

# On-track versus Off-track Betting

An Investigation of Differential  
Performance

- Alistair Bruce  
*University of Nottingham*
- Johnnie Johnson  
*University of Southampton*
- Jane Yu  
*University of Nottingham*

# Home Asset Bias

- Preference for `home' vs `foreign' assets
- And for local vs non-local assets
- Superior returns to home/local assets
  
- Coval & Moskowitz JoF (99), JPE (01)
- Ivkovic & Weisbenner JoF (05)

# Why a Home Bias?

- Trading restrictions
- transactions costs
- linguistic, cultural factors
- ‘familiarity’
- information

# Horseshoe Betting

- Allows insight into home bias
- Focus on investor location
- On-track versus Off-track (parimutuel)
- Contrasting information environments

# The Hypothesis

- Returns to investors in the home market are higher than those to investors in the away market
- This draws both on the received 'wisdom' relating to home and away returns and on the apparent information advantages enjoyed by home bettors

# Comparative Performance

- 18914 horses, 2057 races, 66 tracks
- Aggregate return
- Mean return per race
- Signed ranks test

# Aggregate and Mean Returns

- Aggregate Returns

Home: 0.822      Away: 0.871

- Mean Returns

Home: 0.818      Away: 0.866



# Rank test

Mean Away Return – Mean Home Return

-ve: 963    +ve: 1094

Mean 0.0479

Significant (Wilcoxon, paired samples `t',  
Welch, Brown-Forsythe)

# Interpreting the Results

- Contrary to expectation
- Expectation = f (information)
- Re-evaluate comparative environments
- Other influential factors?

# Home vs Away: A Closer Look (1)

<b>ASPECT</b>	<b>Home</b>	<b>Away</b>
<b>Decision Environment</b>	Charged, Hi Excitement	Reflective, Lo Excitement
<b>Information Environment</b>		
<b><i>Forms</i></b>	Formal and Informal	Formal
<b><i>Access</i></b>	First-hand, Immediate	Filtered, Lagged
<b><i>Scope</i></b>	Comprehensive	Partial

# Home vs Away: A Closer Look (2)

**ASPECT**

**Home**

**Away**

**Better**

Mixed

Focused

**Motivation**

**Cognitive Strain**

High

Limited

# OLS Regressions

Dependent: returns per race

Independent:

ShinZ,  $\ln(\text{probwin})$ ,  $\ln(\text{volume})$

Home: ShinZ,  $\ln(\text{probwin})$  significant

Away:  $\ln(\text{probwin})$ ,  $\ln(\text{vol})$  significant