

The Coarse Nash Bargaining Solutions*

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This version: December 24, 2025

Abstract

This paper studies the axiomatic bargaining problem and proposes a new class of bargaining solutions, called *coarse Nash solutions*. These solutions assign to each problem a set of outcomes coarser than that chosen by the classical Nash solution (Nash, 1950). Our main result shows that these solutions can be characterized by new rationality axioms for choice correspondences, which are modifications of Nash's independence of irrelevant alternatives (or more precisely, Arrow's (1959) choice axiom), when combined with standard axioms.

Keywords: Axiomatic bargaining, Nash solution, Independence of irrelevant alternatives

JEL Classifications: D31, D63, D74

1 Introduction

Consider a group of individuals facing a collective choice problem, in which each individual only cares about the payoff of the chosen outcomes. In a seminal paper, Nash (1950) formalized these

*The authors are grateful to Koichi Tadenuma for their helpful comments and suggestions from the very early stages of this research. We also thank Walter Bossert, Youngsub Chun, Youichiro Higashi, Toru Hokari, Kohei Kamaga, Noriaki Kiguchi, and Kaname Miyagishima, as well as seminar participants at Okayama University and at the Waseda Workshop on Game Theory and Experiment 2025, Sophia University, and the 31st Decentralization Conference in Japan for their helpful comments. We gratefully acknowledge the financial support from the Japan Society for the Promotion of Science KAKENHI, Nos. 25K16606 (Nakada) and 25KJ1298 (Nakamura).

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