

COORDINATION IMPROVEMENT IN A TWO-PERIOD PROJECT UTILIZING A NOISE-PROOF EQUILIBRIUM SELECTION

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ABSTRACT

We develop a game-theoretical model to study a project governed by the risk-sharing contract in which the project's outcome depends on the minimum contractors' progress on their task. Each contractor's progress on its task is determined by the effort exerted and a random environmental shock out of the contractor's control. When the cost-revenue ratio of per-unit effort is low, the result shows that no intervention by the OEM is needed; there exists a unique equilibrium, achieving full coordination. Otherwise, contractors exert the lowest possible effort, leading to coordination failure. To improve coordination, we introduced midterm feedback on contractors' progress.