

Discussion on Demystifying Cheap
Sustainability Talks: Theory and Evidence
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Research question

- Can costless non-verifiable sustainability claims done by firms contain credible information about the firms' ESG and/or financial performance?

Methodology

- Develop a cheap-talk model where:
 - Firm's private information is bi-dimensional: ESG and financial performance.
 - There are investors who care about both dimensions of the firm's performance.
 - Firm aims at maximizing stock price.
- Derive testable empirical implications.
- Test the prediction of the theory using public data.

Main finding

● Theory:

- There are non-babbling equilibria where firms credibly communicate sustainability over-performance only when it happens to occur with financial under-performance.
- Firm sustainability talks should be correlated with:
 - 1 ESG over-performance.
 - 2 Increase in ownership share by sustainable investors.
 - 3 Financial under-performance \Rightarrow exit of standard investors.
 - 4 No significant change in the firm stock price.
 - 5 Reduction in the firm required return.

● Empirical analysis:

- 1 Not tested.
- 2 Supported by increase in holding by 13F investors with top tercile environmental score (+0.6%).
- 3 Supported by decrease in realized EPS (-8%), EPS forecast, ROA and Sales.
- 4 Supported by no significant change in return at the firm announcement.
- 5 Supported by reduction in measures of the Implicit Cost of Capital.

Suggestions

Theory

- Occam's razor: Stick to standard well known simple models; no need to reinvent the wheel.
 - 2x2 binomial state: high/low financial performance + high/low ESG performance.
 - Risk-averse investors (Mean-variance) caring about both financial and ESG performance.
 - Firm maximizes expected share price.
- Fully characterize all non-babbling equilibria:
 - Set of all possible Bayesian posterior belief systems that can be achieved with firm's signaling (mapping from state to message)

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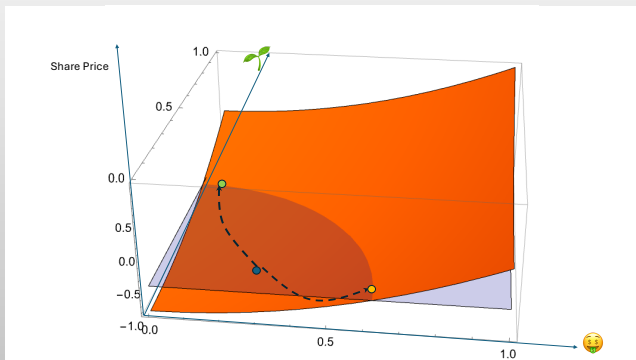
set of all possible belief systems leading to the same equilibrium price.

- Which is the equilibrium that the firm would prefer?
- Derive more empirical implications, namely with respect to the fraction of ESG investors in the economy, residual uncertainty, etc.

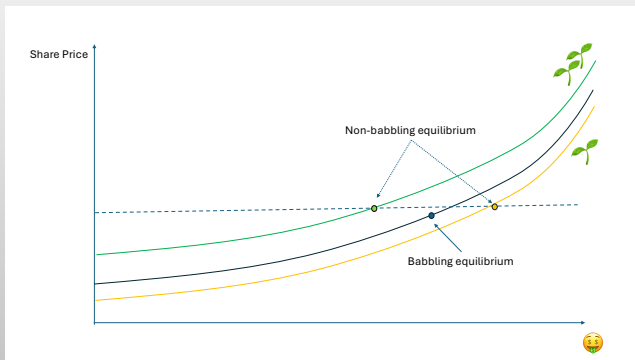
Why do firms like these sustainability claims?

- 1 In any given non-babbling equilibrium of the cheap-talk game, all firms' announcements lead to the same equilibrium stock price.
- 2 But this price differs across non-babbling cheap-talk equilibria and is **larger** than the one in the babbling equilibrium.
- 3 Firm announcements disclose information on both ESG and financial performance,
 - Price invariance across announcements results from the opposite signs of ESG and financial performance
 - But all announcements reduce uncertainty, and because investors are risk averse, prices are larger than in the babbling equilibrium.

Firm prefers non-babbling equilibrium



Firm prefers non-babbling equilibrium



Alternative story

- 1 Firms do implement costly sustainability investment and announce it, and the announcement is grounded on verifiable dimensions.
- 2 The cost of investment deteriorates the firm's financial performance
- 3 ESG investors like these firms and increase their holdings
- 4 Non-ESG investors reduce their holdings



- 5 Undetermined sign in price reaction
- 6 Reduction in ICC

Suggestions

Empirics how to nail the actual mechanism

- The fundamental prediction of your model is that announcement do not change prices \Rightarrow You must be very convincing in testing this \Rightarrow Use abnormal return on announcement rather than just returns: you might get no reaction to announcement because market moves orthogonally to sustainability claim.
- Test change in ESG performance at announcement (RepRisk, Truvalue SASB, MSCI, Sustainalytics, Refinitiv ?)
- Are there additional testable implications?
 - Is there any industry specific effect: Sustainable investors might avoid sin/carbon industries: Your theoretical result require presence of sustainable investors.
 - What is the role of uncertainty on the stock? More uncertainty on financial performance, larger correlation between green statement and low financial performance
 - Sustainable investing strength: what about the backlash since Trump? Fewer announcements/ Weaker correlation between green announcement and financial performance
- Your model is based on the assumption that both ESG and Financial performance are firms' private information.
- What about negative sustainability talks?
- Better clarify ICC.

Conclusion

- Very nice paper asking a relevant research question, and providing a rather convincing (theory + evidence) answer from a novel angle.
- Look forward to reading the next version.