

Sticky Expectations and Consumption Dynamics

by

Christopher D. Carroll

Edmund Crawley

Jiri Slacalek

Kiichi Tokuoka

Matthew N. White

Lenno Uusküla

Eesti Pank, University of Tartu

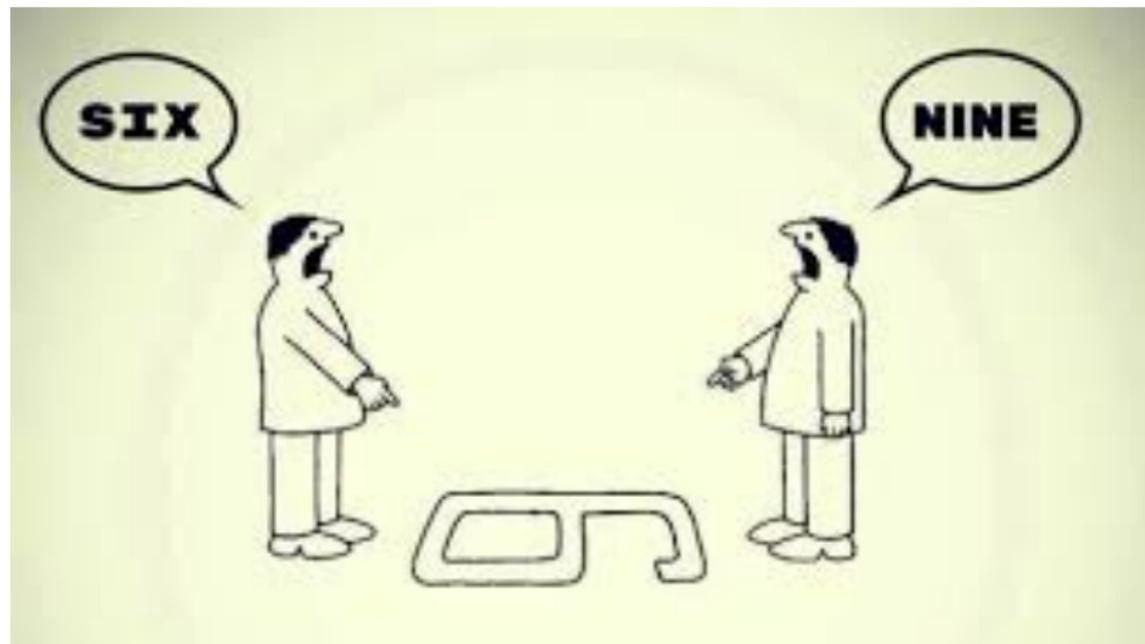
Rome

12 October 2018

Usual disclaimer applies

The views expressed are those of the author and do not necessarily represent the official views of Eesti Pank, the European Central Bank or the Eurosystem.

Short summary



Long summary

Conflicting findings

- ▶ **macro** finds high habit persistence
- ▶ **micro** finds little excess smoothness

Can we explain the possible difference by inattention to macro?

- ▶ **Yes** as macroeconomic shocks go unnoticed

Model can successfully show

- ▶ no persistence at household level
- ▶ strong persistence at macro level
- ▶ little cost of inattention

Contribution

Reconcile

- ▶ micro and macro evidence on smoothness

Application of heterogeneous agent (HA) DSGE

- ▶ push the boundaries what is done

Model

CRRA utility, households decides consumption and savings, **no habits!**

Income risk

- ▶ idiosyncratic: permanent and transitory (big)
- ▶ idiosyncratic unemployment spells of 1 quarter
- ▶ aggregate: permanent and transitory (small)

Information about aggregate states arrives with Calvo

Generate time-series and estimate micro and macro regressions

Thumbs up

- ▶ an interesting puzzle
- ▶ HA-DSGE with a meaning for macro
- ▶ running regressions on model generated data
- ▶ well documented and written, many details covered
- ▶ code in Github

Comments from a representative agent macroeconomist with a habit:)

"Absolutely fascinating." **Wired**

THE POWER OF HABIT

Why we do what we
do and how to *change*



CHARLES DUHIGG

Is low persistence in micro data a (new) puzzle?

- ▶ psychologists claim that we have many habits
- ▶ consumption in housing and cars is very hard to change fast

Your households are super smart but read newspapers once a year!

If you have macro persistence you should see it in micro too (just hard to estimate)

Is the stylized fact so clear?

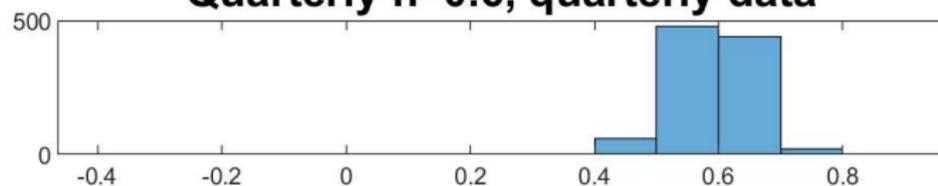
Select the best estimates in the literature!

Evidence you show might not be inconsistent

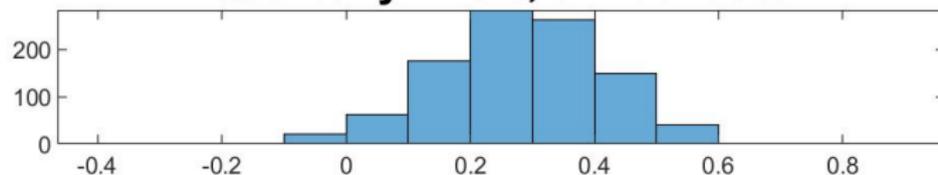
- ▶ macro often finds (0.5,0.8)
- ▶ quarterly habit of 0.6 translates to a year later
 $0.6^4 = 0.1296$
- ▶ **not inconsistent with** Dynan (2000) conf. int.
(-0.21,0.15(1.39)) for **yearly** data

Small simulation

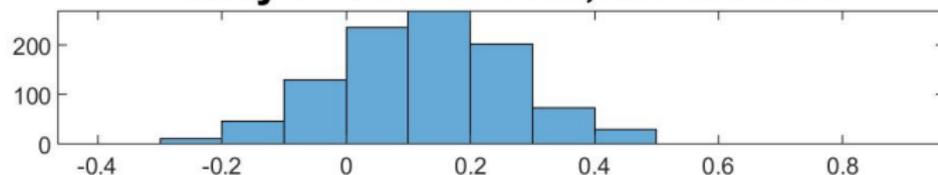
Quarterly $h=0.6$, quarterly data



Quarterly $h=0.6$, annual data



Yearly $h=0.6^4=0.1296$, annual data



Do people care about macro news?

Explain how macro inattention works

- ▶ do they know their budget constraint?
- ▶ people know whether unemployment level is high or low
- ▶ be kinder to learning literature

Macro shocks do not hit everybody the same way

- ▶ some get unemployed, some get wage cuts
- ▶ rich and poor
- ▶ timing matters
- ▶ social safety in good and bad times

Need heterogeneous agent models!

Lessons for macro?

Macroeconomic shocks are not important?

Macroeconomists can continue as usual?

- ▶ habits at macro level are well and alive?
- ▶ what are welfare conclusions of inattention compared to habits?
- ▶ is your evidence against any type of habits and habit persistence? (only one way of estimating in the paper)

Summary

A real pleasure

- ▶ beautiful issue
- ▶ bring micro- and macroeconomists in the same room
- ▶ nice example how we can misunderstand the data

Thank you for the paper!