BEHAVIORAL FINANCE

Decision-Making Under the Gambler's Fallacy

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After reviewing the decisionmaking processes of individuals in three high-stakes contexts — refugee asylum courts, loan application review and baseball umpire calls — the authors write that they found strong negative autocorrelation that was unrelated to the quality of cases. That is, the judges, loan officers and umpires made decisions based as much on their own previous decisions as on the facts they ostensibly were weighing.

This negative autocorrelation is stronger among more moderate and less experienced decision-makers, following longer streaks of decisions in one direction, when the current and previous cases share similar characteristics or occur close in time, and when decision-makers face weaker incentives for accuracy.

The authors show that the negative autocorrelation in decision-making is most consistent with the gambler's fallacy inducing decision-makers to erroneously alternate decisions because they mistakenly believe that streaks of affirmative or negative decisions are unlikely to occur by chance. They contend that their results are unlikely to be driven by potential alternative explanations such as sequential contrast effects, quotas, learning, or preferences to treat two teams fairly.

Beyond the three settings studied, the authors add that the gambler's fallacy could affect decision-making more broadly. For example, financial auditors, HR interviewers, medical doctors, and policy makers all make sequences of decisions under substantial uncertainty. Our results suggest that inaccurate perceptions of what constitutes a fair process can perversely lead to unfair or incorrect decisions in many situations.