Should Inequality be a Concern for Monetary Policy?

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Welfare Considerations Beyond Price Stability

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Why is inequality becoming increasingly relevant for MP?

Traditional view: Distributional issues are considered as *side effects* of CB's 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.

Growing influence of micro-level heterogeneity (HANK) + search and matching frictions (SAM) frameworks on Monetary Policy (MP) macro-modelling has put inequality centre stage.

Focus here on the impact of **expansionary/contractionary** MP shocks on inequality (follow up to Dolado, ECB Forum Sintra 2021).

Direct & Indirect Channels (expansionary MP shock: \sqrt{i})

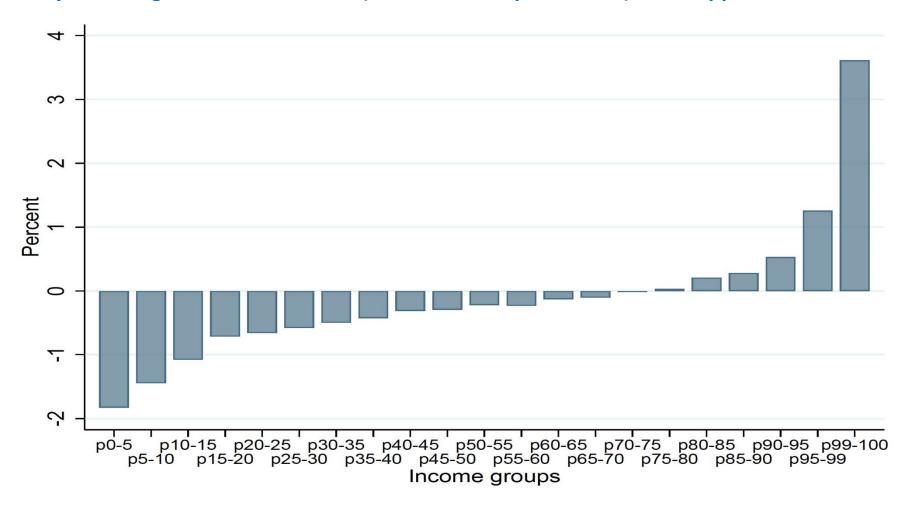
- Savings-redistribution channel: benefits borrowers and hurts lenders:

 ↓ Inequality
- Interest-sensitivity channel: ↑ asset prices & ↓ interest costs (favours the richer)
- Inflation channel: ↑ inflation (harms the poorer): ↑ 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): ↑ 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



Novel MP Mechanism (Labour-Earnings heterogeneity channel): Investment

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

- Capital Skill Complementarity (CSC) embedded in production function (KORV)
 - * Capital equipment and HS-workers are complements
 - * Capital equipment and LS-workers are substitutes

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

Asymmetries in SAM frictions (ASAM)

LS-workers have:

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

Insights & Results

Expansionary MP shock $\rightarrow \uparrow$ Investment & AD $\rightarrow \uparrow$ Relative demand for complementary and more fluid HS-labour $\rightarrow \uparrow$ Investment & AD $\rightarrow \uparrow$ Relative demand for HS-labour $\rightarrow \dots$

Multiplier loop (demand amplification effect)

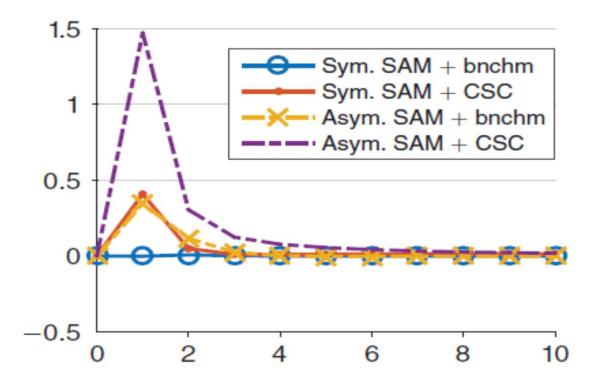
ightharpoonup CSC+ASAM $ightharpoonup \uparrow$ relative income of H-workers vs. L-workers (skill premium x relative employment rates).

➤ Interaction of CSC & ASAM yields stronger effects on relative income shares than the aggregation 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

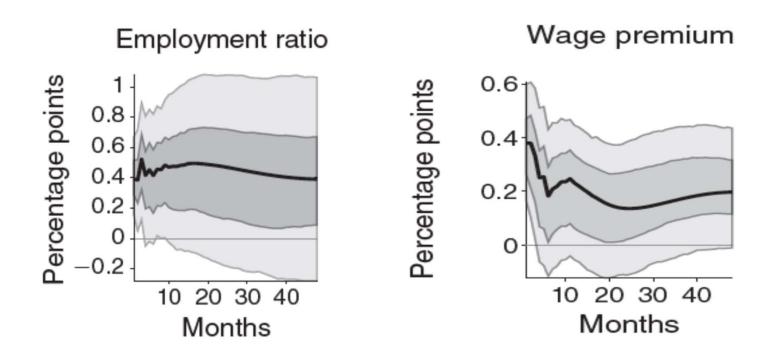
Panel D. Relative income share of H versus L



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



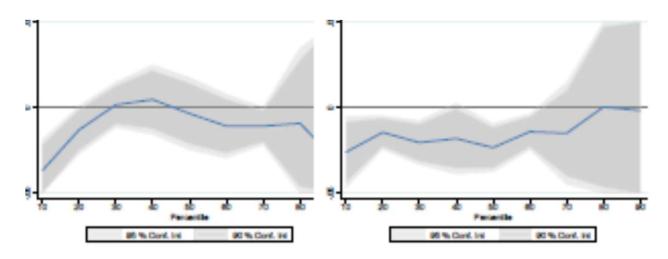
Alternative mechanism: CSC+ Internal liquidity constraints in the face of (+) credit-supply shocks (Aristizábal-Rámirez and Posso, 2021).

LP (Colombia 2008:1-2018:12): Lending from bank b to firm f

High-liquidity firms are able to expand in scale

Firms with less internal resources increase capital and HS workers to substitute LS workers.

Figure 4: A Positive Credit-Supply Shock Reduces the Value of the Wage Deciles on the Bottom Half of the Distribution



A new scenario: Will CB's tapering/tightening reduce wage inequality?.

- Taper tantrum at the time of "gasflation": ↓ Investment & ↓ HS employment and wages relative to LS
- But unemployed HS *trickle down* to LS job segments: \uparrow LS L supply \rightarrow LS wages. Same with automation &AI: middle skilled worker in routine tasks move to LS jobs.
- Is CB's put dead if Ukraine' invasion persists? The combined fiscal and monetary stimulus efforts in the major developed countries has increased aggregate money supply by \$20 trillion over 2020 and 2021 to a record \$102.5 trillion (Bloomberg). Yet, "gasflation" is not likely to respond to a general tightening of MP.
- **MP (+) supply shock**: Need of a targeted approach: accelerate green energy transition and slow down inefficient automation by redefining TLTRO operations from a blunt toolkit to a targeted one.