ple would save by buying the existing money supply and dissave by selling it to next period's savers. On a stationary path, the price of money will rise by a factor of $1+n$ in each period, which corresponds to a rate of interest of n per period, so individuals will in fact prefer holding money to holding output. Thus, at least with respect to stationary paths, the introduction of money leads to efficiency. (More precisely: Every stationary path in the money economy is efficient.) Samuelson's interpretation of this phenomenon is a philosophical one: An economy is inherently more than a mere mechanical system of particles in motion; it is, in fact, such a system *plus* something called a "Hobbes-Rousseau social contract" (Samuelson, 1958, p. 479). A physical system can operate efficiently without this added aspect, but a social system cannot.[9] Now, it seems to us that the social contract is no more involved in Samuelson's money economy than it is in any other general equilibrium model. For this reason we feel that Samuelson's discussion in this area is liable to be misleading. In general equilibrium analysis one thinks of a single market convention in which prices are announced and economic agents determine the trades and the productive activities in which they wish to engage at these prices. If the totality of all trades clears all markets, then the announced prices are said to be equilibrium prices. The question which general equilibrium theory asks is the following: Under the assumption that everybody at the market convention takes prices as *given*, is there a schedule of prices which leads to the clearing of all markets? In Samuelson's money economy, commodities are time-dated output and time-dated money, and all that one asks is whether or not a given price schedule is an equilibrium price schedule. It turns out that the schedule which sets the price of output in all periods equal to 1 and the price of money in period t equal to $(1+n)^t$ is, in fact, an equilibrium price schedule. The element of public trust in the monetary unit is reflected by the fact that a person who buys money in period t, at a price of $(1+n)^t$, assumes that he will be able to sell it in period $t+1$, at a price of $(1+n)^{t+1}$. But this is precisely what is meant in general equilibrium theory by the phrase "taking prices as *given*."

At the beginning of this section, we argued that, if efficiency is to be attained, someone will have to have a balance sheet showing liabilities in excess of assets. For this reason it seems appropriate to look upon money as a liability of a monetary authority that is committed to paying one dollar to whoever presents it with one dollar. The balance sheet of this monetary authority shows only liabilities and no assets, and the value of the authority's liabilities (quantity of money multiplied by the price of money) is precisely equal to the excess of assets over liabilities in the private sector. From this point of view, Samuelson's "contrivance of money" is, in essence, no different from the financial intermediary of section VII.

We turn now to a brief investigation of a model in which people live for *three* periods, and in which efficiency can be achieved (under some circumstances) without introducing into the economy a sector with negative net worth.

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[9] It is not clear whether Samuelson intends his model to constitute a *mathematical proof* of the Locke-Hobbes-Rousseau thesis.