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CONTESTS WITH HETEROGENEOUS AGENTS

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Abstract

We study tournaments with many ex-ante asymmetric contestants, whose valuations for the prize are independently distributed. First, we characterize the equilibria in monotone strategies, second, we provide sufficient conditions for the equilibrium uniqueness and, finally, we reconcile the experimental evidence documenting the ‘workaholic’ behavior in contests with the related theory by introducing heterogeneity among participants. It is a ‘weak’ participant that might become a ‘workaholic’ in an equilibrium, that is, his effort density might *crease* at the highest valuation - weak, either because he is more risk averse or because his rivals consider that it is very unlikely that he has a high value for the prize. In contrast, effort densities are always decreasing in case of symmetry with identically distributed values for the prize and identical attitudes towards risk in case of CARA, as well as in contests with only two participants. Moreover, we show that for low valuations more risk averse agents are less likely to exert low effort than their ‘strong’ rivals, while those with dominated distribution of the prize valuation are more likely to do so. An explicit solution for the uniform distribution case with contestant-specific support is provided as well.

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