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STRATEGY-PROOF RISK SHARING

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**ABSTRACT**

We consider risk sharing problems with a single good and finite number of states. Agents have a common prior and their preferences are represented in the expected utility form and are risk averse. We study efficient and individually rational risk sharing rules satisfying strategy-proofness, the requirement that no one can ever be benefited by misrepresenting his preference. When aggregate certainty holds, we show that "fixed price selections" from the Walrasian correspondence are the only rules satisfying efficiency, individual rationality, and strategy-proofness. However, when aggregate uncertainty holds, we show that there exists no rule satisfying the three requirements. Moreover, in the two agents case, we show that dictatorial rules are the only efficient and strategy-proof rules. Dropping the common prior assumption in the model, we show that this assumption is necessary and sufficient for the existence of rules satisfying the three main requirements in the two agents and aggregate certainty case.

**KEYWORD:** Risk sharing; strategy-proofness; efficiency; individual rationality  
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