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James M Haley* (kapucensko51@comcast.net). *How fed policy makes financial markets chaotic or not.*

A simpler way exists to model the recent financial crisis, as a nonlinear evolution of forecast errors of the real stock return, the forecast errors of inflation, plus the coordination errors of excess bond returns. Specifically, a Sprott system perturbed by noise can be derived by targeting excess demand for real money to be consistent with the Taylor rule, a monetary policy that has failed so far to stabilize financial markets. There is another bifurcation of policy, which guides the economy's search for a rational expectations equilibrium, such that the long-term bond return should be targeted to equal a fixed short-term nominal interest rate of 2%, assuming a zero inflation expectation. This policy peg, unlike the varying interest rate target of the Taylor Rule, makes the forecast errors of the real stock return behave like a Langevin error-correcting, differential equation. This evolution of errors smoothly and quickly converges to a normal density with a bounded variance and a mean of zero. (Received September 23, 2011)