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Economic Analysis of Class Certification

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Economic analysis of class certification has a different focus than economic analysis of most antitrust issues or, indeed, most legal issues.[1] Most economic analysis in support of litigation is concerned with *averages* or *totals*. To show that a practice is anticompetitive, for instance, one typically wants to show that it tends to increase market price, which is generally an average, or to decrease total output. But the focus in class certification is on *differences*: the commonality and typicality requirements for certification have to do with the relative importance of differences versus common elements within the asserted class.

At the class certification stage, plaintiff wants to show that its basic theory of market-wide injury plus relevant evidence implies that all or almost all members of the asserted class are injured and that there is a formulaic way to measure the harm to each class member. In principle, defendant must take that basic theory as given and show, via theory or evidence, that it is consistent with an appreciable number of members of the

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[1] For more extensive discussions of many of the issues touched on here, *see* D. Evans, *Class Certification, the Merits, and Expert Evidence*, 11 GEO. MASON L. REV. 1 (2002) and R. Bone & D. Evans, *Class Certification and the Substantive Merits*, 51 DUKE L.J. 1251 (2002). I have drawn heavily on these excellent articles and benefited from helpful comments by David Evans.

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alleged class not being injured or that the pattern of impacts is too complex to permit formulaic calculation of individual damages. In practice, of course, what one must or wants to take as given may not be clear-cut.

To take an artificially simple example, suppose that a plaintiff's basic theory of injury is that smoking lowers IQ by 5 points for each cigarette per day smoked. Also assume that the asserted class is all U.S. adults and that plaintiff shows that the average U.S. adult smoked 6.2 cigarettes a day in 1998. If the basic theory of injury is correct, then some U.S. adults were injured, since some smoked. But the issue at the class certification stage is whether *all* U.S. adults were injured, and the fact that 76 percent of U.S. adults were non-smokers in 1998 should serve to defeat certification of a class that includes them.

Consider two examples of arguments against class certification that lost in real cases (but note that these are two cases decided by the U.S. Court of Appeals for the Second Circuit before its remarkable about-face in *In re: IPO Sec. Litig.*[2]). In the first example, *Caridad*,[3] the basic theory of injury was that black employees of the Metro North railroad had been injured by discrimination that took the form of excessive disciplinary actions, and the asserted class was all black employees of the railroad. Plaintiffs introduced a regression in which the dependent variable was the number of disciplinary actions each employee experienced, and the independent variables included

[2] In re IPO Sec. Litig., 471 F.3d 24 (2d Cir. 2006). The Second Circuit explicitly rejected its prior decisions in *Caridad* suggesting that plaintiffs only needed to make "some showing" of compliance with class certification requirements, in *Visa Check* suggesting that an expert's testimony could be used to establish class certification simply if it was not "fatally flawed," and in *Heerwagen* suggesting that the trial court may not weigh conflicting evidence on class certification simply because that requirement was identical to a merits issue. *See id.* at 38-39.

[3] Caridad v. Metro-North Commuter Railroad, 191 F.3d 283 (2d Cir. 1999).

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race. The coefficient of the race variable was statistically significant and implied that on average black employees had more disciplinary actions than white employees.

If the class were certified, liability might well turn on the economic and statistical validity of that regression, and if plaintiffs prevailed the estimated difference in disciplinary actions between black and white employees would likely be the start of a calculation of total damages. But at the class certification stage, the logical issue was whether *all* (or almost all) black employees had suffered discrimination. The defendants' expert, David S. Evans, argued, correctly, that as a matter of basic logic even if the regression were completely valid, it could only show that *some* black employees had suffered discrimination.[4] It did not and, indeed, could not demonstrate that *all* black employees had experienced excessive disciplinary actions.

The logic here is exactly the same as in the smoking example above. Regression analysis is normally about averages, but no regression fits perfectly so that there are always deviations from the estimated regression function. Class certification is about the importance of those deviations.

The regression in *Caridad* pooled data on individuals in 168 job categories serving in 37 departments in numerous geographic locations in a relatively decentralized company. Even if there were a difference on average between the treatment of black and white employees, plaintiffs' regression was consistent with there being no difference within some job categories. In fact, the defendants' expert showed that in some job

[4] Evans (2002), *supra* note 1, at 16.

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categories no black employees had received any disciplinary actions at all over the period considered.

The trial judge understood Evans's argument and did not certify the company-wide class, but the Second Circuit said that this sort of "statistical dueling" was not relevant at the class certification stage.[5] Given its 180-degree turn in *In re: IPO Sec. Litig*., it is highly unlikely that the Second Circuit would deem it not relevant today.

The point here is not that regression or other statistical techniques cannot be used at the class certification stage, it is that they must be used carefully and creatively, with a focus on differences rather than averages. Suppose, for instance, that the *Caridad* plaintiffs had estimated their regression using data for non-black employees only and then compared the number of disciplinary actions predicted by that regression for each black employee with the actual number of such actions that employee experienced. A finding that all or almost all black employees had experienced more disciplinary actions than the non-black-only regression predicted would have been good evidence in favor of certification. Finding such a pattern within a subset of departments or job classifications would have been good evidence in favor of certification of a smaller class. On the other side, if defendants could show that a proper whites-only regression underpredicted disciplinary actions for only, say, 70 percent of blacks (a finding not inconsistent with a statistically significant race coefficient), this would be good evidence against certification.

[5] Caridad v. Metro-North Commuter Railroad, 191 F.3d at 292-3.

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In the *Visa Check* case, I was the defendants' economic expert at the class certification stage, and the main issues were not statistical.[6] Plaintiffs argued that Visa and MasterCard had monopoly power in credit cards and that they illegally tied their credit and signature debit cards (Visa Check and MasterMoney, respectively) so that a retailer had to accept both or neither. To over-simplify slightly, Visa and MasterCard charged the same fee for transactions on both credit and signature debit. Their basic theory of injury was that this tie, coupled with monopoly power in credit cards, forced retailers to accept signature debit and pay more for it than they would have been willing to pay absent the tie. In particular, since signature debit cards could also be used with PIN pads as PIN debit cards run through ATM networks, at much lower cost to retailers, plaintiffs argued that absent the tie signature debit fees would have been forced down to the level of PIN debit fees, while credit card fees would remain unchanged. The asserted class was all retailers who took Visa or MasterCard credit cards, and the asserted injury to each was their signature debit volume multiplied by the difference between signature debit and PIN debit fees.

My first main argument rested on simple economic reasoning. If, as alleged, retailers were willing to accept both credit and signature debit at a common per-transaction fee, say F, but would have been unwilling to pay F for signature debit alone, it follows that absent the tie they would have been willing to pay more than F for credit cards. Thus absent the tie, Visa and MasterCard would surely have used their market power to raise credit card fees. In fact, some retailers' customers mainly used credit

[6] In re Visa Check/MasterMoney Antitrust Litig., 280 F.3d 124 (2d Cir. 2001).

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cards, while others' customers mainly used debit cards—consider jewelry stores at one extreme and supermarkets at the other. It follows that if the tie had not been imposed, then retailers whose customers mainly used credit cards would likely have been worse off because of higher credit card fees.

The second argument against class certification involved more complex economic logic. I took as given the no-tie different fee structure that plaintiffs asserted: credit card fees unchanged and signature debit fees substantially lower and equal to PIN debit fees. This structure would make issuing signature debit cards substantially less profitable, however, and there would certainly have been fewer of them issued as a consequence. In the observed world, some retailers had chosen not to incur the costs of installing PIN pads, even though PIN debit transactions involved substantially lower fees than either credit or signature debit transactions. If fees in the but-for world had been as plaintiffs' alleged, incentives to install PIN pads would have been lower. Thus, in the but-for world, there would have been at least as many retailers without PIN pads as in the observed world, and fewer of their customers would have been carrying signature debit cards. It is not clear how the retailers without PIN pads would have accepted PIN debit cards. Perhaps the same customers would have made the same purchases and paid with credit cards (imposing higher costs on the retailers) or perhaps some would have taken their business elsewhere. Again, it seems highly likely that some retailers would have been worse off in the absence of the tie in plaintiffs' but-for world.

Once again, the Second Circuit found that the asserted class could be certified.

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Even though there were weaknesses in plaintiffs' expert report, it was to be relied on because it was "not fatally flawed"[7]—apparently no longer the standard in the Second Circuit.[8] After class certification, the case settled in 2003 for more than US$3 billion, and the tie was broken. Credit card fees rose slightly and signature debit fees fell, but they remained substantially above PIN debit fees. Most merchants agreed to pay a blended fee for both credit and signature debit, and that fee did not change. There may be merchants that take Visa and MasterCard credit cards but not their debit cards, but I have never encountered one.

In any antitrust case, of course, the appropriate economic analysis of class certification must depend on the fact pattern and the basic theory of injury. But as a general matter, economic analysis that is logically relevant to class certification focuses on differences in the damages implied by the plaintiff's basic theory of market-wide antitrust injury, not on averages or totals. In class certification analysis, statistical techniques must be used with care and creativity so that they not only yield estimates of various sorts of averages, but also provide information of the importance and perhaps pattern of deviations from averages. Defendants want to show that even if the plaintiff's basic theory is correct, evidence and economic logic are consistent with a world in which a non-negligible number of members of the asserted class were not injured or at least in which the pattern of injury is so complex that no class-wide formula for damages can be even approximately correct.

[7] *Id.* at 135.

[8] *See* In re IPO Sec. Litig., 471 F.3d.

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