

An Economic Interpretation of Rule 23(b)(3) for Antitrust Classes

Sean Durkin¹

Abstract

Class counsels have incentives to define classes to maximize their profits. Rule 23(b)(3) places some limits on how broadly class counsels can define classes, but it does not provide much guidance on how courts should determine if a class is too broad. This article describes the incentives class counsels face in determining the profit maximizing class definition and discusses reasons why profit maximizing class definitions can be inefficiently broad. These economics principles suggest alternative interpretations of the Rule 23(b)(3) predominance and superiority requirements adopted by courts. I explain why these alternative explanations would enhance efficiency by leading to more narrowly defined classes.

¹ Vice President, CRA and Lecturer, University of Chicago Harris School of Public Policy.

I. INTRODUCTION

Class actions can have both positive and negative effects.² The positive effects arise because class actions can lower costs to individual class members, which can lead to enhanced deterrence, and because class actions can also lower costs for the legal systems. The negative effects of class actions arise because individual class members must give up their ability to advocate on their own behalf if they participate in a class, and the interests of the class counsel may not be aligned with the interests of individual class members. Class actions also have been criticized because the potential for large payoffs for class counsel can lead to overdeterrence.

To certify a class in an antitrust case, a class counsel must satisfy the requirements in Rule 23(a) and, typically, the requirements of Rule 23(b)(3).³ The Rule 23(a) requirements are often referred to as numerosity, commonality, typicality, and adequacy. A class counsel seeking to satisfy a Rule 23(b)(3) class must establish that: 1) common issues predominate over individualized issues; and 2) the class is superior to other methods of adjudicating the controversy. These are often referred to as the predominance and superiority requirements.

In many antitrust cases, a court's willingness to certify a class hinges on whether class counsel can convince the court that it has satisfied the predominance requirement. Economics typically plays a central role in class certification decisions. Economic experts offer testimony on whether the class counsel has satisfied courts' interpretation of the Rule 23(b)(3) requirements. Courts' weighing of the merits of economic experts' opinions on whether common issues predominate is often central to their class certification decisions.

Economics has played a more limited role in how courts have interpreted Rule 23(b)(3). For example, courts have often held that the predominance requirement has been satisfied if a class counsel can demonstrate, through common evidence, that all, or nearly all, class members suffered at least some harm from the conduct challenged as anticompetitive. In many cases, courts have simply presumed that the predominance requirement is necessarily satisfied in

² Thomas S. Ulen, *An Introduction to the Law and Economics of Class Action Litigation*, European Journal of Law and Economics, 32 (May 2011) pp. 185-203.

³ [Rule 23. Class Actions | Federal Rules of Civil Procedure | US Law | LII / Legal Information Institute.](#)

conspiracy cases.⁴ Courts also typically find that the superiority requirement has been satisfied when a class counsel can demonstrate that the proposed class action is superior to individual actions by class members. However, these standards are not based on any economic principles suggesting that the economic benefits of certifying the proposed exceed the economic costs when all, or nearly all, class members suffered at least some harm.

The limited reliance on economics in interpreting Rule 23(b)(3) and developing class certification standards is somewhat surprising because economics is readily amenable to evaluating the efficiency effects of a rule limiting class actions. Class counsels are profit maximizing firms, so they have incentives to define classes to maximize their profits. Implicit in the existence of Rule 23 in general and the predominance requirement in particular is the recognition that a class counsel may have an incentive to define a class too broadly. Rule 23(b)(3), therefore, acts to restrict class counsels' ability to define their profit maximizing classes, and economics can be used to evaluate why such limitations are necessary and when those limitations should be imposed.

The limited use of economics is also somewhat surprising because it is generally recognized that courts have applied Rule 23(b)(3) unevenly.⁵ Classes with similar fact patterns and similar testimony from economic experts are certified in some cases and not certified in others. An economic interpretation of Rule 23(b)(3) has the potential to lead to more consistent class certification decisions.

Some authors have used economics to identify the different forms of the costs and benefits of class actions by examining the incentives of class counsels and potential class members.⁶ While helpful in identifying the different forms of costs and benefits, these authors have not attempted to relate these economic principles to the interpretation of Rule 23(b)(3) and,

⁴ See, for example, *In re Juul Labs, Inc. Antitrust Litigation*, No. 3:20-cv-02345-WHO, Order Granting in Part Motions for Class Certification and Denying Motions to Strike or Exclude (N.D. Cal. Feb. 26, 2026) (Orrick, J.).

⁵ See, e.g., William F. Cavanaugh, David Kleban, and Voratida Sangchant, Navigating Class Certifications in the Antitrust Context, *Global Competition Review, Americas Antitrust Review 2025*.

⁶ See, e.g., Alberto Cassonea and Giovanni B. Ramelloa, The Simple Economics of Class Action: Private Provision of Club and Public Goods, *European Journal of Law and Economics*, Vol 32 pp. 205-224 (May 2011). Thomas S. Ulen, *An Introduction to the Law and Economics of Class Action Litigation*, *European Journal of Law and Economics*, 32 (May 2011) pp. 185-203. Choi, Albert H. & Spier, Kathryn E., *Class Actions and Private Antitrust Litigation*, 14 *Am. Econ. J.: Microeconomics* 131 (2022).

therefore, do not provide much guidance on how to balance the economic costs and benefits for purposes of class certification.

In this article, I take a novel approach to interpreting Rule 23(b)(3) by using the tools of economics to first explain the incentives behind a class counsel's class definition decision and then explain why it may be efficient to restrict the ability of a class counsel to define its profit maximizing class. These economic insights suggest an interpretation of Rule 23(b)(3) that differs from courts' typical interpretation, and I explain why this economic interpretation would enhance efficiency by leading to more narrowly defined classes.

I begin by using economics to explain a class counsel's incentives in choosing its profit maximizing class definition. There are often several options a class counsel has in defining a class. For example, the class counsel may have to decide which products, geographic areas, and time periods to include in the class. There is often variation across buyers and purchases in the effect of anticompetitive conduct on buyers. As a result, a class counsel's expected incremental revenue from defining a broader class tends to fall as the class breath rises. A class counsel's incremental costs tend to rise as the class breath rises because it gets increasingly more difficult to establish that there was common impact as the class gets broader. This means that class counsels' profit maximizing class sets the incremental benefits from expanding the class equal to the incremental costs. In this sense, a class counsel's profit maximizing class definition is like profit maximizing firms setting their output levels such that marginal revenue is equal to marginal cost.

I then address the issue of why a rule constraining a class counsel's profit maximizing class definition could be necessary. In the absence of some form of market failure, allowing competitive firms to maximize their profits often leads to efficient outcomes. This means that a rule that constrains a class counsel from choosing its profit maximizing class definition could be justified if there is some form of market failure that causes a class counsel's profit maximizing class definition to be inefficiently broad.

I discuss three potential forms of market failure that could cause a class counsel in an antitrust case to define a class too broadly. First, class counsels often propose that class members' damages awards equal the average overcharge across all class members or the average

across a group of class members. There is often variation in overcharges across class members, so allowing a class counsel to define its profit maximizing class can harm buyers that have above average overcharges. Second, once a class counsel is assigned to lead a class, it typically does not face competition from other class counsels. The absence of competition prevents buyers with above average overcharges from participating in narrower classes with higher damage awards, and it induces class counsels to define classes that can be inefficiently broad. Third, a class counsel's profit maximizing class definition can induce some class members to opt out of the class, which raises costs to the legal system. This can lead to inefficiently broad classes because a class counsel does not have an incentive to take into consideration the effect of its class definition on legal system costs.

Next, I present a simple numerical example which illustrates how these three factors can affect potential class members, the class counsel, and the legal system. I show that a class counsel will have an incentive to define a class to include buyers who have low expected overcharges if the number of these low-impact buyers is sufficiently large. A broadly defined class benefits low-impact buyers but harms higher impact buyers because it lowers the average expected overcharge. Defining the class this way can also induce some higher impact buyers to opt out of the class, and this raises costs to the legal system. I also explain how the addition of competition from another class counsel can lead to more narrowly defined classes and raise total surplus.

I then use these results to provide an economic interpretation of Rule 23(b)(3), and I compare that to how courts have traditionally interpreted the predominance and superiority requirements. Economics suggests that satisfying the superiority requirement should require establishing that the proposed class is superior to a more narrowly defined class. This is different from courts' typical interpretation of the superiority requirement, which is that a class counsel need only demonstrate that the proposed class is superior to individual actions by class members. An economic interpretation of the common impact requirement is that a class counsel should be required to demonstrate that the overcharges of class members are not sufficiently different that a large share of class members would opt out of the proposed class. Again, this is different from the way that courts have traditionally interpreted common impact, which is that nearly all customers have suffered at least some impact. This economic interpretation of the superiority and

predominance requirements would lead to more narrowly defined classes, and it would raise total surplus because it would reduce the impact of the sources of market failure described above.

I conclude by discussing some of the evidence that can be used to determine whether class counsels have satisfied the economic interpretation of Rule 23(b)(3). First, the regression analyses typically used by economists to calculate average overcharges across class members can often be used to evaluate whether differences in overcharges across groups of class members are sufficiently large that the class is likely to be inefficiently broad. Second, classes can be inefficiently broad when establishing that some class members were harmed requires significantly more evidence that is required to establish that other class members were harmed. Third, evidence that a large share of class members likely will, or even already have, opted out of the class can be evidence that a class may be inefficiently broad.

II. PROFIT MAXIMIZING ANTITRUST CLASS DEFINITIONS IN THE ABSENCE OF RULE 23(B)(3)

Class counsels are profit maximizing firms, and they must define a class. This means that they have incentives to choose a class definition that maximizes their profits. In this section, I begin by describing the class definition options available to a class counsel in antitrust cases. I then use economics to describe the class definition that maximizes a class counsel's profits.

A. Class Definition Options

Antitrust class actions often begin with many class complaints being filed in different courts in which different counsel propose to represent a class of buyers that were allegedly impacted by anticompetitive conduct. Those cases are then consolidated by the Judicial Panel of Multidistrict Litigation ("JPML") and the consolidated case is transferred to a single judge overseeing the multidistrict litigation ("MDL"). Several of the class counsels typically that filed complaints vie to be the lead class counsel, and the judge assigns a lead counsel and/or steering committee. The lead counsel will then file a consolidated complaint that includes a class definition. The typical justification for consolidation into a single case is that consolidation enhances judicial economy and ensures uniform ruling on key questions.⁷

⁷ See, e.g., Isaak Elkind, Elkind, *Efficiency at the Price of Accuracy: The Case for Assigning MDLs to Multiple Districts and Circuits*, 77 Vand. L. Rev. 599 (2024).

Class definitions in antitrust cases often include information on the products at issue, the dates the products were purchased, the geographic location of the buyers or sellers, and the channel/s through which the products were sold. This means that a class counsel may have wide latitude in defining the class. For example, suppose that the class complaints were filed in response to plea agreements in which companies and/or employees of those companies admitted to colluding with rivals over the sale of some products, in some years, sold in some areas, and sold through some channels. The lead class counsel can choose to define the class narrowly to include sales described in plea agreements. It could also claim that the admitted collusion had a broader impact than that described in the plea agreements and choose to define the class more broadly to include additional products, years, geographic areas, or channels. Class counsel could also claim that the defendant(s) engaged in additional forms of anticompetitive conduct other than the conduct covered by the plea agreements and then expand the class, arguing that this additional conduct affected additional buyers and purchases.

In the *In Re Optical Disk Drive Products Litigation*, for example, one supplier of optical disk drives pled guilty to rigging bids from June 2004 through September 2008 for some of the auctions conducted by HP and Dell for purchasing optical disk drives.⁸ In its consolidated complaint, counsel for the direct purchaser class defined a broad class that included all buyers of optical disk drives sold by all defendant sellers of optical disk drives from 2004 through 2010.⁹ The direct purchasers also alleged that the optical disk drive suppliers engaged in additional anticompetitive conduct other than bid rigging on HP and Dell auctions.¹⁰ The direct purchaser class was certified for settlement purposes,¹¹ and several direct purchases opted out of the class.

The *In Re Broiler Chicken Antitrust Litigation* is another example in which class counsel for a direct purchaser class defined the class to include buyers and purchases beyond those covered by plea agreements. The DOJ indicted several employees of producers, alleging that

⁸ *The United States of America v. Hitachi-LG Data Storage, Inc.*, No. CR 11-00724-RS, Plea Agreement, Nov. 8, 2011.

⁹ *In Re Optical Disk Drive Antitrust Litigation Case*, No. 3:10-md-2143 RS, ND California, Order Denying Motions for Class Certification, (Oct 3, 2014).

¹⁰ *Ibid.*

¹¹ *In re Optical Disk Drive Antitrust Litig.*, No. 3:10-md-02143 RS, MDL No. 2143 (N.D. Cal. Mar. 22, 2013).

they rigged bids in auctions held by quick service restaurants.¹² Pilgrim's Pride entered into a plea agreement with the DOJ in which it admitted engaging in price fixing and bid rigging from 2012 to 2017.¹³ Tyson also reached a cooperation agreement with the DOJ.¹⁴ The direct purchaser class counsel defined a broad class that included all purchasers of broiler chickens from all defendant suppliers of broiler chickens from 2008 to 2020, and the direct purchasers alleged that the defendants engaged in anticompetitive conduct other than rigging bids to quick-service restaurants.¹⁵ The direct purchaser class was certified, and a large number of direct purchasers opted out of the class.¹⁶

Similar reasoning applies to cases in which there are judgements that a company or companies engaged in anticompetitive conduct that affected some of their sales. For example, Microsoft faced a series of class action lawsuits in state courts after it was found to have illegally maintained an operating system monopoly by engaging in conduct related to Netscape and Java from 1995 to 1999. The class counsel in these lawsuits defined the classes to include indirect purchasers who bought personal computers with Windows. The complaints in these cases included allegations that Microsoft engaged in conduct other than conduct found to have constituted illegal monopoly maintenance, and the classes were defined to include buyers who purchased computers both before 1995 after 1999.¹⁷

A class counsel often has wide latitude in defining the class, even in cases without plea agreements or judgements. In some cases, class counsels allege that a defendant or defendants engaged in anticompetitive conduct that could have effects that vary across geographic regions. Competition often occurs at the local level, and there can be variation in the market power of the defendant or defendants across local areas. In this setting, class counsels must decide how many of those local areas to include in the class definition. As an example, in its consolidated direct

¹² [Office of Public Affairs | Six Additional Individuals Indicted On Antitrust Charges In Ongoing Broiler Chicken Investigation | United States Department of Justice.](#)

¹³ [Plea Agreement: U.S. v. Pilgrim's Pride Corporation.](#)

¹⁴ [Tyson Foods Inc. - Tyson Foods' Statement on Department of Justice Indictment in Broiler Chicken Investigation.](#)

¹⁵ Direct Purchaser Plaintiffs' Fifth Amended and Consolidated Class Action Complaint, *In Re Broiler Chicken Antitrust Litigation*, Case No. 1:16-cv-08637

¹⁶ [Microsoft Word - Amended Broilers NOC Opt Out Update Dec - Executed.](#)

¹⁷ See, for example, *Comes v. Microsoft Corp.*, Complaint, No. [state docket no.] (Iowa Dist. Ct., Polk County Feb. 18, 2000).

purchaser class complaint, class counsel in *In Re Local TV Advertising Antitrust Litigation*¹⁸ defined the class to include 127 of the 210 local DMAs in which at least two of the defendants competed.¹⁹

B. The Profit Maximizing Class Definition

The profits a class counsel can expect from representing a class depend on its expected revenue and expected costs. In this section, I discuss how the class counsel's class definition can impact its expected revenue and expected costs.

A class counsel's expected revenue can depend on several factors. First, expected revenue depends on how many buyers participate in the class. A more broadly defined class with more buyers and/or more purchases will, other things equal, tend to have higher expected revenue. Second, expected revenue depends on its estimates of the overcharges class members paid because of that conduct. Third, expected revenue depends on its expectation that it will be able to prevail in convincing a court that the defendants engaged in anticompetitive conduct because class counsel's expected revenue is higher when there is a higher probability of prevailing.

In many antitrust cases, there is likely to be variation across buyers in the effect of their inclusion in the class on the class counsel's expected revenue. This can be because cartels may not be uniformly effective at raising prices across all buyers. Cartel members can have incentives to deviate from the cartel agreement, and those incentives can vary across buyers and purchases. In addition, some buyers can be more effective than others at countering the effects of a cartel agreement on their prices. In unilateral conduct cases, the allegedly anticompetitive conduct can often have procompetitive effects that benefit buyers, and the net impact of the procompetitive and anticompetitive effects can vary across buyers. There is also likely to be variation across buyers in a class counsel's expectation that it can prove those buyers' prices were elevated by anticompetitive conduct. For example, it may be easier to prove that firms in an industry

¹⁸ The DOJ investigated information sharing among owners of TV stations regarding local TV advertising, but that investigation did not lead to any plea agreements.

¹⁹ Consolidated Second Amended Antitrust Class Action Complaint, *In Re Local TV Advertising Antitrust Litigation*, No. 18 C 6785.

colluded in one period than in other periods or easier to prove that firms colluded on sales to one set of buyers than on sales to other buyers.

A class counsel has an incentive to define the class to include, at a minimum, those buyers with the highest expected overcharges. The class counsel will also have an incentive to add more buyers with the higher expected overcharges to the class before adding buyers with lower expected overcharges. This means that a class counsel's expected incremental revenue from expanding the class falls as class size rises because expanding the class means adding buyers with lower expected overcharges.

Another feature of many antitrust class actions is that class counsels often propose that individual class members' damages awards equal the estimated average overcharge across all class members or the average estimated overcharge for groups of class members. Class counsels and their experts often justify this by arguing that an increase in average prices means that all class members paid higher prices. Average overcharges will tend to fall as class size rises because a larger class will include more buyers with lower expected overcharges, and this lowers average damages. Damages averaging is, therefore, another reason why expanding the class can reduce expected incremental revenue for a class counsel.²⁰

A class counsel's incremental expected costs from expanding the breath of the class can also increase as the breath of the class increases. The expected cost to the class counsel of providing evidence sufficient to convince a court that anticompetitive conduct raised prices for some purchases may be quite low. For example, when there are plea agreements, a class counsel may, depending on the admissions in the plea agreements, not need much evidence beyond the plea agreements to establish there was a conspiracy during the period covered by the plea agreements that led to higher prices. However, a class counsel may be required to develop additional evidence to convince a court that a conspiracy existed in the period immediately before the period covered by the plea agreements, and a class counsel may be required to

²⁰ In fact, damages averaging can mean that expanding the class size can potentially reduce the class counsel's total and not just incremental revenue. Expanding the class lowers class counsel's expected revenue if the increase in expected revenue from adding additional buyers or purchases to the class is less than the reduction in average damages from expanding the class.

develop even more evidence to convince a court that a conspiracy existed in a period several years before the period covered by the plea agreements.

A class counsel is entitled to collect reasonable attorney fees from the defendant(s) if it prevails at trial.²¹ This means that a class counsel's expected costs depend on the probability that it can convince a court that all class members were impacted by the challenged conduct. Expanding the class adds buyers who were less likely to have been impacted by the challenged conduct, so expanding the class raises the probability that the class counsel will not be able to recover all, or even any, of its fees. This is another reason why the incremental expected costs for class counsel rises as the size of the class rises.

A class counsel's expected incremental revenue and costs from expanding the class also depend on the ability of class members to opt out of the class. Participating in a class often means getting the average overcharge of all class members or a group of class members, so buyers with above average overcharges can have smaller expected revenue from participating in a class than from opting out. A buyer will have an incentive to opt out of the class if the difference between its expected damages award from opting out and from participating in the class is large enough to offset the expected costs of being an opt-out plaintiff. Expanding the class breadth leads to lower average damages and lower damages awards for class members, so it can induce some buyers to opt out of the class. This means that a class counsel has an incentive to take into consideration the effect of its class definition on the incentives of class members to opt out of the class.

How does the possibility of a settlement affect the profit maximizing class definition? Class counsels often settle with a defendant or defendants before going to trial, and many buyers that opt out of classes settle with the defendant/s before going to trial. The willingness of classes to opt out to settle and the value of those settlements depends on their expected profits from going to trial. This means that a class counsel has an incentive to choose the profit maximizing class definition by setting the incremental expected revenue equal to the incremental expected costs, even if there is a possibility that there may be a settlement. Similarly, buyers have an incentive to base their decisions on whether to participate in the class based on a comparison of

²¹ [15 U.S. Code § 15 - Suits by persons injured | U.S. Code | US Law | LII / Legal Information Institute.](#)

the expected profits from participating in the class if it goes to trial with the expected profits from opting out if they go to trial. This is true, even if there is a possibility of a settlement before trial.

In summary, a class counsel's expected incremental revenue tends to fall, and its expected incremental costs tend to rise as the breath of the class grows. In this setting, economics implies that it is profit maximizing for a class counsel to define the class such that the expected incremental revenue of adding more buyers and/or purchases to the class definition equals the expected incremental costs. This is related to the general condition that the profit maximizing output level for a firm sets its marginal revenue equal to its marginal cost.

III. WHY IS RULE 23(B)(3) NECESSARY?

Above, I explained the economic incentives class counsels face in defining the class. In this section, I explain how Rule 23(b)(3) acts as a constraint on a class counsel's ability to choose its profit maximizing class definition, and I explain why, from an economic perspective, it can be efficient to impose constraints on a class counsel's class definition.

A. Profit Maximization and Efficiency

To certify a class in an antitrust case, a class counsel must convince a court that it has satisfied Rule 23(b)(3) based on the class it has defined. If a court determines that the class counsel has failed to satisfy Rule 23(b)(3), then in most instances the case would not precede as a class action.²² Individual named plaintiffs' may continue their case, but the inability to get a class certified often means that the class counsel's profits from representing the class are negative. As a result, Rule 23(b)(3) acts as a potential constraint on a class counsel's ability to define its profit maximizing class. Stated differently, a class counsel may have an incentive to define a class more narrowly than its profit maximizing class to satisfy the requirements of Rule 23(b)(3).

In the absence of some form of market failure, economic principles suggest that allowing firms in competitive markets to maximize their profits is often efficient in that it maximizes consumer plus producer surplus. Surplus is maximized in this setting because: 1) producers choose their profit maximizing output levels to set their marginal revenue equal to their marginal

²² As I discuss in more detail below, a court could choose to certify a narrower class than the one proposed by the class counsel, and it could also choose to certify narrower sub-classes of buyers.

costs; and 2) buyers purchase quantities such that their marginal willingness to pay equals the price. If the buyer is a firm purchasing an input, it has an incentive to purchase the quantity of inputs that sets the incremental profit from buying an additional input equal to the price of the input. In the absence of some form of market failure, there is often no economic reason to impose a constraint on the ability of firms to maximize their profits.

In general, there are several types of market failure that could mean allowing firms to maximize their profits will not be efficient. First, firms' profit maximization decisions may not be efficient if there are externalities affecting buyers, sellers, or both. Externalities exist when the decisions of individual buyers or sellers impact the welfare of other buyers or the profits of other sellers. For example, when buyers and sellers interact through networks, sellers' decisions to participate in a network can benefit other sellers and buyers. Sellers often do not have the incentive or ability to internalize the external effects. This means that sellers' profit maximizing participation decisions may not maximize surplus.

Second, profit maximization may not be efficient if firms in an industry have substantial market power. Profit maximizing output levels for firms with substantial market power may be lower than those in a competitive industry, and this can reduce consumer surplus and lead to deadweight loss. Allowing firms with substantial market power to choose their profit maximizing output levels can lead to lower surplus.

Third, profit maximizing decisions may not be efficient if total surplus depends on something other than producer and consumer surplus from the sales of a product. For example, if total surplus depends on air quality, then the profit maximizing output level of polluting firms in a competitive industry may not maximize total surplus because producers do not have an incentive to take into consideration the effect of their decisions on air quality. This constitutes a form of market failure because there is no price firms must pay for polluting. A rule that restricts polluting firms from choosing their profit maximizing output levels may enhance efficiency.

B. Profit Maximization and the Efficiency of Class Definition Decisions

Like profit maximizing firms more generally, a class counsel has an incentive to expand the class size up to the point where the expected incremental revenue equals the expected incremental costs. Similarly, buyers have an incentive to participate in the class if their expected

profits from participating exceed the expected profits from opting out. Therefore, a class counsel's profit maximizing class definition would typically be efficient in the absence of some form of market failure. Since Rule 23(b)(3) can prevent a class counsel from maximizing its profits, it could only enhance efficiency if there is some form of market failure that causes a class counsel's profit maximizing class definition to be inefficient.

A class counsel's class definition may not be efficient because externalities can impact the welfare effects of class definitions when: 1) the damages awarded to individual class members depend on the average damage of all class members or the average of a group of class members; and 2) there are differences in overcharges across buyers. As I discuss in more detail below, this means that expanding the class can harm some class members because it lowers the average overcharge for all class members.

A class counsel's class definition also may not be efficient because class counsels are not subject to the same type of competitive constraints faced by firms in competitive markets. While consolidating different complaints into a single class can enhance efficiency by eliminating duplication, it does so at the expense of eliminating competition. Class counsels sometimes compete to convince a judge that they should be appointed the lead or co-lead counsel of an MDL, but that competition is not typically based on their class definition decisions.²³ Class counsels also implicitly compete against opt-out counsels because class members have the option to opt-out and hire an opt-out counsel. However, the fact that a class counsel's class definition is not constrained by the class definitions of other class counsels means that its profit maximizing class definition may not be efficient.

Finally, an important rationale for class actions is that they promote judicial economy. This means that, from the perspective of the legal system, efficiency depends on more than just consumer and producer surplus. However, a profit maximizing class counsel does not have an incentive to take into consideration the fact that its profit maximizing class definition can raise costs to the legal system by increasing the number of opt-out plaintiffs. This means that a rule that limits a class counsel from choosing its profit maximizing class definition can enhance

²³ [Structuring Leadership and Personnel Decisions | MDL Toolkit – Center on the Legal Profession](#).

efficiency by reducing costs to the legal system, even if it lowers producer plus consumer surplus.

C. Numerical Example

The analysis above suggests that restricting the ability of a class counsel to choose its profit maximizing class definition may be able to enhance efficiency. In this section, I present a simple numerical example that illustrates the impact of restricting a class counsel's class definition decisions on buyers, the class counsel, and costs to the legal system. This example also shows why Rule 23(b)(3) may be able to raise total surplus.

In the example, I assume that there are three types of buyers: high, medium, and low-impact. High-impact buyers are those most directly affected by the conduct. As above, high-impact buyers could be those whose purchasers were covered by plea agreements. Medium-impact and low-impact buyers are those that are less likely to be affected by the challenged conduct. Table 1 contains information on the assumptions I make about number of these different types of buyers. There are five times more low-impact buyers (500) than high or medium-impact buyers (100 each). This assumption reflects the fact that there are often many additional buyers or purchases that are less likely to have been impacted by challenged conduct that a class counsel could potentially add to the class.

Table 1 also shows the expected overcharges for the different groups of buyers. Expected overcharges are 600 per buyer for high-impact buyers, and this is higher than the expected overcharges per buyer of 400 for medium-impact buyers and 100 for low-impact buyers. High-impact buyers have the highest expected overcharges because they are most directly impacted by the challenged conduct and because the probability of being able to prove that they were affected by the challenged conduct is higher. I assume that class members and class counsel have the same expectations of overcharges and costs for different types of buyers.

Expected costs of opting out include direct payments to opt-out counsel and any share of their damage award paid to the opt-out counsel if the opt-out counsel works on a partial contingency basis. As shown in Table 1, the expected costs per buyer of opting out are lowest for high-impact buyers (400) because the cost of developing evidence to establish that they were impacted is lower. In addition, their costs are typically recoverable if they prevail at trial, so the

likelihood that low-impact buyers' opt-out costs are zero is higher. The expected costs per buyer of opting out for medium-impact and low-impact buyers are 450 and 1000.

High-impact buyers have higher expected overcharges and lower expected costs of opting out, and their expected profits from opting out are 200. Both medium-impact and low-impact buyers' profits from opting out are negative. This implies that medium-impact and low-impact buyers would never opt-out.

TABLE 1

| | High-Impact | Medium-Impact | Low-Impact |
|--------------------------|-------------|---------------|------------|
| Number of buyers | 100 | 100 | 500 |
| Expected overcharge | 600 | 400 | 100 |
| Opt-out costs | 400 | 450 | 1000 |
| Expected opt out profits | 200 | -50 | -900 |

For each possible class definition, Table 2 contains information on: 1) the average expected overcharge; 2) the expected profits from participating in a class for the different types of buyers; and 3) the class counsel's expected costs and profits. I assume that buyers that participate in the class receive the average overcharge of all class members. I also assume that the class counsel's expected costs are higher when it defines the class to include medium-impact and low-impact buyers.²⁴ As I discussed above, it may be more difficult to establish that medium- and particularly low-impact buyers' prices were elevated by anticompetitive conduct.

TABLE 2

| | High-Impact class | High- and Medium-Impact class | All buyer class | All buyer class with opt outs |
|--|-------------------|-------------------------------|-----------------|-------------------------------|
| | | | | |

²⁴ Comparing the costs in Tables 1 and 2 implies that individual buyers' opt out costs are lower than the costs for the class counsel representing them but higher than the class counsel's per member costs. This is consistent with class counsel being able to spread their costs over more buyers and with opt out counsel being able to rely on the evidence developed by the class counsel.

| | | | | |
|-----------------------------|--------|--------|--------|--------|
| Average overcharge | 600 | 500 | 214 | 150 |
| High-impact buyer profits | 420 | 350 | 150 | |
| Medium-impact buyer profits | | 350 | 150 | 105 |
| Low-impact buyer profits | | | 150 | 105 |
| Class counsel costs | 10,000 | 12,000 | 15,000 | 15,000 |
| Class counsel profits | 8000 | 18,000 | 30,000 | 12,000 |

The first column in Table 2 includes the information described above if the class is defined to include only high-impact buyers. The average expected overcharge per buyer for class members is 600, which is just high-impact buyers' average expected overcharge. I assume that the class counsel keeps 30 percent of the damages award, and that there are no direct costs to class members of participating in a class. The expected profits earned by high-impact buyers from participating in the class are 420, which is 70 percent of their expected overcharge. Those expected profits exceed high-impact buyers' expected profits from opting out (200), so they would participate in a class defined to include only high-impact buyers. Medium-impact and low-impact buyers' expected profits per buyer from opting out are negative, so they would not sue on their own if the class counsel defined a class to only include high-impact buyers. Class counsel's expected profits from defining a class to only include high-impact buyers are 8,000.²⁵

The second column in Table 2 contains the same information if the class is defined to include high-impact and medium-impact buyers. The expected average overcharge for a class of high-impact and medium-impact buyers is 500.²⁶ Buyers' expected profits from participating in a class of high-impact and medium-impact buyers are 350 because they keep 70 percent of the average overcharge.²⁷ High-impact buyers expected profits of 350 are lower than the 420 in expected profits if the class was defined to include only high-impact buyers, so high-impact buyers are worse off with the broader class. However, their 350 in expected profits are still

²⁵ $8000 = 0.3 * 600 * 100 - 10,000$.

²⁶ $500 = (600 * 100 + 400 * 100) / 200$.

²⁷ $350 = 500 * 0.7$.

higher than their 200 in expected profits from opting out, so they would participate in the class. Medium-impact buyers would also participate in the class because their profits from opting out are negative.

Class counsel's expected profits from defining a class to include high-impact and medium-impact buyers is 18,000,²⁸ and this exceeds the 8,000 in expected profits it would earn from defining a class to only include high-impact buyers. This means class counsel would have an incentive to expand the breadth of the class beyond just high-impact buyers because the incremental revenue from adding medium-impact buyers exceeds the incremental costs.

The third column in Table 2 shows the relevant values for a class defined to include all buyers. The expected average overcharge for a class consisting of all buyers is 214.²⁹ Buyers' expected profits from participating in a class that includes all buyers is 150.³⁰ High-impact buyers would choose to opt out of a class defined to include all buyers because 150 is less than high-impact buyers' expected profits from opting out of 200.

The fourth column in Table 2 shows that the expected average overcharge for a class, defined to include all buyers, that includes only medium-impact and low-impact buyers is 150 because high-impact buyers opt out.³¹ The expected profits of medium-impact and low-impact buyers from participating in the class are 105.³² Medium-impact buyers would still participate in the class, because their profits from opting out are negative. This means that the decision of high-impact buyers to opt out of the class does not change the incentives of medium-impact buyers to participate in the class.

Class counsel's expected profits are 12,000 if it defines a class to include all buyers, but high-impact buyers opt out of the class.³³ This is less than the 18,000 in profits it would earn if it had defined the class to include only high-impact and medium-impact buyers. The incremental revenue from adding low-impact buyers to the class is less than the incremental cost, so the class counsel's profit maximizing class definition includes high-impact and medium-impact buyers. In

²⁸ $22,000 = .03 * 200 * 500 - 12,000$.

²⁹ $214.3 = (600 * 100 + 400 * 100 + 100 * 500) / 700$.

³⁰ $150 = 214.3 * 0.7$.

³¹ $150 = (400 * 100 + 500 * 100) / 600$.

³² $105 = 150 * 0.7$.

³³ $12,000 = 0.3 * 105 * 600 - 15,000$.

this example, low-impact buyers do not participate in the class, and they do not sue on their own because their expected damage award is lower than their expected costs.

It is not profitable for the class counsel to define a class to include all buyers because the extra profits from adding low-impact buyers is not enough to offset the reduction in profits caused by a reduction in average overcharges, an increase in costs, and the loss of class members because high-impact buyers opt out. Table 3 shows the values for the variables in Table 2 under the modified assumption that there are 750 rather than 500 low-impact buyers. I assume all other values in Table 1 are the same.

The first two columns in Table 3 are the same as those in Table 2. This is because the profits from participating in a class of high-impact buyers or a class of high-impact and medium-impact buyers are not affected by the increase in the number of low-impact buyers. The third column shows that the average overcharge for a class consisting of all buyers falls from 214 in Table 2 to 184 in Table3, because the class now consists of more low-impact buyers, and expected profits from participating in the class defined fall to 129.³⁴ This is even lower than the 150 in Table 2, so high-impact buyers would still opt out of a class defined to include all buyers.

The average overcharge for a class consisting of low and medium-impact buyers is 135, and the average profits from participating in a class consisting of low and medium-impact buyers is 95.³⁵ Medium-impact buyers remain in the class because their profits from opting out are negative. The class counsel's expected profits from defining the class to include all buyers are 19,500, which exceeds the 18,000 in profit it would earn from defining a class to include only high-impact and medium-impact buyers. This means the class counsel's profit maximizing class includes all buyers. Expected profits from defining the class to include all buyers are higher because the class size increases 250 buyers. That increase is large enough to offset the loss in profits from high-impact buyers opting out, the reduction in average revenue per class member, and the increase in class counsel's expected costs.

TABLE 3

³⁴ $184 = (100*600 + 100*400 + 750*100)/950$. $129 = 184*0.7$.

³⁵ $135 = (100*400 + 750*100)/850$. $95 = 135*0.7$

| | High-impact class | High-impact and Medium-impact class | All buyer class | All buyer class with opt outs |
|-----------------------------|-------------------|-------------------------------------|-----------------|-------------------------------|
| Average overcharge | 600 | 500 | 184 | 135 |
| High-impact buyer profits | 420 | 350 | 129 | |
| Medium-impact buyer profits | | 350 | 129 | 95 |
| Low-impact buyer profits | | | 129 | 95 |
| Class counsel costs | 10,000 | 12,000 | 15,000 | 15,000 |
| Class counsel profits | 8,000 | 18,000 | 37,500 | 19,500 |

The results in Table 3 are informative because they can illustrate the impact of a rule that restricts the ability of a class counsel to choose its profit maximizing class definition. Suppose there are 750 low-impact buyers, so the class counsel’s profit maximizing class includes all buyers. Assume also that Rule 23(b)(3) prevents the class counsel from defining a class that includes all buyers, and, as a result, the class counsel defines the class to only include high-impact and medium-impact buyers.

The impact of the restriction on producer and consumer surplus is shown in Table 4. The “With restriction” column reflects the values if class counsel defines the class to include high-impact and medium-impact buyers, and the “Without restriction” column includes the values if the class is defined to include all buyers. There are 100 high-impact buyers with profits of 350 per buyer with the restriction and profits of 200 per buyer without the restriction, so their total profits are 35,000 with the restricted class definition and 20,000 with the unrestricted class definition. The surplus gain from the restriction for high-impact buyers is 15,000. The same logic implies that restriction would raise medium-impact buyers’ profits from 9,471 to 35,000, so their surplus gain is 25,529. The restriction harms low-impact buyers’ profits because they do not participate in the class or sue on their own if the class definition is restricted. There are 750 low-impact buyers with profits per member of 95 if the class definition is not restricted, so they lose 71,209 from the restriction. The losses to low-impact buyers from the restriction exceed the gains to high-impact and medium-impact buyers, so the net effect of the restriction is to reduce

consumer surplus by 30,500.³⁶ The restriction would also lower profits for the class counsel from 19,500 to 18,000. Combining the producer and consumers surplus losses, the restriction lowers producer and consumer surplus by 32,000.

TABLE 4

| Profits | With restriction | Without restriction | Difference |
|---------------------|------------------|---------------------|------------|
| High-impact buyers | 35,000 | 20,000 | 15,000 |
| Medum impact buyers | 35,000 | 9470 | 28,206 |
| Low-impact buyers | 0 | 71,209 | -71,209 |
| Class counsel | 18,000 | 19,500 | -1500 |
| Total | | | -32,000 |

In the example above, high-impact buyers are willing to participate in the class that includes high-impact and medium-impact buyers, even though their damages awards are lower than if they opt out, because they do not need to pay the cost of opting out. Similarly, medium-impact buyers are willing to participate in a class consisting of medium-impact and low-impact buyers because the costs savings from participating in a class are large enough to make it profitable to participate. However, if the costs of opting out are sufficiently low, high-impact and low-impact buyers might not participate in any class in which they have higher than average damages.

To see this, suppose that expected opt-out costs are 25 for high-impact and medium-impact buyers. High-impact buyers' expected profits from opting out are 575, and this exceeds their expected profits or 350 from participating in a class of high-impact and medium-impact buyers. Medium-impact buyers' expected profits from opting out are now 375, and this exceeds their expected profits from participating in a class of medium-impact and low-impact buyers. In

³⁶ The class counsel has an incentive to define the class that maximizes consumer surplus because its revenue is a fraction of the revenue earned by all class members. If there are only 500 low-impact buyers, consumer surplus is higher with a class defined to include high-impact and medium-impact buyers rather than all buyers. However, as I discuss below, the class definition that maximizes consumer surplus may not maximize total surplus because it raises costs to the legal system.

other words, if expected opt-out costs are low enough, then the only buyers willing to participate in a class are low-impact buyers.

This example illustrates that class counsels can face an adverse selection problem.³⁷ For buyers with above average expected damages, expected revenue from participating in a class in which it receives the average overcharge is lower than the expected revenue from opting out of the class. The only reason buyers with above average expected damages would be willing to participate in a class in which they expect to receive the expected average damage award is if their expected cost savings from participating in a class are large enough to offset the expected reduction in their revenue. If those cost savings are sufficiently low, then the only buyers that would be willing to participate in a class are low-impact buyers. This suggests that one possible reason why class counsels may define broad classes is that they could not profitably define a class unless the class definition included low-impact buyers because high-impact and medium-impact buyers would opt out independent of the class definition. As discussed above, one reason the opt out costs could be low is the existence of plea agreements. This may explain why some of the cases discussed above with many opt outs have been cases in which there have been plea agreements.

In theory, a class counsel could attempt to overcome the adverse selection problem by estimating separate damages awards for high-impact buyers to try to keep them in the class. However, class counsels frequently propose that all class members receive the average damages award, even when many buyers opt out of the class. This may be because class counsels find it easier to establish that all class members were harmed by estimating an average overcharge across all class members and then claiming that all class members paid higher prices if the challenged conduct raised the average price.

In the example above, a class counsel can expand the class by defining it to include additional buyers. In practice, expanding the class can often involve adding both additional buyers and additional purchasers by the same buyers. For example, adding additional years or

³⁷ Other economists have recognized that damages averaging can lead to an adverse selection problem in class actions. See, for example, Yeon-Koo Che, Equilibrium Formation of Class Actions Suits, *Journal of Public Economics*, Vol 62 pp 339-361 (1996).

See, e.g., Alberto Cassonea and Giovanni B. Ramelloa, The Simple Economics of Class Action: Private Provision of Club and Public Goods, *European Journal of Law and Economics*, Vol 32 pp. 205-224 (May 2011).

additional products to the class definition will add purchases for buyers who bought in all years or bought all products and buyers who only bought in the additional years or only bought the additional products.

For example, suppose that there are two periods: a high-impact period and a low-impact period. Assume that some buyers buy in both periods and other buyers buy in only one period. High-impact buyers would be those that buy only in the high-impact period, low-impact buyers would be those that bought only in the low-impact period, and medium-impact buyers would be those that bought in both periods. A class counsel that defines the class to include only the high-impact period is equivalent to one in the example above that defines the class to include high-impact and medium-impact buyers. This is because a class defined to include purchases in the high impact period would consist of buyers that bought only in the high impact period and those that bought in both periods. A class counsel that defines the class to include both periods is equivalent to the class counsel that the class to include all buyers. As above, buyers that bought only in the high impact period, could choose to opt out of a class defined to include both periods.

D. Implications of the Numerical Example

Above, I discussed three forms of market failure that could potentially justify a rule that limits a class counsel from choosing its profit maximizing class definition. I now use the numerical example to illustrate how those forms of market failure impact buyers, the class counsel, and the legal system.

One potential form of market failure mentioned above is the presence of externalities. The numerical example shows why externalities matter. The expected profits from participating in a class depend on the average expected overcharge of all class participants, so a class counsel's class definition decisions have different impacts across buyers on the profits from participating in the class. Defining the class to include all buyers reduces the average expected overcharge and reduces the profits from participating for high-impact and medium-impact buyers. Medium-impact buyers stay in the class, but they are worse off because the average overcharge of all class members falls. High-impact buyers opt out and receive their actual overcharge rather than the average overcharge, but their expected profits are still lower because they must pay the costs of being an opt-out plaintiff. The decision of high-impact buyers to opt

out, in turn, harms medium-impact and low-impact buyers because it lowers the average overcharges for class members.

These external effects matter because they imply that the class counsel does not have an incentive to act in the interests of each group of buyers. Expanding the class to include all buyers raises surplus across all buyers, but it lowers surplus for high-impact and medium-impact buyers. High-impact and medium-impact buyers would prefer to participate in a narrower class, but they do not have the option to do so.

The second reason restricting the class counsel's profit maximizing class definition can raise total surplus is that the class counsel does not have an incentive to take into consideration the effects of its class definition decision on its costs to the legal system. The example above illustrates that restricting a class counsel from choosing its profit maximizing class definition can lower the costs to the legal system because it reduces the number of opt outs by 100 buyers. This means that courts may have an incentive to limit the class counsel's profit maximizing class definition because the restriction can reduce legal system costs. The effect of the restriction on total surplus depends on how the increase in opt outs affects legal system costs. I showed in Table 4 that restricting the class counsel from choosing its profit maximizing class definition reduces consumer plus producer surplus by 32,000. If the cost to the legal system from having an additional 100 opt outs exceeds 32,000, then the restriction would raise total surplus.

The ability of a group of opt-out plaintiffs to sue jointly mitigates some of the costs to the legal system. However, that ability does not eliminate those costs. Each opt-out class member, even if it is suing jointly with other opt-outs, must demonstrate that it was impacted by the challenged conduct, and it must provide estimates its own overcharges. This means that the costs to the legal system of having different groups of opt-outs suing jointly are likely higher than the costs to the legal system if all those opt-outs were part of a class.

A third potential form of market failure is the fact that a class counsel does not have to compete against other class counsels. To see why competition matters, consider what would happen in the example above if, after a class of all buyers is certified, the class counsel had to compete against a potential entrant. As shown in Table 3, it would be profitable for an entrant to define a class that included high-impact buyers. Table 3 implies that it would be even more

profitable for the entrant to define a class that includes high-impact and medium-impact buyers. High impact buyers would participate in that class because their profits would be higher than their profits from opting out, and medium-impact buyers would participate in that class than a class that includes medium-impact and low-impact buyers. Therefore, if entry was allowed to occur, the entrant would define a class to include high-impact and medium-impact buyers.³⁸ Low-impact buyers would participate in the incumbent class counsel's class, and it would still be profitable for the incumbent to represent a class of low-impact buyers,³⁹ but its profits would be lower than the entrant's profits.

If the incumbent class counsel could define its class before entry occurs, the incumbent would define the class to include only high-impact and medium-impact buyers. This is true because it would know that the entrant would define a class to include high-impact and medium impact buyers if it defined a class to include all buyers. If so, the entrant could still profitably enter and define a class to include low-impact buyers. Competition matters, then, because it forces the entrant to define a class more narrowly and gives high-impact and medium-impact buyers the opportunity to participate in a class that raises their profits.

Table 5 shows that consumer and producer surplus are higher when competition leads to one class of high-impact and medium-impact buyers and another class of low-impact buyers. Profits for high-impact buyers are 15,000 more with competition than without it because they participate in the high-impact and medium-impact buyer class rather than opt out. Medium-impact buyers' profits are 25,529 higher with competition because they participate in the class that includes high-impact and medium-impact buyers rather than a class of medium-impact and low-impact buyers. Profits from low-impact buyers are 18,529 lower with competition because they participate in a class of only low-impact buyers with competition instead of a class of low and medium-impact buyers without competition. The combined profits for the two class counsels are 8000 higher with competition than the single class counsel's profits without competition. Total consumer plus producer surplus is 29,000 higher with competition. This understates the

³⁸ The profits from defining a class consisting only of medium-impact buyers is zero. This means that it would only be profitable for one class counsel to enter.

³⁹ Its expected revenue would be 22,500 which is 30 percent of the 100 overcharge for each of the 750 low-impact buyers. Its expected profits would be 7,500 which is 22,500 minus the costs of 15,000.

effect of allowing competition on total surplus because it ignores the fact that there are no opt outs with competition, and this lowers the costs to the legal system.

TABLE 5

| Profits | With competition | Without competition | Difference |
|---------------------|------------------|---------------------|------------|
| High-impact buyers | 35,000 | 20,000 | 15,000 |
| Medum impact buyers | 35,000 | 9471 | 25,529 |
| Low-impact buyers | 52,500 | 71,209 | -18,529 |
| Class counsel | 25,500 | 19,500 | 6,000 |
| Total | | | 28,000 |

The effect of entry on class counsels' class definition in this example is like the more general case of the effect of entry when there is a monopoly seller that cannot price discriminate on sales to buyers with different valuations of its product.⁴⁰ In that more general setting, the monopolist's profit maximizing price is above some lower valuation buyers' valuation of the product, and those buyers do not buy from the monopolist. Entry can often induce the incumbent to raise its price, while the entrant charges a price lower than the monopolist's price prior to its entry. Lower valuation buyers that buy from the entrant benefit because the entrant's price is less than their valuation. High valuation buyers that purchase from the monopolist with and without competition are worse off with competition because they must pay a higher price. The net effect of entry on consumer surplus is ambiguous.

⁴⁰ See, for example, Steven J. Davis, Kevin M. Murphy, and Robert H. Topel, Entry, Pricing, and Product Design in an Initially Monopolized Market, *Journal of Political Economy*, Volume 112, Number S1 (Feb 2004).

In the numerical example in Table 3, the class counsel is a monopolist, and it only defines a single class. Its profit maximizing class definition induces high-impact buyers to forgo the use of its services and opt out. Entry forces the incumbent class counsel to narrow its class definition, and the entrant will also define a narrower class than the incumbent did before entry. As a result, more buyers will participate in a class, so like the standard monopoly setting, users of class certification services are higher with competition. In this example, total consumer surplus is higher after entry.

As I described above, the justification for consolidation is that it reduces duplication in legal costs and eliminates inconsistent rulings across classes. The analysis above demonstrates that these benefits come at the expense of a reduction in producer and consumer surplus caused by the elimination of competition. Moreover, these results imply that allowing more than one class can reduce, rather than increase, costs to the legal system because it can reduce the number of opt outs.

IV. AN ECONOMIC INTERPRETATION OF RULE 23(B)(3)

The analysis above illustrates that restricting a class counsel's profit maximizing class definition can enhance efficiency for several reasons. First, class counsel may have an incentive to define the class to include buyers with low expected overcharges even though that can harm those buyers most directly impacted by anticompetitive conduct. Second, the profit maximizing class definition can lead to some buyers not participating in a class that would otherwise participate in a class if there were two class counsels competing for members. Third, the profit maximizing class definition can induce some buyers to opt out and raise costs to the legal system.

The existence of a rule to impose restraints on a class counsel's profit maximizing class definition implicitly recognizes that a class counsel's profit maximizing class definition can be too broad. The next step is to interpret how to implement such a rule based on the reasons why a class counsel's profit maximizing class definition can be too broad.

A. The Predominance and Superiority Requirements of Rule 23(b)(3)

For a class to be certified, Rule 23 requires that classes must satisfy all the Rule 23(a) requirements and satisfy either Rule 23(b)(1), Rule 23(b)(2), or Rule 23(b)(3). Most antitrust

classes with damages claims are Rule 23(b)(3) classes. To qualify as a Rule 23(b)(3) class, a class counsel must establish that “questions of law or fact common to class members predominate over any questions affecting only individual members, and that a class action is superior to other available methods for fairly and efficiently adjudicating the controversy.”⁴¹

Rule 23(b)(3) suggests that factors relevant to the determination of the predominance and superiority requirements include: (A) the class members’ interests in individually controlling the prosecution or defense of separate actions; (B) the extent and nature of any litigation concerning the controversy already begun by or against class members; (C) the desirability or undesirability of concentrating the litigation of the claims in the particular forum; and (D) the likely difficulties in managing a class action.⁴²

Courts have frequently interpreted the predominance requirement to mean that a class counsel must demonstrate that common evidence can establish common impact.⁴³ The relevant common impact part is often stated in terms whether all, or nearly all, of the proposed class members were harmed by the challenged conduct. If a class counsel can establish that common evidence can be used to show that nearly all class members suffered at least some harm, then courts have frequently held that the class counsel has met the predominance requirement.

Likewise, defendants have been able to prevail at the class certification stage in some cases if they have been able to establish that more than a *de minimis* share of proposed class members has suffered either no harm or has benefitted from the challenged conduct. In other cases, courts have held that classes should be certified even if there is more than a *de minimis* share of uninjured class members.⁴⁴

Courts have typically interpreted the superiority requirement as requiring that a class counsel establish that the proposed class is superior to no class.⁴⁵ Whereas the predominance

⁴¹ [Rule 23. Class Actions | Federal Rules of Civil Procedure | US Law | LII / Legal Information Institute.](#)

⁴² *Ibid.*

⁴³ Paul A. Johnson, The Economics of Common Impact in Antitrust Class Certification, *Antitrust Law Journal*, Vol. 77, 533-567.

⁴⁴ Bonnie Lau, Mary Kaiser and Lena Gankin, Buzzing About Rule 23: Bumble Bee & the Predominance Inquiry in Antitrust Cases, *Antitrust Magazine Online*, (October 2022) pp. 1 – 12.

⁴⁵ Christine P. Bartholomew, The Failed Superiority Experiment, 69 *Vand. L. Rev.* 1295 (2016). Available at: https://digitalcommons.law.buffalo.edu/journal_articles/28.

question is often central to antitrust class certification decisions, the superiority requirement is typically viewed as a low bar because of the impracticality of individual buyer legal actions.⁴⁶

B. An Economic Interpretation of the Predominance and Superiority Requirements

The economic analysis above establishes that a class counsel may have an incentive to define a class that is inefficiently broad. I now discuss the implications of that analysis for interpreting the predominance and superiority requirements of Rule 23(b)(3). The main conclusion is that the economic interpretations of the superiority and predominance requirements are similar. Both requirements should limit the ability of a class counsel to define classes that are too broad.

The potential inefficiency of profit maximizing class definitions suggests that a rule that prevents a class counsel from defining an inefficiently broad class should require that the class counsel demonstrate that the class is not inefficiently broad. Therefore, an economic interpretation of the superiority requirement is that a class counsel should establish that the proposed class is superior to (more efficient than) a more narrowly defined class.

This economic interpretation of the superiority requirement differs from the way courts have typically interpreted the superiority requirement, which is that a class counsel need only establish that the proposed class is better than individual actions by class members. The problem with this interpretation is that an inefficiently broad class could easily be superior to no class. In the example above, a class defined to include all buyers would have higher total surplus than no class at all. Without a class, medium-impact and low-impact buyers would have lower profits because they would not sue on their own. There would be substantial costs to the legal system if all high-impact could only sue on their own. However, as shown in Table 4, a class defined to include only high-impact and medium-impact buyers could have higher total surplus, and be superior, to a class defined to include all buyers. This means that classes could be inefficiently broad, even if they are superior to no class at all.

Turning to the predominance requirement, the economic intuition discussed above implies that the potential inefficiency of profit maximizing class definitions is largest when there are large differences in the expected overcharges across class members. When this is true, the

⁴⁶ [Microsoft Word - LCJ Rule Suggestion -- 23\(b\)\(3\) Superiority Sept 2 2022.docx](#).

profit maximizing class definition can lead to large reductions in profits for buyers with high expected overcharges and can lead to an increase in opt outs, which raises costs to the legal system. This means that restricting a class counsel's ability to define its profit maximizing class definition is more likely to raise total surplus when there are large differences in expected overcharges across class members in the proposed class. Stated differently, an economic interpretation of the common impact part of the predominance requirement implies that courts should not certify classes when there are large enough differences in expected overcharges across class members that a non-trivial share of class members would opt out.

Again, this economic interpretation of common impact differs from the one typically adopted by courts, which is that nearly all buyers suffered at least some impact. The problem with this interpretation is that a class could be inefficiently broad even if all buyers suffered some impact. In the example above, the expected overcharge for low-impact buyers is positive. Under the usual interpretation courts have adopted, there is some probability that all proposed class members suffered at least some harm, so a court could hold that this satisfies the common impact requirement. However, because the differences in expected harm between high-impact and low-impact buyers is large, a class defined to include all buyers need not satisfy the economic interpretation of common impact, because it could be more efficient to have narrower classes.

Economics can also be used to interpret the common evidence part of the predominance requirement. As I explained above, a class counsel's expected costs rise as class size increases because additional evidence is needed to establish that customers added to the class paid higher prices because of anticompetitive conduct. For example, assume that high-impact buyers' purchases in the example above were covered by a plea agreement, but purchases of medium-impact and low-impact buyers were not covered by a plea agreement. The plea agreement would be part of the evidence that high-impact buyers were harmed. Additional evidence is needed to establish that medium-impact and low-impact buyers were harmed. In addition, it is less likely that the evidence a class counsel develops will be sufficient to establish that medium-impact and low-impact buyers were harmed by a conspiracy.

This means that common impact cannot be established with evidence common to the class when the class counsel's cost of establishing that some class members were harmed are

significantly higher than it is for other class members. Instead, establishing that low-impact buyers were harmed requires evidence that is unique to them. Therefore, an economic interpretation of the predominance requirement implies that classes should not be certified if the class is defined to include some buyers whose inclusion requires the development of substantial additional evidence.

The economic interpretation of the predominance requirement also illustrates why the presumption that classes should be certified in conspiracy cases is incorrect. The presumption argument is typically based on the claim that the existence of a conspiracy is a common question for all class members and that conspiracies, if they exist, will raise prices for all, or nearly all, class members. However, conspiracies that impact some buyers in a broadly defined class need not impact other members of the class. The presumption argument also fails because classes can be inefficiently broad even if conspiracy did lead to higher prices for all class members.

One method that economists have used to argue that common evidence can demonstrate common impact is through regression analysis that calculates an average overcharge for class members. Economic experts for classes of plaintiffs also often argue that these regressions establish common impact by claiming that anticompetitive conduct that leads to an increase in average prices will lead to higher prices for nearly all class members. However, establishing that the challenged conduct led to higher average prices and that nearly all class members paid higher prices would not constitute common evidence sufficient to establish common impact under the economic interpretation of the predominance requirement. For the same reasons discussed above, even if the regression analyses could establish that nearly all class members suffered at least some harm, they could not establish that all class members suffered a sufficiently similar level of expected overcharges that the class is not inefficiently broad.

One of the disputed topics in class certification is whether classes should be certified if they contain more than a *de minimis* share uninjured class members.⁴⁷ The analysis above can be applied to situations in which there are potentially uninjured class members. To see this, assume that the differences in average expected overcharge across groups in the numerical example are due to variation in the share of class members that suffered no damages. In other words, all

⁴⁷ Bonnie Lau, Mary Kaiser and Lena Gankin, Buzzing About Rule 23: Bumble Bee & the Predominance Inquiry in Antitrust Cases, *Antitrust Magazine Online*, (October 2022) pp. 1 – 12.

buyers of the same type that were injured have the same expected overcharge, but low-impact buyers as a group have the highest share of uninjured buyers and the high-impact buyers have the lowest share. As above, a profit maximizing class counsel will define the class based on the whether adding low-impact buyers to the class raises expected revenue more than expected costs. Adding low-impact buyers means increasing the number of uninjured class members, and it can have the same impact on consumer, producer, and total surplus as shown in Tables 3 and 4. This means that a restriction which prevents a class counsel from defining a class that has too many uninjured class members would have the same effects described above.

C. Application of the Economic Interpretation of Rule 23(b)(3)

The analysis above describes why class counsel can have incentives to define inefficiently broad classes, and it interprets Rule 23(b)(3) as a rule that should limit class counsels from defining their profit maximizing classes when they are too broad. In this section, I describe the type of evidence that could be helpful to courts in determining whether a class is inefficiently broad and discuss how application of the economic interpretation of Rule 23(b)(3) would impact the class certification process.

1. Evidence relevant for determining whether a class is defined too broadly

The economics principles discussed above do not provide a simple formula for determining when a class definition is inefficiently broad. However, the analysis provides suggestions on the type of evidence that could be helpful in evaluating whether a class is too broad. First, the regression models used by classes' economic experts are typically used to estimate average damages for all class members. In some cases, experts use them to attempt to demonstrate that nearly all class members suffered at least some harm. Those same regression models can often be used to estimate the overcharges for individual direct purchasers or groups of those purchasers.⁴⁸ If that analysis reveals that there are large differences in overcharges across individuals or groups of class members, the magnitude of those differences can be relevant for determining whether the class is inefficiently broad.

Second, the analysis above suggests that classes can be inefficiently broad if the evidence required to prove different groups of buyers were impacted by anticompetitive conduct varies

⁴⁸ Michelle Burtis, "*Class Certification*", § 15 ANTITRUST ECONOMICS FOR LAWYERS (Charles River Associates, eds., LexisNexis, Inc. 2025).

across groups. This means that one factor that could be relevant in evaluating whether a class is inefficiently broad is variation in the evidence required to establish that different groups were harmed. A class may be inefficiently broad if establishing some groups were harmed requires non-trivial additional evidence that is not needed to establish that other groups were harmed.

Third, inefficiently broad classes can lead to many opt outs. This implies that evidence that many class members would likely opt out of the defined class could be relevant in assessing whether a class is inefficiently broad. In some cases, class members opt out even before a class is certified. The number of class members that have already opted out can provide evidence of the number of class members that will eventually opt out if the class is certified.

2. Impact of the economic interpretation of Rule 23(b)(3) on the class certification process

How would application of the economic interpretation of Rule 23(b)(3) affect the class certification process? Suppose that in the absence of Rule 23(b)(3), the profit maximizing class definition in the example above would include all buyers. This provides incentives for different class counsel to file similar complaints, each defining the class to include all buyers, and for the court-appointed lead class counsel to define the class to include all buyers in the consolidated complaint.

If, however, class counsels knew that a court would not certify a class of all buyers, some class counsel would have an incentive to define a class to include high-impact and medium-impact buyers, while other class counsel would have incentives to define classes to include only low-impact buyers. The JPML could consolidate those different classes in separate courts or even the same court, but in either case, there would be two separately defined classes. As I discussed above, this is the same outcome which could occur if there was ex-post competition among class counsels. Under the above scenario, there would be a form of ex-ante competition to be appointed class counsel for narrower classes. In either case, total surplus would be higher than if there was a single class defined to include all buyers.

In the example above, a court following the economic interpretation of Rule 23(b)(3) would deny the class counsel's bid to certify a class consisting of all buyers. In that case, one possibility is that there would be no class action, and high-impact buyers would sue on their own.

Rule 23 does allow a court to certify a narrower class than defined by the class counsel, so another possibility is that a court could certify a class consisting of high-impact and medium-impact buyers, even if the class counsel defined the class to include all buyers.

However, a class counsel faced with some probability that a narrower class will be certified if it defines the class too broadly has different incentives than a class counsel that faces some probability that the court will not certify any class if it defines the class too broadly. In the former case, a class counsel could still have an incentive to define the class to include all buyers, if the costs of trying to certify the broader class are not too much larger than the cost of certifying a narrower class. In the latter case, a class counsel is more likely to define a narrower class to avoid the possibility that it cannot represent any class. As above, this would provide an opportunity for another class counsel to define a class of different buyers. This means that it could be more efficient for courts to provide incentives for class counsels to define narrower classes than for courts to certify narrower classes than defined by class counsels.

Another approach courts could take to enhance efficiency by restricting class counsel's profit maximizing class definition would be to certify sub-classes of buyers. Rule 23 permits courts to define sub-classes when members of a class have divergent interests.⁴⁹ In the example above, the court could certify a class of high-impact and medium-impact buyers and a class of low-impact buyers. If so, then the subclasses would have different average expected overcharges and different average expected profits from participating in those sub-classes. Since high impact buyers would expect to receive a share of average overcharge of high-impact and medium buyers, this would provide incentives for the high impact buyers to remain in the sub-class. Certifying sub-classes can replicate the outcome with competition, but doing so at the class certification stage has the same impact as a court defining a narrower class at the class certification stage. A class counsel knowing it could get sub-classes certified would have an incentive to seek to certify a class of all buyers, and in the alternative, seek to certify subclasses, rather than seek to certify a narrower class.

⁴⁹ [Rule 23. Class Actions | Federal Rules of Civil Procedure | US Law | LII / Legal Information Institute](#)

V. CONCLUSION

Economic principles can be used to illustrate why class counsel's profit maximizing class definition can lead to inefficiently broad classes and why there can be a need for a rule that imposes a constraint on class counsels' class definition. The same principles can be used to illustrate why courts' interpretation of the predominance and superiority requirements of Rule 23(b)(3) does not address the sources of inefficiency. Economics suggest that the predominance requirement should mean that difference in class member's overcharges cannot be sufficiently large that it will induce many opt outs and that the superiority requirement should be based on establishing that the proposed class is superior to a narrower class.