**Figure A.** A is a complete list of variables included in the models, with explanations as needed

|  |  |  |  |
| --- | --- | --- | --- |
| Variable | | Description | |
| NHL log viewers | The logarithm (base 10) of the total viewers of a nationally broadcast NHL game, according to Nielsen ratings | |
| NBA regular season overlap | Dummy variable; 1 if game overlaps with NBA regular season game, 0 if not | |
| NBA playoff overlap | | Dummy variable; 1 if game overlaps with NBA playoff game, 0 if not | |
| Year 2014 | | Dummy variable; 1 if game occurs in 2014, 0 if not | |
| Year 2013 | | Dummy variable; 1 if game occurs in 2013, 0 if not | |
| Year 2012 | | Dummy variable; 1 if game occurs in 2012, 0 if not | |
| Year 2011 | | Dummy variable; 1 if game occurs in 2011, 0 if not | |
| Year 2010 | | Dummy variable; 1 if game occurs in 2010, 0 if not | |
| Year 2009 | | Dummy variable; 1 if game occurs in 2009, 0 if not | |
| Year 2008 | | Dummy variable; 1 if game occurs in 2008, 0 if not | |
| Year 2007 | | Dummy variable; 1 if game occurs in 2007, 0 if not | |
| Year 2006 | | Dummy variable; 1 if game occurs in 2006, 0 if not | |
| Year 2005 | | Dummy variable; 1 if game occurs in 2005, 0 if not | |
| Year 2004 | | Dummy variable; 1 if game occurs in 2004, 0 if not | |
| Year 2003 | | Dummy variable; 1 if game occurs in 2003, 0 if not | |
| Year 2002 | | Dummy variable; 1 if game occurs in 2002, 0 if not | |
| Year 2001 | | Dummy variable; 1 if game occurs in 2001, 0 if not | |
| Year 2000 | | Dummy variable; 1 if game occurs in 2000, 0 if not | |
| Day Monday | | Dummy variable; 1 if game occurs on Monday, 0 if not | |
| Day Tuesday | | Dummy variable; 1 if game occurs on Tuesday, 0 if not | |
| Day Wednesday | | Dummy variable; 1 if game occurs on Wednesday, 0 if not | |
| Day Thursday | | Dummy variable; 1 if game occurs on Thursday, 0 if not | |
| Day Friday | | Dummy variable; 1 if game occurs on Friday, 0 if not | |
| Day Saturday | | Dummy variable; 1 if game occurs on Saturday, 0 if not | |
| Day Sunday | | Dummy variable; 1 if game occurs on Sunday, 0 if not | |
| Winter Classic | | Dummy variable; 1 if game is NHL Winter Classic outdoor special, 0 if not | |
| Opening night | | Dummy variable; 1 if game is opening night of the regular season, 0 if not | |
| Hour | | Hour of game start time | |
| Distance from primetime | | Absolute value of the game start time distance from 8:30 p.m. ET; e.g. a start time of 6:00 p.m. ET = (8.5 – 6.0) = 2.5 | |
| After 7 | | Dummy variable; 1 if game starts after 7 p.m. ET, 0 if not | |
| Holiday | | Dummy variable; 1 if game is on Thanksgiving or Christmas, 0 if not | |
| MLB regular season overlap | | Dummy variable; 1 if game overlaps with MLB regular season game, 0 if not | |
| MLB playoff overlap | | Dummy variable; 1 if game overlaps with MLB playoff game, 0 if not | |
| NHL regular season overlap | | Dummy variable; 1 if game overlaps with NHL regular season game, 0 if not | |
| NHLplayoff overlap | | Dummy variable; 1 if game overlaps with NHLplayoff game, 0 if not | |
| NBA regular season overlap | | Dummy variable; 1 if game overlaps with NBA regular season game, 0 if not | |
| NBAplayoff overlap | | Dummy variable; 1 if game overlaps with NBAplayoff game, 0 if not | |
| NFL regular season overlap | | Dummy variable; 1 if game overlaps with NFL regular season game, 0 if not | |
| NFLplayoff overlap | | Dummy variable; 1 if game overlaps with NFLplayoff game, 0 if not | |
| College football overlap | | Dummy variable; 1 if game overlaps with college football game, 0 if not | |
| Overlap | | Dummy variable; 1 if game overlaps with same sport, 0 if not | |
| Playoff round regular season | | Dummy variable; 1 if game in regular season, 0 if not | |
| Playoff round quarterfinals | | Dummy variable; 1 if game in playoff quarterfinals, 0 if not | |
| Playoff round semifinals | | Dummy variable; 1 if game in playoff semifinals, 0 if not | |
| Playoff round conference finals | | Dummy variable; 1 if game in playoff conference finals, 0 if not | |
| Playoff round finals | | Dummy variable; 1 if game in playoff Stanley Cup finals, 0 if not | |
| Away market | | Away team city population by Metropolitan Statistical Area | |
| Home market | | Home team city population by Metropolitan Statistical Area | |
| American market | | Total city population of teams by Metropolitan Statistical Area if American cities | |
| Canadian teams | | Number of Canadian teams playing | |
| Playoff game | | Series game number, coded as integer | |
| Winning team total | | Total playoff series game score for winning team (e.g. if playoff series is 3-1, then counted as 3) | |
| Losing team total | | Total playoff series game score for losing team (e.g. if playoff series is 3-1, then counted as 1) | |
| Series difference | | Difference between playoff series game score for winning team and losing team (e.g. if playoff series is 3-1, then counted as 2) | |
| Series game leverage | | How much weight a game has in swinging series final outcome probabilities based on historical data | |
| TV ABC | | Dummy variable; 1 if game broadcast on ABC channel, 0 if not | |
| TV CBS | | Dummy variable; 1 if game broadcast on CBS channel, 0 if not | |
| TV CNBC | | Dummy variable; 1 if game broadcast on CNBC channel, 0 if not | |
| TV ESPN | | Dummy variable; 1 if game broadcast on ESPN channel, 0 if not | |
| TV ESPN2 | | Dummy variable; 1 if game broadcast on ESPN2 channel, 0 if not | |
| TV FOX | | Dummy variable; 1 if game broadcast on FOX channel, 0 if not | |
| TV NBA TV | | Dummy variable; 1 if game broadcast on NBA TV channel, 0 if not | |
| TV NBC | | Dummy variable; 1 if game broadcast on NBC channel, 0 if not | |
| TV NBCSN | | Dummy variable; 1 if game broadcast on NBC Sports Network channel, 0 if not | |
| TV NFL Network | | Dummy variable; 1 if game broadcast on NFL Network channel, 0 if not | |
| TV TBS | | Dummy variable; 1 if game broadcast on TBS channel, 0 if not | |
| TV TNT | | Dummy variable; 1 if game broadcast on TNT channel, 0 if not | |
| World Cup lead-in | | Dummy variable; 1 if game broadcast on same channel after FIFA World Cup game, 0 if not | |

**Figure B.** Multiple linear regression model results

**NBA regular season**

NBA regular season

===============================================

Dependent variable:

---------------------------

Viewers

-----------------------------------------------

Year2013 -338,430.300\*\*\*

(106,381.200)

Year2014 -544,998.200\*\*\*

(101,739.900)

Holiday 2,649,727.000\*\*\*

(233,157.100)

AwayPrime -229,628.500\*\*\*

(43,300.990)

Past7 -418,426.200

(305,678.100)

NHLReg 51,108.810

(108,404.900)

NHLPlay 144,011.400

(226,053.800)

MLBReg -471,941.800\*\*\*

(126,995.300)

NFL -307,122.900\*

(177,803.000)

CF 233,226.800

(222,317.200)

AwayPop 0.010\*

(0.005)

HomePop 0.021\*\*\*

(0.005)

TVESPN -3,172,837.000\*\*\*

(257,573.000)

TVESPN2 -3,195,861.000\*\*\*

(622,561.300)

TVTNT -2,739,164.000\*\*\*

(269,340.200)

Constant 5,613,321.000\*\*\*

(318,459.800)

-----------------------------------------------

Observations 420

R2 0.652

Adjusted R2 0.639

Residual Std. Error 783,442.900 (df = 404)

F Statistic 50.364\*\*\* (df = 15; 404)

===============================================

Note: \*p<0.1; \*\*p<0.05; \*\*\*p<0.01

**NBA playoffs**

NBA playoffs

===============================================

Dependent variable:

---------------------------

Viewers

-----------------------------------------------

Year2012 -560,612.100\*\*

(219,881.800)

Year2013 -1,141,925.000\*\*\*

(222,353.800)

AwayPrime -123,766.700\*

(67,850.180)

NBAPlay -657,983.400\*

(359,125.400)

NHLPlay -515,473.600\*\*

(227,599.100)

AwayPop 0.042\*\*\*

(0.015)

HomePop 0.040\*\*\*

(0.015)

Round2 1,537,731.000\*\*\*

(230,445.100)

Round3 4,560,892.000\*\*\*

(311,117.700)

Round4 11,610,396.000\*\*\*

(577,595.200)

WT 420,645.100\*\*\*

(81,185.080)

Leverage 1,808,492.000\*\*\*

(445,671.500)

TVESPN -1,892,793.000\*\*\*

(395,290.100)

TVESPN2 -3,572,697.000\*\*\*

(783,313.900)

TVNBA TV -4,424,215.000\*\*\*

(646,695.600)

TVTNT -1,356,332.000\*\*\*

(377,714.300)

Constant 4,426,020.000\*\*\*

(627,850.200)

-----------------------------------------------

Observations 244

R2 0.901

Adjusted R2 0.894

Residual Std. Error 1,324,319.000 (df = 227)

F Statistic 129.380\*\*\* (df = 16; 227)

===============================================

Note: \*p<0.1; \*\*p<0.05; \*\*\*p<0.01

**NFL regular season**

NFL

===============================================

Dependent variable:

---------------------------

Viewers

-----------------------------------------------

Year 882,887.700\*\*\*

(86,087.890)

DayMon -521,805.900

(3,876,548.000)

DaySat 1,104,718.000

(3,581,598.000)

DaySun 8,046,673.000\*\*

(3,646,847.000)

DayThu 4,906,650.000

(3,525,662.000)

DayTue 11,231,686.000\*\*

(4,868,209.000)

DayWed 1,892,871.000

(5,330,382.000)

Holiday 1,607,758.000

(2,788,764.000)

Opening\_Night 6,766,112.000\*\*\*

(2,567,267.000)

TypeDay 12,352,293.000\*\*\*

(3,541,167.000)

TypeGame 12,482,031.000\*\*\*

(2,772,866.000)

TypeKickoff 3,219,924.000

(2,995,677.000)

TypeMNF 3,914,986.000\*\*\*

(1,160,116.000)

TypeNational 6,690,665.000\*\*\*

(741,020.000)

TypeNight 2,569,234.000\*\*

(1,124,358.000)

TypeRegional 165,724.200

(819,876.000)

TypeSingle 4,345,971.000\*\*\*

(812,488.600)

TypeSNF 1,913,538.000\*

(1,065,119.000)

TypeSpecial 11,795,004.000\*\*\*

(2,985,577.000)

TypeTNF 5,593,235.000\*\*\*

(2,001,107.000)

Hour 124,074.900

(1,124,931.000)

AwayPrime -1,274,955.000

(1,126,607.000)

After7 -5,260,810.000\*\*\*

(1,086,098.000)

MLBReg -431,497.000

(417,254.600)

MLBPlay -1,603,445.000\*\*\*

(443,617.000)

NHLReg 585,696.200\*

(337,657.800)

NBAReg -463,450.600

(405,382.300)

AwayPop 0.052\*\*

(0.021)

HomePop 0.035

(0.025)

RoundDIV -8,504,166.000\*\*\*

(951,725.300)

RoundRS -21,910,872.000\*\*\*

(871,749.600)

RoundSB 49,063,246.000\*\*\*

(1,259,306.000)

RoundWC -12,808,523.000\*\*\*

(983,224.800)

TVCBS -663,415.000

(1,247,769.000)

TVESPN

TVFOX 390,543.600

(1,249,946.000)

TVNBC -182,578.000

(1,267,133.000)

TVNFLN -16,196,264.000\*\*\*

(1,932,533.000)

Constant -1,738,161,460.000\*\*\*

(173,091,701.000)

-----------------------------------------------

Observations 538

R2 0.950

Adjusted R2 0.946

Residual Std. Error 3,193,256.000 (df = 500)

F Statistic 256.587\*\*\* (df = 37; 500)

===============================================

Note: \*p<0.1; \*\*p<0.05; \*\*\*p<0.01

**NHL regular season**

NHL regular season

===============================================

Dependent variable:

---------------------------

Viewers

-----------------------------------------------

Year2007 -38,597.620

(268,773.900)

Year2008 26,217.330

(278,411.500)

Year2009 190,382.300

(296,677.000)

Year2013 -191,260.500

(255,355.900)

DayMon 129,695.000

(282,663.000)

DaySat 406,819.200

(292,629.200)

DaySun 51,277.180

(265,716.900)

DayThu 1,012,502.000\*\*\*

(336,987.900)

DayTue 352,617.800

(267,605.100)

DayWed 483,352.500\*

(265,769.500)

AwayPrime -39,365.130

(49,056.180)

MLBReg -264,530.100\*\*

(102,921.100)

NBAReg -393,546.400\*\*

(151,661.800)

NBAPlay -478,547.800\*\*

(199,433.500)

NFL 133,865.200

(212,312.300)

AwayPop -0.015\*\*

(0.006)

HomePop -0.014\*\*

(0.006)

TVNBCSN -1,447,014.000\*\*\*

(319,166.200)

Constant 2,496,581.000\*\*\*

(433,839.400)

-----------------------------------------------

Observations 109

R2 0.806

Adjusted R2 0.767

Residual Std. Error 394,481.200 (df = 90)

F Statistic 20.799\*\*\* (df = 18; 90)

===============================================

Note: \*p<0.1; \*\*p<0.05; \*\*\*p<0.01

**NHL playoffs**

NHL playoffs

===============================================

Dependent variable:

---------------------------

Viewers

-----------------------------------------------

Year2012 -21,492.930

(461,280.100)

Year2013 1,132,323.000\*\*\*

(360,767.200)

Year2014 1,092,220.000\*\*\*

(412,128.700)

DayMon 171,595.000

(258,779.000)

DaySat 21,661.370

(253,449.000)

DaySun 144,406.300

(285,293.300)

DayThu 121,944.700

(268,415.400)

DayTue 120,482.200

(270,074.300)

DayWed 294,018.200

(239,685.000)

Hour -22,769.210

(58,232.840)

AwayPrime -158,084.600

(110,332.500)

Past7 -408,873.400

(633,344.400)

NBAPlay -474,674.200\*\*

(207,970.900)

RoundF 1,722,765.000\*\*\*

(314,166.100)

RoundQF -1,440,339.000\*\*\*

(291,734.800)

RoundSF -631,230.800\*\*

(252,453.100)

AwayPop -0.016

(0.013)

HomePop -0.029\*\*

(0.014)

Canada -197,287.300

(201,473.700)

Game 78,281.700

(59,463.590)

Dif 83,478.520

(138,173.400)

Leverage 1,301,322.000\*

(719,328.100)

TVNBC 1,861,700.000\*\*\*

(321,951.400)

TVNBCSN 110,948.200

(214,494.400)

Constant 1,379,441.000

(897,628.200)

-----------------------------------------------

Observations 110

R2 0.907

Adjusted R2 0.881

Residual Std. Error 632,562.800 (df = 85)

F Statistic 34.552\*\*\* (df = 24; 85)

===============================================

Note: \*p<0.1; \*\*p<0.05; \*\*\*p<0.01

**MLB regular season**

MLB regular season

===============================================

Dependent variable:

---------------------------

Viewers

-----------------------------------------------

Year2011 24,393.640

(153,304.700)

Year2012 -413,281.200

(915,861.700)

Year2013 -1,932,276.000\*\*

(766,169.600)

Year2014 -1,782,112.000\*\*\*

(612,082.900)

DaySat 2,219,873.000\*

(1,171,818.000)

DaySun 1,600,016.000\*

(871,734.900)

AwayPrime -63,619.480

(124,952.900)

After7 1,011,562.000\*\*

(496,495.400)

NHLReg 537,653.500

(364,862.600)

NHLPlay 178,306.500

(267,127.400)

NBAReg

NBAPlay -93,905.620

(271,815.500)

CF -277,177.500

(208,936.200)

Soccer 1,320,003.000\*

(664,557.100)

AwayPop 0.025\*

(0.013)

HomePop 0.025\*

(0.013)

TVFOX

Constant 148,288.500

(1,177,224.000)

-----------------------------------------------

Observations 62

R2 0.643

Adjusted R2 0.526

Residual Std. Error 531,243.400 (df = 46)

F Statistic 5.517\*\*\* (df = 15; 46)

===============================================

Note: \*p<0.1; \*\*p<0.05; \*\*\*p<0.01

**MLB playoffs**

MLB playoffs

===============================================

Dependent variable:

---------------------------

Viewers

-----------------------------------------------

Year2003 2,849,039.000\*\*\*

(989,198.100)

Year2004 2,165,260.000\*\*

(1,023,471.000)

Year2005 1,287,446.000

(972,067.700)

Year2006 -64,731.980

(994,856.500)

Year2007 375,451.200

(1,027,851.000)

Year2008 -698,591.200

(1,004,105.000)

Year2009 -940,404.200

(1,007,712.000)

Year2010 -477,497.400

(979,408.700)

Year2011 -2,825,341.000\*\*\*

(1,025,328.000)

Year2012 -3,443,712.000\*\*\*

(1,107,833.000)

Year2013 -3,216,907.000\*\*\*

(1,062,779.000)

AwayPrime -594,660.800\*\*\*

(172,518.700)

After7 -908,249.300

(733,159.900)

Overlap 2,897,356.000\*\*\*

(884,663.300)

NHLReg -240,045.200

(489,031.800)

NBAReg 312,786.600

(734,185.700)

NFL -567,935.900

(351,767.000)

CF -1,549,273.000\*\*\*

(394,711.800)

AwayPop 0.049\*\*

(0.022)

HomePop 0.086\*\*\*

(0.021)

RoundLDS -2,955,903.000\*\*\*

(471,274.500)

RoundWS 9,162,813.000\*\*\*

(542,614.400)

Game 330,012.700\*\*

(151,543.500)

DIF 1,703,904.000\*\*\*

(430,926.400)

Leverage 12,045,027.000\*\*\*

(2,005,769.000)

TVESPN2 -534,299.100

(1,039,089.000)

TVFOX 3,521,900.000\*\*\*

(668,514.800)

TVTBS 2,002,633.000\*\*\*

(751,665.200)

Constant -146,481.000

(1,642,260.000)

-----------------------------------------------

Observations 341

R2 0.853

Adjusted R2 0.840

Residual Std. Error 2,522,909.000 (df = 312)

F Statistic 64.855\*\*\* (df = 28; 312)

===============================================

Note: \*p<0.1; \*\*p<0.05; \*\*\*p<0.01