

In (10), ${}_1f_2$ signifies the new mark-denominated claims due in period 2 that the government acquires in period 1 (including new central-bank foreign exchange reserves). In words, (10) implies that in period 2 the government will subtract from its original lira cash flow the principal and interest on its period 1 lira borrowing. The latter, in turn, equals lira debt service, government consumption expenditure, and the acquisition of new mark assets, less mark receipts that accrue in period 1. The government's only choice in period 1 (given the assumed setup) is the currency composition of borrowing.

What is the government's position in period 2? It must meet all period 2 obligations, whether incurred in period 1 or before, and spend E_2g_2 lire besides. The revenue to finance these obligations comes from mark assets, taxes on domestic output y , and any increase in the amount of (high-powered) money residents wish to hold in period 2, M_2 , over the amount held in period 1, M_1 ⁽¹⁾. The implied **period 2** constraint is⁽²⁾:

$$(11) \quad {}_1D_2 + {}_0D_2 - E_2({}_1f_2 + {}_0f_2) + E_2g_2 = E_2\tau y + M_2 - M_1.$$

Under the assumptions of capital mobility and uncovered interest-rate parity, perfect-foresight equilibrium entails the *ex post* equality of lira- and mark-asset returns, measured in lire,

$$(12) \quad 1 + i = (E_2/E_1)(1 + i^*).$$

Given (12), (10) and (11) may be combined to yield the familiar intertemporal government budget constraint (expressed in lira terms),

$$(13) \quad E_1({}_0f_1) - {}_0D_1 + \frac{E_2({}_0f_2) - {}_0D_2}{1 + i} = E_1g_1 + \frac{E_2g_2 - \tau y - (M_2 - M_1)}{1 + i}.$$

Private money demand obeys the simple quantity equation:

$$(14) \quad M_t = kE_t y \quad (t = 1, 2),$$

where real output is assumed constant. Incorporating a nonzero nominal interest elasticity of money demand would add nothing to this model, despite its centrality in models of the Krugman (1979) variety, so equation (14) is adopted to simplify the algebraic analysis⁽³⁾. Note the unrealistic assumption that the public holds money in period 2 even though that period is the economy's last and agents could raise consumption by spending it all. This situation arises in certain models of money demand (for example, Brock 1975), but different assumptions about the disposition of period 2 real balances could be made without altering the model's main thrust.

Consider next the government's position. The government cares only about the distorting effects of (*ex post*) inflation and the tax rate. Since both of these variables are, by assumption, zero in period 1, the objective function the government minimizes can be written as

$$(15) \quad \mathcal{L} = \frac{1}{2} \tau^2 + \frac{\theta}{2} \varepsilon^2,$$

where ε is the lira's depreciation rate against the mark (the inflation rate of lira prices) between periods 2 and 1,

$$(16) \quad \varepsilon = (E_2 - E_1)/E_2,$$

and $\theta > 0$ measures the weight placed on depreciation relative to other taxes. The simple quadratic specification in (15) is chosen for simplicity only. There is nothing in (15) to capture the notion that a realignment *per se*, even if small, can cause the government permanently to lose credibility or face. Such an additional, fixed, cost of realignment alters the analysis substantially, as is shown later, but it is easier to see why once the implications of the simpler loss function (15) have been laid out.

(1) The tacit assumption in (10) is that no seigniorage revenue is available in period 1 because the exchange rate must remain fixed until period 2.

(2) In (11) below, it would be more appropriate to take private-sector income as the tax base, but this would only introduce inessential complications. Notice, however, that since y excludes interest payments on government debt held by the domestic public, a tax rate τ on y in excess of 1 is not excluded.

(3) Adding a traditional interest-rate response of money demand would only raise the likelihood of the multiple equilibria shown below.