

Problem Set 7

Money and Public Finance:
Selected Issues from a Positive Perspective (Lecture 7)

Problem 1: Budgetary arithmetic in the Sargent-Wallace-model

In line with the notation of Lecture 7, assume that velocity is constant and consider the steady-state version of the public sector budget constraint in per capita terms

$$m \cdot \left(1 - \frac{1}{(1+n)(1+\pi)}\right) = d + \frac{r-n}{1+n} \cdot b, \quad (1)$$

with $n > 0$, $r > 0$, $\pi \geq -n$, $m > 0$. Assume that per capita government debt is rolled over at an exogenously given level, with $b = \bar{b} > 0$.

a) Let $r - n > 0$

Fiscal dominance: Assume the government announces an increase in the primary deficit d . Discuss implications for the inflation rate π .

b) Let $r - n > 0$

Monetary dominance: Assume the central bank announces a decline in the inflation rate π . Discuss implications for the primary deficit d .

c) Zero seigniorage revenues

Monetary dominance:

c1) Which value of π leads to zero seigniorage revenues?

c2) Let $r - n > 0$. Discuss implications for d .

c3) Let $r - n < 0$. Discuss implications for d .