

On blocking coalitions: Linking Mas-Colell with Grodal-Schmeidler-Vind*

Joseph Greenberg[†] Shlomo Weber[‡] Akira Yamazaki[§]

August 2004

This paper was dedicated to the memory of Birgit Grodal, to whom the authors owe an unlimited debt of gratitude. Her wisdom, guidance and friendship is already so sorely missed. Sadly, during the writing of the paper we lost Karl Vind, whose quiet and towering presence can never be replaced.

Abstract

In this paper we investigate the question of how many coalitions of a given relative size would block a non-Walrasian allocation in large finite economies. It is shown that in finite economies, if a Pareto optimal allocation is bounded away from being Walrasian, then, for any two numbers α, β between 0 and 1, the proportion of blocking coalitions in the set of all coalitions with relative size between α and β , is arbitrarily close to $\frac{1}{2}$, as the number of individuals in the economy becomes large.

*This paper grew out of the authors' much earlier collaboration when all three were visiting the Department of Economics, University of Bonn during the academic year 1980. The authors thank Werner Hildenbrand for fruitful discussions and ceaseless encouragement.

[†]Department of Economics, McGill University, Montreal, Canada.

[‡]Department of Economics, Southern Methodist University, Dallas, USA, and CORE, Belgium.

[§]Graduate Faculty of Economics, Hitotsubashi University, Tokyo, Japan.