

Economics 501
Assignment 9

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Due: December 5, 2006

1. Consider the cash-in-advance model in my notes, but with the following changes. First, let $\gamma_t = 1$ for all t . Next, suppose that each period the consumer has access to a fraction ϕ_t of his or her wage income to spend during the period. That is, expenditure on consumption and asset purchases during the period are constrained by cash available at the beginning of the period plus $\phi_t P_t w_t n_t$, where $0 < \phi_t < 1$.
 - (a) Suppose that (ϕ_t, θ_t) is i.i.d. Determine how consumption, output, labor supply, the nominal interest rate, the price level, and the inflation rate vary with ϕ_t , and explain your results.
 - (b) Suppose that ϕ_t is a first-order Markov process. Determine an optimal rule for monetary policy, and explain your results.