Subjective Beliefs and the Q-theory of Investment

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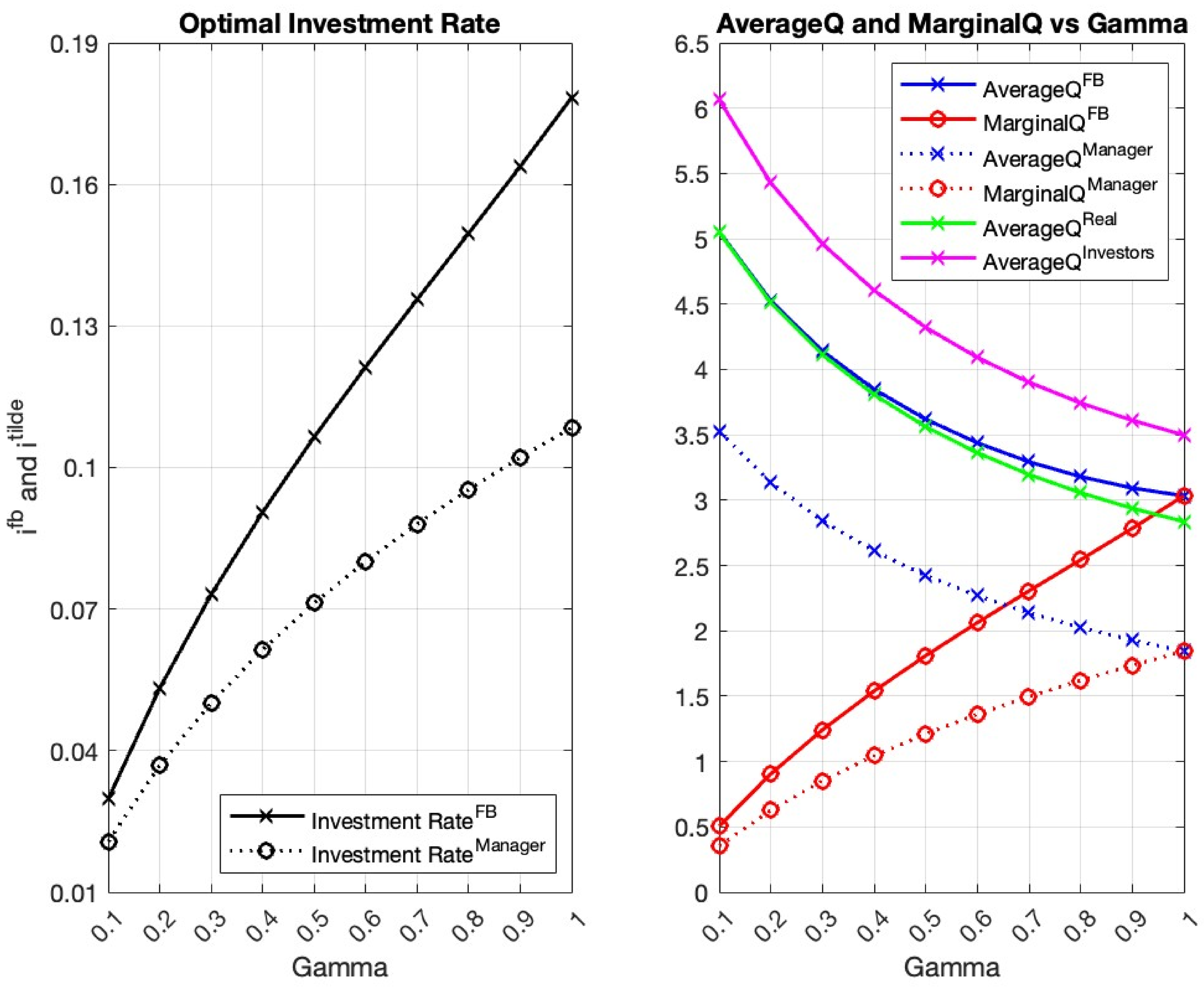
Research Question: What is the role of investors' and managers' subjective beliefs in the disconnection between Investment and Q?

- Recent research highlights **lacklustre investment despite growing valuation** (Gutiérrez and Philippon, 2017). This is in stark contrast with Q-theory. Rise in Intangible capital (Peters and Taylor, 2017)? Rise in rents (Crouzet and Eberly, 2023)?
- **Investors'** and **Managers'** subjective beliefs about future outcomes affect the stock price and capital budgeting decisions (Stein, 1996; Malmendier and Tate, 2015)

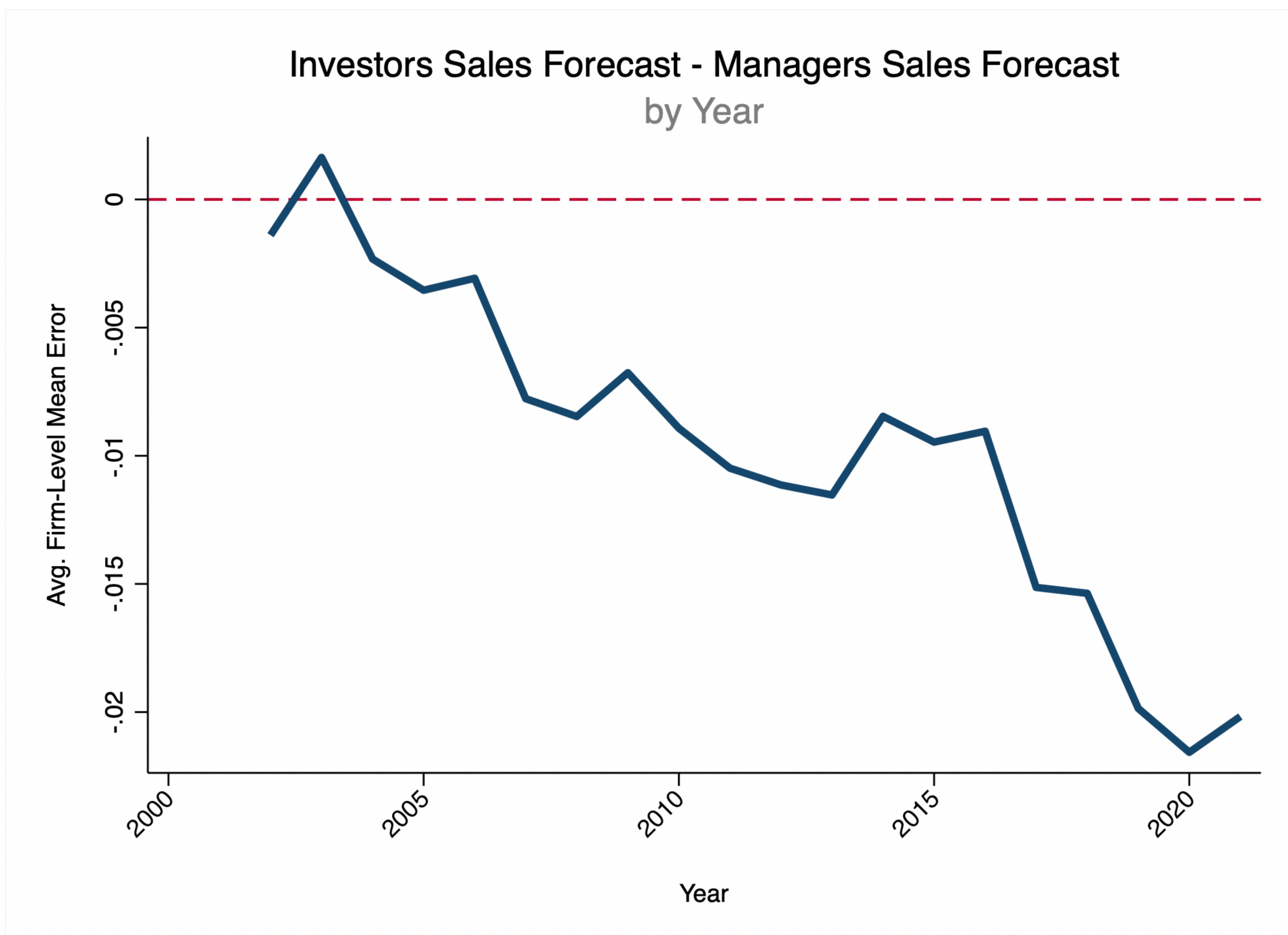
Theory: The disagreement between investors and managers affects the relationship between investment and valuation, and the measurement of economic rents.

- **Setup:**
  Neoclassical Q-model (Hayashi, 1982) augmented with market power (rents parameter inversely proportional to γ) and subjective beliefs.
  Managers (β) and investors (α) hold non-rational expectations about future cashflows.
- **Model Predictions:**
  - Disagreement severs the link between observed Average Q (market belief) and the manager's perceived Marginal Q (investment driver).
  - High disagreement predicts a breakdown of standard Q-theory: lower I-Q sensitivity and significant Cash Flow sensitivity (even absent financial frictions).



Empirics: I test and structurally estimate the model. The expectations-adjusted markups and gap between investment and valuation are higher compared to the rational benchmark.

- **Dataset:**
  Constructed a novel expectations dataset (IBES and FactSet)
- **Reduced Form:**
  - *Persistence:* Forecast errors are persistent and predictable.
  - *Disagreement Effect:* Sorting firms by belief disagreement confirms model predictions. **Low Disagreement:** High I-Q sensitivity, insignificant Cash Flow. **High Disagreement:** Low I-Q sensitivity, significant Cash Flow.
- **Structural Estimation:**
  - GMM estimation of deep parameters reveals managers are optimistic ($\beta > 0$, overinvestment) and investors are pessimistic ($\alpha < 0$, underpricing).
  - Accounting for belief distortions implies significantly higher market power (Markup $\mu \approx 1.35$) than estimates from models assuming rational expectations ($\mu \approx 1.24$ in a comparable sample).



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