Comment and questions on

Jerome L. Stein (2010). Alan Greenspan, the Quants and Stochastic Optimal Control. Economics Discussion Papers, No 2010-17.

This is really a remarkable paper because most of the discussion concerning excess leverage as a likely cause of default and financial crisis propagation does not raise the problem of *optimal* leverage. Here on the contrary the debt ratio is treated as the control variable within a theoretical setup in which an agent intends to maximize capital at the final year of a given horizon. Therefore the degree of leverage is optimal in terms of rational behaviour. Of course if we think of using the model for policy purposes a number of questions arise. Who is really to make the decision about optimal leverage? Should we consider the housing sector, which has been at the origin of the subprime crisis, one answer may be "the managers of the mortgage institutions". But one concern of the present discussion on regulation is about moral hazard and how to prevent it. Relying on managers may be not enough. Thinking of a surveillance authority comes natural and this may imply distinct objective functions with respect to the managers' ones. Moreover situations differ over industries and probably over individual companies. In the light of the model a degree of leverage is not optimal once and for all. In principle every individual agent (over a certain size) requires an optimal leverage at every period of time.