A Bird's-Eye View: Firm Biodiversity Footprints and Earnings Expectations

Atreya Dey

Discussant: Philip Coyle

Aarhus Finance Forum

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Research Question

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Main Findings

- New facilities cut nearby birds **6–9%**.
- High-BFI small (mid-caps) earn $\sim$**89 (52) bps/month**.
- Misread high COGS $\Rightarrow$ beat forecasts $\Rightarrow$ prices correct.

What I Like

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- **The measure is new,** and built from public data.
- **Estimating the radius** instead of assuming it.
- **Regulatory null:** emissions predict enforcement, not ecology.

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My Discussion: *this reads like two not yet connected papers*

1. Does ecological damage translate into an external cost?
2. Does the market respond to biodiversity—or to facility intensity?
3. Do bird-rich locations raise costs—or does technology drive both?

The Paper's Chain of Logic

Facilities damage local ecology $\longrightarrow$

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Facilities damage local ecology → Gives rise to externality-to-value ratio →

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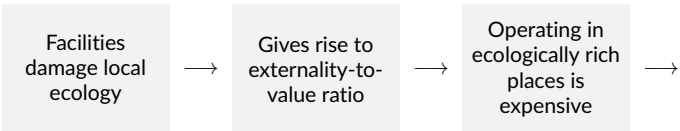

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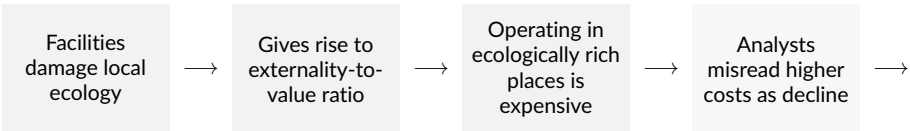

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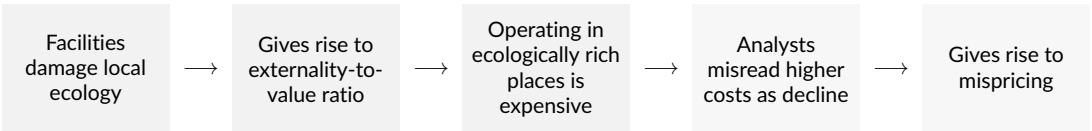

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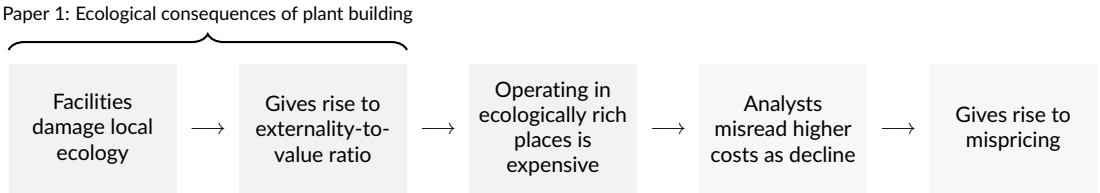

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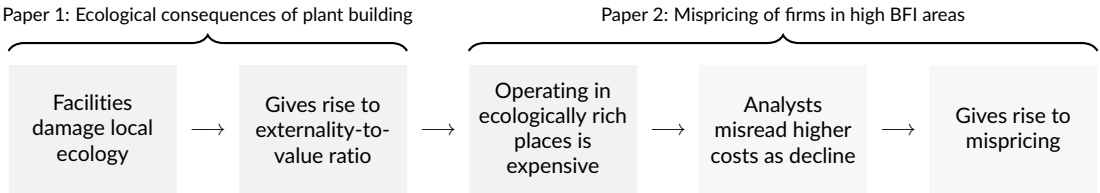

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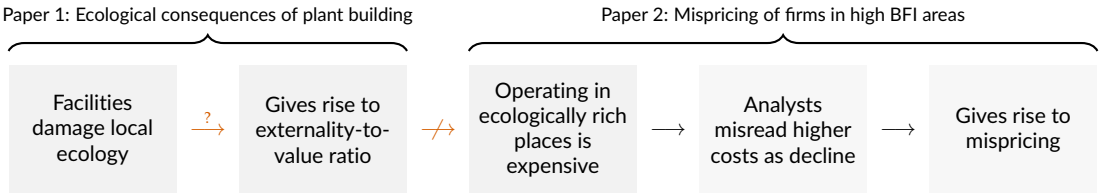

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Suggestion: establish the missing welfare link or describe BFI as an *ecological-exposure-to-value* ratio.

Comment 2: Does the Market Respond to Biodiversity?

Grant it's an externality. BFI can be decomposed:

$$\text{BFI} = \underbrace{\ln(\text{birds per facility})}_{\text{Ecological richness per site}} + \underbrace{\ln(\#\ \text{facilities}/\text{assets})}_{\text{Operating-network intensity}}$$

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The results are concentrated in the extensive margin (A.3, A.4):

- Birds per facility: 0.03 $(t = 1.1)$ for returns; null for production costs.
- Facilities per $ of assets: 0.26 $(t = 4.3)$ for returns — and carries the COGS penalty.
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Suggestion: Horse-race BFI against (facilities/assets). At $\rho = 0.92$, can the two be distinguished?

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Suggestion: horse-race land prices and wages against BFI *in the cost regression*.

Takeaways

This reads like two good papers that aren't yet connected.

1. **The ecology paper** is clean and stands on its own.
2. **The asset-pricing paper:** facility-heavy firms, misjudged.
3. **The missing link:** biodiversity as the mispriced externality.

Two strong pieces. Show the link — or write them as two papers.