## **Online Supplementary Material for**

## Unraveling Yields Inefficient Matchings: Evidence from Post-Season College Football Bowls by

Guillaume Frechette Alvin E. Roth

M. Utku Ünver

Appendix 1

Table 6. End-of-Regular-Season AP Rankings of Teams that Participated in the Bowls

Voor	Rose	Bowl	Fiesta	Bowl	Orange	Bowl	Sugar	Bowl	<b>Cotton Bowl</b>	
Year	Winner	Loser	Winner	Loser	Winner	Loser	Winner	Loser	Winner	Loser
1977	13	4	8	15	6	2	3	9	5	1
1978	3	5	8	15	4	6	2	1	10	9
1979	3	1	10	26	5	4	2	6	8	7
1980	5	16	10	11	4	2	1	7	9	6
1981	12	13	7	8	1	4	10	2	6	3
1982	5	19	11	12	3	13	2	1	4	6
1983	26	4	14	15	5	1	3	8	7	2
1984	18	6	14	13	4	2	5	11	8	26
1985	13	4	5	7	3	1	8	2	11	16
1986	7	4	2	1	3	9	6	5	11	8
1987	8	16	3	5	2	1	4	6	13	12
1988	11	5	1	3	2	6	4	7	9	8
1989	12	3	5	6	4	1	2	7	8	10
1990	8	17	18	25	1	5	10	26	4	3
1991	2	4	6	10	1	11	18	3	5	9
1992	7	9	6	10	3	11	2	1	5	4
1993	9	14	16	10	1	2	8	3	4	7
1994	2	12	4	26	1	3	7	5	21	26
1995	17	3	1	2	8	6	13	9	7	12
1996	4	2	7	20	6	10	3	1	5	14
1997	1	9	8	21	2	7	3	12	5	20
1998	9	6	1	2	7	18	3	8	20	25
1999	4	22	3	6	8	5	1	2	24	14
2000	4	14	5	10	1	3	2	7	11	21
2001	1	4	2	3	5	6	12	7	10	26
2002	8	7	2	1	5	3	4	16	9	26
2003	1	4	7	8	10	9	2	3	16	21
2004	6	13	5	19	1	2	3	9	15	22
2005	2	1	4	5	3	22	11	8	13	18

Table 7. Nielsen Ratings of College Bowls and Super Bowl (%)

Year	Rose	Fiesta	Orange	Sugar	Cotton	Super
1 cai	Bowl	Bowl	Bowl	Bowl	Bowl	Bowl
1985	22.7	14.7	21.3	6.8	12.7	48.3
1986	17.7	24.9	16	8.6	13.6	45.8
1987	16.5	8.7	20.8	7.9	10	41.9
1988	10.8	17	12.9	8.1	9.8	43.5
1989	14.6	8.8	18.5	7.4	7.5	39
1990	11.9	6.2	18.3	4.9	9.4	41.9
1991	15.4	7	11	10.8	10.3	40.3
1992	14.3	6.2	4	18.2	10.2	45.1
1993	11.3	7.9	17.8	5.2	11.3	45.5
1994	18.2	6	11.4	14.9	4.6	41.3
1995	19.2	18.8	12.5	6.3	5.6	46.0
1996	16.5	10	7.8	17.9	5.6	43.3
1997	17.6	5.8	13.3	11.2	6.2	44.5
1998	13.3	17.2	8.4	11.5	4.1	40.2
1999	14.1	9.6	11.4	17.5	4.1	43.3
2000	14	10.7	17.8	13	4.4	40.4
2001	13.8	11.3	9.5	8.6	4.3	40.4
2002	11.3	17.2	9.7	9.2	3.4	40.7
2003	14.3	8.5	9.1	14.8	4.3	41.4
2004	12.4	7.4	13.7	9.5	2.6	41.1
2005	21.7	12.9	12.3	9	3.7	41.6

Table 8: Possibility of creating a match-up between the number 1 and number 2 teams in the AP Sports Writers' Poll rankings in a bowl game:

Regime	Years	AP - Ranked No. 1	Conference	AP - Ranked No. 2	Conference	Possible to match?	Actually matched?	Why not possible to match / Why not matched?
Pre- coalition Era	1977	Texas	Southwest	Oklahoma	Big Eight	NO	-	Southwest Conf. champion was pre- committed to Cotton Bowl and Big Eight champion was pre- committed to Orange Bowl
	1978	Penn State	independent (at-large)	Alabama	Southeastern	YES, at Sugar Bowl	YES	-
	1979	Ohio State	Big Ten	Alabama	Southeastern	NO	-	Big Ten champion was pre-committed to Rose Bowl, which was a closed bowl and Southeastern Conf. champion was pre- committed to Sugar Bowl
	1980	Georgia	Southeastern	Florida State	ACC <sup>1</sup>	YES, at Sugar Bowl	NO	In-season unraveling
	1981	Clemson	ACC	Georgia	Southeastern	YES, at Sugar Bowl	NO	In-season unraveling
	1982	Georgia	Southeastern	Penn State	independent (at-large)	YES, at Sugar Bowl	YES	-
	1983	Nebraska	Big Eight	Texas	Southwest	NO	-	Big Eight champion was pre-committed to Orange Bowl and Southwest Conf. champion was pre- committed to Cotton Bowl
	1984	BYU	Western	Oklahoma	Big Eight	NO	-	Western Conf. champion was pre-committed to Holiday Bowl and Big Eight champion was pre- committed to Orange Bowl
	1985	Penn State	independent (at-large)	Miami	independent (at-large)	YES, at Fiesta Bowl	NO	In-season unraveling
	1986	Miami	independent (at-large)	Penn State	independent (at-large)	YES, at Fiesta Bowl	YES	-

<sup>&</sup>lt;sup>1</sup> In the pre-coalitions era, although the ACC champion was not an at-large team, escape clauses in the agreement of ACC with the Citrus Bowl made it possible that the ACC champion could play at a different bowl when it had a shot at the national championship.

Regime	Years	AP - Ranked No. 1	Conference	AP - Ranked No. 2	Conference	Possible to match?	Actually matched?	Why not possible to match / Why not matched?
	1987	Oklahoma	Big Eight	Miami	independent (at-large)	YES, at Orange Bowl	YES	-
	1988	Notre Dame	independent (at-large)	Miami	independent (at-large)	YES, at Fiesta Bowl	NO	In-season unraveling
	1989	Colorado	Big Eight	Miami	independent (at-large)	YES, at Orange Bowl	NO	In-season unraveling
	1990	Colorado	Big Eight	Georgia Tech	ACC	YES, at Orange Bowl	NO	In-season unraveling
	1991	Miami	Big East (at- large)	Washington	Pacific Ten	NO	-	Pacific Ten champion was pre-committed to Rose Bowl, which was a closed bowl
	1992	Miami	Big East (BC)	Alabama	Southeastern (BC)	YES, at Sugar Bowl	YES	-
ВС	1993	Florida State	ACC (BC)	Nebraska	Big Eight (BC)	YES, at Orange Bowl	YES	-
	1994	Nebraska	Big Eight (BC)	Penn State	Big Ten	NO	-	Big Ten was not part of Bowl Coalition
	1995	Nebraska	Big Eight (BA)	Florida	Southeastern (BA)	YES, at Fiesta Bowl	YES	-
BA	1996	Florida State	ACC (BA)	Arizona State	Pacific Ten	NO	-	Pacific Ten was not part of Bowl Alliance
	1997	Michigan	Big Ten	Nebraska	Big Twelve (BA)	NO	-	Big Ten was not part of Bowl Alliance
BCS	1998	Tennessee	Southeastern (BCS)	Florida State	ACC (BCS)	YES, at Fiesta Bowl	YES	-
	1999	Florida State	ACC (BCS)	Virginia Tech	Big East (BCS)	YES, at Sugar Bowl	YES	-
	2000	Oklahoma	Big Twelve (BCS)	Miami	Big East (BCS)	NO	-	AP and BCS rankings differ.
	2001	Miami	Big East (BCS)	Oregon	Pacific Ten (BCS)	NO	-	AP and BCS rankings differ.
	2002	Miami	Big East (BCS)	Ohio State	Big Ten (BCS)	YES, at Fiesta Bowl	YES	-
	2003	USC	Pacific Ten (BCS)	LSU	Southeastern (BCS)	NO	-	AP and BCS rankings differ.
	2004	USC	Pacific Ten (BCS)	Oklahoma	Big Twelve (BCS)	YES, at Orange Bowl	YES	-

Regime	Years	AP - Ranked No. 1	Conference	AP - Ranked No. 2	Conference	Possible to match?	Actually matched?	Why not possible to match / Why not matched?
	2005	USC	Pacific Ten (BCS)	Texas	Big Twelve (BCS)	YES, at Rose Bowl	YES	-

## Appendix 3

Table 5.1 replicates the specifications 5, 6, and 7 of Table 5 (in the text) using only the data prior to the formation of the first coalition (in 1992). Over that period, only one bowl for which we have the Nielsen rating had an unranked team playing, hence that bowl is dropped as well as the associated regressors from specifications 5, 6, and 7.

Table 5.2. Estimates of the Determinants of Nielsen Rating of a Bowl: Pre-Coalition Era

	Lia	Nielsen Rating of	a Bowl
Regressors:	Spec. (5.2)	Spec. (6.2)	Spec. (7.2)
Championskin (No. 1 as No. 2)	4.703*	5.028*	4.359
Championship (No. 1 vs. No. 2)	(2.169)	(2.286)	(2.562)
N. 1 D 1 T	5.271**	5.239**	5.288**
No. 1 Ranked Team	(1.756)	(1.726)	(1.906)
Average Rank (if unranked	-0.243*	-0.196	-0.272
Team Is not playing)	(0.121)	(0.115)	(0.192)
Difference in Rank (if unranked	0.254**	0.154	0.275
Team is not playing)	(0.096)	(0.114)	(0.247)
Regular Season College Football	1.338	2.233	
Average Nielsen Rating	(1.122)	(1.318)	
Supar Davil's Mislean Dating	0.187	0.386	
Super Bowl's Nielsen Rating	(0.135)	(0.206)	
Fiesta Bowl	3.281	2.906	3.313*
Flesta Bowl	(1.825)	(2.023)	(1.779)
Owanga David	4.306*	4.260*	4.200**
Orange Bowl	(1.947)	(2.072)	(1.876)
Rose Bowl	7.960***	7.954**	7.900***
Rose bowl	(2.046)	(2.149)	(1.504)
Cotton Bowl	4.053**	3.586*	4.108**
Cotton Bowl	(1.332)	(1.601)	(1.878)
Year	-0.455***		
i eai	(0.112)		
1986-1988		0.377	
1980-1988		(0.771)	
1989-1991		0.635	
1909-1991		(1.223)	
Constant	-6.647	-22.812**	8.210***
Constant	(5.375)	(7.748)	(1.535)
Team Dummies	No	No	No
Time Fixed Effects	No	No	Yes
Observations	105	105	105
Robust stand	ard errors in pare	ntheses	
* significant at 10%; ** si	gnificant at 5%; *	*** significant at 1	%

6