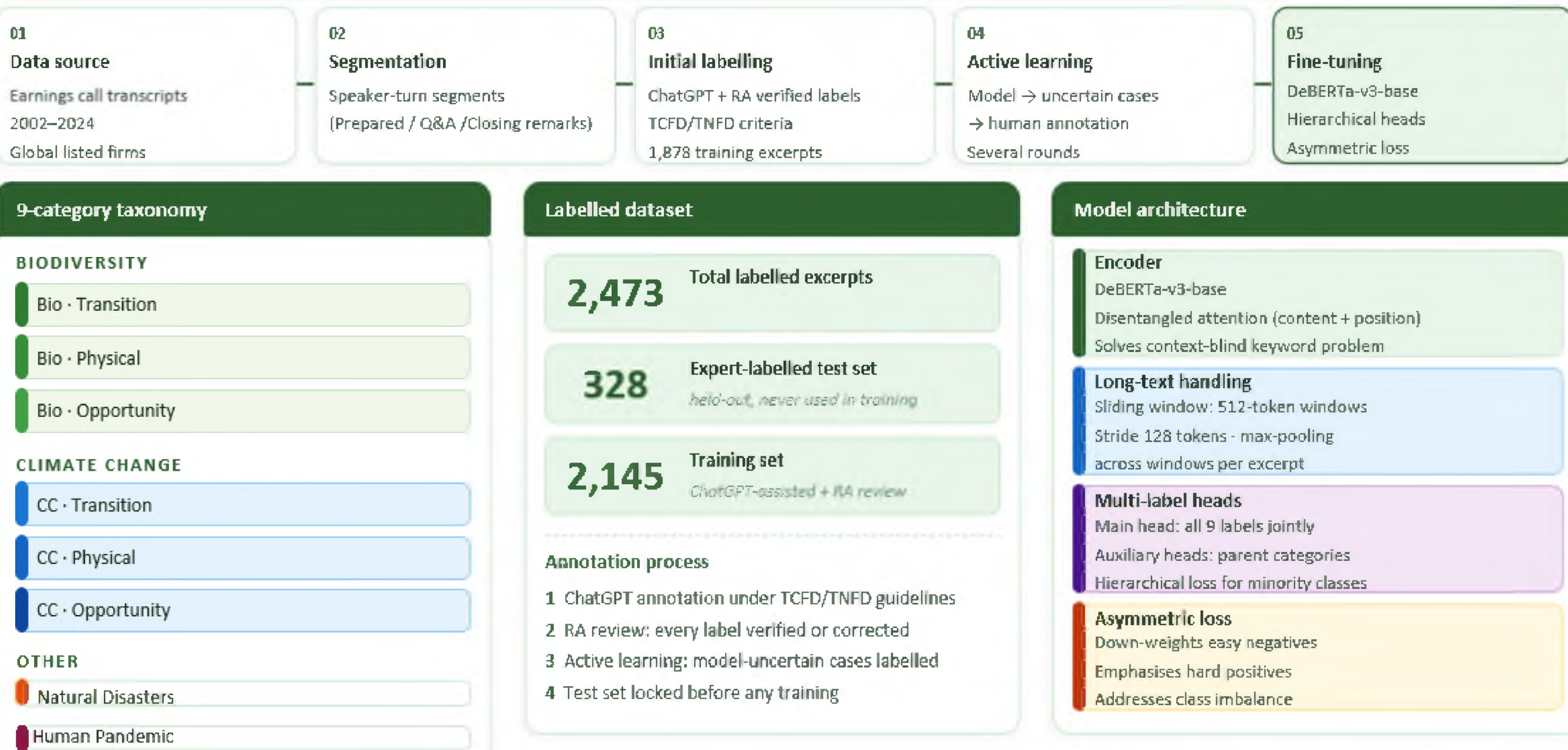


Introduction

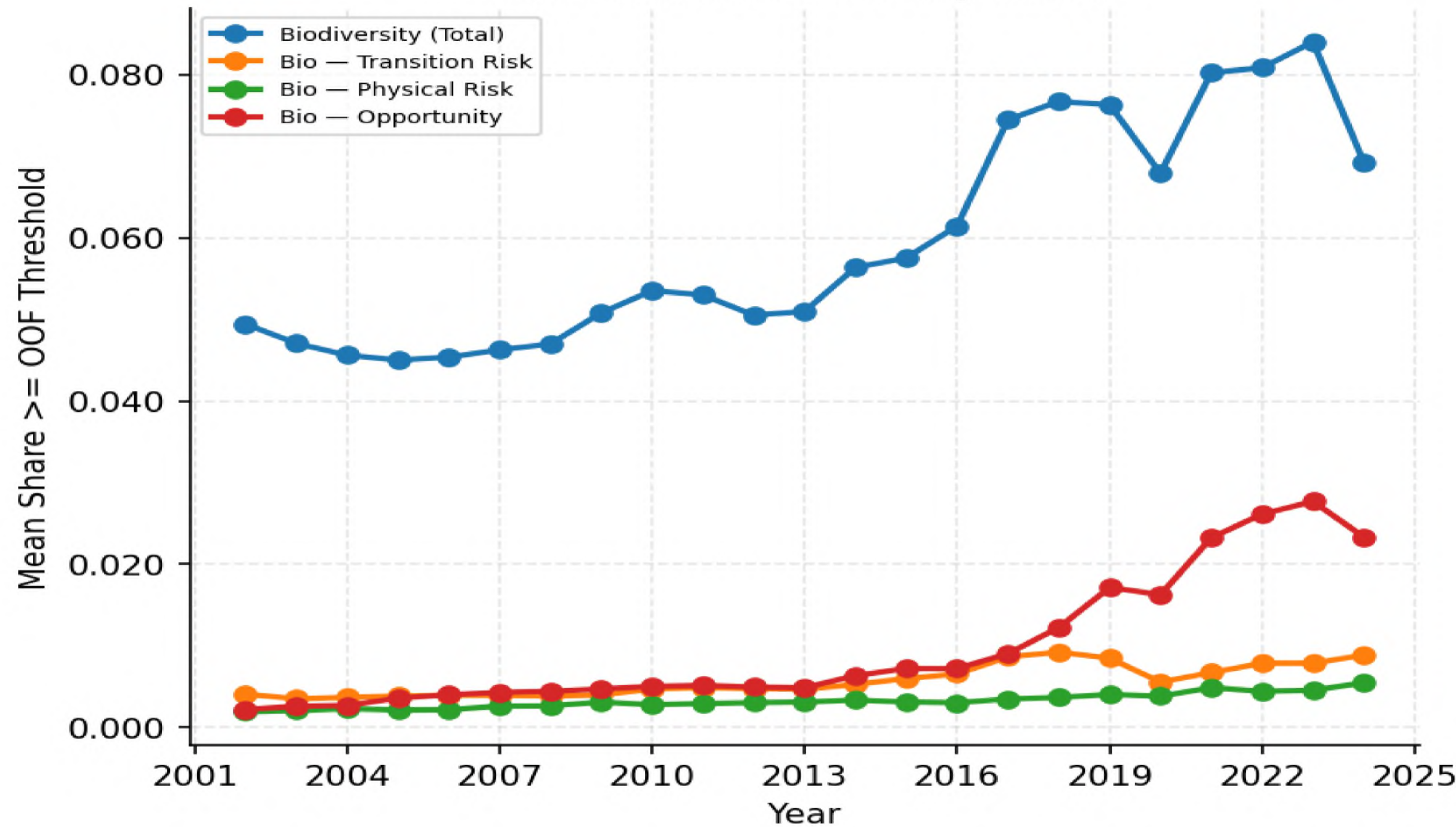
Biodiversity loss is increasingly recognized as a financially material risk. Firms may be exposed through physical and transition channels. Recent studies show that biodiversity risk may affect asset values and stock returns, using measures such as biodiversity-risk news, corporate biodiversity footprints, and biodiversity intensity (Giglio et al., 2026; Garel et al., 2024; Coqueret et al., 2025). The TNFD framework further reflects growing demand for decision-useful nature-related financial disclosure. However, existing measures tell us less about whether biodiversity risk has entered firm–investor communication.

This paper asks whether biodiversity risk has become visible enough to be priced. We use earnings conference calls because they combine timely management disclosure with analyst-driven attention. We build a DeBERTa-v3 classifier to identify biodiversity and climate-related discussion in global earnings calls from 2002 to 2024, separating both topics into transition, physical, and opportunity dimensions. We then trace the recognition-to-pricing chain: which firms discuss these risks, whether discussion predicts weaker fundamentals, how markets respond, and whether biodiversity has reached the same pricing maturity as climate change. The theory of change is that nature-related risks must first become visible to investors before they can affect capital allocation. Once recognized and priced, capital may shift away from unmanaged biodiversity exposure and toward more credible risk-management or nature-positive strategies.

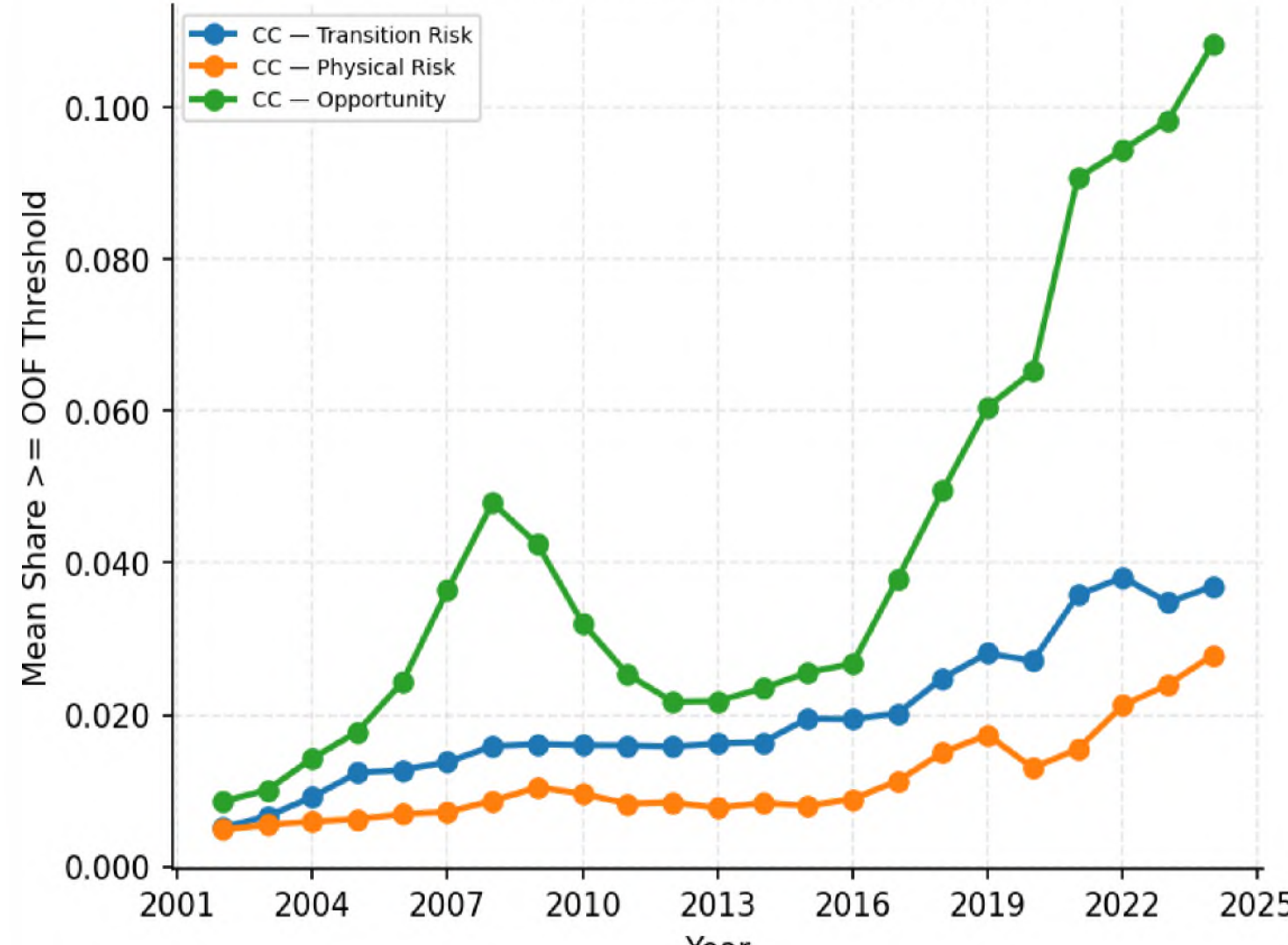
Taxonomy & Classifier



Panel A: Biodiversity Risks



Panel B: Climate Change Risks



Panel C: Other Risks

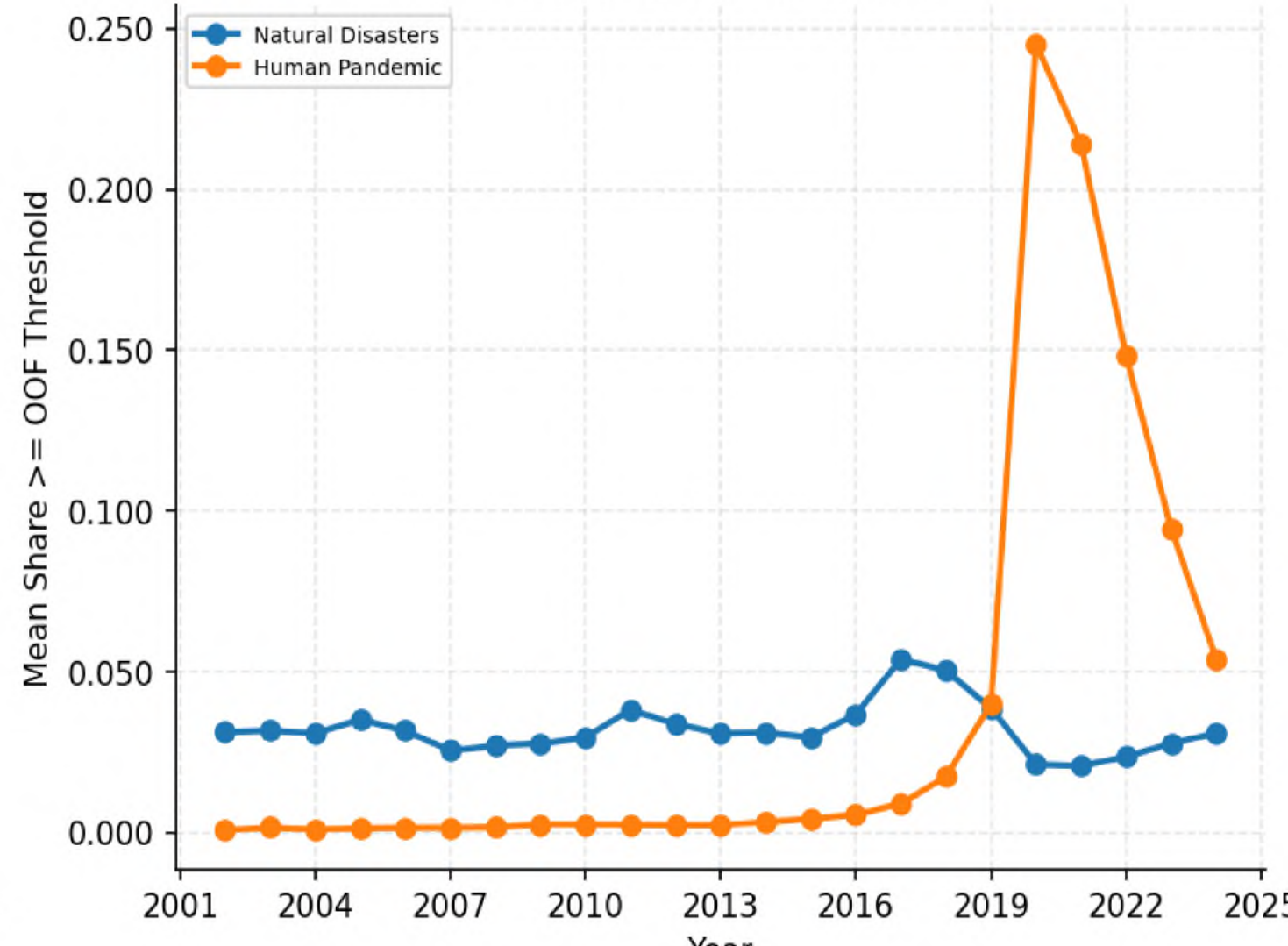


Fig. 1: Trends in Biodiversity and Climate Discussion Intensity, 2002-2024

- Mean share of earnings-call excerpts exceeding the out-of-fold (OOF) threshold, aggregated at the firm-year level.
- “Total” refers to the parent-category discussion measure, not the arithmetic sum of subtopics.

Empirical Results

Result 1: Recognition

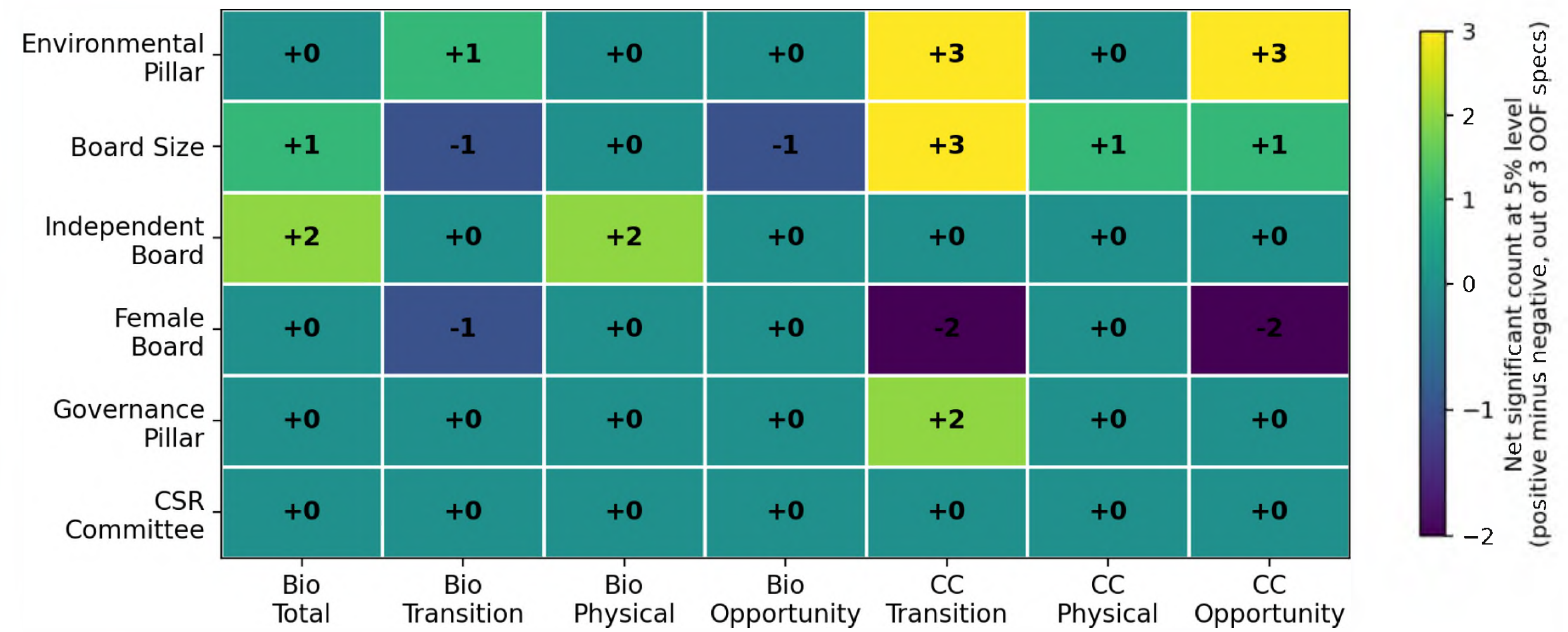


Fig.2 : Determinants of Biodiversity and Climate Discussion

- Unit: net significant count at 5% level across three full-call OOF measures - OOF count, OOF share, and OOF dummy.

Result 2: Financial Consequences

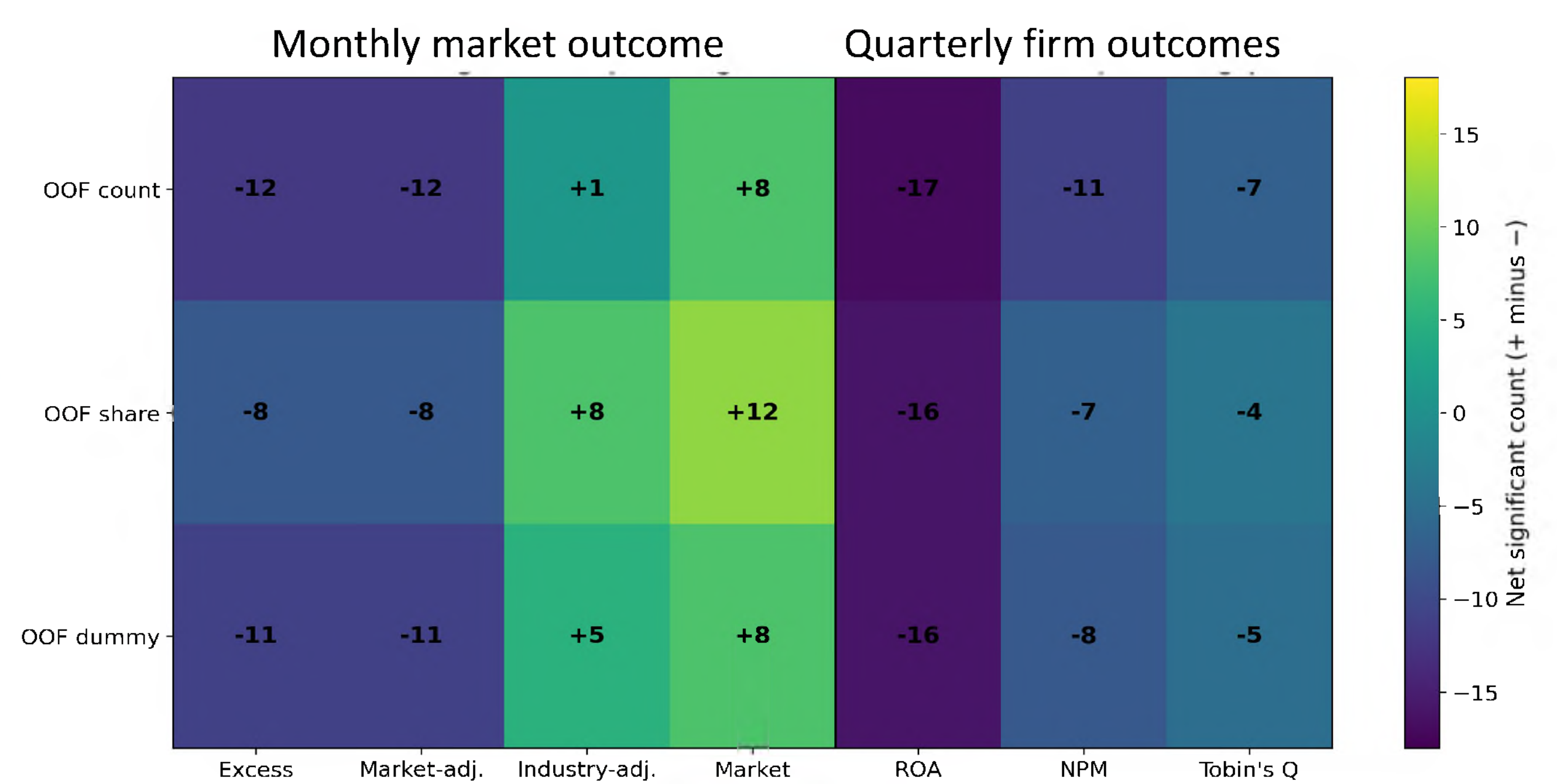


Fig.3 : Biodiversity, Climate Discussion and Financial Outcomes

- Unit: net significant count at 5% level across 28 regressions: 4 call sections × 7 Bio/CC topic categories.

Result 3: Pricing Maturity

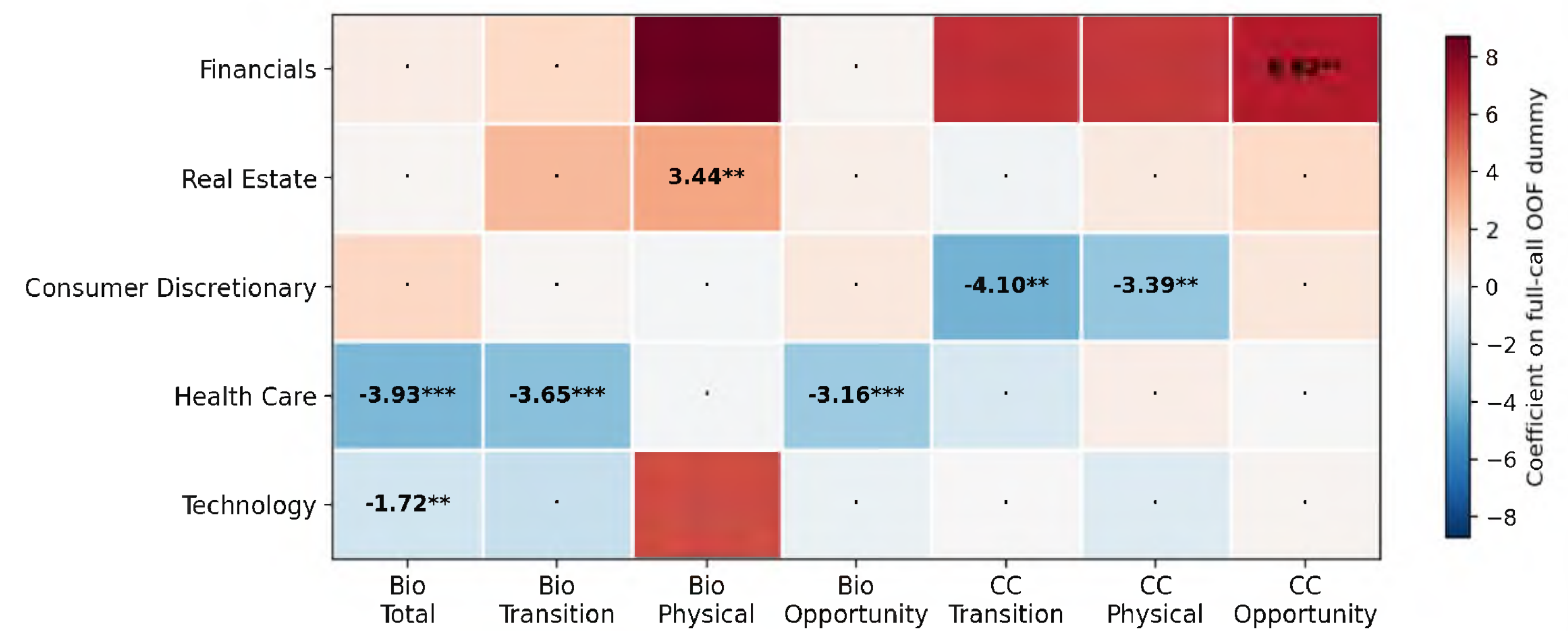


Fig. 4. Industry-Adjusted Return Coefficients by Topic and Industry

- Unit: monthly return coefficient on full-call OOF dummy. Dots = not significant at 5%.

Key Takeaways and Implications

- Biodiversity risk is entering firm–investor communication, but remains less institutionalized than climate risk.
- OOF discussion signals are financially meaningful: they are linked to weaker profitability, higher beta, and return-relevant information.
- Climate has clearer sector-level winner–loser narratives; biodiversity pricing is selective, asymmetric, and industry-specific.

Biodiversity risk is not absent from market pricing — it is visible, financially meaningful, but still fragmented and early-stage compared with climate risk.

References

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