

The interaction between monetary policy and the distribution of wealth and income

Virtual Workshop on Household Distributional Accounts

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The views expressed are those of the presenter and do not necessarily reflect those of the ECB

Euro area HICP

(annual rate of change)





Source: ECB. Latest observation: September 2021.

"The primary objective of the ECB is to maintain **price** stability in the euro area."

"Without prejudice to the price stability objective, the Eurosystem shall **support the general economic policies in the EU** with a view to contributing to the achievement of the Union's objectives as laid down in Article 3 of the Treaty on European Union."

"These objectives include balanced economic growth, a highly **competitive social market economy aiming at full employment and social progress**, and a high level of protection and improvement of the quality of the environment."

(The ECB's monetary policy strategy statement, 8 July 2021)

Effects of APP on household income (percentages)



Source: Lenza and Slačálek (2018)., "How does monetary policy affect income and wealth inequality? Evidence from quantitative easing in the euro area", ECB Working Paper No 2190. Notes: The chart shows the percentage change in mean income for various income quintiles, as well as breaking that change down into the extensive margin (earnings heterogeneity channel) and the intensive margin (increase in wages). The figures in parentheses show the initial level of mean gross household income for each quintile. For the purposes of this chart, the euro area has been modelled by aggregating data for Germany, Spain, France and Italv.

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Effects of APP on the wealth distribution (percentages)



Source: Ampudia et al. (2018), "Monetary policy and household inequality", ECB Working Paper No 2170.

Notes: The numbers in brackets show initial median net wealth levels in each quintile. Euro area aggregates are calculated as the total for the four large countries: Germany, Spain, France and Italy.

Econometric estimates of euro area r* (percentages per annum)

■ Range of smoother estimates ■ Range of all natural rate estimates



Sources: WGEM Report "The natural rate of interest: estimates, drivers, and challenges to monetary policy", OP, No 217; Ajevskis (2018); Brand, Goy, Lemke (2020); Brand, Mazelis (2019); Fiorentini, Galesi, Pérez-Quirós, Sentana (2018); Geiger and Schupp (2018); Holston, Laubach, Williams (2017); Jarocinski (2017); Johannsen and Mertens (2021). Notes: Ranges span point estimates across models. The dark shaded area highlights smoother r* estimates that are statistically less affected by cyclical movements in the real rate of interest than the other estimates depicted in the chart. Latest observation: 2019.

"Prior to the financial crisis, **representative-agent models were the dominant paradigm** for analyzing many macroeconomic questions. (...) I am glad to now see a greater emphasis on the possible macroeconomic consequences of heterogeneity."

(Yellen, 2016)

- Selected channels (Moll, 2018; Mian et al., 2021):
 - Balance sheet/credit constraints
 - Marginal propensities to spend
 - Pressure on equilibrium real rates

The value added of distributional financial accounts

Creating the Distributional Wealth Accounts

Data Releases

• Regular: Quarterly Publication lag ~ 3 months Quarterly Sectoral Accounts Survey (QSA) (HFCS) Aggregate data

Distributional Wealth Accounts (DWA)

- Irregular: 3 waves in 2010, 2013 and 2017
- Publication lag ~ 18 months



- HFCS matched with the QSA data
- Interpolation between (and extrapolation beyond) surveys for guarterly data at instrument level

Use cases of DWA in terms of conjunctural and policy analysis

Conjunctural analysis

- What is the impact of wealth levels on the propensity to consume and save?
- How do cash-constrained/poor households, or wealthy hand-to-mouth households, react to shocks?

Policy analysis

- How does MP affect HH balance sheets across the income and wealth distribution and are there side effects on inequality?
- Impact on the interest income of savers vs. debt servicing burden of borrowers?
- Model development
 - Important information for the calibration of models with heterogeneous agents

Firm heterogeneity as the next frontier?

Leverage at book value for all vs. listed companies

(percentages of total assets)



Source: ECB (QSA), Worldscope. Notes: Leverage is defined as gross debt over total assets. Listed companies series is corrected for the adoption of the IFRS-16 in 2019Q1. Latest observation: 2021Q2.

Policy relevant distributional questions in corporate sector

How did leverage of firms (as it relates to financial frictions) evolve by size/type of firm?

Example (chart): diverging leverage patterns of large companies relative to broader corporate sector

- How did corporate indebtedness evolve by sector?
- How does monetary policy transmit to firms with different characteristics:
 - SMEs versus large firms
 - Leverage / financing structure / profitability

Thank you for your attention!

- Mian, Atif R., Straub, Ludwig and Sufi, Amir, What Explains the Decline in r*? Rising Income Inequality Versus Demographic Shifts (2021). University of Chicago, Becker Friedman Institute for Economics. Working Paper No. 2021-104.
- Moll, Benjamin, *Distributional Macroeconomics*, Asian Meeting of the Econometric Society. June 21, 2018.
- Yellen, Janet L., *Macroeconomic Research After the Crisis* at "The Elusive 'Great' Recovery: Causes and Implications for Future Business Cycle Dynamics". 60th annual economic conference sponsored by the Federal Reserve Bank of Boston. Boston, Massachusetts. October 14, 2016.