A Tale of Two Margins: Monetary Policy and Capital Misallocation

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The views expressed here are solely mine and should not be attributed to the Federal Reserve System or its policies.

Overview

- **Question**: What is the effect of monetary policy on capital allocation? What is the role of firm heterogeneity through productivity (MRPK)?
  - Focus on intensive and extensive margin channels
  - Standard local projections approach
- Case study: Spain 2000-2016

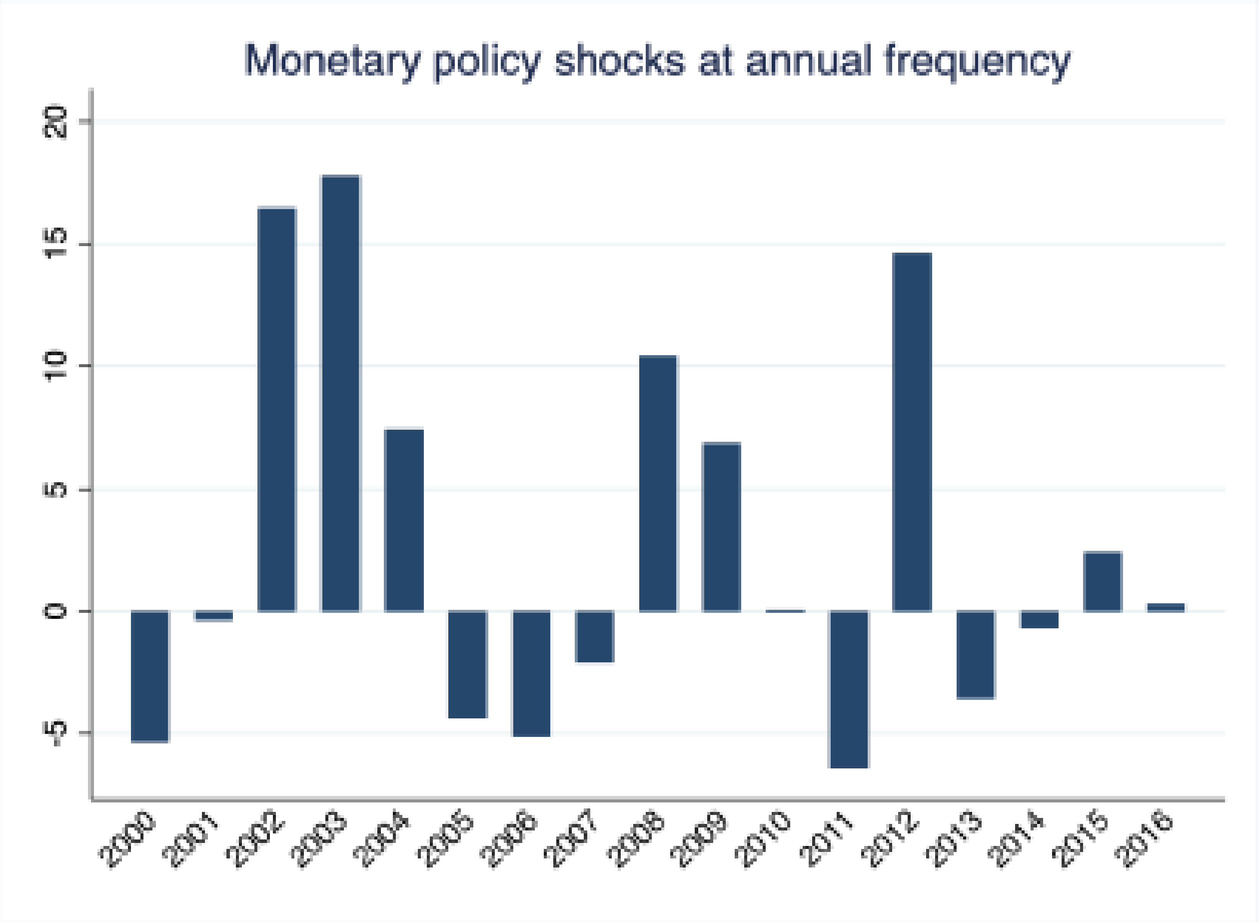
- **Results**:
  - Following an MP easing shock:
    - High MRPK firms increase investment relatively more, driven by age, cash holdings, and leverage → financial constraints
    - Reduce within-industry dispersion of MRPK, i.e. improve capital allocation
    - More entry and exit, especially from low-growth firms, but effects differ in short and long run

Important question and very nice data

- Burgeoning literature on heterogeneity in monetary policy transmission

- Spanish firm level data with detailed financial information, coupled with data on entry and exit over 2000-2016

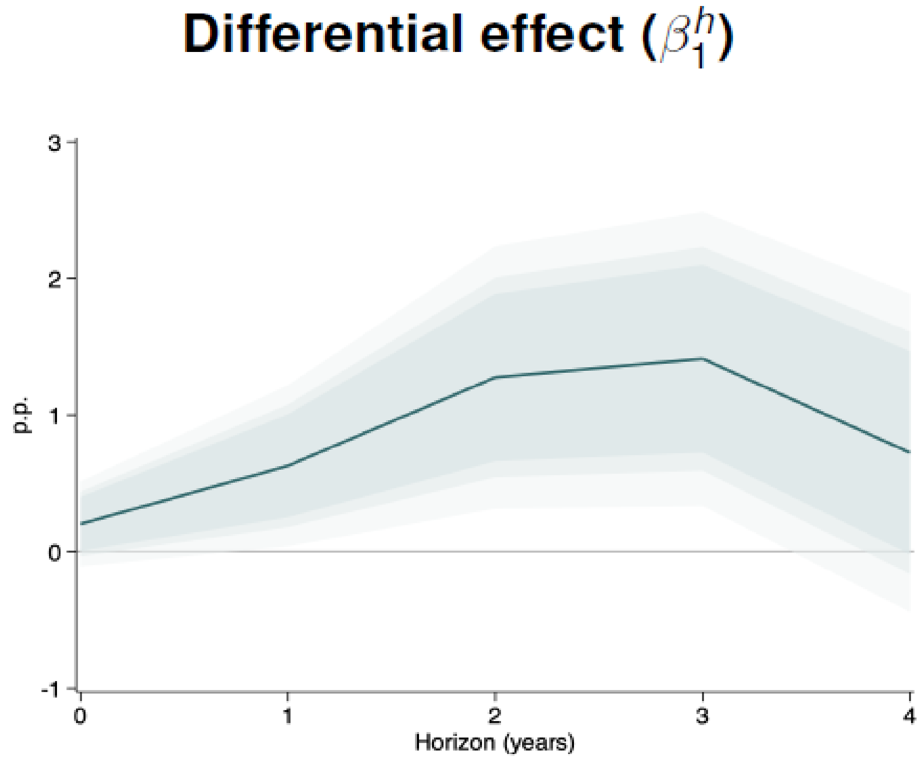
- MP shocks come from Jarocinski and Karadi 2020



My Comments

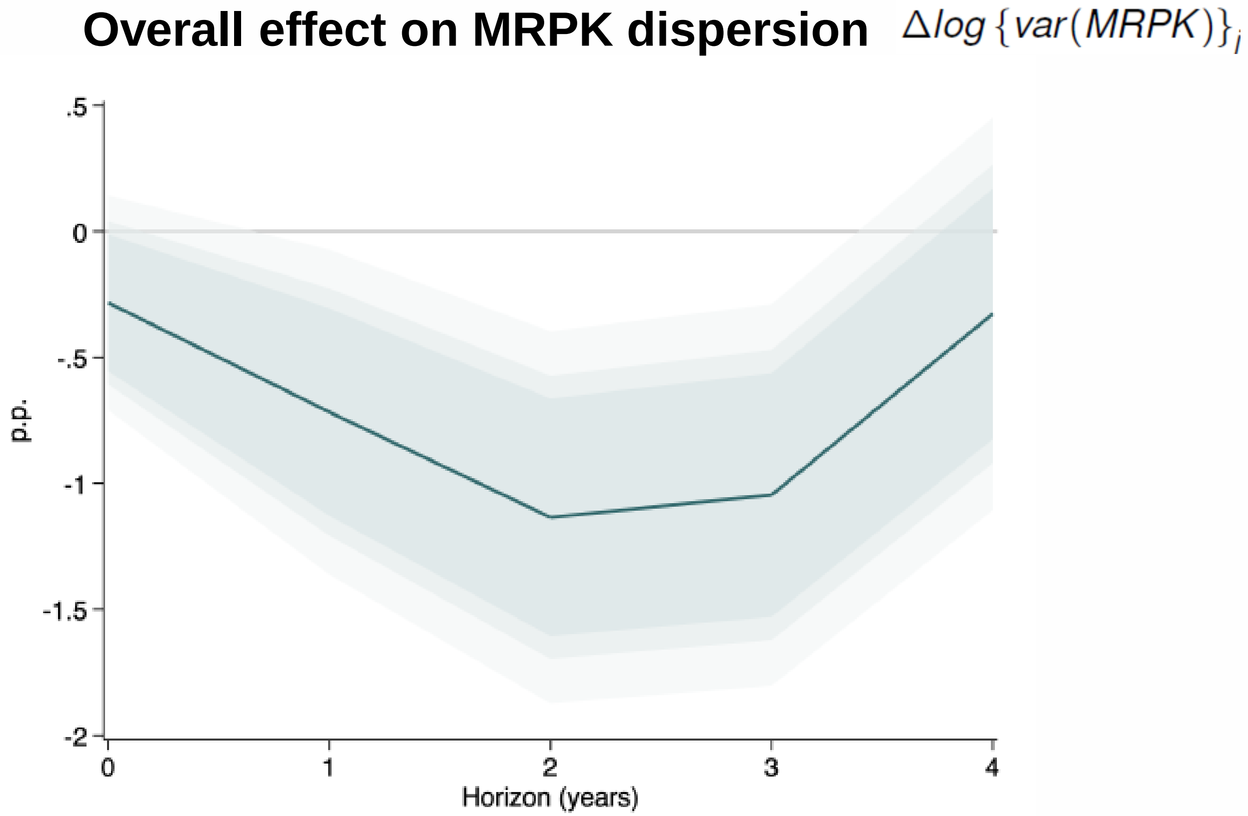
- Link between average/differential effects and dispersion
- MRPK and financial constraints
    - Evidence on the credit channel of monetary policy
- Quibbles

#1/ Link between average/differential effects and MRPK dispersion (capital misallocation)



Note: Shaded areas are, from darker to lighter, 90%, 95% and 99% confidence interval of the estimate.

At peak 3 years after the shock, firms with one standard deviation higher MRPK increase their capital stock by 1.5 pp after an expansionary MP surprise of 1 SD.



One SD expansionary MP surprise decreases the variance of MRPK by 1p.p. 2 years after the shock, and the impact persists at least until the third year.

#1/ Link between average/differential effects and MRPK dispersion (capital misallocation)

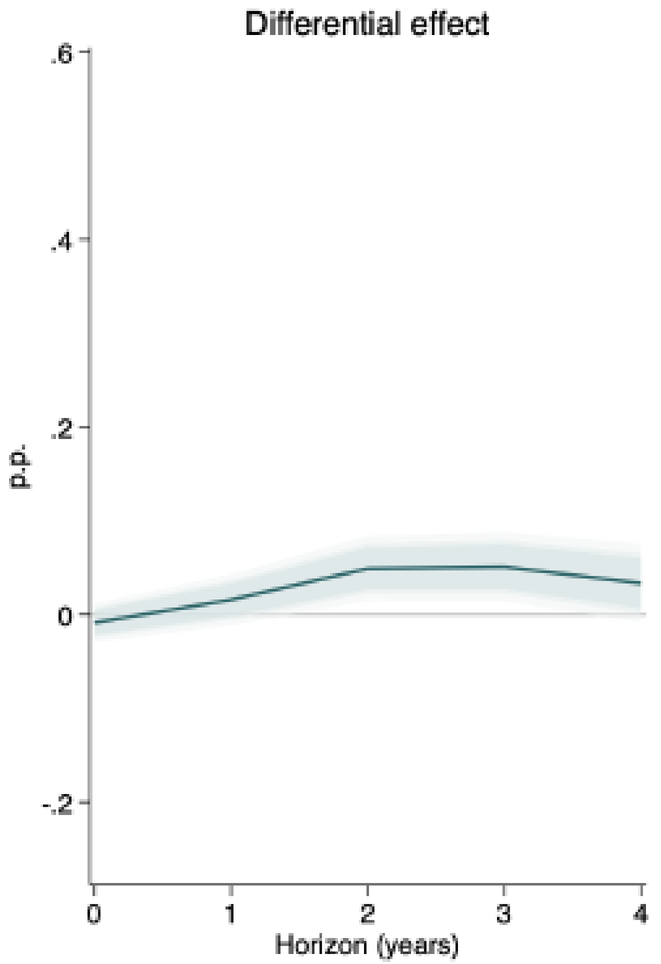
- Following an easing MP shock, the average firm invests more, but high MRPK firms even more

  - More investment per se need not translate into reduced dispersion
  - Is the channel concave investment function?
    - As high MRPK firms invest more, marginal productivity declines and dispersion shrinks?

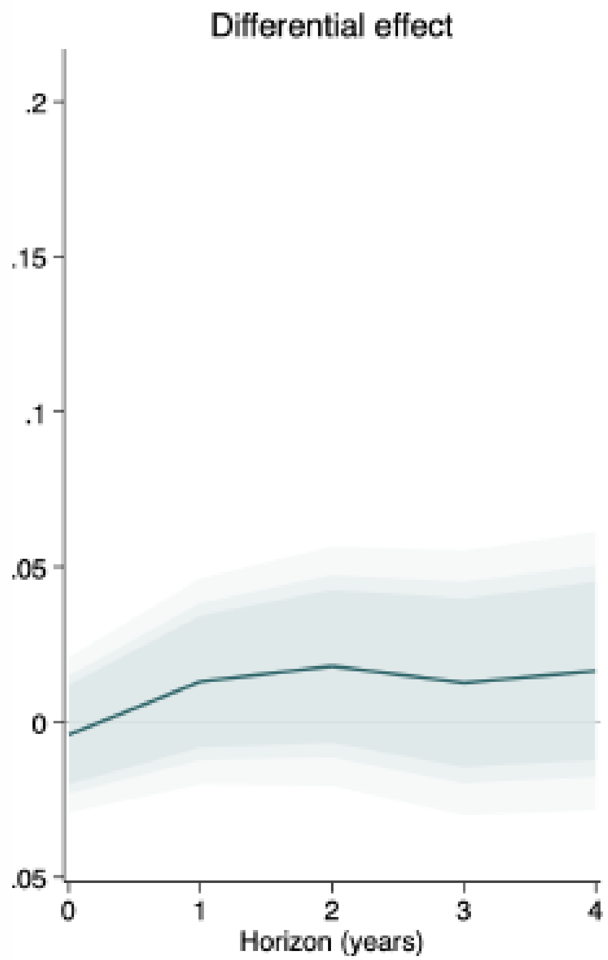
  - Quantitatively, is the identified differential effect enough to generate the identified dispersion effect?

#2/ MRPK and financial constraints

Leverage



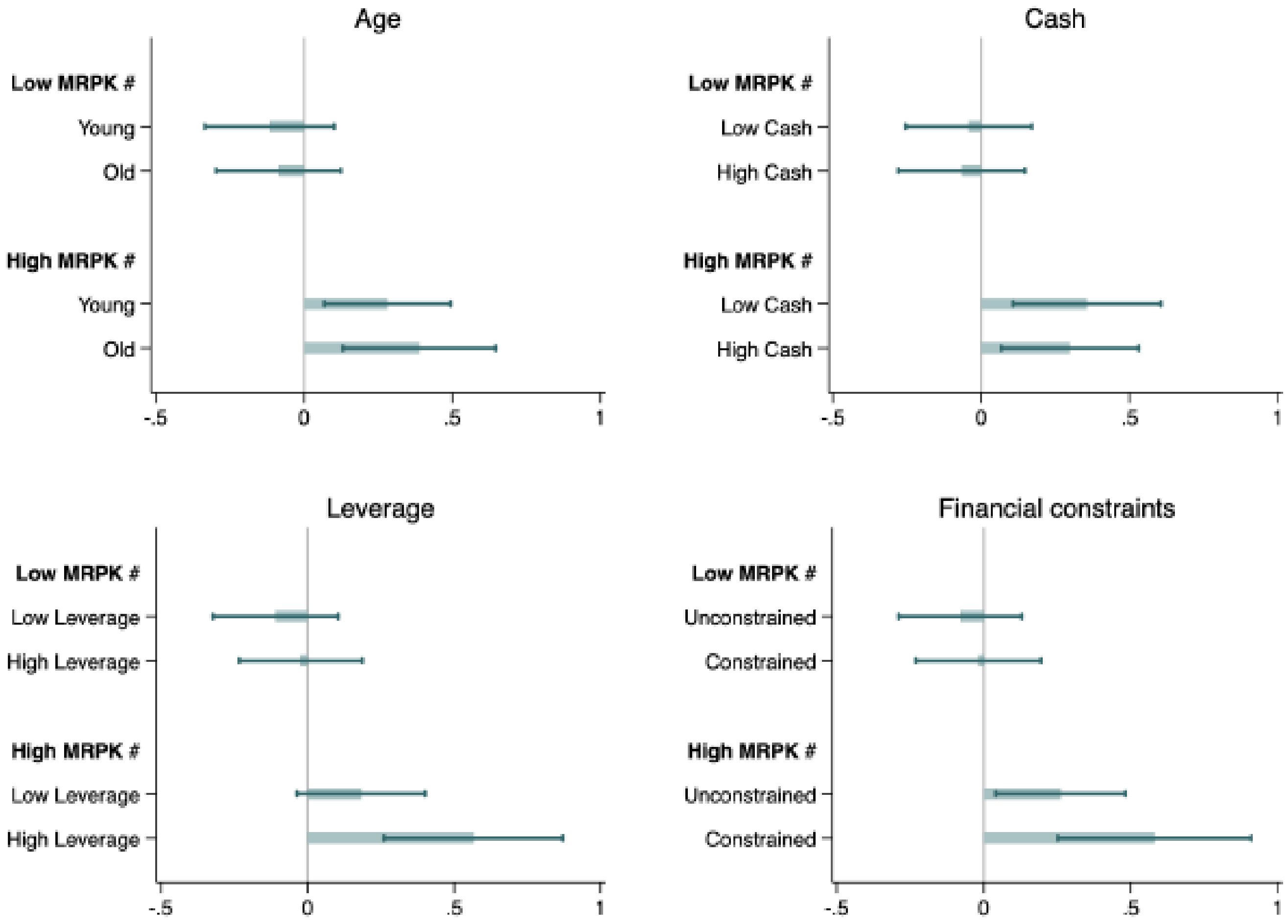
Cash ratio



- Differential effects of MP easing on investment by firm leverage and cash ratio seem quantitatively small
- Paper finds that high MRPK firms increase leverage more after MP easing
- Whether MRPK firms are more constrained is a **key question**

#2/ MRPK and financial constraints

Age, cash, and leverage only matter for high MRPK firms



- Who are the high MRPK firms; based on their characteristics can we gauge if they are in a better position to take advantage of MP easings?
- Do these high MRPK firms borrow more? (leverage is endogenous, + small effect)
- **Direct evidence of the credit channel for these firms?**

#3/ Quibbles

- Extensive margin results are mixed
  - Entry margin leads to worse allocation in the short and medium run
  - Exit margin worsens allocation in the short run, improves it in the long run
  - What explains the change in dynamics between the short- and medium run in these margins?

- Discuss sample differences with Gopinath et al QJE, as the time period significantly overlaps
  - Gopinath et al focuses on effects of low real interest rates, this paper focuses on nominal interest rate shocks

Summing Up

- Exciting and intriguing paper that aims to deepen our understanding of heterogenous effects of monetary policy

- Main comments are about
  - more directly linking the average and differential effects of MP to within-industry MRPK dispersion (capital misallocation)
  - more direct evidence on who are the high MRPK firms; and how they benefit from MP easings through a **credit channel**

- I look forward to seeing future versions of the paper