

Home Advantage and Referees: Evidence from Rugby's Pro14 League

Dr Peter Dawson
School of Economics
University of East Anglia

peter.dawson@uea.ac.uk

Patrick Massey
Compecon Ltd

pmassey@compecon.ie

Prof Paul Downward
School of Sport, Exercise
& Health Sciences
Loughborough University

p.downward@lboro.ac.uk

Paper presented to 10th Conference on Sport Economics
31st August 2018
University of Liverpool.

Outline of Presentation

1. Introduction
2. Literature Review
3. Pro14 – A brief history
4. Data
5. Model
6. Results
7. Some Conclusions
8. Future Work

Introduction

- Home Advantage commonly observed in sport
- Rugby Union particularly interesting:
 - Home advantage high
 - 65% of 1803 matches in sample home wins, 3% drawn.
 - Referee is an instrumental influence on the game (Page and Page, 2014).
 - History of using technology to review refereeing decisions - the Television Match Official (TMO).

Literature Review

- Home advantage common in many sports.
- Bias not due to officiating malfeasance - reflects how context of decision making can influence outcomes.
- Weight of evidence indicates crowd is main source of home advantage largely due to effects of crowd on referees (Nevill & Holder, 1999).
- Agency theory (Downward & Jones, 2007).
- Positive relationship between crowd size and referee home bias in Spanish football (Garicano, Palacios, & Prendergast, 2005).
- Match officials a key source of home bias (Dohmen & Sauermann, 2016).
- Boudreaux et al. (2017); Ponzio & Scoppa (2018) - shared stadiums - further support crowd effect hypothesis.

Evidence of Bias

- Discretionary official 'bias'
 - adding extra time in soccer
 - (Garicano et al, 2005; Sutter & Kocher, 2004).
 - awarding yellow and red cards
 - (Dawson et al. 2007; Downward & Jones 2007; Buraimo et al., 2010; Dawson & Dobson, 2020)

Evidence of Home Advantage in Rugby

- Six nations Thomas et al. (2008); Vaz et al. (2012)
- Currie cup (SA) Pretorious et al. (1999,2000).
- Super 14 Rugby Union and European Super League (Rugby league) Page and Page (2010).
- European Rugby Cup (Dawson et al 2016).

Increased Monitoring of Referees

- Additional on-field officials – results mixed.
 - North American college basketball (McCormick and Tollison, 1984).
 - NHL (Heckelman and Yates, 2003).
 - UEFA Champions League (Dawson, 2014).
- Technology.
 - Camera monitoring of strike calls in baseball (Hamrick & Rasp, 2015).
 - Decision Review System in cricket, (Borooah, 2016; Shivakumar, 2018).

Impact of Increased Monitoring of Officials.

- May induce higher performance and effort and reduce the effects of favouritism.
- May also result in over-reliance on back-up Leading to greater crowd pressure irritated by apparent indecisiveness of the officials
 - “You don’t know what you’re doing”.
- Organisational and rule changes in sport can have unintended consequences (Wright, 2014; Kendall & Lenten, 2017).

The Pro14

- Launched 2001/2 as Celtic League
- 15 teams - Ireland (4), Scotland (2), Wales (9).
- 2003/04 reduced to 12 teams
 - 5 Welsh, 4 Irish, 3 Scots
- 11 teams 2004/05, 10 teams 2007/08.
- 2010/11 Pro12 2 Italian teams added.
- 2017/18 Pro14 2 South African teams added
 - Switch to 2 conference format with playoffs.

Pro14 Refereeing Changes.

- 2007/08 Change in way referees appointed. Previously referee from a country not involved in the match except where both teams from same country – “Neutrality” requirement dropped (Rugby Week).
- 2007/08 TMOs to be appointed in all televised Celtic League matches to assist referee in relation to try scoring.
- 2013/14 TMO role expanded to include reviews of potential foul play.
- 2016/17 League commits to “neutral” TMOs and 1 neutral assistant referee – due to “supporter concerns” – previously TMO & assistant referees from home country – for financial reasons.

Significant Criticism of Pro14 Refereeing.

"Ultimately, if you are listening to a match on television and you hear an Irish TMO speaking at a match in Ireland, as happened with Connacht versus the Ospreys, you are going to think they are biased, even though we know they are not." Martin Anayi MD Pro12.

"Pro12 bosses must act NOW to solve major refereeing issues that are undermining its credibility."

(Simon Thomas Wales online, 02/03/2016)

"Guinness Pro12 to introduce neutral television match officials after spate of controversies ."

(Andy Howell, Wales online 23/08/2016)

Dataset

1803 Pro14 matches played between 2003/04 and 2017/18.

Data on all yellow and red cards and penalty tries.

In rugby yellow card results in player being excluded from game for 10 minutes (out of 80).

Referee can award a penalty try where try would have been scored but for foul play.

Also have data on number of penalties awarded against each team but only complete from 2012/13 onwards.