Finance

COLLEGE *of* BUSINESS at ILLINOIS

Comments on Chiu, Dong and Shao "On the Welfare Effects of Credit Arrangements"

Charles M. Kahn

2011 Bank of Canada Annual Conference

Ottawa, November 17, 2011

Purpose

- Model Competition between cash and credit for payment with microfoundations
- Consider welfare implications of introducing credit.

- Interpretation of credit system

- Credit cards
- Bank provision of inside money

- Main Criticism

- Welfare comparisons based on holding steady state monetary policy constant are problematic (general limitation of literature)
- To see this, consider comparison in terms of effects today, holding <u>future</u> monetary policy fixed (i.e. fixed value of money on the terminal date of the analysis)

- Note this is natural in the case of a dynamic programming structure: the value of money is simply the continuation value from the optimization of the subsequent period. (Would also hold for commodity money).

- Intuition

Introducing banks effectively reduces demand for outside money, (holding the terminal value of outside money fixed).

This permits a reduction in the initial price of outside money, increasing the amount of real money balances.

In turn this reduces the constraints on unbanked in the economy, increasing welfare.

- Intuition

- It also incidentally <u>increases</u> current period inflation—but that's because holding terminal prices fixed, it <u>reduces</u> initial prices.
- Imposing a steady state assumption about inflation in effect forces the real money supply back down, possibly reducing welfare.

- Related paper

- Kahn "Private Payment Systems, Collateral, and Interest Rates" *Annals of Finance*, forthcoming. (Earlier version, entitled "Offshore Settlement, Collateral and Interest Rates" June 2008, the Bank of Canada workshop "Payments Economics: Theory and Policy")

- Comparison

- Both build on Lagos Wright et seq. to consider competition between different payments arrangements.
- CDS extend to consider limitations on participation among some agents.
- Kahn extends to consider tradeoffs between costs of collateral in each system

- Summary

- Well executed paper, useful model of competing payments systems, shows importance of incomplete penetration of payments technologies on economic outcomes
- Counter-intuitive welfare results may say more about state of our models of fiat money than about the relation between outside money and credit based payment.

COLLEGE *of*
BUSINESS
at ILLINOIS