

**Title:** Managing Expectation in the New Keynesian Model

**Authors:** Robert G. King (BU) and Yang K. Lu (HKUST)

**Abstract:**

We study the optimal monetary policy of a central bank that faces the constraint imposed by its imperfect credibility. We consider two types of central bank, one type that can commit to its inflation plans and the other type cannot commit. The current central bank can be either type and the private sector is updating its belief about the current central bank's type after observing the realized inflation rates. We provide a recursive formulation that solves the optimal monetary policies for both types of central bank. The equilibrium dynamics reveals that reputation building by the committed central bank is a by-product of anchoring expectation or accommodating energy price shocks, except when the central bank's initial credibility is very low. Moreover, the equilibrium dynamics under the alternative type exhibits gradual reputation depletion with high inflation, high output and disinflation announcement, which is consistent with historical inflation experience.