On The Role of Group Size in Tournaments: Theory and Evidence from Lab and Field Experiments

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Abstract:

We explore how equilibrium effort in tournaments (for example used as an incentive mechanism in firms) varies with the number of contestants. The probability of winning a tournament depends on both effort and luck, and we show that the assumed distribution of the shock component is critical in whether equilibrium effort increases with group size, or not. We find that if there is much (little) mass on good draws, equilibrium effort is an increasing (decreasing) function of the number of contestants. We test our theory using both laboratory and field experiments, and the results are in line with the theory.