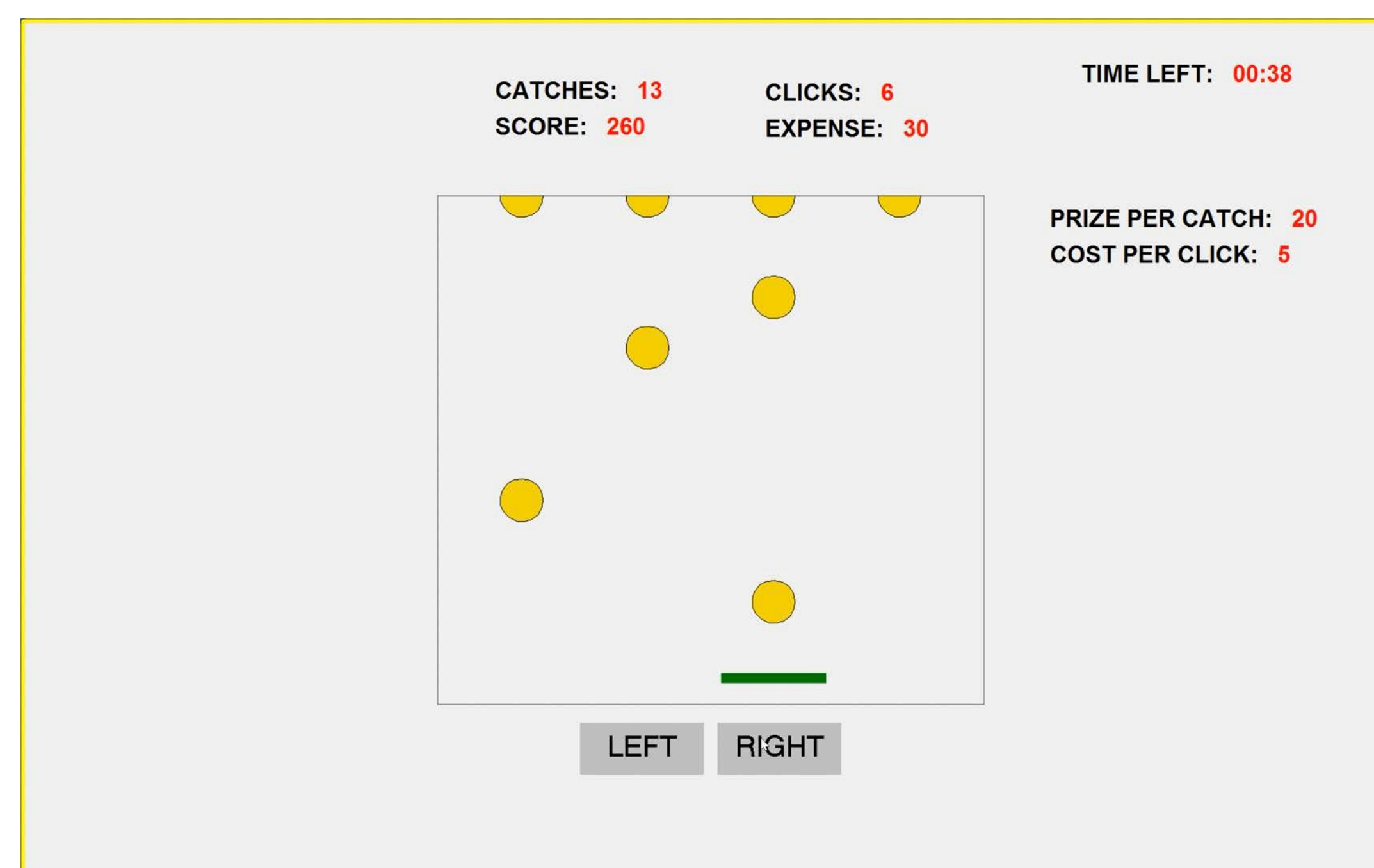


Combining “Real Effort” with Induced Effort Costs: The Ball-Catching Task

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1. THE BALL-CATCHING TASK

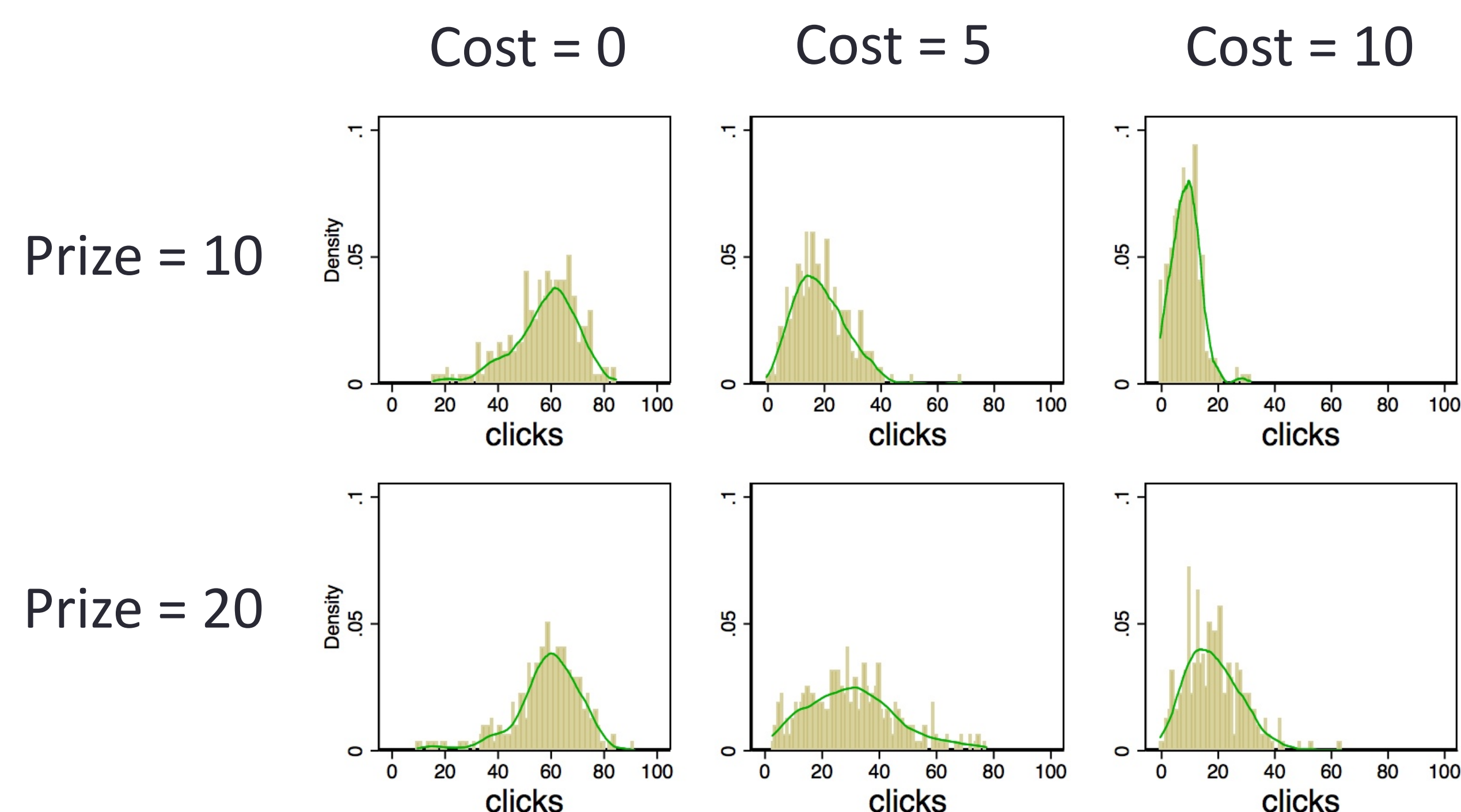
- ❑ Balls fall randomly
- ❑ Mouse clicks move the tray
- ❑ Catch balls using the tray!
- ❑ Clicks as efforts and catches as outputs
- ❑ **Key features:** financial costs attached to clicks, incentive schemes associated with catches
- ❑ **Advantages:** control over effort cost function; permit *comparative static* predictions as well as *quantitative* predictions of effort



- ❑ Study 1: Piece-rate incentives – Testing theoretical predictions
- ❑ Study 2: Applications – Reproducing stylized facts
 - Team production
 - Gift exchange
 - Tournament

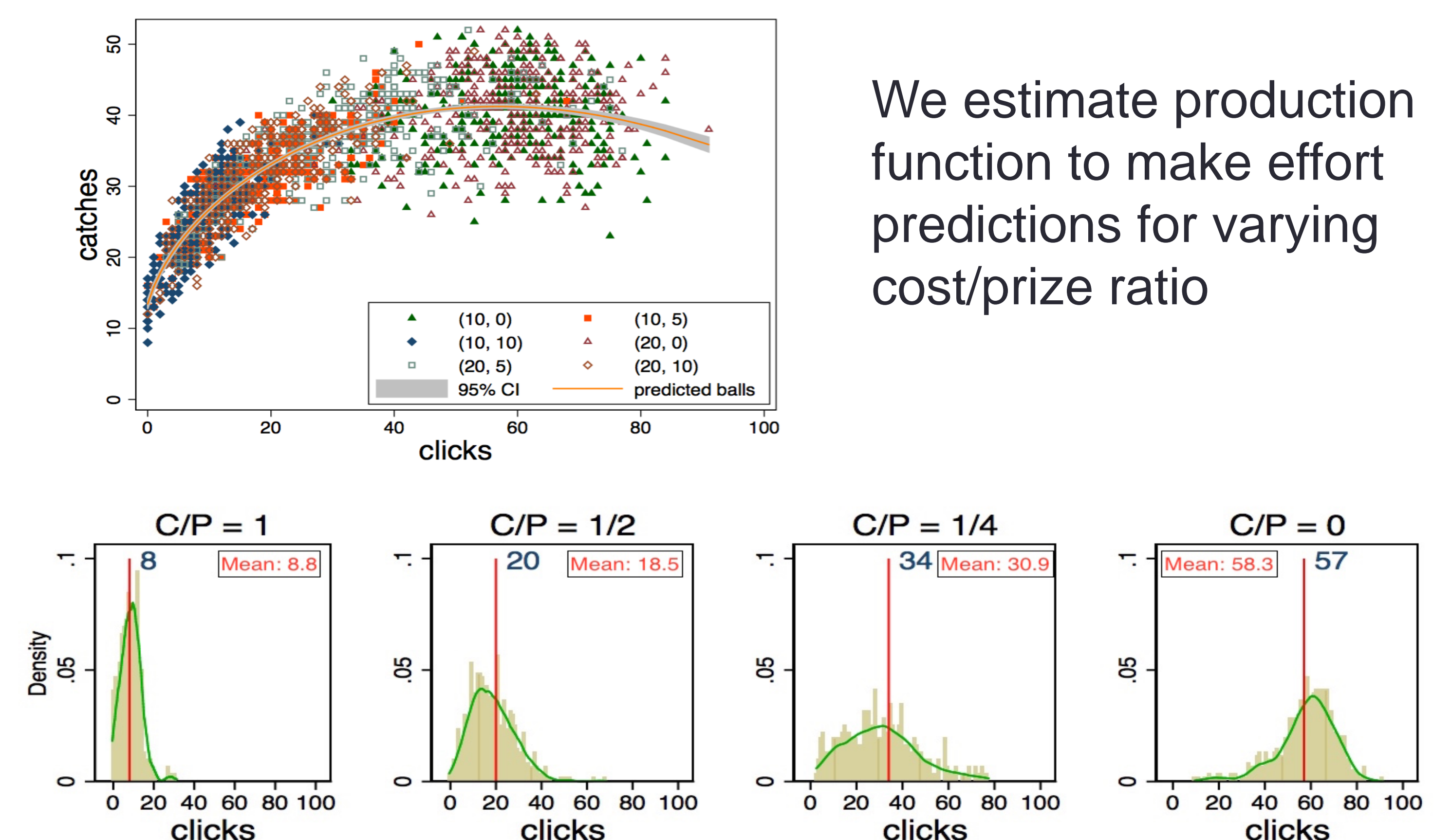
2. STUDY 1: PIECE-RATE INCENTIVES: VARYING COST PER CLICK AND PRIZE PER CATCH

Comparative Static



- ❑ When $C=0$, prize does not affect effort
 - ❑ When $C>0$, effort increases with prize and decreases with cost
 - ❑ Same cost/prize ratio induces same effort
- Predictions borne out!

Comparing predicted and average efforts

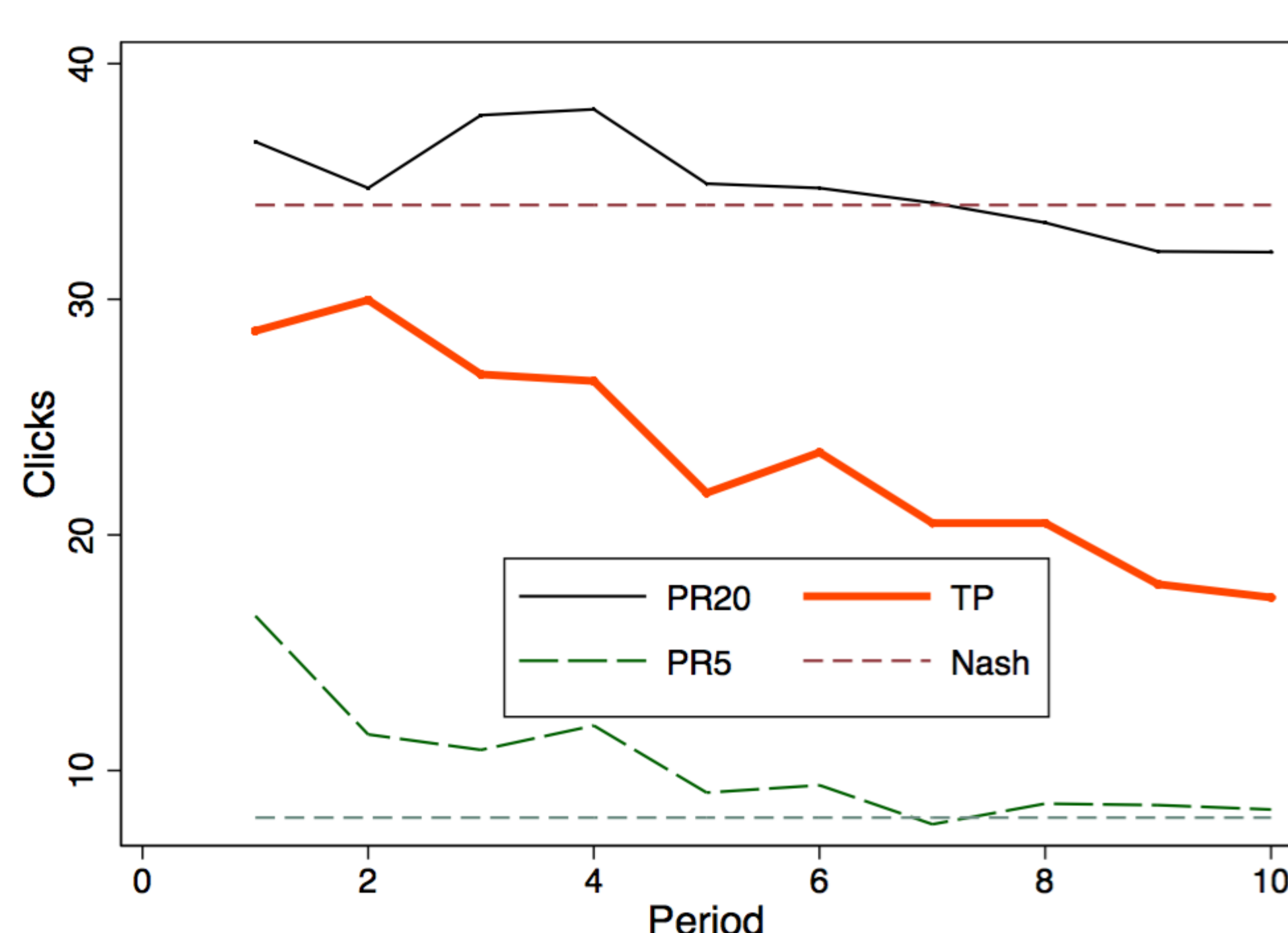


We estimate production function to make effort predictions for varying cost/prize ratio

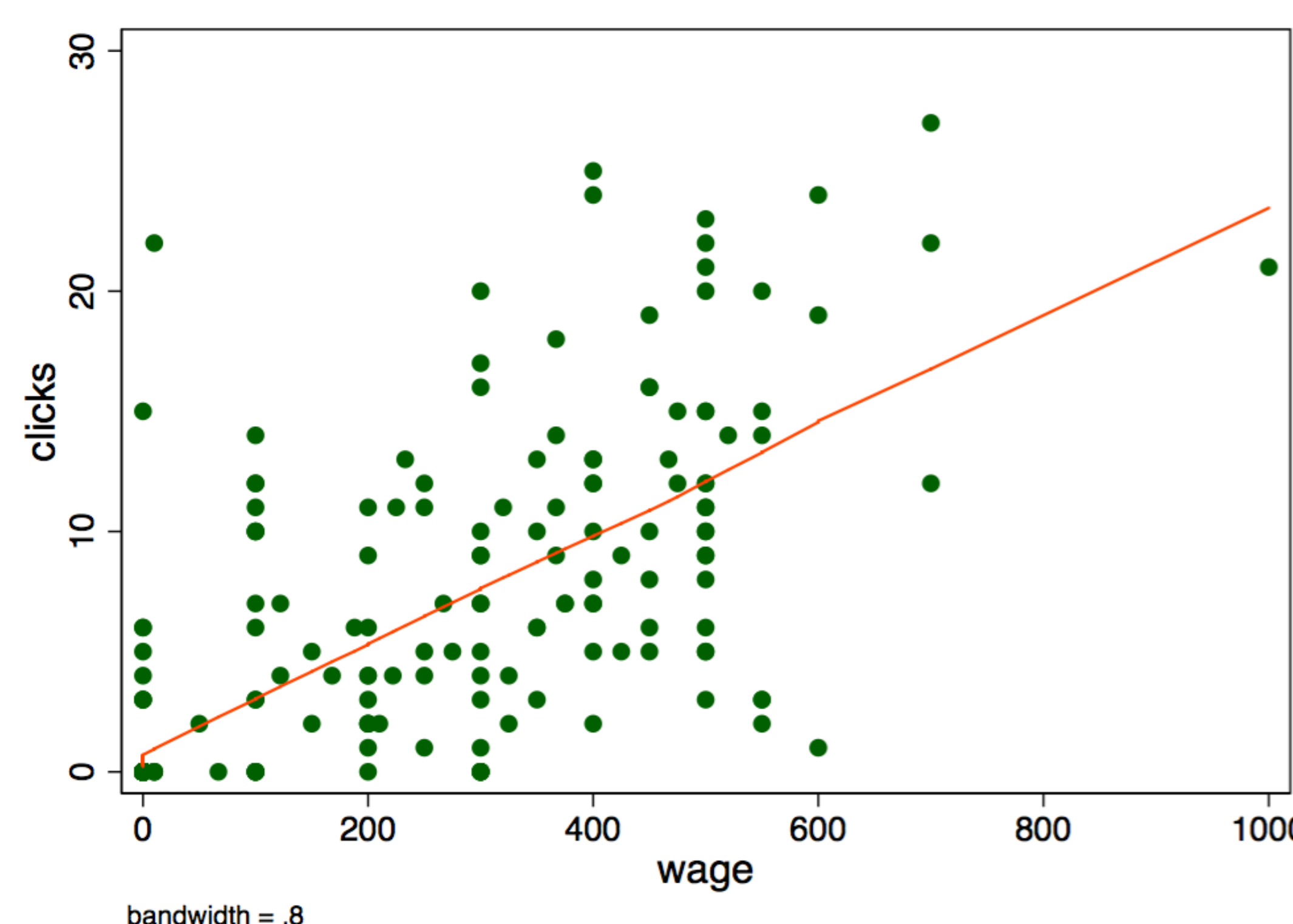
→ Average efforts remarkably close to point predictions

3. STUDY 2: APPLICATIONS: REPRODUCING STYLIZED FACTS

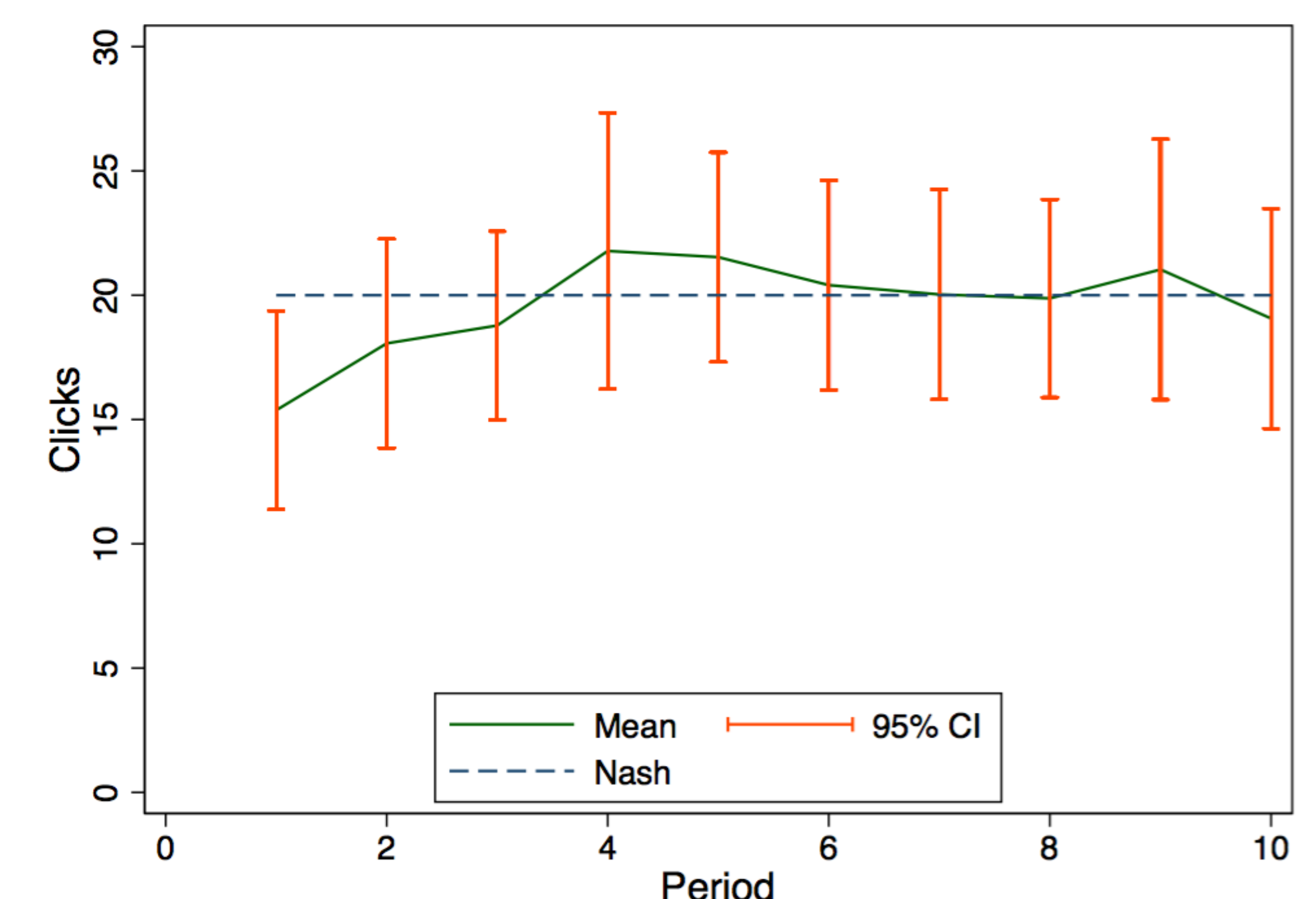
- ❑ **Team Production** (Nalbantian & Schotter 1997)
- ❑ **Bilateral Gift Exchange** (Gächter & Falk 2002)
- ❑ **Tournament** (Bull, Schotter & Weigelt 1987)
- ❑ TP (Prize=20); PR20 & PR5 (piece-rate $P=20$ or 5)



→ Cooperation decreases over time



→ Effort increases with wage



→ Convergence to equilibrium effort level