

## A PROCEDURAL MODEL OF DECREASING INDECISIVENESS

### AUTHORS

Ramses H Abul Naga, Mauro Papi

### EXECUTIVE SUMMARY

In accordance with Plott's Discovered Preference Hypothesis, we model a decision-maker (DM) who starts life as indecisive, and—over time and through experience—gradually resolves their indecisiveness, until they fully discover their preferences. On the basis of two well-documented behavioural regularities, we provide an axiomatization of the evolution of the DM's preferences that results in a model of decreasing indecisiveness. In the resulting axiomatization, the DM's preferences at period  $t$  are given by a semiorder with threshold parameter, where  $\theta_t$  is a strictly decreasing function over time periods. We next study how two firms compete in a market consisting of a single indecisive consumer, thereby illustrating how preference discovery may be shaped by strategic interactions between firms.



### KEYWORDS

- Incomplete preferences
- Indecisiveness
- Preference discovery
- Semiorder

### RESEARCH RELEVANCE

- The paper models how people become less indecisive over time as they gain experience.
- It builds on behavioural evidence showing that people struggle to choose between similar options, but improve with familiarity.
- Preferences are not fixed — they evolve through trial and error, becoming more stable.
- The model also explores how firms can strategically influence this learning process in markets with indecisive consumers.

### BIBLIOGRAPHIC INFORMATION

Abul Naga, R. H., & Papi, M. (2025). A Procedural Model of Decreasing Indecisiveness. *Oxford Economic Papers*, 77(4), 954-969. Advance online publication. <https://doi.org/10.1093/oep/gpaf010>

*“Failing to understand that preferences are discovered over time may lead to flawed policies by competition authorities and suboptimal strategies by firms.”*

