

# Does Household Heterogeneity across Countries Matter for Optimal Monetary Policy within a Monetary Union?

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## Abstract

Yes, it does. Empirical evidence points to large variation of the share of financially constrained households across countries forming a monetary union. We examine the implications of this asymmetry for the conduct of optimal monetary policy in a currency union when money as liquid asset serves for insurance purposes. To this end, we build an analytically tractable Heterogeneous Agent New Keynesian model of a two-country monetary union with idiosyncratic risk of switching the household type and imperfect insurance. We take the heterogeneity across countries into account by different shares of financially constrained households across countries.

Imperfect insurance leads to a liquidity-insurance motive for the central bank as it is welfare-enhancing to provide liquidity to stabilize consumption. While the nominal interest rate is a union-wide instrument, liquidity can be used as a country-specific stabilization tool. We derive a welfare function and find that the asymmetry across countries matters for monetary policy as two additional objectives, consumption inequality within and between countries, arise. This implies a different weight on output stabilization compared to the standard welfare targets in a two-country monetary union. The importance of the additional objectives crucially depends on the share of financially constrained households. The higher this share, the less important becomes inflation stabilization since it is optimal to tolerate higher inflation in favor of stabilizing consumption inequality.

Furthermore, we find that the greater the heterogeneity between countries in terms of the share of constrained households, the more important liquidity as an instrument of redistribution becomes. The higher this share, the more liquidity the central bank will provide, the better the central bank can close the arising relative country gaps since liquidity works as a country-specific instrument. Thus, the central bank can compensate for country differences. However, this comes at the cost of higher aggregate welfare losses as the distance to the efficient equilibrium increases.

**Keywords:** Heterogeneous Households, Liquidity, Imperfect Insurance, Optimal Monetary Policy, Monetary Union, Two-country model

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