

Sequential Sampling and Equilibrium ^{*}

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September 29, 2020

Job Market Paper

Abstract

I propose an equilibrium solution concept based on players sequentially sampling to resolve strategic uncertainty — uncertainty with respect to the distribution of choices of the opponents. Players sample from their opponents' distribution of actions at a cost and make optimal choices given their posterior beliefs. The solution concept makes predictions on the joint distribution of players' choices, beliefs and decision times, and generates stochastic choice through the randomness inherent to sampling, without relying on indifference or choice mistakes. It rationalizes well-known deviations from Nash equilibrium as the own-payoff effect as well as observed patterns in beliefs reported and decision times.

Keywords: Belief Formation; Game Theory; Information Acquisition; Sequential Sampling; Bayesian Learning; Statistical Decision Theory.

JEL Classifications: C70, D83, D84, C41.

^{*}I am very grateful to Yeon-Koo Che, Mark Dean, Navin Kartik and Kfir Eliaz for the continued encouragement and advice. I also thank Elliot Lipnowski and Evan Sadler, as well as Teresa Esteban-Casanelles, Laura Doval, Prajit Dutta, Evan Friedman, Bruno Furtado, Qingmin Liu, Jacopo Perego, Sara Shahanaghi, Yu Fu Wong and the participants at Columbia University's Micro Theory Colloquium and NYU's Student Micro Theory Lunch for valuable feedback.

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