Game Day Meets Election Day: Sports Records, Election Results, and the American South*

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Objectives. Given the emerging literature on the connection between sports outcomes and election results, we replicate and extend previous scholarship while investigating if the relationship is most evident in the American South where sports is followed with a religious fervor. *Methods.* The first stage of our study replicates and extends the analysis by Miller (2013) of the relationship between professional sports records and incumbent vote share in mayoral elections. The second stage of this project updates the analysis by Healy et al. (2010) on the relationship between college football victories and incumbent party vote share through an exploration of the 2012 presidential election as well as senatorial and gubernatorial elections from 2010 to 2013. *Results.* In the first stage, we disaggregate the influence of professional football records and find no impact of those records on incumbent vote share in mayoral elections. For the second stage, we discover that college football victories in the two weeks before the election had no impact on presidential and senatorial elections but a powerful influence on incumbent party vote share for gubernatorial elections from 2010 to 2013. A college football team victory in the two weeks before the gubernatorial election contributes 3.2–4.5 percentage points to the incumbent party vote share after controlling for prior vote share as well as key demographic variables. In both stages of this study, we find the relationship is not amplified in the South. *Conclusions.* The findings of this study on college football wins and gubernatorial election results provide further support for the contention that voter well-being and happiness can influence retrospective voting, and the phenomenon is neither limited to the South nor confined to the power conferences. As elections move closer to the people, the impact of college football outcomes becomes more evident.

The United States is clearly obsessed with professional and college football as evidenced by exploding revenue, game attendance, television ratings, and a cultural fascination with the sport. In the American South, football has been described as a way of life that is followed by some with a religious zealotry. College football rivalries such as Georgia versus Florida (World's Largest Outdoor Cocktail Party), Alabama versus Auburn (Iron Bowl), and Oklahoma versus Texas (Red River Rivalry) have become historical and cultural markers for many southerners. This passion can even bleed into the realm of electoral politics. We initially examine the growing scholarship on the intriguing connection between sports records and election results, and we survey the diverse literature from historical factors to civil religion to quantitative data on the cultural uniqueness of the South in terms of the passion for sports, especially college football.

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The first stage of our study replicates and extends the analysis by Miller (2013) of the relationship between professional sports records and incumbent vote share in mayoral elections. We disaggregate the influence of professional football records and explore the difference between southern and nonsouthern cities. The second stage of our study updates the analysis by Healy et al. (2010) on the relationship between college football victories and incumbent vote share by exploring the 2012 presidential election as well as senatorial and gubernatorial elections from 2010 to 2013. We separate presidential, senatorial, and gubernatorial election results while also testing for regional differences between southern and nonsouthern counties. We conclude with a discussion of the implications of the research findings.

The Surprising Connection: Sports Records and Election Results

While our discipline may not have an equivalent to the laws of thermodynamics, one of the established principles of retrospective voting (Fiorina, 1981) is that incumbents are rewarded for a growing economy (Alesina, Londregan, and Rosenthal, 1993; Lewis-Beck and Paldam, 2000). Miller (2013:60) outlines two models of retrospective voting that are not mutually exclusive: the appraisal model and what he terms the prosperity model. In the first model, "voters assign blame for politically linked outcomes and choose to keep the politicians they associate with successful performance" (Miller, 2013:60). In the prosperity model, "voters simply opt for the status quo when they feel happy" (Miller, 2013:60). Miller's prosperity model draws upon the psychological literature that a positive mood exaggerates a preference for the status quo (Yen and Chuang, 2008). Miller's (2013:62) fundamental argument is that sports outcomes are a "clear proxy for average voter happiness" (citing Schwarz et al., 1987; Wann et al., 2001; Hagen et al., 2004; Forment, 2007), and the prosperity model reveals "an alternative explanation for retrospective voting is that rather than connecting politicians to praiseworthy outcomes, voters favor incumbents when they feel happy" (Miller, 2013:61).

Comparative research on the planet's most popular sport of soccer can be illuminating. Forment (2007) describes the fusion of football clubs and political life in the 2003 Buenos Aires municipal elections. Hagen et al. (2004) discover that soccer games and soccer coverage influenced voting intentions as well as the popularity of political candidates in Germany between 1993 and 2002. Furthermore, Edmans et al. (2007) report a strong link between international soccer matches and the mood of investors, with significant stock market declines in a country after an international soccer loss by the national team. The authors also uncover market declines after international cricket, rugby, and basketball games. Brazil's humiliating defeat (7–1) to Germany in the semifinals of the 2014 World Cup appeared to be yet another factor working against the reelection of Dilma Rousseff, the country's first female president (Keating, 2014), although Rousseff ultimately survived a bruising runoff to win reelection with a little more than 51 percent of the vote in October 2014 (Darlington and Ford, 2014).

Miller (2013) brings the analysis back home to the United States by exploring professional sports team records and the incumbent vote share in mayoral elections (direct election by the people with some form of plurality voting) between 1948 and 2009 for the 39 cities with a professional sports franchise in basketball, football, or baseball. Miller's model predicts incumbent vote share by controlling for sports record, playoff success, prior vote share, and unemployment. He finds that a one standard deviation shift in sports records changes incumbent vote share by roughly 6 percent, "exceeding the margin of victory for . . . Michael Bloomberg in 2009 or Rudy Giuliani in 1997" (Miller, 2013:74). A placebo test reveals that

sports records after the election demonstrate no such relationship (Miller, 2013:72–73). Fundamentally, Miller reports that sports records matter more so than unemployment rates to the reelection of mayors.

Along similar lines, Healy et al. (2010) compared the outcomes of college football games leading up to the general election to the vote share by county in elections for president, senator, and governor and found that a win in the 10 days prior to the election led to a 1.61 percentage point increase in the incumbent party vote share, with the effect being largest for college football powerhouses (championship or high-attendance teams). The results suggest "that voters reward and punish incumbents for changes in their well-being unrelated to government performance" (Healy et al., 2010:12805). A placebo test revealed that college football outcomes in the two weeks after the election had no influence on the election results. The authors also conducted a survey among college basketball fans asking respondents (who lived in areas with a team participating in the NCAA "March Madness" tournament) to report on their favorability of President Obama, finding a 2.3 percent increase in favorability among supporters of winning teams. Furthermore, they found that fans who followed the NCAA tournament closely reported a 5 percent increase in favorability (Healy et al., 2010:12806). While Miller (2013) and Healy et al. (2010) report tantalizing research findings, neither study tested for regional differences across the United States.

Sports and Southern Culture

A diverse literature calls our attention to the cultural uniqueness of the South in terms of the passion for sports, especially college football. The historical origins of this passion can be traced to the early 20th century, and a powerful civil religion connected to athletics and state universities has unfolded over the last hundred years. A collection of intriguing quantitative data highlights the regional distinctiveness of the South.

Borucki (2003:477) reminds us that "college football became a primary means of re-asserting a Southern sense of identify and superiority" in the 1920s and 1930s. Similarly, Baker (2007:106) documents how "religion, football, and regional pride linked arms in a world of newfound affluence. The 'Friday night lights' of Odessa, Texas, trace their origins to a mid-1920s oil boom that coincided with a football boom." The South experienced "the one-two punch of patriotism and athleticism . . . Athletics, long held suspect by southern evangelicals, were now transformed into a good and faithful servant of national interests—and of regional interests too" (Baker, 2007:104).

As the 20th century unfolded, college football became an essential part of the civil religion of the South (Bain-Selbo, 2012:89). Bain-Selbo (2012:124) elaborates that "college football is an important ritual or set of rituals for Southern civil religion . . . The state university represents, as we have seen, the state, and the football team is a tangible expression of the strength and character of the university and thus the state, if not the South as a whole." In addition, college football taps into the culture of honor and militarism in the South, which distinguishes the region from others in the United States (Bain-Selbo, 2012:108). Despite the painful and ugly racial history of the South, sports has become central to the civil religion for African Americans as well as whites in the region (Bain-Selbo, 2012:130).

In *Southern Fried Football*, Barnhart (2008) opines that "save the unshakable belief that the Civil War was, in fact, the War of Northern Aggression, nothing is more ingrained in the Southern psyche than the love of college football—not as just a game, not as a mere diversion, but as a way of life." Baker (2007:85) observes that "today the American South, probably more than any other region in the United States, zealously mixes religion and

sport." While platitudes abound about the distinctiveness of the South, there is quantitative data that can be marshalled to bolster these claims. In his analysis of Google search traffic of the term "college football," Nate Silver (2011) maps the density of the search traffic with the heaviest volume evident in the South, especially the Deep South states. Silver (2011) reports "college football is searched for about 5 times as often in Birmingham, Alabama as it is in New York City, relative to overall search traffic." Furthermore, Barnhart (2008:xxxv) details how "for the 27th straight year, the SEC led all major conferences in total attendance for college football as the league drew 6,687,342 fans to its 89 games. SEC schools averaged 75,139 fans per game, which was also number one in the nation." The behemoth nature of the SEC is most evident when "the combined athletic budgets of the twelve schools exceed eight hundred million dollars. That's more money than the GDP's of twenty-four of the world's poorest countries" (Givens-Carroll and Slade, 2012:160).

In a particularly intriguing study, Clotfelter (2015) analyzed die-hard sports fans as defined by published obituaries that specifically mention the loyalty of the deceased to the team of a specific university. The sample of 1,300 die-hard fans was most heavily concentrated in the South (44 percent) compared to the Midwest (25 percent), the West (20 percent), and the Northeast (11 percent). In comparison to a random control sample, which is matched to the original sample of die-hard fans by gender and distribution across the states, Clotfelter (2015:396–97) discovers higher levels of political engagement of die-hard fans as indicated by significantly higher rates of affiliation with a political party.

Given the aforementioned historical and cultural factors, we expect the relationship between sports outcomes and election results to be most pronounced in the South. Bill Curry, former player and head coach at Georgia Tech, may have summarized it best that "in the South, college football isn't just a game, it's who we are" (Barnhart, 2008:xxxvi).

Findings

The first stage of our study replicates the analysis by Miller (2013) on the relationship between professional sports records and incumbent vote share in mayoral elections. We disaggregate the influence of professional football records from overall sports records across the cities in the data set, and we also test for differences between southern and nonsouthern cities. The data set from Miller's study in *Social Science Quarterly* of 39 American cities from 1948 to 2009 is available online ⟨http://sites.google.com/site/mkmtwo⟩.

Table 1 replicates the ordinary least squares (OLS) regressions in Miller (2013) and adds the additional control of a dummy variable for the South to measure regional variation as well as the interaction term of the South × professional sports record. The dependent variable in Table 1, percentage of total vote share for the incumbent mayor, and the first independent variable, professional sports record (percentage of games won), are both rescaled to provide a log-log model to estimate a direct proportion between the two variables. The average number of professional sports records per mayoral election is 2.04 (3 would be the maximum given the incorporation of professional football, baseball, or basketball records). We extend the analysis of Miller (2013) in Table 2 by regressing the incumbent vote share on the professional football record for a level-level model. The control variables are the same in both tables and were all used in Miller's study (2013).

Miller (2013:64) operationalizes sports record as "the average regular season record of a city's franchises in the most recently completed seasons at the time of each election." Mayoral term measures the term of the incumbent when seeking reelection. Team entered city and team left city are dummy variables that control for effects of professional sports teams moving to or from the city. Unemployment records were collected by the Bureau of

TABLE 1

Predicting the Incumbent Vote Share in Mayoral Elections with Professional Sports Record (1948–2009)

Independent Variables	Model 1	Model 2	Model 3	Model 4
Professional sports record	0.252	0.105**		
	(0.192)	(0.041)		
Lagged dependent variable	0.443**	0.420**	0.440**	0.423**
	(0.100)	(0.063)	(0.098)	(0.063)
Mayoral term	−0.069**	−0.061**	−0.066**	−0.062**
	(0.026)	(0.019)	(0.025)	(0.019)
Team entered city	0.083	0.036	0.082	0.036
	(0.067)	(0.035)	(0.068)	(0.034)
Team left city	0.071	−0.014	0.077	−0.020
	(0.063)	(0.093)	(0.061)	(0.092)
Unemployment	−0.005		−0.009	
	(0.009)		(0.009)	
South	0.093	0.083	0.206	0.101
	(0.168)	(0.105)	(0.127)	(0.101)
South × sports record	0.020	0.002	0.203	0.035
	(0.247)	(0.125)	(0.166)	(0.121)
Playoffs			0.067	0.070*
			(0.059)	(0.036)
Constant	−0.039	−0.121*	−0.141*	−0.221**
	(0.132)	(0.052)	(0.066)	(0.048)
Wald χ^2	41.47**	78.36**	40.74	76.79**
r^2	0.205	0.161	0.189	0.159
N	139	303	139	303

Cell entries are unstandardized regression coefficients. Robust standard errors clustered by city in parentheses.
*$p < 0.05$, **$p < 0.01$.

Labor Statistics and are provided for all cities going back to 1990 and to 1977 for a few cities. The playoffs variable measures the proportion of the city's teams that made it to the playoffs in the season prior to the election. The lagged dependent variable controls for the incumbent's share of the vote in the previous election.

In Tables 1 and 2, the inclusion of unemployment as a control variable for Models 1 and 3 limits the number of cases to 139 when exploring professional sports record and 103 when examing the professional football record. Models 2 and 4 exclude unemployment for an analysis of 303 cases in Table 1 and 233 cases in Table 2. Professional sports record and the playoffs variables are significant in Models 2 and 4 of Table 1. When we include unemployment, a dummy variable for the South, and an interaction term of South × professional sports record, the professional sports record and playoffs are not statistically significant in Models 1 and 3 of Table 1. Following the original design by Miller (2013), the playoffs variable replaces professional sports record in Models 3 and 4 because of collinearity. The dummy variable for the South (1 for cities located in the 11 states of the former Confederacy and 0 for those cities in the rest of the nation) reveals that incumbent mayors fare better in southern cities, and the interaction term of South × professional sports record is positive but does not reach statistical significance in any of the models in Table 1. The lagged dependent variable of prior vote share and mayoral term are significant across all four models The models in Table 1 explain between 15 percent and 20 percent of the variance in incumbent vote share.

TABLE 2

Predicting the Incumbent Vote Share in Mayoral Elections with Professional Football Record (1948–2009)

Independent Variables	Model 1	Model 2	Model 3	Model 4
Professional football record	0.083	0.039	0.074	0.003
	(0.081)	(0.055)	(0.093)	(0.068)
Lagged dependent variable	0.484**	0.397**	0.481**	0.393**
	(0.097)	(0.076)	(0.098)	(0.076)
Mayoral term	−0.037*	−0.029*	−0.037*	−0.029*
	(0.018)	(0.012)	(0.018)	(0.012)
Team entered city	0.036	−0.004	0.035	0.001
	(0.044)	(0.027)	(0.045)	(0.027)
Team left city	0.017	0.026	0.015	0.024
	(0.039)	(0.055)	(0.039)	(0.052)
Unemployment	−0.005		−0.005	
	(0.006)		(0.006)	
South	0.064	0.020	0.056	0.002
	(0.074)	(0.040)	(0.076)	(0.043)
South × football record	0.025	−0.038	0.013	−0.060
	(0.083)	(0.054)	(0.088)	(0.057)
Playoffs			0.015	0.045
			(0.051)	(0.036)
Constant	0.383**	0.403**	0.383**	0.408**
	(0.084)	(0.052)	(0.085)	(0.052)
Wald χ^2	55.74**	53.88**	55.46**	60.81**
r^2	0.216	0.159	0.217	0.166
N	103	233	103	233

Cell entries are unstandardized regression coefficients. Robust standard errors clustered by city in parentheses.
*$p < 0.05$, **$p < 0.01$.

In Table 2, professional sports record is replaced by just the professional football record. The regression coefficients for football record and the dummy variable for the South are positive but do not attain statistical signicance across the four models. The interaction term of South × professional football record is insignificant and negative in two of the four models. Once again, mayoral term and the lagged dependent variable of prior vote share are significant in all four models in Table 2. When the professional baseball record or professional basketball record replaces the professional football record in the models, although not listed in Table 2, the regression coefficients for those specific sports records are insignificant.[1]

The second stage of our study updates the analysis by Healy et al. (2010) on the relationship between college football outcomes and incumbent vote share in presidential, U.S. Senate, and gubernatorial elections. Healy et al. (2010) examined county-level election results from 1964 to 2008. Incumbent vote share is defined as "either the vote share of the incumbent officeholder (sitting president, governor, or senator) or the new candidate of the current officeholder's party" (Healy et al., 2010:12805). College football outcomes

[1]When professional baseball record replaces professional football record in the models of Table 2, the regression coefficient is actually negative. When professional basketball record is the only sports record in the models, the regression coefficients are positive but do not reach statistical significance. The dummy variable for the South is insignificant in the models for professional baseball record as well as the models for professional basketball record.

are analyzed in terms of whether or not the team won the weekend before the general election and the weekend 10 days before the election (Healy et al., 2010). A "placebo test" explores college football records for the week after the general election and two weeks after the election, which should demonstrate no relationship to the incumbent vote share (Healy et al., 2010). We follow this methodology for our analysis of the 2012 presidential election as well as the senatorial and gubernatorial elections from 2010 to 2013. We also follow Healy et al. (2010) by examining county-level election results for just the county in which the university is physically located. The relationship between college football wins and election results should be most pronounced in those counties. Extending the analysis beyond those counties becomes problematic in terms of which college team record should be the driving force in a given election, especially in states with numerous college football teams. Multiple counties are only coded when the physical presence of the university crosses county boundaries.

Our study diverges from Healy et al. (2010) in three ways: we code data for all Football Bowl Subdivision (formerly called Division I-A) football programs in the United States rather than just BCS (Bowl Championship Series) teams; we separate presidential, senatorial, and gubernatorial election results; and we explore differences between the South and non-South. We look at all NCAA Football Bowl Subdivision schools to explore how broadly college football records may impact election results. In the context of statewide elections, we expect that elections closer to home such as a gubernatorial election will demonstrate more of a relationship to college football records than a high-profile national election like senate and presidential races. Finally, we explore regional differences that are not tested in the original study by Healy et al. (2010).

No significant differences were observed when analyzing the Obama vote in the 2012 presidential election and the senatorial elections between 2010 and 2012. In the 10 days prior to the election as well as the weekend right before the general election, the presidential and senatorial vote was actually slightly higher in a county where the college football team lost.[2] In a multivariate regression analysis, controlling for key demographic factors (i.e., race, education, unemployment, per capita income, and population density), the college football record before the election had no impact on the Obama vote or the incumbent party vote in senatorial elections. Furthermore, the relationship is nonexistent in southern as well as nonsouthern counties.

In sharp contrast to the presidential and senatorial election findings, dramatic differences are evident in the gubernatorial elections between 2010 and 2013. Table 3 highlights a simple difference of means test for the incumbent party vote share in counties where the college football team won versus those where the team lost. The differences in Table 3 are the average incumbent party vote share in counties where the college football team won minus the average incumbent party vote share in counties where the college football team lost. If the college football team won 10 days before the election, the average incumbent party vote share is almost 7 percentage points higher than in counties where the team lost (53.80 percent vs. 47.01 percent). In counties where the college football team won the weekend before the election, the

[2]The average Obama vote was 51 percent in those counties where the college football team won and 53 percent in those counties where the team lost 10 days prior to the general election. The average Obama vote was 50 percent in counties where the college football team won and 53 percent where the team lost the weekend right before the election. In U.S. Senate elections, the average incumbent party vote was 56 percent in counties where the college football team won and 58 percent in those where the team lost 10 days prior to the general election. The average incumbent party vote in senatorial elections was 57 percent in counties where the college football team won as well as 57 percent where the team lost the weekend right before the election.

TABLE 3

Difference of Means Tests of College Football Outcomes and the Incumbent Party Vote Share in Gubernatorial Elections (2010–2013)

	10 Days Before the Election	Weekend Before the Election	Weekend After the Election	Two Weeks After the Election
All counties				
Win	53.80%**	53.36%**	50.08%	52.29%
Loss	47.01%**	43.72%**	49.79%	48.92%
Difference	**+6.79%**	**+9.64**	**+.29%**	**+3.37**
Southern counties				
Win	55.48%**	53.80*	51.29%	53.15%
Loss	45.62%**	44.94*	48.24%	49.68%
Difference	**+9.86%**	**+8.86%**	**+3.05%**	**+3.47%**
Nonsouthern counties				
Win	52.60%	53.10%**	49.23	51.74
Loss	47.91%	42.83%**	50.95	48.32
Difference	**+4.69%**	**+10.27%**	**−1.72**	**+3.42**

*t-test differences are statistically significant at $p < 0.05$.
**t-test differences are statistically significant at $p < 0.01$.

incumbent party vote share is approximately 10 percentage points higher than where the team lost (53.36 percent vs. 43.72 percent). The differences before the election are statistically significant at $p < 0.01$. Following the methodology of Healy et al. (2010), a placebo test is included for the college football results one week and two weeks after the election. The placebo test assumes that postelection game outcomes will not correlate with the election results. A postelection correlation makes no sense in terms of time order and suggests that some unspecified factor in the model may account for the relationship between college football results and incumbent party vote share, while no correlation helps to buttress the causal relationship between preelection game outcomes and gubernatorial election results. In Table 3, the differences are not statistically significant after the election. The incumbent party vote share is virtually identical the weekend after the election when comparing counties where the college football team won and where the team lost.

Is the relationship between college football records and incumbent party vote share in gubernatorial elections most pronounced in the South? The results are mixed, as revealed in Table 3. In southern counties, defined as those counties in the 11 states of the former Confederacy, the incumbent party vote share is almost 10 percentage points higher when the college football team wins 10 days before the election and the difference is statistically significant. For nonsouthern counties, the incumbent party enjoys a 4.69 percentage point advantage when the college football team wins 10 days before the election, but the difference does not reach statistical significance. While the impact is more pronounced in the South for college football team victories 10 days before the election, the impact is slightly more noticeable in nonsouthern counties the weekend before the election. In nonsouthern counties, the incumbent party vote share is more than 10 percentage points higher when the college football team wins, with an advantage of approximately 9 percentage points in southern counties. The placebo test for southern counties as well as nonsouthern counties reveals no statistically significant differences for the weekend after the election and two weeks after the election.

TABLE 4

Predicting the Incumbent Party Vote Share in Gubernatorial Elections (2010–2013)

Independent Variables	Model 1	Model 2	Model 3
Total football wins before the election	4.543**	3.238*	3.469*
	(1.165)	(1.535)	(1.592)
Lagged dependent variable	0.473**	0.513**	0.503**
	(0.073)	(0.078)	(0.077)
Percentage African American	0.130*	0.077	0.077
	(0.064)	(0.081)	(0.080)
Percentage high school graduates	−0.502*	−0.363	−0.297
	(0.238)	(0.254)	(0.252)
Unemployment	−1.303*	−1.144*	−1.098*
	(0.504)	(0.519)	(0.516)
Per capita income	0.035	0.0435	0.028
	(0.125)	(0.125)	(0.123)
Population density	0.178	0.580	0.653
	(0.854)	(0.878)	(0.866)
South		0.181	1.195
		(3.635)	(3.649)
South × total football wins		3.149	2.689
		(2.346)	(2.320)
Championship teams			−5.340
			(3.867)
Championship teams × total football wins			−0.304
			(2.994)
Constant	69.92**	54.37*	49.81
	(22.58)	(25.40)	(25.17)
F	12.23**	10.04**	8.97**
r^2	0.416	0.434	0.460
N	128	128	128

Cell entries are unstandardized regression coefficients. Standard errors in parentheses.
*$p < 0.05$, **$p < 0.01$.

Beyond the simple difference of means test, Table 4 summarizes the OLS regression results for three models.[3] In all of the models, the dependent variable is the incumbent party vote share in gubernatorial elections (2010–2013) across counties with a Football Bowl Subdivision college football team. Following the methodology of Healy et al. (2010), our key independent variable is the total number of college football team wins in the two weeks before the election. Model 1 includes controls for prior vote share (lagged dependent variable) and key demographic variables.[4] Model 2 adds a dummy variable for the South and an interaction term for South × the total number of college football team wins in the two weeks before the election. Model 3 adds a dummy variable for those teams that have won a national championship (1 for national champion college football teams, 0 for all

[3]Regression diagnostics were conducted to check for normality of residuals, homoscedasticity, multicollinearity, and model specification. These tests indicate that the assumptions for OLS are met by our models.

[4]Healy et al. (2010) incorporate percentage African American in a county, percentage high school graduates, the unemployment rate, and per capita income. These four independent variables appear in Table 4. Healy et al. (2010) utilize farms per capita as well as log population, while we use population density (number of people per square mile) to capture the rural nature of a county, which we consider to be a more contemporary and parsimonious measure. The data for per capita income and population density are measured in thousands of dollars/people.

other teams) and an interaction term for championship teams × the total number of wins in the two weeks before the election.

Across all of the models in Table 4, a powerful variable is total college football team wins in the two weeks before the election. A win in the two weeks prior to the general election increases the incumbent party vote share by 3.2–4.5 percentage points, and the regression coefficients are statistically significant. Prior vote share is of course conspicious and significant across all three models. As expected, higher unemployment rates suppress the incumbent party vote share, and the relationship is statistically significant across all three models. In the first truncated model, percentage African American has a positive and statistically significant impact on incumbent party vote share, while percentage high school graduates has a negative and statistically significant influence on incumbent party vote share. In the second model, the dummy variable for the South reveals that incumbent party vote share in gubernatorial races is higher in southern counties than nonsouthern counties, but the variable is not significant. The interaction term for South × total college football team wins before the election is positive but does not attain statistical significance. In the final model, the dummy variable for championship teams reveals a lower incumbent party vote share in those counties with college football teams that have won a national championship.[5] Surprisingly, the interaction term for championship teams × total wins before the election is negative but not significant. Healy et al. (2010) report positive and statistically significant findings for such an interaction term in relation to incumbent party vote share as a reflection of college football powerhouses and their influence on elections. Across the three models in Table 4, the independent variables explain over 40 percent of the variance in incumbent party vote share.

A final placebo test replaces total college football wins in the two weeks before the election with wins in the two weeks after the election. Doing so produces a statistically insignificant regression coefficient in Table 4 for college football outcomes across all models. Again, this provides additional confidence in the causal relationship between college football wins before the election and incumbent party vote share in gubernatorial elections.

Discussion

What do these results teach us about the relationship between sports records and incumbent vote share? As we drill into the data set by Miller (2013), it is clear that professional football records do not singularly impact incumbent vote share in mayoral elections between 1948 and 2009. When professional sports records impact incumbent vote share in mayoral elections, it appears to involve a dynamic of various sports franchises. This finding makes sense in a study of approximately 40 cities across the nation if we recognize that some professional sports and specific franchises are more popular than their competion in a given city.

Our update of the intriguing research by Healy et al. (2010) fails to find any relationship between college football records and the incumbent party vote share in national elections. On the other hand, extending the analysis to gubernatorial elections between 2010 and 2013 reveals a most dramatic impact of college football wins before the general election. As elections move closer to the people, the impact of college football outcomes becomes more

[5]We also tested a dummy variable for whether or not the name of the state appeared in the college football team's name. The relationship between college football wins and incumbent party vote share in gubernatorial elections might be most pronounced in cases where the college football team carries the name of the state. The dummy variable was insignificant across all the models, and the rest of the model is essentially unchanged.

evident. While analyzing a much broader time period, Healy et al. (2010:12806) suggest the effect of college football wins "may be somewhat stronger for the games occuring the week before the game than for the games immediately preceding the election." Our findings from the 2010 to 2013 gubernatorial election cycle reveal a slightly more noticeable effect of college football victories the weekend right before the election.[6] In our regression models of the incumbent party vote share in gubernatorial elections, the total number of football wins in the two weeks before the election is a powerful predictor. The placebo test finds no statistically significant differences for college football wins versus losses and incumbent party vote share in the two weeks after the election. Furthermore, college football wins after the election are irrelevant when inserted in the multivariate regression models.

For apostles of the rational voter model, the strong connection between a booming economy and incumbent reelection rates is comforting, while a connection between sports records and those same reelection rates can be most disquieting. Healey et al. (2010:12807) recognize that such findings "can be interpreted in a negative light," but the authors remind us that "political scientists have argued that emotions can promote more competent decision making and more deliberative reasoning" (citing Brader, 2006; Rudolph et al., 2000). On the implications for democracy, Miller (2013:75) concludes that "under the Prosperity Model, incumbent politicians are motivated to maximize voter happiness at the time of the election. This is hardly the gravest of threats, even if motivating politicians to maximize well-being in the long run is preferable." Our findings for gubernatorial elections provide further evidence that voter well-being and happiness can influence retrospective voting. Furthermore, we find the relationship is not confined to BCS power conferences or championship teams.[7]

What do the results reveal about potential regional differences in the relationship between sports outcomes and incumbent vote share? Southern history, culture, civil religion, and even quantitative data (Google searches of "college football," attendance data, athletic budgets, and obituaries of "die-hard fans") all suggest a more powerful relationship between sports outcomes, especially college football records, and election results in Dixie compared to the rest of the nation. When considering southern versus nonsouthern cities in Miller's (2013) data set, the dummy variable for the South is not significant in any of the eight models. The interaction term of South × professional sports record is positive but insignificant in relation to incumbent vote share. The interaction term of South × professional football record is actually negative in two of the models but again not significant. In his historical analysis of the urban landscape, Riess (1989:259) observes that "while cities across the country differ in population, physical size, regional location, climate, wealth, and ethnic demographics, the development and influence of sport and sporting institutions in major metropolitan areas has been pretty much the same." The lack of regional differences in the relationship between professional sports records and mayoral election results confirms this observation.

For the gubernatorial elections from 2010 to 2013, the impact of college football wins 10 days before the election on incumbent party vote share is more pronounced in southern

[6]We regressed incumbent party vote share on college football outcomes right before the election and the key demographic variables of Table 4, and we also regressed incumbent party vote share on college football outcomes 10 days before the election and the key demographic variables of Table 4. The effect is slightly more pronounced (an unstandardized regression coefficient of 7.5) for college football outcomes right before the election than the outcomes 10 days before the election (an unstandardized regression coefficient of 6.3).

[7]When the models in Table 4 are truncated to just BCS schools, we find that the regression coefficients for college football wins before the gubernatorial election are weaker in all three models and statistically insignificant in two of the three models. The dramatic relationship between college football records and gubernatorial election results is not being driven by just BCS schools in the power conferences. The relationship is most pronounced when we look at all FBS schools.

counties when compared to nonsouthern counties. For the weekend right before the election, the impact of college football victories is slightly more pronounced in nonsouthern counties. In our regression model, the interaction term of South × total football wins in the two weeks before the election is positive but statistically insignificant. Clear regional differences are simply not evident in this study.

The sense of happiness and well-being that comes from college football victories, which may in turn impact gubernatorial election results, is as pronounced outside as inside the South. College football fans outside the American South might well argue that their passion and sense of well-being from victories is just as strong as for any southern football fanatic. While we might each craft our own list, John Coon (2010) lists the top 25 greatest college football rivalries. College football teams in the South constitute approximately half of the list (12 out of the 25) with Alabama versus Auburn as the top rivalry. It is worth noting that Ohio State versus Michigan, Army versus Navy, and USC versus Notre Dame all rank in the top 5, with Utah versus BYU (Holy War) and Oregon versus Oregon State (Civil War) in the top 10 (Coon, 2010). To borrow a line from the title of Healy et al.'s article (2013), if irrelevant events like college football records influence how voters evaluate government performance, the phenomemon is not limited to the South.

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