

Thesis Abstract

Title of Thesis	On observable restrictions of choice models
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Supervisor	Hisatoshi Tanaka

Language used: same as your dissertation manuscript
(English: up to 1500 words / Japanese: up to 3000 characters)
If your dissertation is in Japanese, you must also write an English version.

This thesis provides revealed preference tests for various choice models. Chapters 2 and 3 focus on limited consideration models, which is a choice model where a decision maker is rational in the sense that she is a preference maximizer, but is irrational in the sense that she may not consider all alternatives in the feasible sets. In Chapter 4, we deal with a standard choice model where a decision maker is a weak preference maximizer, but assume that a choice function is observed rather than a choice correspondence. The revealed preference analyses conducted in this thesis only require that a non-exhaustive choice function is observed, so the results are straightforwardly applicable to actual choice data.

Various limited consideration models have been proposed, for instance the attention filter model, the competition filter model, and the (transitive) rational shortlisting method, which differ depending on the structure of the decision maker's consideration. In Chapter 2, we clarify observable restrictions of a limited consideration model where the decision maker's consideration is both an attention filter and a competition filter (henceforth, the competitive attention filter model), and clarify observable restrictions of the (transitive) rational shortlisting method. In addition, we conduct a simulation by randomly generating choice data, in order to compare the relative restrictiveness of various limited consideration models. The simulation result shows that the attention filter model and competition model have little testing power, while the competitive attention filter model and (transitive) rational shortlisting methods are quite restrictive. The contents of Chapter 2 are based on "On the observable restrictions of limited consideration models: theory and application," which is co-authored with Dr. Koji Shirai. This paper is published in the journal *Economic Theory* (forthcoming).

Chapter 3 puts forward a behavioral framework where a decision maker makes choices at multiple time periods, while she may not be aware of all available alternatives at all times. This framework inherits the main idea of the theory of limited consideration, and adds to it

an assumption that a decision maker's consideration grows over time. In particular, it is required that she takes into consideration any alternative that she chose in the past. We refer to this property as growing consideration. Revealed preference tests, as well as conditions under which we can robustly infer the decision maker's preference, consideration, and non-consideration are given. Following a revealed preference analysis of a baseline framework of decision making under growing consideration, we deal with special cases where the decision maker's consideration is a competition filter/attention filter. Chapter 3 is based on the paper "Growing consideration," which is a working paper in WINPEC Working Paper Series (No. E2003).

In Chapter 4, we develop revealed preference analysis of an individual choice model where an agent is a weak preference maximizer, under the assumption that a choice function, rather than a choice correspondence, is observed. In particular, we provide a revealed preference test for such model, and then provide conditions under which we can surely say whether some alternative is indifferent/weakly preferred/strictly preferred to another, solely from the information on the choice function. Furthermore, interpreting a choice correspondence as sets of potential candidates of alternatives that could be chosen from each feasible set, we analyze which alternatives must be, or cannot be a member of the choice correspondence: sharp lower and upper bounds of this underlying choice correspondence are given. The contents of Chapter 4 is based on the paper "Rationalizing choice functions with a weak preference," which is a working paper in WINPEC Working Paper Series (No. E2004).

論文概要書

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執筆者氏名	
指導教員	

言語：論文と同じ言語とする。（日本語：3000字以内 / 英語：1500 words 以内）
ただし、日本語の場合は、英語の概要書も必要。