

GOLFING FOR INFORMATION: SOCIAL INTERACTIONS AND ECONOMICS CONSEQUENCES



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HIGHLIGHTS

Using golf games played to capture the **social interactions** among the company directors, we find that the golf pattern change significantly after the market shocks, and the companies benefit from social interactions by making better investments.

1. The golf patterns of the top managers of real estate companies change after the demand for new information increases.
2. No evidence of collusion. The likelihood of a pair of golfers to both win decreases.
3. The more informed developers bid a lower price in the land auctions, while the chance of winning remain unchanged.
4. The informed land acquisition generate significant negative spillover to the nearby housing price.

FIRST STAGE

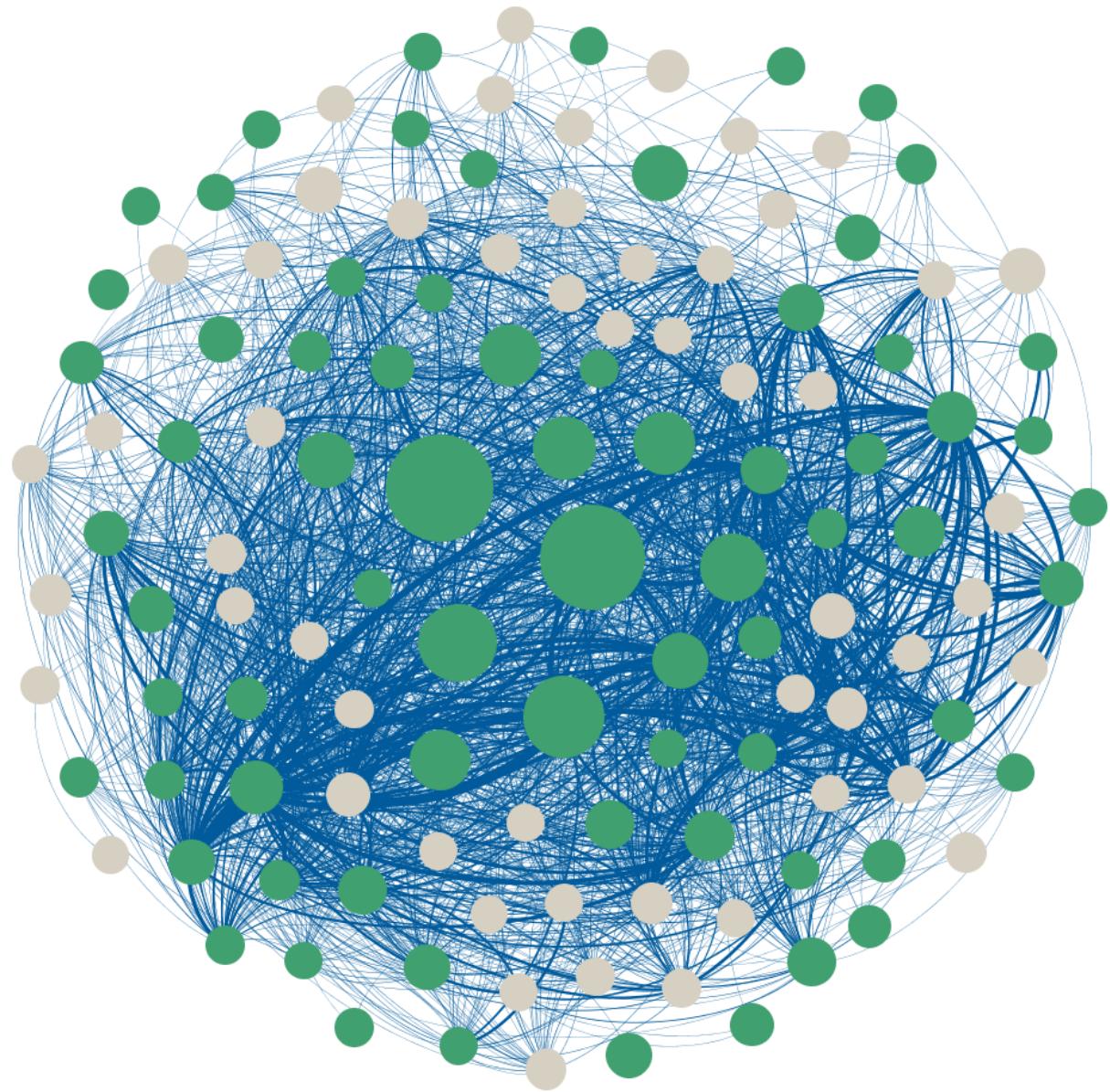


Figure 1: Golf Network

LAND MARKET IN SG

- Land parcels are sold through tenders.
- First Price Sealed Bids Auctions
- Highest bids are winning bids.
- On average 7-8 bidders in each tender
- Government announces land supply schedule every half a year, at flexible dates.

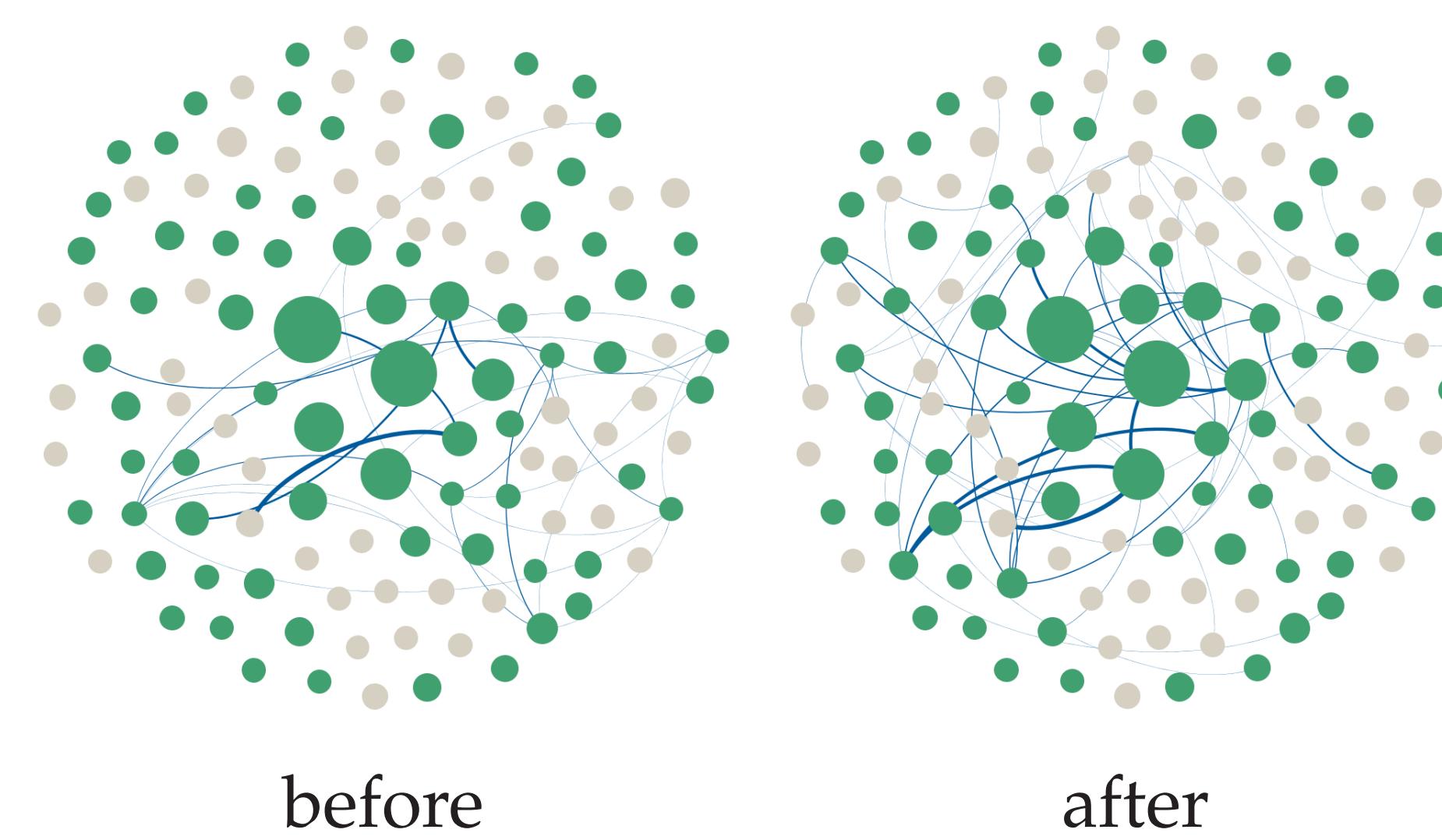


Figure 2: Announcement Effects (unconditional)

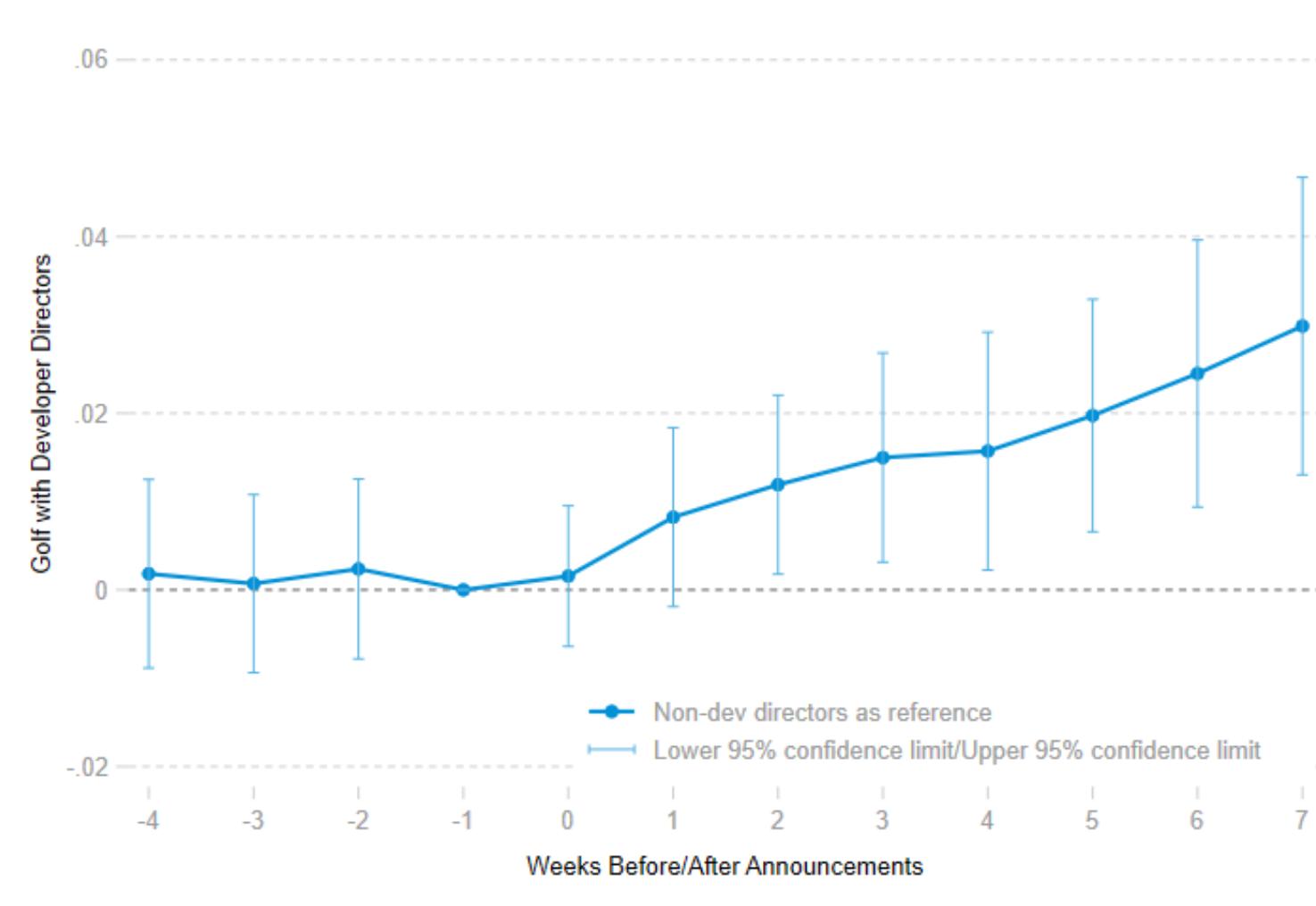


Figure 3: Announcement Effects (conditional)

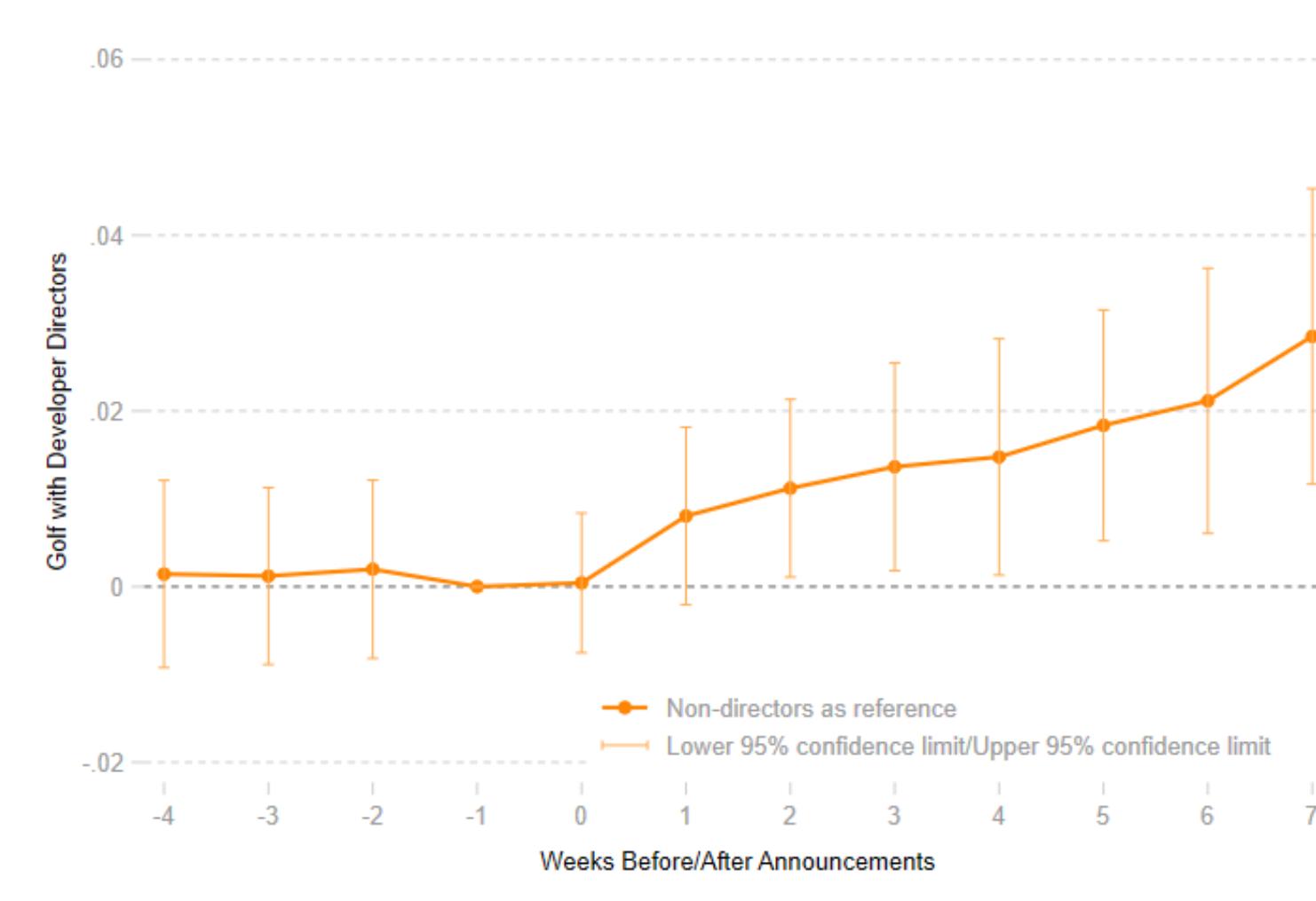


Figure 4: Announcement Effects (conditional)

CONTRIBUTION

1. The paper is among the first to provide direct evidence showing that social interactions facilitate information exchanges.
2. This paper provides empirical evidence showing that the informal interactions positively influence company investment.

FREQUENTLY ASKED QUESTIONS

1. Why not always golf? Why does not everyone golf?
2. Selection Issues in the Third Stage
3. Golf is not the only way of social interaction
4. About Second Stage: Not winning does not necessarily mean no collusion. Side payments?

DATA

1. Golf record of all players in Singapore (2010-2014, 30,000 golfers, 6% population)
2. Land bidding data (all bids are included)
3. Property transaction records
4. Demographics of company top managers

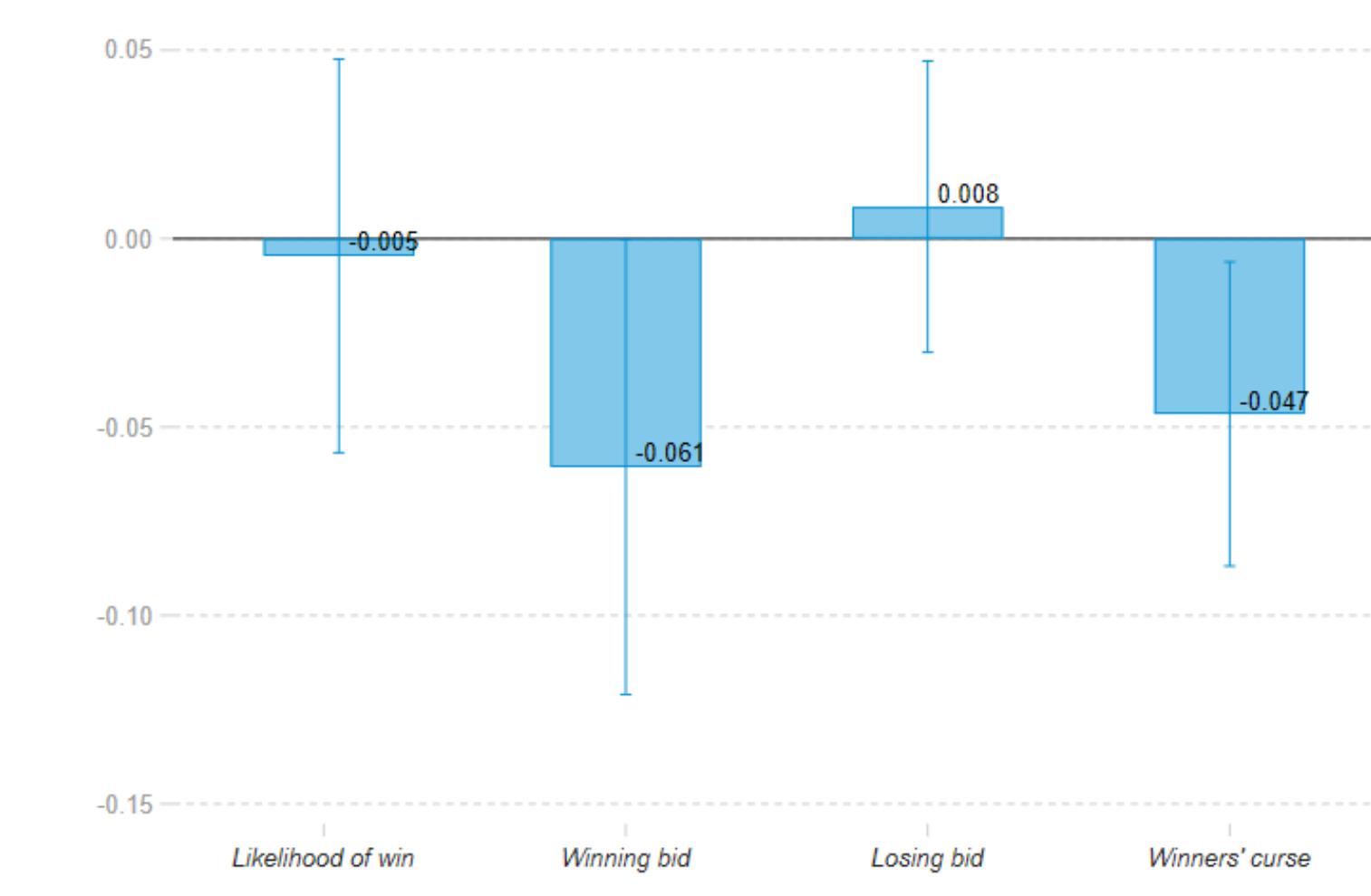
SECOND STAGE: COLLUSION?

The Likelihood of a Pair of Golfers to Win

Variables	(1) <i>Both_wint,p</i>	(2) <i>Both_wint and t+1,p</i>
<i>Golf_tgthert,p</i>	-0.016*** (0.006)	-0.026** (0.011)
Obs	55,125	55,125
R-squared	0.230	0.365
Mean of DV	0.0127	0.0222
Cycle FE	Yes	Yes
Pair FE	Yes	Yes
SE Cluster	Twoway Cluster at Bidder Level	

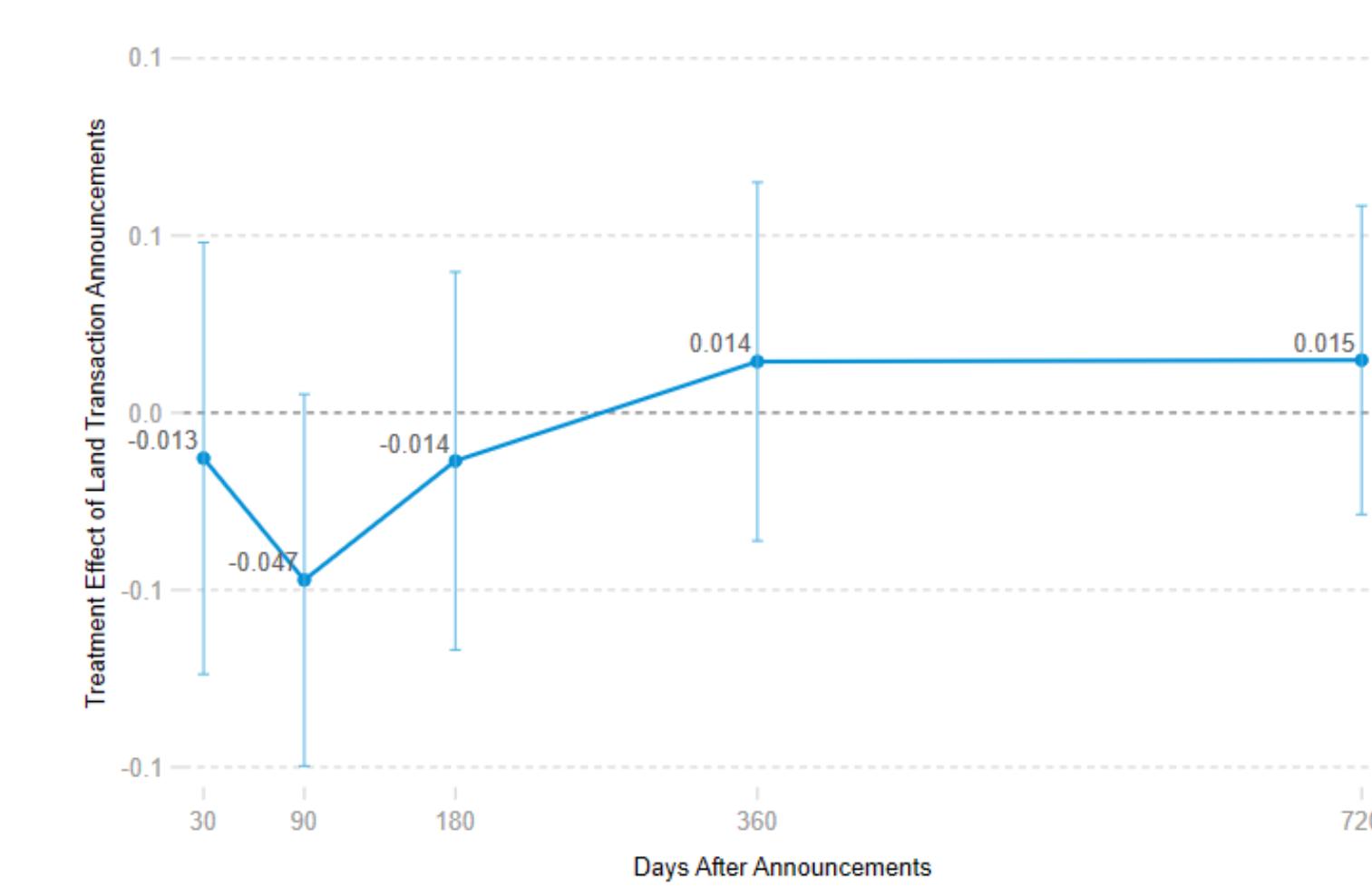
THIRD STAGE: BIDDING

Outcomes: Winning or not, Bid price, Winners' Curse



FOURTH STAGE: SPILLOVER

Local Housing Price Decreases in the Short-run



WELFARE IMPLICATION

The government loss USD 100 million per year, and the losses are gained by the developers.

CONTACT

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