LOGIT Model: Algorithmic Competition Analysis

Δ vs RPDI Relationship

Delta = RPDI Line

Delta (Δ)

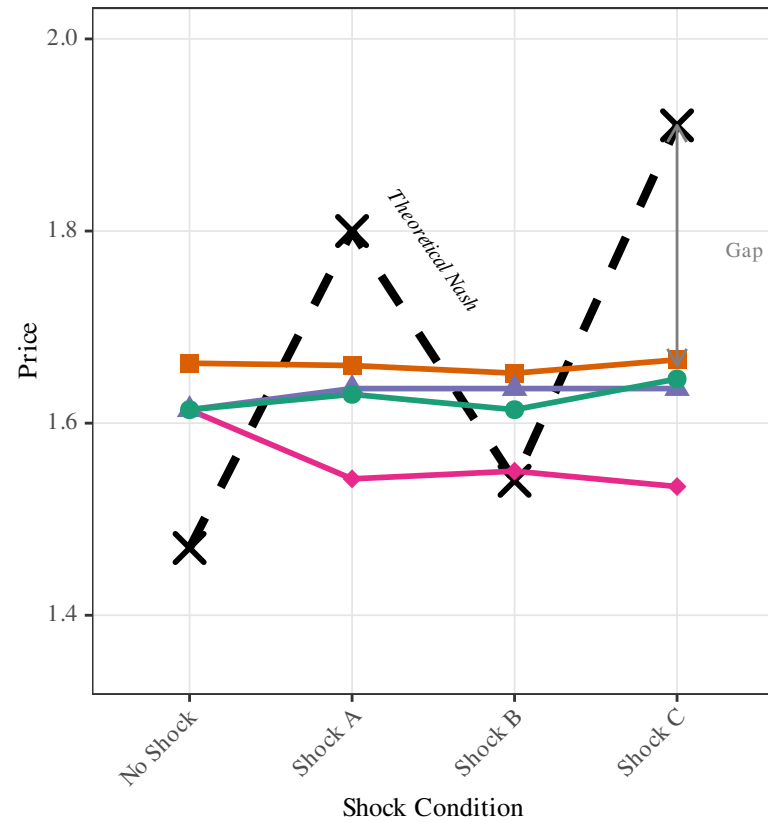Relative Price Difference Index (RPDI)

Shock Impact on Δ

Monopoly (Δ=1)

Nash (Δ=0)

Delta (Δ)

Shock Condition

No Shock · Shock A · Shock B · Shock C

Price vs Benchmark

Theoretical Nash

Gap
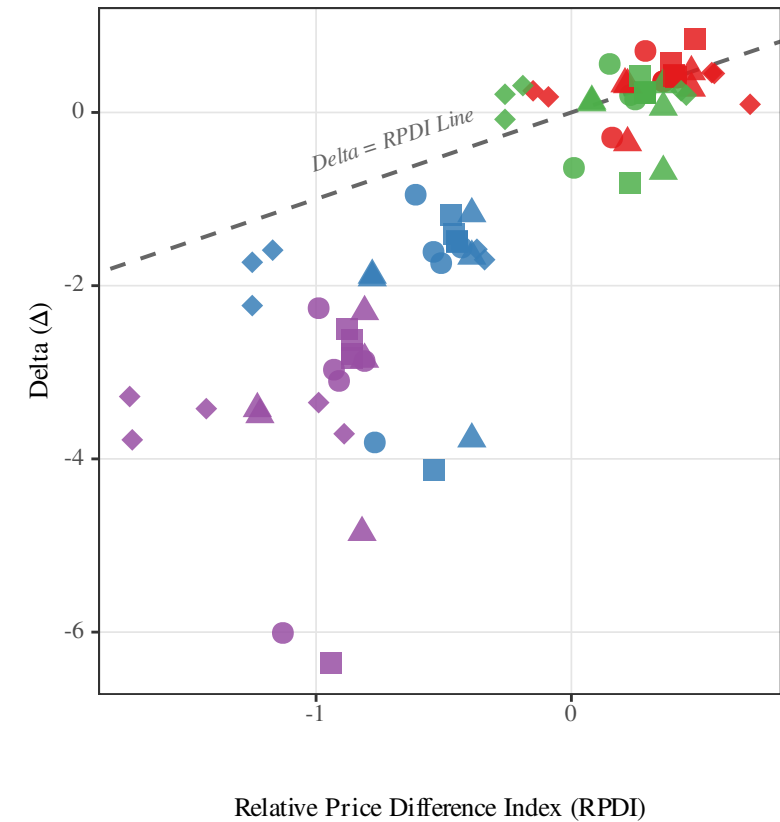
Price

Shock Condition
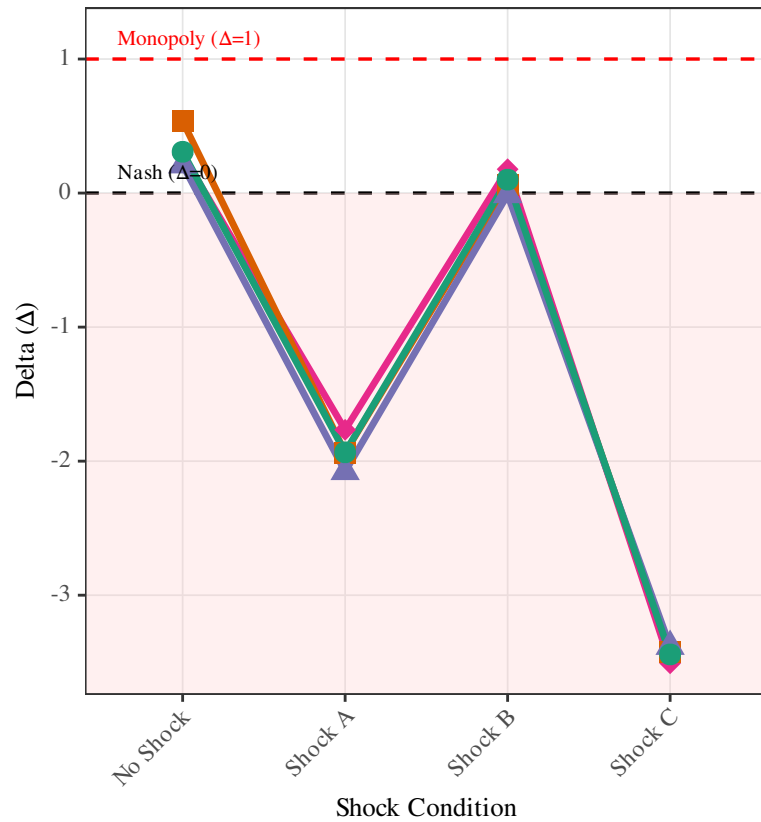
No Shock · Shock A · Shock B · Shock C

Algorithm
- ◆ DDPG
- ■ DQN
- ▲ PSO
- ● Q-learning

Shock Condition
- ● No Shock
- ● Shock A
- ● Shock B
- ● Shock C