BOUNDING WRONG-WAY RISK BY SIMULATION

P. Glasserman, Columbia University, New York, pg20@columbia.edu
L. Yang, Columbia University, New York, ly2220@columbia.edu

The dependence between stochastic inputs to a model is often difficult to characterize, even when good marginal information is available about the individual inputs. This problem arises in measuring counterparty risk, which involves dependence between the market value of transactions with a counterparty and the counterparty's probability of default. Positive dependence creates "wrong-way risk." We develop methods for bounding this effect and for interpolating between the worst case and the independent case based on the degree of uncertainty in the dependence.