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S.M. Mousavi* (mostafa.mousavi22@gmail.com), Cubicle S, South Hall, UCSB, Santa Barbara, CA 93106, and **J-P Fouque**. *Mean field games in interbank models*.

We study in the setting of mean-field games the model of interbank borrowing and lending proposed by Carmona et al (2014) while taking into account that any lending (or borrowing) needs to be returned after some specific time. In this model, log monetary reserves of banks are described by a system of stochastic differential equations with delays, coupled through their drifts. The game feature of the model comes from the fact that each bank is trying to optimize its rate of lending/borrowing to the central bank to minimize the associated quadratic cost whose rate is determined by the regulator. Therefore, each bank has incentive to start borrowing when its log monetary reserve is less than some critical value, which in here is the average log monetary reserve, and vice versa. Given that the log monetary reserve process is no longer Markovian, in order to solve the corresponding optimization problem, its process is recasted as an abstract stochastic differential equation on a Hilbert space. (Received September 20, 2015)