

A Maximin Strategy for Optimal Threshold Social Choice

After the optimal set has been established and the distribution of utilities computed for each individual based on the optimal set, the worst off person in terms of utility might have their results improved at the expense of a diminution of total utility. Starting with the worst off individual, make all possible changes to the winning set and calculate the worst off person's utility and also the total utility after each change has been made. If the worst off person's utility can be increased in such a way that the total utility is not decreased more than that increase for the worst off person, then this would be a partial maximin solution. Now continue this process with the resulting worst off person in terms of utility. Continue this process until there is no way by altering the winning set to improve the worst off person's utility in such a way that the total utility is decreased by a lesser or equal amount. At that point any change in the winning set to increase the worst off person's utility would result in a greater decrease in the total utility. This would be the final maximin solution.