

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK

THOMAS LAUMANN, FERNANDA
GARBER, ROBERT SILVER, DAVID
DILLON, GARRETT TRAUB and PETER
HERMAN, representing themselves and all
others similarly situated,

Plaintiffs,

v.

NATIONAL HOCKEY LEAGUE, *et al.*

Defendants

CA No. 12-1817 (SAS)

FERNANDA GARBER, MARC LERNER,
DEREK RASMUSSEN, ROBERT SILVER,
GARRETT TRAUB, and PETER HERMAN,
representing themselves and all others similarly
situated,

Plaintiffs,

v.

OFFICE OF THE COMMISSIONER OF
BASEBALL, *et al.*

Defendants

CA No. 12-3704 (SAS)

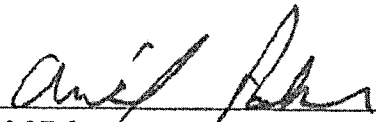
ECF Cases

[CORRECTED EXHIBITS 6 AND 7]

SUPPLEMENTAL DECLARATION OF ARIEL PAKES

1. My name is Ariel Pakes. I submitted declarations in this matter on November 11, 2014 ("Initial Declaration") and January 16, 2015 ("Reply Declaration"), in which I set forth my opinions concerning the fundamental methodological flaws in the analysis of Plaintiffs' expert Dr. Roger Noll, contained in Dr. Noll's September 19, 2014 Supplemental Declaration and in his December 29, 2014 Reply Declaration. Dr. Noll's Reply Declaration contains a new model that produces new data that is different than that contained in his Supplemental Declaration, including different purported pricings for the products at issue in his but-for world. This Supplemental Declaration updates the exhibits from my Initial Declaration to take into account the new model and new data reflected in Dr. Noll's Reply Declaration.
2. Supplemental Exhibits 1-4 update Exhibits 1-4 to my Initial Declaration. I perform the same analysis detailed in my Initial Declaration using Dr. Noll's new data.
3. Supplemental Exhibits 5A-5B update Exhibits 5A-5B to my initial declaration. I perform the same analysis detailed in my Initial Declaration using Dr. Noll's new data.
4. Supplemental Exhibits 6-7 update Exhibits 6-7 to my initial declaration. I perform the same analysis detailed in my Initial Declaration using Dr. Noll's new data (but for the sake of simplicity I do not report the joint venture analysis contained in my Initial Declaration).

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


Ariel Pakes

Executed on Feb. 3, 2015 at Palo Alto, California.

Pakes Supplemental Exhibit 1
Dr. Noll's Model Predicts Higher But-For Prices
When DIRECTV is Allowed to Set Prices to
Consumers for MLB Content

Actor	Noll Reply Exhibit 2C [A]	DIRECTV MLB Prices [B]
1 Angels	\$11.42	\$41.74
2 Astros	\$10.84	\$44.10
3 Athletics	\$11.51	\$42.31
4 Blue Jays	\$10.81	\$42.19
5 Braves	\$12.89	\$41.07
6 Brewers	\$10.54	\$43.04
7 Cardinals	\$11.81	\$42.08
8 Cubs	\$11.42	\$42.33
9 Diamondbacks	\$10.55	\$43.93
10 Dodgers	\$12.75	\$40.22
11 Giants	\$11.40	\$41.31
12 Indians	\$11.15	\$43.28
13 Mariners	\$10.67	\$43.25
14 Marlins	\$10.69	\$43.14
15 Mets	\$11.88	\$41.75
16 Nationals	\$12.83	\$41.01
17 Orioles	\$11.74	\$43.31
18 Padres	\$11.18	\$42.55
19 Phillies	\$12.69	\$42.18
20 Pirates	\$10.66	\$43.35
21 Rangers	\$11.49	\$42.42
22 Rays	\$11.69	\$42.34
23 Red Sox	\$12.91	\$41.02
24 Reds	\$11.26	\$42.85
25 Rockies	\$10.50	\$42.93
26 Royals	\$10.53	\$43.05
27 Tigers	\$12.08	\$42.29
28 Twins	\$10.89	\$43.01
29 White Sox	\$10.95	\$42.58
30 Yankees	\$15.94	\$38.87
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31 BFW League Package	\$24.42	\$40.73
32 BFW League Package price relative to DIRECTV's MLB Extra Innings package price	-\$9.17	\$7.14

Source: Noll Reply Declaration

Note: DIRECTV's MLB Extra Innings package price according to Dr. Noll is \$33.59 per month. The predicted BFW League Package price of \$40.73 is statistically higher than \$33.59 at the 5% confidence level. The 95% confidence interval is \$39.81 to \$41.65.

[A] This column replicates Noll's Reply Exhibit 2C.

[B] Predicted prices from Dr. Noll's DIRECTV model when the model is updated to allow DIRECTV to set the prices it charges for each team's channel and the BFW League Package.

Pakes Supplemental Exhibit 2
Comparison of Dr. Noll's But-For Internet and DIRECTV Prices for
MLB Content

Actor	Noll Reply Exhibit 2A Internet Price per month [A]	Noll Reply Exhibit 2C DIRECTV Price per month [B]	Percent Difference ([B] - [A]) / [A]
1 Angels	\$7.63	\$11.42	49.7%
2 Astros	\$6.55	\$10.84	65.5%
3 Athletics	\$7.13	\$11.51	61.4%
4 Blue Jays	\$6.84	\$10.81	58.2%
5 Braves	\$8.46	\$12.89	52.3%
6 Brewers	\$6.81	\$10.54	54.7%
7 Cardinals	\$8.24	\$11.81	43.3%
8 Cubs	\$7.49	\$11.42	52.5%
9 Diamondbacks	\$6.84	\$10.55	54.3%
10 Dodgers	\$8.60	\$12.75	48.2%
11 Giants	\$8.14	\$11.40	40.0%
12 Indians	\$6.88	\$11.15	62.2%
13 Mariners	\$6.92	\$10.67	54.2%
14 Marlins	\$6.68	\$10.69	60.0%
15 Mets	\$7.70	\$11.88	54.2%
16 Nationals	\$7.48	\$12.83	71.5%
17 Orioles	\$7.57	\$11.74	55.0%
18 Padres	\$6.81	\$11.18	64.3%
19 Phillies	\$8.41	\$12.69	50.8%
20 Pirates	\$7.29	\$10.66	46.2%
21 Rangers	\$7.40	\$11.49	55.3%
22 Rays	\$7.16	\$11.69	63.4%
23 Red Sox	\$9.10	\$12.91	41.9%
24 Reds	\$7.20	\$11.26	56.4%
25 Rockies	\$6.64	\$10.50	58.1%
26 Royals	\$6.67	\$10.53	57.8%
27 Tigers	\$8.35	\$12.08	44.6%
28 Twins	\$6.98	\$10.89	55.9%
29 White Sox	\$7.12	\$10.95	53.8%
30 Yankees	\$10.21	\$15.94	56.1%
31 BFW League Package	\$14.50	\$24.42	68.4%
Average	\$7.51	\$11.59	54.7%
Actual World League Package Price	\$20.05	\$33.59	67.5%

Source: Noll Reply Declaration

Note:

[A] This column replicates Noll's Reply Exhibit 2A.

[B] This column replicates Noll's Reply Exhibit 2C.

Pakes Supplemental Exhibit 3
Dr. Noll's Model Predicts a DIRECTV MLB But-For Package
Price That Is Not Lower Than the Actual World Price of the OMP
When the League Prices as a Joint Venture

Actor	Noll Reply Exhibit 2C [A]	Dr. Noll's But-For Prices Accounting for Joint Venture Incentives [B]
1 Angels	\$11.42	\$11.56
2 Astros	\$10.84	\$10.93
3 Athletics	\$11.51	\$11.65
4 Blue Jays	\$10.81	\$10.90
5 Braves	\$12.89	\$13.22
6 Brewers	\$10.54	\$10.61
7 Cardinals	\$11.81	\$11.98
8 Cubs	\$11.42	\$11.55
9 Diamondbacks	\$10.55	\$10.62
10 Dodgers	\$12.75	\$13.02
11 Giants	\$11.40	\$11.55
12 Indians	\$11.15	\$11.26
13 Mariners	\$10.67	\$10.74
14 Marlins	\$10.69	\$10.77
15 Mets	\$11.88	\$12.06
16 Nationals	\$12.83	\$13.08
17 Orioles	\$11.74	\$11.91
18 Padres	\$11.18	\$11.31
19 Phillies	\$12.69	\$12.97
20 Pirates	\$10.66	\$10.74
21 Rangers	\$11.49	\$11.64
22 Rays	\$11.69	\$11.85
23 Red Sox	\$12.91	\$13.23
24 Reds	\$11.26	\$11.39
25 Rockies	\$10.50	\$10.57
26 Royals	\$10.53	\$10.60
27 Tigers	\$12.08	\$12.30
28 Twins	\$10.89	\$10.98
29 White Sox	\$10.95	\$11.05
30 Yankees	\$15.94	\$16.53
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31 BFW League Package	\$24.42	\$33.34
32 BFW League Package price relative to DIRECTV's MLB Extra Innings package price	-\$9.17	-\$0.25

Source: Noll Reply Declaration

Note: DIRECTV's MLB Extra Innings package price according to Dr. Noll is \$33.59 per month. The predicted BFW League Package price of \$33.34 is not statistically different from the actual world OMP price of \$33.59 at the 5% confidence level. The 95% confidence interval is \$32.68 to \$33.99.

[A] This column replicates Noll's Reply Exhibit 2C.

[B] Predicted prices from Dr. Noll's model when the model is updated to allow the League to have joint venture incentives and to allow the teams to account for the revenue they receive from the BFW League Package. In the updated model, each team sets the price of its own channel to maximize the profits it receives from the sales of its own channel plus its share of the profits from the BFW League Package, which is equal to 1/30 of the profits of the BFW League Package. The League, in turn, is concerned with the aggregate industry profits, including the sales of the BFW League Package.

Pakes Supplemental Exhibit 4
Dr. Noll's Model Predicts an Internet NHL But-For Package Price That Is Not Lower Than the Actual World Price of the OMP When the League Prices as a Joint Venture

Actor	Noll Reply Exhibit 2B [A]	Dr. Noll's But-For Prices Accounting for Joint Venture Incentives [B]
1 Ducks	\$5.87	\$5.96
2 Bruins	\$6.98	\$7.23
3 Sabres	\$6.61	\$6.81
4 Hurricanes	\$5.57	\$5.65
5 Flames	\$5.81	\$5.90
6 Black Hawks	\$7.34	\$7.64
7 Blue Jackets	\$5.19	\$5.23
8 Avalanche	\$5.55	\$5.62
9 Stars	\$5.75	\$5.85
10 Red Wings	\$8.72	\$9.23
11 Oilers	\$5.66	\$5.74
12 Panthers	\$5.68	\$5.75
13 Kings	\$6.81	\$7.03
14 Wild	\$5.41	\$5.47
15 Canadiens	\$5.60	\$5.67
16 Devils	\$6.31	\$6.48
17 Predators	\$5.48	\$5.55
18 Islanders	\$5.70	\$5.78
19 Rangers	\$6.82	\$7.06
20 Senators	\$5.36	\$5.41
21 Flyers	\$8.04	\$8.50
22 Coyotes	\$5.53	\$5.60
23 Penguins	\$9.54	\$10.21
24 Sharks	\$6.34	\$6.50
25 Blues	\$6.11	\$6.24
26 Lightning	\$5.17	\$5.21
27 Maple Leafs	\$6.20	\$6.33
28 Canucks	\$6.87	\$7.09
29 Jets	\$5.35	\$5.41
30 Capitals	\$7.00	\$7.26
<hr/>		
31 BFW League Package	\$18.08	\$25.73
32 BFW League package price relative to NHL GameCenter LIVE package price	-\$8.20	-\$0.55

Source: Noll Reply Declaration

Note: NHL GameCenter LIVE package price according to Dr. Noll is \$26.28 per month. The predicted BFW League Package price of \$25.73 is not statistically different from the actual world OMP price of \$26.28 at the 5% confidence level. The 95% confidence interval is \$24.71 to \$26.75.

[A] This column replicates Noll's Reply Exhibit 2B.

[B] Predicted prices from Dr. Noll's model when the model is updated to allow the League to have joint venture incentives and to allow the teams to account for the revenue they receive from the BFW League Package. In the updated model, each team sets the price of its own channel to maximize the profits it receives from the sales of its own channel plus its share of the profits from the BFW League Package, which is equal to 1/30 of the profits of the BFW League Package. The League, in turn, is concerned with the aggregate industry profits, including the sales of the BFW League Package.

Pakes Supplemental Exhibit 5A
Dr. Noll's DIRECTV MLB Model is Not in Equilibrium
Because the Yankees Have an Incentive to Deviate
Prices

Actor	Dr. Noll's BFW League Package		BFW League Package Without the Yankees	
	Dr. Noll's Incentives [A]	Joint Venture Incentives [B]	Dr. Noll's Incentives [C]	Joint Venture Incentives [D]
1 Angels	\$11.42	\$11.56	\$11.44	\$11.55
2 Astros	\$10.84	\$10.93	\$10.85	\$10.92
3 Athletics	\$11.51	\$11.65	\$11.52	\$11.63
4 Blue Jays	\$10.81	\$10.90	\$10.82	\$10.89
5 Braves	\$12.89	\$13.22	\$12.91	\$13.17
6 Brewers	\$10.54	\$10.61	\$10.54	\$10.60
7 Cardinals	\$11.81	\$11.98	\$11.82	\$11.96
8 Cubs	\$11.42	\$11.55	\$11.43	\$11.53
9 Diamondbacks	\$10.55	\$10.62	\$10.56	\$10.61
10 Dodgers	\$12.75	\$13.02	\$12.77	\$12.98
11 Giants	\$11.40	\$11.55	\$11.41	\$11.53
12 Indians	\$11.15	\$11.26	\$11.16	\$11.25
13 Mariners	\$10.67	\$10.74	\$10.67	\$10.74
14 Marlins	\$10.69	\$10.77	\$10.69	\$10.76
15 Mets	\$11.88	\$12.06	\$11.89	\$12.03
16 Nationals	\$12.83	\$13.08	\$12.84	\$13.05
17 Orioles	\$11.74	\$11.91	\$11.74	\$11.88
18 Padres	\$11.18	\$11.31	\$11.19	\$11.29
19 Phillies	\$12.69	\$12.97	\$12.70	\$12.93
20 Pirates	\$10.66	\$10.74	\$10.67	\$10.73
21 Rangers	\$11.49	\$11.64	\$11.50	\$11.62
22 Rays	\$11.69	\$11.85	\$11.70	\$11.83
23 Red Sox	\$12.91	\$13.23	\$12.93	\$13.19
24 Reds	\$11.26	\$11.39	\$11.27	\$11.37
25 Rockies	\$10.50	\$10.57	\$10.51	\$10.56
26 Royals	\$10.53	\$10.60	\$10.53	\$10.59
27 Tigers	\$12.08	\$12.30	\$12.09	\$12.26
28 Twins	\$10.89	\$10.98	\$10.89	\$10.97
29 White Sox	\$10.95	\$11.05	\$10.96	\$11.04
30 Yankees	\$15.94	\$16.53	\$22.64	\$22.31
<hr/>				
31 BFW League Package	\$24.42	\$33.34	\$25.93	\$32.86
32 Teams Avg.	\$11.59	\$11.75	\$11.82	\$11.93
33 Price of Creating Full BFW Package	\$24.42	\$33.34	\$48.58	\$55.17
<hr/>				
Choice Set				
34 Favorite	✓	✓	✓	✓
35 Full BFW Package	✓	✓	✓	✓
36 Partial BFW Package			✓	✓

Source: Noll Reply Declaration

Note: All values are expressed in dollars.

[A] This column replicates Noll's Reply Exhibit 2C.

[B] Predicted prices from Dr. Noll's model when the model is updated to allow the League to have joint venture incentives and to allow the teams to account for the revenue they receive from the BFW League Package. In the updated model, each team sets the price of its own channel to maximize the profits it receives from the sales of its own channel plus its share of the profits from the BFW League Package, which is equal to 1/30 of the profits of the BFW League Package. The League, in turn, is concerned with the aggregate industry profits, including the sales of the BFW League Package.

[C] Predicted prices from Dr. Noll's model when the Yankees are not part of the BFW League Package, but consumers have the option of replicating the full BFW League Package by purchasing the BFW League Package (without the Yankees) and the Yankees channel.

[D] Predicted prices from the model in [B] when the Yankees are not part of the BFW League Package, but consumers have the option of replicating the full BFW League Package by purchasing the BFW League Package (without the Yankees) and the Yankees channel. The Yankees do not receive a portion of the League's profits, and the remaining teams each receive 1/29 of the of the BFW League Package profits.

Pakes Supplemental Exhibit 5B
Dr. Noll's DIRECTV MLB Model is Not in Equilibrium
Because the Yankees Have an Incentive to Deviate
Profit

Actor	Dr. Noll's BFW League Package		BFW League Package Without the Yankees	
	Dr. Noll's Incentives [A]	Joint Venture Incentives [B]	Dr. Noll's Incentives [C]	Joint Venture Incentives [D]
1 Angels	\$467,465	\$478,251	\$470,587	\$478,829
2 Astros	\$386,797	\$395,108	\$389,172	\$395,558
3 Athletics	\$465,734	\$476,506	\$468,798	\$477,030
4 Blue Jays	\$450,898	\$460,473	\$453,695	\$461,039
5 Braves	\$550,792	\$566,248	\$554,620	\$566,366
6 Brewers	\$410,315	\$418,768	\$412,830	\$419,329
7 Cardinals	\$473,493	\$484,919	\$476,569	\$485,303
8 Cubs	\$450,634	\$460,927	\$453,533	\$461,410
9 Diamondbacks	\$403,468	\$411,744	\$405,954	\$412,328
10 Dodgers	\$581,836	\$597,508	\$585,846	\$597,764
11 Giants	\$462,272	\$473,093	\$465,225	\$473,496
12 Indians	\$445,827	\$455,685	\$448,558	\$456,118
13 Mariners	\$414,112	\$422,723	\$416,688	\$423,308
14 Marlins	\$418,465	\$427,289	\$421,027	\$427,800
15 Mets	\$466,838	\$478,218	\$470,134	\$478,821
16 Nationals	\$552,105	\$566,670	\$555,823	\$566,918
17 Orioles	\$471,713	\$483,128	\$474,771	\$483,479
18 Padres	\$459,181	\$469,638	\$462,183	\$470,185
19 Phillies	\$577,111	\$592,596	\$581,185	\$592,956
20 Pirates	\$410,086	\$418,640	\$412,626	\$419,198
21 Rangers	\$434,212	\$444,335	\$436,995	\$444,734
22 Rays	\$488,560	\$500,128	\$491,738	\$500,578
23 Red Sox	\$575,955	\$592,082	\$580,239	\$592,605
24 Reds	\$437,579	\$447,535	\$440,336	\$447,952
25 Rockies	\$411,110	\$419,525	\$413,584	\$420,056
26 Royals	\$392,673	\$400,787	\$395,045	\$401,292
27 Tigers	\$512,804	\$525,782	\$516,203	\$526,096
28 Twins	\$432,351	\$441,667	\$435,104	\$442,253
29 White Sox	\$424,588	\$433,795	\$427,300	\$434,356
30 Yankees	\$922,304	\$954,778	\$1,132,183	\$1,116,939
31 BFW League Package	\$3,662,656	\$3,577,034	\$3,908,276	\$3,859,082
32 Teams Total	\$14,351,277	\$14,698,545	\$14,648,549	\$14,873,996
33 Teams Avg. (exc. Yankees)	\$463,068	\$473,923	\$466,082	\$474,381
Choice Set				
33 Favorite	✓	✓	✓	✓
34 Full BFW Package	✓	✓	✓	✓
35 Partial BFW Package			✓	✓

Source: Noll Reply Declaration

Note: All values are expressed in dollars.

[A] This column shows the profits from the analysis Dr. Noll presents in his Reply Exhibit 2C.

[B] Predicted profits from Dr. Noll's model when the model is updated to allow the League to have joint venture incentives and to allow the teams to account for the revenue they receive from the BFW League Package. In the updated model, each team sets the price of its own channel to maximize the profits it receives from the sales of its own channel plus its share of the profits from the BFW League Package, which is equal to 1/30 of the profits of the BFW League Package. The League, in turn, is concerned with the aggregate industry profits, including the sales of the BFW League Package.

[C] Predicted profits from Dr. Noll's model when the Yankees are not part of the BFW League Package, but consumers have the option of replicating the full BFW League Package by purchasing the BFW League Package (without the Yankees) and the Yankees channel.

[D] Predicted profits from the model in [B] when the Yankees are not part of the BFW League Package, but consumers have the option of replicating the full BFW League Package by purchasing the BFW League Package (without the Yankees) and the Yankees channel. The Yankees do not receive a portion of the League's profits, and the remaining teams each receive 1/29 of the of the BFW League Package profits.

Pakes Supplemental Exhibit 6
Dr. Noll's DIRECTV MLB Model Is Not in Equilibrium Because
Each Team Has a Unilateral Incentive to Deviate

Excluded Team	Individual Team Prices [A]		League Prices [B]		Individual Team Profits [C]		Post-Deviation Industry Profits [D]	
	Pre-Deviation	Post-Deviation	Reduced Package	Price of Creating		Pre-Deviation		Post-Deviation
				Full BFW Package				
1 Angels	\$11.42	\$14.52	\$24.89	\$39.42	\$467,465	\$543,998	\$18,272,266	
2 Astros	\$10.84	\$13.65	\$24.78	\$38.43	\$386,797	\$448,500	\$18,229,245	
3 Athletics	\$11.51	\$14.95	\$24.92	\$39.87	\$465,734	\$544,471	\$18,282,252	
4 Blue Jays	\$10.81	\$13.14	\$24.79	\$37.93	\$450,898	\$518,725	\$18,246,612	
5 Braves	\$12.89	\$18.19	\$25.14	\$43.33	\$550,792	\$658,510	\$18,340,798	
6 Brewers	\$10.54	\$12.66	\$24.74	\$37.40	\$410,315	\$470,703	\$18,222,020	
7 Cardinals	\$11.81	\$15.69	\$24.96	\$40.65	\$473,493	\$557,001	\$18,291,535	
8 Cubs	\$11.42	\$14.75	\$24.89	\$39.64	\$450,634	\$525,958	\$18,272,933	
9 Diamondbacks	\$10.55	\$12.81	\$24.75	\$37.57	\$403,468	\$463,971	\$18,225,769	
10 Dodgers	\$12.75	\$17.14	\$25.16	\$42.30	\$581,836	\$689,895	\$18,348,790	
11 Giants	\$11.40	\$14.53	\$24.88	\$39.41	\$462,272	\$538,233	\$18,266,631	
12 Indians	\$11.15	\$14.22	\$24.88	\$39.10	\$445,827	\$518,582	\$18,266,454	
13 Mariners	\$10.67	\$13.01	\$24.78	\$37.78	\$414,112	\$476,652	\$18,232,893	
14 Marlins	\$10.69	\$12.97	\$24.76	\$37.73	\$418,465	\$481,341	\$18,227,754	
15 Mets	\$11.88	\$15.93	\$24.96	\$40.89	\$466,838	\$549,741	\$18,292,927	
16 Nationals	\$12.83	\$17.59	\$25.13	\$42.72	\$552,105	\$657,248	\$18,348,837	
17 Orioles	\$11.74	\$15.54	\$24.94	\$40.48	\$471,713	\$554,257	\$18,284,039	
18 Padres	\$11.18	\$14.17	\$24.86	\$39.03	\$459,181	\$533,448	\$18,263,423	
19 Phillies	\$12.69	\$17.76	\$25.20	\$42.97	\$577,111	\$688,046	\$18,359,953	
20 Pirates	\$10.66	\$13.00	\$24.76	\$37.76	\$410,086	\$472,205	\$18,228,756	
21 Rangers	\$11.49	\$15.00	\$24.89	\$39.89	\$434,212	\$507,974	\$18,264,168	
22 Rays	\$11.69	\$15.37	\$24.97	\$40.34	\$488,560	\$572,730	\$18,298,101	
23 Red Sox	\$12.91	\$18.26	\$25.17	\$43.43	\$575,955	\$689,622	\$18,358,673	
24 Reds	\$11.26	\$14.28	\$24.84	\$39.13	\$437,579	\$508,944	\$18,251,728	
25 Rockies	\$10.50	\$12.56	\$24.72	\$37.29	\$411,110	\$470,911	\$18,220,028	
26 Royals	\$10.53	\$12.76	\$24.72	\$37.47	\$392,673	\$451,256	\$18,217,053	
27 Tigers	\$12.08	\$16.47	\$25.05	\$41.51	\$512,804	\$606,367	\$18,315,709	
28 Twins	\$10.89	\$13.49	\$24.81	\$38.30	\$432,351	\$499,735	\$18,248,270	
29 White Sox	\$10.95	\$13.60	\$24.80	\$38.40	\$424,588	\$490,899	\$18,243,757	
30 Yankees	\$15.94	\$22.64	\$25.93	\$48.58	\$922,304	\$1,132,183	\$18,556,826	

Source: Noll Reply Declaration

Note: All values are expressed in dollars. DIRECTV's MLB Extra Innings package price according to Dr. Noll is \$33.59 per month. Industry profits under Dr. Noll's model are \$18.01 million. Noll Reply Exhibit 4.

[A] The prices of individual teams' feeds in Dr. Noll's model before and after exclusion from the BFW League Package. The pre-deviation scenario shows the results from Dr. Noll's Reply Exhibit 2C. In the post-deviation scenario, each row represents a situation in which the given team is not included in the BFW League Package, but consumers can replicate the full bundle by purchasing the BFW League Package and the excluded team's channel.

[B] Reduced BFW League Package shows the price of the BFW League Package when the given team's feed is not included in the BFW League Package. Price of Creating Full BFW Package shows the price of purchasing both the reduced BFW League Package and the excluded team's channel.

[C] The profits earned by the excluded team.

[D] As in [A], [B], and [C], each row represents a situation in which the given team is not included in the BFW League Package, but consumers have the option of replicating the full BFW League Package by purchasing the excluded team's channel and the BFW League Package, which excludes the team. Industry profits represent the aggregate of all individual teams' profits from individual channels plus the profits from the BFW League Package.

Pakes Supplemental Exhibit 7
Dr. Noll's Internet NHL Model is Not in Equilibrium
Because Each Team Has a Unilateral Incentive to Deviate

Excluded Team	Individual Team Prices [A]		League Prices [B]		Individual Team Profits [C]		Post-Deviation Industry Profits [D]	
	Pre-Deviation	Post-Deviation	Reduced Package	Price of Creating Full		Pre-Deviation		Post-Deviation
				BFW Package				
1 Ducks	\$5.87	\$11.36	\$18.53	\$29.89	\$45,771	\$52,177	\$2,053,276	
2 Bruins	\$6.98	\$13.86	\$18.67	\$32.53	\$57,384	\$67,403	\$2,061,741	
3 Sabres	\$6.61	\$10.66	\$18.55	\$29.41	\$55,080	\$63,544	\$2,055,213	
4 Hurricanes	\$5.57	\$8.50	\$18.40	\$26.90	\$44,861	\$50,284	\$2,047,607	
5 Flames	\$5.81	\$9.36	\$18.45	\$27.81	\$48,823	\$55,166	\$2,051,106	
6 Black Hawks	\$7.34	\$13.78	\$18.66	\$32.44	\$58,744	\$69,380	\$2,061,150	
7 Blue Jackets	\$5.19	\$6.55	\$18.23	\$24.78	\$40,570	\$44,721	\$2,040,167	
8 Avalanche	\$5.55	\$8.72	\$18.43	\$27.15	\$44,728	\$50,180	\$2,048,326	
9 Stars	\$5.75	\$10.60	\$18.42	\$29.03	\$43,038	\$48,764	\$2,049,472	
10 Red Wings	\$8.72	\$16.22	\$18.97	\$35.19	\$73,479	\$88,936	\$2,071,195	
11 Oilers	\$5.66	\$8.68	\$18.46	\$27.14	\$48,480	\$54,450	\$2,050,048	
12 Panthers	\$5.68	\$9.51	\$18.47	\$27.98	\$45,402	\$51,243	\$2,050,230	
13 Kings	\$6.81	\$14.56	\$18.65	\$33.21	\$52,821	\$62,262	\$2,060,222	
14 Wild	\$5.41	\$7.70	\$18.38	\$26.08	\$43,231	\$48,240	\$2,045,264	
15 Canadiens	\$5.60	\$7.88	\$18.35	\$26.20	\$47,563	\$53,099	\$2,046,696	
16 Devils	\$6.31	\$12.85	\$18.53	\$31.37	\$48,875	\$56,597	\$2,055,396	
17 Predators	\$5.48	\$7.71	\$18.32	\$26.03	\$42,998	\$47,970	\$2,044,357	
18 Islanders	\$5.70	\$8.51	\$18.38	\$26.89	\$44,171	\$49,639	\$2,046,431	
19 Rangers	\$6.82	\$16.17	\$18.66	\$34.84	\$52,611	\$62,440	\$2,061,475	
20 Senators	\$5.36	\$6.97	\$18.29	\$25.25	\$46,343	\$50,186	\$2,043,488	
21 Flyers	\$8.04	\$16.10	\$18.87	\$34.97	\$66,273	\$79,830	\$2,067,765	
22 Coyotes	\$5.53	\$8.43	\$18.39	\$26.82	\$44,470	\$49,809	\$2,047,449	
23 Penguins	\$9.54	\$18.35	\$19.12	\$37.47	\$78,563	\$96,850	\$2,076,058	
24 Sharks	\$6.34	\$12.59	\$18.54	\$31.13	\$50,884	\$58,936	\$2,056,583	
25 Blues	\$6.11	\$11.31	\$18.48	\$29.79	\$47,739	\$54,712	\$2,053,033	
26 Lightning	\$5.17	\$6.53	\$18.25	\$24.79	\$41,033	\$45,245	\$2,040,683	
27 Maple Leafs	\$6.20	\$12.25	\$18.59	\$30.84	\$52,536	\$60,497	\$2,058,209	
28 Canucks	\$6.87	\$13.12	\$18.70	\$31.82	\$59,975	\$70,021	\$2,062,752	
29 Jets	\$5.35	\$7.23	\$18.33	\$25.56	\$45,211	\$50,181	\$2,044,779	
30 Capitals	\$7.00	\$14.63	\$18.68	\$33.30	\$55,518	\$65,614	\$2,062,265	

Note: All values are expressed in dollars. NHL GameCenter LIVE package price according to Dr. Noll is \$26.28 per month. The industry profits under Dr. Noll's model are \$2.02 million. Noll Reply Exhibit 4.

[A] The profits of individual teams' feeds in Dr. Noll's model before and after exclusion from the BFW League Package. The pre-deviation scenario shows the results from Dr. Noll's Reply Exhibit 2C. In the post-deviation scenario, each row represents a situation in which the given team is not included in the BFW League Package, but consumers can replicate the full bundle by purchasing the BFW League Package and the excluded team's channel.

[B] Reduced BFW League Package shows the price of the BFW League Package when the given team's feed is not included in the BFW League Package. Price of Creating Full BFW Package shows the price of purchasing both the reduced BFW League Package and the excluded team's channel.

[C] The profits earned by the excluded team.

[D] As in [A], [B], and [C], each row represents a situation in which the given team is not included in the BFW League Package, but consumers have the option of replicating the full BFW League Package by purchasing the excluded team's channel and the BFW League Package, which excludes the team. Industry profits represent the aggregate of all individual teams' profits from individual channels plus the profits from the BFW League Package.