

## 道德约束环境下的Nash实施

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## Nash Implementation with Cost of Signal

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**摘要** 探讨了代理人发送信号的成本对社会选择规则可实施性的影响,证明了在存在道德约束的实施环境中,单调性不再是一个社会选择规则可Nash实施的必要条件。当代理人数量大于2时,满足一致性条件的社会选择规则都是可Nash实施的。当代理人数量等于2,满足交叉性条件和一致性条件的社会选择规则是可Nash实施的。结论表明:在实际的实施问题中,社会选择规则可实施的范围可能远远大于预期,在存在道德约束的实施环境中,一些不满足单调性但却满足一致性条件的社会选择规则,如Pareto规则都是可Nash实施的。

**关键词:** [社会选择规则](#) [Nash实施](#) [信号成本](#)

**Abstract:** The paper discusses the impact of cost of signal on the implementability of social choice rule. The result of the paper shows that, in environment with moral constraint, monotonicity is no longer a necessary condition for Nash implementation. In environment with moral constraint, when the number of agents is no less than 3, any social choice rule that satisfies unanimity is Nash implementable, and when the number of agents is 2, any social choice rule that satisfies unanimity and intersection is Nash implementable. According to the results of this paper, the number of social choice rules which are implementable may be larger than we have thought. In environment with moral constraint, some social choice rules which do not satisfy monotonicity but unanimity, such as Pareto rule and Borda rule, are also Nash implementable.

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