# Essays on redistributive policies and household finance with heterogeneous agents

submitted by

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#### Abstract

The overall objective of the thesis is to investigate needs and incentives of all income/wealth groups in order to explore ways and means to remedy the excessive economic inequality. A closer examination of individual decisions across richer and poorer households allows us to recognize conflicts of wants, needs and values and subsequently to draw recommendations for future policies.

The first chapter examines households' preferences over the redistribution of wealth resources. The preferences of voting households are restricted by agents' present and future resource constraints. The wealth resources vary over the business cycle, which affects the grounds for speculations of voting households. We augment the standard Real-Business-Cycle (RBC) model by the majority voting on lump-sum redistribution employing a balanced government budget. Our findings indicate that for the usual elasticity of labor supply both transfers' level and share of output are procyclical, with the procyclicality increasing in the discrepancy between richer and poorer households.

In the second chapter we analytically demonstrate that all economic agents face subsistence costs that hinder economic and financial decisions of the poor. We find that the standard two-asset portfolio-selection model with a time-invariant subsistence component in the common-across agents Stone-Geary utility function is capable of explaining qualitatively and quantitatively three empirical regularities: (i) increasing saving rates in wealth, (ii) rising risky portfolio shares with wealth, (iii) more volatile consumption growth of the richer. On the contrary, "keeping-up-with-the-Joneses" utility with a time-varying weighted mean consumption produces identical saving rates and portfolio asset shares across richer and poorer agents, failing to match the micro data.

Finally, in the third chapter we use Epstein-Zin-Weil recursive preferences altered to include subsistence costs, as this form of utility function enables trade-off between stability and safety. We pursue an analytical investigation of a more complex multi-asset portfolio-choice model with perfectly insurable labor risk and no liquidity constraints and find further support of the data evidence. If households' total resources are anticipated to increase over time, poorer agents can afford to gradually escape subsistence concerns by choosing lower saving rates and accepting only minor portfolio risks as their consumption hovers close to the subsistence needs. The calibration part of the model economy shows that analytical results can quantitatively reconcile the data, too.

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### My individual contributions to chapters

- Chapter 1: contributed to model description, data construction, wrote Gauss code and conducted simulations;
- Chapter 2: contributed to model description, data construction, calibration of parameter values, sensitivity analysis;
- Chapter 3: contributed to model description, calibration of parameter values, sensitivity analysis.