

# Discussion of "Risk Management in Monetary Policy: A Review with Asset Pricing Implications"

Jordi Galí

CREI, UPF and BSE

Santiago, November 2025

# What the Paper Does

- Monetary policy *tilt*: forward-looking component of monetary policy, over and above current policy actions. Generally in the form of directional bias (towards tightening or easing). Revealed through communication.
- Empirical properties of two language-based measures of the tilt: the HD score (Hawkish minus Dovish statements) and an LLM-based indicator (+1,0,-1).
- Key findings
  - (i) MP tilt explained by perceptions of risk and uncertainty, over and above expectations  $\Rightarrow$  risk management
  - (ii) MP tilt has an impact on financial markets: a tightening tilt reduces the term premium
- Two case studies in risk management: 1990s productivity miracle and 2000s post-covid episode

# General Comments

**1) Review of a very interesting research program, with some new results**

**2) Focus: risk management and the tilt**

- But risk management factors can also drive *current* policy actions, and *current* policy actions can presumably influence risk.
- So why a (nearly) exclusive focus of the paper on the "tilt"?

**3) Language-based measures from FOMC transcripts (5 year lag).**

- Why not real-time communications? (press conference, speeches, etc.)

**4) Missing: financial crises**

- Key aspect of risk management in monetary policy
- Woodford (2012), Svensson (2017),..., Boissay-Collard-Galí-Manea (2025)

**5) Presentation**

- Long list of empirical findings, new and old. *All* interesting.
- But the order of presentation may not be the most logical

# Empirical Findings

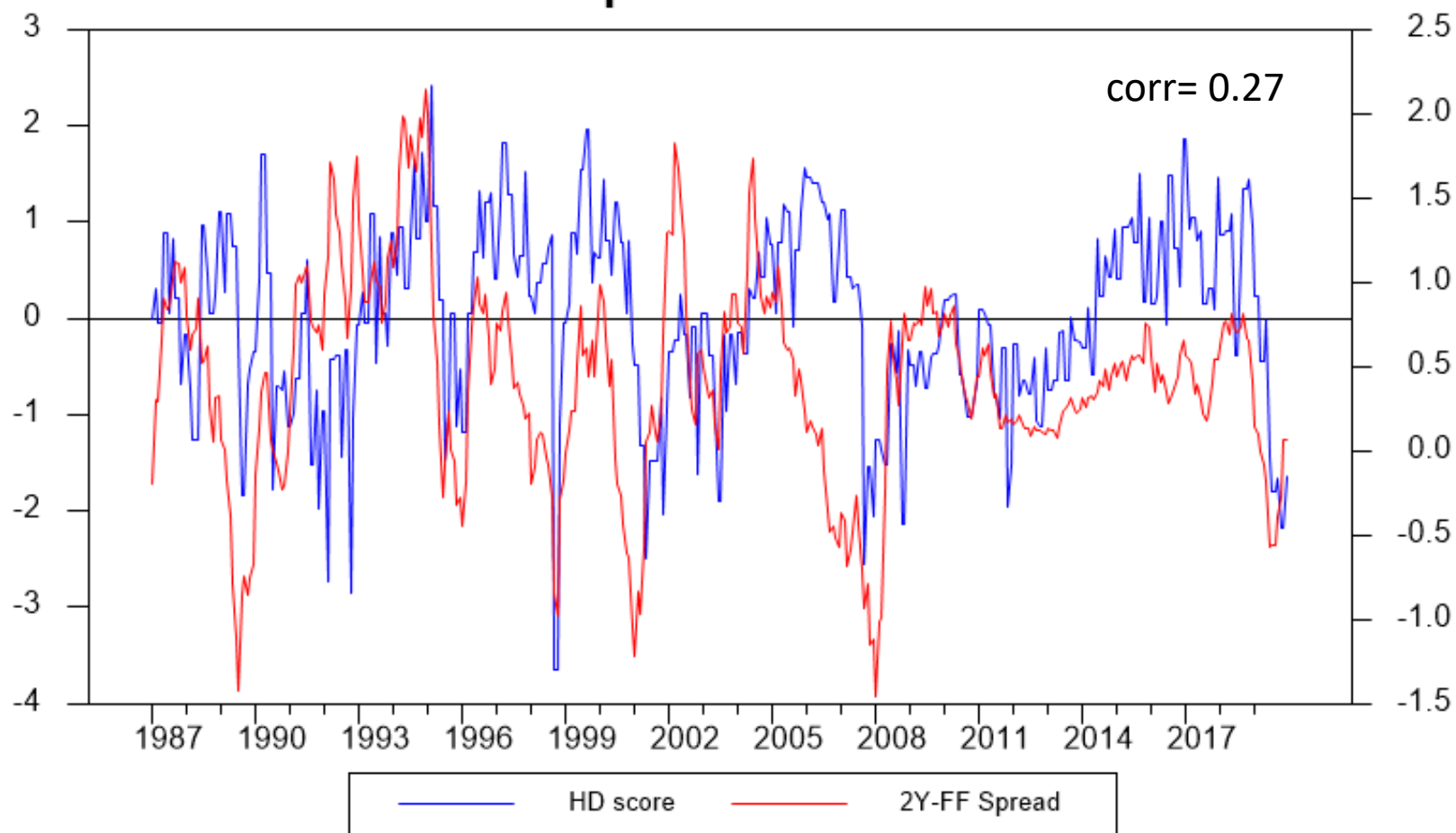
## 1) HD score explains the "official tilt" (83-99)

- Both reflect intentions.
- Not much surprising, but sanity check

## 2) HD score explains future changes in Federal Funds rate

- Fed tilt is informative, not just verbal noise.
- Not addressed: Are language-based measures of the tilt reflected in corresponding *market-based* measures? Intended vs perceived
- Evidence: HD score vs 2Y-Yield minus FFR Spread

## Term Spread vs HD score



# Empirical Findings

## 1) HD score explains the "official tilt" (83-99)

- Both reflect intentions.
- Not much surprising, but sanity check

## 2) HD score explains future changes in Federal Funds rate

- Fed tilt is informative, not just verbal noise.
- Not addressed: Are language-based measures of the tilt reflected in corresponding *market-based* measures? Intended vs perceived
- Evidence: HD score vs 2Y-Yield minus FFR Spread
- Forecasting policy rate changes:

$$f_{t+12} - f_t = \frac{-0.70^{**}}{(0.07)} + \frac{1.29^{**}}{(0.09)} spread_t \quad ; \quad R^2 = 0.31$$

$$f_{t+12} - f_t = \frac{-0.16^{**}}{(0.06)} + \frac{0.44^{**}}{(0.07)} HD_t \quad ; \quad R^2 = 0.09$$

$$f_{t+12} - f_t = \frac{-0.67^{**}}{(0.07)} + \frac{1.19^{**}}{(0.09)} spread_t + \frac{0.25^{**}}{(0.06)} HD_t \quad ; \quad R^2 = 0.34$$

## 3) HD score explains Romer-Romer monetary policy shocks

- Interesting, but not obvious interpretation
- Consistent with *exogenous* MP shocks being persistent, with MP driven by first moments and disconnected from risk factors
- Suggestion: explore whether RR shocks are explained by uncertainty and tail risk factors

## 4) Inflation uncertainty and real economy sentiment explain HD score and LLM-based measures of tilt

- Key finding of the paper
- But LLM-based tilt also explains *current* policy actions (Table 1)

A. Dependent variable: FOMC policy action,  $\Delta FFR_t$  or  $ActionLLM_t$ 

|              | $\Delta FFR_{t-1,t}$ |                   | $ActionLLM_t$     |                   |
|--------------|----------------------|-------------------|-------------------|-------------------|
|              | (1)                  | (2)               | (3)               | (4)               |
| $BoRLLM_t$   | 0.12***<br>(5.45)    |                   | 0.29***<br>(7.59) |                   |
| $InfPMU_t$   |                      | 0.045**<br>(2.48) |                   | 0.096**<br>(2.32) |
| $EcoSent_t$  |                      | 0.052**<br>(2.31) |                   | 0.11**<br>(2.47)  |
| Controls     | Yes                  | Yes               | Yes               | Yes               |
| $R^2$        | 0.43                 | 0.39              | 0.39              | 0.36              |
| $\Delta R^2$ | 0.073                | 0.053             | 0.12              | 0.11              |
| N            | 259                  | 259               | 259               | 259               |

B. Dependent variable: FOMC policy tilt,  $TiltLLM_t$ 

|                       | $TiltLLM_t$        |                   |                   |                   |                   |                   |
|-----------------------|--------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
|                       | (1)                | (2)               | (3)               | (4)               | (5)               | (6)               |
| $BoRLLM_t$            | 0.68***<br>(11.15) | 0.60***<br>(7.58) | 0.58***<br>(7.96) |                   |                   |                   |
| $ActionLLM_t$         |                    | 0.22*<br>(1.67)   | 0.017<br>(0.13)   |                   |                   |                   |
| $HD_t$                |                    |                   |                   | 0.42***<br>(7.09) |                   |                   |
| $InfPMU_t$            |                    |                   |                   |                   | 0.32***<br>(4.26) | 0.27***<br>(4.38) |
| $EcoSent_t$           |                    |                   |                   |                   | 0.30***<br>(4.25) | 0.16**<br>(2.46)  |
| $F_t(\pi_4) - \tau_t$ |                    |                   | 0.49***<br>(5.66) | 0.31***<br>(3.08) |                   | 0.48***<br>(3.89) |
| Controls              | No                 | No                | Yes               | Yes               | No                | Yes               |
| $R^2$                 | 0.49               | 0.51              | 0.62              | 0.50              | 0.40              | 0.51              |
| N                     | 259                | 259               | 259               | 259               | 259               | 259               |

## 3) HD score explains Romer-Romer monetary policy shocks

- Interesting, but not obvious interpretation
- Consistent with *exogenous* MP shocks being persistent, with MP driven by first moments and disconnected from risk factors
- Suggestion: explore whether RR shocks are explained by uncertainty and tail risk factors

## 4) Inflation uncertainty and real economy sentiment explain HD score and LLM-based measure of tilt

- Key finding of the paper
- But LLM-based tilt also explains *current* policy actions (Table 1)
- Suggestions:
  - (i) show corresponding evidence for HD score
  - (ii) use same explanatory variables in regressions for current action as used for tilt
  - (iii) show increase in  $R^2$  resulting from uncertainty and sentiment variables

# Empirical Findings

## 5) A tilt towards tightening reduces the term premium

- Authors' interpretation:  $\uparrow$  policy credibility,  $\downarrow$  uncertainty, etc
- Interpreted as suggesting effectiveness of MP tilts...
- ... but it works against policymakers' intentions!

Why would a Fed in an easing mood (e.g. ZLB) want to see an increase in term premia?

# Concluding Remarks

- Great paper
- Big picture and detailed findings about a very interesting research program
- I look forward to further instalments!