

## Published research by CCP members

### Policy Brief

# Substitution between leisure activities: a quasi-natural experiment using sports viewing and cinema attendance

**KEYWORDS:** Leisure, football, cinema, difference-in-difference, D12, J22.

**TYPE OF PUBLICATION:** Journal Article

**SUGGESTED CITATION:** Sofia Izquierdo Sanchez, Caroline Elliott & Robert Simmons (2016) Substitution between leisure activities: a quasi-natural experiment using sports viewing and cinema attendance, *Applied Economics*, 48:40, 3848-3860, DOI: 10.1080/00036846.2016.1145353

#### BACKGROUND

- This article considers the allocation of time between substitute leisure activities, treating working time as fixed.
- International football tournaments provide an opportunity to consider consumers' preferences for watching football and films in a quasi-natural experimental setting.

#### METHODOLOGY

- A trade-off between the two leisure activities is identified using a difference-in-difference methodology. Using an original, four-country data set, a large and robust negative effect of mega sports events on cinema admissions is identified.

#### KEY FINDINGS

- The results strongly support the idea that per capita box office revenues decrease when mega sports events take place. It is concluded that there is a clear substitution between cinema admissions and the viewing of mega sports events, specifically international football tournaments.
- The results add to the economic literature finding significant negative spill over effects from holding or participating in mega events.
- This article also highlights the presence of additional negative spill overs, in the form of displacement effects on other leisure industries when a large sports tournament takes place, even in a different country. These substitution effects are clearly not confined to the host country.
- Further research could usefully examine whether there are similar impacts on other leisure activities.

February 2016

*Substitution between leisure activities: a quasi-natural experiment using sports viewing and cinema attendance*

*Applied Economics Journal*

Published Research  
CCP Policy Brief

# Published research by CCP members

## Policy Brief

### POLICY ISSUES

- The negative spill over effects of hosting or participating in major sporting events should be reviewed thoroughly before the overall benefits to the economy is reported, given the level of substitutability between football and films.

---

### THE CCP

The Centre for Competition Policy (CCP), at the University of East Anglia, undertakes competition policy research, incorporating economic, legal, management and political science perspectives, that has real-world policy relevance without compromising academic rigour.

### FOR MORE INFORMATION

More information about CCP and its research is available from our website: [www.competitionpolicy.ac.uk](http://www.competitionpolicy.ac.uk)

### ABOUT THE AUTHOR

Sofia Izquierdo Sanchez is a Senior Lecturer in Economics at the University of Huddersfield.

Caroline Elliott is Deputy Dean of the Business School at Aston University. Before this Caroline was a Professor in Industrial Economics at the University of Huddersfield.

Rob Simmons is a Lecturer in Economics. He was educated at University of Warwick and University of Manchester and holds a doctorate from University of Leeds.