

Coalitional Stability in the NIMBY Problem: An Application of the Minimax Theorem

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Abstract

We consider the situation in which agents choose the location of a public bad from a street according to a given voting mechanism. We study coalitional behaviors in such a situation. We identify a necessary and sufficient condition for a voting mechanism to possess a strong Nash equilibrium by applying the minimax theorem (von Neumann and Morgenstern, 1944). We moreover characterize the class of solutions that can be implemented in strong Nash equilibria. As a by-product of these results, we propose a simple voting mechanism that implements any solution that can be implemented in strong equilibria.

JEL Classification: D78, D72, C70.

Key words: NIMBY problem, Single-dippedness, Strong Nash equilibrium, Minimax theorem, Core, Implementation, Manipulation.

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