Risk-Taking Dynamics and Financial Stability^{*}

Anton Korinek[†] John Hopkins and NBER Martin Nowak[‡] Harvard PED

Draft Version – December 2015

Abstract

We study how compositional effects in the financial sector drive the dynamics of aggregate risk-taking and lead to novel effects of financial policy interventions. When financial market participants differ in their risk-taking, good shock realizations increase the capital of high-risk investors more than that of low-risk investors. This raises the fraction of wealth controlled by risk-takers in the population and, under incomplete markets, increases aggregate risk-taking. The opposite conclusions apply for bad shocks. As a result, aggregate risk-taking is pro-cyclical, capturing Minsky's financial instability hypothesis that "booms sow the seeds of the next crisis." Public policy interventions (like financial regulation, bailouts, etc.) work primarily by affecting the composition of the financial sector, in contrast to the static restriction on choice sets that is the focus of most conventional economic frameworks. Interventions to stabilize aggregate risk-taking bring the economy closer to the first-best, increasing expected growth and reducing aggregate volatility.

JEL Classification: E14, E44, G18

Keywords: Risk-taking, evolutionary dynamics, financial stability.

^{*}The authors would like to thank Jeremy Stein and Joe Stiglitz for helpful comments and discussions.

[†]Department of Economics, Johns Hopkins University, 3400 N. Charles St., Baltimore, MD 21218. Email: akorinek@jhu.edu.

[‡]Program for Evolutionary Dynamics, Harvard University, One Brattle Square, Cambridge, MA 02138. Email: martin nowak@harvard.edu.