

Empirical Challenges in the Capability Approach: Measuring Capability Sets and Unfreedom through Counterfactual Comparisons*

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Abstract

This study addresses a fundamental challenge in the empirical application of the Capability Approach: the measurement of the “capability set” as an opportunity set. Unlike standard utility-based measures that focus solely on achieved outcomes, measuring capability requires assessing the welfare of potential activities—including those not chosen (counterfactuals). We propose a novel methodology that bridges normative social choice theory and econometric causal inference. Specifically, we interpret the Average Treatment Effect (ATE) derived from panel data fixed-effects models as capturing marginal counterfactual welfare differences between alternative actions, rather than level comparisons of achieved outcomes. Using a unique panel dataset of elderly individuals in Japan, focusing on “going-out” versus “staying-home” behavior, we evaluate the size of capability sets and the degree of “unfreedom” (the welfare gap between options). Furthermore, we propose and apply several aggregation rules—ranging from Utilitarian to Rawlsian—to construct group-level capability measures. Our empirical results demonstrate that the ranking of social groups varies significantly depending on the normative aggregation rule employed, highlighting the importance of explicitly defining the informational basis of social evaluation.

Keywords: Capability Approach, Causal Inference, Average Treatment Effect, Social Choice Theory, Unfreedom

JEL Codes: I31, D63, C23

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