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Kasper Larsen* (kasper1@andrew.cmu.edu), Department of Mathematical Sciences, Wean Hall 7219, Pittsburgh, PA 15213, and **Jin Hyuk Choi**. *Taylor approximation of incomplete Radner equilibrium models*. Preliminary report.

In the setting of exponential investors and uncertainty governed by Brownian motions we first prove the existence of an incomplete equilibrium for a general class of models. We then introduce a tractable class of exponential-quadratic models and prove that the corresponding incomplete equilibrium is characterized by a coupled set of Riccati equations. Finally, we prove that these exponential-quadratic models can be used to approximate the incomplete models we studied in the first part. (Received September 16, 2013)