DISCUSSION OF:

MONETARY POLICY ACCORDING TO HANK

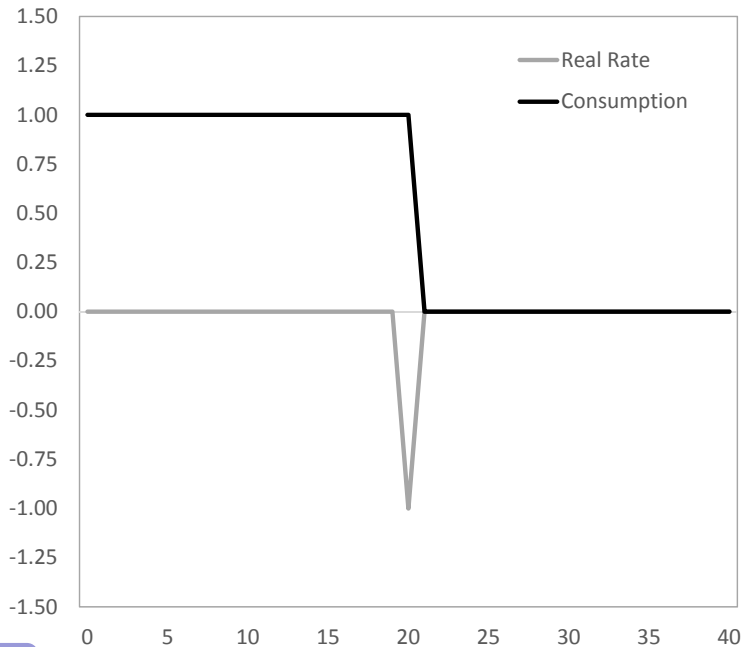BY KAPLAN, MOLL, VIOLANTE

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February 2016

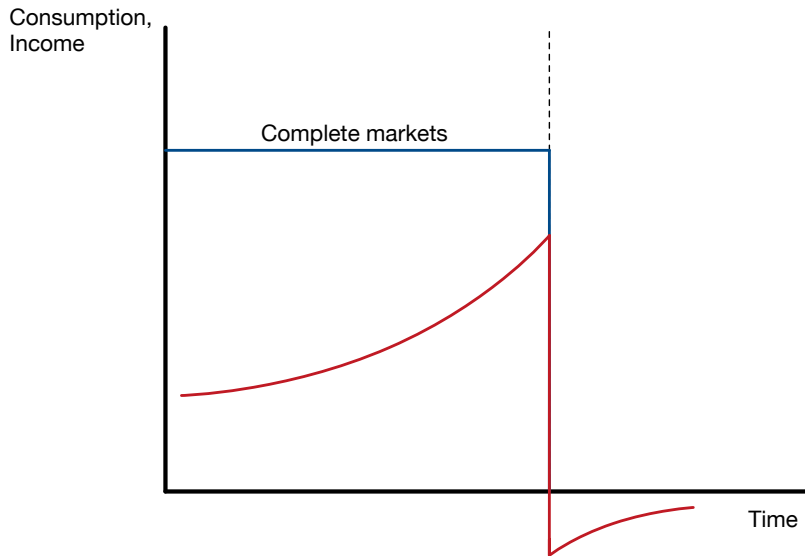HANK is the Future of Monetary Economics
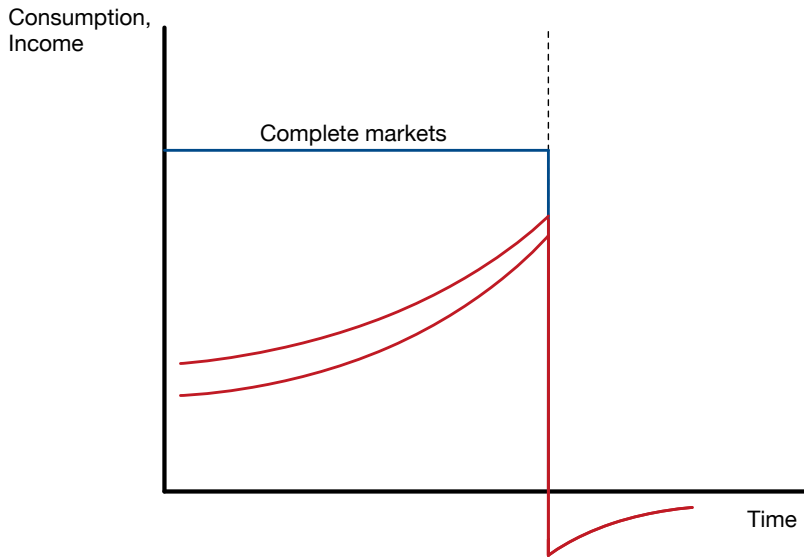
MP in HANK = MP in RANK

If:

- Individual income is proportional to aggregate income
  for all agents (distribution of relative income is unaffected
  by changes in aggregate income)

- Liquidity is proportional to aggregate income for all agents
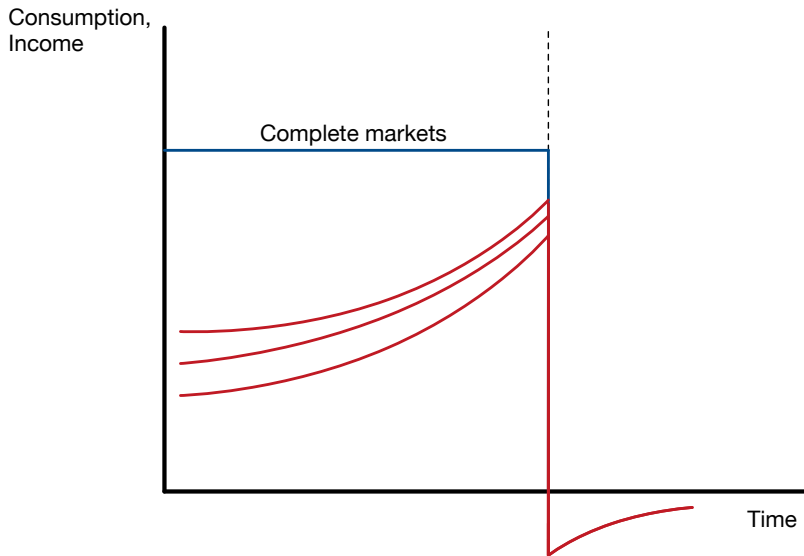  (borrowing constraints and asset values)

Legend:
— Real Rate
— Consumption

# GENERAL EQUILIBRIUM EFFECTS

- MP involves redistribution of wealth towards less constrained agents

- Income of more constrained agents doesn't rise proportionally with aggregate income

- Borrowing constraints and value of asset doesn't change proportionally with aggregate income

- Risk is pro-cyclical

## FOCUS OF HANK PAPER

- What is the relative size of direct effects and indirect effects of monetary policy?

- RANK: 95% direct effects
- HANK: Mostly indirect effects

- Same general thrust as in Werning's paper
- But what about aggregate effects?

|  | $T$ adjusts | $G$ adjusts | $B^g$ adjusts |
|  | (1) | (2) | (3) |
| Change in $r^b$ (pp) | -0.23% | -0.21% | -0.25% |
| Change in $Y_0$ (%) | 0.41% | 0.81% | 0.13% |
| Implied elasticity $Y_0$ | -1.77 | -3.86 | -0.52 |
| Change in $C_0$ (%) | 0.50% | 0.64% | 0.19% |
| Implied elasticity $C_0$ | -2.20 | -3.05 | -0.77 |
| Component of Change in $C$ due to: | | | |
| Direct effect: $r^b$ | 12% | 9% | 37% |
| Indirect effect: $w$ | 59% | 91% | 48% |
| Indirect effect: $T$ | 32% | 0% | 15% |
| Indirect effect: $r^a$ | 0% | 0% | 0% |

Table 6: Decomposition of monetary shock on non-durable consumption

RANK implied elasticity $C_0$: -1.50

# REDISTRIBUTION IMPORTANT

- T adjusts case > RANK because of redistribution towards poor
- G adjusts case > T adjusts because of "redistribution" towards government (MPC = 1 agents)
- B adjusts case small (no such redistribution)

- Redistribution clearly very important in HANK
- No gross positions important limitation

## DIRECT VERSUS INDIRECT EFFECTS
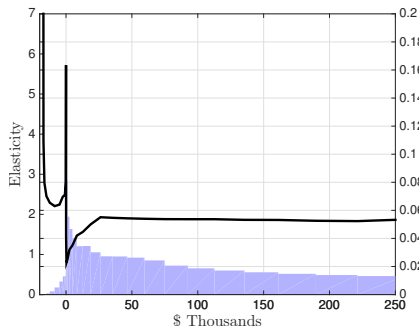
Alternative summary:

- Direct effects are robustly small
- Indirect effects can be either large of small
    - Depends on a lot of stuff
- Empirical evidence gives some guide as to
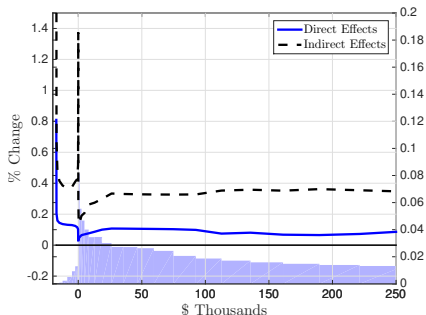  how large indirect effects are

Why do we care?

- Usual reason why structural models are useful (Lucas critique)
- Don't have empirical evidence on all types of policy experiments

# WHY DO THE RICH BEHAVE LIKE THE POOR?

## TWO ASPECTS: LARGE INDIRECT EFFECT AND SMALL DIRECT EFFECT



(a) Elasticity with respect to $r^b$

(b) Consumption Change: Indirect and direct

Figure 5: Consumption Responses by Liquid Wealth Positions

# WHY DO THE RICH BEHAVE LIKE THE POOR?

Large indirect effects:

- GHH preferences (Elasticity -2.2 versus -1.2)
- Realistic?

Small direct effects:

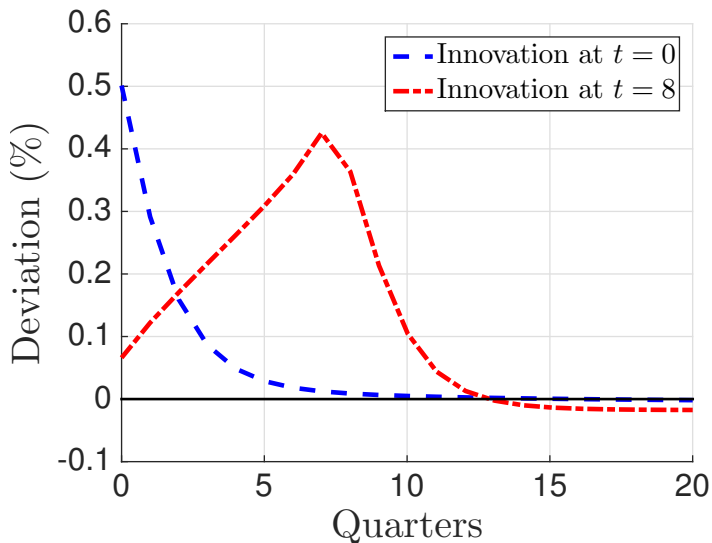- Wealth effects (wealthy loose interest income)
- Redistribution important!!

# OTHER ISSUES

- Risk versus predictable changes in earnings

- Consumption can't be analyzed in isolation

- No durable consumption goods

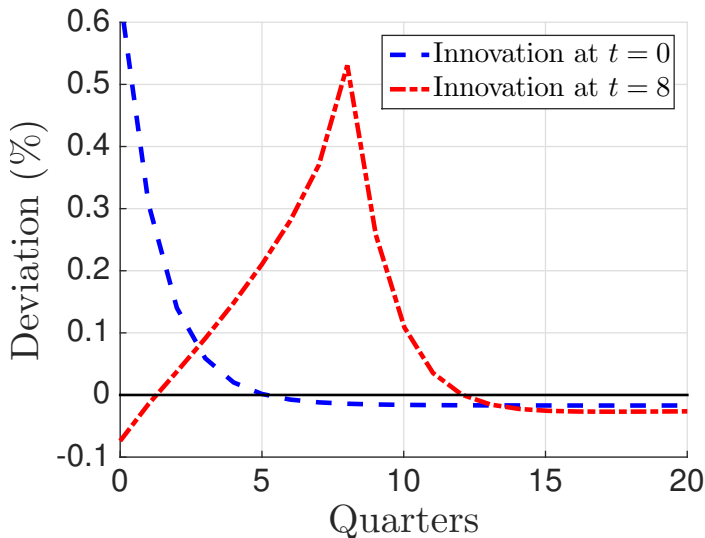# FORWARD GUIDANCE ROBUSTLY LESS POWERFUL

- Power of contemporaneous monetary policy sensitive to specification of fiscal policy
- Power of forward guidance robustly smaller in HANK than RANK
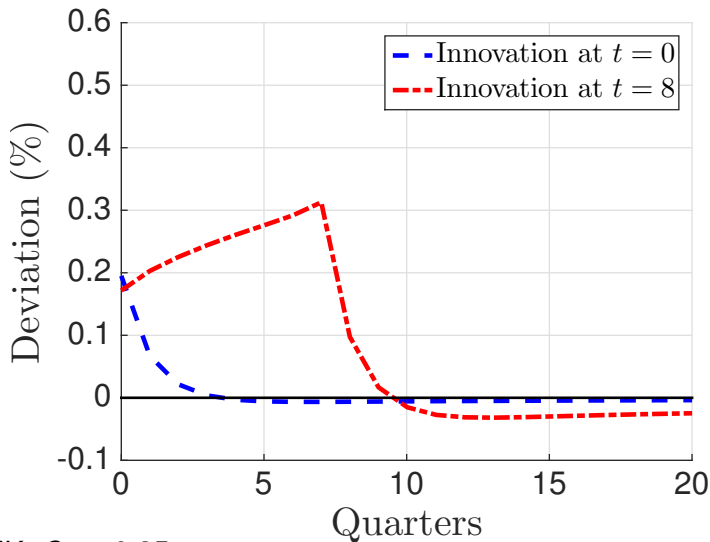
# FORWARD GUIDANCE WHEN T ADJUSTS



In RANK: $C_0 = 0.35$

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# WAY FORWARD

Many things matter that didn't before:

- Gross positions

- Response of labor income to product demand

- Response of borrowing limits to lower interest rates
  and higher output

- Asset liquidity / duration

- Durables / investment / financial intermediation / etc.

Appendix

# PARTIAL EQUILIBRIUM