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Ibrahim Ekren* (iekren@fsu.edu), Tallahassee, FL. *Kyle-Back Models with risk aversion and non-Gaussian beliefs.*

We show that the problem of existence of equilibrium in Kyle's continuous time insider trading model can be tackled by considering a system of quasilinear parabolic equation and a Fokker-Planck equation coupled via a transport type constraint. We show the well-posedness of solutions and study the properties of the equilibrium obtained for small enough risk aversion parameter. In our model, the insider has exponential type utility and the belief of the market on the distribution of the price at final time can be non-Gaussian. Based on a joint work with S. Bose. (Received August 27, 2020)