

Computational Evidence on the Distributive Properties of Monetary Policy

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Abstract

Empirical studies have pointed out that monetary policy may significantly affect income and wealth inequality. To investigate the distributive properties of monetary policy we resort to an agent-based macroeconomic model where firms, households and one bank interact on the basis of limited information and adaptive rules-of-thumb. Simulations show that the model can replicate fairly well a number of stylized facts, specially those relative to the business cycle. We address the issue using three types of computational experiments, including a global sensitivity analysis carried out through a novel methodology which greatly reduces the computational burden of simulations. The result emerges that a more restrictive monetary policy increases inequality, even though this effect may differ across groups of households. This may put into question the principle of the independence of central banks. In addition, this effect appears to be attenuated if the bank's willingness to lend is lower.

Keywords: Economic inequality, Monetary policy, Agent-based models

JEL Codes : C63, D31, D50

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