

On the Distributional Effects of Conventional Monetary Policy and Forward Guidance

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Motivation

- ❖ Core topic in macroeconomics: the relationship between monetary policy and economic inequality
- ❖ Set of central bank tools increased in scope and complexity. Two key ones:
 - **Conventional monetary policy (CMP)**: changes in *current* policy rate
 - **Forward guidance (FG)**: information about *future* path of policy rate
- ❖ Still little known about the effects of unconventional tools on households

This paper

Study the **macroeconomic** and **distributional** impact of FG compared to CMP, with a particular focus on the **consumption inequality** between households

Empirics I: Aggregate effects

Data and approach

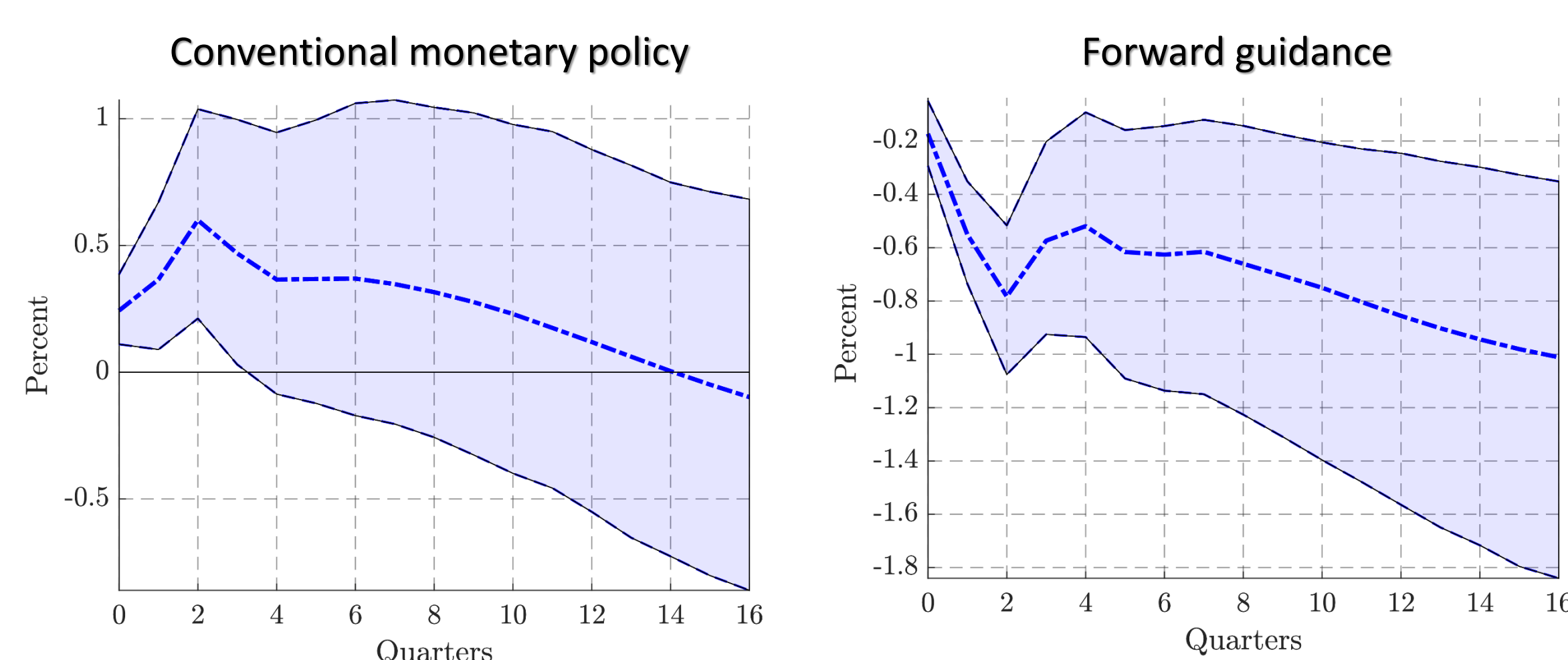
- ❖ Measure of **consumption dispersion**: U.S. household-level survey data from the Consumer Expenditure Survey (CEX)
 - Baseline measure: cross-sectional standard deviation of real consumption
- ❖ Disentangle the effects of monetary policy by isolating surprise changes in the federal funds rate and in forward guidance announcements (Swanson, 2021)
- ❖ Quarterly **structural VAR** model for 1991Q3-2019Q2 (Cholesky decomposition)
 - Variables: Policy surprises, inequality measure, macro/financial variables

Estimation of the macroeconomic impact of CMP and FG announcements

- ❖ Find **similar** and **significant** effects on the aggregate economy
- ❖ A **contractionary** monetary **shock** of either type leads to
 - a persistent decrease in real activity and a gradual fall in prices
 - tighter financial conditions

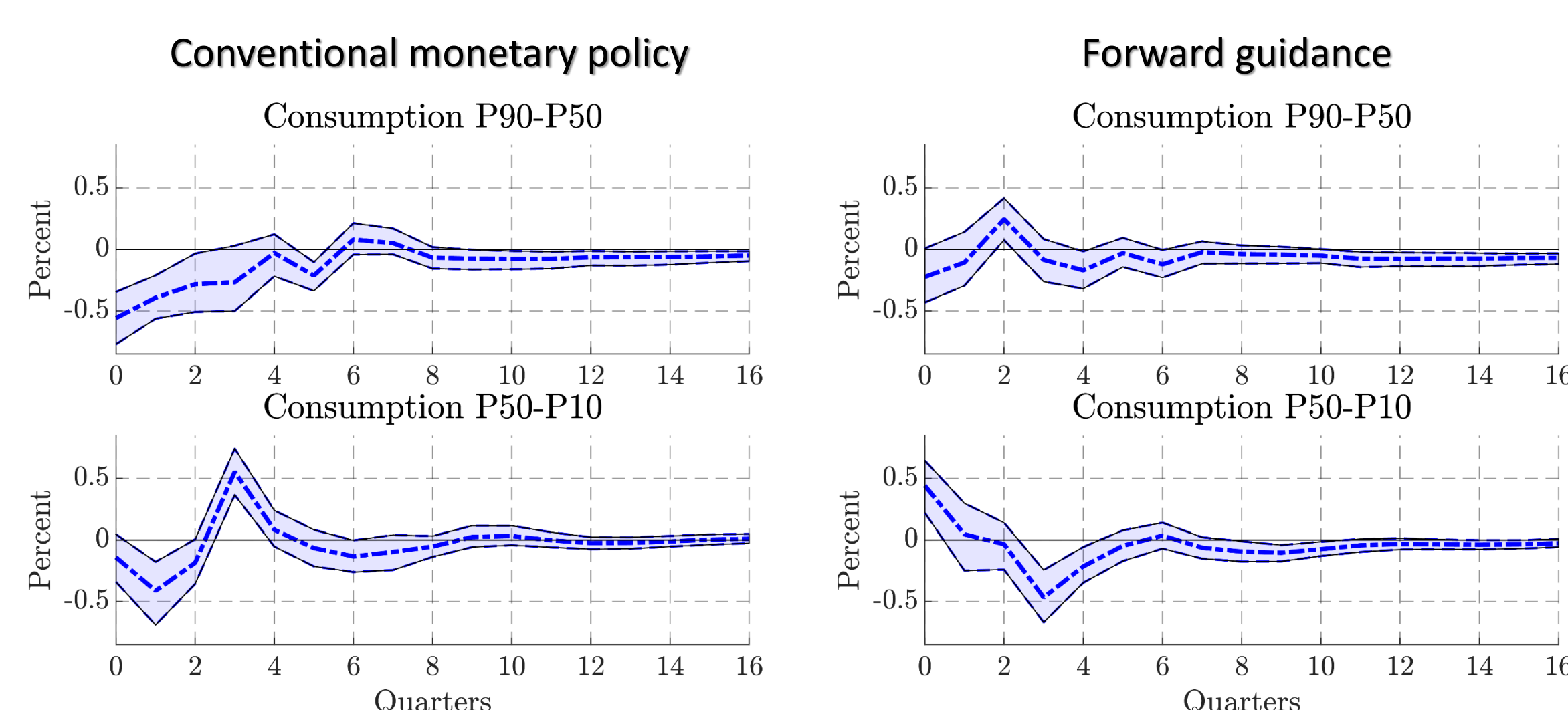
Empirics II: Distributional effects

Estimate the heterogeneous impact on **total household consumption inequality**



- ❖ Immediate **countercyclical** (left) or **procyclical** (right) cumulative response
 - Responses on impact are around the same size as the peak impact on output

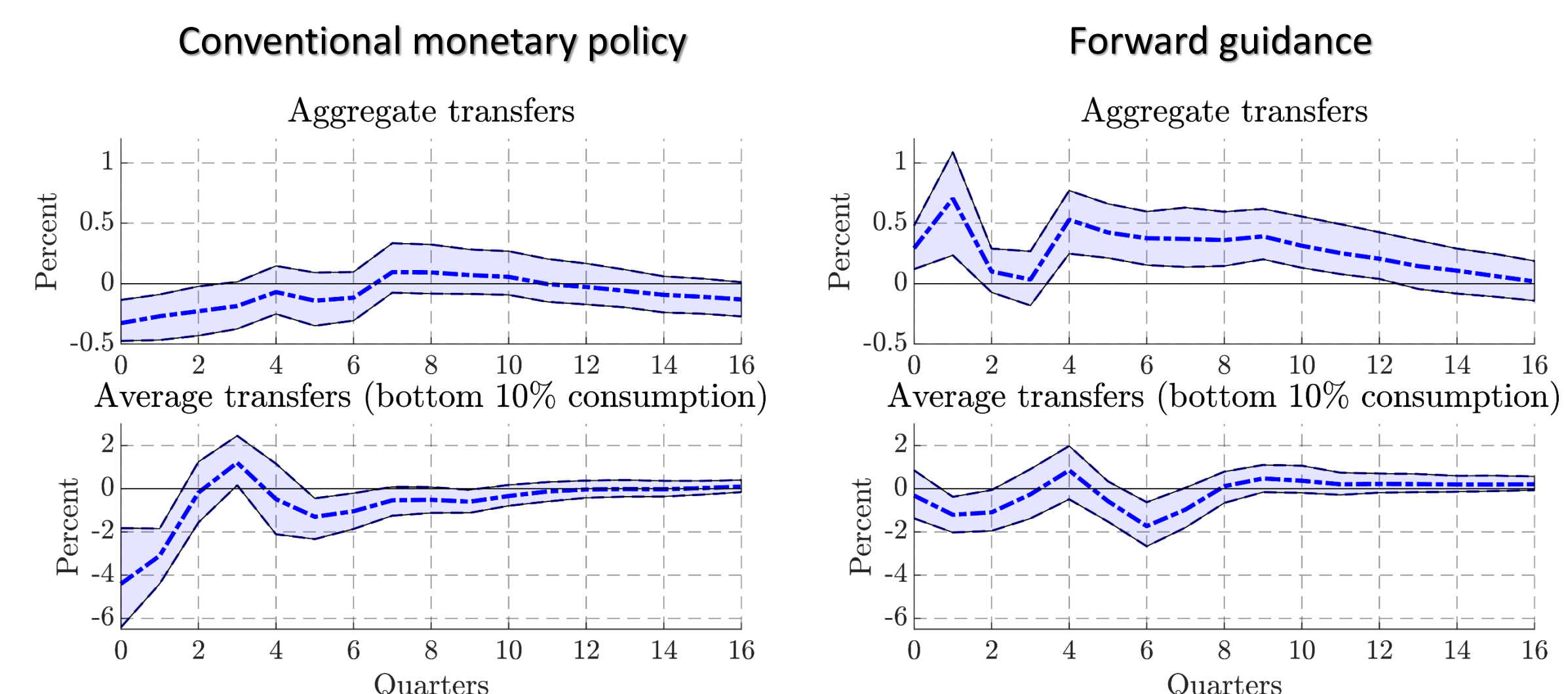
Zoom into the **heterogeneity across consumption percentiles**



- ❖ Different sensitivity at the two tails of the consumption distribution
 - CMP: **Low**-consumption households reduce spending significantly more \Rightarrow **inequality \uparrow**
 - FG: **High**-consumption households decrease spending considerably \Rightarrow **inequality \downarrow**

Empirics III: Transfers as explanatory factor

Idea: Policy rate $\uparrow \Rightarrow$ interest payments on government debt & borrowing costs \uparrow
 \Rightarrow fiscal adjustment \Rightarrow transfers to HHs $\uparrow \downarrow \Rightarrow$ **consumption (inequality) $\uparrow \downarrow$**



- ❖ Significant **differences** for both total fiscal transfers (*top*) and average transfer income of households at the left tail of the consumption distribution (*bottom*)
 - CMP: Bottom 10% contributes considerably to the negative response of total transfers
 - FG: Lowest-consumption households almost unresponsive

Model

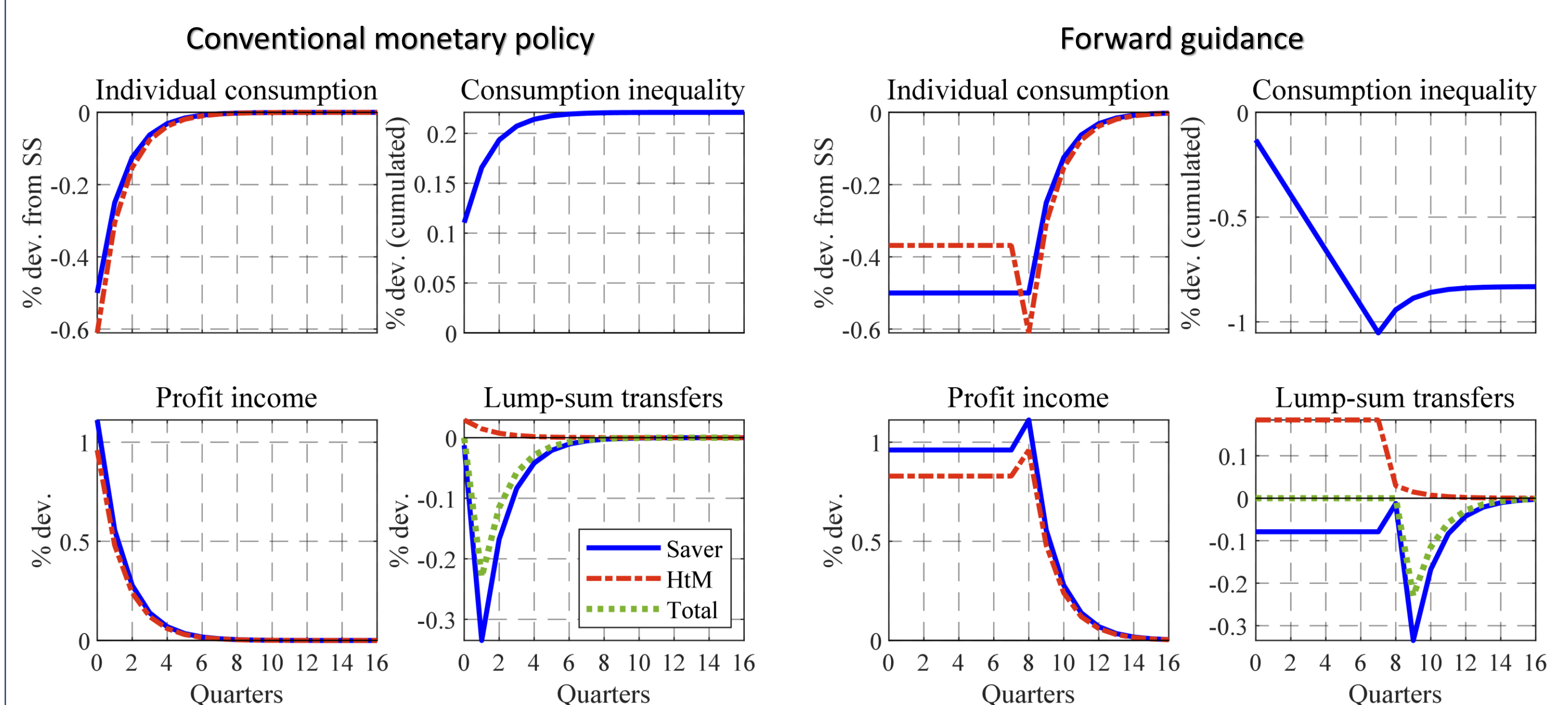
Tractable **DSGE model** with household heterogeneity and nominal rigidities (**TANK**)

- ❖ Goal: **Rationalize** empirical evidence & **illustrate mechanism** through fiscal policy
- ❖ Agents: Households, firms, government, monetary authority
- ❖ Two household types, heterogeneous in access to financial markets
 - **Savers**: smooth consumption, save in bonds, earn labor and dividend income, get transfers
 - **Hand-to-mouth**: own no assets, consume total labor income plus transfers

Key element for households' consumption response: **tax and transfer scheme**

- (1) **Redistribution** of (countercyclical) firm **profits** from richer to poorer households
 - Higher profit share of hand-to-mouth agents \Rightarrow **consumption inequality \downarrow**
- (2) **Lump-sum transfers** to both household types. Example for hand-to-mouth:
 - Fiscal channel: Larger debt implies a cut in transfers \Rightarrow **consumption inequality \uparrow**
 - Automatic stabilizer: Lower GDP entails more transfers \Rightarrow **consumption inequality \downarrow**

Study **increase in real interest rate** today (CMP) or eight periods from now (FG)



- ❖ Replicated evidence on heterogeneous response of consumption inequality
- ❖ Adjustments in **fiscal policy** after shocks determine **cyclical behavior of inequality**
 - Timing of real interest rate change matters for government debt burden
 - Redistribution through transfers stabilizes fluctuations in hand-to-mouth's income

Policy implications

- ❖ Fiscal-monetary policy coordination shapes heterogeneous effects of conventional and unconventional policy tools
- ❖ **Key role of fiscal response** to demand shocks for cyclical behavior of inequality
 - Targeted redistribution can reduce (consumption) inequality
- ❖ **Inequality matters** for the transmission of **monetary policy**

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