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Gordan Zitkovic*, Department of Mathematical Sciences, University of Texas at Austin, 1 University Station, C1200, Austin, TX 78712, and **Kasper Larsen**. *Stability of utility maximization*.

The effectiveness of utility-maximization techniques for portfolio management relies on our ability to estimate correctly the parameters of the dynamics of the underlying financial assets. In the setting of complete or incomplete financial markets, we investigate whether small perturbations of the market coefficient processes lead to small changes in the agent behavior derived from the solution of the related utility-maximization problems. Specifically, we identify the topologies on the parameter-process space and the solution space under which the utility maximization is a continuous operation, and provide a counterexample showing that our results are best possible, in a certain sense. A novel result about the structure of the solution of the utility-maximization problem where the prices are continuous semimartingales is established as an offshoot of the proof of our central theorem. (Received September 20, 2006)