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Pricing Caps When Bond Prices Follow Jump-diffusion Processes and Have Log Price Volatility.

This work derives arbitrage-free dynamics of forward LIBOR rates in the presence of stochastic volatility and jump processes. The jumps allow randomness of jump sizes and dependence between jumps and stochastic volatility. The stochastic volatility inherits the special log form from the underlying bond dynamics. I also formulate a tractable subclass of models and price interest rate caps utilizing the model. (Received February 11, 2008)