Demand for Money and Goods in a Riskless Economy with Pure Exchange

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Conditions 1-4 (or their alternatives) are chosen as assumptions; 5-8 (or their alternatives) are chosen as implications.*

I. ASSUMPTIONS

1. Perfect market.

1'. Imperfect market with transaction costs and no barter.

2. Marketing occurs only once.

2'. Marketing will be repeated; no agreement between individuals' anticipations of future prices (or of marginal revenue curves).

3. Total initial money stock may be positive.

3'. Total initial money stock is zero.

4. Money can be used in consumption.

4'. Money cannot be used in consumption.

*Other ways of classifying the conditions into assumptions and implications are possible. If assumptions a and b imply c, we can also say instead that non-c implies non-a or non-b. The chosen classification has some advantages of exposition with reference to existing theories.
II. IMPLICATIONS

5. Equilibrium money prices are finite and determinate.
5'. They are determinate up to a constant factor.
5". They do not exist.

6. Individual equilibrium stocks are proportional to respective consumption flows.
6'. They are not necessarily proportional to respective consumption flows.
6". Individual equilibrium stocks and flows do not exist.

7. Individual equilibrium stocks and flows depend on money prices (or, more generally, on marginal revenue curves).
7'. They depend on ratios between money prices.
7". They do not exist.

8. Individual equilibrium stocks depend on market conditions (prices, price-ratios, or marginal revenue curves) in a continuous fashion.
8'. Individual equilibrium stocks are discontinuous ("all-or-nothing") functions of current and expected prices, and hence unstable.

9. The ratio $V$, of the money value of all consumption flows of all individuals to the total money stock, is finite and is independent of the given that determine the individual flows and stocks and the prices.
9'. $V$ is finite but not independent (hence, the "equation of exchange" is not independent of other equations).
9". $V$ is infinite (hence the "equation of exchange" is meaningless).

III. SOME ECONOMIC SYSTEMS (i.e., sets of consistent conditions)

A. Static, with metal money:
   1, 2, 3, h imply 5, 6, 7, 8, 9'.

B. Static, with paper money:
   1, 2, 3, h' imply 5", 6", 7", 9".
C. Static, with money-of-account:

\[1, 2, 3', 4' \implies 5', 6, 7', 8, 9'.\]

D. Dynamic; relative liquidity of a stock not defined (or always = 1):

\[1, 2', 3, 4' \implies 5, 6', 7, 8', 9'.\]

E. Dynamic; relatively liquid stocks defined, and their advantages derived:

\[1', 2', 3, 4' \implies 5, 6', 7, 8, 9'.\]