

APPENDIX

A CONTEXT

A.1 VIOLENCE IN ARGENTINEAN FOOTBALL

Figure A.1: Deaths from Violence in Argentinean Football



This Figure shows the number of deaths due to episodes of violence in stadiums during professional football games in Argentina. The database was constructed based on the information provided by the NGO “Salvemos el fútbol” and published by the newspaper “La Nación”.

Figure A.1 shows data from all deaths from violence in Argentinean football, including the deaths of supporters of teams from lower divisions. During the period of this study (from 2011 to 2014), there were 49 deaths, 28 of supporters from first division teams, and 21 from lower division teams. Out of the 28 deaths from first division team supporters, 23 of them occurred in episodes orthogonal to any game (in different venues and times), and most deaths (20) were caused by clashes between supporters of the same team due to internal conflicts. Most deaths were *not* caused by clashes between host and visiting supporters on a match day and venue. Finally, from the beginning of 2011 until the ban was implemented on 10 June 2013, there were 17 deaths of supporters from first division teams, and from 10 June 2013 until the end of 2014, there were 11 deaths of supporters from first division teams. While the number of deaths continued to be high, the trend after the ban did not increase, and if anything, decreased. One reason we conjecture that can explain the high remaining level of deaths after the ban could be that the great majority of the deaths did not happen during the games and are not due to clashes between two different teams’ supporters. Finally, it is important to note that no first division football player was directly threatened, injured, or killed in any of these violent episodes in Argentinean football.

A.2 NON-RANDOM CHANGES OF ARGENTINE FOOTBALL ORGANIZATION SINCE 2015

In this Appendix we enumerate the most salient changes that occurred in the organization of the Argentinean football from January 2015 to date. We first describe the structure of the tournament of the first division during the period of analysis of this paper, and then introduce the changes chronologically.

STRUCTURE OF THE TOURNAMENT DURING 2011-2014

During the period of analysis of this paper (2011-2014), there were two tournaments in each season following the European calendar: the Apertura tournament played in the second half of the calendar year, and the Clausura tournament played in the first half of the following year. There were 20 teams per season. At the end of the season, the two teams with the worst average in the relegation table (average points scored in the last four seasons) were relegated and replaced by the two best teams from the second division tournament. This structure was kept throughout the period of analysis of this paper. However, from 2015 onward, there were several major changes in the organization of the tournament that make it impossible to use the data from 2015 onward for a sensible econometric analysis (For detailed information, see here).

CHANGES IN THE STRUCTURE OF THE TOURNAMENT SINCE 2015

Table A.1 presents the structure of the seasons from 2011 to 2021, with the number of teams participating, number of teams relegated, number of teams promoted, and an indication of whether visiting and/or home supporters were allowed in stadiums. As it can be seen, the structure of the seasons starting in 2015 is significantly different from structure of the seasons 2011-2014.

First, in the 2015 season, there was a massive promotion of ten teams. There was also a single tournament during the whole calendar year (instead of Apertura and Clausura), with thirty teams in one round. Each team played against 16 teams only, and the roster was not randomly chosen. In the first part of 2016, a short new tournament was held, with the teams divided into two zones, the winners of which played the final that crowned the champion. The aim was to return to the European calendar with the biannual tournaments. In the 2016-17 season: a new relegation and promotion regime was implemented: two promotions and 4 relegations, to progressively reduce the number of teams to twenty-two. In 2019, given the Covid-19 pandemic, relegation was suspended for the 2019-20 and 2021 seasons, planned to be resumed at the end of the 2022 season. In the meantime, the promotion of two teams per season has continued, which is gradually increasing the number of participants.

The changes due to Covid were as follows. From 17 March 2020 to 30 March 2020 all games were suspended. After this, there were different measures depending on the province, and only on 30 October 2020 home supporters were allowed to go only to a maximum number (about 30) In what regards to visitors' supporters, the idea that they would

Table A.1: Structure of the Seasons

Season	Number of teams			Supporters	
	No. of teams participating	No. of teams relegated	No. of teams promoted	Visiting supporters	Home supporters
	(1)	(2)	(3)	(4)	(5)
<u>Panel A: Seasons in the analysis sample</u>					
2011-12	20	2	2	Allowed	Allowed
2012-13	20	2	2	Allowed	Allowed
2013-14	20	2	2	From 06/13: not allowed	Allowed
2014	20	2	2	Not allowed	Allowed
<u>Panel A: Seasons not included in the analysis sample</u>					
2015	30	2	2	Not allowed	Allowed
2016-17	30	4	2	Not allowed	Allowed
2017-18	28	4	2	Not allowed	Allowed
2018-19	26	4	2	Not allowed	Allowed
2019-20 (*)	24	0	2	Not allowed	Allowed
2021	26	0	2	Not allowed	Partially Allowed

This table presents the structure of the Argentinean first division seasons from 2011 to 2021, with the number of teams participating (col. 1), number of teams relegated to second division (col. 2), number of teams from second division promoted to first division (col. 3), and an indication of whether visiting (col. 4) and/or home supporters (col. 5) were allowed in stadiums.

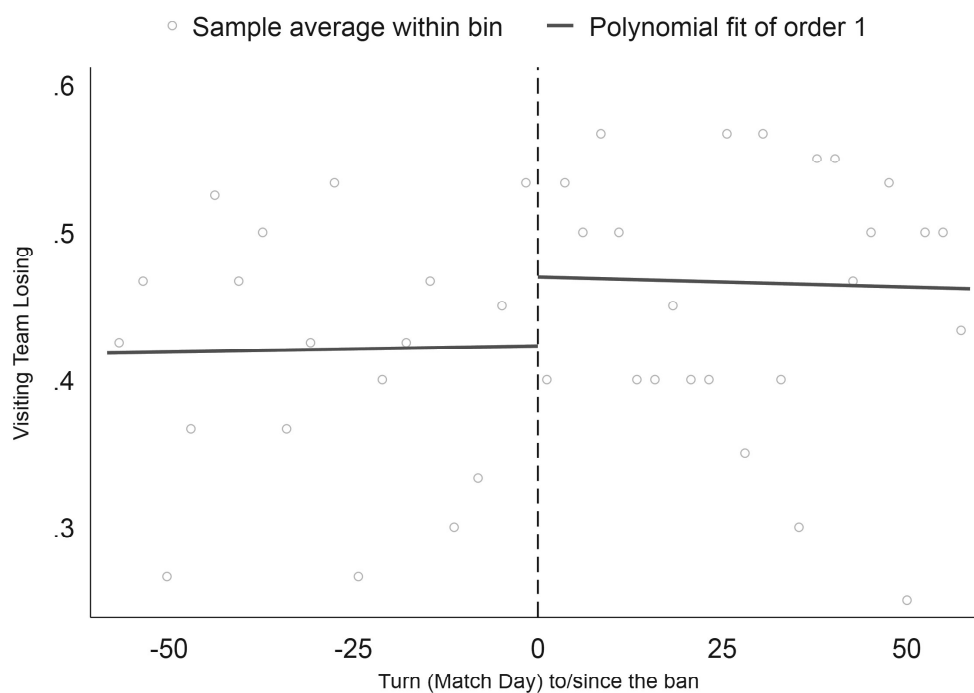
be allowed to come back was latent since 2015 but was never implemented in a systematic way. We are aware that some visitor supporters were allowed to be present, in some games, in a non-random way. Unfortunately, there is no systematic evidence of the games in which this happened. During this time, some visitors would come to the stadium “incognito”. In some games, and for some teams, visitors’ supporters were allowed to go to the stand of the stadium typically left for visiting supporters. This happened in different ways. In some sporadic games outside the city of Buenos Aires, the visitor supporters were allowed to go to the stands of the stadium dedicated to visitors’ supporters. These were some few games, non-randomly chosen typically when a big-5 team visited a small team outside the city of Buenos Aires (e.g. some games that River or Boca played in Mendoza against Godoy Cruz (here), in Mar del Plata against Aldosivi - here, or in Santiago del Estero against Central Córdoba - here). In some other sporadic games, the visitor supporters were allowed to go to the stands of the stadium dedicated to visitors’ supporters but as neutral supporters. That

means, that these supporters were not be allowed to wear a jersey or flags of their teams, although this rule was only partially abided (see here (August 2022), or here (Feb 2022) . In other cases, in which neither visitors nor neutral supporters were allowed, there were visitor supporters infiltrated among local supports. This became known in the cases when the “infiltrated” supporters were discovered by the police or the local supporters, and triggered violence (for example, here (Dec 2021), and here (August 2022)). All these games were sporadic and carefully chosen.

The decision to play with visitors was discussed and agreed at many levels, game by game, and using data from 2015 onwards would create selection concerns in our study. Moreover, there is no systematic recollection of which games deviated from the “no-visitor ban” rule. This, together with the major changes that occurred from 2015 owners in the organization of the Argentinean football league, make us lead to the conclusion that including data from 2015 in the analysis would be a mistake.

B ADDITIONAL DESCRIPTIVE STATISTICS

Figure B.1: Share of Games Lost by the Visiting Team



This Figure shows the share of games lost by the visiting team in the 590 games played before and the 590 games played after the ban and two linear fits, before and after. Evenly spaced mimicking variance number of bins using spacings estimators.

Table B.1: Visitor Losing - Raw Averages

	Mean (1)	SD (2)	N. of games (3)
<u>Panel A: League Games</u>			
2011-2012 Apertura	.353	.480	190
2011-2012 Clausura	.437	.497	190
2012-2013 Apertura	.411	.493	190
2012-2013 Clausura	.411	.493	190
2013-2014 Apertura	.468	.500	190
2013-2014 Clausura	.458	.499	190
2014	.468	.500	190
<u>Panel B: Cup Games</u>			
2011-2012	.444	.501	63
2012-2013	.491	.504	55
2013-2014	.465	.505	43
2014	.661	.477	62

This table reports the raw averages of the main variable of interest, games ended with a defeat for the visiting team, by half-season for the league games (Panel A) and by season for the cup games (Panel B). Column (1) reports the average values and Column (2) reports the standard deviations and column (3) the number of games played in each season or half-season.

C ALTERNATIVE SPECIFICATIONS

Table C.1: Logit Regressions

Maximum Likelihood Estimation								
Dependent Variable: <i>Dummy for losing/not losing a match for the visiting team</i>								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Presence of the Ban	0.059** (0.027)	0.059** (0.026)	0.059** (0.029)	0.059** (0.027)	0.027* (0.015)	0.093*** (0.031)	0.056* (0.029)	0.111** (0.045)
Dummies Home Team					✓		✓	
Dummies Visiting Team						✓	✓	
Dummies Match								✓
<i>N</i>	1330	1330	1330	1330	1330	1330	1330	856
Number of Clusters		25	25	550	25	25	550	295
Cluster Home Team		✓			✓			
Cluster Visiting Team			✓			✓		
Cluster Match				✓			✓	✓

Maximum likelihood estimation of a Logit model of the effect of the ban on the probability of losing a game for the visiting team. Controls include dummies for home team in Columns (5) and (7), dummies for visiting team in Columns (6) and (7), and dummies for game in Column (8). Beta coefficients reported and robust standard errors in parentheses. Standard errors are clustered by home team in Columns (2) and (5), by visiting team in Columns (3) and (6) and by game interaction in Columns (4), (7) and (8). *** significant at 1%, ** significant at 5%, * significant at 10%.

Table C.2: Main Regression: Twoway Clustering

OLS Estimation								
Dependent Variable: <i>Dummy for losing/not losing a match for the visiting team</i>								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Presence of the Ban	0.059** (0.027)	0.059** (0.026)	0.059* (0.029)	0.059** (0.027)	0.046* (0.024)	0.087*** (0.029)	0.075*** (0.022)	0.081*** (0.024)
Dummies Home Team					✓		✓	
Dummies Away Team						✓	✓	
Dummies Match								✓
<i>N</i>	1330	1330	1330	1330	1330	1330	1330	1330
Number of Clusters		25	25	25-25	25	25	25-25	25-25
Cluster Home Team		✓		✓	✓		✓	✓
Cluster Away Team			✓	✓		✓	✓	✓

OLS estimation of the effect of the ban on the probability of losing a game for the visiting team. Controls include dummies for home team in Columns (5) and (7), dummies for visiting team in Columns (6) and (7), and dummies for game in Column (8). Beta coefficients reported and robust standard errors in parentheses. Standard errors are clustered by home team in Columns (2) and (5), by visiting team in Columns (3) and (6) and by home and visiting team in Columns (4), (7) and (8). *** significant at 1%, ** significant at 5%, * significant at 10%.

D TIME CONTROLS

Table D.1: Main Regressions Controlling for Linear Turn Trend

OLS Estimation								
Dependent Variable: <i>Dummy for losing/not losing a match for the visiting team</i>								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Presence of the Ban	0.058** (0.027)	0.058** (0.026)	0.058* (0.029)	0.058** (0.027)	0.045* (0.024)	0.086*** (0.029)	0.074** (0.031)	0.080* (0.042)
Dummies Home Team					✓		✓	
Dummies Away Team						✓	✓	
Dummies Match								✓
<i>N</i>	1330	1330	1330	1330	1330	1330	1330	1330
Number of Clusters		25	25	550	25	25	550	550
Cluster Home Team		✓			✓			
Cluster Away Team			✓			✓		
Cluster Match				✓			✓	✓

OLS estimation of the effect of the ban the probability of losing a game for the visiting team. Controls include 1-19 turn of the game in all the specifications (linear trend), dummies for home team in Columns (5) and (7), dummies for visiting team in Columns (6) and (7), and dummies for match in Column (8). Beta coefficients reported and robust standard errors in parentheses. Standard errors are clustered by home team in Columns (2) and (5), by visiting team in Columns (3) and (6) and by match interaction in Columns (4), (7) and (8). *** significant at 1%, ** significant at 5%, * significant at 10%.

Table D.2: Main Regressions Controlling for Quadratic Turn Trend

OLS Estimation								
Dependent Variable: <i>Dummy for losing/not losing a match for the visiting team</i>								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Presence of the Ban	0.057** (0.027)	0.057** (0.026)	0.057* (0.030)	0.057** (0.027)	0.045* (0.023)	0.086*** (0.030)	0.074** (0.031)	0.077* (0.042)
Dummies Home Team					✓		✓	
Dummies Away Team						✓	✓	
Dummies Match								✓
<i>N</i>	1330	1330	1330	1330	1330	1330	1330	1330
Number of Clusters		25	25	550	25	25	550	550
Cluster Home Team		✓			✓			
Cluster Away Team			✓			✓		
Cluster Match				✓			✓	✓

OLS estimation of the effect of the ban the probability of losing a game for the visiting team. Controls include 1-19 turn of the game in all the specifications (quadratic trend), dummies for home team in Columns (5) and (7), dummies for visiting team in Columns (6) and (7), and dummies for match in Column (8). Beta coefficients reported and robust standard errors in parentheses. Standard errors are clustered by home team in Columns (2) and (5), by visiting team in Columns (3) and (6) and by match interaction in Columns (4), (7) and (8). *** significant at 1%, ** significant at 5%, * significant at 10%.

Table D.3: Main Regressions Controlling for Cubic Turn Trend

OLS Estimation								
Dependent Variable: <i>Dummy for losing/not losing a match for the visiting team</i>								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Presence of the Ban	0.058** (0.027)	0.058** (0.026)	0.058* (0.030)	0.058** (0.027)	0.045* (0.024)	0.086*** (0.031)	0.074** (0.031)	0.074* (0.041)
Dummies Home Team					✓		✓	
Dummies Away Team						✓	✓	
Dummies Match								✓
<i>N</i>	1330	1330	1330	1330	1330	1330	1330	1330
Number of Clusters		25	25	550	25	25	550	550
Cluster Home Team		✓			✓			
Cluster Away Team			✓			✓		
Cluster Match				✓			✓	✓

OLS estimation of the effect of the ban the probability of losing a game for the visiting team. Controls include 1-19 turn of the game in all the specifications (cubic trend), dummies for home team in Columns (5) and (7), dummies for visiting team in Columns (6) and (7), and dummies for match in Column (8). Beta coefficients reported and robust standard errors in parentheses. Standard errors are clustered by home team in Columns (2) and (5), by visiting team in Columns (3) and (6) and by match interaction in Columns (4), (7) and (8). *** significant at 1%, ** significant at 5%, * significant at 10%.

Table D.4: Main Regressions Controlling for Pre-trends Following Goodman-Bacon (2021)

	OLS Estimations							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<u>Panel A: First Stage</u>								
Dependent Variable: <i>Dummy for losing/not losing a match for the visiting team</i>								
Matchday	0.008** (0.003)	0.008* (0.004)	0.008*** (0.003)	0.008** (0.003)	0.008* (0.004)	0.008** (0.003)	0.008** (0.003)	0.006 (0.008)
<i>N</i>	739	739	739	739	739	739	739	739
Number of Clusters		22	22	443	22	22	443	443
<u>Panel B: Second Stage</u>								
Dependent Variable: <i>Residuals from the first stage regression</i>								
Presence of the Ban	0.054** (0.027)	0.054** (0.026)	0.054* (0.029)	0.054** (0.027)	0.041* (0.024)	0.082*** (0.029)	0.069** (0.031)	0.077* (0.042)
<i>N</i>	1330	1330	1330	1330	1330	1330	1330	1330
Number of Clusters		25	25	550	25	25	550	550
Dummies Home Team					✓		✓	
Dummies Away Team						✓	✓	
Dummies Match								✓
Cluster Home Team		✓			✓			
Cluster Away Team			✓			✓		
Cluster Match				✓			✓	✓

OLS estimation of the effect of the ban the probability of losing a game for the visiting team, controlling for pre-trends following Goodman-Bacon (2021). Panel A presents results of the first stage regression of the outcome, *Dummy for losing/not losing a match for the visiting team*, on a continuous time trend variable, *Match-day*, and controls, estimated in the pre-ban period. Panel A presents results of the second stage regression of the predicted residuals from first stage regression on the ban dummy and controls using the entire period of the analysis. Controls include dummies for home team in Columns (5) and (7), dummies for visiting team in Columns (6) and (7), and dummies for match in Column (8). Beta coefficients reported and robust standard errors in parentheses. Standard errors are clustered by home team in Columns (2) and (5), by visiting team in Columns (3) and (6) and by match interaction in Columns (4), (7) and (8). *** significant at 1%, ** significant at 5%, * significant at 10%.

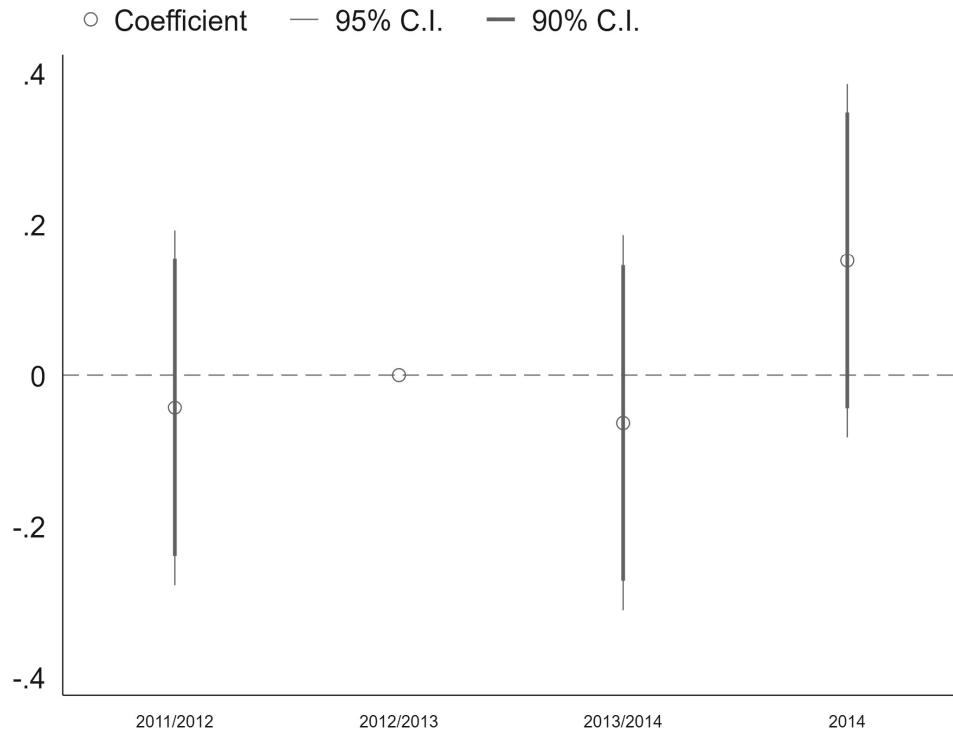
E ADDITIONAL RESULTS

Table E.1: Effect of the Ban on Goals Scored

	Maximum Likelihood Estimation						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>Panel A</u>							
Dependent Variable: <i>Number of goals scored by the local team</i>							
Presence of the Ban	1.176 (0.117)	1.176* (0.106)	1.176 (0.142)	1.176* (0.114)	1.136 (0.108)	1.291** (0.166)	1.257* (0.148)
<u>Panel B</u>							
Dependent Variable: <i>Number of goals scored by the visiting team</i>							
Presence of the Ban	0.947 (0.0964)	0.947 (0.100)	0.947 (0.106)	0.947 (0.0948)	0.948 (0.112)	0.899 (0.123)	0.897 (0.112)
<u>Controls</u>							
Dummies Home Team					✓		✓
Dummies Visiting Team						✓	✓
<i>N</i>	1330	1330	1330	1330	1330	1330	1330
Number of Clusters		25	25	550	25	25	550
Cluster Home Team		✓			✓		
Cluster Visiting Team			✓			✓	
Cluster Match				✓			✓

Panel A: Maximum Likelihood estimation of an Ordered Logit Model of the effect of the ban on the number of goals scored by the home team. Panel B: Maximum Likelihood Estimation of an Ordered Logit Model of the effect of the ban on the number of goals scored by the visiting team. Controls include dummies for home team in Columns (5) and (7) and dummies for visiting team in Columns (6) and (7). Beta coefficients reported and robust standard errors in parentheses. Standard errors are clustered by home team in Columns (2) and (5), by visiting team in Columns (3) and (6) and by game interaction in Columns (4), (7). *** significant at 1%, ** significant at 5%, * significant at 10%.

Figure E.1: Event Study Coefficients - Copa



This Figure plots OLS estimation coefficients of the effect of the season dummies on the probability of losing a game for the visiting team in Copa games. The 2012-2013 *clausura* half season dummy is taken as reference point and is omitted from the regression. Controls include dummies for visiting team. Standard errors are clustered by local and visiting team.

F SUBSAMPLE SENSITIVITY ANALYSIS

Table F.1: Main Regressions Excluding Promoted and Relegated Teams Just After the Ban

OLS Estimation								
Dependent Variable: <i>Dummy for losing/not losing a match for the visiting team</i>								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Presence of the Ban	0.058*	0.058*	0.058*	0.058*	0.053*	0.069*	0.064*	0.071*
	(0.033)	(0.028)	(0.033)	(0.032)	(0.026)	(0.033)	(0.034)	(0.042)
Dummies Home Team					✓		✓	
Dummies Visiting Team						✓	✓	
Dummies Match								✓
<i>N</i>	904	904	904	904	904	904	904	904
Number of Clusters		19	19	315	19	19	315	315
Cluster Home Team		✓			✓			
Cluster Visiting Team			✓			✓		
Cluster Match				✓			✓	✓

OLS estimation of the effect of the ban on the probability of losing a game for the visiting team. Sample: all games but the ones played by the teams that got promoted or relegated in 2013, i.e. *Independiente, Union Santa Fe, San Martin de Tucumán, Olimpo de Bahía Blanca, GELP and Rosario Central*. Controls include dummies for home team in Columns (5) and (7), dummies for visiting team in Columns (6) and (7), and dummies for game in Column (8). Beta coefficients reported and robust standard errors in parentheses. Standard errors are clustered by home team in Columns (2) and (5), by visiting team in Columns (3) and (6) and by game interaction in Columns (4), (7) and (8). *** significant at 1%, ** significant at 5%, * significant at 10%.

Table F.2: Main Regressions Excluding all Promoted and Relegated Teams During the Time-span of the Study

OLS Estimation								
Dependent Variable: <i>Dummy for losing/not losing a match for the visiting team</i>								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Presence of the Ban	0.079* (0.046)	0.079** (0.034)	0.079* (0.040)	0.079* (0.046)	0.080** (0.034)	0.083* (0.041)	0.084* (0.046)	0.093* (0.054)
Dummies Home Team					✓		✓	
Dummies Visiting Team						✓	✓	
Dummies Match								✓
<i>N</i>	462	462	462	462	462	462	462	462
Number of Clusters		12	12	132	12	12	132	132
Cluster Home Team		✓			✓			
Cluster Visiting Team			✓			✓		
Cluster Match				✓			✓	✓

OLS estimation of the effect of the ban on the probability of losing a game for the visiting team. Sample: all games but the ones played by the teams that got promoted or relegated during the whole analyzed period. Controls include dummies for home team in Columns (5) and (7), dummies for visiting team in Columns (6) and (7), and dummies for game in Column (8). Beta coefficients reported and robust standard errors in parentheses. Standard errors are clustered by home team in Columns (2) and (5), by visiting team in Columns (3) and (6) and by game interaction in Columns (4), (7) and (8). *** significant at 1%, ** significant at 5%, * significant at 10%.

Table E.3: Main Regressions Excluding Lanús

OLS Estimation								
Dependent Variable: <i>Dummy for losing/not losing a match for the visiting team</i>								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Presence of the Ban	0.052*	0.052*	0.052*	0.052*	0.037	0.081**	0.067**	0.069
	(0.029)	(0.026)	(0.029)	(0.028)	(0.024)	(0.030)	(0.033)	(0.044)
Dummies Home Team					✓		✓	
Dummies Away Team						✓	✓	
Dummies Match								✓
<i>N</i>	1197	1197	1197	1197	1197	1197	1197	1197
Number of Clusters		24	24	503	24	24	503	503
Cluster Home Team		✓			✓			
Cluster Away Team			✓			✓		
Cluster Match				✓			✓	✓

OLS estimation of the effect of the ban on the probability of losing a game for the visiting team. Sample: all games but the ones played by Lanús. Controls include dummies for home team in Columns (5) and (7), dummies for visiting team in Columns (6) and (7), and dummies for game in Column (8). Beta coefficients reported and robust standard errors in parentheses. Standard errors are clustered by home team in Columns (2) and (5), by visiting team in Columns (3) and (6) and by game interaction in Columns (4), (7) and (8). *** significant at 1%, ** significant at 5%, * significant at 10%.

Table E.4: Main Regressions Excluding Estudiantes

OLS Estimation								
Dependent Variable: <i>Dummy for losing/not losing a match for the visiting team</i>								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Presence of the Ban	0.053*	0.053*	0.053	0.053*	0.038	0.085**	0.071**	0.075*
	(0.029)	(0.028)	(0.032)	(0.029)	(0.025)	(0.035)	(0.033)	(0.045)
Dummies Home Team					✓		✓	
Dummies Away Team						✓	✓	
Dummies Match								✓
<i>N</i>	1197	1197	1197	1197	1197	1197	1197	1197
Number of Clusters		24	24	503	24	24	503	503
Cluster Home Team		✓			✓			
Cluster Away Team			✓			✓		
Cluster Match				✓			✓	✓

OLS estimation of the effect of the ban on the probability of losing a game for the visiting team. Sample: all games but the ones played by Estudiantes. Controls include dummies for home team in Columns (5) and (7), dummies for visiting team in Columns (6) and (7), and dummies for game in Column (8). Beta coefficients reported and robust standard errors in parentheses. Standard errors are clustered by home team in Columns (2) and (5), by visiting team in Columns (3) and (6) and by game interaction in Columns (4), (7) and (8). *** significant at 1%, ** significant at 5%, * significant at 10%.

G REFEREE BEHAVIOR

Table G.1: Main Regressions Controlling for Red and Yellow Cards

OLS Estimation								
Dependent Variable: <i>Dummy for losing/not losing a match for the visiting team</i>								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Presence of the Ban	0.058** (0.027)	0.058** (0.024)	0.058** (0.027)	0.058** (0.026)	0.047** (0.021)	0.082*** (0.028)	0.071** (0.030)	0.078* (0.041)
Dummies Home Team					✓		✓	
Dummies Away Team						✓	✓	
Dummies Match								✓
<i>N</i>	1328	1328	1328	1328	1328	1328	1328	1328
Number of Clusters		25	25	550	25	25	550	550
Cluster Home Team		✓			✓			
Cluster Away Team			✓			✓		
Cluster Match				✓			✓	✓

OLS estimation of the effect of the ban the probability of losing a game for the visiting team. Controls include number of yellow cards awarded to home team, number of yellow cards awarded to visiting team, number of red cards awarded to home team, number of red cards awarded to visiting team, dummies for home team in Columns (5) and (7), dummies for visiting team in Columns (6) and (7), and dummies for match in Column (8). Beta coefficients reported and robust standard errors in parentheses. Standard errors are clustered by home team in Columns (2) and (5), by visiting team in Columns (3) and (6) and by match interaction in Columns (4), (7) and (8). *** significant at 1%, ** significant at 5%, * significant at 10%.

Table G.2: Main Regressions Controlling for Penalties Awarded

OLS Estimation								
Dependent Variable: <i>Dummy for losing/not losing a match for the visiting team</i>								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Presence of the Ban	0.052*	0.052**	0.052*	0.052*	0.040*	0.081***	0.069**	0.075*
	(0.027)	(0.025)	(0.029)	(0.027)	(0.023)	(0.029)	(0.031)	(0.042)
Dummies Home Team					✓		✓	
Dummies Away Team						✓	✓	
Dummies Match								✓
<i>N</i>	1328	1328	1328	1328	1328	1328	1328	1328
Number of Clusters		25	25	550	25	25	550	550
Cluster Home Team		✓			✓			
Cluster Away Team			✓			✓		
Cluster Match				✓			✓	✓

OLS estimation of the effect of the ban the probability of losing a game for the visiting team. Controls include number of penalties awarded to home team, number of penalties awarded to visiting team, dummies for home team in Columns (5) and (7), dummies for visiting team in Columns (6) and (7), and dummies for match in Column (8). Beta coefficients reported and robust standard errors in parentheses. Standard errors are clustered by home team in Columns (2) and (5), by visiting team in Columns (3) and (6) and by match interaction in Columns (4), (7) and (8). *** significant at 1%, ** significant at 5%, * significant at 10%.

Table G.3: Main Regressions Controlling for Cards and Penalties Awarded

OLS Estimation								
Dependent Variable: <i>Dummy for losing/not losing a match for the visiting team</i>								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Presence of the Ban	0.051*	0.051**	0.051*	0.051*	0.040*	0.076**	0.065**	0.072*
	(0.027)	(0.024)	(0.027)	(0.026)	(0.021)	(0.028)	(0.031)	(0.041)
Dummies Home Team					✓		✓	
Dummies Away Team						✓	✓	
Dummies Match								✓
<i>N</i>	1328	1328	1328	1328	1328	1328	1328	1328
Number of Clusters		25	25	550	25	25	550	550
Cluster Home Team		✓			✓			
Cluster Away Team			✓			✓		
Cluster Match				✓			✓	✓

OLS estimation of the effect of the ban the probability of losing a game for the visiting team. Controls include number of yellow cards awarded to home team, number of yellow cards awarded to visiting team, number of red cards awarded to home team, number of red cards awarded to visiting team, number of penalties awarded to home team, number of penalties awarded to visiting team, dummies for home team in Columns (5) and (7), dummies for visiting team in Columns (6) and (7), and dummies for match in Column (8). Beta coefficients reported and robust standard errors in parentheses. Standard errors are clustered by home team in Columns (2) and (5), by visiting team in Columns (3) and (6) and by match interaction in Columns (4), (7) and (8). *** significant at 1%, ** significant at 5%, * significant at 10%.

H STRATEGY OF MANAGERS

Table H.1: Main Regressions with Half-season and Round Dummies

OLS Estimation								
Dependent Variable: <i>Dummy for losing/not losing a match for the visiting team</i>								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Presence of the Ban	0.060** (0.028)	0.060** (0.027)	0.060* (0.032)	0.060** (0.027)	0.046* (0.024)	0.088** (0.032)	0.075** (0.031)	0.075* (0.042)
Dummies Home Team					✓		✓	
Dummies Visiting Team						✓	✓	
Dummies Match								✓
Dummy Half-Season	✓	✓	✓	✓	✓	✓	✓	✓
Dummies Week/Round	✓	✓	✓	✓	✓	✓	✓	✓
<i>N</i>	1330	1330	1330	1330	1330	1330	1330	1330
Number of Clusters		25	25	550	25	25	550	550
Cluster Home Team		✓			✓			
Cluster Visiting Team			✓			✓		
Cluster Match				✓			✓	✓

OLS estimation of the effect of the ban on the probability of losing a game for the visiting team controlling for dummy for half-season (Apertura/Clausura), and round dummies (from 1 to 19). Further controls include dummies for home team in Columns (5) and (7), dummies for visiting team in Columns (6) and (7), and dummies for game in Column (8). Beta coefficients reported and robust standard errors in parentheses. Standard errors are clustered by home team in Columns (2) and (5), by visiting team in Columns (3) and (6) and by game interaction in Columns (4), (7) and (8). *** significant at 1%, ** significant at 5%, * significant at 10%.

Table H.2: Main Regressions with Month Dummies

OLS Estimation								
Dependent Variable: <i>Dummy for losing/not losing a match for the visiting team</i>								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Presence of the Ban	0.068** (0.028)	0.068** (0.026)	0.068** (0.030)	0.068** (0.027)	0.054** (0.024)	0.096*** (0.030)	0.083*** (0.031)	0.096** (0.041)
Dummies Home Team					✓		✓	
Dummies Visiting Team						✓	✓	
Dummies Match								✓
Dummies Month	✓	✓	✓	✓	✓	✓	✓	✓
<i>N</i>	1330	1330	1330	1330	1330	1330	1330	1330
Number of Clusters		25	25	550	25	25	550	550
Cluster Home Team		✓			✓			
Cluster Visiting Team			✓			✓		
Cluster Match				✓			✓	✓

OLS estimation of the effect of the ban on the probability of losing a game for the visiting team controlling for month dummies. Further controls include dummies for home team in Columns (5) and (7), dummies for visiting team in Columns (6) and (7), and dummies for game in Column (8). Beta coefficients reported and robust standard errors in parentheses. Standard errors are clustered by home team in Columns (2) and (5), by visiting team in Columns (3) and (6) and by game interaction in Columns (4), (7) and (8). *** significant at 1%, ** significant at 5%, * significant at 10%.

Table H.3: Main Regressions Controlling for Lineups

OLS Estimation								
Dependent Variable: <i>Dummy for losing/not losing a match for the visiting team</i>								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Presence of the Ban	0.056** (0.027)	0.056** (0.021)	0.056* (0.027)	0.056** (0.026)	0.050** (0.020)	0.081*** (0.028)	0.076** (0.030)	0.079* (0.041)
Jaccard Home to Home	0.006** (0.003)	0.006** (0.002)	0.006** (0.003)	0.006** (0.003)	0.006** (0.002)	0.006** (0.003)	0.006** (0.003)	0.006 (0.004)
Jaccard Home to Visiting	-0.001 (0.003)	-0.001 (0.003)	-0.001 (0.003)	-0.001 (0.003)	0.001 (0.002)	-0.001 (0.003)	0.001 (0.003)	0.002 (0.005)
Jaccard Visiting to Home	-0.000 (0.003)	-0.000 (0.003)	-0.000 (0.003)	-0.000 (0.003)	-0.000 (0.003)	-0.001 (0.003)	-0.001 (0.003)	0.003 (0.004)
Jaccard Visiting to Visiting	-0.005* (0.003)	-0.005* (0.003)	-0.005 (0.004)	-0.005* (0.003)	-0.005* (0.003)	-0.006* (0.003)	-0.006** (0.003)	-0.009** (0.004)
Dummies Home Team					✓		✓	
Dummies Visiting Team						✓	✓	
Dummies Match								✓
<i>N</i>	1309	1309	1309	1309	1309	1309	1309	1309
Number of Clusters		25	25	550	25	25	550	550
Cluster Home Team		✓			✓			
Cluster Visiting Team			✓			✓		
Cluster Match				✓			✓	✓

OLS estimation of the effect of the ban on the probability of losing a game for the visiting team. Jaccard home(visiting) to home[visiting] refers to the similarity index between the lineup of the home(visiting) team to the other lineups of the same team in its home[visiting] games. The number of observations corresponds to the number of games with exactly 11 starting players per team. Controls include dummies for home team in Columns (5) and (7), dummies for visiting team in Columns (6) and (7), and dummies for game in Column (8). Beta coefficients reported and robust standard errors in parentheses. Standard errors are clustered by home team in Columns (2) and (5), by visiting team in Columns (3) and (6) and by game interaction in Columns (4), (7) and (8). *** significant at 1%, ** significant at 5%, * significant at 10%.

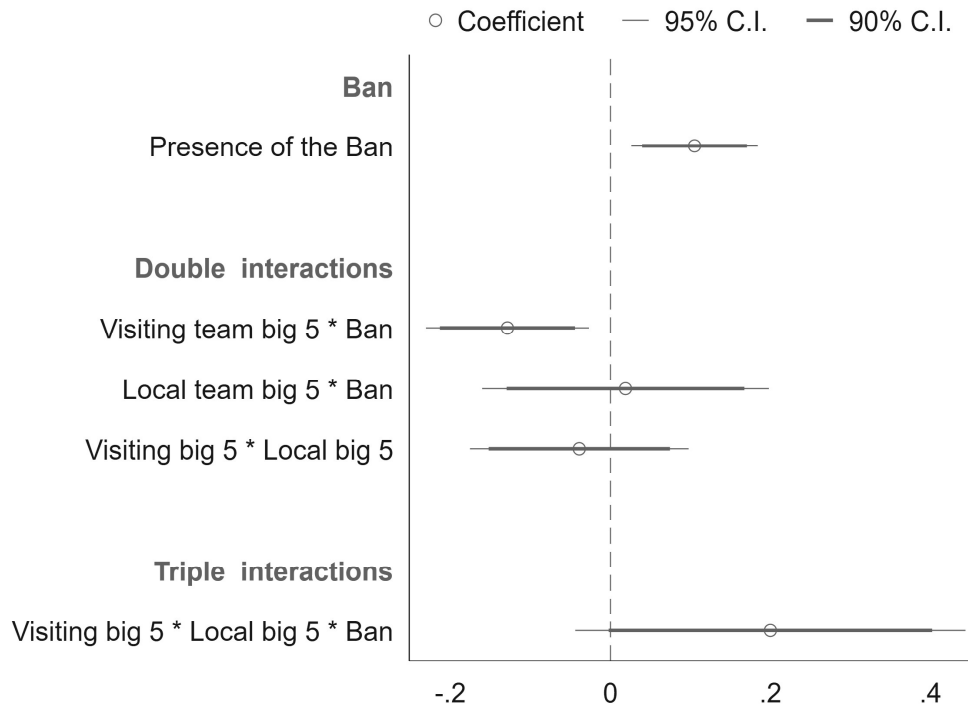
Table H.4: Main Regressions Controlling for Market Value

OLS Estimation								
Dependent Variable: <i>Dummy for losing/not losing a match for the visiting team</i>								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Presence of the Ban	0.059** (0.027)	0.059** (0.027)	0.059* (0.030)	0.059** (0.027)	0.048* (0.024)	0.086*** (0.029)	0.075** (0.031)	0.080* (0.041)
Market Value Home Team	0.050** (0.020)	0.050** (0.020)	0.050** (0.019)	0.050** (0.020)	0.000 (0.015)	0.050** (0.019)	0.003 (0.030)	-0.003 (0.041)
Market Value Visiting Team	-0.067*** (0.019)	-0.067*** (0.019)	-0.067*** (0.022)	-0.067*** (0.019)	-0.068*** (0.019)	-0.010 (0.022)	-0.012 (0.028)	-0.017 (0.037)
Dummies Home Team					✓		✓	
Dummies Visiting Team						✓	✓	
Dummies Match								✓
<i>N</i>	1330	1330	1330	1330	1330	1330	1330	1330
Number of Clusters		25	25	550	25	25	550	550
Cluster Home Team		✓			✓			
Cluster Visiting Team			✓			✓		
Cluster Match				✓			✓	✓

OLS estimation of the effect of the ban on the probability of losing a game for the visiting team. Market Value refers to the average value of a single player in million euros. Controls include dummies for home team in Columns (5) and (7), dummies for visiting team in Columns (6) and (7), and dummies for game in Column (8). Beta coefficients reported and robust standard errors in parentheses. Standard errors are clustered by home team in Columns (2) and (5), by visiting team in Columns (3) and (6) and by game interaction in Columns (4), (7) and (8). *** significant at 1%, ** significant at 5%, * significant at 10%.

I HETEROGENEOUS EFFECTS - GRAPHICAL EVIDENCE

Figure I.1: Heterogeneous Effects: The *Big-5*



This Figure plots OLS estimation coefficients of the effect of the effect of the ban on the probability of losing a game for the visiting team interacting the effect with (i) the home team being among the best five teams in the league, (ii) the visiting team being among the best five teams in the league and (iii) both teams being among the best five teams in the league. Controls include dummies for visiting team. Standard errors are clustered by visiting team.

J COVID-19 PANDEMIC

Table J.1: Effect of the Covid-19 Closed-stadium Ban

OLS Estimation						
Dependent Variable: <i>Dummy for losing/not losing a match for the visiting team</i>						
	(1)	(2)	(3)	(4)	(5)	(6)
Covid Period	-0.054 (0.055)	-0.054 (0.040)	-0.054 (0.047)	-0.054 (0.055)	-0.053 (0.042)	-0.052 (0.049)
Dummies Home Team					✓	
Dummies Away Team						✓
<i>N</i>	325	325	325	325	325	325
Number of Clusters		26	26	325	26	26
Cluster Home Team		✓			✓	
Cluster Away Team			✓			✓
Cluster Match				✓		

OLS estimation of the effect of the Covid-19 ban on the probability of losing a game for the visiting team. Controls include dummies for home team in Columns (5) and (7), dummies for visiting team in Columns (6) and (7), and dummies for match in Column (8). The Sample used concerns all the games played in the First Division Argentinean League in 2021. Beta coefficients reported and robust standard errors in parentheses. Standard errors are clustered by home team in Columns (2) and (5), by visiting team in Columns (3) and (6) and by match interaction in Columns (4), (7) and (8). *** significant at 1%, ** significant at 5%, * significant at 10%.

K MARKET VALUE OF TEAMS

Table K.2: Number of Players with Reported Market Value by Team

Club	Season			
	2011	2012	2013	2014
Atlético de Rafaela	7	10	16	22
Club Atlético Boca Juniors	12	18	12	21
Estudiantes de La Plata	17	9	13	20
Club Atlético Rosario Central			8	20
Quilmes Atlético Club		5	13	18
Club Atlético Banfield	5			17
Club de Gimnasia y Esgrima La Plata			12	16
Defensa y Justicia				14
Club Deportivo Godoy Cruz	3	3	1	14
CA Independiente de Avellaneda	8	15		14
Arsenal de Sarandí FC	2	3	10	14
Club Atlético Lanús	9	13	5	13
Club Atlético Newell's Old Boys	8	9	9	12
Club Atlético Vélez Sarsfield	8	11	12	11
Olimpo de Bahía Blanca	7		6	10
Club Atlético River Plate		16	15	9
Racing Club de Avellaneda	5	11	9	9
Belgrano de Córdoba	4	3	10	5
Club Atlético Tigre	5	10	7	4
Club Atlético San Lorenzo de Almagro	8	9	8	2
CA Unión Santa Fé	4	8		
Argentinos Juniors	14	13	17	
Club Atlético Colón (Santa Fe)	8	5	13	
Club Atlético San Martín (SJ)	6	6		
CA All Boys Buenos Aires	11	13	18	
Average	7.55	9.5	10.7	13.25

This table reports the number of players for which we have a market value by team and season. The sample includes all the 820 players of teams playing in the First Argentinean League during the period of the analysis and reported in the Transfermarkt database with a player value greater than 0.

Table K.3: Average Market Value by Team

Club	Season			
	2011	2012	2013	2014
Club Atlético Boca Juniors	839,583	1,059,722	1,833,333	2,800,000
Club Atlético River Plate		3,112,500	2,096,667	2,377,778
Club Atlético Rosario Central			350,000	1,153,750
CA Independiente de Avellaneda	1,168,750	378,333		1,078,571
Racing Club de Avellaneda	3,610,000	775,000	694,444	919,444
Club Atlético Vélez Sarsfield	831,250	868,182	416,667	818,182
Club Atlético Lanús	1,266,111	469,231	580,000	801,923
Estudiantes de La Plata	1,705,882	433,333	551,923	703,750
Club Atlético Newell's Old Boys	321,875	515,000	2,433,333	679,167
Club Atlético Banfield	225,000			667,647
Club Deportivo Godoy Cruz	333,333	475,000	25,000	428,571
Atlético de Rafaela	335,714	642,500	368,750	402,273
Club de Gimnasia y Esgrima La Plata			739,583	362,500
Olimpo de Bahía Blanca	221,429		212,500	350,000
Defensa y Justicia				266,071
Quilmes Atlético Club		270,000	592,308	265,278
Arsenal de Sarandí FC	32,500	216,667	182,500	251,786
Belgrano de Córdoba	1,662,500	966,667	332,500	205,000
Club Atlético San Lorenzo de Almagro	896,875	2,061,111	1,475,000	200,000
Club Atlético Tigre	435,000	297,500	557,143	106,250
Club Atlético San Martín (SJ)	341,667	408,333		
Argentinos Juniors	426,786	792,308	794,118	
CA All Boys Buenos Aires	420,455	298,077	1,000,000	
Club Atlético Colón (Santa Fe)	450,000	550,000	653,846	
CA Unión Santa Fé	387,500	246,875		
Average	795,611	741,817	794,481	741,897

This figure reports the average market value of football players by team and season. The sample includes all the 820 players of teams playing in the First Argentinean League during the period of the analysis and reported in the Transfermarkt database with a player value greater than 0.