

Draft Empirics Section

David Freed and Samuel Green

April 30, 2016

Regression Tables

Table 1: Twitter Responsiveness to Game Events (pt. 1)

	<i>Dependent variable:</i>		
	SentDiff.Period		
	(1)	(2)	(3)
Margin_Period_Lag1	0.891** (0.367)	0.881** (0.366)	0.910** (0.370)
Margin_Period_Lag2			0.864** (0.377)
Vegas_Line		-1.008*** (0.231)	-0.973*** (0.237)
QualityDiff		35.390*** (10.041)	32.811*** (10.304)
TwitterDiff		-0.004 (0.011)	-0.006 (0.011)
Min_End		0.068 (0.075)	0.061 (0.079)
Observations	1,306	1,306	1,266
R ²	0.005	0.021	0.023
Adjusted R ²	0.004	0.017	0.018
Residual Std. Error	30.443	30.238	30.562
F Statistic	5.897**	5.548***	4.972***

Table 2: Twitter Responsiveness to Game Events (pt. 2)

	<i>Dependent variable:</i>		
	VolDiff_Period		
	(1)	(2)	(3)
Margin_Period_Lag1	6.253*** (1.259)	5.877*** (1.237)	6.028*** (1.246)
Margin_Period_Lag2			4.779*** (1.268)
Vegas_Line		-1.454* (0.781)	-1.416* (0.797)
QualityDiff		129.964*** (33.914)	122.143*** (34.662)
TwitterDiff		0.165*** (0.036)	0.168*** (0.037)
Min_End		-0.630** (0.253)	-0.679** (0.267)
Observations	1,306	1,306	1,266
R ²	0.019	0.063	0.073
Adjusted R ²	0.018	0.060	0.069
Residual Std. Error	104.377	102.132	102.812
F Statistic	24.685***	17.550***	16.599***

Table 3: Twitter Responsiveness to Game Events (Closing Minutes)

	<i>Dependent variable:</i>			
	SentDiff_Period		VolDiff_Period	
	(1)	(2)	(3)	(4)
Margin_Period	3.080*** (0.898)		9.598*** (2.980)	
Margin_Period_Lag1		1.325 (0.934)		7.570** (3.071)
Vegas_Line	-1.691*** (0.585)	-1.802*** (0.594)	1.061 (1.941)	0.671 (1.953)
QualityDiff	54.306** (25.706)	61.013** (26.013)	44.282 (85.282)	60.681 (85.559)
TwitterDiff	-0.012 (0.028)	-0.012 (0.028)	0.451*** (0.092)	0.447*** (0.092)
Min_End	-0.526 (0.740)	-0.719 (0.751)	-2.755 (2.455)	-3.466 (2.470)
Observations	316	316	316	316
R ²	0.068	0.039	0.133	0.121
Adjusted R ²	0.053	0.024	0.119	0.107
Residual Std. Error	37.840	38.427	125.537	126.387
F Statistic	4.535***	2.520**	9.490***	8.531***

Table 4: The Accuracy of the Crowds (pt. 1)

	<i>Dependent variable:</i>		
	Margin_Period		
	(1)	(2)	(3)
SentDiff_Period_Lag1	0.006*** (0.002)	0.006*** (0.002)	0.006*** (0.002)
SentDiff_Period_Lag2			0.001 (0.003)
SentDiff_Period_Lag3			−0.003 (0.002)
Vegas_Line		0.009 (0.018)	0.003 (0.019)
QualityDiff		0.983 (0.780)	1.239 (0.809)
TwitterDiff		0.0003 (0.001)	0.0002 (0.001)
Min_End		0.004 (0.006)	0.007 (0.006)
Observations	1,306	1,306	1,226
R ²	0.006	0.012	0.015
Adjusted R ²	0.005	0.008	0.009
Residual Std. Error	2.342	2.338	2.344
F Statistic	7.250***	3.106***	2.638**

Table 5: The Accuracy of the Crowds (pt. 2)

	<i>Dependent variable:</i>			
	Margin_Period			
	(1)	(2)	(3)	(4)
VolDiff_Period_Lag1	0.002*** (0.001)	0.002*** (0.001)	0.002** (0.001)	0.003*** (0.001)
SentDiff_Period_Lag1			0.004 (0.002)	
VolDiff_Period_Lag2				0.0004 (0.001)
VolDiff_Period_Lag3				−0.002** (0.001)
Vegas_Line		0.006 (0.018)	0.009 (0.018)	0.0004 (0.018)
QualityDiff		0.902 (0.780)	0.837 (0.781)	1.224 (0.806)
TwitterDiff		−0.00003 (0.001)	0.0001 (0.001)	0.00005 (0.001)
Min_End		0.005 (0.006)	0.005 (0.006)	0.008 (0.006)
Observations	1,306	1,306	1,306	1,226
R ²	0.009	0.014	0.016	0.021
Adjusted R ²	0.008	0.010	0.011	0.015
Residual Std. Error	2.338	2.335	2.334	2.337
F Statistic	11.852***	3.686***	3.435***	3.675***

Table 6: Reversion to the Mean

	<i>Dependent variable:</i>			
	Margin_Period			
	(1)	(2)	(3)	(4)
Margin_TOT_Lag1	−0.018** (0.008)	−0.023*** (0.008)	−0.019** (0.008)	−0.024*** (0.008)
SentDiff_Total_Lag1		0.001** (0.0004)		0.001** (0.0004)
VolDiff_Total_Lag1			0.00004 (0.0001)	0.00005 (0.0001)
Vegas_Line	0.005 (0.018)	0.016 (0.019)	0.005 (0.018)	0.017 (0.019)
QualityDiff	1.679** (0.802)	1.364* (0.815)	1.631** (0.805)	1.303 (0.819)
TwitterDiff	0.0004 (0.001)	0.0005 (0.001)	0.0003 (0.001)	0.0003 (0.001)
Min_End	0.002 (0.006)	0.001 (0.006)	0.002 (0.006)	0.002 (0.006)
Observations	1,306	1,306	1,306	1,306
R ²	0.011	0.014	0.011	0.015
Adjusted R ²	0.007	0.010	0.007	0.009
Residual Std. Error	2.339	2.336	2.340	2.337
F Statistic	2.865**	3.111***	2.454**	2.744***

Table 7: Generalized Linear Model

	<i>Dependent variable:</i>			
	Winner			
	(1)	(2)	(3)	(4)
Vegas_Line	−0.041*** (0.014)	−0.034** (0.014)	−0.044*** (0.014)	−0.038*** (0.014)
Margin_TOT	0.173*** (0.012)	0.166*** (0.012)	0.168*** (0.012)	0.160*** (0.012)
SentDiff_Total		0.001*** (0.0005)		0.001*** (0.001)
VolDiff_Total			0.0002** (0.0001)	0.0002** (0.0001)
Constant	−1.067*** (0.109)	−1.043*** (0.112)	−1.074*** (0.112)	−1.056*** (0.114)
Observations	1,346	1,346	1,346	1,346
Log Likelihood	−594.303	−590.365	−591.049	−587.436
Akaike Inf. Crit.	1,194.606	1,188.730	1,190.097	1,184.873