Discussion of Lester, Millard, and Willison, "Optimal Settlement Rules"

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The switch from DNS to RTGS

- DNS: deferred net settlement; RTGS: real-time gross settlement.
- U.S., U.K., Japan, E.U. all switched to RTGS in the 1990s.
- A good idea?
- Selgin: markets chose DNS.
- Also: How much risk does DNS really pose?

Competing equilibria?

- Costly transfer of funds implies DNS efficient.
- Does this account for historical popularity of DNS?
- As costs fall, RTGS becomes feasible and possibly more efficient.
- Policy: Encourage the switch to RTGS?
- No actual transition dynamics.

Stylized differences

- DNS, payments credited to customers before final settlement = credit risk.
- RTGS, more costly, but technological improvement is reducing the cost.
- Systemic risk? At the heart of the debate, but not in the model.
- Multiple equilibria: A sensible way to analyze problems like these.

Environment

- Random matching, single coincidence meetings.
- Competitive, costly banking sector.
- Reserve requirement.
- Banks charge an upfront fee for loans.

Settlement

- Two sub-periods. Trade in the morning.
- Some payments made through bank accounts.
- RTGS settles these payments in the morning.
- DNS settles these payments in the afternoon.

Bank default

- Exogenous risk of bank default between morning and afternoon.
- Default is resolved with full insurance for depositors.
- Under DNS, sellers receive partial payment.
- Under RTGS, no default risk, but higher costs κ levied on all bank accounts.

Payments

- Buyers make take-it-or-leave-it offers on methods of payment.
- RTGS offers are made w.p. $1 - \beta$.
- DNS offers are made w.p. β.
- DNS offers are accepted w.p. σ.
- Cash and RTGS offers are always accepted.

Equilibria

- For high ω, no DNS equilibrium exists.
- For high κ no RTGS equilibrium exists.
- For low κ and ω RTGS coexists with DNS equilibrium.
- Welfare: RTGS can dominate in coexistence region.
- A role for policy?

Multiple equilibria

- As the authors stress, the calibration is casual.
- Not clear how seriously to take the coexistence region. Relate parameters to data as in Rocheteau and Wright?
- Could a visit to autarky be interpreted as systemic risk? "Payments system breaks down."
- Transition dynamics necessary for full welfare evaluation.

Concluding thoughts

- Under the author's interpretation, we should not have observed RTGS systems. Were there ever RTGS systems?

- Could ω fall as well? Improved insurance or financial systems?

- Transition did not seem to be a problem in data for countries that switched from DNS to RTGS.