Capital, Income Inequality, and Consumption

Bilbiie, Känzig, Surico

Discussion by Thomas Drechsel
(University of Maryland)

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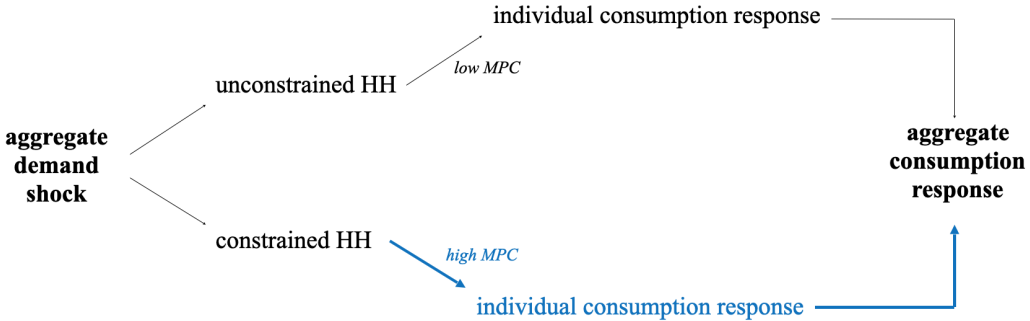
A NEW THEORETICAL CHANNEL

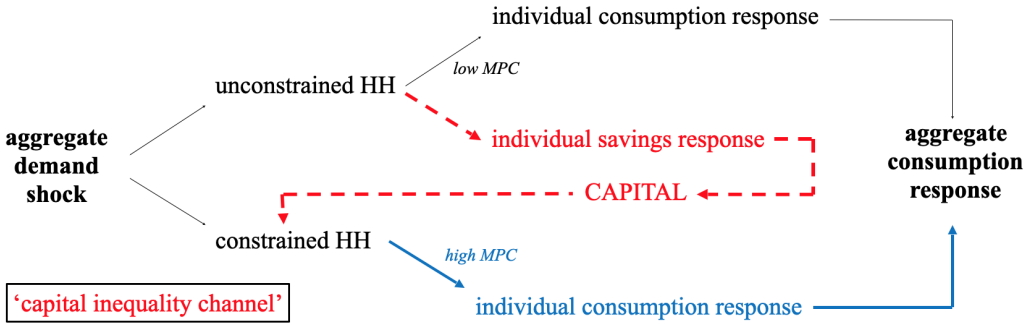
aggregate demand shock

aggregate consumption response

A NEW THEORETICAL CHANNEL



A NEW THEORETICAL CHANNEL



INTERACTION IS KEY

income inequality channel

+

capital inequality channel

=

LARGE effect of demand shock on aggregate consumption

CONTRIBUTIONS OF THIS PAPER

- Elicit novel theoretical channel
- Develop tractable framework to study its mechanics ('THANK' model)
- Examine related features of the economic environment
  - Fiscal redistribution
  - Idiosyncratic risk
  - Wage rigidity

MY SUGGESTIONS

1. Clarify and illustrate where channel is already implicitly at work
2. Open up the channel in more detail using an explorative calibration
3. Revisit investment-specific shocks and business cycle comovement

Suggestion 1

THE ESSENCE OF CAPITAL

- What *is* "capital" in the proposed channel?
- "Very general amplification mechanism likely to operate in any heterogeneous agent model with [...] any asset in positive net supply"
- Any savings of low MPC agents that end up in the hands of high MPC agents

$$C_t^H = \underbrace{W_t/P_t}_{\text{they can end up here}} N_t^H + \underbrace{T_t^H}_{\text{or also here}}$$

IMPLICIT CAPITAL INEQUALITY CHANNELS

- Previous research: indirect GE effects hugely important, outweigh direct intertemporal substitution channels
  - See e.g. Kaplan, Moll, and Violante (2018) or Cloyne, Ferreira, and Surico (2019)
- To what extent is this driven by the interaction between capital and income inequality highlighted here?
- The paper makes some shy remarks in this direction, but I think it would benefit from illustrating this more explicitly

CAN I FIND YOUR CHANNEL IN THESE NUMBERS?

TABLE 1—ELASTICITY OF AGGREGATE CONSUMPTION AND SHARE OF DIRECT EFFECTS IN SEVERAL VERSIONS OF THE RANK AND TANK MODELS

	RANK				TANK		
	$B = 0$	$B > 0$	S–W	$B, K > 0$	$B = 0$	$B > 0$	$B, K > 0$
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Elasticity of C	−2.00	−2.00	−0.74	−2.07	−2.00	−2.43	−2.77
PE. elast. of C	−1.98	−1.96	−0.73	−1.95	−1.38	−1.39	−1.39
Direct effects (%)	99	98	99	94	69	57	50

Notes: "$B = 0$" denotes the simple models of Section I with wealth in zero net supply. "$B > 0$" denotes the extension of these models with government bonds in positive net supply. In RANK, we set $\gamma = 1, \eta = 0.5, \rho = 0.005$, and $B_0/Y = 1$. In addition, in TANK we set $\Lambda = \Lambda^T = 0.3$. "S − W" is the medium-scale version of the RANK model described in online Appendix A.4 based on Smets-Wouters. "$B, K > 0$" denotes the richer version of the representative-agent and spender-saver New Keynesian model featuring a two-asset structure, as in HANK. See online Appendix A.5 for a detailed description of this model and its calibration. In all economies with bonds in positive supply, lump-sum transfers adjust to balance the government budget constraint. "PE. elast of C" is the partial equilibrium (or direct) elasticity computed as total elasticity times the share of direct effects.

Source: Kaplan, Moll, and Violante (2018)

BUILDING A 'CASE STUDY'

- My understanding is that it is not easy to isolate the channels in a full-blown HANK framework
- After all, that is a contribution of the paper to begin with
- But perhaps the framework can be extended to contain familiar model elements from the literature and these can be dissected in light of the new insights
- The beauty of the paper will remain its generality, but it could be illustrated with some familiar specifics

Suggestion 2

OPENING UP THE CHANNEL

- Can the mechanism be explored (disciplined) with some data?
- In my view, a quantitative version of the model in this context should put numbers on the different forms of the channel itself
  - Asset types, real wage vs. redistribution effects, ...
- We do have information on:
  1. Where HH across the income distribution put their savings
  2. How those savings come back into the economy and HH income (although this is a bit more difficult)
- I understand the contribution is theoretical, but matching some broad empirical patterns of asset allocation could highlight the applicability of the insights

WHERE DO THE SAVINGS GO?

- Recent work on where savings across HH income distribution end up
  - Mian, Straub, and Sufi (2020): high income HHs save in low income HHs' debt
  - Melcangi and Sterk (2020): stock market participation across income distribution
  - Doerr, Drechsel, and Lee (2020):
    - high income HHs invest directly into large firms
    - low income HHs hold deposits, which are intermediated to small firms
    - Income inequality affects which firms create jobs
- Some empirical insights could be borrowed from this line of work
- "Explorative calibration" possible?
  - Classify asset types depending on whether investment likely ends up in W/P or T
  - Match shares held in these assets across high MPC and low MPC households

Suggestion 3

INVESTMENT-SPECIFIC SHOCKS AND COMOVEMENT

- Investment shocks key driver of output fluctuations in quantitative RANK models
  - See e.g. Justiniano, Primiceri, and Tambalotti (2010)
- Comovement challenge:
  - In simplest RBC: $i \uparrow$ and $c \downarrow$
  - With additional rigidities: $i \uparrow$ and $c \uparrow$

INVESTMENT-SPECIFIC SHOCKS AND COMOVEMENT REVISITED?

- I suspect that the capital inequality channel may be able generate $i \uparrow$ and $c \uparrow$ in response to investment-specific shock *without* additional rigidities
- Low MPC HHs make use of more efficient investment
  - Generates aggregate $i \uparrow$
- High MPC HHs get some of the proceeds and increase consumption
  - Generates aggregate $c \uparrow$
  - Can be true even if low MPC households' $c \downarrow$
- This could be an interesting extension or even a starting point for a spin-off paper

WRAPPING UP

IN A NUTSHELL

- Fascinating paper and extremely clear exposition
- My suggestions boil down to "breathing more life" into the channel
  - How exactly do we find it operating in existing work?
  - Can we discipline it with some broad empirical patterns?
  - Does it shed new light on old comovement problems?

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