing the studies and opinions about the probability of cartel detection).

fairly well with optimal deterrence. In other words, if the sanction equal to three times of ‘net harm to others’ was achieved, it would be to a large extent in line with optimal deterrence.

Under the antitrust model, there are at least three interrelated components that enhance deterrence: corporate fines, personal fines and damages claims. Regardless of these components being different in nature, Davis and Lande consider that they can be converted into and compared in dollars. Accordingly, one year of prison corresponds to \$6 million and a year of house arrest to \$3 million of corporate liability.²²⁷ Therefore, relying on this estimation, all three components can be converted in the same value and applied in calculating optimal deterrence. However, it is highly debatable whether a year of prison can be converted in financial value (in any form). What is clear is that despite the risk of being punished through the different layers of the enforcement mechanism, there is no indication that the optimal deterrence has been achieved.²²⁸ This is reinforced by the fact that wrongdoers ‘tend to be recidivists.’²²⁹ The major question for this study is whether antitrust collective litigation pushes deterrence closer to an optimal level. Another important question is how corporations respond to the threat of litigation from small-stakes class actions. Indeed, the magnitude of the increase in deterrence depends upon the likelihood of antitrust class actions increasing the probability of cartel detection and conviction. Another factor is estimating how the total damages of class action lawsuits may correspond with the ‘net harm to others’. Each of the elements will be discussed in turn.

To start with, it should be stressed that class actions that follow after government actions have little or no effect on detection. By contrast, stand-alone actions have much higher impact on the probability of detection, and the consequent deterrence. According to the studies of Connor and Lande-Davis mentioned above, a large share (40%-50%) of private antitrust actions are stand-alone lawsuits, while follow-on cases are only around 20%-30%. Relying on this data, it can be claimed that class action lawsuits have a potential of substituting actions of public enforcers. However, another study by Connor and Lande found that out of 71 cartel damages cases from 1990 to 2014, 42 suits were follow-on damages actions (36 after U.S. government convictions and 6 after European antitrust authorities’ decisions) and 29 non-follow-on damages suits.²³⁰ However, it is not entirely clear whether all non-follow-on damages claims were stand-alone actions. What is clear from the data is that at least 60% of cartel damages claims are follow-ons. The study also concludes that the mean Recovery Ratio (size of antitrust settlements relative to damages) is higher in follow-on suits (81.2%) than in the non-follow-on cases (54.8%). These findings confirm what has been obvious for many years: stand-alone cartel actions are less attractive for private attorney generals. Smarter it is to wait until competition authorities issue their decision, because cartel cases are covert, requiring more investigation and financial capacities to prove the violation than for example monopolization cases. As it will be discussed later, public authorities are also better suited to deal with cartel cases. To sum up, private antitrust claims have a potential to substitute public enforcement in non-cartel cases, while this is highly unlikely when it comes to cartel violations. This conclusion is reinforced by the fact that only around 10% of potential class actions that are on

²²⁷ Davis and Lande, *supra* note 4, at 58-59.

²²⁸ See e.g. Maurice E. Stucke, *Morality and Antitrust*, Colum. Bus. L. Rev. 443, 470-74 (2006).

²²⁹ See e.g. John M. Connor & C. Gustav Helmers, *Statistics on Modern International Cartels 1990–2005*, AAI Working Paper No 07-01, 22-23, Appendix tbl. 11 (2007) (out of 283 modern private international cartels, fixing recidivists were found in 174 cases. Notably, 11 companies were caught 10 or more times fixing prices).

²³⁰ Connor and Lande, *supra* note 34, at 2010.

the radar of law firms are brought to the courts.²³¹ Therefore, private attorneys usually take low risk cases, while a majority of cases remain unprosecuted. This is not to deny the reality that public enforcers also take low-risk cases, as many cartels are detected and prosecuted after the leniency program. But this mechanism is the main concern for rational infringers that cartel violations may be detected. There is always a potential that a whistleblower (a co-infringer) will report violations to antitrust authorities. In addition, public enforcers have the enforcement resources that private enforcers lack: grand juries, lawyers specialized in cartel enforcement, and the support of the Federal Bureau of Investigation.²³² It then follows that government actors are able to create a considerable threat at the time when rational actors perform their cost-benefit analysis. Notably, the personal sanctions (criminal fines and jail sentences) against cartel managers foremost depend on how active the DOJ criminal enforcement is. The recent findings show some interesting trends in criminal enforcement. In 2017, the Antitrust Division of DOJ sentenced 30 individuals to prison – the highest number since 2012, while 9 criminal cases went to trial – a record number in the modern history of criminal antitrust enforcement.²³³ This is surprising considering that there were decreasing trends before 2017.²³⁴ On the one hand, it may suggest that current criminal penalties under-deter. On the other hand, it may show the maturity of public enforcement in prosecuting antitrust violations. In turn, it leads to increased fear of wrongdoers, i.e. facilitated deterrence. It is hard to assess the reality, as it remains unknown how many cartels remain undetected and whether this number is increasing or decreasing each year. Despite that, the truth is that effectiveness of public enforcement is the most important element affecting rational actors' behavior and stand-alone actions of private enforcers have little impact. However, this reasoning is partly against the empirical study by Simard, who asked every corporate counsel of Fortune 500 companies to rate his ability to anticipate the class action. For third generation small-stakes class actions, almost 90% of general counsels asserted that they had “moderate” or “high” ability to foresee that their company will be sued.²³⁵ However, corporate counsels anticipate their liability less frequently for first and second generation small-stakes class actions under the same determinants, respectively 25% and 65%.²³⁶ However, these findings should not be directly applied in the context of antitrust optimal deterrence theory. First, Simard in her questionnaire focuses on all types of class actions. Second, the results are subject to some errors as observed by the author.²³⁷ Third, it is unclear from the study

²³¹ Steven E. Fineman, Guest Lecture Complex Litigation Course, Stanford University (October 2015). The antitrust cases are potentially brought even less frequently.

²³² Bill Baer, *Public and Private Antitrust Enforcement in the United States*, Conference Paper, remarks prepared for delivery to European Competition Forum 2014, Brussels, February 11, 2014, 2, <https://www.justice.gov/atr/file/517756/download> (last visited Aug. 10, 2018).

²³³ The United States Department of Justice, *Doing Hard Time: The Antitrust Division Sets Records in Number of Individuals Sentenced and in Number of Criminal Trials*, <https://www.justice.gov/atr/division-operations/division-update-spring-2018/doing-hard-time-antitrust-division-sets-records-number-individuals-sentenced-and-number-criminal> (last visited Feb. 7, 2019).

²³⁴ Organisation for Economic Co-operation and Development, *Sanctions in Antitrust Cases*, Global Forum on Competition (2016), https://www.ftc.gov/system/files/attachments/us-submissions-oecd-other-international-competition-fora/sanctions_united_states.pdf (last visited Feb. 8, 2019). The following number of executives was sentenced: 45 (2012), 28 (2013), 21 (2014), 12 (2015).

²³⁵ Simard, *supra* note 221, at 26. According to the author, third generation small-stakes class actions has a basis for legal and factual support developed in previous litigation and the available information is the most comprehensive.

²³⁶ *Id.* at 24-26. First generation small-stakes class actions include unexplored legal theories and/or unproven factual scenarios. Second generation small-stakes class actions include legal theories and factual scenarios that have been previously argued in other cases but have not been definitively resolved.

²³⁷ *Id.* at 21. (for example, stressing that “all Respondents are vulnerable to class action suits, they have an incentive to downplay the validity of this costly regulatory device”).

how general counsels foresee their liability under stand-alone and follow-on antitrust actions for damages.

With regard to the probability of conviction, it mainly relates to the possibility of class actions to be certified. Even if the lawsuit is brought, its chances to survive the certification stage are far from good. In that regard, the RAND Institute estimated that only 14% of the state and federal class actions against insurers were certified.²³⁸ This proportion is likely to be similar, or even lower in antitrust class actions. This is notable because judges have become more reluctant to certify these actions during the last years.²³⁹ But if the class action is certified, the probability of conviction is 100% or very close to that proportion, since the vast majority of class actions is settled. The Federal Judicial Center, for instance, estimated that 13% of class actions are certified and further settled in federal courts.²⁴⁰

Another point regards the impact of class actions on the ‘net harm to others’. The standard calculation of the ‘net harm to others’ encompasses not only cartel overcharges, but also the allocative inefficiency.²⁴¹ At least two elements may be included in this context: the expected cost of litigation and actual damages. As regards the first element, the expected costs to oppose class certification, or lead the case after the certification may be valued in millions (largely due to expensive discovery procedures). According to the empirical data, the average time to settlement is around 3.3 years.²⁴² It might demand very high litigation expenses, with the possibility to consume up to \$10 million or more out of the defendant’s pocket.²⁴³ If a class is certified, the following step is to estimate the award of settlement. Even if trebled damages are typically waived in the settlement agreement, it is wrong to assume that the potential value of trebling is excluded in the settlement negotiation process. At its core, automatic trebling creates a good bargaining position for the plaintiff. The further assessment of deterrence weighs the components in Table 3 by assessing a rational actor’s position.

Certification: Given the complicated nature of certification, it is the primary element that rational agents weigh when conducting a cost-benefit analysis. Another point is to assess the judges’ reluctance to proceed with certain types of antitrust litigation. Only then may the rational agents assess the potential risks from settlement.

Settlement: Rational players must have forethought to the probability of conviction being almost 100% when the case is certified, because they will seek settlement, i.e. a lenient form of conviction.

²³⁸ Nicholas M. Pace and etc., *Insurance Class Actions in the United States*, RAND Institute for Civil Justice, xxi (2007), https://www.rand.org/content/dam/rand/pubs/monographs/2007/RAND_MG587-1.pdf (last visited Aug. 18, 2018).

²³⁹ See, e.g. *In re Hydrogen Peroxide Antitrust Litigation* 552 F.3d 305, 318 (3d Cir. 2008). For further discussion, see also Ariana Andreangeli, *Collective Redress in EU Competition Law: An Open Question with Many Possible Solutions*, 35 *World Competition* 529, 545-46 (2012).

²⁴⁰ Emery G. Lee III & Thomas E. Willging, *Impact of the Class Action Fairness Act on the Federal Courts*, Federal Judicial Center, 6 (2008), <https://www.fjc.gov/sites/default/files/2012/CAFA1108.pdf> (last visited Aug. 18, 2018). This study, however, does not give data about certification rates in antitrust class actions.

²⁴¹ Connor and Lande, *supra* note 226, at 455.

²⁴² See, e.g. Fitzpatrick, *supra* note 123, at 820 (also noting that Eisenberg-Miller study found averages 3.35 years in fee-shifting cases and 2.86 years in non-fee-shifting cases).

²⁴³ See *supra* note 159.

In turn, settled actions have a larger potential to internalize the damages caused due to far higher awards than government actions.

Trebling: Trebling is very important when negotiating terms of the settlement. However, the impact on the magnitude of a likely penalty is significantly reduced due to the fact that cases usually settle for amounts that are more close to actual damages than treble damages. Connor and Lande estimated that only around 20% of cartel settlements during 1990-2014 produced initial (or more) damages in settlements, while other cases generated less than single damages.²⁴⁴ An even more disappointing factor is that the average recovery ratio was only 66%.²⁴⁵ Indeed, there is little probability that rational actors calculate their illegal behavior on the basis of the potential value of trebling, because it is rarely applied in practice.

Liability: Defendants admit wrongdoing in settlements, but they usually admit no liability (moral or legal). Thus, there is no effect on a rational actors' behavior when they assess the costs and benefits of the infringement. In some cases, for example in *cy pres* settlements, the defendants may receive positive public response due to the significant 'donation' to charities.²⁴⁶

The relationship between two enforcement modes: Both enforcement methods take the less risky cases that have a relatively large chance of success. Yet, public enforcement, with its wide investigation tools, is better suited to detect wrongdoings than private enforcement. At the same time, private enforcement (especially class action lawsuits) is a more effective tool to increase the significance of liability when the case is certified.

Cartel managers: The managers foremost engage in a personal cost/benefit analysis of the probability of facing criminal or monetary sanctions. The data suggests that around 69% of individuals are convicted in DOJ proceedings.²⁴⁷ Furthermore, there is an existing fear that some corporations might prefer prison sentences for their own executives rather than giving significant payouts in private litigation. Thus, the time lags of infringements are not so valuable under optimal deterrence theory, because a criminal conviction can follow the manager even if he or she no longer holds the same position in the corporation.

Stock prices: The total 6.6% drop in share value is an aggregate of both enforcement modes. The simple model suggests that stock prices are driven by expectations²⁴⁸, thereby suggesting that the anticipated private litigation may have immediate effects on deterrence. In this respect, it must be borne in mind that the actual drop of share value by filing a private suit should be higher than 0.6%, but there is no reliable method to determine the exact impact (proportions) on stock prices.

Based on these conclusions, one could argue that class action litigation extends the deterrence objective through the prism of optimal deterrence. It is probably true that government actors have

²⁴⁴ Connor and Lande, *supra* note 226, at 1998.

²⁴⁵ *Id.* at 2009.

²⁴⁶ Wasserman, *supra* note 33, at 101.

²⁴⁷ See John M. Connor, *Problems with Prison in International Cartel Cases*, 56 *Antitrust Bull.* 311, 43 *tbl.* 3. (2011) (For the entire 1990–2009 period the individuals after DOJ proceedings were convicted 158 times out of 228 (69%)).

²⁴⁸ For further discussion, see, e.g. Michael D. Hurd & Susann Rohwedder, *Stock Price Expectations and Stock Trading*, National Bureau of Economic Research Working Paper 17973 (2012), <http://www.nber.org/papers/w17973> (last visited Aug. 10, 2018).

more tools and resources than private litigators to increase the probability of detection. However, it is equally true that private litigation is more efficient in increasing the magnitude of a monetary penalty. This is because a class action lawsuit has the ability to aggregate the negative expected value claims, sometimes totaling in millions of class members. Even if these claims are low individually, the anticipated aggregate value may push the wrongdoer to internalize the cost of the harm caused closer to the optimal level. In fact, it is hard to imagine other tool that could impose the same high monetary value.

Hence, it undeniably appears that achieving optimal deterrence would fail if private litigation, and class actions especially, were not included in the scheme together with the other two indispensable elements of deterrence: corporate fines and personal fines. Despite having a high potential to extend the monetary liability, class action litigation faces crucial obstacles. First, the complicated certification procedure reduces the probability of conviction. If the class is certified, the case is typically settled for amounts closer to actual damages rather than treble damages. As shown before, low settlement values provide low proportional recovery to an insignificant number of victims, meaning that wrongdoers internalize a low cost for the harm caused. As a consequence, class action litigation is not so efficient in increasing the level of the ‘net harm to others’ as it may seem from the first blush.

When compared with other two elements, class actions only serve a *secondary* function in achieving the objective of optimal deterrence. The crucial point is that government enforcement deters rational offenders even before they engage in anticompetitive conduct, while private remedies are rather assessed when the investigation is started or the action is brought to the court. This is because damages actions are subject to many restrictions, while public enforcement is reinforced by the possibilities of employing extensive investigatory tools. In addition, criminal prosecution of cartel managers primarily depends on how effective public enforcement is. Thus, it is perhaps overly optimistic to claim that ‘*private antitrust enforcement probably deters more anti-competitive conduct than the US Department of Justice’s anti-cartel program*’²⁴⁹. For private remedies to serve a better deterrent function, and potentially the equal deterrent function as public enforcement, some amendments are needed. In order to increase the rate of detection, private enforcers should be provided with additional incentives. One option may be that public enforcers would provide investigatory support when a stand-alone action is brought. Another option is to allow a more lenient approach in certifying antitrust class actions.²⁵⁰ In order to increase the total fine of collective litigation, the settlement awards may be capped for higher than actual award (for example, requiring to settle for double damages). Hence, it may force the wrongdoer to internalize the higher cost of the harm caused.

However, this *hypothetical* scenario cannot be implemented in practice. First, state investigatory powers will need to support private actions financially and in terms of resources. There is no reasonable justification for this amendment, since government enforcers lack resources for prosecuting all potential actions of their own. Second, a robust policy on certification has become a central safeguard against abusive litigation. Hence, relaxing certification may exacerbate ‘blackmail

²⁴⁹ Lande & Davis, *supra* note 210, at 315.

²⁵⁰ One example is that flexibility would be given for aggregating different sub-classes.

settlement'. Third, capping settlement would jeopardize the free will of the parties to decide on the final outcome of the case.

Even if we suppose that this hypothetical scenario was implemented, it would not ensure optimal deterrence. One issue is that there the combined rate of detection and prosecution (the multiplier) will be enhanced, but this increase should be minimal, and not a 'game changer'. First, there is no guarantee that each class will be certified and that each case will collect sufficient evidence for proving damages. Second, capped settlements may have dissuasive effects for plaintiffs, since defendants may be more reluctant to settle in some cases, either before or after certification. This is because the ultimate damages may not differ much from treble damages, for example, if double damages were set. In fact, capped settlements may reduce plaintiffs' incentives to sue in cases where early settlements would not be predicted. Another point is that capped settlements would not ensure the penalty, which would correspond to the required level of fines: around triple net harm to others. Under the most optimistic scenario, it can be assumed that double damages will be awarded to class members. After the deduction of case-related costs (contingency fees, administrative and expert fees), there is a possibility that class members will receive high proportional awards, or even full awards in some cases. However, this level is far away from the optimal deterrence, which would require to award at least three times of 'net harm to others'. Therefore, the element of under-deterrence should be observed. This statement is contrary to the critics who claim that class actions deter too much.²⁵¹ One of the most popular views is that the plaintiff-friendly class action mechanism, especially the possibility of treble damages, incentivizes private attorneys to bring too many class action suits (both meritorious and not) that lead to over-deterrence, resulting from over-enforcement.²⁵² However, it was already shown that treble damages are in practice lower than single damages. Instead, this paper relies on the approach that over-deterrence would occur if one of the conditions was met: first, the sanction is set at too high a level; second, the enforcement activities, which defines the levels of the probability of detection and conviction, is excessive.²⁵³ Indeed, the analysis has clearly shown that none of the conditions are fulfilled by class actions.

In conclusion, it should be stressed that the debate over optimal deterrence theory mainly regards cartel infringements. However, it does not mean that the private attorney general serves the same deterrent effects in other type of infringements, for example in case of monopolization. The fact that at least 90 percent of all federal antitrust cases are private actions is of crucial importance. It therefore suggests that private attorneys general bring much needed deterrence to antitrust enforcement, especially when public enforcers have neither the time nor the resources to prosecute all anticompetitive conduct. However, another viewpoint is that the effectiveness of cartel prosecution is the most important determinant factor in assessing the deterrence model. Indeed, hard-core cartels require much more attention due to their covert nature. If the probability of detection is low, such a system cannot be considered to provide much deterrence. To sum up, the effective anti-cartel deterrence system should be a function of three equal components acting together – competition authorities' fines, private (class action) damages claims and personal fines.

²⁵¹ See, e.g. JOHN C. COFFEE, *ENTREPRENEURIAL LITIGATION*, 134 (Harvard University Press 2015).

²⁵² Antitrust Modernization, *supra* note 16, at 247. In order to illustrate, the Commission noted that "some have argued that treble damages, along with other remedies, can over-deter some conduct that may not be anticompetitive and result in duplicative recovery. No actual cases or evidence or systematic over-deterrence were presented to the Commission, however."

²⁵³ Bucirossi et al., *Deterrence in Competition Law*, LEAR Study Discussion Paper No. 285, 6 (2009), <http://www.sfbtr15.de/uploads/media/285.pdf> (last visited Feb. 19 2018).

Under the current scheme, however, the private antitrust remedies are framed to serve only a secondary function.

3.6 CONCLUSION

The research question of this Chapter was the following:

How well do antitrust class actions in the United States fulfil compensation objectives and to what extent can they facilitate deterrence?

When addressing this question, it was found that antitrust class actions have not been as effective as theory predicts them to be. Building on this, the following findings were made.

1) The compensation goal in antitrust collective litigation fails to a large extent

This Chapter presented the success and failure presumptions of compensation. By applying the actual compensation rate of 40% in automatic distribution settlements and a 25% claiming rate in claims-made settlements, it was found that antitrust class actions fail to pass the defined threshold in small-stakes class actions. The class action device is determined to provide very low proportional compensation to a low number of victims due to the unique nature of antitrust litigation: widespread overcharge, high administrative fees, expensive counterfactual assessments and low settlement awards. Attorneys' overpayment has also been confirmed. Despite of class members remaining largely undercompensated, the class counsel usually reaps significant rewards without any connection to the (lack of) success of the distribution. It was argued that amounts higher than three times that of the expenditure costs can be already considered as overpayment. Consequently, the empirical data proved that the class counsel typically receives higher proportional compensation, which sometimes can even be tens of times higher compensation than the expenditure. In order to appreciate the *cy pres* controversy, the 20% failure presumption has been set; that is, if more than two out of ten *cy pres* settlements are frivolous. Because of the limited data available, there was no attempt to draw definite conclusions. It was found that dubious *cy pres* distributions most often occur in antitrust cases, suggesting that a majority of antitrust distributions attract dubious actions.

2) Antitrust collective actions, in any form, produce small impacts on the objective of deterrence

This Chapter assessed the impact of antitrust class action on deterrence through the elements of the optimal deterrence theory: probability of detection, probability of conviction and 'net harms to others'. It was found that the fulfilment of optimal deterrence requires three equal components acting together: corporate fines, personal sanction and damages actions. When compared with two other elements, the current scheme allows for private enforcement to serve only a *secondary* function.

It was determined that the DOJ enforcement has more effect on the probability of detection, but the class action litigation may score higher points in maximizing the monetary penalty. However, the full effect of deterrence is diminished due to the following factors. First, the courts are reluctant to certify antitrust class actions. Second, cases are settled for amounts closer to or around the actual

damages rather than treble damages. Third, class members receive less than actual damages, meaning that infringers internalize only low costs from the harm caused. Due to these obstacles, class action litigation does not deter rational actors during or before the antitrust violation; it has an effect only when the investigation is started.

However, even if private remedies were enhanced by additional support from public enforcers, by relaxing rules on certification and by capping settlements for higher than actual awards, optimal deterrence would not be achieved. It is highly questionable whether attorneys would bring more cases under the proposed model, as capping settlements may bring dissuasive effective for attorneys' incentives to sue. Therefore, the proportion of detecting and convicting cartels would remain similar, as in the current mechanism. Another viewpoint is that capped settlements would potentially ensure full award to class members, but this value is much lower than the optimal penalty, which necessitates awarding the damages at least as three times of the 'net harm to others'.

3.7 APPENDIX: SUMMARY OF AMENDMENTS

Page	Description of amendment	Explanation
51	Amendment in the title of the Chapter, adding "the United States".	It gives more clarification about the structure of the dissertation.
59	Additional data on the rates of class certification.	This important data was overlooked in the published article. Additional reference is added, numbered 34.
59	Additional discussion on the meaning of abusive litigation, based on the Hensler's study.	It gives a more insightful picture about abusive litigation if a class action lawsuit is funded by third party funders. Additional reference is added, numbered 37.
61	Additional discussion on the joint and several liability.	The discussion on the joint and several liability—deterrence-based measure—better explains the potential of abusive litigation. Additional references are added, numbered 48-49.
62	Hensler's view in favor of class actions is added.	Hensler gives a more insightful picture, as she supports the view that abusive litigation has less fear than perceived. For the amendment, additional references are added, numbered 63-66.
69	Additional statistics on the number of class actions both in federal and state courts.	This data gives a more comprehensive view about the actual numbers of class actions. Additional reference is added, numbered 124.
70	Additional data on the real value of treble damages after a settlement, based on the empirical study of Connor and Lande.	It gives more comprehensive data about the effectiveness of class actions in compensating victims. Additional references are added, numbered 128-129.
84	Simard's formula estimating the deterrent value of small-stakes class actions is presented.	It gives a more insightful view about the standards of deterrence in small-stakes class actions. Additional reference is added, numbered 221.
85	Explanation on optimal deterrence theory and its determinants.	Clarification helps to better determine the scope and boundaries of optimal deterrence. Additional references are added, numbered 225-226.
86	The approach of Davis and Lande is presented regarding the comparison of corporate fines, personal fines and damages claims in the form of US dollars.	It gives a more insightful picture about the standards of deterrence. Additional reference is added, numbered 227.
86	The possibility of class action lawsuits to substitute the actions of public enforcers is additionally discussed.	The findings of Connor and Lande give a more insightful view about the relationship between stand-alone and follow-on class actions. In addition, it provides important data regarding the recovery ratio (size of antitrust settlements relative to damages). Additional reference is added, numbered 230.
87	Additional data by the DOJ regarding the trends in criminal enforcement.	This data gives more insightful picture about the increased public enforcement, which helps to overview the activities of the Antitrust Division of DOJ. Additional references are added, numbered 233-234.
87	Additional empirical data on corporate counsel's ability to anticipate the class action.	The findings by Simard tell that corporate counsel can foresee class actions, and this potentially adds to deterrence. This is in contrast with the thesis author's view that "the strength of public enforcement is the most important element affecting rational actors' behavior and stand-alone actions of private enforcers have little impact". Therefore, Simard's view gives a more insightful picture to a general discussion in the dissertation. Additional references are added, numbered 235-237.
88	Additional figures on the rates of certification and settlements.	Additional data by the RAND institute and the Federal Judicial Center. Additional references are added, numbered 238-240.
89	Additional findings on the effectiveness of trebling.	It gives a more insightful analysis about the average recovery rates. Additional references are added, numbered 244-245.
91	Additional discussion on over-deterrence.	This was involved as the published article missed this important assessment. Additional references are added, numbered 251-253.

