Axiomatic Characterization of the Maximin Principle in the Arrow-Dasgupta Economy∗

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Abstract

This paper provides an axiomatic characterization of the Rawlsian maximin principle in a dynamic economy Arrow (1973) and Dasgupta (1974a,b) constructed to examine behavior of the principle under the feasibility conditions of consumption and production. Our exercise gives an answer to the question of why the maximin principle generates the different paths, where one is a saw-tooth shaped path and the other a constant path. We make use of the axioms of effectiveness, weak Pareto principle, Hammond equity and group equity. These axioms except one are familiar in the characterization of the maximin principle.

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