Discussion of "A Model of Money and Credit"

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... we have to give an explanation of the fact that people do hold money when rates of interest are positive, or we have to evade the difficulty somehow ...

... the great evaders would not have denied that there must some sort of explanation ...

[b]ut they would have put it down to frictions ... and there was no adequate place for frictions in the rest of their economic theory ...

This is where I disagree ... we have to look the frictions frictions in the face.

J.R. Hicks, A Suggestion for Simplifying the Theory of Money

A dictum ...

Money should not be a primitive in monetary theory

Some models ... satisfy the dictum, and others do not

MIUF and ... CIA models do not satisfy the dictum.

N. Wallace, A Dictum for Monetary Theory

- Get a whiff of a CIA constraint in the third subperiod
  - Can only use money, and not debt, in decentralized market
- I agree with authors: Agents should not be able to use "new" debt in decentralized period
- But why can't "existing" debt be used?

Existing Debt

- Debt can be issued and used in first and second subperiods
  - periods of complete recording keeping

- Why can't debt issued in subperiods 1 and 2 debt be used in subperiod 3?
  - can be counterfeited?
  - why can't fiat be counterfeited?

Problem with using existing debt in subperiod 3

- Agents can issue IOU's to themselves in subperiods 1 and 2; use them in subperiod 3
  - No need for fiat money

Observations

1. In practice, we do not see many private monies circulating

2. Frictions that give rise to fiat as a medium of exchange also limit that amount of private money the circulates.

Add a bit more structure to the first two subperiods

Subperiod 1, has two parts

- Part 1: Anonymous trade in market; can trade output for money and "existing" debt

- Part 2: Settlement of debt; record keeping, no production

Subperiod 2, has two parts

- Part 1: Market trade of output for money, existing debt and new debt; complete record keeping
  - New debt: Debtor and creditor have costly technologies that can make IOU counterfeit-proof; unit upper bound.
- Part 2: Trade money and debt; no production.

Subperiod 3

- As in paper, except that existing debt can be used.

Consider the modified model without fiat money

- Subperiod 1
  - Part 1: Agents produce output $x_c^* < x^* < x_d^*$
  - Part 2: Debt issued in previous subperiod 2 is settled with output

- Subperiod 2
  - Producers produce and receive debt; consumers consume and issue debt

- Subperiod 3

  – The only matched agents that can consume are those who were producers in the second subperiod.

  $\longrightarrow$ Agents who were non-traders and consumers in the second subperiod cannot consume even if they are in a productive match.

Observations

1. Huge proportion of the population cannot consume in subperiod 3 because they lack a medium of exchange, debt issued in subperiod 2.

2. Introduce fiat money: In equilibrium, agents will exit subperiod 1 with money ... in case that they are consumers or non-traders in subperiod 2.

3. Money is essential.

Concluding Comments

1. If additional frictions are introduced, money and debt can be media of exchange in subperiod 3 (no whiff of a CIA constraint)

2. Paper nicely compliments and extends Ayigari, Wallace and Wright (*JME* 1996)

3. This paper is about rate of return dominance

   $\longrightarrow$ the application to the credit card puzzle is distracting.