Rational Bubbles and Economic Policy

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We are living in dangerous times, hardly conceivable just fifteen years ago. Bubbles in the housing market in various countries, bubbles in the financial markets, bank runs that put to the ground some of biggest international banks in no more than a couple of days, panic in many sovereign bond markets (negative bubbles), central banks running out of policy tools to manage monetary policy efficiently, are just some of the features of the tormented world we are currently facing. Is this world governed by irrational behavior? Or is it the case that such fantastic behavior may arise from fully rational agents? In an influential review article, Stephen Le Roy (2004) stated very clearly that ”under rational asset pricing, including rational expectations, such biased expectations [bubbles, panic, bank runs] cannot occur: absence of arbitrage implies that the expected (risk-adjusted and discounted) gain on any security or portfolio is zero. Thus in this usage bubbles are synonymous with irrationality.” In this paper, we analyze the dynamics of an asset pricing model subject to complete markets and rational expectations, firstly developed by Aiyagari (1988). The model displays endogenous cycles and high volatility even in the case of no exogenous shocks hitting the economy. Contrary to the dominant view in economics and finance — ”the preliminary conclusion seems to be that when endogenous fluctuations exist in optimizing models, the associated policy advice is laissez-faire”, Bullard and Butler (1993) — we argue that economic policy may lead to an increase in social welfare in such a context by ruling out rational bubbles.