#### FINANCIAL INNOVATION AND MARKET LIQUIDITY

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#### Introduction

Loosely based on monetary economics in: Hartley Withers *The Meaning of Money* (1909) and J.A. Hobson *Gold, Prices and Wages* (1913)

Minsky on innovation: makes markets more liquid. How?

Credit/monetary innovation discussion of 1960s.

'Regulatory' innovation of 1970s and 1980s.

Contrast with 'product' and 'process' innovation in production.

Simple definition: invention and use of new financial instruments (e.g., credit cards in 1970s) or new uses for old instruments (e.g., using mobile phones to make cross-border payments) confuses the general appearance of innovations with their specific functions.

Presenting a more systematic view of innovation as an 'endogenous' process in 3 stages: each stage containing a different kind of innovation; each stage leading on to the next stage.

By the time the final stage is reached it is possible that the three different kinds of innovation may be occurring simultaneously. But they are of a different kind nevertheless.

Financial innovation starts in societies that have money and wealth, with wealth unequally distributed.

(An equal distribution of wealth is a major disincentive to financial innovation because much of the desire to accumulate more wealth arises from invidious comparison.

## 1. Credit innovation and asset markets ...

Money can be used to buy goods and services, but wealth can only be enjoyed, or applied productively. This situation gives rise to monetary innovation, i.e., the development of new forms of money in the form of credit.

Insecurity of unsecured lending, vs. secured lending (vs.

'asymmetric information').

E.g., Roman land mortgage;

land banks in colonial Kenya.

#### Lead to stage 2: Asset markets.

Once asset can be used as security for loan, new buyer can get a loan to buy the asset.

Problems of securing credit on  $17^{\text{th}}$  century government annuities  $\rightarrow$  government bond markets.

Credit needs for building infrastructure and machine production  $\rightarrow$  stock and bond markets.

Banks advance loans against stocks and shares, facilitating buying and selling of loans.

 $\rightarrow$  Credit expands beyond gold reserve capacity (Withers theory of financial crisis; Hobson's critique of quantity theory of money).

### 2. ... breed unstable asset markets

Inflow and outflow of credit into asset markets creates unstable asset prices.

Problem of unstable collateral.

## $\rightarrow$ Third Stage: derivatives markets

Difference contracts; future 'put' or 'call' contracts or options with fixed 'strike' price.

H.C. Emery: (1896) Speculation on the Stock and Produce*Exchanges of the United States* New York: Columbia UniversityPress: Futures contract offer certainty in an uncertain world.Insurance vs. gambling view.

Current cycle of financial innovation starts in 1950s: rise of unregulated credit markets in London and Singapore (Euromarkets).

→ Undermining of stability of asset market in foreign exchange (i.e., fixed exchange rates).

Milton Friedman & Leo Melamed promote exchange rate futures. Monetary policy activism at end  $1970s \rightarrow$  interest rate futures.

Conversion of debt into tradable instrument: securitisation and collateralised debt obligations.

## 3. Known and unknown risks

'Risk management' by credit-default swaps, credit insurance etc., ostensibly eliminating instability of asset values.

 $\rightarrow$  Fourth stage of innovation: transfer of financial risk from those who know of the risk (although not how much) to those who don't know of the risk. This is not 'asymmetric information' or transfer from 'risk-averse' to 'less risk averse'.

# Conclusion

Little need for most stage 3 innovations: Risks are most conveniently and cheaply 'hedged' with cash/bank deposits, i.e., Keynesian liquidity preference.

Demand for derivatives mostly comes from traders seeking profitable 'hedges' for open contracts; and banks hedging their OTC forward contracts.

# **Post-crisis**:

Pace of innovation slowed by increased reluctance to hold innovative assets;

Financial reconstruction may stabilise asset values  $\rightarrow$  reduced need for value-fixing derivatives;

More equal distribution of income and wealth may reduce demand for innovations.

Resources tied up in financial innovation may then be applied to more socially useful activities.