Abstract

We study a principal-agent model with moral hazard and adverse selection. Agents have private information about the distribution of outcomes conditional on each effort. We prove the existence and characterize the solution of the resulting multidimensional screening problem, and establish several general properties. A positive mass of types with low conditional probabilities of success gets a constant payment and zero rents. Exclusion is desirable if and only if it is first-best efficient. When agents are risk neutral, an intermediate mass of types is also pooled, although they are offered contracts with variable payments and get positive rents. In addition, the region of types who exert high effort is contained in the interior of the first-best high-effort region and, unlike in pure adverse selection models, the model features "distortion at the boundary." Under additional conditions, the optimal mechanism offers only finitely many contracts. We apply our framework to multidimensional generalizations of canonical models in insurance, regulation, and optimal taxation and show that it generates novel results.