### UNITED STATES DISTRICT COURT SOUTHERN DISTRICT OF NEW YORK

THOMAS LAUMANN, FERNANDA GARBER, ROBERT SILVER, DAVID DILLON, GARRETT TRAUB, and PETER HERMAN, representing themselves and all others similarly situated,	12-cv-1817 (SAS)
Plaintiffs,	
v.	
NATIONAL HOCKEY LEAGUE, et al.,	
Defendants	
FERNANDA GARBER, MARC LERNER, DEREK RASMUSSEN, ROBERT SILVER, GARRETT TRAUB, and VINCENT BIRBIGLIA, representing themselves and all others similarly situated,	12-cv-3704 (SAS)
Plaintiffs,	ECF Cases <u>Filed under Seal</u>
v. OFFICE OF THE COMMISSIONER OF BASEBALL, et al.,	REDACTED VERSIO

Defendants

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## **MEMORANDUM OF LAW IN OPPOSITION TO DEFENDANTS'** JOINT MOTION TO EXCLUDE OPINIONS AND TESTIMONY OF PLAINTIFFS' EXPERT ROGER G. NOLL

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#### **INTRODUCTION**

Defendants' motion to exclude the testimony of Professor Roger Noll is meritless. Dr. Noll's opinions are reliable and in line with commonly accepted economic principles. His opinions are well supported by economic literature and will assist the Court in determining whether plaintiffs have satisfied the class certification requirements of Rule 23. Nothing more is required at this stage. *See, e.g., Ge Dandong v. Pinnacle Perform. Ltd.,* No. 10-8086, 2013 WL 5658790, at \*13 (S.D.N.Y. Oct. 17, 2013).

Defendants do not challenge Dr. Noll's extensive academic or professional qualifications. As Judge Cote recently held, Dr. Noll "is entinently qualified and nationally respected in the field of antitrust economics." *In re Elec. Books Antitrust Litig.* ("*Ebooks*"), No. 11-md-2293, 2014 WL 1282293, at \*25 (S.D.N.Y. Mar. 28, 2014). He is the leading sports economist of the last forty years and was recently qualified as an expert in that field in *O'Bannon v. NCAA*, 7 F. Supp. 3d 955 (N.D. Cal. 2014). Dr. McFadden, one of Defendants' experts, testified that Dr. Noll is an acknowledged expert in sports economics. McFadden Tr. 19. Dr. Noll's qualifications are perfectly aligned with these cases—he is an expert in sports, broadcasting, and antitrust economics.

Nevertheless, Defendants challenge Dr. Noll's interim damages model, the final version of which is not due until after class certification has been decided. At this stage, the question is not whether Dr. Noll has determined class damages or if his working model is perfect. *See, e.g., In re Cathode Ray Tube (CRT) Antitrust Litig.*, No. 1917, 2013 WL 5429718, at \*22 (N.D. Cal. June 20, 2013) (*"Comcast* did not articulate any requirement that a damage calculation be performed at the class certification stage."); *In re Polyurethane Foam Antitrust Litig.*, No. 10-md-2196, 2014 WL 6461355, at \*44 (N.D. Ohio Nov. 17, 2014) (*"*[T]he method of proof withstands Defendants' extended assault, much of which reads as if it were written on the understanding that Direct Purchasers must *prove* impact *now*. They do not.") (emphasis in

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original; citation removed); see also, e.g., In re Wellbutrin XL Antitrust Litig., 282 F.R.D. 126, 140 (E.D. Pa. 2011).

For class certification, what matters is whether Dr. Noll has demonstrated that damages and antitrust impact can be assessed on a class basis. He must only "propose a workable *methodology* for proving these elements before a class action may be certified." *In re Amaranth Natural Gas Commodities Litig.*, 269 F.R.D. 366, 383 (S.D.N.Y. 2010) (Scheindlin, J.) (emphasis in original). And yet Defendants do not attack Dr. Noll's modeling methodologies; instead, they challenge certain of his assumptions or particular details of the implementation of those methods. These criticisms only *confirm* that damages can be calculated on a class basis, as Defendants' experts merely suggest different ways of applying the same methods.

In contrast to Dr. Noll, Defendants experts have *no* expertise in the sports broadcasting industry. They are in no position to challenge the assumptions Dr. Noll makes on the basis of his expertise as a sports economist and his analysis of the record evidence.

The closest Defendants come to making an argument appropriate to a *Daubert* challenge is that Dr. Noll's failure to model bargaining between the parties is a methodological flaw sufficient to render his entire model unreliable. This argument is baseless. Modeling bargaining remains the exception, not the rule, in structural modeling. Indeed, Dr. Pakes—Defendants' structural modeling expert—testified that it would be "silly" to insist that all vertical relationships require a bargaining model. Pakes Tr. 58. Defendants argue that Dr. Noll should have added a model of bargaining in this instance because Drs. Crawford and Yurukoglu included a bargaining model in the paper on which Dr. Noll relies in part. *See* Gregory S. Crawford & Ali Yurukoglu, *The Welfare Effects of Bundling in Multichannel Television Markets*, 102 Am. Econ. Rev. 643 (2012) ("C&Y"). But the bargaining model in that paper has no application here. Indeed, Drs. Crawford and Yurukoglu themselves agree that a bargaining model is unnecessary in these cases. *See* Noll Tr. 464. Their paper, moreover, found that, unlike

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most other programming, sports programming costs *decreased* as a result of the bargaining they modeled.

*Daubert* motions are "not intended to serve as a replacement for the adversary system." Fed. R. Evid. 702, Notes of Advisory Committee, 2000 Amendments (quoting *United States v. 14.38 Acres of Land Situated in Leflore Cnty.*, 80 F.3d 1074, 1078 (5th Cir. 1996)). "[R]ejection of expert testimony is the exception rather than the rule," and is not justified simply because an opposing expert offers "competing principles or methods in the same field of expertise." Id. Disputes of this sort go to the weight of the expert testimony, not its admissibility, and are for the jury to resolve at trial. *See Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579, 596 (1993). As the Supreme Court has explained, "[v]igorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence …. These conventional devices, rather than wholesale exclusion … are the appropriate safeguard where the basis of scientific testimony meets the standards of Rule 702." *Id. Daubert* is meant to protect against junk science—evidence "outside the range where experts might reasonably differ," *Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 153 (1999)—a situation that could not be more dissimilar than the one here.<sup>1</sup>

#### SUMMARY OF DR. NOLL'S OPINIONS

Expert discovery in these cases has been segmented into multiple stages. *See Laumann*, Dkt. 177 (Scheduling Order). Plaintiffs' first report, served in February 2014, covered Plaintiffs' initial burden, enabling Defendants to move for summary judgment before class certification. *Id.*<sup>2</sup> The second report, demonstrating that the economic issues can be decided on a class basis,

<sup>&</sup>lt;sup>1</sup> Given that Defendants offer Dr. Pakes' and Dr. McFadden's testimony only to support their motion to exclude Dr. Noll's testimony, there is no need to consider whether their testimony is itself admissible. As the discussion below demonstrates, however, Plaintiffs would have substantial grounds to exclude their testimony if it is proffered later for use at trial or summary judgment. Plaintiffs reserve the right to make such challenges at the appropriate time.

<sup>&</sup>lt;sup>2</sup> The Defendants did not challenge Dr. Noll's analysis or model as part of their motion for summary judgment.

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was submitted as part of Plaintiffs' motion for class certification. After class certification, Defendants will submit their initial reports on the merits, as well as rebuttals to Plaintiffs' reports. Plaintiffs may also serve further merits reports and will subsequently submit their final damages report. *Id.* Accordingly, while Dr. Noll has described the foundation of his damages model and applied that model to a subset of data to show that damages can be determined on a classwide basis, his final model and conclusions are not scheduled to be submitted until after the Court rules on Plaintiffs' class certification motion. His current modeling, in other words, is not intended to establish exactly what the damages are; it is intended to show that a common methodology can be used to establish damages on a class basis.

Dr. Noll's first report analyzed the relevant product markets, concluding that out-ofmarket telecasts are competitive substitutes for in-market telecasts in the same sport, but that telecasts of other sports or non-sports programming are not competitive substitutes. Noll Decl. 43-53. He found that league rules create artificial, localized markets that, absent these rules, would be integrated into a combined national market. *Id.* at 43-48; 53-58. He found that the clubs and the teams enjoy substantial market power (with extraordinarily high profit margins) in selling television rights and that the principal cause of this power is the agreements not to compete in the sale of local television rights. *Id.* at 69-95. Dr. Noll also analyzed each of the business justifications that the defendants had offered to justify the restraints, and concluded that none were valid because none offered plausible benefits to consumers that outweighed the harms wrought by the restraints. *Id.* at 105-120. Each of these findings applies equally to all class nuembers' claims, and Defendants do not challenge these classwide findings.

Dr. Noll's second report explains that the methods an antitrust economist would use to prove liability and calculate class damages in this matter are predominantly common to members of the class. "The fundamental reason that proof of liability and calculation of damages are common to members of each class is that the products are sold nationally on the basis of posted

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prices." Noll Supp. 4. These cases focus on Defendants' conduct, not any individual class member's, because the prices associated with each package do not vary according to individual characteristics of a consumer or individual negotiation with a customer. *Id.* at 9.

To show that damages can be reliably calculated on a classwide basis, Dr. Noll analyzed consumer demand based on purchasing and viewership data. He applied established econometric methods for studying the economic effects of unbundling cable programming to large sets of viewership data. *See* C&Y, at 3; *see also* Pakes Tr. 54 (testifying that C&Y is "more reliable than what had been done in the literature prior to this, considerably, for the industry it's studying"). By using that information together with data about what the subscribers paid for the bundle, Dr. Noll was able to estimate the prices that each club (or its RSN) would charge for its own programming in a competitive market, as well as a price for a league-wide package in a market where consumers could choose between individual team offerings and a bundle. These benchmark prices apply on a classwide basis, as do the benchmark prices produced by Defendants' experts. Dr. Noll's analysis confirmed common sense—if the packages were sold in a competitive market, prices would be lower. Because all class members bought the same few products for posted prices, the overcharge they suffered is easily calculated classwide.

As explained in Dr. Noll's reply declaration, he has continued to refine the model in a number of ways in order to make its predictions more accurate and to test the effect of Defendants' criticisms. These refinements address certain of the Defendants' concerns, but have had no effect on Dr. Noll's overall conclusion that the amounts consumers overpaid for the league packages can be calculated on a classwide basis. And none of the refinements alter his fundamental methodology, which is plainly reliable.

#### LEGAL STANDARD

Although the "Supreme Court has not definitively ruled on the extent to which a district court must undertake a *Daubert* analysis at the class certification stage," *In re U.S. FoodServ.* 

Pricing Littig., 729 F.3d 108, 129 (2d Cir. 2013), cert. denied, 134 S. Ct. 1938 (2014), the prevailing view is that some variant of "the Daubert standard applies, but the inquiry is 'limited to whether or not the [opinions] are admissible to establish the requirements of Rule 23." Ge Dandong, 2013 WL 5658790, at \*13 (quoting In re NYSE Specialists Sec. Litig., 260 F.R.D. 55, 66 (S.D.N.Y. 2009)); accord Fort Worth Emps. ' Ret. Fund v. J.P. Morgan Chase & Co., 301
F.R.D. 116, 126 (S.D.N.Y. 2014);. "In other words, '[t]he question is not … whether a jury at trial should be permitted to rely on [the expert's] report to find facts as to liability, but rather whether [the Court] may utilize it in deciding whether the requisites of Rule 23 have been met." Ge Dandong, 2013 WL 5658790, at \*13 (quoting In re Visa Check/Mastermoney Antitrust Litig., 192 F.R.D. 68, 77 (S.D.N.Y. 2000)) (alterations in original).

Under Federal Rule of Evidence 702, the role of the Court is to "ensur[e] that an expert's testimony both rests on a reliable foundation and is relevant to the task at hand." *Daubert*, 509 U.S. at 597. The question is not whether the expert's analysis is flawless, or even correct, but whether it is reasonable. *Kumho Tire*, 526 U.S. at 153 (1999); *In re Linerboard Antitrust Litig.*, 497 F. Supp. 2d 666, 673 (E.D. Pa. 2007) ("The judge does not have to determine that these methods are necessarily the best grounds to ascertain certain facts, but only that the evidence presented will help the trier of fact."). Typically, "contentions that [an expert's] assumptions are unfounded go to the weight, not the admissibility, of the testimony." *Boucher v. U.S. Suzuki Motor Corp.*, 73 F.3d 18, 21 (2d Cir. 1996) (quotation omitted). This flexible and permissive standard is consistent with the "liberal thrust of the Federal Rules and their general approach of relaxing the traditional barriers to opinion testimony." *Daubert* 509 U.S.at 588, "[T]he Second Circuit's standard for admissibility of expert testimony is especially broad." *Clarke v. LR Sys.*, 219 F. Supp. 2d 323, 332 (E.D.N.Y. 2002); *see also Amorgianos v. Nat'l R.R. Passenger Corp.*, 303 F.3d 256, 267 (2d Cir. 2002).

This flexibility is especially important in antitrust cases because "causes and effects in the realm of economics are not nearly as clear-cut as they are in other disciplines, such as chemistry or engineering; there is room for disagreement among the experts." *In re Se. Milk Antitrust Litig.*, No. 08-md-1000, 2010 WL 5102974, at \*2 (E.D. Tenn. Dec. 8, 2010); *see also In re Scrap Metal Antitrust Litig.*, No. 02-0844, 2006 WL 2850453, at \*13 (N.D. Ohio Sept. 30, 2006) ("[E]ven in the most complicated cases ... [competing expert opinions] should be tested by the adversarial process ... rather than excluded."). This is particularly so where, as here, damages do not need to be precisely calculated:

[D]amage issues in these cases are rarely susceptible of the kind of concrete, detailed proof of injury which is available in other contexts. The Court has repeatedly held that in the absence of more precise proof, the factfinder may "conclude as a matter of just and reasonable inference from the proof of defendants' wrongful acts and their tendency to injure plaintiffs' business … that defendants' wrongful acts had caused damage to the plaintiffs."

Zenith Radio Corp. v. Hazeltine Research, Inc., 395 U.S. 100, 123-24 (1969) (quoting Bigelow v. RKO Radio Pictures, Inc., 327 U.S. 251, 264 (1946)); see also Eastman Kodak Co. v. S. Photo Materials Co., 273 U.S. 359, 378-79 (1927); Story Parchment Co. v. Paterson Parchment Paper Co., 282 U.S. 555, 561-66 (1931).

The reason for this long-settled rule is that "the most elementary conceptions of justice and public policy require that the wrongdoer shall bear the risk of the uncertainty which his own wrong has created." *Bigelow*, 327 U.S. at 265; Philip E. Areeda & Herbert Hovenkamp, *Antitrust Law: An Analysis of Antitrust Principles and Their Application*, ¶ 392 (2014) ("[S]ince the defendant created the need for damage estimation by violating the antitrust laws, it should bear the burden of uncertainty in proving the consequent damages.").

Defendants ignore these standards and ignore the procedural posture of the case, suggesting that the Court must conclude now that Dr. Noll's damages calculations are correct, even though he has yet to submit his final model. At this stage, the Court need only determine whether it is more likely than not that Plaintiffs will be able to provide a valid methodology for Case 1:12-cv-03704-SAS Document 378 Filed 01/14/15 Page 14 of 33

estimating classwide damages at trial—where they will have a "lightened" burden of proof. *New York v. Hendrickson Bros.*, 840 F.2d 1065, 1077 (2d Cir. 1988).

#### ARGUMENT

#### I. DR. NOLL'S OPINIONS ARE RELIABLE AND WILL HELP THE COURT DETERMINE WHETHER PLAINTIFFS HAVE SATISFIED RULE 23

Defendants do not challenge the majority of Dr. Noll's conclusions. They do not challenge his conclusions regarding relevant markets, defendants' market power, or the lack of valid business justifications for the challenged restraints. Instead, Defendants focus on Dr. Noll's damages model. For this critique to have any bite at class certification, however, Defendants must convince the Court that Dr. Noll will not be able to make a common showing regarding impact or damages at trial. Yet they do not seriously challenge that damages can be determined on a classwide basis—if Dr. Noll is correct, then the whole class has suffered monetary damages, and if the Defendants are correct, then no one can establish damages.

#### II. DEFENDANTS' ARGUMENTS DO NOT UNDERMINE DR. NOLL'S CONCLUSIONS OR JUSTIFY EXCLUDING ANY OF HIS TESTIMONY

The pricing model Dr. Noll uses to reach this conclusion applies an established technique used to determine rational, stand-alone prices for cable television channels by assessing viewing patterns and prices paid for the bundle of channels. *See* C&Y. Dr. Noll's model has two parts, a determination of the distribution of demand for individual teams' games from viewership data—the "demand side"—and the subsequent use of the demand-side data to model the pricing and supply that would result in a market in which the challenged restraints were removed—the "supply side." As discussed below, Defendants and their experts do not take issue with Dr. Noll's general approach on either side of the modeling. Instead, they critique Dr. Noll's *application* of these accepted approaches.

#### A. Defendants' Arguments Regarding the "Supply Side" Are Misplaced.

To criticize the "supply side" of Dr. Noll's nudel, Defendants have hired Dr. Ariel Pakes. Dr. Pakes criticizes Dr. Noll's model in a number of ways, but his declaration *supports* 

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the reliability of the methods used by Dr. Noll. Dr. Pakes himself is a well-known authority in the methods used here, and was an advisor to Dr. Yurukoglu for his dissertation, which was an early version of C&Y.<sup>3</sup> Not surprisingly, he takes no issue with the general approach that Dr. Noll has employed, and he testified that the C&Y approach was reliable. Pakes Tr. 54. Indeed, he uses the *same* methods, with altered assumptions, to challenge Dr. Noll's conclusions.

Dr. Pakes is not an expert in sports economics, and has admitted that he has no professional experience analyzing the economics of sports leagues or the economics of broadcasting. *Id.* at 13. Because his expertise is in modeling methods and not in any particular industry, he testified that he works "with somebody who is an expert in the field of that industry" when using structural models. *Id.* at 35. Yet, here, Dr. Pakes did *not* work with either a sports or broadcasting expert in forming his opinions. *Id.* at 35. Indeed, he admitted that Dr. Yurokuglu— who is assisting Dr. Noll here—"knows much more about the sports industry and about the content providers in this industry than I do." *Id.* at 66.<sup>4</sup> Consequently, Dr. Pakes is not in a position to argue that Dr. Noll's assumptions are incorrect; rather, his expertise can establish only what the modeling consequences would be of the assumptions he employs. The substantial majority of his declaration thus has nothing to do with the reliability of Dr. Noll's methods. Instead, it challenges Dr. Noll's application of those methods to the sports broadcasting market—a market in which Dr. Pakes, unlike Dr. Noll, has no expertise.

# 1. A Bargaining Model Is Unnecessary and Would Not Alter the Classwide Nature of Damages in Any Event.

Dr. Pakes's primary challenge to Dr. Noll's model is that it should have included a formal bargaining component to model the relationship between the MVPDs and RSNs in a situation in which the RSNs were sold separately to consumers. Pakes Decl. 2. As he admits, this

<sup>&</sup>lt;sup>3</sup> Dr. Noll was an advisor to Dr. Crawford's dissertation, which was an earlier application of these techniques to determine the demand for cable television channels.

<sup>&</sup>lt;sup>4</sup> Dr. Pakes admitted that he was not aware how contracts within the industry were structured and that he only "skimmed one contract" between an RSN and club. Pakes Tr. 113.

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relationship does not exist with regard to the Internet packages because the Leagues offer the Internet packages directly. Pakes Tr. 68. Accordingly, his challenge applies only to the television out-of-market products and has no bearing on the certification of a class of Internet-package purchasers. Dr. Pakes contends that bargaining, in theory, may alter the price of the RSNs, which would, in turn, alter the prices of the television bundles, but he admitted that he does not know if this is in fact true since he did no modeling to test the hypothesis. Pakes Tr. 106.

As an initial matter, Dr. Pakes's criticism has no bearing on whether damages can be determined on a classwide basis. He only argues that the price of the bundles—paid by all purchasers—would be different than the price that Dr. Noll has estimated. It is thus not a valid challenge to Dr. Noll's class certification findings.<sup>5</sup>

In any event, the suggestion that the lack of a bargaining model renders Dr. Noll's model unreliable is groundless. Dr. Pakes has acknowledged that bargaining models are not necessary for every vertical relationship in a structural model. Pakes Tr. 58 (testifying that "nobody would be that silly" to assume that bargaining models are always required). In fact, bargaining models remain the exception. Dr. Pakes's best-known work analyzes pricing in the automobile industry. In a series of papers, he has analyzed demand for features of automobiles using the same general approach used here, and then employed a Nash-Bertrand analysis to estimate prices, just as Dr. Noll does here.<sup>6</sup> In none of these papers is there any bargaining analysis, despite the fact that

<sup>&</sup>lt;sup>5</sup> *Cf. Amaranth*, 269 F.R.D. at 385 ("[D]efendants' objections go solely to whether plaintiffs' models will in fact demonstrate causation and artificiality, and hence, are unrelated to the requirements of class certification. Indeed, by arguing that plaintiffs' models, as corrected by defendants' expert, show that Amaranth did not cause any artificiality during the Class Period, defendants impliedly concede that causation can be evaluated on a class-wide basis.") (emphasis onuitted).

<sup>&</sup>lt;sup>6</sup> Steven Berry, James Levinsohn, and Ariel Pakes, *Automobile Prices in Market Equilibrium*, 63 Econometrica 841, 843 (1995) ("Our framework is based upon: (i) a joint distribution of consumer characteristics and product attributes that determines preferences over the products marketed; (ii) price taking assumptions on the part of consumers; and (iii) *Nash equilibrium assumptions on the part of producers*. This is a very rich framework ...."); Berry, Levinsohn, and Pakes, *Voluntary Export Restraints on Automobiles: Evaluating a Trade Policy*, 89 Am. Econ. Rev. 400, 418 (1999) (applying Nash-Bertrand to calculate "industry equilibrium"); Berry,

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there are a number of vertical relationships in the automobile market (and the fact that it is one of the few markets in which consumers bargain over price).

Dr. Pakes's own papers do not include bargaining because adding bargaining components to structural modeling is not standard practice and does not typically justify the additional complexity. Neither C&Y nor any other paper has turned bargaining into a necessary element of such models.<sup>7</sup> Defendants contend that it is necessary to use a bargaining model here, because the C&Y paper's results show that bargaining is likely to increase costs to consumers when programmers bargain with MVPDs.<sup>8</sup> In fact, the C&Y results support the *opposite* conclusion that prices would go *down* in this case. While overall, bargaining for a-la-carte channels increases programming costs in C&Y, that is not true with respect to sports programming. C&Y predict that the cumulative price paid hy MVPDs for sports-oriented channels would drop by thirty-eight percent.<sup>9</sup> The RSNs analyzed in C&Y—the Fox Sports Nets—are predicted to drop by *forty-nine percent*. They found that bargaining *reduced* these marginal input costs, driving the

Levinsohn, and Pakes, Differentiated Products Demand Systems from a Combination of Micro and Macro Data: The New Car Market, 112 J. Pol. Econ. 68, 92 (2004).

<sup>&</sup>lt;sup>7</sup> A quick survey of the literature since C&Y was published reveals a significant number of papers by well-known economists in top-tier journals that employ structural models without bargaining models. *See, e.g.*, Alon Eizenberg, *Upstream Innovation and Product Variety in the U.S. Home PC Market*, 81 Rev. Econ. Stud. 1003 (2014); Igal Hendel & Aviv Nevo, *Intertemporal Price Discrimination in Storable Goods Markets*, 103 Am. Econ. Rev.2722 (2013); Stephen P. Ryan, *The Costs of Environmental Regulation in a Concentrated Industry*, 80

Econometrica 1019 (2012).

<sup>&</sup>lt;sup>8</sup> Dr. Pakes's claim that Dr. Noll assumes that DirecTV would not earn a markup is baseless. The markup is already incorporated into the price that represents the joint-profit maximizing price, and the RSN and DirecTV would share in the profits (as they do now). A bargaining model would not be needed to account for the existence of DirecTV's markup; it merely determines whether DirecTV's costs would change in a way that would shift pricing *away* from the joint profit-maximizing level.

<sup>&</sup>lt;sup>9</sup> The sports channels in C&Y are ESPN, ESPN 2, Fox Sports Net, Golf Channel, Speed Channel (now Fox Sports 1), and Versus (now NBCSN). The cost for carrying those channels together is reported as \$5.17 in a bundle, and \$3.22 for a la carte (in 2000 dollars). C&Y, 677.

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prices consumer pay down.<sup>10</sup> Thus, the results of C&Y—the only basis for Defendants' assertion that bargaining is necessary—indicate that damages would likely *increase* by implementing the bargaining model in C&Y. There is no question that a reasonable economist could conclude, from C&Y itself, that modeling bargaining is unnecessary.

As Dr. Noll explains, modeling bargaining is not called for where products are relatively similar, as they are here. Noll Tr. 460-61. Dr. Pakes suggests that fans do not view the RSNs as substitutes for each other, so the programmers may have significant bargaining power. Whatever the plausibility of that claim with respect to in-market programming, the issue here is whether the RSNs would have significant bargaining power *outside their local areas* in competition with the RSNs of the other teams. Given that C&Y found that RSNs could not raise prices in-market, it is reasonable to assume that they could not do so out of market where they would have even less bargaining power.<sup>11</sup>

There is another reason not to employ a C&Y-type bargaining model here even if it were assumed that it would cause prices to rise—in particular, it would not be a realistic model of the nuarket. *See* Noll Reply 21-26. The rise C&Y found was a result of "double marginalization," which occurs in vertical industries when the upstream provider's price (cost + margin) becomes a marginal cost for the downstream firm, which then sets its price based on that elevated cost. *See generally* Jean E. Tirole, *Theory of Industrial Organization*, 174-76 (1988). This effect decreases output and raises prices in such a way as to harm the producer and the distributor, because the

<sup>&</sup>lt;sup>10</sup> The change in RSN pricing would have no effect at all unless it were a marginal cost meaning the RSN charged a per-subscriber rate. If it did, then bargaining would lower the marginal cost for the MVPD, which would lower the consumer price.

<sup>&</sup>lt;sup>11</sup> Dr. Pakes's only response is to point to a footnote in C&Y in which the authors surmise that the model may underestimate the value of sports channels. Pakes Tr. 96-105. But for both C&Y and Dr. Pakes, that is based only on intuition and is not supported by any econometric analysis. The model shows what the model shows, and Defendants cannot simultaneously argue that Dr. Noll needed to employ C&Y's bargaining model because C&Y reliably predicted cost rises for most channels, but that C&Y's specific results with respect to sports programming are not reliable.

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price rises above the firms' joint profit-maximizing price. The ultimate buyers are obviously harmed as well. *Id.* at 177 ("[W]elfare is unambiguously increased by the elimination of double marginalization."). In other words, *everyone* is worse off if bargaining results in double marginalization.<sup>12</sup>

Dr. Noll's model uses Nash-Bertrand, which accurately determines the profit-maximizing price for imperfectly competitive products, such as out-of-market RSNs, without double marginalization.<sup>13</sup> The Bertrand price he determines is the overall profit-maximizing price for the producer and the distributor. Therefore, by definition, if bargaining resulted in a price above the Bertrand price, that price would be less profitable for the firms.

The parties may tolerate a modest degree of double marginalization, but any substantial effect could, and would, be avoided.<sup>14</sup> Thus, no realistic bargaining model could raise prices substantially above the joint profit-maximizing price, because the parties would structure their contracts to avoid that result. Dr. Noll's model recognizes the parties' interest to avoid any significant double-marginalization, and he adopts an appropriate Nash-Bertrand pricing strategy. As Dr. Ordover states, the "the economic literature on bargaining" assumes that parties will generally reach a solution that "maximizes their joint profits." Ordover Decl. ¶ 34.

Dr. Pakes's own model assumes that the teams and RSNs will structure their contracts to maximize their joint profits. If so, a bargaining model makes no difference in the final price

<sup>&</sup>lt;sup>12</sup> At his deposition, Dr. Pakes acted like he did not understand that double marginalization was a problem. Pakes Tr. 70-74. Yet, this is not credible, as every undergraduate economics major is well versed in what Dr. Yurukoglu himself described as "the double marginalization problem." Noll Reply 21-22 & n.26; Ali Yurukoglu, *Price Discrimination and Vertical Relationships in Multichannel Television*, 1 (June 18, 2009) (Ph.D. dissertation, N.Y.U.). Nor is this a novel concept in the law. For example, then-Judge Breyer illustrated the effect in Appendix B to *Town of Concord v. Boston Edison Co.*, 915 F.2d 17, 32-33 (1st Cir. 1990).

<sup>&</sup>lt;sup>13</sup> Dr. Ordover testified that Bertrand is not just a reliable methodology, it is one of the "work horses of industrial organization economics." Ordover Tr. 159.

<sup>&</sup>lt;sup>14</sup> Indeed, Drs. Crawford and Yurukoglu acknowledged that some economists may view their pricing assumptions as "unrealistic" because of the double-marginalization effects. *See* C&Y, n.23.

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because the contract structure already reflects the negotiation between the relevant parties. In this regard, there is little reason to believe that the but-for world would be any different than the current world. RSN/team contracts, for example, avoid double-marginalization now, because the teams do not charge a per-subscriber fee. Rights fees are thus not marginal costs that must be incorporated into the MVPD's marginal costs, and they do not affect the RSNs' pricing decisions.<sup>15</sup> The leagues and MVPDs also use strategies that avoid double marginalization.<sup>16</sup> As Dr. Noll explains, there is no reason to think that the defendants would undermine their own profits by introducing double marginalization into the markets here, so there is no reason to model it. Noll Reply 25-26.

It is also important to note that C&Y does not include bargaining at every stage of the distribution chain. They do not model, for example, any renegotiation that would occur between MLB, NHL, or their clubs, on the one hand, and the channels that carry their programming, on the other. Nor do they model negotiations between any other content creator, such as a TV show, and the channel carrying it. Defendants are insisting here on a bargaining model that is absent from C&Y—despite Dr. Pakes's conceding at his deposition that the lack of a bargaining model between rights providers and channels in C&Y does not render it any less reliable. Pakes Tr. 62 (using Nash-Bertrand "is probably the best approximation you could do").<sup>17</sup>

<sup>16</sup> In the operative MLB Extra Innings contracts, for example,

<sup>17</sup> Defendants selectively quote from two academic articles for the proposition that Bertrand is not typically used in non-merger cases. *See* Daubert Mem., at 16-17 n.8. The authors of these

<sup>&</sup>lt;sup>15</sup> While Defendants' primarily focus on the RSN/MVPD negotiations as a necessary stage for bargaining, they also suggest that there would be bargaining between RSNs and the league for inclusion of the games in the packages. But as is discussed in Plaintiffs' class certification reply, the leagues do not bargain with RSNs now—they have no contractual relationship with RSNs. Indeed, it would make no sense to have the clubs grant rights to the RSNs that they would turn around and sell to the league. Nor, of course, do clubs engage in bilateral bargaining with their own leagues.

## 1. Dr. Pakes's Criticisms of Dr. Noll's Model's Profit Assumptions Are Incorrect

Dr. Pakes contends that Dr. Noll's model is unreliable because it modeled the wrong profit incentives of the clubs and the leagues by failing to take into account that the clubs and their respective leagues are joint ventures. Dr. Pakes grounds this criticism on assumptions about league practices—an area in which he has conceded he has no expertise. Pakes Tr. 13.

In Dr. Noll's model, both the clubs and the leagues seek to maximize the profits of the products they sell. In Dr. Pakes's model, the clubs and the leagues are each concerned about the profits of the other. Most significantly, Dr. Pakes's model assumes that the leagues would take into account the profits of the teams, which would result in a higher league price, to limit the competitive pressure on the clubs' profits.<sup>18</sup> He insists, in other words, that the leagues would use their dominant market power to increase prices of the bundles by approximately 40% over a competitive price, in order to coordinate rises in the clubs' pricing as well.<sup>19</sup> Whether the leagues

articles did not find that Bertrand was unreliable, only that it is not typically used in non-merger cases because there are other methods available, such as before-and-after or Difference-im-Differences. Dr. Carlton states that prices *can* be determined in a non-merger context if "one is willing to specify a model of competition *such as Bertrand.*" Dennis W. Carlton, *Use and Misuse of Empirical Methods in the Economics of Antitrust*, CPI Antitrust Chron., 3 (Mar. 2011) (emphasis added); *see also* Daniel L. Rubenfeld, *Econometric Issues in Antitrust Analysis*, 166 J. Inst. & Theoretical Econ. 62, 68-69 n.10 (2010) ("The Bertrand pricing assumption is standard in existing models; it is analytically tractable and has been found to have empirical support."). Because Defendants have dominated the market for so long, Dr. Noll does not have access to a suitable control market(and Defendants have not proposed one). In this way, the situation here is akin to the merger context because the control group is "the actual world, and the goal is to figure out where the but-for world would be … , *and you can do it within the Bertrand simulation approach.*" Ordover Tr. 167-68 (emphasis added); *see also* McFadden Tr. 69 ("[I]ndustrial organizations economists do testify as experts in antitrust proceedings … where it is difficult or impossible to identify a control.").

<sup>18</sup> He also assumes that the clubs take account of their share of the league's profits. As Dr. Noll has explained it is unnecessary to model this effect because it is *de minimus*—each team is entitled to 1/30<sup>th</sup> of the league's profits, or 3.33%. Noll Tr. 104. Given the marginal effect of this consideration, it was reasonable to ignore the added complexity it would introduce, even assuming its appropriateness.

<sup>19</sup> Part of the explanation for the fact that this resulted in prices higher than they currently are is that Dr. Noll did not model all aspects of competition in his model, which for his purposes, was a conservative assumption. Dr. Noll's refined model incorporates competition between the clubs.

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could lawfully exercise their pricing power to set a collusive price in this manner is a classwide question that need not be addressed here, but it is important to see that Defendants' argument is that Plaintiffs are not entitled to damages from their anticompetitive practice, because the leagues could replace the current anticompetitive practices (and inflated prices) with other anticompetitive practices in the but-for world as well.<sup>20</sup>

As an initial matter, Dr. Pakes cites no record evidence for his assumption about league practices and admitted at his deposition that he does not know if the leagues currently set a profit-maximizing price, or a price above or below that price. Pakes Tr. 116. It is certainly not necessary that the leagues will set prices that reduce their profits. The CEO of MLBAM claims that it prices MLB.tv *below* profit-maximizing, which is flatly inconsistent with Dr. Pakes's position. Bowman Decl. ¶ 29 ("[W]e choose not to set a higher price because we want to serve our broader mission of getting the greatest number of baseball games to the greatest number of fans."). And as Dr. Noll notes, the leagues typically take into account the fact that they use joint revenue-generators for revenue sharing purposes. Pricing the packages higher with respect to the teams reduces the common revenue that the leagues are able to control and share. Noll Reply 44, 46-47.<sup>21</sup>

Even with Dr. Pakes's collusive pricing strategy, Dr. Noll's model shows that prices for Game Center Live and Extra Innings would be slightly lower in the but-for world. Noll Reply 45. <sup>20</sup> Am. Needle, Inc. v. Nat'l Football League, 560 U.S. 183, 202 (2010) ("[C]ompetitors cannot simply get around antitrust liability by acting through a third-party intermediary or joint venture.") (internal quotation omitted); Starr v. Sony BMG Music Entm't, 592 F.3d 314, 327 (2d Cir. 2010) (noting that the activities of joint ventures are subject to the rule of reason); Federal Trade Commission & U.S. Dept. of Justice, Antitrust Guidelines for Collaborations Among Competitors, 20 (April 2000) ("Joint control over the collaboration's price and output levels could create or increase market power and raise competitive concerns."); William Hepburn Page, Proving Antitrust Damages: Legal and Economic Issues, 55 (2d ed. 2010) (plaintiffs entitled to presume defendants' compliance with the law in but-for world); Herbert Hovenkamp, Federal Antitrust Policy: The Law of Competition and Its Practice (4d ed. 2011).

<sup>&</sup>lt;sup>21</sup> This is different from the question whether the current prices are above the *competitive* price. They surely are. *See, e.g.*, Ex 1 to the Diver Decl. in Opp'n to S.J. (MLB's senior vice president of broadcasting stating that

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In any event, Dr. Pakes's model treats the current package prices are set at profitmaximizing levels, despite his assumption that they would inevitably be priced above that level. Because of this, Dr. Pakes's model amounts to inappropriate double-counting. He assumes, as Dr. Noll's model does, that *current* prices are profit-maximizing, which, if his protectionist assumption is correct, elevates the prices in the model, and then he elevates them *again* by assuming that the but-for-world price would be *above* the profit-maximizing price. Thus, even if his assumption were appropriate, he would need to account for it on both sides of his model, which would bring his but-for prices back down.

Dr. Pakes also models DirecTV's pricing by assuming that it faces no competitive pressure of any kind, effectively pricing the entire market as a pure monopolist. His model of the effects of *increased* competition thus assumes the *elimination* of all competitive constraints on price. Pakes Tr. 131. It is neither surprising nor illuminating that a model with zero competition eliminates the effects of competition on pricing. He admits that any competitive pressure DirecTV would face from the Internet or other MVPDs would necessarily lower the price. Pakes Decl. ¶ 35. This is especially true in the case of a-la-carte channels, because consumers would not be required to change television providers entirely to obtain the programming another way. Dr. Pakes justifies this assumption, in part, by claiming that the Internet is not a competitive substitute for television. This position is not only implausible, it is entirely inconsistent with Defendants' view that Internet competition is a fundamental competitive threat to television—indeed, that it is such a threat that RSNs might not even agree to produce the games in the face of competition from the Internet in clubs' home markets. *See* Class Opp'u 23 (stating that Internet availability of RSNs "would significantly reduce the attractiveness of the RSNs' telecasts to MVPDs.").

competitors can. It is a different question whether they set prices above the *monopoly* profitmaximizing price, which is what Dr. Pakes assumes they would do.

# 2. Dr. Pakes's Claim That Some Clubs Would Opt Out of the League Bundle Is Unrealistic.

In an attempt to create an issue that, unlike those discussed above, might affect the ability to determine damages on a classwide basis, Dr. Pakes concocts a theory in which he argues that individual RSNs would choose to opt out of the league-wide bundles. This, Dr. Pakes hypothesizes, would lead to a world in which one or a few teams sell their games only individually, and the league sells a bundle of the remaining teams.

Dr. Pakes acknowledges that, for this to happen, the leagues would have to change their existing rules. In other words, contrary to Dr. Pakes's claims, Dr. Noll's conclusion *is* an equilibrium point given the current league rules. Dr. Pakes admits he has no expertise in sports economics, so he is in no position to provide opinions in support of his speculation about changes in league policies.

Dr. Pakes first analyzes the profitability of the New York Yankees if the Yankees were to offer their own package while the other twenty-nine teams offered a bundle without the Yankees. He concludes that the Yankees' profit would go up in this scenario, and that the Yankees would therefore choose to remove their games from the league package. His model also concludes that the overall profits of the league would rise, which, he claims, implies that the league would change its rules to allow the Yankees to leave the bundle.

His model shows that this would be true for every team in both MLB and the NHL. That is, every team would want to deviate. But it is uncontested that if *every* team opted out of the bundle, then overall profits would fall. Noll Supp., Ex. 7. Thus, Dr. Pakes's model shows that the leagues would maximize overall profits by allowing one or a few, but not all, teams to deviate from the league-wide bundle, even though all teams would like to be among the deviants.

The notion that the Leagues would change their rules in this regard is absurd. Leaguewide products are used for revenue-sharing purposes, and both MLB and the NHL have taken steps to limit revenue disparity among the clubs. Noll Reply 46-67. Permitting the Yankees to

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obtain excess profits through opportunities not available to other teams is not likely to be viewed as a long-term profit-maximizing strategy for the league and is certainly not the kind of strategy that other teams could plausibly agree to permit. When the New York Rangers tried to opt out of the very rules at issue in this case, the NHL responded by fining them \$100,000 per day. Am. Compl., *MSG v. NHL*, No. 07-8455 (S.D.N.Y. Mar. 31, 2008), at ¶ 14. It is hardly a stretch to assume, as Dr. Noll has, that the league would not eliminate a rule that would prevent a profitable league product from unraveling to the detriment of the league as a whole.

The absurdity of Dr. Pakes's proposition is shown by the fact that if his model is applied to the package *today*, it produces the same results. That is, Dr. Pakes's model shows that the Yankees have an incentive to opt out of the current out-of-market packages, and offer their own package out of market. The league's overall profits would also increase. Noll Reply 46. Under Dr. Pakes's reasoning, the leagues would have let some clubs opt out of the league-wide packages and offer their own out-of-market streams years ago. That they have not done this in the actual world belies the possibility that they are likely to do so in the but-for world.

#### B. Defendants' Arguments Regarding the "Demand Side" Are Misplaced.

For the "demand side" of Dr. Noll's model, the Defendants have hired Dr. Daniel McFadden. Dr. McFadden criticizes Dr. Noll's model in its details, but as is the case with Dr. Pakes, he does not dispute that the fundamental methods Dr. Noll has applied are well-accepted within economic literature, or that they can be used here to determine damages on a classwide basis. Indeed, he runs various hypotheticals using the same approach as Dr. Noll. Dr. McFadden simply makes a handful of criticisms that do not affect the classwide nature of the problem Dr. Noll is addressing.

Dr. McFadden's strategy is to manipulate the modeling in various ways in order to produce what he claims are absurd results. For example, he replaces the actual data with fictional "extreme caricatures," McFadden Decl. ¶14, and then plugs this fabricated data into the model.

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But the model was not designed to run on such unrealistic data. If the data were radically different, it is unlikely that the same model would be used. As Dr. McFadden conceded, "You build an econometric model ... for a specific purpose, and it may have a limited range of applicability." McFadden Tr. 107. "[T]he model ... has to be appropriate to the application and that includes the kind of data that are available to calibrate it. That's true." *Id.* at 106. This is especially true where, as here, the model employs a number of simplifying assumptions that are intended to be conservative in the context of the actual data, but end up contributing to the unexpected results Dr. McFadden achieves through his artificial data. In other words, simplifying assumptions that may be appropriate with real data may not be appropriate when used with Dr. McFadden's hypothetical data, but that has nothing to do with whether the underlying model is reliable.

Dr. Noll has continued to refine his model—and will continue to do so until his final damages report is due. *Cf. Amaranth*, 269 F.R.D. at 385 ("[Plaintiffs' expert's] methods will undoubtedly need refinement before they are effectively applied at trial. Regardless, at this stage of the litigation, the proposed methods are sufficiently developed to permit the conclusion that they can be used to demonstrate liability on a class-wide basis."). Some of the refinements that he has made obviate the criticisms Dr. McFadden makes, by removing simplifying and conservative assumptions that Dr. McFadden exploits in his altered modeling. But none of these changes are necessary to address what is relevant here, which is whether Dr. Noll has proposed a workable method for determining damages on a class basis. As to that issue, Dr. McFadden's critique only serves to confirm the reliability of Dr. Noll's methods.<sup>22</sup>

<sup>&</sup>lt;sup>22</sup> Dr. McFadden testified that he was in "no position, having not studied it, to offer any ... opinion whether it would be a common effect or not." McFadden Tr. 205.

# 1. Dr. McFadden's Insensitivity Critique Does Not Challenge Dr. Noll's Methodological Approach.

Dr. McFadden contends that Dr. Noll's model is insensitive to viewer preferences. On its face, this is incorrect. Dr. McFadden is merely cherry-picking one output (price) that is relatively similar across clubs, while ignoring more relevant outputs like market share and overall profit. In Dr. Noll's September model, for example, the clubs' market shares and profits from their individual packages vary significantly in accordance with the preferences revealed in the viewership data. Thus, for example, the Yankees *price* was not the highest, as Dr. McFadden points out, but its *market share* was the highest—leading to *profits* several times higher than the average, as would be expected.<sup>23</sup> The least-watched teams, like the Houston Astros, were also the least profitable.

These outcomes are driven by viewer preferences, as Dr. McFadden conceded at his deposition. McFadden Tr. 180 (testifying that the market share calculations are "a consequence of the real data."). Dr. McFadden challenges the fact that changing preferences does not seem to change the price of the bundle very much. But it would be expected that the ranking of preferences would have less effect on the price of the bundle in the but-for world. After all, the bundle price is affected by preferences of fans of all teams and the prices of all teams, so the dispersion of interest in particular teams would not be expected to have a large effect on the price of a bundle of all teams' out-of-market games. *See* Noll Reply 50.

Nearly all of Dr. McFadden's critiques are related to one simplifying step that Dr. Noll made in his earlier models, which was to ignore competition between the clubs. As he discussed in his declarations, this assumption was obviously conservative because the increase in competition could only drive prices down. Noll Decl. 102; Noll Supp. 36. In the context of a

<sup>&</sup>lt;sup>23</sup> As discussed below, in Dr. Noll's current models, the Yankees command both the highest price and the highest share. But there is nothing about the fact that the Yankees have more fans that requires that the prices be higher than other teams. Noll Reply 49-50. The minor-league hockey analog to NHL GameCenter Live, AHL Live, costs substantially more than the NHL package, while the minor-league baseball package costs less than the major-league package.

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model intended only to show that prices could be modeled, it was an appropriate assumption. But when Dr. McFadden changes the data or the modeling assumptions, the absence of this additional competition produces results that he claims show that the model is unreliable.

Dr. McFadden attempts to support his critique by creating two artificial datasets, one in which every fan is a "superfan" who only watches a single team, and another in which every fan is a "fan of the game" who has evenly distributed preferences for all teams. He ran these artificial data sets in Dr. Noll's model, and obtained results that differed substantially at the team level, but produced similar bundle prices. Similarly, Dr. McFadden criticized the results of Dr. Noll's model under an artificial scenario in which consumers must choose their least favorite team instead of their most favorite team.

As an initial matter, Dr. Noll's model was not designed to accommodate these artificial data sets and consumer preferences. As Dr. Noll explains and even Dr. McFadden admits, different demand structures call for different modeling approaches, and the approach Dr. Noll has employed would not likely be employed if the data were so radically different. In any event, Dr. Noll has now analyzed the distribution of superfans, fans of two teams, and fans of the game to determine whether omitting his conservative assumption about inter-team competition moots Dr. McFadden's critique. Dr. Noll's refined model accounts for the fact that many fans have strong team loyalty and do not view different teams as competitive substitutes, while others do. As expected, Dr. McFadden's headline result evaporates.<sup>24</sup> In the modified model, the "superfan" datasets now produce bundle prices that are above the but-for prices produced by actual data, while the "fan of the game" data sets produce prices that are substantially lower. Noll Reply 54, 56 <sup>25</sup> Dr. Noll's refined model also produces reasonable and intuitive results under Dr.

<sup>&</sup>lt;sup>24</sup> Another change, discussed below, may have had a secondary effect on this result. Dr. Noll has refined the data analysis to measure viewing time at the RSN level, rather than to count the two teams equally.

<sup>&</sup>lt;sup>25</sup> Moreover, for Dr. McFadden's analysis of "Fans of the Game" analysis, he assumes that generalist fans would prefer to purchase the league-offered bundles. He predicates this assumption on the idea that consumers who watch various bundled channels in equal amounts

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McFadden's artificial scenario in which consumers are forced to choose their least favorite team instead of their most favorite team.

Similarly irrelevant to the present analysis is Dr. McFadden's claim that the model "double counts" consumers' viewing habits. Dr. Noll's original model measured both clubs' viewing time equally when those clubs played one another. Counting both teams was a choice that had the virtue of capturing relevant information about both teams, but was perhaps something of a rough cut insofar as it counted the value of both teams equally. Counting both was not "inconsistent counting," though, because overall viewing time was doubled to account for it. None of this has anything to do with the reliability of the model or the ability to resolve damages on a class basis, so it has no bearing on the present motion. Nevertheless, as explained in Dr. Noll's rebuttal declaration, he has rendered this issue irrelevant by refining the data analysis to determine the particular *feed* of the game that each fan watches—an approach Dr. McFadden supports. McFadden Tr. 222. If the Yankees are playing the Astros, for example, the model now accounts separately for the viewers actually watching the YES Network's feed of the game and those watching the Astros' feed.<sup>26</sup> Noll Reply 34-37.

Dr. McFadden is also incorrect that the model's results are unreliable due to the sensitivity to the seed of the random number generator. The inclusion of this element, which Dr.

have a distinct preference for watching all of the various teams. As Dr. Noll explains in his rebuttal report, it is just as likely that such a fan simply wants to watch major league hockey or baseball, and does not care what team he is watching. Noll Reply 54-55. Such a consumer would be perfectly happy buying a single club's games, and would do so if that were the cheaper option. It cannot be said, as Dr. McFadden does, that a "Fan of the Game"—defined not by a strong preference for teams of the entire league but only by the lack of preference for a particular club—would necessarily be willing to pay for the bundle than any single club's offering. <sup>26</sup> Dr. McFadden is incorrect that the model engages in selection bias. The model does not assume all consumers have the same intensity of preference for games, and does not assume any particular behavior in-market. To the contrary, it assumes that only those fans with a sufficient interest in the games and/or a sufficient indifference to the price will purchase the package. Moreover, since it is trying to measure out-of-market damages, it does not assume that a local clubs' broadcasts would be available via the package "in-market," and does not need to account for any potential difference between "in-market" and "out-of-market" fans. *See* Noll Reply 15.

McFadden agrees is necessary, will always add a measure of randomness to the prices. When, as in the September model, the prices of the teams are very close, this effect can cause the relative ordering of the prices to change. But nothing follows from that, because the exercise was not to determine the relative ordering of individual club's pricing, but to determine the effect of all thirty products on the bundle, which is not affected by reshuffling the order of team prices. Noll Reply 50. In any event, the artificial and irrelevant result Dr. McFadden obtained is no longer applicable, because refinements to the September model—including the modeling of inter-team competition and RSN-level viewing data—produce a greater dispersion in team prices and stable relative rankings. The prices for teams like the Yankees, are consistently at the top for MLB, and the Penguins and Rangers are consistently among the most expensive for the NHL. Noll Reply 41-42, 51.

# 2. Dr. McFadden's Marginal Costs Critique Does Not Challenge Dr. Noll's Methodological Approach.

Dr. McFadden also attacks Dr. Noll's assumption that the marginal costs of each individual club's offering would be 1/30th of the league's. This is just the kind of quibble that has no place in analyzing the question whether Dr. Noll's model represents a workable *method* for computing damages, yet Dr. McFadden treats it as a fundamental flaw that renders Dr. Noll's analysis "unacceptable." McFadden ¶ 35. In Dr. Noll's original model, he calculated the marginal cost of an individual club's package of out of market games as being 1/30 of the league's out-of-market marginal cost to account for the fact that there are 30 teams in each league.<sup>27</sup> This was a simplifying assumption to be sure, but it does not render his analysis unacceptable or reveal that damages cannot be determined on a class basis. As explained in his rebuttal declaration, Dr. Noll has now examined the actual costs associated with the leagues' packages and determined which of these costs are marginal and which would be marginal in a

<sup>&</sup>lt;sup>27</sup> Dr. McFadden testified that he does not know what the difference in marginal costs would be. McFadden Tr. 196 (testifying that marginal costs are "definitely not something I have studied.").

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single club's package. Dr. Noll estimates that the actual marginal cost for a single club's package would be for the bundle's costs for the NHL and for the bundle's costs for MLB. Noll Reply 13, 49.

Ultimately, while incorporating a more accurate marginal cost assumption is a refinement that improves Dr. Noll's model, it has no bearing at all on the model's ability to show class impact or damages. It simply improves the accuracy of the classwide results.<sup>28</sup> Amaranth, 269 F.R.D. at 385. Dr. McFadden's attempt to isolate imperfections in what is, in any event, a preliminary model and turn them into bases for excluding unquestionably reliable methods should be rejected out of hand.

#### **CONCLUSION**

Plaintiffs respectfully request that the Court deny Defendants' joint motion to exclude the opinions and testimony of Dr. Roger Noll.

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Respectfully Submitted,

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<sup>&</sup>lt;sup>28</sup> Dr. McFadden also points out that Dr. Noll did not use every single data type used in C&Y to estimate preferences. These kinds of arguments have nothing to do with the reliability of the underlying methods. If they are even relevant, they might be refinements to the model that might improve its accuracy, but are in no way a valid challenge to the methods at issue. Indeed, Dr. McFadden does not even purport to assert that they would change the model's output in any significant way.

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