Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of Petition for Rulemaking to Eliminate the Sports Blackout Rule	MB Docket No. 12-3

COMMENT OF SPORTS ECONOMISTS ON

THE FCC'S SPORTS BLACKOUT RULES

Submitted by (affiliations for identification only):

Robert Baade, Lake Forest Co9llege

Dennis Coates, University of Maryland Baltimore County

Rodney Fort, University of Michigan

Ira Horowitz, University of Florida

Brad Humphreys, University of Alberta

Roger G. Noll, Stanford University

Allen Sanderson, University of Chicago

John J. Siegfried, Vanderbilt University

Andrew Zimbalist, Smith College

SUMMARY

The purpose of this comment is to provide background information on the economic effects of sports blackouts that the Commission may find useful in its re-evaluation of its blackout rules. The authors of this comment are academic economists who have published research on the economics of major league team sports. The authors have prepared this comment independently and have received no payment or assistance of any kind from any party for preparing this comment.

Herein we summarize the results of research that economists have undertaken on sports broadcasting that is relevant to evaluating the Commission's blackout rules. A list of published economics research on attendance at sporting events and sports broadcasting is included at the end of this comment, along with other publications that contain relevant facts that are used in this comment. Academic research supports the conclusion that local television blackouts have little or no effect on ticket sales or attendance for the game that is being televised. Local blackouts of home games harm consumers without producing a significant financial benefit to teams.

Much has changed since the current blackout rules were adopted in 1973. Today only the National Football League (NFL) blacks out local telecasts of home games that do not sell out. Since the current blackout rules were promulgated, the NFL's television rights fees, ticket prices, revenues and profits have risen dramatically, while the number of blackouts has shrunk to about 6 percent of all games. Thus, even if eliminating the FCC's blackout rules caused the NFL to stop blacking out games, which is unlikely, there is no factual basis to the claim that the NFL would suffer a significant adverse effect.

THE ORIGIN OF BLACKOUT RULES

The FCC's blackout rules are a small part of the broadcasting policies that are practiced by U.S. professional sports leagues. Sports blackout rules arise from the practice of each major professional sports league in the U.S. to assign a "home territory" to each team. Teams have two types of territorial rights: one pertaining to where a team can play, and the other pertaining to where a team can sell rights to broadcast its games.

The first territorial right prevents a team from playing home games in another team's home territory without obtaining permission from that team, and such permission is almost never granted. For example, the Oakland Athletics baseball team currently is being blocked from moving to San Jose because San Jose is part of the home territory of the San Francisco Giants, even though San Jose is farther from San Francisco than is Oakland. Whereas a few metropolitan areas have more than one team in the same sport, most teams hold exclusive territorial rights for staging home games.

The second territorial right gives a team exclusive control of radio and television broadcasts of its games in its home territory and some ability to prevent a team in another home territory from broadcasting games in its home broadcast market. Originally rights to broadcast games were sold only by individual teams. The only sense in which televised games were blacked out was that a team could prevent teams in other home territories from broadcasting their games in its local broadcasting market.

In 1951 the U.S. Department of Justice challenged the NFL's television blackout rule, which gave each team the right to exclude telecasts of games of other teams in its home territory, regardless of when the televised game was scheduled. In 1953 Judge Allen Grim ruled that blackouts of telecasts when the home team was not playing a home

game were an antitrust violation, but blackouts of games in a team's home territory when a home game was played simultaneously were not an antitrust violation because such a rule was a reasonable means to protect home attendance.

The migration of television broadcasts to national networks led to changes in league blackout policies. In the 1950s, the possibility for creating a simultaneous national telecast led teams to assign the sale of television rights to the league. In 1954 the National Basketball Association (NBA) became the first league to negotiate a national television agreement. Also in 1954 MLB sought approval from the Antitrust Division of the Department of Justice to create a nationwide "game of the week" that would include a blackout provision for areas where any game (including a minor league game) was being played simultaneously. The Antitrust Division rejected this proposal as anticompetitive, but CBS then signed agreements with a group of teams that allowed it to televise games nationwide. Within a few years, both CBS and NBC had contracts with groups of teams that enabled each network to televise games on Saturday and Sunday, with games blacked out in major league cities in which a home game was being played.

In the late 1950s CBS also sought to create nationwide telecasts of NFL games, but Judge Grim extended his prior ruling about blackouts to include a prohibition against the NFL pooling the rights of its member teams. In response, CBS, NBC and a part-time sports broadcasting network of independent stations acquired the rights to televise some teams and offered nationwide telecasts of NFL games on Sunday afternoon. In addition the American Football League, which was launched in 1960, sold the television rights to all of its games to ABC. Consequently, in 1960 and 1961 four networks and groups of teams televised competing Sunday afternoon professional football games.

The Sports Broadcasting Act of 1961 reversed Judge Grim's decision about leagues pooling the sale of television rights. The Act granted antitrust immunity to leagues to sell pooled television rights to "free" over-the-air broadcasters and authorized blackouts of a game in the local television market in which the game was played.

The practice of blacking out all nationally televised games in the locality in which the game was played was unpopular, and in 1973 Congress responded by amending the Sports Broadcasting Act to permit a three-year experiment in which games could be blacked out locally only if they were not sold out 72 hours before game time. Although these amendments were not renewed, the NFL continued to follow this blackout policy rather than to revert to its prior policy of blacking out all games in the local television market of the home team.

The first national television agreements were negotiated before cable television and other multichannel video program distribution systems (MVPDS) became important. The growth of cable television, especially after the FCC's decisions in 1973 and 1980 that eliminated most restrictions on cable TV programming, brought two new challenges to the blackout policy: "distant signal importation" and regional sports networks.

Distant signal importation occurs when a cable television system carries a station from outside of the local television market where the cable system is located. Several stations responded to this opportunity by actively seeking carriage on cable systems beyond the reach of their over-the-air signals, thereby becoming "superstations" that are more like a television network than a local station. Some highly successful superstations, notably WTBS in Atlanta and WGN in Chicago, televised games of a team in their local market to a national cable audience.

The rapid growth of cable television created a new market for networks that were created exclusively or primarily for distribution on cable television systems. Most professional sports teams responded to this opportunity by selling the rights to televise their games to regional sports networks.

THE FCC'S BLACKOUT POLICY

As a technical matter, superstations and regional networks could extend into the home broadcast territory of another team, and so threaten a league's blackout policies. The FCC's blackout rules extended league blackout policies to channels that are carried by cable and satellite systems. In essence, the rules allow rights holders to apply their blackout policies for local television to channels that are available for carriage in the same television market by cable and satellite systems.

Blackouts and the NFL

As a practical matter the implications of this proceeding are different for the NFL than for other U.S. professional sports leagues. Currently only the NFL practices the policy that was set forth in the 1973 amendment to the Sports Broadcasting Act. The NFL also is the only professional league that sells all television rights to all regular season games. Even though television rights to all NFL games are sold as part of national packages, telecasts of many Sunday afternoon games are localized in that they are televised only in the home regions of the two competing teams. Because NFL teams sell out almost all of their games, the NFL's blackout policy causes a few games (16 in 2011, or about 6 percent of the regular season schedule) not to be televised in the home

team's market even though the game is being televised somewhere else and a local broadcaster (either an over-the-air station or a cable/satellite service) otherwise would be willing to televise the game locally.

The FCC's blackout rules extend the local television station blackout to other sources of the same program that could be accessed by an MVPDS, such as the station that carries the game in the visiting team's home market. Nevertheless, because *all* television rights to NFL games are sold by the league, the NFL could impose the same blackout restrictions on all entities that televise NFL games. Just as the NFL followed the blackout policy in the 1973 amendment to the Sports Broadcasting Act after the amendment expired, the NFL also could continue the FCC's blackout policies in its television contracts if the FCC were to withdraw its current rules. If the FCC's rule that permits these blackouts were eliminated, the NFL might be exposed to antitrust litigation if it continued to follow this policy, but the risk to the NFL is small. The 1953 antitrust decision and the Sports Broadcasting Act explicitly permit blackouts in a local market where a game is being played, so the only issue is whether a policy this policy applies to MVPDS channels as well as local television stations. Thus, the only likely effect of eliminating the FCC's blackout rules is to remove formal regulatory support for a practice that, however unpopular and unnecessary, has substantial legal support.

The FCC's Blackout Rules and Other Sports

Other major professional sports leagues in the U.S. generally do not use blackout rules to prevent a game from being televised in the locality in which it is being played. Unlike the NFL, all other major professional sports leagues sell television rights to only

some games through national broadcast agreements. Broadcast rights to most games are held by the home team, which then has reciprocal arrangements with other teams that allow each team to broadcast its away games as well as its home games. This arrangement allows teams to sell television rights to both home and away games to local television stations in their home market and/or to regional cable/satellite networks that deliver games to areas that are not part of the home territory of any team. Thus, each team is in control of deciding how many of its games, both home and away, will be broadcast live in its local and regional market.

The FCC's blackout rules currently have little relevance with respect to television rights that are sold by a team rather than the league. The FCC's rules apply only to games in the local area where they are being played. Thus, the FCC's blackout rules bear no relation to league policies that prevent telecasts in a team's home market of a game being played elsewhere. For games that are played locally, the vast majority of teams choose to sell television rights to all or most all of their games, both home and away, indicating that the revenue from the sale of the television right exceeds the effect of television on in-stadium revenues.

National television rights are sold by leagues other than the NFL on both an exclusive and a non-exclusive basis. Non-exclusive rights allow the local team to retain the right to televise its games in its local market. In this case, the national broadcast is blacked out locally if the game is being televised by a local broadcaster, but consumers retain the opportunity to watch the game. The FCC's blackout rules do not apply because the local broadcast is not being blacked out.

If the league sells exclusive rights, no game can be televised locally during the

exclusive time period of the national broadcaster, even a local home game that is played during the exclusive time period but is not being televised by the national broadcaster. Technically, this practice is not really a "blackout" because a game that is played during the exclusive period is not televised anywhere. Usually teams avoid this limitation by scheduling home games so that they do not conflict with an exclusive national telecast. Major League Baseball (MLB) has further exempted Miami and Texas from this blackout provision for ESPN's Sunday Night Baseball, which otherwise is an exclusive agreement, to accommodate the desire of these teams to schedule all home games at night during the summer. Otherwise if a team does schedule a game during an exclusive period, the game cannot be televised anywhere other than by the national rights holder. If a national exclusive rights holder is televising another game in this time period, the local game is not affected by the FCC's blackout rules because it is not being televised anywhere and so is not being blacked out on an MVPDS channel.

MLB has a unique system for allocating territorial television rights that causes an unusual blackout problem. All local television markets in the U.S., even markets that are located hundreds of miles from the nearest MLB team, are part of the home broadcasting territory of at least one team. Some localities (examples are Las Vegas and Des Moines) are in the home television territory of as many as six teams. These territorial designations lead to blackouts when the local MVPDS does not carry the telecast of a home game by the team's regional sports network. If the television market is not part of the television home territory of the visiting team and if the broadcaster that holds the rights to the other team is televising the game, then the game is blacked out on the local MVPDS.

The FCC's blackout rules apply to cable and satellite services within the market

in which a game is being played. Thus, they do not apply to MLB's rule about games that can be televised over MVPDS in Des Moines and Las Vegas since the teams that claim these cities as their home broadcast territory do not play games there. As a result, eliminating the FCC's blackout rules will not solve the problem that arises from MLB's expansive definition of home television territories.

EVALUATING TELEVISION BLACKOUT RULES

Television became important to the sports industry in the 1950s. Between 1950 and 1955, the fraction of households that had a television set rose from less than one in ten to about two-thirds. During this period nationwide live telecasts became feasible (the first nationwide live telecast of a baseball game occurred in 1951) and then commonplace (the World Series has been televised live nationally since 1952). These developments created an opportunity for generating a large audience and substantial rights fees from televising a game simultaneously in many cities.

Rationales for Blackouts

Because all telecasts originally were licensed by teams, league blackout rules served only to prohibit a team from broadcasting its games into the home territory of another team. Originally this prohibition applied regardless of whether the home team was playing a home game at the same time. This blackout rule was designed to reduce competition among teams for broadcast rights in order to increase the broadcast revenue each team could collect in its home territory. The only competition that could arise under this rule was in broadcasting games in areas that were not within the home territory of

any team in the league. In all sports except football, where the rights to most games are sold by teams to local television stations and/or regional MVPDS networks, league blackout rules still reduce competition among teams in the sale of broadcast rights and so increase the market power of teams in selling their rights.

The introduction of televised games caused sports executives to develop another concern besides eliminating competition in selling broadcast rights. Whereas a radio broadcast was not regarded as a substitute for attending a game, sports executives feared that a local telecast of a home game would reduce attendance. While in the 1950s sports teams sold radio rights that allowed simultaneous local radio broadcasts of home games, teams were reluctant to sell rights for live local telecasts of home games out of fear that fans would prefer to watch a game on television rather than at the stadium.

The possibility of a substitution of television for live attendance has two components. The first is the possibility that fewer tickets will be sold to a game. The second is the possibility that some sold tickets will not used ("no-shows"). In either case, the revenue from the game will be lower because both sources of reduced attendance, if they exist, lead to less revenue from in-stadium sources such as concessions, programs, memorabilia, and, in some cases, parking.

Beyond the use of blackouts to reduce competition in the sale of broadcasting rights and to increase revenues inside the stadium, some broadcasters have an additional concern about eliminating the FCC's blackout rules. Because the FCC's rules apply only to MVPDS, some broadcasters fear that eliminating them will cause leagues to allow fewer games to be broadcast on over-the-air television.

Since the FCC announced that it was seeking comments on the petition to

eliminate its sports blackout rules, several league officials and broadcasters have made public statements that reiterate these concerns. NFL Commissioner Roger Goodell stated (quoted in Reedy): "We want our stadiums full, and we want to continue to stay on free television. And we're fortunate to be able to extend those television agreements to stay on free television, which is unique within professional sports, and that has to be balanced with driving people to your stadiums with offering your games on free television." Dennis Wharton, Executive Vice President of the National Association of Broadcasters (NAB), stated (quoted in Bachman): "If you want to hasten the migration of marquee sports to pay TV, this is the petition for you." According to Brian McCarthy, Vice President of Communications for the NFL (quoted in McCarthy): "The policy is very important to supporting NFL stadiums and the ability of NFL clubs to sell tickets; keeping our games attractive as television programming with large crowds; and ensuring that we can continue to keep our games on free TV."

The Effects of Blackouts in the NFL

As explained elsewhere, the concerns about removing the FCC's blackout rules presently apply only to the NFL because only the NFL has a league policy of blacking out telecasts of games that are played locally. The statements by NFL officials raise the issue that ending blackouts will reduce attendance and revenues, and that this effect threatens "free" broadcasts of NFL games on national over-the-air networks. The latter point is then reflected in the statement by the NAB official. Thus, the first step in the argument is the attendance effect and the second step is the effect of blackout rules on the choice of broadcasters by the NFL.

To analyze the importance of blackouts, a useful starting point is the changes in the financial condition of the NFL at the time that all home games were blacked out (before the 1973 amendment to the Sports Broadcasting Act) with the present. The overall trend has been that during the past 60 years, fewer and fewer games have been blacked out, but attendance, ticket prices, and team revenues and profits have continued to grow. With only a few games now being blacked out, it is not credible that eliminating the remaining blackouts would have a substantial effect on any of these trends.

In the 1950s the NFL was a struggling league. In 1950 the New York Bulldogs folded, and in 1952 the Dallas Texans went out of business before the end of the season. Economists who study the history of the NFL have concluded that the value of the league was substantially enhanced by television, in part because television became the league's most important source of revenue, but also because televising games substantially increased the fan base for professional football. As a result, economists have concluded that the long-run effect of television on attendance at NFL games was positive.

Television has improved the financial condition of NFL teams in two ways: by directly providing most of the revenue of the league and, through enhancing the popularity of the NFL, by allowing teams to sell more tickets at ever higher prices. Precise quantification of the increases in the prices and profits of the NFL is not possible because the NFL does not publicly release financial statements. The league also has a rule prohibiting the ownership of teams by publicly traded corporations, which assures that financial disclosure requirements for publicly traded companies do not apply to NFL teams. Nevertheless, through the years scholars and journalists (notably the annual *Forbes* analysis of financial conditions in team sports) have estimated the revenues, costs,

profits and ticket prices of NFL teams.

Since the current NFL blackout policies have been in place, the NFL's financial indicators all have improved dramatically. In 1970 the estimated average revenue of an NFL team was about $5 million (which, adjusted for inflation, is equivalent to about $28 million in 2009), whereas in 2009 estimated average revenue was about $250 million. The estimated average operating income of NFL teams rose from under $1 million in 1970 (which is under $6 million in 2009 dollars) and about $9 million in 1991 (about $14 million in 2009 dollars) to $33 million in 2009. The NFL has the highest ticket prices in professional team sports. In 2009, the average price of tickets to regular season NFL games was about $75 compared to about $50 for basketball and hockey, and $27 for baseball. In addition, ticket sales account for a much smaller fraction of NFL revenues (around 20 percent) than rights fees for broadcasts (around 60 percent).

Despite high prices, almost all NFL games are sell-outs, as implied by the fact that only about 6 percent of games were blacked out in 2011 because they were not sold out three days before the game was scheduled to be played. Nearly all teams sell out every game. The 16 blackouts in 2011 occurred in four cities (Buffalo, Cincinnati, San Diego and Tampa). Most teams sell all of their good seats and all but a few tickets per game as season tickets. To guarantee having good seats to the games of these teams, fans must buy season tickets. Most teams have waiting lists of fans for season tickets if they become available. Thus, the pricing policy of most NFL teams seems to be to set the price to guarantee that games will be sold out.

These facts are inconsistent with the claim that eliminating blackouts – assuming implausibly that eliminating the FCC's blackout rule would have this effect – would have

a significant effect on ticket sales, the financial viability of teams, or the willingness of the NFL to televise games. To conclude otherwise is to believe that eliminating 16 blackouts per season (one-half game per team) would cause a significant number of season ticket holders to give up their seats and then for the fans on the waiting list to decide not to replace them.

The linchpin of the argument in favor of blackouts is that televising live games locally hurts attendance. Economists have undertaken several econometric studies of attendance at NFL games as well as other team sports in the U.S. and Europe. Some of these studies are listed in the references; more studies can be found by consulting the references in the studies that are listed.

Producing a reliable estimate of the causes of attendance is difficult. One reason is that teams set ticket prices on the basis of their expectations about the number of tickets that will be sold at different prices. Attendance at games reflects the combined effect of the underlying demand for the sport in a team's home market and the team's decisions about pricing.

Another problem in modeling the demand for tickets arises because attendance cannot exceed stadium capacity, and in the NFL almost all games are sold out. Thus, the principal cause of differences in attendance among NFL teams is differences in stadium capacities. Most teams set prices so that ticket demand equals or even exceeds seating capacity. In principle, if the possibility that games will not be blacked out reduces the demand for tickets, ticket prices could be cut to guarantee a sell-out. The issue that actually matters to the team is not whether the game is sold out, but what the effect of televising the game will be on gate receipts and other in-stadium revenues.

Still another difficulty is that teams can use the threat of blackouts as a strategic marketing tool. A team may know that attendance is not affected by whether a game is televised locally, but still can market the opportunity to avoid a blackout. A firm that buys the last block of tickets just before the blackout deadline can then claim credit for lifting the blackout. For example, a local restaurant bought the remaining unsold tickets to the last Buffalo Bills home game in 2010 to assure that the game would be televised. Thus, the actual number of sell-outs is likely to decline by a few games if blackouts are eliminated and, as a result, a team sponsor (or in rare cases the team itself) no longer has an incentive to buy the last remaining tickets to lift a blackout.

Based on these observations, one should not be surprised that economists have not found a significant effect of live telecasts of local games on ticket sales in the NFL. In sports in which sell-outs are much less common and teams do not have extensive season ticket sales, as is the case for many teams in baseball and European soccer, some studies find that live telecasts do affect ticket sales. In these cases, whether a substitution effect is present depends on specific circumstances and varies among leagues and locations. The only robust finding of a negative effect of televised games on attendance is when a game in a league with a higher classification is televised in a locality where a game in a league of lesser classification is played simultaneously. Thus, MLB telecasts reduce attendance at minor league games, and telecasts of English Premier League games reduce attendance at games in the lower divisions of English soccer. These results have no relevance to the effect of the FCC's blackout rules on the NFL.

NFL officials express concern about no-shows as well as ticket sales. Economists have studied whether blackouts affect the number of no-shows. The research strategy in

these studies is to undertake an econometric analysis of the difference between (or ratio of) actual attendance and the number of tickets sold. These studies, too, face a complicated econometric problem. Only teams that do not sell a large number of season tickets are likely to have blackouts and these teams are likely to be of low quality. Hence these teams are most susceptible to having a larger proportion of no-shows. In addition, the extent to which televising a game causes no-shows is likely to depend on weather conditions at game time. Bad weather is likely to cause more no-shows, but it is also likely to reduce the demand for the tickets that remain unsold a few days before the game when fans have some information about weather conditions at the game. Disentangling the separate effects of team quality, weather and blackouts on attendance is difficult.

One result that reflects this complexity is that when no-shows are regressed on the qualities of the teams in the game, weather indicators, local socioeconomic variables and an indicator variable for a blackout, the coefficient on NFL blackouts is negative – that is, blacked out games have lower attendance. When blackouts are interacted with other factors that are likely to influence no-shows, the effect of blackouts on attendance at NFL games becomes small but positive when the weather is bad, but otherwise is not significant. On a cold day with wind and rain or snow, a locally televised game will have a few hundred more no-shows (less than one percent of ticket sales).

The results for the NFL are consistent with the television policies of teams in other American sports leagues in which the team, not the league, determines the frequency with which its home games will be televised locally. If televising games substantially reduced attendance, one would not expect that teams would televise all or nearly all of their home games. Extensive local telecasting of home games constitutes

evidence that teams are benefited rather than harmed by live telecasts of home games.

Effect on Over-the-Air Television

The argument that eliminating the FCC's blackout rules will cause the NFL to abandon free, over-the-air television networks is based on the premise that blackouts significantly affect attendance and revenues. If there is no such effect, then ending the FCC's blackout rules cannot possibly cause a migration away from free television.

Notwithstanding the effects of blackouts, the NFL and other sports are switching televised games from over-the-air networks to MVPDS channels. The NFL already has switched *Monday Night Football* (17 games) from ABC to ESPN, and in 2012 will televise 15 Thursday night games on *NFL Network.* This trend has nothing to do with blackouts, but instead reflects the continuing shift of viewing time away from over-the-air networks as MVPDS penetration has grown to about 90 percent of the population.

If the NFL eliminated its blackout rules altogether, the effect would be to enable current rights holders – three over-the-air networks, ESPN and the NFL itself – to broadcast a few more games in the home team's market. This change would increase the value of the television rights to broadcasters, which thereby would allow the NFL to charge more for these rights. There is no basis for believing that the value of these rights would increase by a different proportion between over-the-air and MVPDS broadcasters. In either case, rights holders gain viewers in the home team's local market. Thus, a change in blackout policy will not alter the relative attractiveness of over-the-air and MVPDS broadcasters to the NFL.

The NFL's broadcast policy is subject to another strategic consideration beyond

the short-run difference in the amount of revenue that MVPDS and over-the-air networks will pay for television rights. The high and growing profits of the NFL create an incentive for new leagues to enter. At present, the nation's second largest metropolitan area (Los Angeles) lacks an NFL franchise, and the two teams in the largest metropolitan area (New York) share a stadium in New Jersey, which leaves the eastern portion of the New York region without a conveniently located team.

Because television revenue accounts for over half of the revenue of the NFL, an important consideration for a new league is whether it can sell its television rights to a national network. All four major national networks, including ABC through its ownership of ESPN, have a stake in protecting the value of their NFL television rights. If the NFL removed its games from one of these networks, the abandoned network would be in a position to televise a new league, just as ABC did when the AFL was created and NBC did when the ill-fated XFL was launched in 2001. Neither of these networks held rights to televise NFL games when the new league was formed.

CONCLUSIONS

Research on the economics of sports and broadcasting lends no support to the concerns that have been expressed by the NFL and broadcasters. There is no evidence that the current blackout practices of the NFL have a significant effect on attendance, revenues, profits and the allocation of television rights between over-the-air and MVPDS broadcasters. The current FCC rules do not pertain to the actual blackout practices in any league except the NFL, and even in the NFL, the FCC's blackout rules are more symbolic than real. If the FCC eliminates its blackout rules, the NFL can continue the status quo

through provisions in its television contracts.

Blackout rules were created in the mid 20th Century, before professional sports attained its current popularity and financial stability. Steady growth in demand for both attendance and television rights have caused dramatic increases in ticket prices, television rights fees, revenues and profits, especially in the NFL. The NFL's defense of blackout rules hinges on their financial significance, yet the available evidence indicates that these rules have at best a very minor effect of the NFL's financial performance.

The main reasons to abandon the FCC's blackout rules are, first, to get rid of unnecessary regulation and, second, to erase an official government endorsement of an NFL policy that harms consumers and that has been voluntarily abandoned by all other professional sports leagues. As stated by Commissioner Goodell, the NFL sees blackouts as a means for "driving people to … stadiums." Blackouts have no significant effect on ticket sales in the NFL and increase no-shows only when the weather is bad. The issue in deciding whether to continue the FCC's blackout rules accurately can be characterized as follows: should the federal government assist the NFL in forcing a few hundred people a few days per year to choose between not seeing a game and attending the game in bad weather, while simultaneously preventing fans who do not have tickets from watching the game on television?

References

Alavy, Kevin, Alison Gaskell, Stephanie Leach and Stefan Szymanski, "On the Edge of Your Seat: Demand for Football on Television and the Uncertainty of Outcome Hypothesis," *International Journal of Sport Finance* Vol. 5, No. 2 (May 2010), pp. 75-95.

Allan, Grant, and Graeme Roy, "Does Television Crowd out Spectators?" *Journal of Sports Economics* Vol. 9, No. 6 (December 2008), pp. 592-605.

Bachman, Katy, "FCC Seeks Comment on NFL Blackout Rule: League Regs Forced Local TV Stations to Black Out 16 Games," *Ad Week* January 31, 2012, at http://www.adweek.com/news/advertising-branding/fcc-seeks-comment-nfl-blackout-rule-137803.

Baimbridge, Mark, Samuel Cameron and Peter Dawson, "Satellite Television and the Demand for Football: a Whole New Ball Game?" *Scottish Journal of Political Economy* Vol. 43, No. 3 (August 1996), pp. 317-333.

Borland, Jeff, "The Demand for Australian Rules Football," *Economic Record* Vol. 63, No. 3 (September 1987), pp. 220-230.

_____ and Jenny Lye, "Attendance at Australian Rules Football: A Panel Study," *Applied Economics* Vol. 24, No. 9 (September 1992), pp. 1053-1058.

_____ and Robert MacDonald, "The Demand for Sport," *Oxford Review of Economic Policy* Vol. 19, No. 4 (Winter 2003), pp. 478-502.

Buraimo, Babatunde, David Forrest and Robert Simmons, "Insights from Modelling Match Attendance in Football," *Journal of the Operations Research Society* Vol. 60, No. 2 (February 2009), pp. 147-155.

Buraimo, Babtunde, and Robert Simmons, "A Tale of Two Audiences: Spectators, Television Viewers, and Outcome Uncertainty in Spanish Football," *Journal of Economics and Business* Vol. 61, No. 4 (July-August 2009), pp. 326-338.

Carmichael, Fiona, Janet Millington, and Robert Simmons, "Elasticity of Demand for Rugby League Attendance and the Impact of BSkyB," *Applied Economics Letters* Vol. 6, No. 12 (December 1999), pp. 797-800.

Coates, Dennis, and Brad R. Humphreys, "Ticket Prices, Concessions and Attendance at Professional Sporting Events," *International Journal of Sport Finance* Vol. 2, No. 3 (August 2007), pp. 161-170.

Economic Report of the President Together with the Annual Report of the Council of Economic Advisers, U.S. Government Printing Office, February 2012.

Feddersen, Arne, and Armin Rott, "Determinants of Demand for Live Football: Features of the German National Football Team," *Journal of Sports Economics* Vol. 12, No. 3 (May 2011), pp. 352-369.

Fizel, John, and Randall W. Bennett, "The Impact of College Football Telecasts on College Football Attendance," *Social Science Quarterly* Vol. 70, No. 4 (December 1989), pp. 980-988.

Forrest, David, Robert Simmons and Babatunde Buraimo, "Outcome Uncertainty and the Couch Potato Audience," *Scottish Journal of Political Economy* Vol. 52, No. 4 (October 2005), pp. 641-661.

Fort, Rodney D., "Inelastic Sports Pricing," *Managerial and Decision Economics* Vol. 25, No. 2 (March 2004), pp. 87-94.

Freeman, Adam, "NFL Teams Get around Blackouts, Why Can't Bucs?" *WTSP.com*, September 22, 2011, at http://www.wtsp.com/news/article/211846/4/NFL-teams-get-around-blackouts-why-cant-Bucs.

Horowitz, Ira, "Sports Broadcasting," in Roger G. Noll (ed.), *Government and the Sports Business*, Brookings Institution, 1974, pp. 275-323.

Kaempfer, William H., and Patricia L. Pacey, "Televising College Football: The Complementarity of Attendance and Viewing," *Social Science Quarterly* Vol. 67, No. 1 (March 1986), pp. 176-185.

Kirkendall, Josh, "NFL Commissioner Roger Goodell Comments on Blackout Policy During State Of The League Press Conference," *Cincy Jungle* February 3, 2012, at http://www.cincyjungle.com/2012/2/3/2769370/nfl-commissioner-roger-goodell-comments-on-blackout-policy-during.

McCarthy, Michael, "FCC Reviewing Sports Blackout Rules," *USA Today*, January 12, 2012, at http://content.usatoday.com/communities/gameon/post/2012/01/fcc-reviewing-sports-tv-blackout-rules-nfl-federal-communications-commission/1.

Michel, Lou, "Salvatore Saves Bills TV Fans from Blackout," *Buffalo News,* December 23, 2010, at http://www.buffalonews.com/sports/bills-nfl/article292399.ece.

Miller, Phillip, "An Overview of NFL Revenues and Costs," in Kevin G. Quinn (ed.), *The Economics of the National Football League*, Springer, 2011, pp. 55-77.

Mondello, Michael, "Media Economics of the NFL," in Kevin G. Quinn (ed.), *The Economics of the National Football League*, Springer, 2011, pp. 89-105.

Noll, Roger G., "Attendance and Price Setting," in Roger G. Noll (ed.) *Government and the Sports Business*, Brookings Institution, 1974, pp. 115-157.

_____, "Broadcasting and Team Sports," *Scottish Journal of Political Economy* Vol. 54, No. 3 (July 2007), pp. 400-421.

Notte, Jason, "NFL Blackouts: 16 Games in 2011, NFL Cares 0," *The Street*, January 2, 2012, at http://www.thestreet.com/story/11360934/3/nfl-blackouts-16-games-in-2011-nfl-cares-0.html.

Price, Donald I., and Kaber C. Sen, "The Demand for Game Day Attendance in College Football: An Analysis of the 1997 Division I-A Season," *Managerial and Decision Economics* Vol. 24, No. 1 (January-February 2003), pp. 35-46.

Putsis, William P., Jr., and Subrata K. Sen, "Should NFL Blackouts Be Banned?" *Applied Economics* Vol. 32, No. 12 (October 2000), pp. 1495-1507.

Quirk, James, and Rodney D. Fort, *Pay Dirt: The Business of Professional Team Sports*, Princeton University Press, 1992.

Reedy, Joe, "Goodell Defends NFL's Blackout Policy," *Cincinnati.com*, February 4, 2012, at http://news.cincinnati.com/article/20120203/SPT02/302030047/Goodell-defends-NFL-s-blackout-policy.

Roberts, Gary R., "Pirating Satellite Signals of Blacked-Out Sports Events: A Historical Policy Perspective," *Columbia-VLA Journal of Law and the Arts* Vol. 11, No. 3 (1986-1987), pp. 363-386.

John J. Siegfried and C. Elton Hinshaw, "Professional Football and the Anti-Blackout Law," *Journal of Communications* Vol. 27, No. 3 (September 1977), pp. 169-174.

_____ and _____, "The Effect of Lifting Television Blackouts on Professional Football No-Shows," *Journal of Economics and Business* Vol. 32, No. 1 (Fall 1979), pp. 1-13.

Swopes, Jr., Herbert Bayard, "Swopes Sees Tele Stimulating Sports Business; Says It Creates 'Experts,' Makes Paying Fans," *Billboard*, September 13, 1947, p. 14.

Tainsky, Scott, "Television Broadcast Demand for National Football League Contests," *Journal of Sports Economics* Vol. 11, No. 6 (December 2010), pp. 629-640.

TV Basics, Television Bureau of Advertising, December 2011.

Welki, Andrew M., and Thomas J. Zlatoper, "U.S. Football Professional Game Day Attendance," *Atlantic Economic Journal* Vol. 27, No. 3 (September 1999), pp. 285-298.