

Suppose that the economy is on its balanced-growth path with real output growing at $n + g$. The demand for money is given by $M^d = P \cdot L(Y, i, TC) = PY^\eta i^\varepsilon TC^\xi$, where P is the aggregate price level, $i = r + \pi$ is the nominal interest rate, π is the inflation rate ($= \dot{P} / P$), and TC is real transaction costs associated with converting between money and interest-bearing assets (“bonds”). In the steady state, the supply of money is growing at constant rate $\mu = \dot{M} / M$.

1. What signs do you expect for η , ε , and ξ , and why?
2. Assuming that r and TC have no long-run trend, find an equation for the steady-state rate of inflation in terms of μ , η , n , and g .