

CONTRACTS FOR TEAMS UNDER IMPERFECT OBSERVABILITY

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ABSTRACT. Agents exert costly efforts to produce a team output according to an arbitrary technology. A principal contracts with the agents based on outcomes that depend stochastically on the output. We characterize the allocation of incentive pay across agents and outcomes in any optimal contract. The characterization leverages insights from the theory of network games. Agents are paid in proportion to (i) individual productivity and (ii) organizational centrality, in the sense of being complementary to productive others. Our results generalize Holmstrom's characterization of optimal single-agent contracts to the multi-agent case.

An earlier working paper with some related results in a special case is available at bengolub.net/equity/