We consider a certain number of economical agents, each described by a random variable and solving a system of Stochastic Differential Equations coupled through a mean field interaction. Some coefficients in the coupled system are optimized by a centralized authority (central bank, government) in order to maximize the average utility. Solving this system would thus require the resolution of a N-dimensional viscous Hamilton-Jacobi equation which far too costly computationally. Instead, we derive a 1 dimensional coupled system giving a good approximation. (Received September 16, 2013)