# UNITED STATES DISTRICT COURT SOUTHERN DISTRICT OF NEW YORK

	)	
FERNANDA GARBER, MARC	)	
LERNER, DEREK RASMUSSEN,	)	
ROBERT SILVER, GARRETT TRAUB,	)	
and VINCENT BIRBIGLIA, representing	)	(
themselves and all others similarly situated,	)	
	)	
Plaintiffs,	)	
	)	
V.	)	]
	)	
OFFICE OF THE COMMISSIONER OF	)	
BASEBALL, et al.,	)	
	)	
Defendants.	)	
	)	
	)	

Civil Action No. 12-cv-3704 (SAS)

# **DECLARATION OF IAN AYRES**

[REDACTED – PUBLIC VERSION]

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

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#### I. INTRODUCTION

1. I have been asked by counsel for Plaintiffs to review and comment upon the proposed Class Action Settlement<sup>1</sup> ("Settlement Agreement") filed January 20, 2016 in the above captioned matter between Plaintiffs Fernanda Garber, Marc Lerner, Derek Rasmussen, Robert Silver, Garrett Traub, and Vincent Birbiglia (collectively, "Plaintiffs"), on behalf of themselves and all other Class Members (collectively, "Class Members"), and Defendants Office of the Commissioner of Baseball, Major League Baseball ("MLB") Properties Inc., as successor by merger to Major League Baseball Enterprises Inc., MLB Advanced Media L.P., MLB Advanced Media, Inc., Athletics Investment Group, LLC, the Baseball Club of Seattle, L.L.P., Chicago Cubs Baseball Club, LLC, Chicago White Sox, Ltd., Colorado Rockies Baseball Club, Ltd., The Phillies, Pittsburgh Baseball, Inc., San Francisco Baseball Associates, L.L.C., New York Yankees Partnership, Yankees Entertainment and Sports Network, LLC, Comcast Corporation, Comcast SportsNet California, LLC, Comcast SportsNetChicago, LLC, Comcast SportsNet Philadelphia, L.P., DIRECTV, LLC, DIRECTV Sports Networks, LLC, DIRECTV Sports Net Pittsburgh, LLC d/b/a Root Sports Pittsburgh ("Root Sports Pittsburgh"), DIRECTV Sports Net Rocky Mountain, LLC d/b/a Root Sports Rocky Mountain ("Root Sports Rocky Mountain"), and DIRECTV Sports Net Northwest, LLC d/b/a Root Sports Northwest ("Root Sports Northwest") (collectively, "Defendants"). I have reviewed the Settlement Agreement and the Second Amended Class Action Complaint for this case filed September 11, 2013 in the

<sup>&</sup>lt;sup>1</sup> Class Action Settlement Agreement, Garber v. Office of the Commissioner of Baseball, Case No. 12-cv-3704 (SAS) (filed January 20, 2016) [hereinafter *Settlement Agreement*].

Southern District of New York.<sup>2</sup> These and other materials that I rely upon in forming my opinions are listed in Appendix 1.<sup>3</sup>

2. Plaintiffs have brought a case on behalf of themselves and all individuals who (1) have purchased programming from DIRECTV and/or Comcast since four years prior to the filing of the Complaint that "included channels carrying video presentations of live major league baseball games that were not available through a sponsored telecast," and (2) all individuals who purchased MLB.tv in the United States since four years prior to the filing of the Complaint.<sup>4</sup> MLB.tv is the consumer product that has been offered to consumers enabling them to view, over the Internet, games designated as "out-of-market" by the MLB and its teams.<sup>5</sup> Plaintiffs allege that Defendants have engaged in anti-competitive behavior that has eliminated competition in the distribution of live MLB games over the Internet and television.<sup>6</sup> Plaintiffs allege that Defendants have created exclusive territories for each MLB team for purposes of live-game video presentation, such that other teams agree not to compete in other teams' exclusive territories.<sup>7</sup> Plaintiffs allege that the only way for consumers to view live presentations of games for teams outside their exclusive territories is to subscribe to MLB.tv (for viewing live games over the Internet) or MLB Extra Innings (which is distributed by cable and satellite providers).<sup>8</sup> Each of these packages consists of programming for all out-of-market teams, and a consumer cannot subscribe to a more limited package that would include fewer teams (such as a single

<sup>&</sup>lt;sup>2</sup> Second Amended Class Action Complaint, Garber v. Office of the Commissioner of Baseball, Case No. 12cv-3704 (SAS) (filed September 11, 2013) [hereinafter *Complaint*].

<sup>&</sup>lt;sup>3</sup> Jeffrey West, a consultant working under my supervision, provided substantial assistance in the preparation of this report.

<sup>&</sup>lt;sup>4</sup> *Complaint*, ¶42.

<sup>&</sup>lt;sup>5</sup> Settlement Agreement, at ¶¶33-34.

<sup>&</sup>lt;sup>6</sup> Complaint,  $\P 2$ .

<sup>&</sup>lt;sup>7</sup> *Id.* at  $\P$ 9.

 $<sup>^{8}</sup>$  *Id.* at ¶10.

favorite team of the consumer that is out-of-market).<sup>9</sup> Therefore, Plaintiffs allege, many consumers are forced to pay for more games than they want. Plaintiffs allege that these practices are anti-competitive.

3. I have been asked to calculate the value of the Settlement Agreement to consumers. Based on the calculations described in this report, I estimate that the Settlement Agreement will benefit future MLB.tv and MLB Extra Innings subscribers by \$178.4 million to \$213.8 million, not including attorneys' fees or costs.

#### **II.** QUALIFICATIONS

4. I am the William K. Townsend Professor at Yale Law School, and a Professor at Yale's School of Management. I was the editor of the Journal of Law, Economics and Organization for seven years. I have previously taught at Harvard, Illinois, Northwestern, Stanford, and Virginia law schools and have been a research fellow of the American Bar Foundation. In 2006, I was elected to the American Academy of Arts and Sciences. I regularly teach courses in Contract Law and Quantitative Corporate Finance. I received my B.A. in Russian Studies and economics and J.D. from Yale University and my Ph.D. in economics from M.I.T.

5. I am the co-author of a widely-adopted contracts casebook, *Studies in Contract Law*, which is now in its 8<sup>th</sup> edition. In the Spring of 2010, together with Barry Nalebuff, I published a book with Basic Books on retirement investments entitled *Lifecycle Investing: A New, Safe, and Audacious Way to Improve the Performance of Your Retirement Portofilio*. My book with Gregory Klass, *Insincere Promises: The Law of Misrepresented Intent*, won the

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<sup>&</sup>lt;sup>9</sup> *Id.* at ¶¶10-11.

2006 Scribes book award "for the best work of legal scholarship published during the previous year." I have published 11 books and over 100 articles on a wide range of topics.

6. I am the author of several empirical studies that include econometric analysis and work with large datasets: Does Affirmative Action Reduce the Number of Black Lawyers?, 57 Stanford Law Review 1807 (2005) (with Richard Brooks); To Insure Prejudice: Racial Disparities in Taxicab Tipping, 114 Yale Law Journal 1613 (2005) (with Fred Vars and Nasser Zakariya); A Separate Crime of Reckless Sex, 72 University of Chicago Law Review 599 (2005) (with Katharine Baker); Shooting Down the More Guns, Less Crime Hypothesis, 55 Stanford Law Review 1193 (2003) (with John J. Donohue III); Measuring the Positive Externalities from Unobservable Victim Precaution: An Empirical Analysis of Lojack, 113 Quarterly Journal of Economics 43 (1998) (with Steven D. Levitt); Pursuing Deficit Reduction Through Diversity: How Affirmative Action at the FCC Increased Auction Competition, 48 Stanford Law Review 761 (1996) (with Peter Cramton); A Market Test for Race Discrimination in Bail Setting, 46 Stanford Law Review 987 (1994) (with Joel Waldfogel); and Racial Equity in Renal Transplantation: The Disparate Impact of HLA-Based Allocation, 270 Journal of American Medical Association 1352 (1993) (with Robert Gaston, Laura Dooley, and Arnold Diethelm).

7. My curriculum vitae is included as Appendix 2. I have previously testified as an expert witness in a variety of antitrust, contract, and civil rights cases. I have attached a list of cases on which I have given sworn testimony (Appendix 3).

8. I file this report in my individual capacity and have no financial stake in the outcome of this case. My hourly rate in this matter is \$850. My compensation is not contingent

on any action or event resulting from the analyses, opinions or conclusions in, or the use of, this report.

9. My review of materials and data is continuing, and I reserve the right to modify my opinions as new materials emerge.

#### **III.SETTLEMENT AGREEMENT TERMS**

10. The Settlement Agreement includes injunctive relief consisting of new unbundled programming packages and price relief on existing bundle programming packages. In this section, I briefly describe these terms.

#### A. MLB.tv Unbundled Programming

11. Under the terms of the Settlement Agreement, beginning with the 2016 season and continuing for four additional seasons, MLB will offer unbundled live game programming that is included in the full, bundled MLB.tv package.<sup>10</sup> The unbundled live game programming included in this portion of the Settlement Agreement will allow consumers to purchase programming for a single "out-of-market" team rather than the bundled MLB.tv package ("MLB.TV Package") that consists of all teams. The consumer price of the unbundled MLB.tv programming for any individual team ("Internet Single-Club Programming") shall be \$84.99 for the 2016 MLB season. Thereafter, through the 2020 MLB season, the price of the Internet Single-Club Programming may increase by no more than 3% or that year's Cost of Living

<sup>&</sup>lt;sup>10</sup> Settlement Agreement, at ¶¶49, 55. MLB will also offer the right to sell unbundled MLB Extra Innings programming ("Single-Club Programming") for each and every MLB team to Comcast and DIRECTV. *Id.* at ¶¶49, 56. Neither Comcast nor DIRECTV is required to offer this unbundled programming under the terms of the Settlement Agreement. If either Comcast or DIRECTV chooses to offer Single-Club Programming, it cannot be priced higher than 80% of the residential consumer price for the full-season MLB Extra Innings package.

Adjustment ("COLA"), as determined by the Social Security Administration, whichever is greater.<sup>11</sup>

#### MLB.tv and MLB Extra Innings Price Relief B.

In addition to the unbundled MLB.tv package, the terms of the Settlement 12. Agreement include provisions for the pricing of the full, bundled MLB.TV and MLB Extra Innings Packages.<sup>12</sup> Under those provisions, MLB will provide the MLB.TV Package at a price of \$109.99 for the 2016 season. Thereafter, through the 2020 MLB season, the price of the MLB.TV Package may increase by no more than 3% or that year's COLA, whichever is greater.<sup>13</sup> Comcast and DIRECTV will provide full-season MLB Extra Innings Packages for the 2016 and 2017 seasons to residential customers at a 12.5% discount off of their corresponding full-season MLB Extra Innings prices to residential customers for the 2015 season.<sup>14</sup>

#### C. MLB.tv "Follow-Your-Team" Add-On Feature

13. Under the provisions of the settlement, MLB will offer its MLB.TV Package subscribers a "Follow-Your-Team" Package for an additional \$10 beyond the regular MLB.TV Package under the settlement.<sup>15</sup> The "Follow-Your-Team" feature would enable those MLB.TV Package subscribers the ability to view, via the internet, the out-of-market local broadcast of a game between the subscriber's selected out-of-market team and a team within the subscriber's market. This feature will be available subject to agreements between MLB and the regional sports networks carrying the games.

- <sup>14</sup> *Id*.
- <sup>15</sup> *Id.* at ¶58.

<sup>&</sup>lt;sup>11</sup> *Id.* at ¶55. <sup>12</sup> *Id.* at ¶57. <sup>13</sup> *Id.* 

#### **IV. VALUE OF SETTLEMENT AGREEMENT TO CLASS MEMBERS**

14. The Settlement Agreement includes savings for both Class Members who continue to subscribe to the bundled MLB.TV and MLB Extra Innings Packages in the future as well as savings for Class Members who switch from the bundled packages to the MLB's unbundled Internet Single-Club Programming. Therefore, the key inputs to my calculation of the value to Class Members of the terms of the Settlement Agreement are (1) the number of subscribers, (2) the prices, and (3) the share of Class Members who switch from the bundled package.

<sup>&</sup>lt;sup>16</sup> E-Mail from William Durbin, Paul, Weiss, Rifkind, Wharton & Garrison LLP, to Peter Leckman, Langer, Grogan & Diver, P.C., Feb. 29, 2016; E-Mail from John Vazquez, Kirkland & Ellis LLP, to Peter Leckman, Langer, Grogan & Diver, P.C., Feb. 29, 2016; E-Mail from Andrew DeLaney, Davis Polk & Wardwell LLP, to Peter Leckman, Langer, Grogan & Diver, P.C., Jan. 29, 2016.

<sup>&</sup>lt;sup>17</sup> MLB.tv Basic also did not permit viewing on all devices available for MLB.tv Premium. See, e.g., *Complaint*, ¶83; Plaintiffs' Memorandum in Support of Motion for Preliminary Approval of Class Action Settlement, Garber v. Office of the Commissioner of Baseball, Case No. 12-cv-3704 (SAS) (filed January 20, 2016), at 10 n.7.

<sup>&</sup>lt;sup>18</sup> See, e.g., Mark Newman, *Signups for 2015 MLB.TV are underway*, MLB.COM, Feb. 3, 2015, http://m.mlb.com/news/article/108190358/signups-for-2015-mlbtv-are-underway.

respectively.<sup>19</sup> The Settlement Agreement does not include any terms related to partial season packages. Therefore, I only consider full-season subscriber and pricing data in my analysis.

16. For purposes of valuing the settlement terms, I assume that the number of MLB.tv subscribers (excluding any subscribers who switch from MLB Extra Innings to Internet Single-Club Programming) would programming per year from 2016 through 2020. This matches

in the number of MLB.tv subscribers from 2012 to 2015 (as shown in Table 1 below). I understand that MLB is not offering the MLB.tv Basic Package in 2016 under the terms of the settlement. However, I assume that MLB would have offered the MLB.tv Basic Package had no settlement occurred, and I categorize these but-for MLB.tv Basic Package subscribers under the "MLB.TV Basic" label in my settlement and no settlement calculations described herein. I assume that the number of MLB.tv Basic subscribers would

from 2016 to 2020, matching

in subscribers from

2012 to 2015, as shown in Table 1. The number of MLB.tv Premium subscribers each year is equal to the difference between the total number of MLB.tv subscribers and the number of MLB.tv Basic subscribers in that year. Finally, I assume that the number of subscribers to DIRECTV MLB Extra Innings and Comcast MLB Extra Innings (before subtracting subscribers who would switch to Internet Single-Club Programming) remain at the 2015 levels.<sup>20</sup> These assumptions are conservative, given that the rate of increase in subscriptions will likely

<sup>&</sup>lt;sup>19</sup> See, e.g., Phillip Swann, *DIRECTV Holds Price For 2015 MLB Extra Innings*, TVPREDICTIONS.COM, Feb. 13, 2015, http://www.tvpredictions.com/mlb021315.htm; Posting of ComcastTeds to Comcast Help & Support Forums, http://forums.xfinity.com/t5/Channels-and-Programming/MLB-Extra-Innings/td-p/2488259 (Mar. 18, 2015, 15:38 EST).

<sup>&</sup>lt;sup>20</sup> Besides 2015 subscriber figures, I have reviewed MLB Extra Innings subscriber figures for 2008-2012 for DIRECTV and 2006-2012 for Comcast. Between 2008 and 2012, the number of DIRECTV MLB Extra Innings subscribers ranged from

<sup>.</sup> MLB0007163-7167, at MLB0007163. Between 2006 and 2012, the number of Comcast MLB Extra Innings subscribers ranged from

accelerate as a result of the lower prices and additional choices coming from the proposed settlement.

17. For purposes of valuing the settlement terms, I assume that the undiscounted prices of the MLB Extra Innings packages will remain at their 2015 levels (\$197.94 for DIRECTV and \$199.00 for Comcast) through the 2020 season. I assume that the MLB.TV Package (Basic and Premium) would increase by 3% each year from 2016 to 2020 if no settlement had occurred. I consider two scenarios of price increases under the terms of the settlement for purposes of valuing the Settlement Agreement to Class Members. Under Scenario 1, I assume that the MLB.TV Package price would increase by 3% each year from 2016 to 2020. Under Scenario 2, I assume that the MLB.TV Package price would remain constant (increase by 0%) from 2016 to 2020. Based on the terms of the Settlement Agreement, MLB would be forbidden from implementing any price increase in the MLB.TV Package if it could not obtain in-market streaming rights for local game broadcasts on all the Regional Sports Networks of DIRECTV, Comcast, and 21st Century Fox.<sup>21</sup> Therefore, the difference between total subscriber benefits under the two scenarios is a representation of the value of the in-market streaming provision of the Settlement Agreement.

18. For purposes of valuing the settlement terms, I assume that 30% of the MLB.tv Premium and MLB Extra Innings subscribers that would exist without the settlement will switch to the less expensive Internet Single-Club Programming under the terms of the settlement. I assume that MLB.tv Basic subscribers are more price sensitive than MLB.tv Premium and MLB Extra Innings subscribers, by virtue of their choice to subscribe to the less expensive MLB.tv offering but-for the settlement. Therefore, I assume that 50% of MLB.tv Basic subscribers that

<sup>&</sup>lt;sup>21</sup> Settlement Agreement, at ¶59.

would exist without the settlement will switch to the less expensive Internet Single-Club Programming under the terms of the Settlement. I assume that these consumers with a strong team preference who switch value the unbundled team package as much as the bundle package. Because Comcast and DIRECTV are not required to offer the unbundled package to their MLB Extra Innings subscribers, I assume that the unbundled package is available only through MLB.tv under the terms of the Settlement Agreement.

19. My assumptions regarding the number and valuations of unbundled MLB.tv Internet Single-Club Programming subscribers are likely to be conservative because they do not take into account new consumers who will enter (or re-enter) the market. For the purposes of valuing the settlement in monetary terms, what matters is the absolute number of consumers who purchase the single team package instead of the traditional package, not any given percentage of preexisting subscribers. My calculations of the value of the unbundled MLB.tv Internet Single-Club Programming package to the 30%-to-50% share of subscribers who would exist without a settlement does not include the value to the additional consumers who would enter the market once an unbundled package becomes available.

20. Table 1 summarizes the data and assumptions regarding MLB.tv upon which I rely in calculating the value of the terms of the Settlement Agreement to Class Members, as described above.

		MLB.tv Basic	MLB.tv Premium	Total MLB.tv
[1]	Subscribers, 2012			
[2]	Subscribers, 2015			
[3]	% Increase, 2012-2015			
[4]	Average Annual % Increase, 2012-2015			
[5]	Price of MLB.TV Package, 2015	\$109.99	\$129.99	
[6]	Price of MLB.TV Package under Settlement, 2016	N/A	\$109.99	
[7]	Price of Internet Single-Club Programming under Settlement, 2016	N/A	\$84.99	
[8]	Assumed % of MLB.TV Package Subscribers who Switch to Internet Single-Club Programming	50%	30%	
[9]	Assumed Annual % Change in Subscribers, 2016-2020			
	Assumed Annual Price Change of MLB.TV Package (Bundled) & Internet Single-Club Programming (Unbundled) under Settlement, 2016-2020			
[10]	Scenario 1	N/A	3%	3%
[11]	Scenario 2	N/A	0%	0%
[12] Sourc	Assumed Annual Price Change of MLB.TV Package (Bundled) under No Settlement, 2016-2020	3%	3%	3%

#### TABLE 1: MLB.TV MODEL INPUTS

[1] MLB0357678. Does not include monthly subscribers.

[2] E-Mail from William Durbin, Paul, Weiss, Rifkind, Wharton & Garrison LLP, to Peter Leckman, Langer, Grogan & Diver, P.C., Feb. 29, 2016. Does not include monthly subscribers.

[3] = ([2] - [1]) / [1][4] = (1 + [3])<sup>1/3</sup> - 1

[5] Mark Newman, Signups for 2015 MLB.TV are underway, MLB.COM, Feb. 3, 2015, http://m.mlb.com/news/article/108190358/signups-for-2015-mlbtv-are-underway.

[6] Settlement Agreement, at \$57. MLB ty Basic will no longer be offered under the settlement terms.

[7] Settlement Agreement, at ¶55.

[8] Assumption.

[9] = [4] for MLB.tv Basic and Total MLB.tv (Basic plus Premium). The annual percent increase in MLB.tv Premium subscribers will vary by year to be consistent with the assumed decrease in Basic subscribers and assumed increase in total MLB.tv subscribers. This assumed percentage increase excludes any Comcast or DIRECTV MLB Extra Innings subscribers who would switch to the Internet Single-Club Programming under the settlement.

[10] Settlement Agreement, at ¶¶55, 57.

[11] Settlement Agreement, at ¶55, 57, 59.

[12] Assumption.

21. Table 2 summarizes the data and assumptions regarding DIRECTV MLB Extra Innings and Comcast MLB Extra Innings upon which I rely in calculating the value of the terms of the Settlement Agreement to Class Members, as described above.

		DirecTV MLB Extra Innings	Comcast MLB Extra Innings
[1]	Subscribers, 2015		
[2]	Price of MLB Extra Innings Package, 2015	\$197.94	\$199.00
[3]	% Discount of MLB Extra Innings Package Price, Relative to 2015		
	2016	12.50%	12.50%
	2017	12.50%	12.50%
	2018	0.00%	0.00%
	2019	0.00%	0.00%
	2020	0.00%	0.00%
[4]	Discount of Unbundled Package, relative to MLB Extra Innings Package	N/A	N/A
[5]	Assumed % of MLB Extra Innings Package Subscribers who Switch to Internet Single-Club Programming (MLB.tv)	30%	30%
[6]	Assumed Annual % Change in Subscribers, 2016-2020	0%	0%
[7]	Assumed Annual Price Change of MLB Extra Innings Package, 2016- 2020 (Before Any Settlement-Related Discounts)	0%	0%

## TABLE 2: MLB EXTRA INNINGS MODEL INPUTS

Sources:

[1] E-Mail from John Vazquez, Kirkland & Ellis LLP, to Peter Leckman, Langer, Grogan & Diver, P.C., Feb. 29, 2016.

[2] E-Mail from Andrew DeLaney, Davis Polk & Wardwell LLP, to Peter Leckman, Langer, Grogan & Diver, P.C., Jan. 29, 2016.

[3] Settlement Agreement, at ¶57.

[4] Settlement Agreement, at ¶56. DIRECTV and Comcast are not required to offer unbundled MLB Extra Innings packages to their customers. Therefore, I assume that the unbundled package is only offered through the Internet Single-Club Programming of MLB.tv.

[5] Assumption.

[6] Assumption.

[7] Assumption.

22. To calculate the benefit of the settlement to consumers, I calculate the customer programming costs for all MLB.tv, DIRECTV MLB Extra Innings, and Comcast MLB Extra Innings subscribers for each of the five seasons beginning with the 2016 season. I calculate these customer costs under the terms of the Settlement Agreement, and I compare these costs to the costs that would be incurred by subscribers without the settlement. The value of the Settlement Agreement is equal to the difference between these two costs.

23. Appendix 4-1 illustrates the programming price per subscriber in my model if the terms of the Settlement Agreement are implemented ("Settlement") and the programming price per subscriber if the terms of the Settlement Agreement are not implemented ("No Settlement") under Scenario 1. Appendix 4-2 illustrates the programming price per subscriber in my model if the terms of the Settlement Agreement are implemented and the programming price per subscriber if the terms of the Settlement Agreement are not implemented under Scenario 2. Through a comparison of these sets of Settlement and No Settlement prices, Appendices 4-1 and 4-2 illustrate the cost savings from the Settlement Agreement to each subscriber who either remains a bundle package subscriber or switches to an unbundled package. Table 3 summarizes these cost savings under Scenarios 1 and 2 for each type of subscriber.

		2016	2017	2018	2019	2020
	Settlement, Scenario 1					
	MLB.tv Basic					
[1]	Bundled	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
[2]	Unbundled	\$25.00	\$25.75	\$26.52	\$27.32	\$28.14
	MLB.tv Premium					
[3]	Bundled	\$20.00	\$20.60	\$21.22	\$21.85	\$22.51
[4]	Unbundled	\$45.00	\$46.35	\$47.74	\$49.17	\$50.65
[5]	DIRECTV MLB Extra Innings	\$24.74	\$24.74	\$0.00	\$0.00	\$0.00
[6]	Comcast MLB Extra Innings	\$24.88	\$24.88	\$0.00	\$0.00	\$0.00
	Settlement, Scenario 2					
	MLB.tv Basic					
[7]	Bundled	\$0.00	\$3.30	\$6.70	\$10.20	\$13.80
[8]	Unbundled	\$25.00	\$28.30	\$31.70	\$35.20	\$38.80
	MLB.tv Premium					
[9]	Bundled	\$20.00	\$23.90	\$27.92	\$32.05	\$36.31
[10]	Unbundled	\$45.00	\$48.90	\$52.92	\$57.05	\$61.31
[11]	DIRECTV MLB Extra Innings	\$24.74	\$24.74	\$0.00	\$0.00	\$0.00
[12]	Comcast MLB Extra Innings	\$24.88	\$24.88	\$0.00	\$0.00	\$0.00
[2] = Ap [3] = Ap [4] = Ap [5] = Ap [6] = Ap [7] = Ap	opendix 4-1, row [3] opendix 4-1, row [5] opendix 4-1, row [8] opendix 4-1, row [10] opendix 4-1, row [13] opendix 4-1, row [16] opendix 4-2, row [3] opendix 4-2, row [5]					

#### TABLE 3: SETTLEMENT BENEFIT TO A BUNDLED & UNBUNDLED PACKAGE SUBSCRIBER

[9] = Appendix 4-2, row [8] [10] = Appendix 4-2, row [10] [11] = Appendix 4-2, row [13]

[12] = Appendix 4-2, row [16]

24. As Table 3 shows, an MLB.TV Package subscriber would save \$20.00 for the 2016 season under the terms of the Settlement Agreement relative to what the subscriber would have paid for MLB.TV Premium under no settlement (\$109.99 vs. \$129.99). An MLB.TV

Package subscriber would pay the same amount in 2016 under the terms of the Settlement Agreement as the subscriber would have for MLB.tv Basic under no settlement. MLB.tv subscribers who switch to the unbundled Internet Single-Club Programming save an additional \$25 from the discounted bundled package in 2016. The benefits to MLB.tv subscribers increase each year from 2016 to 2020. Benefits are larger under Scenario 2 relative to Scenario 1 from 2017 to 2020 because the MLB.TV Package and Internet Single-Club Programming prices under the terms of the Settlement Agreement do not increase over that period in Scenario 2, whereas they increase by 3% each year in Scenario 1.

25. Table 3 also shows that the 12.5% discount for MLB Extra Innings programming lowers the total price of MLB Extra Innings programming by almost \$25 for the 2016 and 2017 seasons. This represents an approximate \$25 benefit per MLB Extra Innings subscriber who remains with the bundled MLB Extra Innings package of either Comcast or DIRECTV.

26. Appendix 5 illustrates the number of subscribers to the MLB.TV and MLB Extra Innings bundle packages who either (1) remain bundle package subscribers under the terms of the Settlement Agreement, or (2) switch to the unbundled Internet Single-Club Programming package. Table 4 summarizes the subscriber estimates from Appendix 5.

TABLE 4: FORECASTED BUNDLE PACKAGE AND UNBUNDLED PACKAGE SUBSCRIBERS FOR EACH SEASON, 2016-2020

		2016	2017	2018	2019	2020
[1]	No Settlement					
	Settlement					
[2]	Bundled					
[3]	% of Total	69.5%	69.6%	69.7%	69.8%	69.8%
[4]	Unbundled					
[5]	% of Total	30.5%	30.4%	30.3%	30.2%	30.2%
[6]	Total					

Notes: [1] = Appendix 5, row [6] [2] = Appendix 5, row [12] [3] = [2] / [6] [4] = Appendix 5, row [18] [5] = [4] / [6] [6] = [2] + [4]

27. As Table 4 shows, of the **sector** total MLB.tv, DIRECTV MLB Extra Innings, and Comcast MLB Extra Innings subscribers in 2016, **sector** (69.5% of the total) are forecasted to remain bundle package subscribers when the terms of the Settlement Agreement are implemented. Approximately 30% of the total subscribers in each year are forecasted to switch to the unbundled Internet Single-Club Programming package.

28. Using the pricing and subscriber calculations illustrated in detail in Appendices 4-1, 4-2, and 5, and summarized in Tables 3 and 4, I calculate the benefit to MLB.tv and MLB Extra Innings subscribers from the Settlement Agreement. Appendix 6-1 illustrates my calculations under the assumptions of Scenario 1, whereas Appendix 6-2 illustrates my calculations under the assumptions of Scenario 2. Table 5 summarizes my results of the value of the Settlement Agreement to all MLB.tv, DIRECTV MLB Extra Innings, and Comcast MLB Extra Innings subscribers. TABLE 5: SUMMARY OF SETTLEMENT AGREEMENT BENEFITS TO BUNDLE PACKAGE AND UNBUNDLED PACKAGE SUBSCRIBERS, 2016-2020

	Scenario 1	
[1]	Bundle Subscriber Benefit	
[2]	Unbundled Subscriber Benefit	
[3]	Total Subscriber Benefit	\$178,389,441
	Scenario 2	
[4]	Bundle Subscriber Benefit	
[5]	Unbundled Subscriber Benefit	
[6]	Total Subscriber Benefit	\$213,770,690
	Notes:	
	[1] See Appendix 6-1, row [21]	
	[2] See Appendix 6-1, row [22]	
	[3] = [1] + [2]	
	[4] See Appendix 6-2, row [21]	
	[5] See Appendix 6-2, row [22]	
	[6] = [4] + [5]	

29. Table 5 shows that under the assumption of Scenario 1 that the MLB.TV Package and Internet Single-Club Programming prices increase by 3% each year from 2016 to 2020, the total benefit from the Settlement Agreement to subscribers who remain bundle package subscribers is **\$10000000** from the 2016 to the 2020 seasons. The total benefit to subscribers who switch to the unbundled package is **\$10000000** under Scenario 1. The total benefit to all MLB.tv, DIRECTV MLB Extra Innings, and Comcast MLB Extra Innings subscribers is \$178.4 million under Scenario 1.

31. The valuation range of \$178.4 million to \$213.8 million illustrated in Table 5 is a conservative estimate of the overall benefit of the Settlement Agreement to consumers. First, the valuation is conservative because I assume that the rate of increase in total number of subscribers to the bundled and unbundled packages does not increase over time. It is likely that additional consumers (including Class Members who were not active subscribers in 2015 but had been subscribers in earlier years) would subscribe to these packages due to the decrease in price and increase in programming package choice. Second, I assume in my calculations that MLB Extra Innings prices without the settlement discounts remain constant over time. If the undiscounted price were to increase, then the dollar value of the discounts would increase, thus increasing the value of the settlement to subscribers. Third, my calculations do not include the benefit to MLB.TV Package subscribers who would choose the "Follow-Your-Team" feature that was not available without the Settlement.

#### **V.** CONCLUSION

32. In summary, I find that subscribers to MLB.tv and MLB Extra Innings will save approximately \$178.4 million to \$213.8 million over the five seasons beginning with the 2016 season and ending with the 2020 season under the terms of the Settlement Agreement. The Settlement Agreement provides further benefits to subscribers by introducing the choice of an unbundled package that has not been offered previously. Therefore, I conclude that the Settlement Agreement benefits Class Members. \* \* \*

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

Executed on April 10, 2016.

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Ian Ayres

#### **APPENDIX 1: MATERIALS RELIED UPON**

Legal Filings & Expert Reports:

- Second Amended Class Action Complaint, Garber v. Office of the Commissioner of Baseball, Case No. 12cv-3704 (SAS) (filed September 11, 2013).
- Plaintiffs' Memorandum in Support of Motion for Preliminary Approval of Class Action Settlement, Garber v. Office of the Commissioner of Baseball, Case No. 12-cv-3704 (SAS) (filed January 20, 2016).
- Class Action Settlement Agreement, Garber v. Office of the Commissioner of Baseball, Case No. 12-cv-3704 (SAS) (filed January 20, 2016).

Letters, E-Mails, and Other Correspondences

- E-Mail from Andrew DeLaney, Davis Polk & Wardwell LLP, to Peter Leckman, Langer, Grogan & Diver, P.C., Jan. 29, 2016.
- E-Mail from William Durbin, Paul, Weiss, Rifkind, Wharton & Garrison LLP, to Peter Leckman, Langer, Grogan & Diver, P.C., Feb. 29, 2016.
- E-Mail from John Vazquez, Kirkland & Ellis LLP, to Peter Leckman, Langer, Grogan & Diver, P.C., Feb. 29, 2016.

Document Production

- MLB0007161-7167.
- MLB0357678.
- COM-00063011.

News Articles & Web Sites:

- Mark Newman, *Signups for 2015 MLB.TV are underway*, MLB.COM, Feb. 3, 2015, http://m.mlb.com/news/article/108190358/signups-for-2015-mlbtv-are-underway.
- Phillip Swann, *DIRECTV Holds Price For 2015 MLB Extra Innings*, TVPREDICTIONS.COM, Feb. 13, 2015, http://www.tvpredictions.com/mlb021315.htm.
- Posting of ComcastTeds to Comcast Help & Support Forums, http://forums.xfinity.com/t5/Channels-and-Programming/MLB-Extra-Innings/td-p/2488259 (Mar. 18, 2015, 15:38 EST).

#### **APPENDIX 2: CURRICULUM VITAE OF IAN AYRES**

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#### **EDUCATION**

- Ph.D. (Economics) Massachusetts Institute of Technology, 1988.
  Major Fields: Industrial Organization, Econometrics.
  Dissertation: Essays on Vertical Foreclosure, Cartel Stability and the Structural Determinants of Oligopolistic Behavior.
- J.D. Yale Law School, 1986. Articles Editor, Yale Law Journal.
- B.A. Yale University, 1981. Majors: Russian and East European Studies (Distinction). Economics (Distinction). <u>Summa Cum Laude</u>, 1981. <u>Phi Beta Kappa</u>, 1980.

#### **PROFESSIONAL APPOINTMENTS**

William K. Townsend Professor, Yale Law School, 1994 - present.

Professor, Yale School of Management, 1994 - present.

Anne Urowsky Professorial Fellow, 2009 - present.

Research Associate, National Bureau of Economic Research, 2005 - present.

Editor, JOURNAL OF LAW, ECONOMICS AND ORGANIZATION, 2002 - 2009.

Adviser, The Center for Cost-Effective Consumerism, 2008 – present.

Robert B. and Candice J. Haas Visiting Professor, Harvard Law School, Winter Term 2008.

Visiting Professor, University of Illinois, School of Law, 1997-98.

Lecturer, University of Toronto, Faculty of Law, January 1995.

Professor, Stanford Law School, 1992 - 1994.

Lecturer, University of Illinois, School of Law, Summers 1994 and 1995.

Board of Editors, SUPREME COURT ECONOMIC REVIEW, 1993 - . Lecturer, University of Iowa, School of Law, January Term 1993.

Lecturer, Moscow State Institute of International Relations (MGIMO) -- Cardozo Law Institute, Summer 1992.

Visiting Professor, Yale Law School, Fall 1991.

Visiting Professor, University of Virginia, School of Law, Fall 1990 - Spring 1991.

Guest Scholar, Brookings Institution, Summer 1990 - Spring 1991.

Associate Professor, Northwestern University, School of Law, 1990 - 1991; (Assistant Professor, 1987-1990).

Research Fellow, American Bar Foundation, 1987 - 1991.

Scholar in Residence, Sonnenschein Nath and Rosenthal - Summer 1990.

Associate Editor, Law and Social Inquiry, 1990.

Clerk to the Honorable James K. Logan, Tenth Circuit Court of Appeals, 1986-1987.

Olin Summer Research Fellow, Yale Law School Program in Law, Economics, and Public Policy, May to August 1986.

#### **COURSES TAUGHT**

Antitrust, Civil Rights, Commercial Law, Contracts, Corporations, Corporate Finance, Intellectual Property, Law and Economics, Empirical Law and Economics, LGBT Litigation Seminar, Property, Quantitative Methods.

#### PUBLIC INTEREST

*Rothe Dev. Corp. v. United States*, SA-98-CA-1011-EP, U.S. District Court Western District of Texas, testifying expert concerning narrow tailoring of affirmative action in government procurement, 1999.

Advisor, Justice and Commerce Departments on post-Adarand review of Affirmative Action, 1998.

Member, Board of Directors, Yale Law School Early Learning Center, 1996 - 1997.

Member, Board of Directors, East Palo Alto Community Law Project, 1993 - 1994.

*In re Insurance Antitrust Litigation*, consulting expert; regarding antitrust claims of 17 state Attorneys General against major commercial insurers, 1988 - 1991.

Counsel in Illinois post-conviction petition, *People v. Titone*, 83-C-127, 1988 to 1992 (Death sentence vacated September 7, 1990; argued claims concerning underlying conviction to Illinois Supreme Court, March 14, 1992).

<u>New Haven Battered Women's Temporary Restraining Order Project</u>, September 1985 to April 1986.

Harvard Prison Legal Assistance Project, October 1983 to May 1984.

Legal Services of Western Missouri, June to August 1983.

Jerome Frank Legal Services Organization, January 1983 to October 1984.

### **PUBLICATIONS**

### Books

STUDIES IN CONTRACT LAW (8th edition, Foundation Press, 2012) (with Greg Klass).

THE \$500 DIET: WEIGHT LOSS FOR PEOPLE WHO ARE COMMITTED TO CHANGE (Kindle Select, 2011).

CARROTS AND STICKS: UNLOCK THE POWER OF INCENTIVES TO GET THINGS DONE (Bantam Books, 2010).

LIFECYCLE INVESTING: A NEW, SAFE, AND AUDACIOUS WAY TO IMPROVE THE PERFORMANCE OF YOUR RETIREMENT PORTFOLIO (Basic Books, 2010) (with Barry Nalebuff).

STUDIES IN CONTRACT LAW (7<sup>th</sup> edition, Foundation Press, 2008) (with Richard E. Speidel).

SUPER CRUNCHERS: WHY THINKING-BY-NUMBERS IS THE NEW WAY TO BE SMART (BANTAM

BOOKS 2007).

Excerpt: How Computers Routed the Experts, Financial Times (August 31, 2007).

STRAIGHTFORWARD: HOW TO MOBILIZE HETEROSEXUAL SUPPORT FOR GAY RIGHTS (PRINCETON UNIVERSITY PRESS 2005) (with Jennifer Gerarda Brown).

INSINCERE PROMISES: THE LAW OF MISREPRESENTED INTENT (YALE UNIVERSITY PRESS, 2005) (with Gregory Klass).

OPTIONAL LAW: THE STRUCTURE OF LEGAL ENTITLEMENTS (UNIVERSITY OF CHICAGO PRESS, 2005).

WHY NOT?: HOW TO USE EVERYDAY INGENUITY TO SOLVE PROBLEMS BIG AND SMALL (Harvard Business School Press, 2003) (with Barry Nalebuff) *also published in Portugese* as "Você Pode Tudo" (Negocio Editora), *in Spanish* as "¿Y por que NO" (Empresa Activa), *in Korean* (Sejong), *in Japanese* (Hankyu), *in Chinese* (The Commercial Press), *in Bulgarian* (Klasika and Still), *in Chinese* (China Times), *in Estonian* (Tanapaev), *in Italian* (Il Sole), *in Korean* (Sejong Books), *in Russian* (Williams Publishing), and *in Thai* (AR Business Press).

*Book Excerpt: Ideas Waiting to Happen*, FORBES 127 (Oct. 27 2003) (with Barry Nalebuff).

Book Excerpt: A Role on the Board for the Loyal Opposition, 'DIRECTORS & BOARDS 32 (Fall 2003).

Book Excerpt: Problem Solving: What Would Croesus Do?, DARWIN (Nov. 2003).

STUDIES IN CONTRACT LAW (6<sup>th</sup> edition, Foundation Press, 2003) (with Edward J. Murphy & Richard E. Speidel).

VOTING WITH DOLLARS: A NEW PARADIGM FOR CAMPAIGN FINANCE (with Bruce Ackerman) (Yale University Press) (2002).

PERVASIVE PREJUDICE?: UNCONVENTIONAL EVIDENCE OF RACE AND GENDER DISCRIMINATION (University of Chicago Press, 2002).

STUDIES IN CONTRACT LAW (5<sup>th</sup> edition, Foundation Press, 1997) (with Edward J. Murphy & Richard E. Speidel).

RESPONSIVE REGULATION: TRANSCENDING THE DEREGULATION DEBATE (OXFORD UNIVERSITY PRESS 1992) (with John Braithwaite).

### Scholarly Articles and Chapters

*The Rule of Probabilities*, STANFORD LAW REVIEW (forthcoming 2015) (with Barry Nalebuff).

*Effect of Perineal Self-Acupressure on Constipation: The PSAC Randomized, Controlled Trial,* JOURNAL GENERAL INTERNAL MEDICINE (November 2014) (with Ryan Abbott, Ed Hui and Ka-Kit Hui)

*Innovation Sticks: The Limited Case for Penalizing Failures to Innovate*, U. CHI. L. REV. (forthcoming 2015) (with Amy Kapczynski).

Book Review of The Behavior of Federal Judges: A Theoretical and Empirical Study of Rational Choice. By Lee Epstein, William M. Landes, and Richard A. Posner. Harvard University Press, 2013. 52 (LII) JOURNAL OF ECONOMIC LITERATURE 866 (September 2014).

Beyond Diversification: The Pervasive Problem of Excessive Fees and "Dominated Funds" in 401(k) Plans, YALE LAW JOURNAL (forthcoming 2014) (with Quinn Curtis).

*Protecting Consumer Investors by Facilitating "Improved Performance" Competition,* UNIVERSITY OF ILLINOIS LAW REVIEW (forthcoming 2014) (with Quinn Curtis).

Unhappy Meals: Sex Discrimination in Toy Choice at McDonald's, WILLIAM & MARY JOURNAL OF WOMEN AND THE LAW (forthcoming 2014) (with Antonia Rose Ayres-Brown).

*Evidence and Extrapolation: Mechanisms for Regulating Off-Label Uses of Drugs and Devices*, 64 DUKE LAW JOURNAL 377 (2014) (with Ryan Abbott).

Anti-Herding Regulation, HARVARD BUSINESS LAW REVIEW (forthcoming 2014) (with Joshua Mitts).

*Three Proposals for Regulating the Distribution of Home Equity*, YALE JOURNAL ON REGULATION (forthcoming 2013) (with Joshua Mitts).

A Randomized Experiment Assessing the Accuracy of Microsoft's "Bing It On" Challenge Claims, 26 LOYOLA LAW REVIEW 1 (2014) (with Emad Atiq, Sheng Li, Michelle Lu, Christine Tsang, & Tom Maher).

The Chastain Effect: Using Title IX to Measure the Causal Effect of Participating in High School Sports on Adult Women's Social Lives, 48 JOURNAL OF SOCIO-ECONOMICS 62

(2014) (with Phoebe Clarke).

Skeletons in the Database: An Early Analysis of the CFPB's Consumer Complaints 19 FORDHAM JOURNAL OF CORPORATE & FINANCIAL LAW 343 (2014) (with Jeff Lingwall, & Sonia Steinway).

*Measuring Fiduciary and Investor Losses in 401(k) Plans* (working paper 2013) (with Quinn Curtis).

*The No Reading Problem in Consumer Contract Law*, 66 STANFORD LAW REVIEW 545 (2014) (with Alan Schwartz).

Tops, Bottoms, and Versatiles: What Straight Views of Penetrative Preferences Could Mean for Sexuality Claims Under Price Waterhouse, 123 YALE LAW JOURNAL 714 (2013) (with Richard Luedeman).

*Diversification Across Time*, 39 JOURNAL OF PORTFOLIO MANAGEMENT 73 (Winter 2013) (with Barry Nalebuff).

Information Escrows, 111 MICHIGAN LAW REVIEW 145 (2012) (with Cait Unkovic).

Anti-Incentives: The Power of Resisted Temptation, EUROPEAN FINANCIAL REVIEW 40 (February-March 2012).

*Regulating Opt Out: An Economic Theory of Altering Rules*, 121 YALE LAW JOURNAL 2032 (2012).

Race Effects on eBay, working paper (2011) (with Mahzarin Banaji and Christine Jolls).

*Randomizing Law*, 159 UNIVERSITY OF PENNSYLVANIA LAW REVIEW 929 (2011) (with Michael Abramowicz & Yair Listokin).

*Testing for Discrimination and the Problem of "Included Variable Bias,"* working paper (2010).

Meador Lecture: Using Commitment Contracts to Further Ex Ante Freedoms: The Twin Problems of Substitution and Ego Depletion, 62 ALABAMA LAW REVIEW 811 (2011).

*Commitment Bonds*, 100 GEORGETOWN LAW JOURNAL 605 (2012) (with Michael Abramowicz).

*The Erasure of the Affirmative Action Debate in the Age of Obama*, in THE OBAMAS AND A (POST) RACIAL AMERICA (Gregory Parks & Matthew Hughey, eds. Oxford University Press)

(2011).

Theodicy and the Law, 78 UMKC Law Review 1023 (2010).

*Optimal Voting Rules for Two-member Tenure Committees*, 36 SOCIAL CHOICE & WELFARE 323 (2011) (with Colin Rowat and Nasser Zakariya).

Schwartz Lecture, Never Say No: The Law, Economics and Psychology of Counteroffers, 25 Ohio State Journal on Dispute Resolution 603 (2010).

Yet Another Refutation of the More Guns, Less Crime Hypothesis – With Some Help From Moody and Marvell, 6 ECON. J. WATCH 35 (2009) (with John Donohue).

*More Guns, Less Crime Fails Again: The Latest Evidence from 1977 – 2006, 6 ECON. J.* WATCH 218 (2009) (with John Donohue).

Evidence from Two Large Field Experiments that Peer Comparison Feedback Can Reduce Residential Energy Usage, 29 JOURNAL OF LAW, ECONOMICS AND ORGANIZATION 992 (2013) (with Sophie Raseman & Alice Shih).

Yet Another Refutation of the More Guns, Less Crime Hypothesis – With Some Help From Moody and Marvell, 6 ECON. JOURNAL WATCH 35-59 (January 2009) (with John J. Donohue, III).

A Study of Racially Disparate Outcomes in the Los Angeles Police Department, prepared for the ACLU of Southern California, available at <u>www.aclu-sc.org</u> (October 2008) (with Jonathan Borowsky).

Options and Epidemics, DAEDALUS 118 (Spring 2008).

*Tradable Patent Rights*, 60 STANFORD LAW REVIEW 863 (2007) (with Gideon Parchomovsky).

*Privatizing Employment Protection*, 49 ARIZONA LAW REVIEW 587 (2007) (with Jennifer Gerarda Brown).

Market Power and Inequality: A Competitive Conduct Standard for Assessing When Disparate Impacts are Justified, 95 CALIFORNIA LAW REVIEW 669 (2007).

*Comment on* Jolls's *Behavioral Law and Economics*, in BEHAVIORAL ECONOMICS AND ITS APPLICATIONS (Peter Diamond & Hannu Vartiainen, eds., 2007).

Seeing Significance: Is the 95% Probability Range Easier to Perceive?, 20 CHANCE 11 (Winter 2007) (with Antonia Ayres-Brown & Henry Ayres-Brown).

Written Statement, Disparity Studies as Evidence of Discrimination in Federal Contracting, U.S. COMMISSION ON CIVIL RIGHTS (May 2006).

*The Secret Refund Booth*, 73 UNIVERSITY OF CHICAGO LAW REVIEW 1107 (2006) (with Bruce Ackerman), published in Spanish in MAS ALLA DEL ACCESO A LA INFORMACION 282 (John M. Ackerman ed. 2008).

New Rules for Promissory Fraud, 48 ARIZONA LAW REVIEW 957 (2006) (with Gregory Klass).

*Don't Tell, Don't Ask: Narrow Tailoring After* Grutter *and* Gratz, 85 TEXAS LAW REVIEW 517 (2006) (with Sydney Foster).

*Ya-HUH: There Are and Should Be Penalty Defaults*, 33 FLORIDA STATE UNIVERSITY LAW REVIEW 589 (2006).

*Promissory Fraud*, 78 NEW YORK STATE BAR ASSOCIATION JOURNAL 26 (May 2006) (with Gregory Klass).

Menus Matter, 73 UNIVERSITY OF CHICAGO LAW REVIEW 3 (2006).

First Amendment Bargains, 18 YALE J. L & HUMANITIES 178 (2006).

*Mark(et)ing Nondiscrimination: Privatizing ENDA with a Certification Mark*, 104 MICHIGAN LAW REVIEW 1639 (2006) (with Jennifer Gerarda Brown).

Institutional and Evolutionary Failure and Economic Development in the Middle East, 30 YALE JOURNAL OF INTERNATIONAL LAW 397 (2005) (with Jonathan Macey).

*Does Affirmative Action Reduce the Number of Black Lawyers?*, 57 STANFORD LAW REVIEW 1807 (2005) (with Richard Brooks).

A Separate Crime of Reckless Sex, 72 UNIVERSITY OF CHICAGO LAW REVIEW 599 (2005) (with Katharine Baker).

*To Insure Prejudice: Racial Disparities in Taxicab Tipping*, 114 YALE LAW JOURNAL 1613 (2005) (with Fred Vars and Nasser Zakariya).

*Discrimination in Consummated Car Purchases*, in HANDBOOK ON EMPLOYMENT DISCRIMINATION RESEARCH: RIGHTS AND REALITIES 137 (Springer 2005).

*The Inclusive Command: Voluntary Integration of Sexual Minorities into the U.S. Military,* 103 MICHIGAN LAW REVIEW 150 (2004) (with Jennifer Gerarda Brown).

*Should Heterosexuals Boycott Marriage?*, ISSUES IN LEGAL SCHOLARSHIP, Single-Sex Marriage (2004): Article 2, <u>http://www.bepress.com/ils/iss5/art2</u> (with Jennifer Gerarda Brown).

*Promissory Fraud Without Breach*, 2004 WISCONSIN LAW REVIEW 507 (2004) (with Gregory Klass).

Three Tests for Measuring Unjustified Disparate Impacts in Organ Transplantation: The Problem of "Included Variable" Bias, 48 PERSPECTIVES IN BIOLOGY AND MEDICINE S68 (2005).

*The Brennan Center Jorde Symposium Issue* on BRUCE ACKERMAN & IAN AYRES, VOTING WITH DOLLARS: A NEW PARADIGM FOR CAMPAIGN FINANCE REFORM, 91 CALIFORNIA LAW REVIEW 641 (2003) and *The New Paradigm Revisited*, 91 CALIFORNIA LAW REVIEW 743 (2003) (with Bruce Ackerman).

Symposium Issue on IAN AYRES, PERVASIVE PREJUDICE?: UNCONVENTIONAL EVIDENCE OF RACE AND GENDER DISCRIMINATION (2002), 55 STANFORD LAW REVIEW 2267 (2003) and Is Discrimination Elusive?, 55 STANFORD LAW REVIEW 2419 (2003)

*Symposium Issue Commentaries* on BRUCE ACKERMAN & IAN AYRES, VOTING WITH DOLLARS: A NEW PARADIGM FOR CAMPAIGN FINANCE REFORM, 37 UNIVERSITY OF RICHMOND LAW REVIEW 935 (2003) and *Why a New Paradigm?*, 37 UNIVERSITY OF RICHMOND LAW REVIEW 1147 (2003) (with Bruce Ackerman).

Shooting Down the More Guns, Less Crime Hypothesis, 55 STANFORD LAW REVIEW 1193 (2003) (with John J. Donohue III).

*The Latest Misfires in Support of the More Guns, Less Crime Hypothesis*, 55 STANFORD LAW REVIEW 1371 (2003) (with John J. Donohue III).

Marketing Privacy, 20 YALE JOURNAL ON REGULATION 77 (2003) (with Matthew Funk).

*Correlated Values in the Theory of Property and Liability Rules*, 32 JOURNAL OF LEGAL STUDIES 121 (2003) (with Paul Goldbart).

Valuing Modern Contract Scholarship, 112 YALE LAW JOURNAL 881 (2003).

Outcome Tests of Racial Disparities in Police Practices, 4 JOURNAL OF THE JUSTICE

RESEARCH & STATICS ASSOCIATION 131 (2002).

Internalizing Outsider Trading, 101 MICHIGAN LAW REVIEW 313 (2002) (with Stephen Choi).

*Optimal Delegation and Decoupling in the Design of Liability Rules*, 100 MICHIGAN LAW REVIEW 1 (2001) (with Paul Goldbart).

*Using Public Affirmative Action to Remedy Private Discrimination* (with Frederick E. Vars) Chapter 2 in NYU WORKING PAPERS ON LABOR AND EMPLOYMENT LAW: 1998-1999 35 (2001).

A Dilution Mechanism for Valuing Corporations in Bankruptcy, 111 YALE LAW JOURNAL 83 (2001) (with Barry E. Adler).

Substitutes for Insider Trading, 54 STANFORD LAW REVIEW 235 (2001) (with Joe Bankman).

2000 MONSANTO LECTURE IN TORT REFORM AND JURISPRUDENCE: Using Tort Settlement To Cartelize, 34 VALPARAISO UNIVERSITY LAW REVIEW 595 (2000).

*Disclosure versus Anonymity In Campaign Finance*, in DESIGNING DEMOCRATIC INSTITUTIONS, XLII NOMOS 19 (Ian Shapiro & Stephen Macedo, eds.2000).

*Economics of Affirmative Action*, in 2 ENCYCLOPEDIA OF THE AMERICAN CONSTITUTION 848 (Leonard W. Levy & Kenneth L. Karst, eds., 2d ed. 2000)

*Empire or Residue: Competing Visions of the Contractual Canon*, in LEGAL CANONS 47 (J.M. Balkin and S. Levinson, eds.) (2000).

*Threatening Inefficient Performance*, 44 EUROPEAN ECONOMIC REVIEW 818 (2000) (with Kristin Madison).

Determinants of Citations to Articles in Elite Law Review, 29 JOURNAL OF LEGAL STUDIES 427 (2000) (with Fredrick E. Vars).

Taking Issue With Issue Advocacy, 85 VIRGINIA LAW REVIEW 1793 (1999).

Nondiscretionary Concealed Weapons Laws: A Case Study of Statistics, Standards of Proof and Public Policy, 1 AMERICAN LAW AND ECONOMICS REVIEW 436 (1999) (with John J. Donohue III).

Threatening Inefficient Performance of Injunctions and Contracts, 148 UNIVERSITY OF PENNSYLVANIA LAW REVIEW 45 (1999) (with Kristin Madison).

*The Employment Contract*, 8 KANSAS JOURNAL OF LAW AND PUBLIC POLICY 71 (1999) (with Stewart Schwab).

*Comment [on "The Tobacco Deal" by Jeremy Bulow & Paul Klemperer],* in BROOKINGS PAPERS ON ECONOMIC ACTIVITY: MICROECONOMICS 395 (1998).

*Eroding Entitlements as Litigation Commitment*, 66 UNIVERSITY OF CHICAGO LAW REVIEW 836 (1999).

*Majoritarian v. Minoritarian Defaults*, 51 STANFORD LAW REVIEW 1591 (1999) (with Robert Gertner).

1998 LADD LECTURE: *Empire or Residue: Competing Visions of the Contractual Canon*, 26 FLORIDA STATE LAW REVIEW 897 (1999).

Discrediting the Free Market, 66 UNIVERSITY OF CHICAGO LAW REVIEW 273 (1999).

Limiting Patentees' Market Power Without Reducing Innovation Incentives: The Perverse Benefits of Uncertainty and Non-Injunctive Remedies, 97 MICHIGAN LAW REVIEW 985 (1999) (with Paul Klemperer).

*When Does Private Discrimination Justify Public Affirmative Action?* 1998 COLUMBIA LAW REVIEW 1577 (1998) (with Fredrick E. Vars).

1998 MONSANTO LECTURE IN TORT REFORM AND JURISPRUDENCE: *Protecting Property With Puts*, 32VALPARAISO UNIVERSITY LAW REVIEW 793 (1998).

"Pro-competitive Executive Compensation" as a Condition for Approval of Mergers that Simultaneously Exploit Consumers and Enhance Efficiency, 19 CANADIAN COMPETITION RECORD 18 (Spring 1998) (with Stephen F. Ross).

The Donation Booth: Mandating Donor Anonymity to Disrupt the Market for Political Influence, 50 STANFORD LAW REVIEW 837 (1998) (with Jeremy Bulow) republished as La Donacion Secreta: Evitar que los candidatos sepan quienes son sus donantes permite desaticular el trafico de influencias, 83 ESTUDIOS PUBLICOS 67 (2001).

*Measuring the Positive Externalities from Unobservable Victim Precaution: An Empirical Analysis of Lojack*, 113 QUARTERLY JOURNAL OF ECONOMICS 43 (1998) (with Steven D. Levitt).

*Default Rules for Incomplete Contracts*, THE NEW PALGRAVE DICTIONARY OF ECONOMICS AND THE LAW, Vol. A-D 585 (Peter Newman, ed., 1998).

*Three Proposals To Harness Private Information in Contract*, 21 HARVARD JOURNAL OF LAW AND PUBLIC POLICY 135 (1997).

*The Twin Faces of Judicial Corruption: Extortion and Bribery*, 74 DENVER UNIVERSITY LAW REVIEW 1231 (1997).

Never Confuse Efficiency With A Liver Complaint, 1997 WISCONSIN LAW REVIEW 503 (1997).

*Common Knowledge As A Barrier to Negotiation*, 44 UCLA LAW REVIEW 1631 (1997) (with Barry Nalebuff).

Legal Entitlements as Auctions: Property Rules, Liability Rules, and Beyond, 106 YALE LAW JOURNAL 703 (1997) (with Jack Balkin).

Narrow Tailoring, 43 UCLA LAW REVIEW 1781 (1996).

Pushing the Envelope: Antitrust Implications of the Envelope Theorem, 17 MISSISSIPPI COLLEGE LAW REVIEW 21 (1996). See also ELECTRONIC DISCUSSION, 17 MISSISSIPPI COLLEGE LAW REVIEW 91, 93, 102 (1996).

Comment on Painter, 65 FORDHAM LAW REVIEW 201 (1996).

The Q-Word As Red Herring: Why Disparate Impact Liability Does Not Induce Hiring Quotas, 74 TEXAS LAW REVIEW 1485 (1996) (with Peter Siegelman).

Review, *Overcoming Law*, by Richard A. Posner, 40 AMERICAN JOURNAL OF LEGAL HISTORY 371 (1996).

Pursuing Deficit Reduction Through Diversity: How Affirmative Action at the FCC Increased Auction Competition, 48 STANFORD LAW REVIEW 761 (1996) (with Peter Cramton).

Supply Side Inefficiencies and Competitive Federalism, in INTERNATIONAL REGULATORY COMPETITION AND COORDINATION: PERSPECTIVES ON ECONOMIC REGULATION IN EUROPE AND THE UNITED STATES (Oxford University Press, 1996) (McCahery, Baratton et al. eds.)

Distinguishing Between Consensual and Nonconsensual Advantages of Liability Rules, 105 YALE LAW JOURNAL 235 (1995) (with Eric Talley).

*Further Evidence of Discrimination in New Car Negotiations and Estimates of Its Cause*, 94 MICHIGAN LAW REVIEW 109 (1995).

Review, *The Limits of Freedom of Contract*, by Michael J. Trebilcock, 33 JOURNAL OF ECONOMIC LITERATURE. 865 (1995).

*HLA Matching in Renal Transplantation*, 332 THE NEW ENGLAND JOURNAL OF MEDICINE 752 (1995) (with Robert Gaston and Mark Deierhoi).

Solomonic Bargaining: Dividing A Legal Entitlement To Facilitate Coasean Trade, 104 YALE LAW JOURNAL 1027 (1995) (with Eric Talley).

Supply-Side Inefficiencies in Corporate Charter Competition: Lessons from Patents, Yachting and Bluebooks, 43 KANSAS LAW REVIEW 541 (1995).

Race and Gender Discrimination in Negotiation For the Purchase of a New Car, 84 AMERICAN ECONOMIC REVIEW 304 (1995) (with Peter Siegelman).

Alternative Grounds: Epstein's Discrimination Analysis in Other Market Settings, 31 UNIVERSITY OF SAN DIEGO LAW REVIEW 67 (1994).

A Market Test for Race Discrimination in Bail Setting, 46 STANFORD LAW REVIEW 987 (1994) (with Joel Waldfogel).

Preliminary Thoughts on Optimal Tailoring of Contractual Rules, 3 SOUTHERN CALIFORNIA INTERDISCIPLINARY LAW JOURNAL 1 (1993).

*Relational Investing And Agency Theory*, 15 CARDOZO LAW REVIEW 1033 (1994) (with Peter Cramton).

*Economic Rationales For Mediation*. 80 VIRGINIA LAW REVIEW 323 (1994) (with Jennifer Gerarda Brown).

*Mutual and Unilateral Mistake in Contract Law*, 22 JOURNAL OF LEGAL STUDIES 309 (1993) (with Eric Rasmusen).

Racial Equity in Renal Transplantation: The Disparate Impact of HLA-Based Allocation, 270 JOURNAL OF AMERICAN MEDICAL ASSOCIATION 1352 (1993) (with Robert Gaston, Laura Dooley and Arnold Diethelm). Response to letters-to-the-editors, 271 JOURNAL OF AMERICAN MEDICAL ASSOCIATION 269 (1994).

*Unequal Racial Access to Kidney Transplantation*, 46 VANDERBILT LAW REVIEW 805 (1993) (with Laura Dooley and Robert Gaston).

Making a Difference: The Contractual Contributions of Easterbrook and Fischel, 59

UNIVERSITY OF CHICAGO LAW REVIEW 1391 (1992), reprinted in 35 Corporate Practice Commentator 65 (1993).

*Designing Responsive Regulatory Institutions*, 2 THE RESPONSIVE COMMUNITY 41 (1992) (with John Braithwaite).

Judging Close Corporations in the Age of Statutes, 70 WASHINGTON UNIVERSITY LAW QUARTERLY 365 (1992).

Partial Industry Regulation: A Monopsony Standard for Consumer Protection, 80 CALIFORNIA LAW REVIEW 13 (1992) (with John Braithwaite).

*Strategic Contractual Inefficiency and the Optimal Choice of Legal Rules*, 101 YALE LAW JOURNAL 729 (1992) (with Rob Gertner).

*The Possibility of Inefficient Corporate Contracts*, 60 CINCINNATI LAW REVIEW 387 (1991).

*Three Approaches to Modelling Corporate Games: Some Observations*, 60 CINCINNATI LAW REVIEW 419 (1991).

*Tripartism: Regulatory Capture and Empowerment*, 16 LAW AND SOCIAL INQUIRY 435 (1991) (with John Braithwaite).

Pregnant With Embarrassments: An Incomplete Theory of the Seventh Amendment, 26 VALPARAISO UNIVERSITY LAW REVIEW 385 (1991).

Back to <u>Basic</u>s: Regulating How Corporations Speak to the Market, 77 VIRGINIA LAW REVIEW 945 (1991).

*Fair Driving: Gender and Race Discrimination in Retail Car Negotiations*, 104 HARVARD LAW REVIEW 817 (1991).

*Optimal Pooling in Claims Resolution Facilities*, 53 LAW AND CONTEMPORARY PROBLEMS 159 (1990).

"I'll Sell It To You at Cost:" Legal Methods to Promote Retail Markup Disclosure, 84 NORTHWESTERN LAW REVIEW 1047 (1990) (with F. Clayton Miller).

Analyzing Stock Lockups: Do Target Treasury Sales Foreclose or Facilitate Takeover Auctions?, 90 COLUMBIA LAW REVIEW 682 (1990).

Playing Games with the Law, 42 STANFORD LAW REVIEW 1291 (1990).

Unlocking the Stock Lockup in Mobil v. Marathon Oil, 1 JOURNAL OF MERGER AND ACQUISITION ANALYSIS 37 (1990).

*Filling Gaps in Incomplete Contracts: An Economic Theory of Default Rules*, 99 YALE LAW JOURNAL 87 (1989) (with Robert Gertner), *reprinted* 7 PEKING UNIVERSITY LAW REVIEW 17 (2005).

A Private Revolution: Markovits and Markets, 64 CHICAGO-KENT LAW REVIEW 861 (1989).

The Economics of the Insurance Antitrust Suits: Toward an Exclusionary Theory, 63 TULANE LAW REVIEW 971 (1989) (with Peter Siegelman) reprinted 4 NATIONAL INSURANCE LAW REVIEW 1 (1990) and 4 INSURANCE LAW ANTHOLOGY 501 (1989-1990).

Determinants of Airline Carrier Conduct, 8 INTERNATIONAL REVIEW OF LAW & ECONOMICS, 187 (1988).

A Theoretical Fox Meets Empirical Hedgehogs: Competing Approaches to Accident Economics, 82 NORTHWESTERN LAW REVIEW 837 (1988).

Halfway Home, 13 LAW AND SOCIAL INQUIRY 413 (1988).

How Cartels Punish: A Structural Theory of Self-Enforcing Collusion, 87 COLUMBIA LAW REVIEW 295 (1987).

*Posner's Symphony No. 3: Thinking About the Unthinkable*, 39 STANFORD LAW REVIEW 791 (1987) (with John Donohue).

Rationalizing Antitrust Cluster Markets, 95 YALE LAW JOURNAL 109 (1985).

### **Popular Press**

Blog Contributor: Freakonomics and Balinization.

*Meet Callisto, the Tinder-like Platform that Aims to Fight Sexual Assault*, WASHINGTON POST, Oct. 9, 2015.

*Fix VW's Polluting Diesels, and Fix the Recall System Too*, Los ANGELES TIMES, Sept. 28, 2015.

*In Supreme Court redistricting case, it's the 'whole number of persons'*, Los ANGELES TIMES, May 29, 2015 (with Bruce Ackerman).

John Roberts' Roadmap for Campaign Finance Reform, THE ATLANTIC, May 7, 2015 (with Bruce Ackerman).

Statistical Methods Can Demonstrate Racial Disparity, NEW YORK TIMES, April 27, 2015.

*When Whites Get a Free Pass: Research Shows White Privilege is Real*, NEW YORK TIMES A23 (February 24, 2015).

*Ending Excessive Police Force Starts With New Rules Of Engagement*, WASHINGTON POST A25 (December 25, 2014) (Daniel Markovits).

*Obama, the Least Lame President?*, NEW YORK TIMES A27 (Dec. 21, 2014) (with John Fabian Witt).

All Eyes on Obama: Obama needs to put his money where his mouth is on campaign finance reform, Slate,

http://www.slate.com/articles/news\_and\_politics/jurisprudence/2014/04/campaign\_finance\_r eform\_will\_obama\_break\_his\_alliance\_with\_the\_court.html (April 4, 2014) (with Bruce Ackerman),

The U.S. Hypocrisy Over Russia's Anti-gay Laws, WASHINGTON POST, January 31, 2014 (with William Eskridge).

*Canceling the Shutdown, Playing by the Rules*, LOSANGELESTIMES.COM (Oct 4, 2013) (with Bruce Ackerman).

*How the Internet Can Save Journalism*, HUFFINGTON POST (August 7, 2013) (with Bruce Ackerman).

*How Congress Can Overrule Citizens United*, HUFFINGTON POST (February 8, 2012) (with Bruce Ackerman).

Don't Tax the Rich. Tax Inequality Itself, NEW YORK TIMES A29 (December 18, 2011) (with Aaron S. Edlin).

Paying Students to Quit Law School, SLATE (November 18, 2011) (with Akhil Reed Amar).

How to Hire A Federal Watchdog, WASHINGTON POST (June 23, 2011).

Did Egypt's Rising Economy Lead to Hosni Mubarak's Fall?, POLITICO (Feb. 18, 2011) (with Jonathan Macey).

Bring on the Share Economy, FORBES (Sept. 13, 2010) (with Barry Nalebuff).

Make a Commitment, FORBES (August 30, 2010) (with Barry Nalebuff).

*Despite Court Ruling, Congress Can Still Limit Campaign Finance*, WASHINGTON POST (Jan. 26, 2010) (with Bruce Ackerman).

Winning the Audit Lottery, FORBES (Nov. 30, 2009) (with Barry Nalebuff).

A Market Test for Credit Cards, FORBES (June 25, 2009) (with Barry Nalebuff).

*Crazy Eddie's House Sale*, SLATE http://www.slate.com/id/2219369/ (June 1, 2009) (with Daniel Markovits).

Why not nominate vice justices for the Supreme Court?, Los ANGELES TIMES (May 7, 2009) (with Akhil Reed Amar).

A Voluntary Gas Tax, FORBES (March 16, 2009) (with Barry Nalebuff).

A National Endowment for Journalism, THE GUARDIAN (February 13, 2009) (with Bruce Ackerman).

Your Personal Climate Exchange, FORBES (November 24, 2008) (with Barry Nalebuff).

The LAPD and Racial Profiling, LOS ANGELES TIMES (Oct. 23, 2008).

Sell the Conventions, FORBES (Oct. 13, 2008) (with Barry Nalebuff).

*Adam Smith Meets Climate Change*, SLATE <u>www.slate.com/id/2200911/</u> (September 25, 2008) (with Doug Kysar).

*New Jingles May Be Coins in Your Pocket*, MARKETPLACE (July 21, 2008) (public radio commentary with Barry Nalebuff).

An Equity Kicker, FORBES 113 (May 19, 2008) (with Barry Nalebuff).

Mining Unconscious Wisdom, HARVARD BUSINESS REVIEW (March 1, 2008).

Lose Weight? Bet On It, Los ANGELES TIMES (Jan. 27, 2008).

Where Money Is No Object, THE GUARDIAN (Jan. 26, 2008) (with Bruce Ackerman).

The New Green, FORBES 119 (Jan. 7, 2008) (with Barry Nalebuff).

A Roundtable Discussion: Citizenship & the Sciences, 2 RHI: PROMOTING ACTIVE CITIZENSHIP 68 (2007).

*Give Freakonomics a Chance*," THE ECONOMIST'S VOICE, Vol. 4 : Iss. 5, Article 1. Available at: http://www.bepress.com/ev/vol4/iss5/art1.

*Prepare to be Super-Crunched*, THE TIMES HIGHER EDUCATION SUPPLEMENT 18 (Oct. 26, 2007).

*Now, The Customer's Always Managed* (Oct. 8, 2007) (public radio commentary with Barry Nalebuff).

Experiment, FORBES 103 (Sept. 3, 2007) (with Barry Nalebuff).

Streamline Tax Filing, YALE LAW REPORT 48 (Summer 2007).

*Did You Use That Gift Card or Rebate?* (Aug. 9, 2007) (public radio commentary with Barry Nalebuff).

You Found a Better Idea, PARADE (July 8, 2007) (with Barry Nalebuff).

*Down With Plutocrats and Fat Cat Donors*, SLATE <u>www.slate.com/id/2169025</u> (June 25, 2007) (with Bruce Ackerman).

Cupid and Colleges, FORBES 87 (May 9, 2007) (with Barry Nalebuff).

*For Many, Forms Could Be a Lot Less Taxing*, (April 16, 2007) (public radio commentary with Barry Nalebuff).

Do You Have A Better Idea?, PARADE (March 25, 2007) (with Barry Nalebuff).

For the Love of the Game, FORBES 54 (March 12, 2007) (with Barry Nalebuff).

Environmental Atonement, FORBES 87 (Dec. 25, 2006) (with Barry Nalebuff).

Skin in the Game, FORBES 156 (Nov. 13, 2006) (with Barry Nalebuff).

*The Hollow Promise: Sexual Orientation Nondiscrimination Policies*, 24 ASSOCIATION OF CORPORATE COUNSEL DOCKET 48 (Oct. 2006) (with Richard F. Ober, Jr.).

Promises, not policies, YALE ALUMNI MAGAZINE 32 (Sept./Oct. 2006).

A Way to Stop Pretexting (Sept. 11, 2006) (public radio commentary with Barry Nalebuff).

*Easy Savings*, FORBES 146 (Sept. 4, 2006) (with Barry Nalebuff). *Give NY's Poor What They Need Most: A Voice*, NEW YORK DAILY NEWS (August 14, 2006) (with Bruce Ackerman).

*How To Strengthen Shareholder Democracy* (July 6, 2006) (public radio commentary with Barry Nalebuff).

*The Knicks Boldly Go Where Companies Have Not*, NEW YORK TIMES (July 2, 2006) (with John J. Donohue III).

The Ticket to Savings, FORBES 176 (May 22, 2006) (Barry Nalebuff).

*Secret Political Donations Can End the Secret Deal*, FINANCIAL TIMES 23 (April 27, 2006) (with Bruce Ackerman).

When the Blind See Better, FORBES 141 (Feb. 13, 2006) (with Barry Nalebuff).

Mortgage Your Retirement, FORBES 150 (Nov. 14, 2005) (with Barry Nalebuff).

End Tipping? (Oct. 5, 2005) (public radio commentary with Barry Nalebuff).

Just What the Professor Ordered, NEW YORK TIMES A27 (Sept. 16, 2005).

*Justice Roberts Should Sell His Stock* (Sept. 14, 2005) (public radio commentary with Barry Nalebuff).

Promises to Keep, FORBES 78 (July 4, 2005) (with Barry Nalebuff).

Opting for Equality (June 30, 2005) (public radio commentary with Barry Nalebuff).

*The Joy of Ambiguity*, THE ADVOCATE <u>www.advocate.com/print\_article.asp?id=18249</u> (June 29, 2005) (with Jennifer Gerarda Brown).

Better Benchmarking (June 21, 2005) (public radio commentary with Barry Nalebuff).

Guest blogger <a href="https://www.lessig.org/blog/">www.lessig.org/blog/</a> (June 2005)

*Privatizing Gay Rights with Non-discrimination Promises Instead of Policies*, THE ECONOMIST'S VOICE, Vol. 2: No. 2, <u>http://www.bepress.com/ev/vol2/iss2/art11</u> (2005) (with Jennifer Gerarda Brown).

Straight, Not Narrow: How Straight Couples Can Support Gay Marriage, NEW HAVEN ADVOCATE (June 16, 2005) (with Jennifer Gerarda Brown).

Separate, Unequal: How Civil Unions Fall Short of Marriage, HARTFORD COURANT A13 (June 10, 2005).

*Warning: We Discriminate*, ALTERNET <u>www.alternet.org/rights/22030/</u> (May 17, 2005) (with Jennifer Gerarda Brown).

Peer Pressure, FORBES 135 (April 11, 2005) (with Barry Nalebuff).

Looking Out For No. 2: A Modest Proposal for Single-Use Toilets, SLATE www.slate.com/id/2114441 (March 7, 2005).

Ask Iraqi Voters: Do You Want Us To Stay?, HARTFORD COURANT (Jan. 28. 2005) (with Barry Nalebuff).

Stop Thief, FORBES 88 (Jan. 10, 2005) (with Barry Nalebuff).

*Going Soft on Microsoft? The EU's Antitrust Case and Remedy*, THE ECONOMISTS' VOICE, Vol. 2: No. 2, Article 4, <u>www.bepress/ev/vol2/iss2/art4/</u> (2005) (with Barry Nalebuff).

*Encouraging Suggestive Behavior*, HARVARD BUSINESS REVIEW (December 1, 2004) (with Barry Nalebuff).

Anonymously Yours, WORTH 32 (November 2004).

Cable Bundling (Nov. 19, 2004) (public radio commentary with Barry Nalebuff).

Race, Tips and Economics, FORBES 136 (Nov. 1, 2004) (with Barry Nalebuff).

*Microsoft I: A Remedy Worthy of Solomon*, INTERNATIONAL HERALD TRIBUNE (Oct. 11, 2004) (with Barry Nalebuff).

*Going, Google,* THE WALL STREET JOURNAL A12 (August 20, 2004) (with Barry Nalebuff).

Cellphone Sleuth (Aug. 20, 2004) (public radio commentary with Barry Nalebuff).

Throwaway Tickets, FORBES 52 (August 18, 2004) (with Barry Nalebuff).

A Donation Booth? (June 23, 2004) (public radio commentary with Barry Nalebuff).

Say Goodbye to TIVO (June 9, 2004) (public radio commentary with Barry Nalebuff).

Dialing for Thieves, FORBES 76 (April 19, 2004) (with Barry Nalebuff).

*Getting Iraq to Undermine OPEC* (April 6, 2004) (public radio commentary with Barry Nalebuff).

The Wrong Ticket to Ride, NEW YORK TIMES A29 (March 24, 2004) (with Barry Nalebuff).

*Benefits of Non-Transparency* (Feb. 23, 2004) (public radio commentary with Barry Nalebuff).

Don't Sell Us Short, FORBES 57 (Feb. 2, 2004) (with Barry Nalebuff).

Principled Problem Solving: Letting Constraints Filter and Guide Your Thinking Can Often Be the Best Way to Reach Truly Creative Solutions, 14 SCIENTIFIC AMERICAN MIND 96 (2004) (with Barry Nalebuff).

System Down: McCain-Feingold Helped Doom the Current Model of Public Financing for Campaigns. Fixing it will Take Some Imagination, THE AMERICAN PROSPECT ON LINE (Dec. 12, 2003) (with Bruce Ackerman) available at <u>www.prospect.org.</u>

It Beats a CD, FORB ES 160 (Dec. 8, 2003) (with Barry Nalebuff).

Who's Right? (Nov. 10, 2003) (public radio commentary with Barry Nalebuff).

Why Legislating Low Tuitions for State Colleges Is a Mistake: They Just Subsidize the Rich, WRIT FINDLAW'S LEGAL COMMENTARY (October 30, 2003) (with Aaron Edlin) http://writ.news.findlaw.com/commentary/20031030\_ayres.html.

*In Praise of Honest Pricing*, 45 MIT SLOAN MANAGEMENT REVIEW 24 (Fall 2003) (with Barry Nalebuff).

Want to Call Me? Pay Me!, WALL STREET JOURNAL A24 (Oct. 8, 2003) (with Barry Nalebuff).

Making Ideas Take Flight, BUSINESS 2.0 133 (Oct. 2003) (with Barry Nalebuff).

Dialing for Dollars, NEW YORK TIMES A29 (Sept. 30, 2003).

Blackboxes For Cars (Sept. 16, 2003) (public radio commentary with Barry Nalebuff).

Exactly Who's in the Right in this Labor Dispute? YALE DAILY NEWS 2 (Sept. 4, 2003) (with

Barry Nalebuff).

Sarbanes/Oxley's First Birthday (July 30, 2003) (public radio commentary with Barry Nalebuff).

Blackbox for Cars, FORBES 83 (August 11, 2003) (with Barry Nalebuff).

*Patriot Dollars Put Money Where the Voters Are*, L.A. TIMES at 15 (July 17, 2003) (with Bruce Ackerman).

An Educated Consumer. FORBES 95 (June 09, 2003) (with Barry Nalebuff).

*Charity Begins At Schedule A*, NEW YORK TIMES, p. A21, col. 1 (April 15, 2003) (with Barry Nalebuff).

Make Car Insurance Fairer, FORBES 154 (March 17, 2003) (with Barry Nalebuff).

Pay Per Mile Auto Insurance (Feb. 25, 2003) (public radio commentary with Barry Nalebuff).

Spoiling Spam (Dec.24, 2002) (public radio commentary with Barry Nalebuff).

The Virtues of a Virtual Strike, FORBES 128 (Oct. 25, 2002) (with Barry Nalebuff).

*Virtual Strikes* (Oct. 4, 2002) (public radio commentary with Barry Nalebuff). *Price-Protect Your Home*, FORBES 101 (Sept 16, 2002) (with Barry Nalebuff).

*Disclosing Hidden Fees to Consumers* (Aug. 28, 2002) (public radio commentary with Barry Nalebuff).

An Alternative to Expensing Stock Options (July 24, 2002) (public radio commentary with Barry Nalebuff).

*Campaign Reform's Worst Enemy*, NEW YORK TIMES, p. A19, col. 2 (July 6, 2002) (with Bruce Ackerman).

Opt-Out Advertising, FORBES 164 (June 20, 2002) (with Barry Nalebuff).

A Community of Ideas, FORBES 173 (May 9, 2002) (with Barry Nalebuff).

If Telemarketers Paid For Your Time, FORBES 225 (April 15, 2002) (with Barry Nalebuff).

A Viable Alternative to Breaking up Microsoft: Compulsory Licensing That Would Make Microsoft Compete With Its Past Self, WRIT FINDLAW'S LEGAL COMMENTARY (April 10, 2002) (with Aaron Edlin) http://writ.news.findlaw.com/commentary/20020410\_edlin.html

*Connecticut's Speeder-Friendly Crackdown*, NEW YORK TIMES, p. A19, col. 2 (August 31, 2001) (with Barry Nalebuff).

Should Campaign Donors Be Identified?, 24 REGULATION 12 (Summer 2001), excerpted as A Real Solution: Make Donors Anonymous, NATIONAL REVIEW ONLINE (July 12, 2001) http://www.nationalreview.com/comment/comment-ayres071201.shtml.

*Why Telemarketers Should Pay Us*, HARTFORD COURANT, P. A15, col. 3 (May 10, 2001) (with Matthew Funk).

Lectures vs. Laptops, NEW YORK TIMES, p. A25, col. 2 (March 20, 2001).

*Monetize Labor Practices*, 26 BOSTON REVIEW 18 (February-March 2001) (available at http://bostonreview.mit.edu/BR26.1/ayres.html), *reprinted in* Archon Fung, Dara O'Rourke, & Charles Sabel, CAN WE PUT AN END TO SWEATSHOPS 80 (Beacon Press 2001)

Why Prosecute Linda Tripp?, NEW YORK TIMES P. A17, col. 1 (August 10, 1999).

*Remedying Private Discrimination: Following the 'Anderson' Model*, Los ANGELES TIMES M2, col. 3 (April 26, 1998).

*The Donation Booth*, 22 BOSTON REVIEW 26 (December-January 1997-98) (with Jeremy Bulow) (available at http://bostonreview.mit.edu/BR22.6/ayres.html), *reprinted in* 47 YALE LAW REPORT 62 (2000) and THE NEWS-GAZETTE, B1 (Sept. 27, 1998).

*Breaking Windows: Why the Justice Department Should Go After the Microsoft Monopoly*, THE NEW REPUBLIC 18 (Nov. 17, 1997).

Car Buying, Made Simpler, NEW YORK TIMES F12 (April 13, 1997) (with Peter Schuck).

Aid Diversity, and the Treasury, NEW YORK TIMES F13 (May 21, 1995) (with Peter Cramton).

Price and Prejudice, THE NEW REPUBLIC 30 (July 6, 1992).

Colleges in Collusion, THE NEW REPUBLIC 19 (October 16, 1989).

### NAMED LECTURES

The W. D. Carpenter Lecture, "Diversifying Time: Why Buying Stock With Borrowed Money Can Reduce Risk?," Middlebury College, Department of Economics, April 26, 2010.

The Meador Lecture, "Freedom and Commitment," University of Alabama, School of Law, April 19, 2010.

The 46<sup>th</sup> Henry J. Miller Lecture, "Barriers to Diversification," Georgia State University, School of Law, March 18, 2010.

The Schwartz Lecture on Dispute Resolution, "Never Say No: The Law, Economics and Psychology of Counteroffers," Ohio State University, Moritz College of Law, April 2, 2009.

The Biddle Lecture, "A New Test for Race Discrimination," Harvard Law School, November 12, 2008.

The Hart Lecture, "The Secret Refund Booth," Georgetown University Law Center, March 22, 2006.

The Henry Schneider Lecture, "Mark(et)ing Nondiscrimination," Columbia Law School, March 8, 2005.

The Hazard Lecture, "Can Creativity be Taught?: Why Not!," Pembroke Hill High School, September 17, 2004.

The John M. Olin Lecture in Law and Economics, "Why Not?: Can Legal Creativity Be Taught?," Michigan Law School, September 11, 2003.

The Monsanto Lecture in Tort Reform and Jurisprudence, "Using Tort Settlement To Cartelize," Valparaiso University, School of Law, March 26, 2000.

The John M. Olin Public Lecture in Law and Economics, "Coveting Thy Neighbor's Stock: Substitute Trading as Evasion and as Policy Tool," University of Toronto, September 24, 1999.

The Ladd Lecture, "Empire or Residue: Competing Visions of the Contractual Canon," Florida State College of Law, October 22, 1998.

The Monsanto Lecture in Tort Reform and Jurisprudence, "Protecting Property with Puts," Valparaiso University, School of Law, March 26, 1998.

Inaugural Lecture for William K. Townsend Chair, "Solomonic Bargaining," Yale Law School, November 15, 1994.

The Mirikitani Lecture in Law and Economics, "Back to Basics," University of Hawaii, March 9, 1990.

#### PROFESSIONAL MEMBERSHIP

James W. Cooper Fellow, Connecticut Bar Foundation, 2009 – present.

Fellow, American Academy of Arts & Sciences, 2006 - present.

Member, American Law Institute, 1997 - present.

Board of Directors, American Law and Economic Association, 1995-1999.

Admitted, Illinois Bar, 1987.

#### AWARDS

Bernstein Fabozzi/Jacobs Levy Outstanding Article Award for *Diversification Across Time* (with Barry Nalebuff), 2013.

Scribes Book Award (INSINCERE PROMISES) – "for the best work of legal scholarship published during the previous year," 2006

Research in the Public Interest, The Center for Public Representation, 1991.

### ACTIVITIES

1st Place, Law and Society Association -- 5 kilometer fun run, 1989, 2002 and 2003.

Completed 1984 Boston marathon in 3 hours, 12 minutes.

Whiffenpoofs, 1980-81.

Yale Russian Chorus, 1977-80.

Semester in Soviet Union, Moscow's Pushkin Institute, Spring 1979.

CURRENT AS OF OCTOBER 12, 2015

#### APPENDIX 3: CASES IN WHICH IAN AYRES HAS TESTIFIED OR WRITTEN A DISCLOSED REPORT

- 1. City of Miami Gardens v. Wells Fargo & Co. (2016), Case No. 1:14-cv-22203-MORENO (S.D. Fla.) (testifying expert; re: disparate impact of mortgage lending practices).
- 2. Laumann v. National Hockey League (2015), Case No. 12-1817 (SAS) (S.D. N.Y.) (expert estimating value of proposed settlement to class members).
- 3. City of Los Angeles v. Wells Fargo & Co. (2015), Case No. 2:13-cv-09007-ODW (RZx) (C.D. Cal.) (testifying expert; re: disparate impact of mortgage lending practices).
- 4. City of Los Angeles v. Bank of America Corp. (2015), Case No. 2:13-cv-09046-PA (AGRx) (C.D. Cal.) (testifying expert; re: disparate impact of mortgage lending practices).
- 5. Cave v. Saxon Mortgage Services, Inc. (2014) No. 2:11-cv-04586-JP & No. 2:12-cv-05366-JP (E.D. Pa) (testifying expert; re: mortgage modification policies).
- 6. Adkins v. Morgan Stanley (2014) No. 1:12-cv-7667-VEC (S.D. N.Y.) (testifying expert; re: disparate impact of mortgage lending practices).
- 7. Saint-Jean v. Emigrant Mortgage Co. (2013) No. 1:11-cv-02122-SJ (E.D. N.Y.) (testifying expert; re: disparate impact and disparate treatment of mortgage lending practices).
- 8. In Re: Bank of America Home Affordable Modification Program (HAMP) Contract Litigation (2013), No. 1:10-md-02193-RWZ (D. Mass.) (testifying expert; re: mortgage modification policies).
- 9. In Re: CitiMortgage, Inc. Home Mortgage Affordable Modification Program ("HAMP") Litigation (2013), No. 11-md-2274-DSF (PLAx) (C.D. Cal.) (testifying expert; re: mortgage modification policies).
- In re JPMorgan Chase Mortgage Modification Litigation (2012), No. 11-md-02290-RGS (D. Mass.) (testifying expert; re: mortgage modification policies).
- 11. Reso v. Artisan Partners Limited Partnership (2012) No. 2:11-cv-00873-JPS (E.D. Wis.) (testifying expert; re: competition in the mutual fund industry).
- 12. Guerra v. GMAC LLC (2011) No. 2:08-cv-01297-LDD (E.D. Pa.) (testifying expert; re: disparate impact of discretionary pricing policies).
- 13. In re Wells Fargo Mortgage Lending Practices Litigation (2010) No. 08-CV-01930-MMC (JL) (N.D. Cal.) (submitted declaration responding to a motion to exclude the testimony of another expert re: disparate impact of discretionary pricing policies).

- 14. In re Countrywide Financial Mortgage Lending Practices Litigation (2010) MDL No. 1974 (W.D. Ky.) (testifying expert; re: disparate impact of discretionary pricing policies).
- 15. Barrett v. Option One Mortgage Corp. (2010) No. 08-10157 (D. Mass.) (testifying expert; re: disparate impact of discretionary pricing policies).
- 16. In re First Franklin Financial Corp. Litigation (2010) No. C08-01515JW (HRL) (N.D. Ca.) (testifying expert; re: disparate impact of discretionary pricing policies).
- 17. In re Federated Mutual Funds Excessive Fee Litigation (2009) Consolidated No. 2:04-cv-352-DSC (W.D. Pa.) (testifying expert; re: competition in the mutual fund industry).
- Connecticut Podiatric Medical Association v. Health Net of Connecticut (2008) No. X01-CV-05-005900-S (CT SUP. CT.) (analyzed business justifications for discriminatory pricing in reimbursement rates paid to podiatrists and medical doctors).
- 19. INEOS Fluor Americas LLC, v. Honeywell International Inc. (2006) Civil Action No.: 06-189-SLR (DC. Del.) (expert concerning competition in the market for hydrofluoric acid).
- Techold Participações S.A. v. Telecom Italia International N.V. (2006) International Chamber of Commerce Arbitration Nos.: 13960/CCO, 14048/CCO, 14376/CCO and 14393/CCO (expert concerning breach of corporate fiduciary duties).
- 21. Regarding Cayuga Nation's Land in Trust Application (2006) (expert concerning economic impact of placing certain lands in trust).
- 22. Blanchard & Co. v. Barrick Gold Corp. (2005) NO.: 02-3721 c/w 04-2610 (E.D. Louisiana) (expert concerning derivative trading strategies).
- 23. Claybrooks v. Primus Automotive Financial Services, Inc. (2005) No. 3-02-0382(M.D. Tenn.) (Testifying expert concerning disparate impact of finance markups).
- 24. Owens v. Nationwide Mutual Insurance Co. (2005) No. 3-03CV1184-H (N.D. Texas) (expert concerning disparate impact of credit scoring mechanism).
- 25. Russell v. Bank One (2004), No. 3-02-0365 (M.D. Tenn.) (testifying expert concerning disparate impact of finance markups).
- 26. Fishback and Willis vs. AHFC (2004), No. 3-02-0490 (M.D.Tenn.) (Testifying expert concerning disparate impact of finance markups).
- 27. Smith v. CFC (2004) No. 00-6003 (D.N.J.) (expert concerning disparate impact of finance markups).
- 28. Jones v. FMCC (2004) No. 00 CIV 8330 (S.D.N.Y.) (testifying expert concerning disparate impact of finance markups).

- 29. Coleman v. GMAC (2003) No. 3-98-0211 (M.D. Tenn) (testifying expert concerning disparate impact of finance markups).
- 30. Monsanto v. Scruggs (2002) Civil Action No. 3:00CV-161-P-A (N.D. Miss) (testifying expert concerning GM seed antitrust and patent abuse claims).
- 31. Rodriguez v. FMCC (2002) No. 01 C 8526 (N.D. Ill.) (submitted report concerning disparate impact of finance markups).
- 32. Cisco System, Inc (2001) (transfer pricing report prepared for IRS).
- 33. Cason v. Nissan Motor Acceptance Corp (2001) 3-98-0223 (M.D. Tenn.) (testifying expert concerning disparate impact of finance markups).
- 34. Star Scientific v. Steve Carter (2001) IP01-0838 C T/G (S. D. Indiana) (testifying expert concerning MSA qualifying statute).
- 35. Johnson v. City of Tulsa (2001) 94-C-39-H (N.D. Okla.) (submitted report concerning racial profiling by Tulsa Police Department).
- 36. Wisconsin v. Rent-a-Center (2000) (testifying expert concerning rent-to-own transaction).
- 37. Dynalantic Corp. v. United States Department of Defense (1999) (submitted report concerning narrow tailoring of affirmative action in government procurement).
- 38. Colon v. Rent-a-Center (1999) (wrote report concerning rent-to-own transaction).
- 39. Rothe Dev. Corp. v. United States, (1999) (testifying expert concerning narrow tailoring of affirmative action in government procurement).
- 40. Chiron Corp. v. Hoffman-La Roche (1999) (submitted report concerning interpretation of contract releasing certain claims concerning Hepatitis C patent).
- 41. Teledyne v. Boeing (1998) (testifying expert re: contractual and antitrust issues of Apache attack Helicopter fuselage procurement).
- 42. Connecticut Municipal Electric Energy Cooperative v. Connecticut Light & Power Co. (February 1998) (submitted report concerning interpretation of Life-of-Unit nuclear power output contract).
- 43. F. Buddie Contracting Ltd. v. Cuyahoga Community College District (March 1998) (submitted expert report re: narrow tailoring of procurement affirmative action plan).
- 44. Lufkin v. IDES and CMS (January 1998) (consulting expert; re: disparate impact and Equal Pay Act challenge to Illinois compensation plan).
- 45. DOJ's PCS Auction Investigation (June 1997) (non-testifying expert on competitive effects of auction bidding strategies).

- 46. Cassandra Burney et al. v. Rent-a-Center (1996-97) (testifying expert; re: excess interest charged in rent-to-own agreements).
- 47. Mother Bertha Music, Ltd. v. Bourne Music Ltd. (May 1996) (consulting expert; re: interpretation of copyright assignment contract).
- 48. U.S. v. Christopher Barnes (March 1996) (testifying expert, re: statistical representation of minorities in federal criminal venires).
- 49. U.S. v. John M. Purdy, Jr. (February 1996) (testifying expert; re: statistical representation of minorities in federal criminal venires).
- 50. Johnson v. Apple (July 1994) (testifying expert; re: disparate treatment and damages).
- 51. Williams v. Du Pont (July 1993) (affidavit expert; re: appropriate prejudgement interest rate).
- 52. AT&T (September 1993) (consulting expert; re: appropriate preconditions for lifting interexchange restriction).
- 53. James E. Gilleran, et al. v. Deno Evangelista, et al. (October 1992) (testifying expert; re: fiduciary duties of officers and directors).
- 54. Neiman Marcus Group v. Federated Department Stores (January 1992) (consulting expert; re: covenant not to compete).
- 55. In re Fare Box Litigation (1989) (testifying expert; re: relevant market and merger to monopoly).
- 56. In re Insurance Antitrust Litigation (1988 1991) consulting expert; re: antitrust claims of 17 state Attorneys General against major commercial insurers.

		2016	2017	2018	2019	2020
	MLB.TV Basic					
[1]	No Settlement, Bundle Package	\$109.99	\$113.29	\$116.69	\$120.19	\$123.79
[2]	Settlement, Bundle Package	\$109.99	\$113.29	\$116.69	\$120.19	\$123.79
[3]	Bundle Subscriber Benefit	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
[4]	Settlement, Unbundled Package	\$84.99	\$87.54	\$90.17	\$92.87	\$95.66
[5]	Unbundled Subscriber Benefit	\$25.00	\$25.75	\$26.52	\$27.32	\$28.14
	MLB.TV Premium					
[6]	No Settlement, Bundle Package	\$129.99	\$133.89	\$137.91	\$142.04	\$146.30
[7]	Settlement, Bundle Package	\$109.99	\$113.29	\$116.69	\$120.19	\$123.79
[8]	Bundle Subscriber Benefit	\$20.00	\$20.60	\$21.22	\$21.85	\$22.51
[9]	Settlement, Unbundled Package	\$84.99	\$87.54	\$90.17	\$92.87	\$95.66
[10]	Unbundled Subscriber Benefit	\$45.00	\$46.35	\$47.74	\$49.17	\$50.65
	DIRECTV MLB Extra Innings					
[11]	No Settlement, Bundle Package	\$197.94	\$197.94	\$197.94	\$197.94	\$197.94
[12]	Settlement, Bundle Package	\$173.20	\$173.20	\$197.94	\$197.94	\$197.94
[13]	Bundle Subscriber Benefit	\$24.74	\$24.74	\$0.00	\$0.00	\$0.00
	Comcast MLB Extra Innings					
[14]	No Settlement, Bundle Package	\$199.00	\$199.00	\$199.00	\$199.00	\$199.00
[15]	Settlement, Bundle Package	\$174.13	\$174.13	\$199.00	\$199.00	\$199.00
[16]	Bundle Subscriber Benefit	\$24.88	\$24.88	\$0.00	\$0.00	\$0.00
otes:						
	Fable 1, rows [5] & [12]         Fable 1, rows [6] & [10]					
[3] = [1]	Table 1, rows [6] & [10] -[2]					
	Table 1, rows [7] & [10]					

# APPENDIX 4-1: PRICES OF BUNDLED & UNBUNDLED PACKAGES (SCENARIO 1)

[1] See Table 1, rows [5] & [12] [2] See Table 1, rows [6] & [10] [3] = [1] - [2] [4] See Table 1, rows [7] & [10] [5] = [1] - [4] [6] See Table 1, rows [5] & [12] [7] See Table 1, rows [6] & [10] [8] = [6] - [7] [9] = See Table 1, rows [7] & [10] [10] = [6] - [9] [11] See Table 2, rows [2] & [7] [12] = [11] discounted by Table 2, row [3] [13] = [11] - [12] [14] See Table 2, rows [2] & [7] [15] = [14] discounted by Table 2, row [3] [16] = [14] - [15]

		2016	2017	2018	2019	2020
	MLB.TV Basic					
[1]	No Settlement, Bundle Package	\$109.99	\$113.29	\$116.69	\$120.19	\$123.79
[2]	Settlement, Bundle Package	\$109.99	\$109.99	\$109.99	\$109.99	\$109.99
[3]	Bundle Subscriber Benefit	\$0.00	\$3.30	\$6.70	\$10.20	\$13.80
[4]	Settlement, Unbundled Package	\$84.99	\$84.99	\$84.99	\$84.99	\$84.99
[5]	Unbundled Subscriber Benefit	\$25.00	\$28.30	\$31.70	\$35.20	\$38.80
	MLB.TV Premium					
[6]	No Settlement, Bundle Package	\$129.99	\$133.89	\$137.91	\$142.04	\$146.30
[7]	Settlement, Bundle Package	\$109.99	\$109.99	\$109.99	\$109.99	\$109.99
[8]	Bundle Subscriber Benefit	\$20.00	\$23.90	\$27.92	\$32.05	\$36.31
[9]	Settlement, Unbundled Package	\$84.99	\$84.99	\$84.99	\$84.99	\$84.99
[10]	Unbundled Subscriber Benefit	\$45.00	\$48.90	\$52.92	\$57.05	\$61.31
	DIRECTV MLB Extra Innings					
[11]	No Settlement, Bundle Package	\$197.94	\$197.94	\$197.94	\$197.94	\$197.94
[12]	Settlement, Bundle Package	\$173.20	\$173.20	\$197.94	\$197.94	\$197.94
[13]	Bundle Subscriber Benefit	\$24.74	\$24.74	\$0.00	\$0.00	\$0.00
	Comcast MLB Extra Innings					
[14]	No Settlement, Bundle Package	\$199.00	\$199.00	\$199.00	\$199.00	\$199.00
[15]	Settlement, Bundle Package	\$174.13	\$174.13	\$199.00	\$199.00	\$199.00
[16]	Bundle Subscriber Benefit	\$24.88	\$24.88	\$0.00	\$0.00	\$0.00
Votes:						
	Table 1, rows [5] & [12]         Table 1, rows [6] % [11]					
[2] See [3] = [1]	Table 1, rows [6] & [11]					
	Table 1, rows [7] & [11]					

# APPENDIX 4-2: PRICES OF BUNDLED & UNBUNDLED PACKAGES (SCENARIO 2)

[1] See Table 1, rows [5] & [12] [2] See Table 1, rows [6] & [11] [3] = [1] - [2] [4] See Table 1, rows [7] & [11] [5] = [1] - [4] [6] See Table 1, rows [5] & [12] [7] See Table 1, rows [6] & [11] [8] = [6] - [7] [9] = See Table 1, rows [7] & [11] [10] = [6] - [9] [11] See Table 2, rows [2] & [7] [12] = [11] discounted by Table 2, row [3] [13] = [11] - [12] [14] See Table 2, rows [2] & [7] [15] = [14] discounted by Table 2, row [3] [16] = [14] - [15]

		2016	2017	2018	2019	2020
	No Settlement					
[1]	MLB.TV Basic					
[2]	MLB.TV Premium					
[3]	MLB.TV Total					
[4]	DIRECTV MLB Extra Innings					
[5]	Comcast MLB Extra Innings					
[6]	Total, No Settlement					
	Settlement					
	Bundled					
[7]	MLB.TV Basic					
[8]	MLB.TV Premium					
[9]	MLB.TV Total					
[10]	DIRECTV MLB Extra					
	Innings					
[11]	Comcast MLB Extra Innings Total Bundled					
[12]	Total Bunalea					
	Unbundled					
[13]	MLB.TV Basic					
[14]	MLB.TV Premium					
[15]	MLB.TV Total					
[16]	DIRECTV Switchers					
[17]	Comcast Switchers					
[18]	Total Unbundled					
[19]	Total, Settlement					

### APPENDIX 5: FORECASTED BUNDLE PACKAGE & UNBUNDLED PACKAGE SUBSCRIBERS

Notes:

- $[1] = (Table 1, row [2]) \times [1 + (Table 1, row [9])]$  for 2016; = Prior Year's  $[1] \times [1 + (Table 1, row [9])]$  for 2017-2020
- [2] = [3] [1][3] = (Table 1, row [2]) × [1 + (Table 1, row [9])] for 2016;
- $[5] (1able 1, row [2]) \times [1 + (1able 1, row [9])] \text{ for } 2016;$ = Prior Year's [1] × [1 + (Table 1, row [9])] for 2017-2020
- [4] = (Table 2, row [1]) × [1 + (Table 2, row [6])] for 2016; = Prior Year's [4] × [1 + (Table 2, row [6])] for 2017-2020 [5] = (Table 2, row [1]) × [1 + (Table 2, row [6])] for 2016;
- $= Prior Year's [5] \times [1 + (Table 2, row [6])] for 2017-2020$ [6] = [3] + [4] + [5]
- $[7] = [1] \times [1 (Table 1, row [8])]$

- $[8] = [2] \times [1 (Table 1, row [8])]$  [9] = [7] + [8]  $[10] = [4] \times [1 - (Table 2, row [5])]$  $[11] = [5] \times [1 - (Table 2, row [5])]$
- $[11] [3] \times [1 (1able 2, 10w])$ [12] = [9] + [10] + [11]
- [12] = [9] + [10] + [11] $[13] = [1] \times (Table 1, row [8])]$
- $[13] = [1] \times (Table 1, Tow [8])]$  $[14] = [2] \times (Table 1, row [8])]$
- [15] = [13] + [14]
- $[16] = [4] \times (Table 2, row [5])$
- $[17] = [5] \times (Table 2, row [5])$
- [18] = [15] + [16] + [17]
- [19] = [12] + [18]

		2016	2017	2018	2019	2020	Total 2016- 2020
[1] [2] [3]	MLB.tv Basic Bundle Subscribers Savings per Bundle Subscriber Total Savings for Bundle Subscribers	<u>\$0.00</u> <b>\$0</b>	<u>\$0.00</u> <b>\$0</b>	<u>\$0.00</u> <b>\$0</b>	<u>\$0.00</u> <b>\$0</b>	<u>\$0.00</u> <b>\$0</b>	\$0
[4] [5] [6] [7]	Unbundled Subscribers Savings per Unbundled Subscriber Total Savings for Unbundled Subscribers Total Savings for MLB.TV Basic Subscribers	<u>\$25.00</u>	<u>\$25.75</u>	<u>\$26.52</u>	<u>\$27.32</u>	<u>\$28.14</u>	
[8] [9] [10]	MLB.tv Premium Bundle Subscribers Savings per Bundle Subscriber Total Savings for Bundle Subscribers	<u>\$20.00</u>	<u>\$20.60</u>	<u>\$21.22</u>	<u>\$21.85</u>	<u>\$22.51</u>	
[11] [12] [13] [14]	Unbundled Subscribers Savings per Unbundled Subscriber Total Savings for Unbundled Subscribers Total Savings for MLB.TV Premium Subscribers	<u>\$45.00</u>	<u>\$46.35</u>	<u>\$47.74</u>	<u>\$49.17</u>	<u>\$50.65</u>	
[15] [16] [17]	DIRECTV MLB Extra Innings Bundle Subscribers Savings per Bundle Subscriber Total Savings for Bundle Subscribers	<u>\$24.74</u>	<u>\$24.74</u>	<u>\$0.00</u>	<u>\$0.00</u>	<u>\$0.00</u>	
[18] [19] [20]	Comcast MLB Extra Innings Bundle Subscribers Savings per Bundle Subscriber Total Savings for Bundle Subscribers	<u>\$24.88</u>	<u>\$24.88</u>	<u>\$0.00</u>	<u>\$0.00</u>	<u>\$0.00</u>	
[21]	Total Savings for MLB.tv & MLB Extra Innings Bundle Subscribers						
[22]	Total Savings for MLB.tv & MLB Extra Innings Unbundled Subscribers						
[23]	Total Savings for MLB.tv & MLB Extra Innings Subscribers						\$178,389,441

# APPENDIX 6-1: VALUE OF SETTLEMENT AGREEMENT TO MLB.TV AND MLB EXTRA INNINGS SUBSCRIBERS (SCENARIO 1)

Appendix 6-1 Notes: [1] = Appendix 5, row [7] [2] = Appendix 4-1, row [3] [3] = [1] × [2] [4] = Appendix 5, row [13] [5] = Appendix 4-1, row [5] [6] = [4] × [5] [7] = [3] + [6] [8] = Appendix 5, row [8] [9] = Appendix 4-1, row [8] [10] = [8] × [9] [11] = Appendix 5, rows [14]

[11] = Appendix 5, rows [14] + [16] + [17]. Includes DIRECTV & Comcast MLB Extra Innings subscribers who would switch to the unbundled MLB.TV Internet Single-Club Programming under the assumptions of Scenario 1.

[12] = Appendix 4-1, row [10]. I assume the financial benefit to MLB Extra Innings subscribers who switch to the Internet Single-Club Programming is the same as the benefit for MLB.tv Premium subscribers who switch to Internet Single-Club Programming. This is conservative, in that the difference between MLB Extra Innings (without settlement) and Internet Single-Club Programming is greater than the difference between the price of MLB.tv Premium (without settlement) and Internet Single-Club Programming.

 $[13] = [11] \times [12]$  [14] = [10] + [13] [15] = Appendix 5, row [10] [16] = Appendix 4-1, row [13]  $[17] = [15] \times [16]$  [18] = Appendix 5, row [11] [19] = Appendix 4-1, row [16]  $[20] = [18] \times [19]$  [21] = [3] + [10] + [17] + [20] [22] = [6] + [13][23] = [21] + [22]

		2016	2017	2018	2019	2020	Total 2016- 2020
[1] [2] [3]	MLB.tv Basic Bundle Subscribers Savings per Bundle Subscriber Total Savings for Bundle Subscribers	<u>\$0.00</u>	<u>\$3.30</u>	<u>\$6.70</u>	<u>\$10.20</u>	<u>\$13.80</u>	
[4] [5] [6] [7]	Unbundled Subscribers Savings per Unbundled Subscriber Total Savings for Unbundled Subscribers Total Savings for MLB.TV Basic Subscribers	<u>\$25.00</u>	<u>\$28.30</u>	<u>\$31.70</u>	<u>\$35.20</u>	<u>\$38.80</u>	
[8] [9] [10]	<i>MLB.tv Premium</i> Bundle Subscribers Savings per Bundle Subscriber <b>Total Savings for Bundle Subscribers</b>	<u>\$20.00</u>	<u>\$23.90</u>	<u>\$27.92</u>	<u>\$32.05</u>	<u>\$36.31</u>	
[11] [12] [13] [14]	Unbundled Subscribers Savings per Unbundled Subscriber Total Savings for Unbundled Subscribers Total Savings for MLB.TV Premium Subscribers	<u>\$45.00</u>	<u>\$48.90</u>	<u>\$52.92</u>	<u>\$57.05</u>	<u>\$61.31</u>	
[15] [16] [17]	DIRECTV MLB Extra Innings Bundle Subscribers Savings per Bundle Subscriber Total Savings for Bundle Subscribers	<u>\$24.74</u>	<u>\$24.74</u>	<u>\$0.00</u>	<u>\$0.00</u>	<u>\$0.00</u>	
[18] [19] [20]	Comcast MLB Extra Innings Bundle Subscribers Savings per Bundle Subscriber Total Savings for Bundle Subscribers	<u>\$24.88</u>	<u>\$24.88</u>	<u>\$0.00</u>	<u>\$0.00</u>	<u>\$0.00</u>	
[21]	Total Savings for MLB.tv & MLB Extra Innings Bundle Subscribers						
[22]	Total Savings for MLB.tv & MLB Extra Innings Unbundled Subscribers						
[23]	Total Savings for MLB.tv & MLB Extra Innings Subscribers						\$213,770,690

# APPENDIX 6-2: VALUE OF SETTLEMENT AGREEMENT TO MLB.TV AND MLB EXTRA INNINGS SUBSCRIBERS (SCENARIO 2)

Appendix 6-2 Notes: [1] = Appendix 5, row [7] [2] = Appendix 4-2, row [3] [3] = [1] × [2] [4] = Appendix 5, row [13] [5] = Appendix 4-2, row [5] [6] = [4] × [5] [7] = [3] + [6] [8] = Appendix 5, row [8] [9] = Appendix 4-2, row [8] [10] = [8] × [9] [11] = Appendix 5, rows [14]

[11] = Appendix 5, rows [14] + [16] + [17]. Includes DIRECTV & Comcast MLB Extra Innings subscribers who would switch to the unbundled MLB.TV Internet Single-Club Programming under the assumptions of Scenario 2.

[12] = Appendix 4-2, row [10]. I assume the financial benefit to MLB Extra Innings subscribers who switch to the Internet Single-Club Programming is the same as the benefit for MLB.tv Premium subscribers who switch to Internet Single-Club Programming. This is conservative, in that the difference between MLB Extra Innings (without settlement) and Internet Single-Club Programming is greater than the difference between the price of MLB.tv Premium (without settlement) and Internet Single-Club Programming.

 $[13] = [11] \times [12]$  [14] = [10] + [13] [15] = Appendix 5, row [10] [16] = Appendix 4-2, row [13]  $[17] = [15] \times [16]$  [18] = Appendix 5, row [11] [19] = Appendix 4-2, row [16]  $[20] = [18] \times [19]$  [21] = [3] + [10] + [17] + [20] [22] = [6] + [13][23] = [21] + [22]