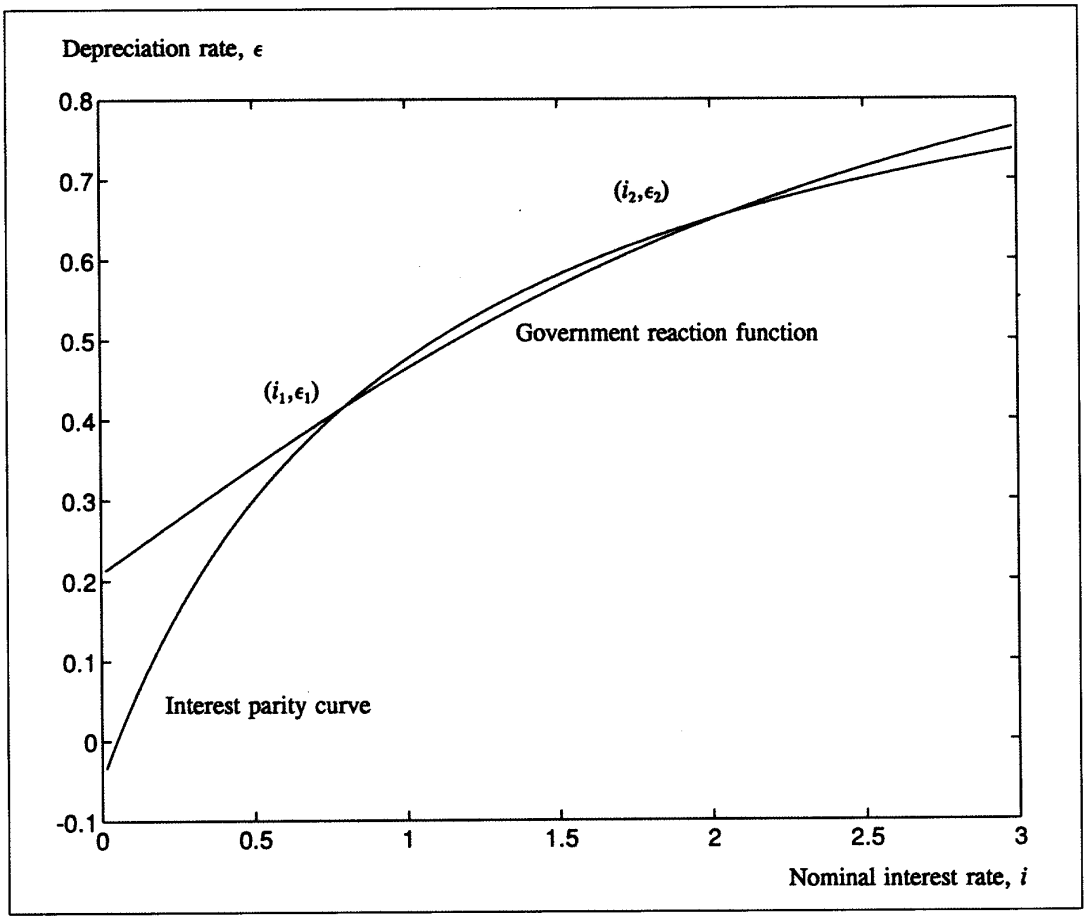
Figure 5



In a perfect-foresight equilibrium, the depreciation rate the market expects must equal the depreciation rate the government finds optimal, given market expectations. Thus, intersections of the government reaction function and the interest parity curve determine possible equilibria of nominal interest rates and currency depreciation. Figure 5 shows a case in which this equilibrium is not unique. Notice that the inflation and interest rates illustrated in the figure seem implausibly high, but remember that this is a two-period model in which the government must repay its entire debt on date 2.

In figure 5 there are two equilibria[1]. Obviously the government's loss is lower in the low-depreciation equilibrium, but there is no way to ensure that the bond market coordinates on the relatively low lira interest rate. The government faces a dynamic inconsistency problem: much as it would like to, it cannot credibly promise not to validate expectations if the bond market settles on the high-inflation equilibrium's interest rate.

Next consider the implications of this analysis for a regime of fixed exchange rates. International exchange rates are never irrevocably fixed. A sovereign government always can abandon a currency peg if economic conditions warrant a realignment. Assume, however, that the government faces a fixed cost c of realigning—a cost that could reflect political embarrassment and lost credibility, among other factors[2]. In this case the loss function is

(1) It is obtained by setting $y = 1$, ${}_0d_1 = 1.0$, ${}_0d_2 = 0.2$, ${}_0f_1 = 0$, ${}_0f_2 = 0$, ${}_1f_2 = 0$, $g_1 = g_2 = 0.35$, and $i^* = 0.05$.

(2) De Kock and Grilli (1993) formalize the credibility costs of realigning through a trigger-strategy model. They also find a possibility of multiple equilibria. I do not take explore in detail why policymakers found it optimal to institute the fixed rate and subject themselves to the realignment cost. Particularly if we ignore the possibility of strategic debt management (taken up below), it is entirely possible that a realignment cost has the potential to improve economic welfare by preventing excessive currency depreciation.