Anthem Protests, Viewer Politics, and the Demand for NFL Games:

The Impact of National Anthem Protests on NFL Television Demand

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April 2021

Abstract

This paper analyzes the effect of lagged unambiguous and ambiguous anthem protests on televised NFL demand, measured by Nielsen ratings and viewership in millions, while controlling for several measures of NFL market-specific political beliefs and other demand determinants. Using data from all early and late-afternoon Sunday games from the 2014 through 2017 regular NFL seasons, lagged unambiguous protests provide consistent statistically significant, negative coefficients on measures of NFL demand. Not only are these results statistically significant, but they are also of practical significance with the negative coefficients representing declines from the average demand measures of between 11.6% and 14.9%. Lagged ambiguous protests were generally not statistically significant.

Introduction

Starting in mid-2016, U.S. athletes across a series of sports began staging peaceful protests during the national anthem to call attention to the issue of racial inequality in the United States (KXTV Staff, 2017). Often these protests took the form of refusing to stand or otherwise objecting to appear at all during the national anthem. These actions upset a portion of the fans who viewed the actions as unpatriotic and promised to respond by refusing to patronize teams that endorsed or permitted player protests (Cash, 2020). National Football League (NFL) players were among the first and most publicized of the protestors. The NFL is big business, with annual revenues in excess of \$15.0 billion USD and over half of those revenues coming from the sale of lucrative media contracts (Dixon, 2020). These prices are high because NFL games consistently achieve some of the highest viewership among televised broadcasts (Smith, January 2020).

This paper seeks to analyze the effect of player protests on the demand for NFL games. We measure the demand for NFL games using television ratings and viewership. In contrast to prior literature on the topic, we attempt to control for the mediating effects of political characteristics of the viewing area. That is, the effect of the protests on ratings may depend on the political beliefs of the local viewers. Because we contend that protests by members of a particular team will exert larger effects on the viewership for that team, we consider only ratings and viewership for games broadcast to a local audience.

Our results should allow NFL managers to understand the effect of anthem protests more precisely on fan demand. Such information is of critical value to a team manager who is conducting a cost-benefit analysis for the acquisition of a new player who has a history of protesting or whether to enact rules that sanction or discourage player protests. Additionally, a more precise understanding of the effect of anthem protests would give NFL players more information when considering protesting. If the effect of anthem protests on demand is modest, then many of the risks associated with protesting for players (such as threat of punishment from management) could decrease. Alternately, it is possible that the novelty of protests may, contrary to popular consensus, increase interest in games and the inclusion of protests may be of value to the NFL.

The demand response to the protests have implications that extend beyond the NFL's bottom line. In the past, it was common for U.S. firms to avoid making partisan statements in fear of alienating certain market segments. Perhaps the most famous statement of this view is attributed to basketball legend and sneaker endorser Michael Jordan. Jordan, asked to justify his failure to engage with the political issues of his day explained "Republicans buy sneakers, too." Today, this view no longer seems to carry the day; as seen with responses to the NFL protests.

By analyzing the effects of the anthem protests on NFL demand, we hope to clarify the costs (or benefits) of open advocacy of political positions.

Literature Review

Inquiries into the causes and consequences of sports-related protests have largely been analyzed in the context of labor strikes (Berri & Schmidt, 2002, Matheson, 2006). Given the high revenues at stake, strikes may arise as players seek improvements in their collective bargaining agreements. Each game cancelled poses risks to players and owners alike. The owners not only lose out on ticket sales and advertising revenue, but also risk alienating fans who might be displeased with the hostility toward players. Players on the other hand, miss out on salaries that are frequently in the six figure range and risk alienating fans who see them as overpaid prima donnas.

The anthem protests differ from conventional sports protests as they are not causing work stoppages (like strikes). Given that the games still occur, the effect of these protests on consumer demand should directly relate to the degree to which fans identify with the purported goal of the protests, rather than dissatisfaction from not being able to watch the games. As such, the current strike literature is ill-equipped to analyze the NFL anthem protests. In terms of an effect on consumer demand as a result of protests, three outcomes are possible: (1) a consumer identifies with the protests and is more likely to watch games that feature protests, or (2) a consumer objects to the protests and is less likely to watch games that feature protests, or (3) a consumer is indifferent to the protests and does not consider it as a factor in their viewing decisions.

While a series of studies test whether political allegiance predicts attitudes towards protests, these papers rely on surveys. These surveys pose numerous concerns for generalizing

the results to the NFL markets of interest (Sevi, et, al., 2019, Stratmoen, et, al., 2019). The surveys were small scale (n < 400) and comprised of non-random samples. Those selected for participation were typically of a single race and from a single area. Given that individuals were not randomly selected to be representative of typical NFL viewers, extrapolating the results to NFL viewership and political behavior more generally is risky. Another shortcoming of these surveys is that they simply report attitudes rather than actual decisions (i.e., attendance or viewership). Though these attitudes provide a foundation for assessing the impact of the protests, they provide virtually no information about how the protests have actually affected NFL television metrics and other measures of NFL demand.

By contrast, Watanabe and Soebbing (2019) use in-person attendance to gauge the effect of anthem protests by college football players on college-level games. Though attendance captures actions rather than attitudes, attendance as an outcome measure is still flawed.

Attendance is limited as an outcome measure given the inherent upper bound caused by maximum stadium capacities. In addition, attendance is unable to track short-term, weekly changes in demand as tickets are often purchased months in advance. Though results were mixed, they found some evidence of significant declines in attendance after protests. Locations with a higher Republican vote share in the 2016 presidential election showed larger declines in attendance after protest. These studies, though not directly measuring NFL outcomes, indicate the clear importance of political ideology as a key factor in predicting anthem protest responses.

The studies that analyze NFL outcomes also fall victim to their own range of measurement concerns (Watanabe & Cunningham, 2020; Brown & Sheridan, 2020). Watanabe and Cunningham (2020) utilize game-level data across a six year period (spanning across the 2012 through 2017 regular NFL seasons) to assess the interaction effects between anthem

protests and racial animas, explicit bias, and implicit bias on game attendance. Protests are measured with a dummy variable and assigned a value of 1 if mass NFL anthem protests occurred during that period (2016 – 2017) and a 0 for years before the mass protest period (2012 – 2015). Racial animus is measured using Google Trend data on the usage of a single slur for African Americans in state-level NFL markets.

Explicit bias is measured using state-level Pew Research Center data on a single question about race relations in America. The item in question reports the percentage of respondents in each state who agreed that race relations were worsening in the United States (*PewPct*). Implicit bias is measured using state-level data collected by Harvard University. The Harvard data relied on the racial Implicit Association Test (IAT), an empirical methodology developed by psychologists, to measure bias. Higher values of IAT indicate higher racial bias in a population. Control variables included the percentage of minorities within each Metropolitan Statistical Area (MSA) and MSA voting patterns including the percentage of voters in each MSA who voted for the Republican candidate in the 2016 Presidential election. The results of the study show that racial animus was insignificant while IAT scores and their assessment of race relations (as measured with *PewPct*) were significantly negative and positive, respectively. The only significant interaction with the protest variable was the IAT score, and the effect was positive. This finding suggests that areas with higher implicit bias (higher IAT scores) experienced increased attendance in the protest period when compared to the pre-protest period.

The decision of Watanabe & Cunningham (2020) to use state-level data for racial animus, implicit bias, and explicit bias may produce misleading results. Though certain states may have relatively uniform demographics and political beliefs, this is not necessarily the case for all states such as Pennsylvania and Florida. Measures of political beliefs for these specific areas must be

tailored to the NFL markets of interest, not the state as a whole. Given the difficulty in computing such a precise political variable for the NFL markets, few have tried. Despite the shortcomings of Watanabe & Cunningham (2020), the incorporation of MSA-level voting data from the 2016 Presidential election as a measure of political ideology is an improvement over broader state-wide measures. The choice of measure for racial animus is risky given its reliance on the searching for a *single* racial slur on a *single* online search engine. The use of IAT scores as a measure of implicit racial bias also seems flawed given the documented concerns of reliability and validity surrounding the IAT metric (Goldhill, 2017).

The use of *PewPct* as a measure of explicit bias is flawed given that the variable measures general perceptions about the deterioration of race relations in a state rather than capturing the degree to which people exhibit explicit prejudice. The measurement of protests as a dummy variable at the regular-season-level is limiting for a variety of reasons including: (1) the measurement assumes all teams during the mass-protest period to be affected by the protest behavior, even for teams that may have not once protested; and (2) it neglects to consider that stronger forms of protests may have larger effects on demand. The use of attendance as an outcome variable is also concerning given its inherently limited upper bound due to stadium capacity restrictions. If such capacity limits were reached prior to the occurrence of anthem protests, then the effect of the protests may not be visible at all.

Brown & Sheridan (2020) improve upon Watanabe & Cunningham (2020) in some respects, but still neglect to consider key controls. They utilize game-level data across a four-year period (spanning across the 2014 through 2017 regular NFL seasons) to assess the effects of anthem protests on NFL demand. They measure demand through televised game ratings and viewership collected by the Nielsen Media Research company. Their work improves upon

Watanabe and Cunningham by: (1) measuring protests at the game-level and differentiating games where neither team protested from those where protests occurred; (2) including a continuous count for protests; (3) analyzing protests by type; and (4) using television metrics such as viewership and ratings instead of attendance as the outcome variable.

In including these measurement revisions, Brown & Sheridan attempt to capture the effect of protests at the game-level far more precisely than previous studies. They also provide new controls to reflect the change in the outcome variable from in-person attendance to televised viewership. The results of the study suggest that higher counts of protests in a game had a statistically significant negative effect on ratings for the game in which the protest occurred. This is reasonable to expect as people may not notice or alter their behavior when only one or two players are protesting. Among the most common forms of protests observed, kneeling and remaining in the locker room during the national anthem were found to be statistically significant while raising a fist during the anthem was not. This suggests that the most unambiguous forms of protests are more likely to produce a negative response from fans. These protests, despite being statistically significant, were of low practical significance given their declines on ratings and viewership being only 1.42% and 1.45%, respectively, for the game in which the protests occurred.

Despite these improvements, Brown and Sheridan do not attempt to control for the political characteristics of the local television markets. Given the importance of political factors as a key determinant of anthem protest responses, neglecting this as a control variable is unwise (Sevi, et, al., 2019, Stratmoen, et, al., 2019, Watanabe and Cunningham, 2020).

While some predictors for NFL demand may be difficult to capture (Borland and McDonald, 2003), Tainsky (2010) found that team quality and television time slots were key

factors in modeling NFL ratings. Feddersen & Rott (2011) reach similar conclusions in their assessment of the German national soccer team, concluding key determinants of demand include team quality and tournament significance of a given game. Finally, Paul and Weinbach (2015) find point spreads and expected combined points are determinants of ratings.

Data & Methods

This analysis will assess the effects of NFL player protests on the demand for televised NFL games, controlling for several measures of NFL market-specific political beliefs. We use Nielsen ratings and television viewership counts to capture demand because: (1) television contracts are estimated to make up roughly half of the NFL's revenue (Cave & Crandall, 2001); (2) the ratings are not subject to capacity limits like stadium attendance; and ratings may capture shifts in attitudes in a way that pre-purchased game tickets cannot.

Television metrics are also of importance to the major networks who broadcast NFL games as their contracts are periodically renegotiated. If metrics are underperforming, the NFL could blame the current contract holders and seek partnership with other networks. The networks have so-called "make good" agreements with advertisers which compensate advertisers with free advertising time in the event ratings fall below a pre-determined threshold (Rust, et al., 1992). With the performance of television metrics being deeply intertwined with the revenue for both the NFL and the television networks, it is reasonable to conclude that determining the factors that influence ratings and viewership are of critical value to both parties. Given the high profile coverage of the anthem protests in the media occurring simultaneously with declining NFL demand, an analysis of the effects of the protests is worth undertaking.

For the purpose of our analysis, protests by players are classified into two broad categories: 'unambiguous protests' and 'ambiguous protests'. Unambiguous protests include any protests in which a player kneels or sits during the national anthem, stays in the locker room during the national anthem, or raises a fist during the national anthem. We classify these protests as unambiguous protests due to their visibility, clear meaning, and widespread media attention. We classify all other protests, such as locking arms with teammates or putting a hand on the shoulder of a teammate committing to an unambiguous protest, as ambiguous protests as they are subject to competing interpretations. These ambiguous protests do not show direct animosity toward the national anthem and may be interpreted as support for teammates. Indeed, the unambiguous protests get the most media attention and disdain from critics while the ambiguous protests are generally viewed less harshly. Additionally, the unambiguous protests tend to be viewed as the actions of 'rogue' individuals while the ambiguous protests tend to appear as more coordinated actions planned by team management.

Figure 1 displays a timeline of unambiguous protests occurring in the 2016 through 2017 regular season while Figure 2 displays the ambiguous protests for the same period. A large spike in both categories of protests can be seen in week 3 of 2017, with the effects of this spike seemingly dissipating by week 9 of 2017. This spike in protest behavior is generally viewed as a response by players to then President Donald Trump's call to action for the NFL to fire all players who did not stand during the national anthem.

This analysis seeks to improve upon the empirical design in Watanabe & Cunningham (2020) and Brown & Sheridan (2020) by developing more precise measures of political ideology tailored to the specific NFL markets. Some of the data used for this analysis was generously supplied by Brown and Sheridan. It includes the outcome variables of television viewership and

ratings measured at the game-level as well as various controls such as the network broadcasting the game, team quality (using the same calculation method in Tainsky (2010)), the time and day of the game, divisional game status, combined market size, the number of simultaneously occurring games, betting lines, and counts of protests by type.

We track protests at the game-level, detailing the category of protest (unambiguous or ambiguous) and whether the home team or away team engaged in the protest. Since 2002, the NFL has had 32 teams operating in any given regular season; however, due to two teams moving to new cities during the sample period, our analysis tracks 34 teams. For the purpose of analysis, the San Diego Chargers and the Los Angeles Chargers as well as the Oakland Raiders and the Las Vegas Raiders will be respectively considered as independent teams from each other with each belonging to their own unique MSA.

To capture the political ideology of the NFL markets, we use a population-weighted average of congressional district vote shares for Donald Trump in the 2016 Presidential election. Lacking a direct compendium for which congressional districts were in which MSAs for these given periods, additional datasets containing ZIP Code Tabulation Areas (ZCTAs) to congressional districts and ZCTAS to MSAs were used to create a dataset containing congressional districts with the correct corresponding MSAs for these periods. Using the MSA matched congressional-level Trump vote shares and the population estimates, an MSA-level weighted average congressional conservativeness score is computed for each NFL market for each regular season between 2014 and 2017.

Because the protest decisions by a given team are more likely to impact the local viewing market, the ideal demand measure is local television ratings. However, this data is not publicly available. Lacking this local viewership data, we drop nationally broadcast games from the

dataset and analyze only games that occurred on Sunday early-afternoons (roughly 1:00pm EST) and Sunday late-afternoons (roughly 4:05/4:25pm EST) among the games played during the 2014 through 2017 regular seasons. These early and late-afternoon Sunday games are chosen as the proxy for local viewership given that network contracts surrounding these "Sunday Regional Games" largely lock television subscribers into only being able to view local games.

When we remove the prime time (8:00pm EST) games occurring on Thursday night, Monday night, and Sunday night, this leaves roughly 6 games occurring simultaneously during these early and late-Sunday time slots to be broadcast based on regional television contracts (out of a possible total of 15). Given the local broadcast restrictions and simultaneous game occurrences, we surmise that those watching regional Sunday games are largely members of either the home or away team markets. While some viewers outside of the home and away team markets may view the games through services like NFL RedZone and NFL Sunday Ticket, these options are estimated to be in only roughly 9% of households as of 2013 (Statista, 2013). In using only these early and late-afternoon Sunday games, the number of game-level observations from the 2014 through 2017 regular season is reduced from n = 1024 to n = 796.

In addition to issues related to the appropriate scope of the outcome measure, there are other concerns regarding inferring demand behavior from models using Nielsen ratings as the outcome variable. Given that Nielsen ratings are comprised of average ratings across the span of an entire game, it is difficult to determine if the observed rating is capturing the full effect of the protest behavior. It is possible that this averaging could be capturing the viewership of disgruntled viewers who were unable to change the channel in time following a protest and thus their viewership is still captured in the rating. Other situations could include an anti-protest viewer who failed to notice the protest during the game and only became aware of the action

following the game's conclusion. The same concerns apply to the viewership in millions measure which is also averaged across the span of the entire game.

Despite viewing the protests unfavorably, those in these examples are still being aggregated to increase the average demand for a given game. As put so elegantly by Brown and Sheridan (2020), "Even if [a] viewers' behavior does not change during the week of the protest, or is not captured accurately by the ratings, one could argue that if the protests are truly important to viewers then a viewer [being aware of a] protest one week will be less likely to watch the protesting team in the following week" (Brown & Sheridan, 2020).

Consequently, we investigate the effect of protests on viewership by constructing a lagged variable for protests. Because the unit of observation is a game, we must count protests in the prior week when each of the teams was matched against a different opponent. Our count measure of lagged protests is equal to 0 if neither team in a current game had a protest occur in their previous game, a value of 1 if exactly one team in the current game had a protest occur in the previous game, or a value of 2 if both teams has a protest occur in their previous game.

Building on this, we estimate the following equation:

(1) Viewership $i = \alpha + Unambiguous_Protests$ it- $1 + Simultaneous_Games$ i $+ Combined_Market_Size$ i $+ Combined_Team_Quality$ i $+ Home_Team_Trump_Vote$ i $+ Average_Trump_Vote$ i + Week i + Year i + e i

Viewership is either Nielsen ratings or the average number of viewers in millions for the game. Unambiguous Protests are a lagged measure for unambiguous protests. The variable takes on a value of 0 if neither team in a current game had a protest occur in their previous game, a value of 1 if exactly one team in the current game had a protest occur in the previous game, or a value of 2 if both teams has a protest occur in their previous game. Ambiguous Protests follow the same value structure as the Unambiguous Protests, but differs by tracking the number of teams in a current game who had an ambiguous protest occur in their prior game. Combined

Market Size is the sum of the television market size for the home team and away team in a game, as measured by the Nielsen Media Research company. Combined Team Quality is the combined team quality of the home team and away team using the calculation of team quality developed by Tainsky (2010). Home Team Trump Vote is the home team's MSA-level weighted average vote share for Donald Trump in the 2016 Presidential election. Average Trump Vote is the average of the population weighted average 2016 Trump vote for the metro areas that house each team in a game. Week controls for weekly changes in demand beginning in week 1 of 2014 (week 1) and ending at week 17 of 2017 (week 68). Year controls for annual changes in demand across regular season games beginning in in 2014 and ending in 2017.

Results

Table 1 displays the summary statistics for each of the variables used in the analysis.

Table 1 shows that the values for Nielsen ratings ranged from 0.72 to 17.25, with a mean value of 2.88. Viewers in Millions ranged from 1.30 million to 30.26 million, with a mean value of 4.92 million. On average, one of the teams had an unambiguous protest about every other game. Ambiguous protests were less frequent. Teams engaged in some type of ambiguous protest in about 1 out of 5 games.

There is some evidence that home teams are less likely to protest than away teams. If we count home team player protests as the sum of all unambiguous protests at the player-level for the entire observed period, we obtain a mean value for the per-game home team unambiguous protest count of 0.4653 (n = 793). Using the same calculation, we obtain a mean value for the away team unambiguous protests of 0.7137 (n = 793). These mean values are important to consider in the context of that the maximum number of players for a single team that could be

protesting at a time should be equal to the roster limit of 53 players. If we cut the sample period to include only the protest period (n = 396), unsurprisingly, the coefficients roughly double (home team mean = 0.9318, away team mean = 1.4292), but the difference remains statistically significant (p = 0.0392). One explanation for this behavior may be that players, aware of the negative stigma surrounding the protests, may be choosing to protest in areas outside of their home market as to avoid generating scrutiny from their primary fan base.

We find weak evidence of lower levels of protest activity in conservative metro areas. If we: 1) classify metro areas as liberal or conservative based on whether the 2016 Trump vote was above or below the median for the data set (47.12); and 2) count protests as the sum of all unambiguous protests committed at the player-level for all teams, we obtain a mean value for unambiguous protests of 36.7 for high Trump-vote teams (n = 16). Using the same procedure, we obtain a mean unambiguous protest count for the low Trump-vote teams of 19.375 (n = 16). While the difference is substantial, it is not statistically significant (p = 0.2512)

Table 2 reports regression results based on equation (1) using Nielsen ratings as the dependent variable. Given the previously discussed concerns regarding non-lagged measures, we use lagged protests as the independent variable of interest. Columns 1 and 2 include the entire sample of early and late-afternoon Sunday games while columns 3 and 4 split the sample based on the median value of the population-weighted-average Trump vote in 2016 at the metro area level. Column 1 shows that a one unit increase in the lagged unambiguous protest count variable (i.e., a protest by either team) is associated with a decline in average Nielsen ratings of 0.4301 (p < 0.01). This 0.4301 decline is a notable 14.9% decline in ratings when compared to the average Nielsen rating for the sample (2.88). Contrary to the findings in Brown & Sheridan

(2020), these results imply that protests are exerting substantial, negative, and at least somewhat persistent effects on the demand for NFL games.

Column 2 adds controls for year and week. After including these time controls, the coefficient for the lagged unambiguous protest variable reduces to -0.3353, though neither of the time controls is statistically significant. Despite the reduction, the coefficient is still statistically significant at the 5% level and still represents a practical decline in ratings of 11.6% when compared to the average. Also evident from column 2 is that many of the controls have large impacts on ratings. A one game increase in the number of simultaneous games is associated with a 0.5249 decline in ratings (p < 0.01). The sign of this coefficient is expected given that the occurrence of simultaneous games should increase competition for viewership. A one million person increase in combined market size is associated with a 0.2113 increase in ratings which is significant at the 1% level. Another expected sign given that a larger combined market size should have a larger population of potential viewers. A one unit increase in combined team quality is associated with an 8.4868 increase in ratings which is significant at the 1% level. This sign is expected given that audiences are assumed to prefer watching games against strong teams when given the opportunity.

Looking at the political controls in column 2, a one percentage-point increase in the population-weighted average Trump vote is associated with a 0.0375 increase in ratings (p < 0.1). This suggests that metro areas with higher levels of support for Trump watch more football. In addition, a one percentage-point increase in the home team's average Trump vote is associated with a 0.0336 increase in ratings (p < 0.05). This suggests an additional ratings boost occurs for games where the home team has a high Trump vote.

Columns 3 and 4 disaggregate the observed sample into two groups to determine whether protests are associated with larger decreases in ratings when the teams are located in politically conservative metro areas. We measure conservatism using the average Trump vote and we divide the sample at the median value of the average Trump vote (45.5).

Somewhat surprisingly, the results in column 3 and column 4 show remarkably similar effects from protests on Nielsen ratings, with the protests only slightly stronger for conservative audiences (-0.3867) as compared to liberal audiences (-0.3312). This small difference implies that there is likely not a notable difference in responses to protest behavior across political divisions, which is somewhat surprising given the perceived stronger support by liberal areas for the cause the unambiguous protestors are supporting. An alternative explanation could be that even within liberal areas, football fans could be a conservative minority within their team's more liberal MSA.

Table 3 uses the same analytical layout as Table 2, with column 1 reporting the base specification, column 2 adding time controls, and columns 3 and 4 disaggregating the sample along political divisions; however, the outcome variable has been changed from Nielsen ratings to millions of viewers. Column 1 shows that a one unit increase in the lagged unambiguous protest count variable is associated with a decline in average viewership of 0.6584. This result is of both high statistical significance (p < 0.01) and high economic significance as seen in Table 1 where the mean viewers in millions for the sample is 4.92. This 0.6548 decline is thus a notable 13.3% decline in viewership when compared to the average. Once again contrary to Brown & Sheridan's results, we find that the lagged effect of unambiguous protests on viewership is both statistically and economically significant.

In column 2, additional time variables are added to control for general changes in NFL demands across time periods. When including these time controls, the coefficient for the lagged unambiguous protest variable is reduced to -0.5497. Despite the reduction, the coefficient is statistically significant at the 5% level and still represents a practical decline in ratings of 12% when compared to the average.

Columns 3 and 4 again disaggregate the observed sample into conservative and liberal metro areas for unambiguous protests between political divisions. Contrary to the Nielsen results, the protest variable is statistically insignificant when we disaggregate the data into conservative and liberal metro areas using the average Trump vote. Despite this lack of statistical significance, the lagged unambiguous coefficients are still of notable economic significance, with the declines in columns 3 and 4 representing declines of 13.75% and 10.5% from the average, respectively.

As seen in Tables 2 and 3, these unambiguous protests reduce demand for NFL games (measured as Nielsen rating and viewers in millions). This finding is in contrast to the current literature (Brown & Sheridan, 2020) and suggests that the negative effects of protests on NFL demand are at least somewhat persistent. The lingering negative effects of protest behavior are also by no means inconsequential, with the minimum decline attributed to previous unambiguous protests being between 11.6% and 12.0% depending on the outcome measure.

To assess the full scope of lingering effects of protest behavior on NFL demand, Tables 4 and 5 repeat the analytical procedures from Tables 2 and 3, respectively, with the only alteration being the use of the lagged count for ambiguous protests rather than the lagged count for unambiguous protests. Consistent with previous research, Tables 4 and 5 show the lagged count for ambiguous protests have weaker effects on demand as measured by Nielsen ratings and viewers in millions when compared to unambiguous protests. The estimates are generally smaller

in each case and not statistically significant. These consistent results across models imply that the ambiguous protests do little to influence viewer behavior.

Given the consistent difference in significance between the lagged count for ambiguous protests (as seen in Tables 2 and 3) and the lagged count for ambiguous protests (as seen in Tables 4 and 5) across the models, it is reasonable to conclude that, consistent with existing literature, audiences do have a statistically significant stronger response to the unambiguous protests. This is also unsurprising given that the ambiguous protests are often coordinated by team management and consciously designed to not take any actions that could be perceived to be unpatriotic.

Discussion

Through this analysis, we have expanded upon the growing literature of athlete activism on televised sports demand, in particular for the NFL, in a variety of ways. We account for political beliefs, a factor deemed crucial in much of protest literature, at the team MSA level, thus allowing for a much more precise measure of political leaning than seen in previous studies which often relied on data at only the state-level. In narrowing our analysis to only the early and late-afternoon Sunday regular season games, we better capture the effect of the protest behavior. We also construct a clear measure of prior protest activity. Most importantly, we provide evidence, contrary to the current literature, that unambiguous protests do have some level of statistically significant and economically significant, negative persistent effects on televised NFL demand. Stakeholders in the NFL can now more precisely understand what the magnitude and direction for which anthem protests are impacting televised game demand and consider that

information accordingly when forming policies on how to respond to player protesting going forward.

We find that, contrary to the current literature, unambiguous protests are exerting substantial, negative, and at least somewhat persistent effects on the demand for televised NFL games. The practicality of these results are reinforced by declines on average ratings between 11.6% and 14.9%. Consistent with the current literature, ambiguous protests are found to be practically insignificant.

In regard to future research is this area of study, the literature could benefit from the release of several types of game specific viewership data not currently available. One such dataset which would be of great use is local viewership data. Having access to local data would allow for much more precise conclusions to be drawn about the effect of political control factors on televised demand as opposed to needing to proxy local viewership by using only a subset of the available sample in early and late-afternoon Sunday games. If this data was also disaggregated as to show the local home-team viewership separate from the local away-team viewership, this would allow for more accurate means by which to assess if protests from the home team are associated with viewership declines from the away team and vice versa.

Another dataset of value would be viewership data at multiple time points for every game in the regular season, as opposed to the average viewership across the entire game which we currently have access to. In having a dataset that tracks viewership across multiple points in a game, we could make stronger claims on the immediate effect of anthem protests by assessing how much viewership changes between pre-anthem and post-anthem during a game with anthem protests.

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Tables

Table 1. Summary Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
Nielsen_Ratings	794	2.88	3.04	0.72	17.25
Viewers_Millions	779	4.92	5.36	1.30	30.26
Unambiguous_Protests	748	0.45	0.68	0	2
Ambiguous_Protests	747	0.19	0.47	0	2
Simultaneous_Games	794	6.82	2.35	1	10
Combined_Market_Size	794	4.09	2.24	1.21	14.20
Combined_Team_Quality	794	0.48	0.13	0.13	0.81
Home_Team_Trump_Vote	794	45.09	10.55	22.09	61.73
Average_Trump_Vote	794	45.18	7.66	22.46	60.01
Week	794	34.65	19.70	1	68
Year	794	2015.50	1.12	2014	2017

Table 2. Effect of Lagged Unambiguous Protests on Nielsen Ratings

	(1)	(2)	(3)	(4)
Unambiguous_Protests	-0.4301***	-0.3353**	-0.3867*	-0.3312*
	(0.1297)	(0.1523)	(0.2339)	(0.1944)
Simultaneous_Games	-0.5265***	-0.5249***	-0.6494***	-0.4021***
	(0.0579)	(0.0582)	(0.0970)	(0.0691)
Combined_Market_Size	0.2089***	0.2113***	0.4158**	0.1436***
	(0.0496)	(0.0497)	(0.1498)	(0.0527)
Combined_Team_Quality	8.4762***	8.4868***	7.9720***	8.6122***
	(0.8320)	(0.8347)	(1.1079)	(1.2615)
Home_Team_Trump_Vote	0.0339**	0.0336**	0.0437**	0.0408**
	(0.0142)	(0.0142)	(0.0189)	(0.0168)
Average_Trump_Vote	0.0360*	0.0375*		
	(0.0200)	(0.0199)		
Week		0.0050	0.0016	0.0028
		(0.0188)	(0.0268)	(0.0258)
Year		-0.1732	0.0509	-0.2477
		(0.3501)	(0.5136)	(0.4584)
Observations	748	748	374	374
R-Squared	0.3488	0.3495	0.4238	0.2893

Table 3. Effect of Lagged Unambiguous Protests on Viewers in Millions

	(1)	(2)	(3)	(4)
Unambiguous_Protests	-0.6584***	-0.5497**	-0.6766	-0.5169
	(0.2264)	(0.2692)	(0.4127)	(0.3425)
Simultaneous_Games	-0.9431***	-0.9407***	-1.1584***	-0.7259***
	(0.1037)	(0.1040)	(0.1730)	(0.1235)
Combined_Market_Size	0.3594***	0.3616***	0.7212***	0.2447***
	(0.0872)	(0.0874)	(0.2672)	(0.0925)
Combined_Team_Quality	14.7753***	14.7895***	13.8007***	15.1181***
	(1.4483)	(1.4531)	(1.9413)	(2.1884)
Home_Team_Trump_Vote	0.0595**	0.0593**	0.0722**	0.0727**
	(0.0252)	(0.0252)	(0.0338)	(0.0297)
Average_Trump_Vote	0.0642*	0.0659**		
	(0.0351)	(0.0350)		
Week		0.0167	0.0055	0.0192
		(0.0341)	(0.0496)	(0.0462)
Year		-0.3821	0.1078	-0.6362
		(0.6434)	(0.9582)	(0.8269)
Observations	733	733	366	367
R-Squared	0.3536	0.3540	0.4251	0.2959

Table 4. Effect of Lagged Ambiguous Protests on Nielsen Ratings

	(1)	(2)	(3)	(4)
Ambiguous_Protests	-0.3656*	-0.1633	-0.3756	0.0863
	(0.2107)	(0.2295)	(0.3688)	(0.2837)
Simultaneous_Games	-0.5265***	-0.5231***	-0.6461***	-0.3954***
	(0.0577)	(0.0580)	(0.0962)	(0.0691)
Combined_Market_Size	0.2062***	0.2113***	0.4028***	0.1405***
	(0.0499)	(0.0498)	(0.1479)	(0.0531)
Combined_Team_Quality	8.5166***	8.5278***	8.0617***	8.6447***
	(0.8344)	(0.8370)	(1.1089)	(1.2629)
Home_Team_Trump_Vote	0.0327**	0.0328**	0.0436**	0.0419**
	(0.0142)	(0.0142)	(0.0188)	(0.0168)
Average_Trump_Vote	0.0425**	0.0430**		
	(0.0199)	(0.0199)		
Week		0.0058	0.0018	0.0060
		(0.0189)	(0.0265)	(0.0265)
Year		-0.2800	-0.0109	-0.4717
		(0.3506)	(0.4989)	(0.4741)
Observations	747	747	373	374
R-Squared	0.3445	0.3480	0.4245	0.2860

Table 5. Effect of Lagged Ambiguous Protests on Viewers in Millions

	(1)	(2)	(3)	(4)
Ambiguous_Protests	-0.5720	-0.2936	-0.6936	0.1653
	(0.3657)	(0.3998)	(0.6412)	(0.4929)
Simultaneous_Games	-0.9452***	-0.9385***	-1.1526***	-0.7142***
	(0.1034)	(0.1036)	(0.1715)	(0.1237)
Combined_Market_Size	0.3556***	0.3618***	0.6982***	0.2393**
	(0.0876)	(0.0876)	(0.2633)	(0.0932)
Combined_Team_Quality	14.8353***	14.8564***	13.9609***	15.1791***
	(1.4519)	(1.4572)	(1.9424)	(2.1915)
Home_Team_Trump_Vote	0.0579**	0.0579**	0.0721**	0.0745**
	(0.0252)	(0.0252)	(0.0337)	(0.0297)
Average_Trump_Vote	0.0744**	0.0749**		
	(0.0349)	(0.0350)		
Week		0.0175	0.0056	0.0249
		(0.0344)	(0.0490)	(0.0473)
Year		-0.5444	0.0102	-1.0048
		(0.6421)	(0.9294)	(0.8518)
Observations	732	732	365	367
R-Squared	0.3507	0.3529	0.4259	0.2933

Figures

Figure 1: Unambiguous NFL Protests by Type for Sunday Early and Late-Afternoon Regular Season Games (2016 – 2017)

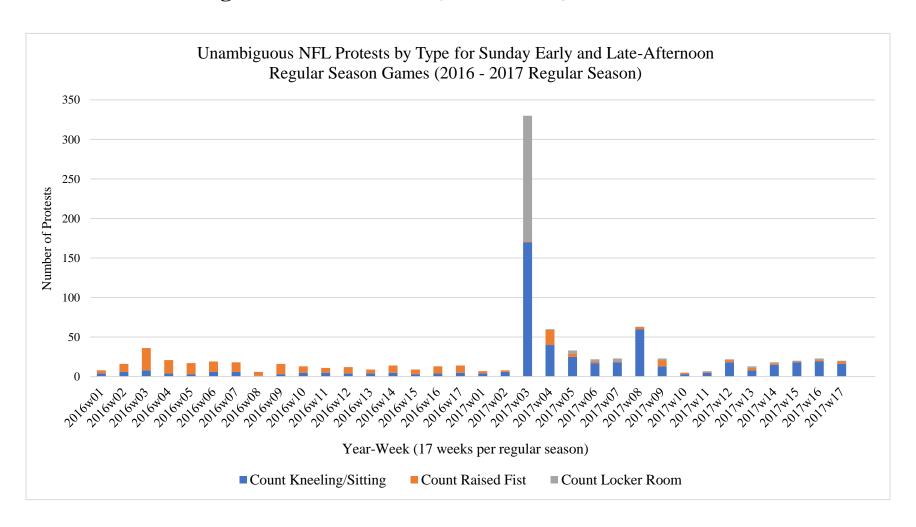
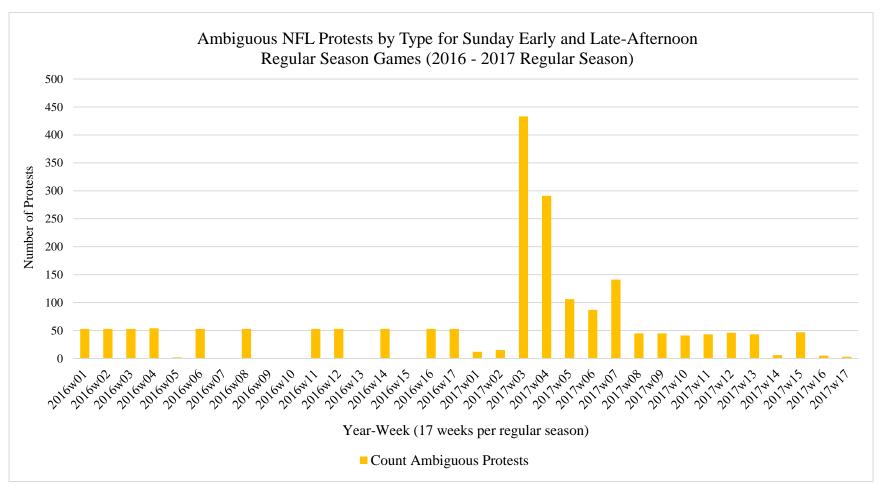


Figure 2: Ambiguous NFL Protests by Type for Sunday Early and Late-Afternoon Regular Season Games (2016 – 2017)



^{*}Ancillary protests most commonly include, but are not limited to: a player locking arms with other players, a player placing a hand on the shoulder of a player committing an unambiguous protest, and a player wearing attire with the phrase "I can't breathe" during game practices.