Bayesian Jurors and the Limits to Deterrence

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We consider a model of crime with rational Bayesian Jurors. We find that if jurors are not perfectly informed, even when there is no limit to the size of the punishment that can be imposed, it is not possible to deter all crime. There is a finite lower bound on the crime rate which results from the difficulties in achieving a conviction with imperfect evidence and very low crime rates. Crime cannot be reduced below this rate by increasing the penalty, but the lower bound can be decreased by improving the quality of evidence presented to jurors, or by increasing the threshold of evidence necessary for prosecution.