

# Inspecting the Mechanism: Optimal Monetary Policy in HANK Economies

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ABSTRACT. In this paper, we study the positive and normative implications for monetary policy of cross-sectional wealth dispersion due to uninsured, idiosyncratic labor-income risk. To this purpose we develop a tractable Heterogenous-Agent New Keynesian (HANK) model based on CARA (Constant Absolute Risk Aversion) utility functions and Normally distributed labor-income risk. The distributions of wealth, earnings and consumptions, as well as their dynamics over time, can be solved in closed form, which informs us about the precise impact of monetary policy on those cross-sectional distributions. The Social Welfare Function (SWF) that aggregates agents' utility can also be solved in closed form, which allows formulating and solving a linear-quadratic approximation to the optimal monetary policy problem faced by the central bank. The optimal policy response to aggregate shocks gives a central role to (i) the redistribution of wealth through inflation (as emphasized by Bhandari et al., 2018), and (ii) the impact of policy on the marginal propensity to consume out of wealth (a new channel that we identify, to the best of our knowledge).