# **Should Inequality be a Concern for Monetary Policy ?**

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Panel on Monetary Policy, Employment and Inequality

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## **Growing interest on this issue**

 Introduction of Micro-level heterogeneity (HANK) + search and matching frictions (SAM) frameworks in Monetary Policy (MP) macro-modelling has brought inequality to centre stage.

(ECB Work Stream Report on Employment, 2021)

 Traditional view: Distributional issues are considered as side effects of central banks' policies stabilizing the economy as a whole. Alternative view: MP could have non-negligible direct effects on inequality at business cycle frequencies which interact with different channels of MP transmission mechanism.

Focus here on the impact of **expansionary** MP shock on inequality.

**Direct & Indirect Channels (expansionary MP shock:**  $\downarrow i$  )

- Savings-redistribution channel: benefits borrowers and hurts lenders:
   Inequality
- Household/Firm-heterogeneity channel: (access financial markets, discount rates, mortgagors, small young firms): ↓ Inequality
- Income-composition channel (wages, profits, transfers): ?? Inequality
- Labour earnings-heterogeneity channel (skills ): 1 Inequality

#### **Granular Information: Positive Income Gradient**

Andersen, Johannesen, Jørgensen & Peydró (2020): individual-level tax records and balance sheets for the entire adult population in Denmark (1987-2014)

2-year changes in income shares (across income percentiles) for  $\downarrow$  1pp. in interest rate



Unexplored MP Mechanism (Earnings heterogeneity channel): Investment

Dolado, Motyovzski & Pappa. (AEJ-Macro 2021): high (H)-less (L) skilled workers

• Capital Skill Complementarity (CSC) embedded in production function (KORV)

# \* Capital equipment and H-workers are complements \* Capital equipment and L-workers are substitutes

(similar reasoning for investment in AI & robots and decline of routine tasks) Acemoglu & Restrepo (AER, 2018)

• Asymmetries in SAM (ASAM)

L-workers have:

- \* Higher separation rates,
- \* Lower matching efficiency
- \* Lower Nash bargaining power

### **Insights & Results**

➢ Expansionary MP shock → ↑ Investment & AD → ↑ Relative demand for complementary and more fluid H-labour → ↑ Investment & AD → ↑ Relative demand for H-labour → .....

## Multiplier loop (*demand amplification effect*)

➤ CSC+ASAM → ↑ relative income of H-workers vs. L-workers (skill premium x relative employment).

Interaction of CSC & ASAM yields stronger effects on relative income shares than the sum of the two separate forces. Monetary Policy shock (NK+CSC+ASAM):  $\downarrow$  1 pp in *i*.

CSC vs Cobb-Douglas (benchmark) ASAM vs Symmetric SAM

Panel D. Relative income share of *H* versus *L* 



# Confronting CSC+ASAM mechanism with US (CPS) data: $\downarrow$ *i* by -1 pp.

Proxy SVAR (US 1979:1-2007:12): Wieland and Yang (2016) update of Romer & Romer

SVAR (ff, u-rate, emp-rate (H), emp-rate (L), real wage (H), real wage (L), CPI inf) across different sectors



#### Job polarization and the slope of the price Phillips Curve

• Job polarization may be another relevant driver of PC flattening.

The labour market for **non-routine jobs** is more *fluid* than the labour market for **routine jobs**.

Cantore, Ferroni & Leon-Ledesma (JEEA, 2020), Siena & Zago (2021).



Figure 1: The Slope of the Phillips Curve and Job Polarization

Note : Figure 1.a and 1.b plots respectively the slope of the Phillips Curve and the routine employment share across the EMU. Grey areas represent the Great Recession and the Sovereign Debt Crisis. Light-blue shaded areas represent 95% confidence intervals.