Risk-Taking, Capital Allocations and Monetary Policy *

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Abstract

We study optimal monetary policy in a business cycle setting in which firms differ in their exposure to macroeconomic conditions, i.e., aggregate risk. We uncover a tradeoff between long-run (average) aggregate productivity and volatility – more cyclically sensitive firms offer higher rates of return on capital as compensation for risk and choose lower levels of capital, which (i) induces dispersion in marginal products of capital, lowering aggregate productivity and (ii) reduces realized volatility by shifting resources to less cyclical firms. In an otherwise frictionless economy, the allocation is efficient. With additional frictions, risk-taking is inefficient, which results in either excessive volatility or depressed productivity and implies a role for corrective policy. We use a medium-scale new-Keynesian model featuring price and wage rigidities and a time-varying labor wedge to show that risk considerations have quantitatively significant effects on the optimal degree of stabilization – in particular, the central bank leans more against output gap fluctuations than in an observationally equivalent economy that abstracts from firm-level risk.

PRELIMINARY