

Firm Leverage and Wealth Inequality*

Ivo Bakota

CERGE-EI, Prague[†]

Max Planck Institute for Social Law and Social Policy, Munich

July 7, 2020

Abstract

This paper studies the effects of a change in firm leverage on wealth inequality and macroeconomic aggregates. The question is studied in a general equilibrium model with a continuum of heterogeneous agents, life-cycle, incomplete markets, and idiosyncratic and aggregate risk. The analysis focuses on the particular change in firm leverage that occurred in the U.S. during the 1980s, when firm leverage increased significantly, and subsequently has been dropping since the early 1990s. In the benchmark model, an increase in firm leverage of the size that occurred during the 1980s increases capital accumulation by 5.38%, decreases wealth inequality by 1.07 Gini points and decreases government revenues by 0.11% of output. An increase in firm leverage increases average after-tax returns on savings, as firm debt has beneficial tax treatment. This increases the saving rates of all households, and disproportionately increases the saving rates of relatively poorer households. Consequently, the model implies that the increase in firm leverage did not contribute to rising inequality in the U.S. in the 1980s, but rather the opposite; that the reduction in leverage from the early 1990s to 2008 has contributed to rising wealth inequality. Furthermore, I show that if the model abstracts from beneficial tax treatment of corporate debt, the change in leverage has only minor effects on macro aggregates and inequality, despite having significant implications for asset prices. This is consistent with the previous result in the literature showing that the Modigliani-Miller theorem approximately holds in the heterogeneous agents model with imperfect markets.

JEL Classification: E44, G10, G11, G32

Keywords: Portfolio Choice, Heterogeneous agents, Life-Cycle, Leverage

*Email: ivo.bakota@cerge-ei.cz, bakota@mea.mpsoc.mpg.de. This paper has been previously circulated under the title: “Wealth Distribution and Macroeconomic Implications of Financial Policy”. I am grateful for financial support from Charles University GA UK agency, under project No. 344217. I am thankful for discussion and useful comments to Byeongju Jeong, Marek Kapička, Marios Karabarbounis, Dirk Krueger, Benjamin Moll, Petr Sedláček, Veronika Selezneva, Ctirad Slavík, participants of the European Economic Association meeting and the Computing in Economics and Finance conference in 2018.

[†]CERGE-EI is a joint workplace of Charles University and the Economics Institute of the Czech Academy of Sciences, Politický vevnu 7, 111 21 Prague, Czech Republic.