

# Micro MPCs and Macro Counterfactuals: The Case of the 2008 Rebates

Jacob Orchard, Valerie A. Ramey, Johannes Wieland  
discussed by Ernesto Pastén

XXV Central Bank of Chile Annual Conference

The views expressed herein are solely those of the author and do not necessarily represent the views of the Central Bank of Chile.

# Intro

- ▶ **Spoiler:** This is an enthusiastically supportive discussion!

# Intro

- ▶ **Spoiler:** This is an enthusiastically supportive discussion!
- ▶ **One-bullet summary:** When using micro-estimated MPCs in a macro model...



# Intro

- ▶ **Spoiler:** This is an enthusiastically supportive discussion!
- ▶ **One-bullet summary:** When using micro-estimated MPCs in a macro model...



- ▶ **This discussion:** Review main points scattered with some thoughts.

## Bird-eye look

- ▶ **Main observation:** Estimated micro MPC in a standard macro model produces suspiciously too strong aggregate counterfactuals.
- ▶ One possibility: Estimating micro MPC is tough – upward bias.
- ▶ Another (complement) possibility: Those are **micro MPCs**, no **macro MPCs**. GE may make a difference.
- ▶ The paper argues that counterfactuals pass the smell test when
  - ▶ Upward bias in micro MPC estimates is corrected.
  - ▶ GE forces (for instance, introduced by durables in a TANK model) imply

$$\text{macro MPCs} < \text{micro MPCs.}$$

## Deep point – in my view

- ▶ Models are meant for performing counterfactuals.
- ▶ Microdata is useful *in the extent* it informs counterfactuals.
- ▶ Of course, which counterfactuals depend on the question.
- ▶ This is what I mean: Quite too often we see papers...
  - ▶ ...adding degrees of freedom in models to match microdata to...
  - ▶ ...claim 'success' and do counterfactuals never looking at data again.
- ▶ **This paper invites us to evaluate inputs from microdata in the extent they produce plausible counterfactuals.**

- ▶ The result that micro estimates seem inconsistent with macro evidence is not unique to MPCs:
  - ▶ Risk aversion.
  - ▶ Frisch elasticity.
- ▶ It is easy to shoot at the paper for using a TANK model.
- ▶ I am not going to do that: I see it as an example of GE implications.
- ▶ The mechanism by adding durables (think of cars) is:
  - ▶ As rebates increase durables demand, durables prices go up.
  - ▶ **Key:** expectations of transitory price spike delay durables demand.
  - ▶ In the model, a price spike of 1% can produce substantial delay.

## GE, cont'd

- ▶ This is an example; one can think of other examples.
- ▶ One can think of other questions too.
- ▶ The aggregate consumption response to the 2008 rebates is no doubt important.
- ▶ But one may be interested in welfare or the interplay b/w other policies and the rebate.
- ▶ If so, using microdata to identify mechanisms is also important.
- ▶ For instance, if financial frictions are behind large micro MPCs...



# MPC estimation

- ▶ Asynchronous rebates creates upward bias when DiD estimates include those who already got it.
- ▶ Excluding them substantially reduces DiD estimates.
- ▶ However, numbers are not that different from some used in models.
- ▶ An angle not exploited in the paper: heterogeneity in MPCs.
- ▶ It opens the possibility that aggregation may also create a wedge between micro and macro MPCs.
- ▶ If related with observables, MPC heterogeneity may guide modelling.

# Summing up

- ▶ Neat, general message [not entirely novel, but worthwhile to make]:

**Evaluate the informativeness of microdata for modelling  
using macro counterfactuals you can check!**

- ▶ In the context of heterogeneous agents models:
  - ▶ Micro MPCs are less important than you think for some questions...
  - ▶ ... while they can remain important for others.