

Dynamic Discrete Choice Structural Models in Empirical IO

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TOPICS

1. Introduction to dynamic discrete choice structural models in empirical IO
2. Dynamic games of oligopoly competition
3. Dynamic games when players have biased beliefs
4. Euler equations and finite dependence in dynamic discrete choice models
5. Fixed effect estimation of dynamic discrete choice structural models

OUTLINE AND REFERENCES

(* = Main reference)

1. Introduction to dynamic discrete choice structural models in empirical IO

- Examples of empirical questions and models
- Basic framework in single-agent models
- Data, Identification, and Estimation
- Predictions and counterfactual experiments

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2. Dynamic discrete games of oligopoly competition

2.1. Examples

2.2. Basic framework and assumptions

2.3. Data, Identification, and Estimation

2.4. Unobserved market heterogeneity

2.5. Multiple equilibria

2.6. Counterfactuals

2.7. Dealing with the curse of dimensionality

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3. Dynamic games when players have biased beliefs

- 3.1. Introduction and examples of strategic uncertainty
- 3.2. Identification in static games
- 3.3. Identification in dynamic games
- 3.4. Applications

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4. **Euler equations and finite dependence in dynamic discrete choice models**

- 4.1. Single-agent models: Estimation
- 4.2. Single-agent models: Solution and counterfactuals
- 4.3. Dynamic games: Estimation
- 4.4. Dynamic games: Solution and counterfactuals

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5. **Fixed effect estimation of dynamic discrete choice structural models**

- 5.1. Previous results for dynamic discrete choice models where agents are not (explicitly) forward-looking.
- 5.2. Single-agent models: Sufficient statistics for fixed-effects. Identification & Estimation
- 5.3. Dynamic games: Sufficient statistics for fixed-effects. Identification & Estimation

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