Accepted Manuscript

Fairness in group identification

Wonki Jo Cho

PII: S0165-4896(18)30032-5
DOI: https://doi.org/10.1016/j.mathsocsci.2018.04.002
Reference: MATSOC 2009

To appear in: *Mathematical Social Sciences*

Received date : 29 December 2017
Revised date : 11 April 2018
Accepted date : 16 April 2018

Please cite this article as: Cho W.J., Fairness in group identification. *Mathematical Social Sciences* (2018), https://doi.org/10.1016/j.mathsocsci.2018.04.002

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

ACCEPTED MANUSCRIPT

Fairness in Group Identification*

Wonki Jo Cho†

May 5, 2018

Abstract

We study the problem of classifying individuals into groups, using agents' opinions on who belong to which group as input. Our focus is on the rules that satisfy equal treatment of equals, a minimal fairness property, in addition to independence of irrelevant opinions and non-degeneracy. We show that a rule satisfies the three axioms if and only if it is the liberal rule, a strong one-vote rule, a one-row rule, or a one-column rule. The last three families of rules can be ruled out by simple, intuitive properties. Thus, invoking equal treatment of equals, which is substantially weaker than symmetry, we obtain a characterization of the liberal rule.

JEL Classification Numbers: C0; D70; D71; D72

Key Words: Equal treatment of equals; symmetry; independence of irrelevant opinions; liberal rule

*I thank an Associate Editor and two anonymous referees for comments that greatly improved the earlier version of this paper. I am also grateful to Biung-Ghi Ju and William Thomson for their helpful discussions. This work was supported by the Ministry of Education of the Republic of Korea and the National Research Foundation of Korea (NRF-2016S1A3A2924944).

†Department of Economics, Korea University, Anam-ro 145, Seongbuk-gu, Seoul, South Korea, 02841; chowonki@korea.ac.kr

Download English Version:

https://daneshyari.com/en/article/7372632

Download Persian Version:

https://daneshyari.com/article/7372632

Daneshyari.com