

Creating Cohesion in Energy Strategy: An Analysis of Risk Management in the Western Canadian Petroleum Industry

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Abstract

Strategic synergy can lead to operational efficiencies and improved performance, a phenomenon not sufficiently explored within the environmental strategies of the Western Canadian petroleum industry (WCPI). This study, therefore, explores, “to what extent does the WCPI demonstrate synergy in the discussion of risk between their environmental and corporate strategies?” and, “how is this relationship moderated by industry subsector and firm size?”. Through textual analysis of published environmental and corporate reports, firms demonstrated a lack of strategic synergy and inconsistent risk disclosures: citing more environmental risks in their environmental reporting, with inconsistent financial and operational risks within corporate reporting. Although some relationship to the moderating variables is observable, statistical analysis provided mixed results. Moreover, firms demonstrated homogeneity in risk disclosures and strategic methodologies, with evidence of coercive and mimetic institutional isomorphic forces. Stricter ESG frameworks or adopting integrated reporting could drive greater consistency but will still require additional oversight and regulation.

Methods

Sample Selection:

- Purposive sampling method used to select 37 firms operating in the WCPI.
- Selection criteria included extent of operations, reputation, and public document availability.
- Firms selected based on specific criteria, including firm size and petroleum subsector.
- Classification of firms into small, medium, and large categories based on average annual revenues.

Data Sources:

- Primary data source: publicly available ES and CS documents, including AR/MD&A, AIFs, and sustainability/ESG reports.
- Secondary data sources: relevant industry standards on ESG and climate disclosure from organizations like GRI, CDP, SASB, and TCFD, as well as the UNGC guidelines.

Coding Methods:

- Coding framework developed based on established principles from Saldana and Braun and Clarke.
- Codes created within NVivo for coding and analysis, created ad-hoc during the coding process.
- Analysis involved comparison of documents across common codes, identification of patterns and relationships.

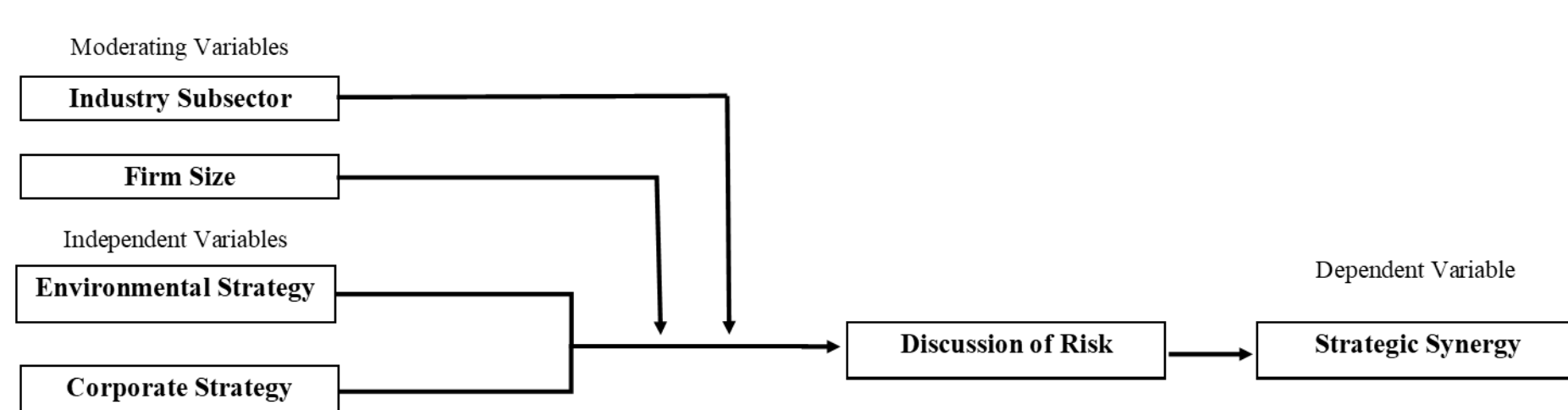
Search Terms for Coding Framework:

- General Risk Management
- Environmental Strategy and Environmental Risks
- Corporate Strategy
- Sustainable Development Goals
- ESG Reporting Standards
- Formal and Informal Institutional Pressures.

Data Analysis:

- NVivo used for coding, categorizing, and synthesis of textual data.
- Quantitative analysis facilitated by NVivo features.
- Qualitative analysis involved an iterative cycle of coding, categorizing, and synthesizing the data.
- Reflexivity maintained to avoid personal biases.

Conceptual framework for measuring strategic synergy in the WCPI through analysis of risk disclosures in ES and CS documents.



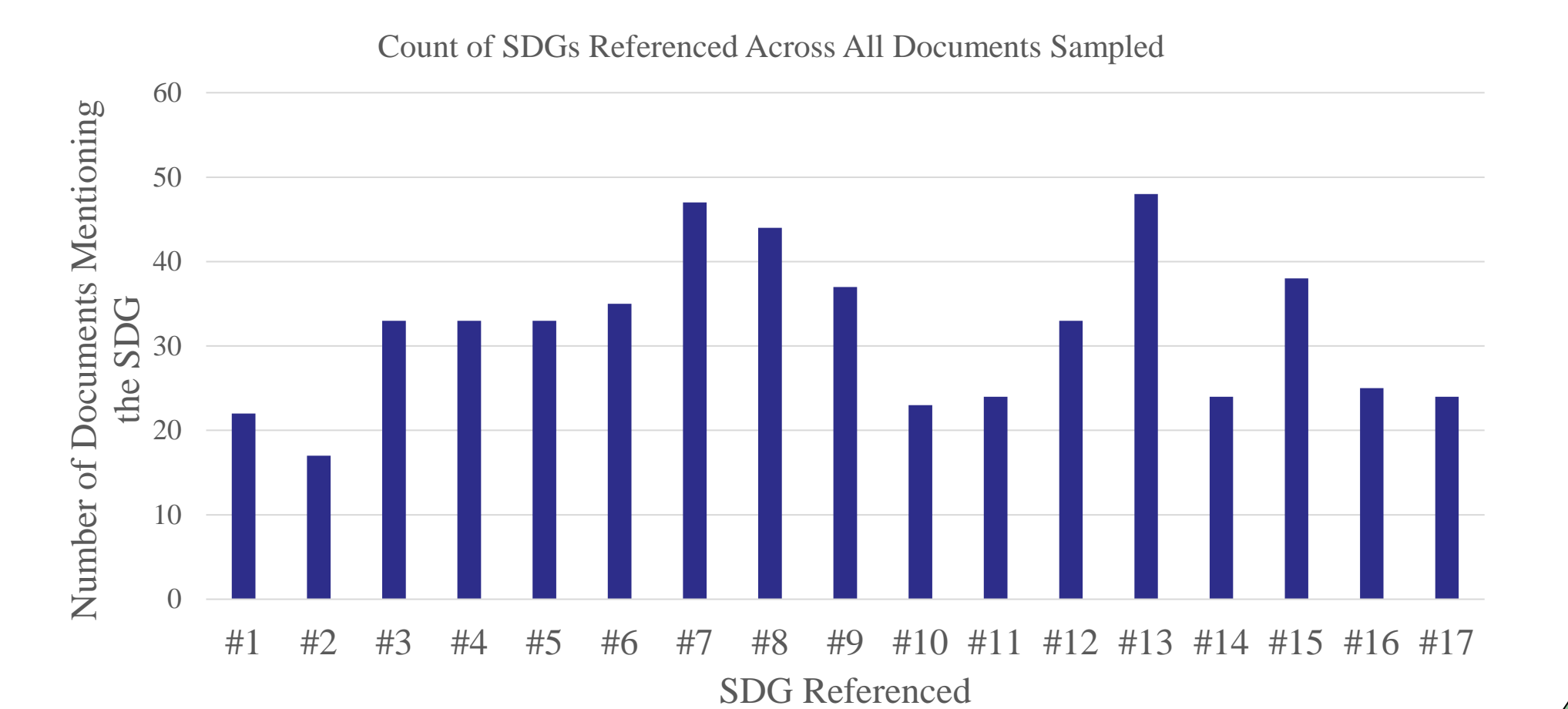
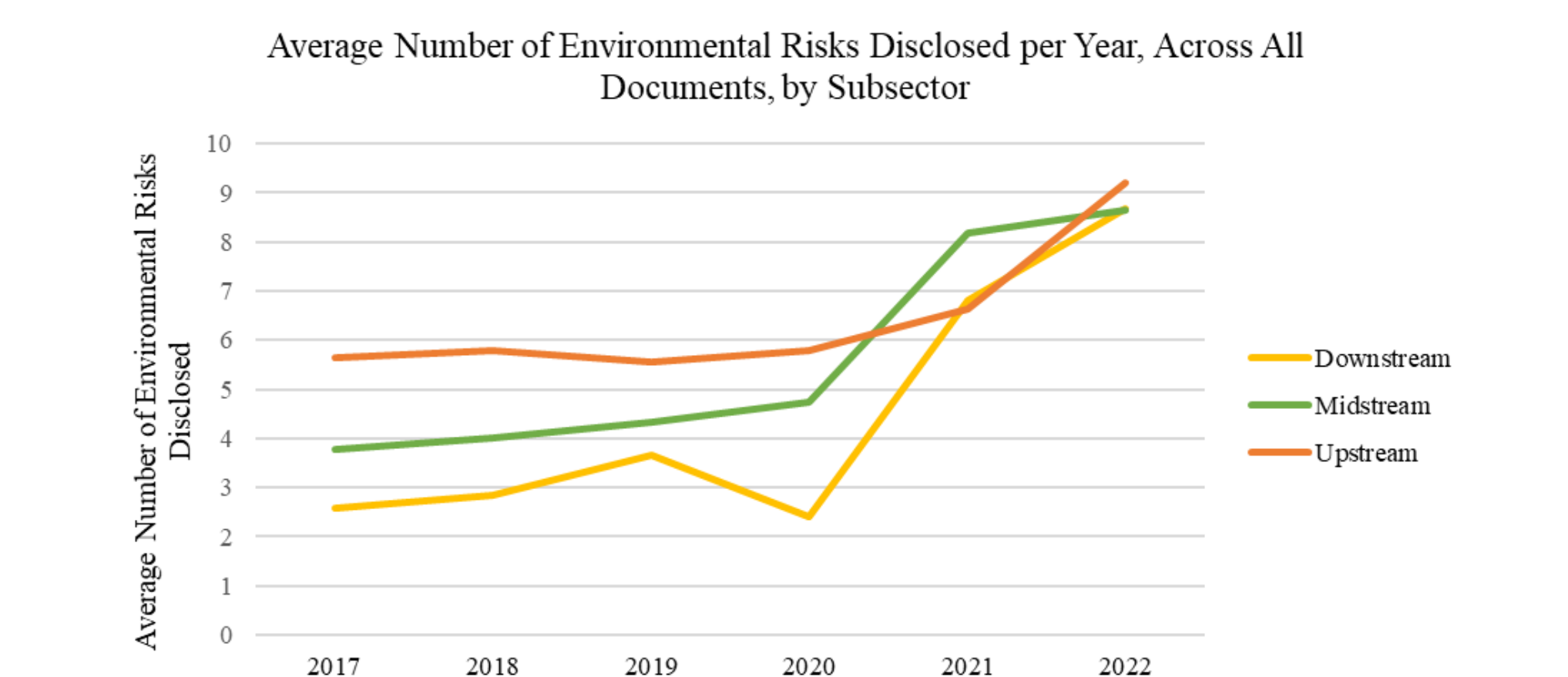
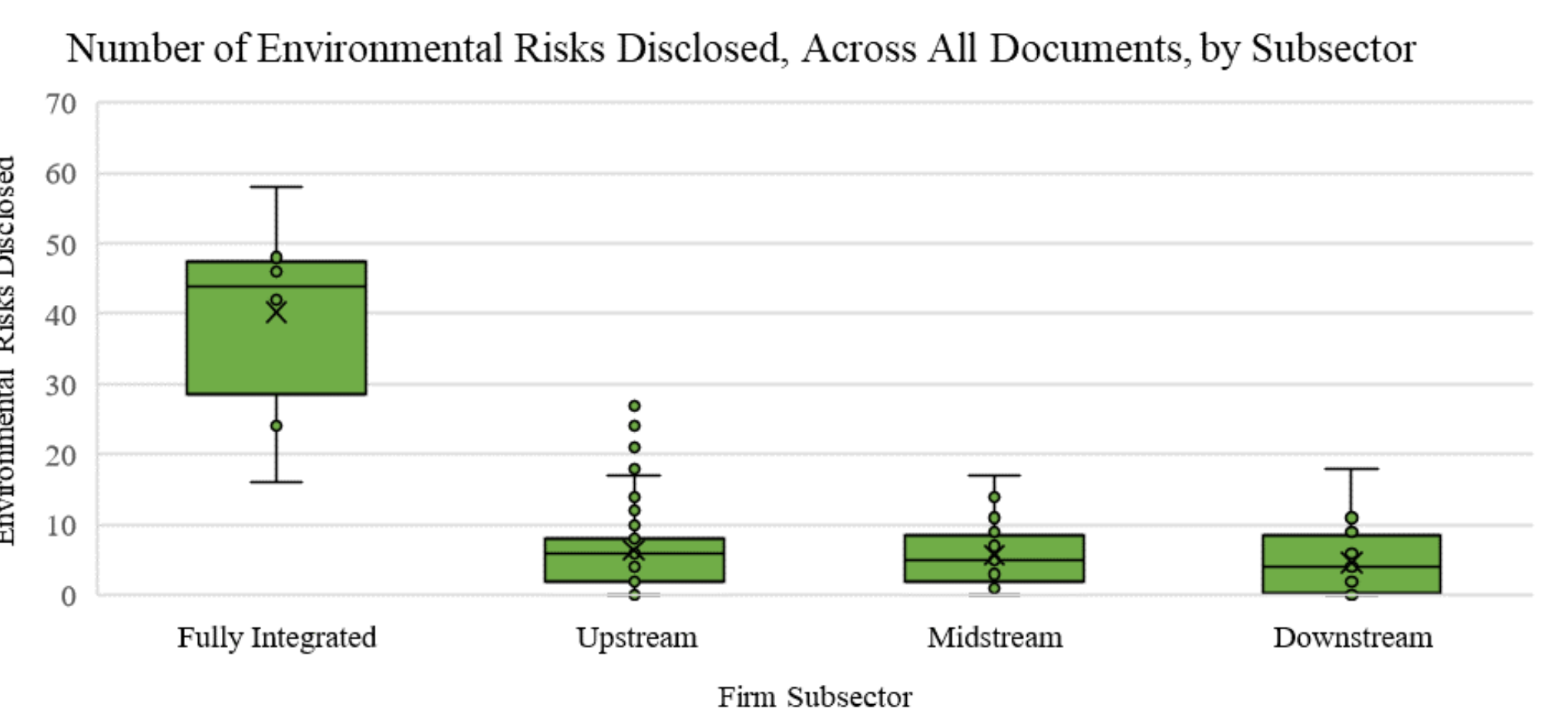
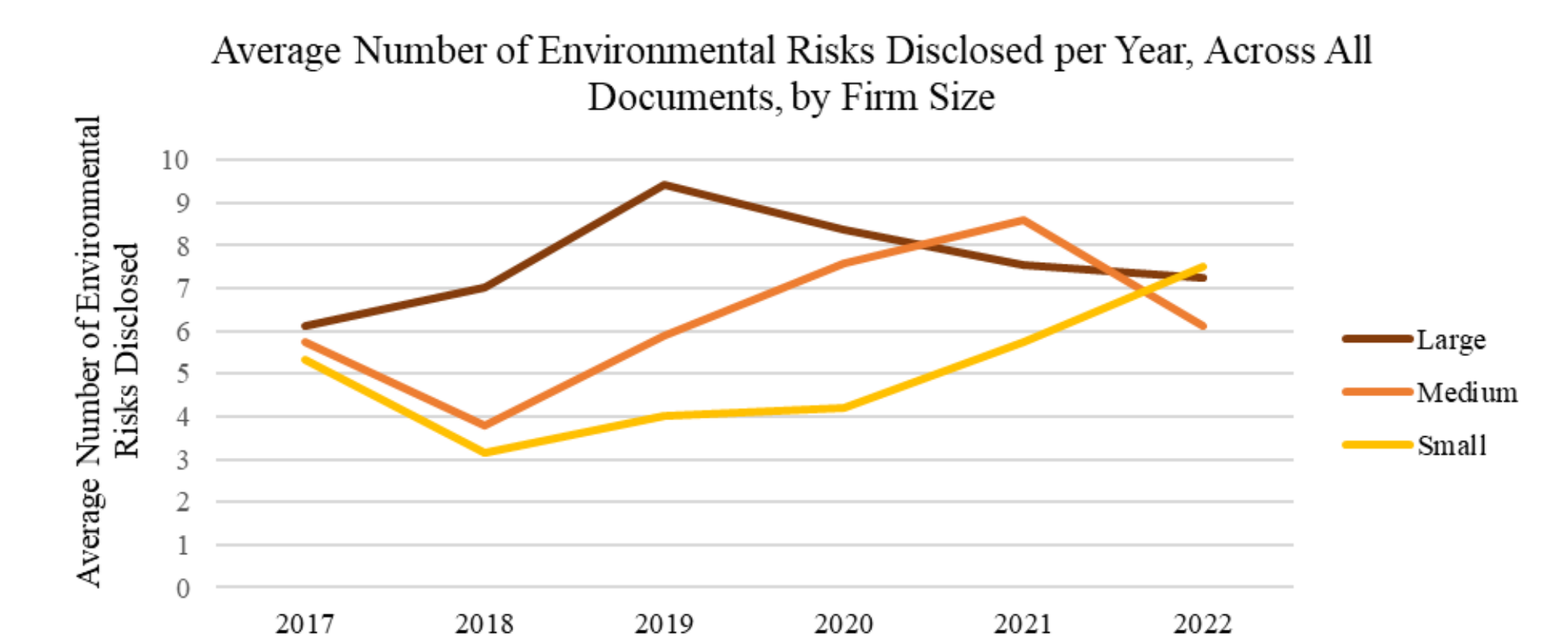
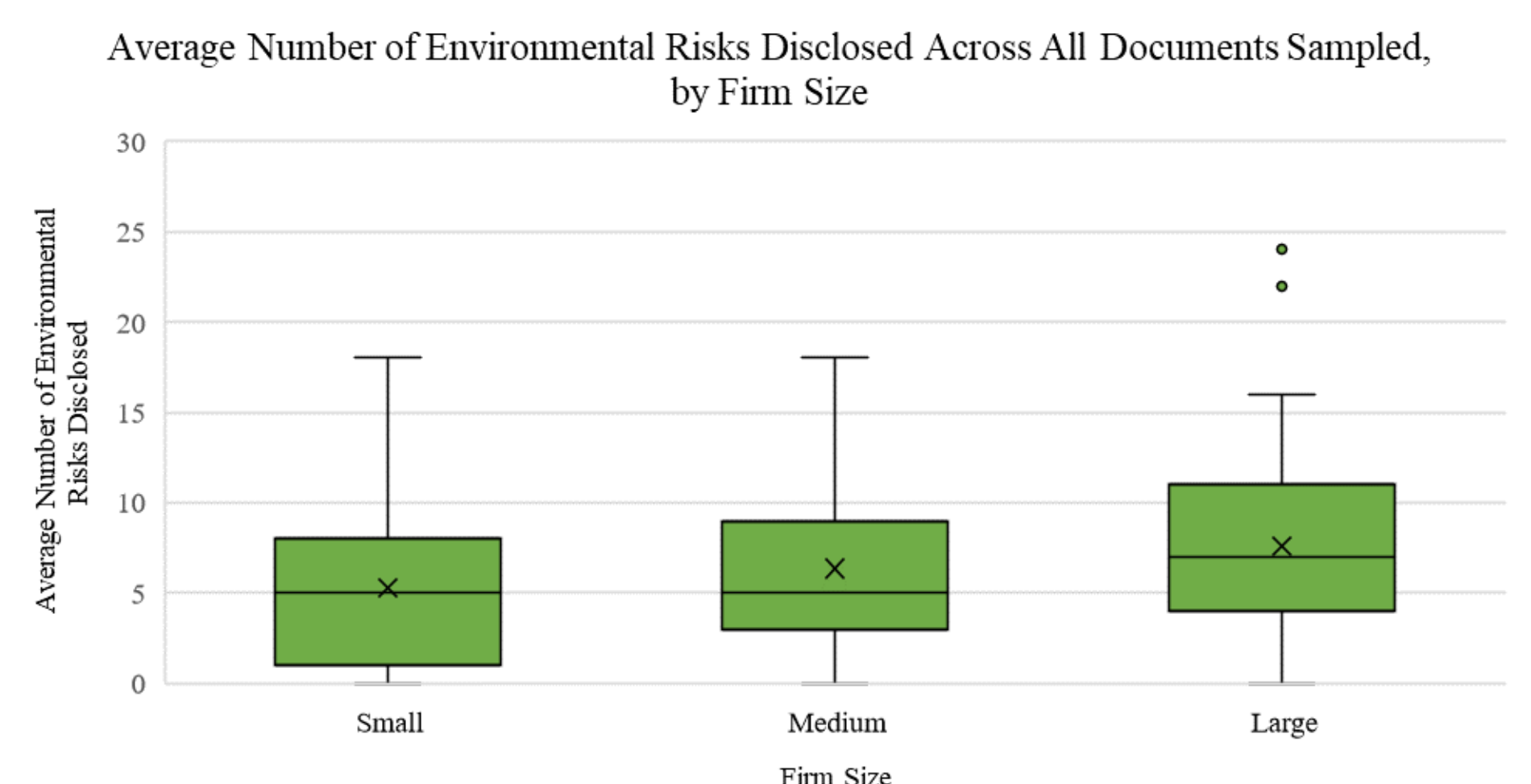
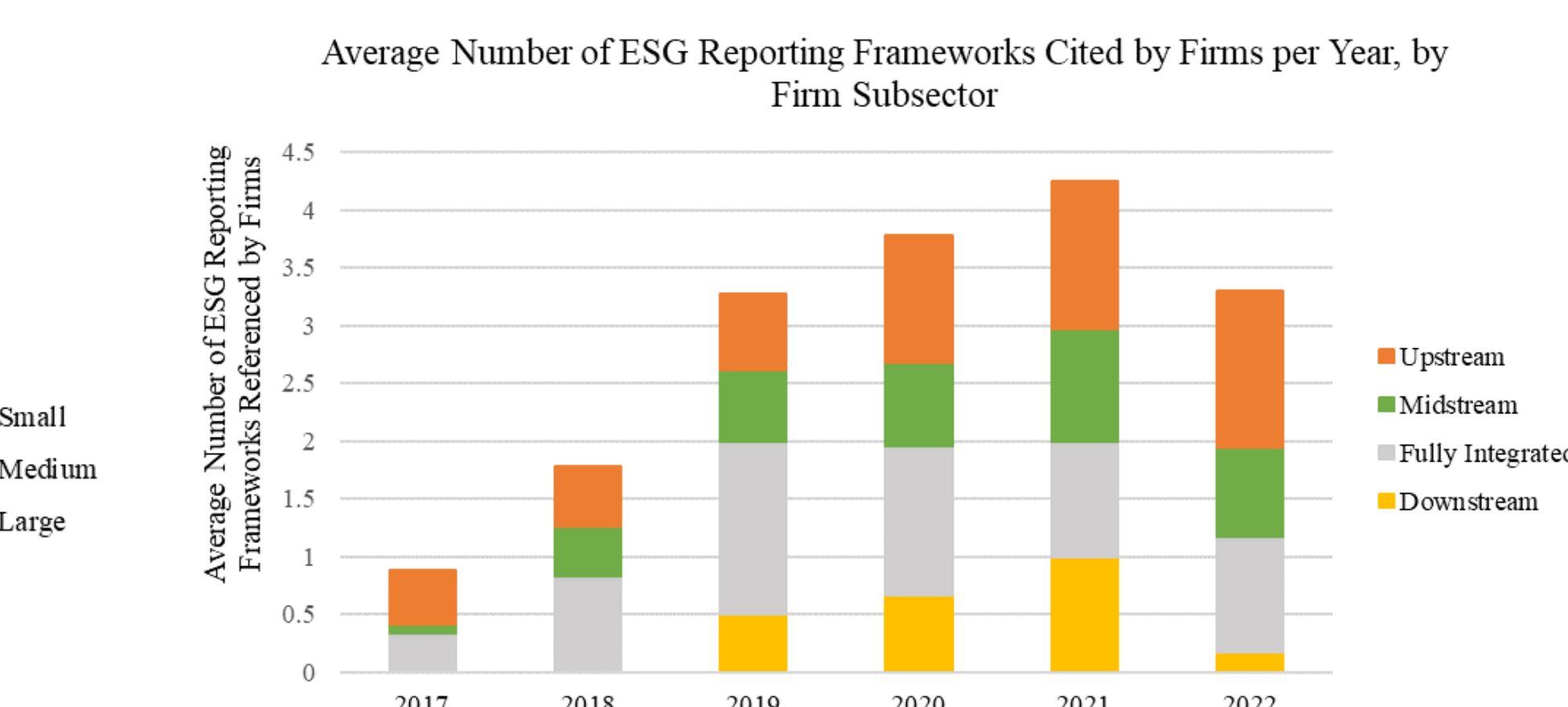
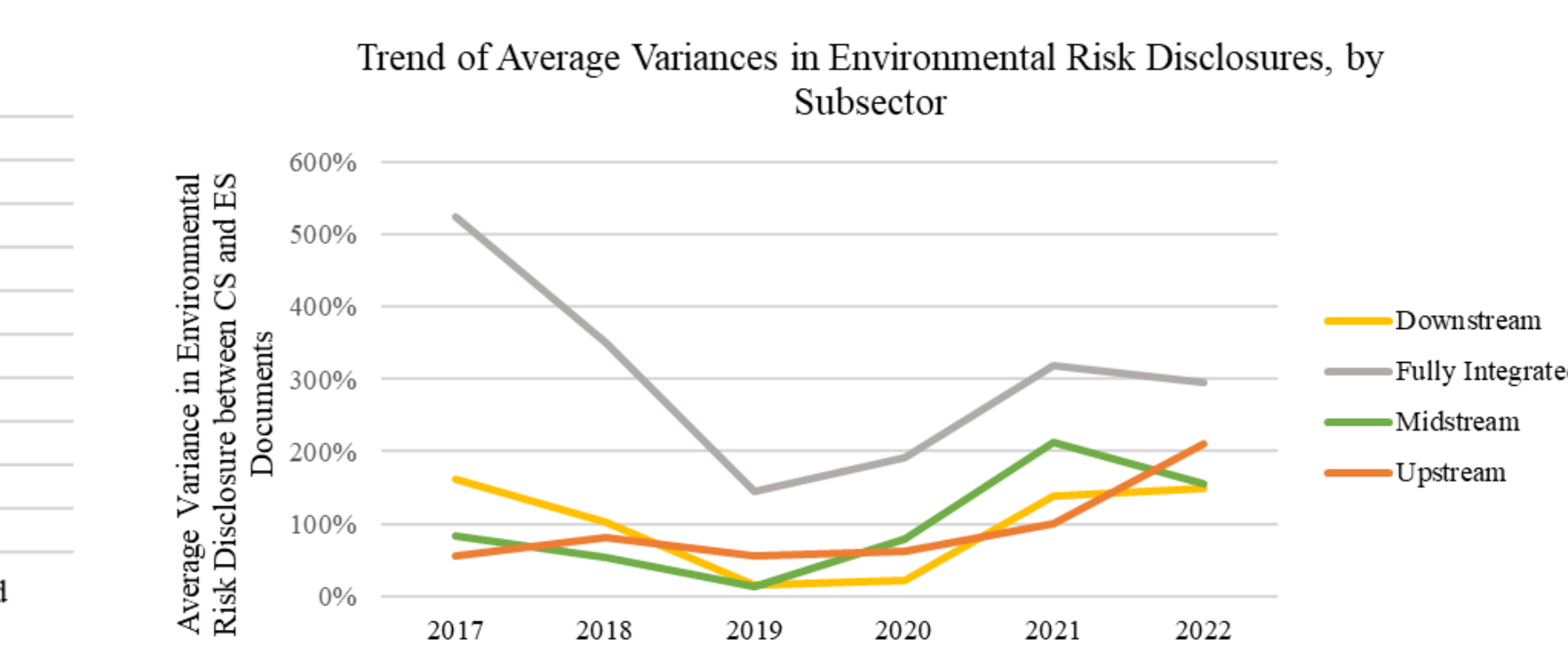
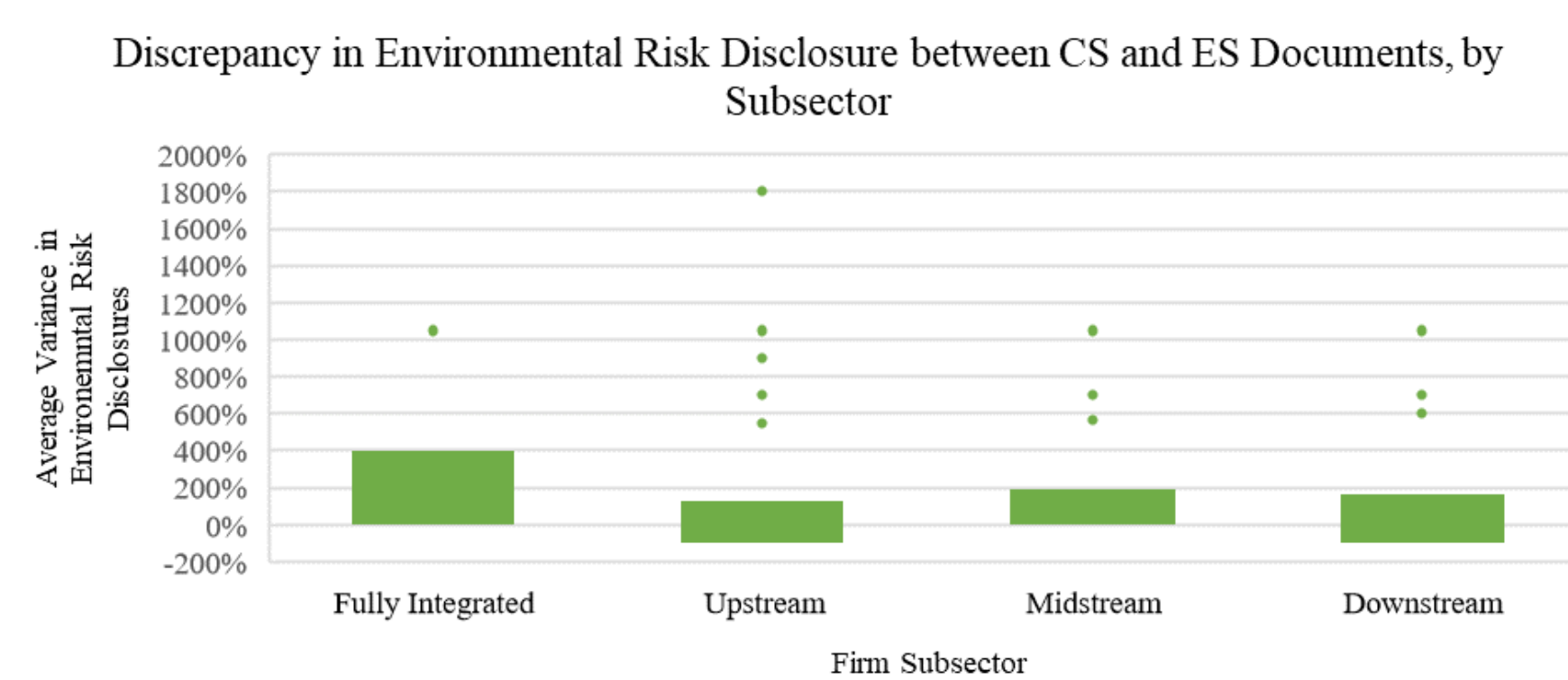
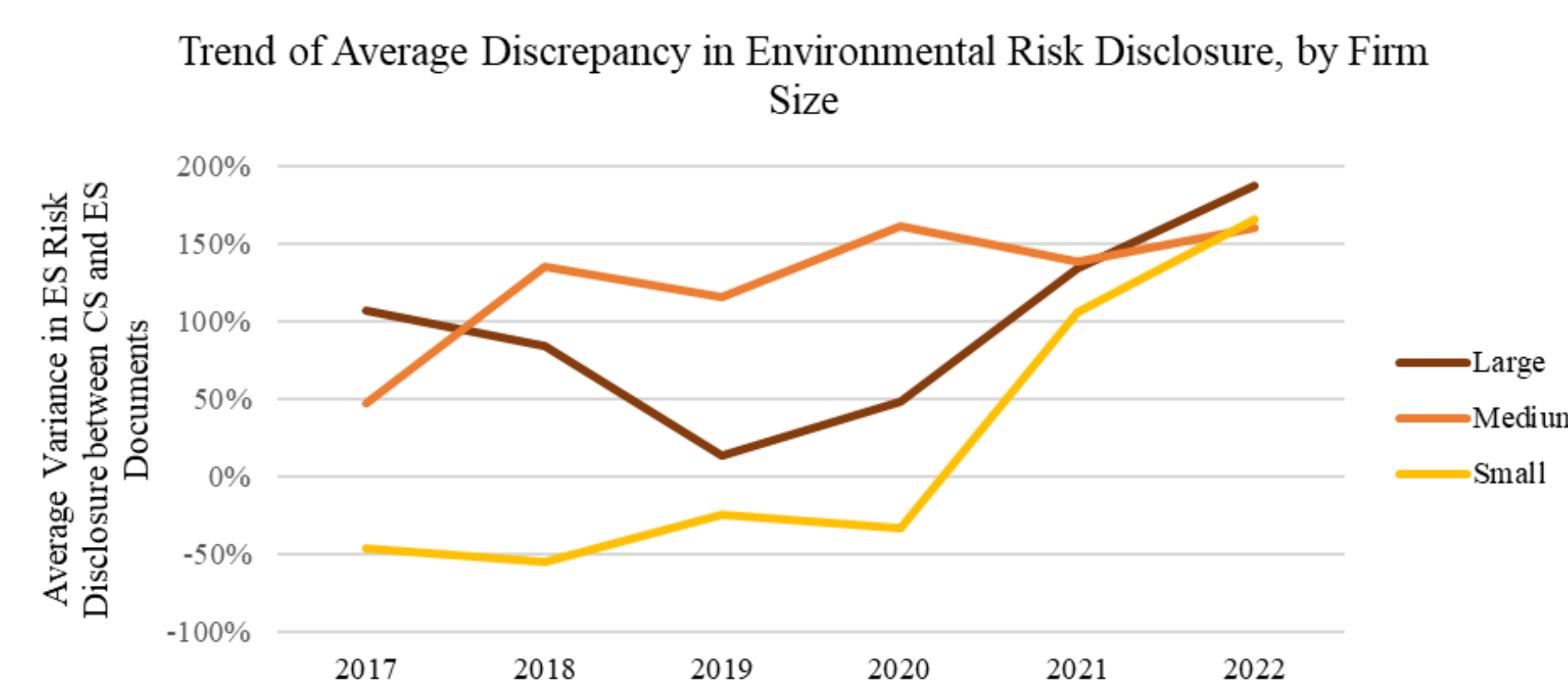
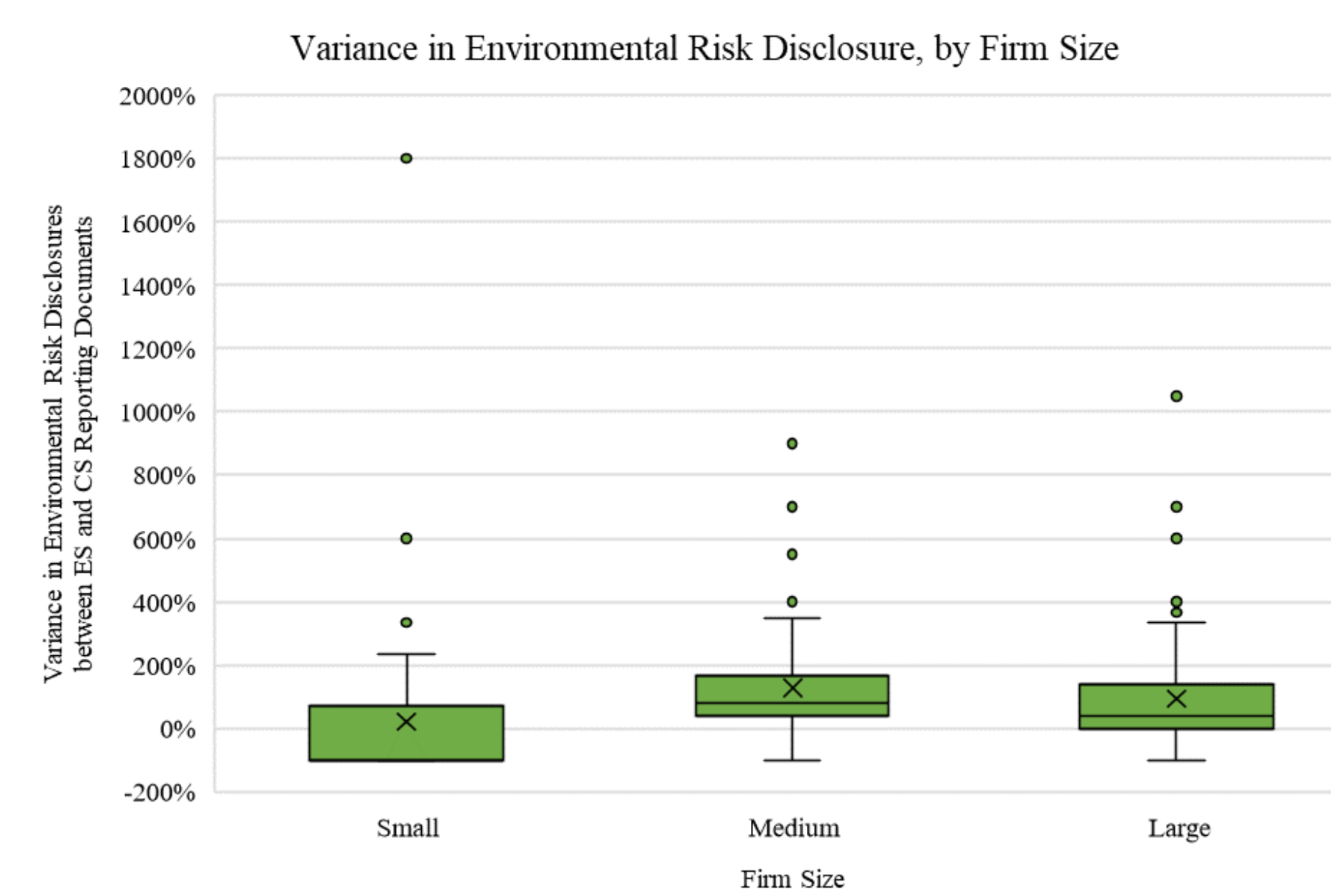
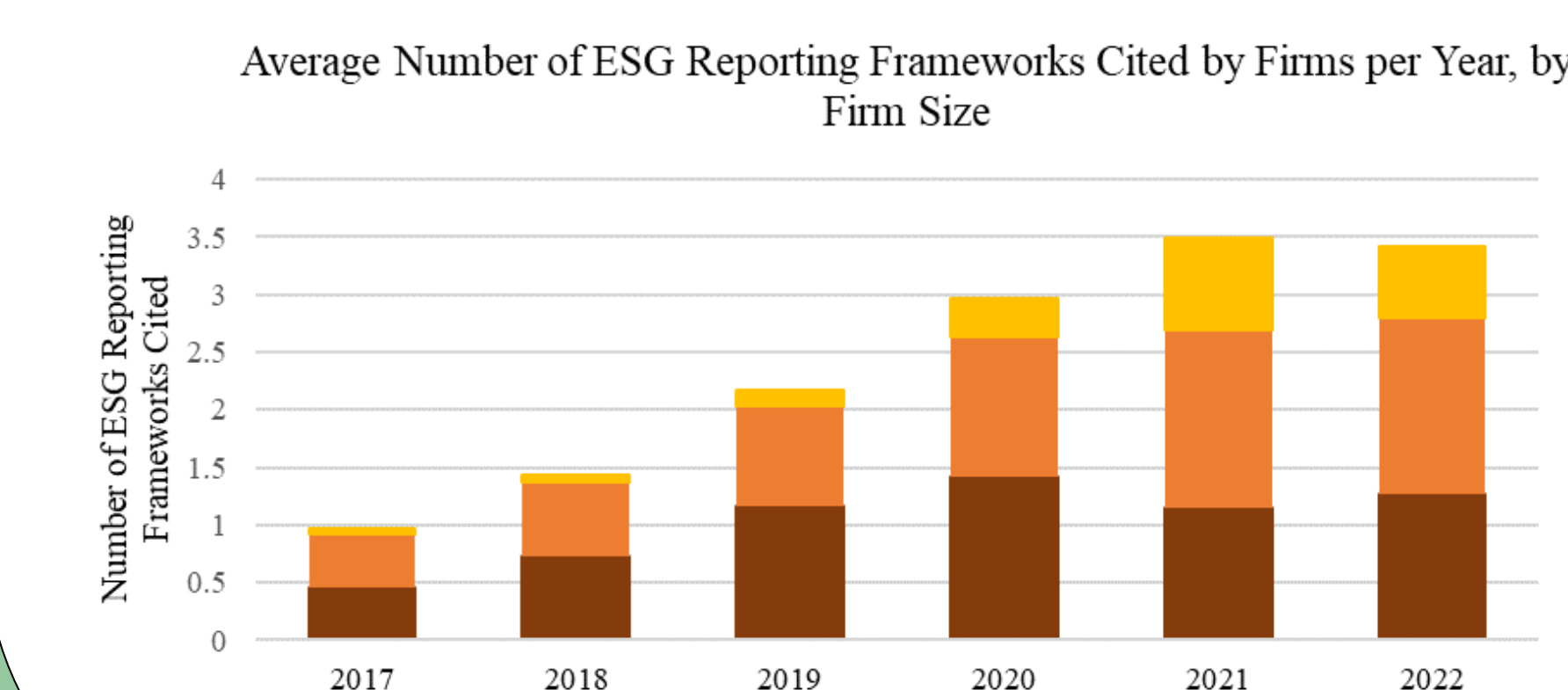
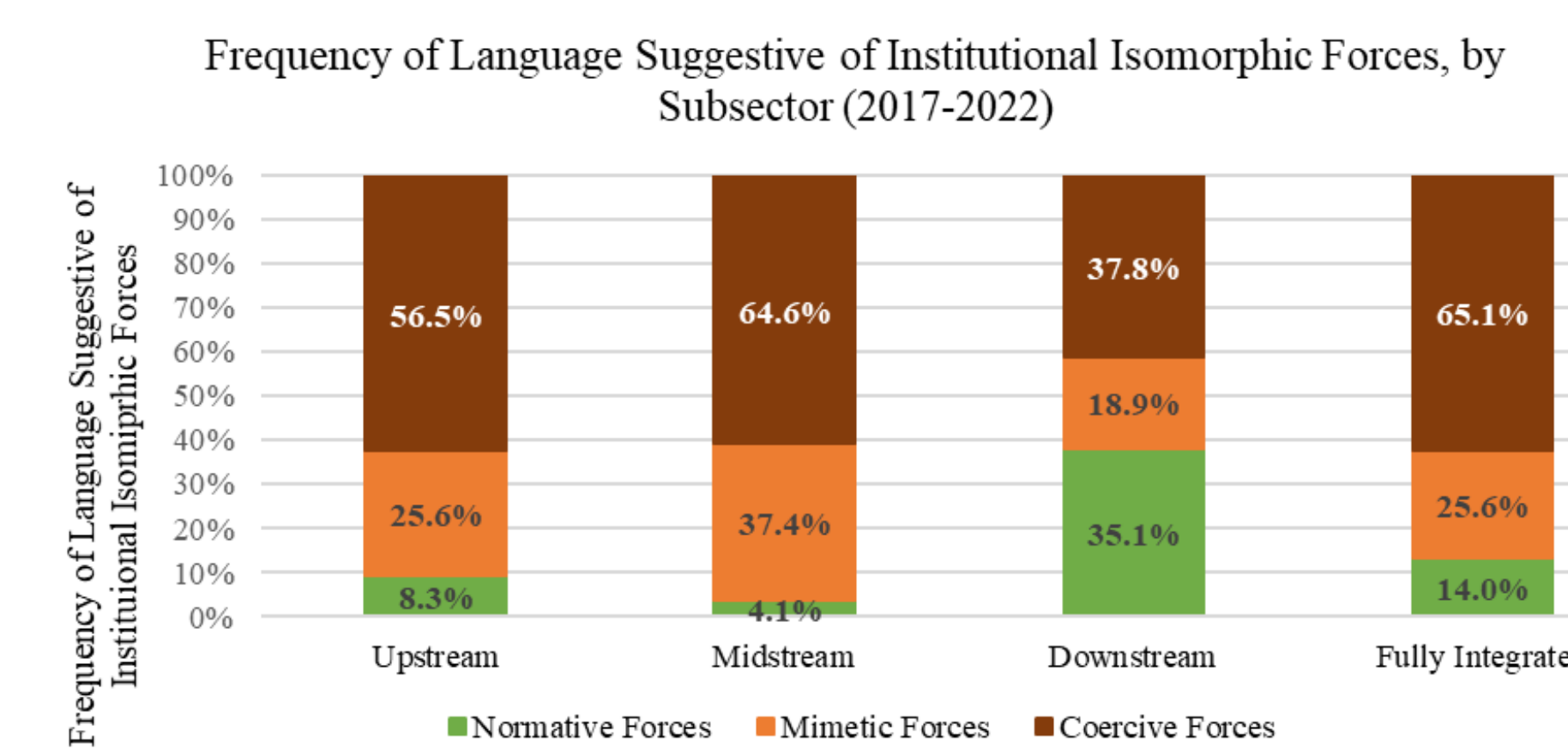
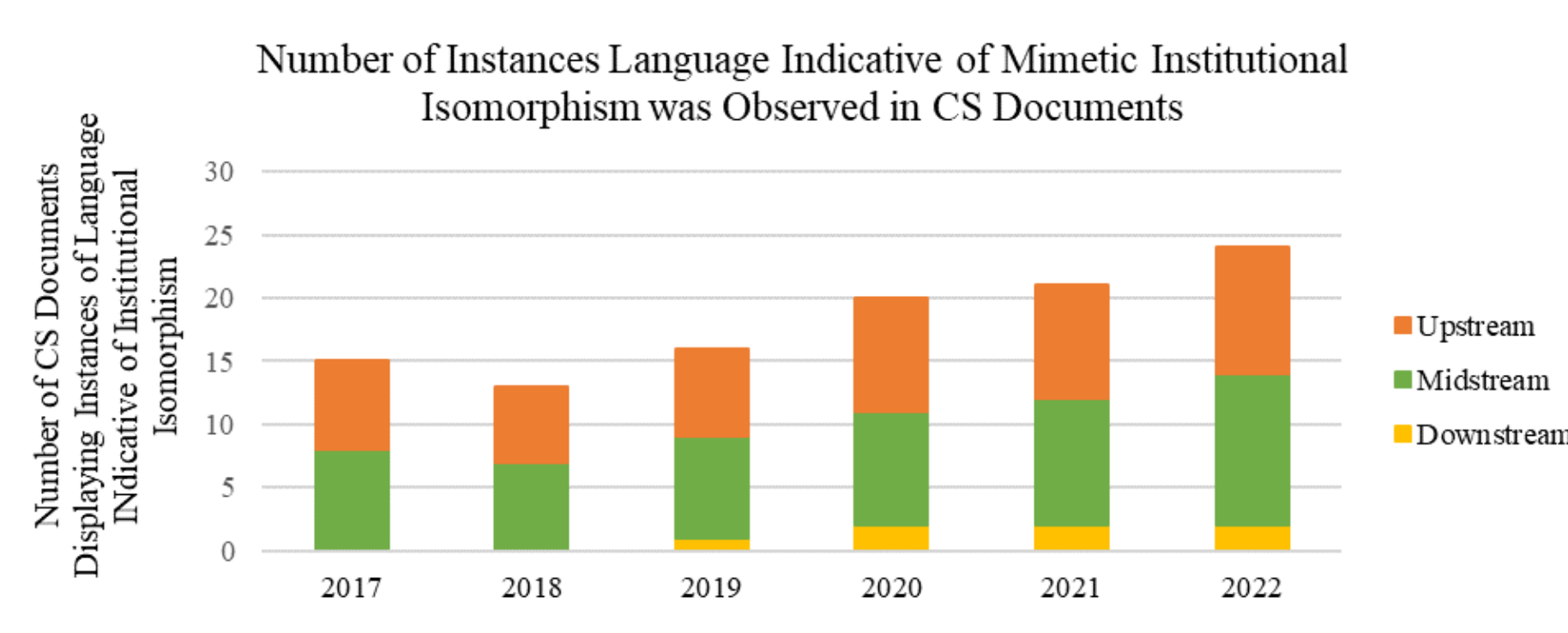
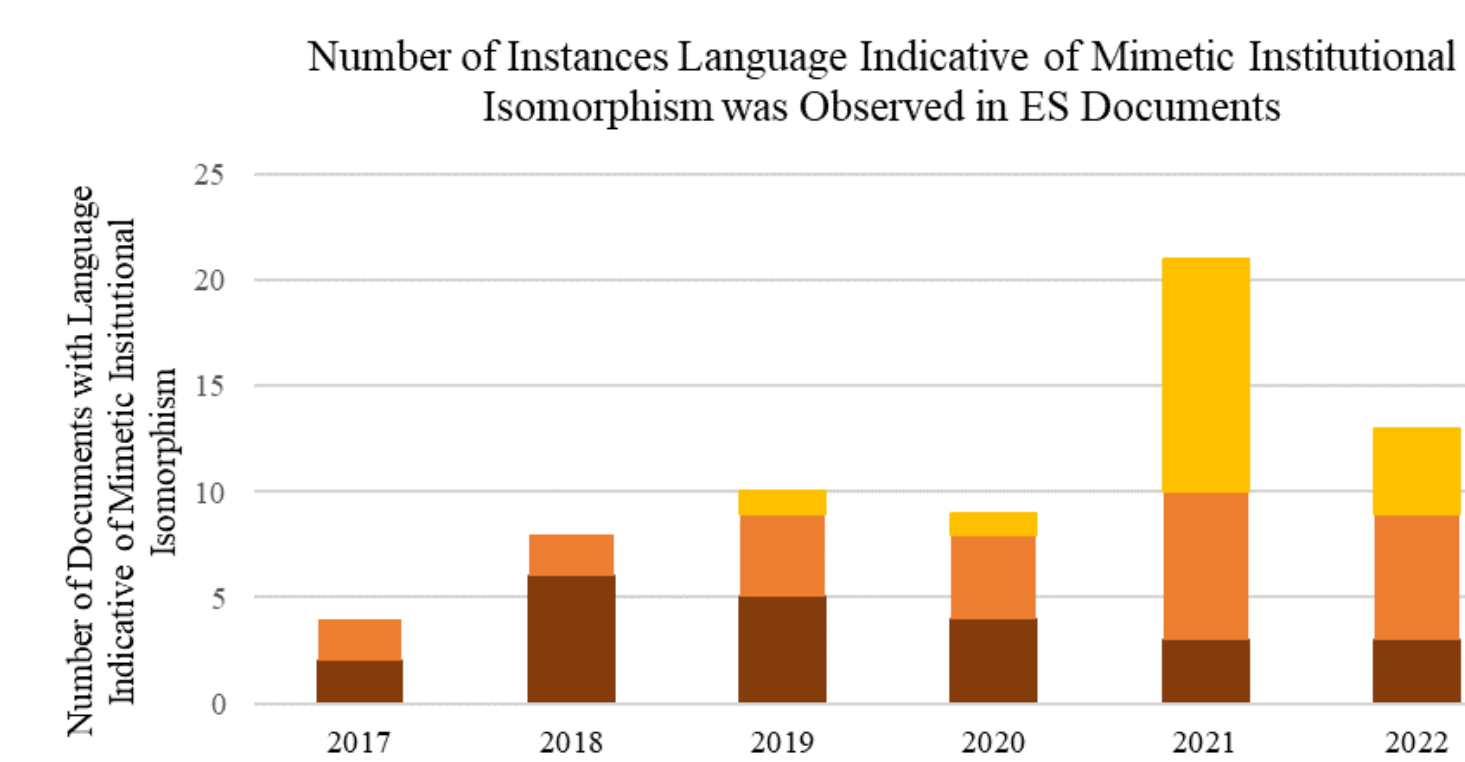
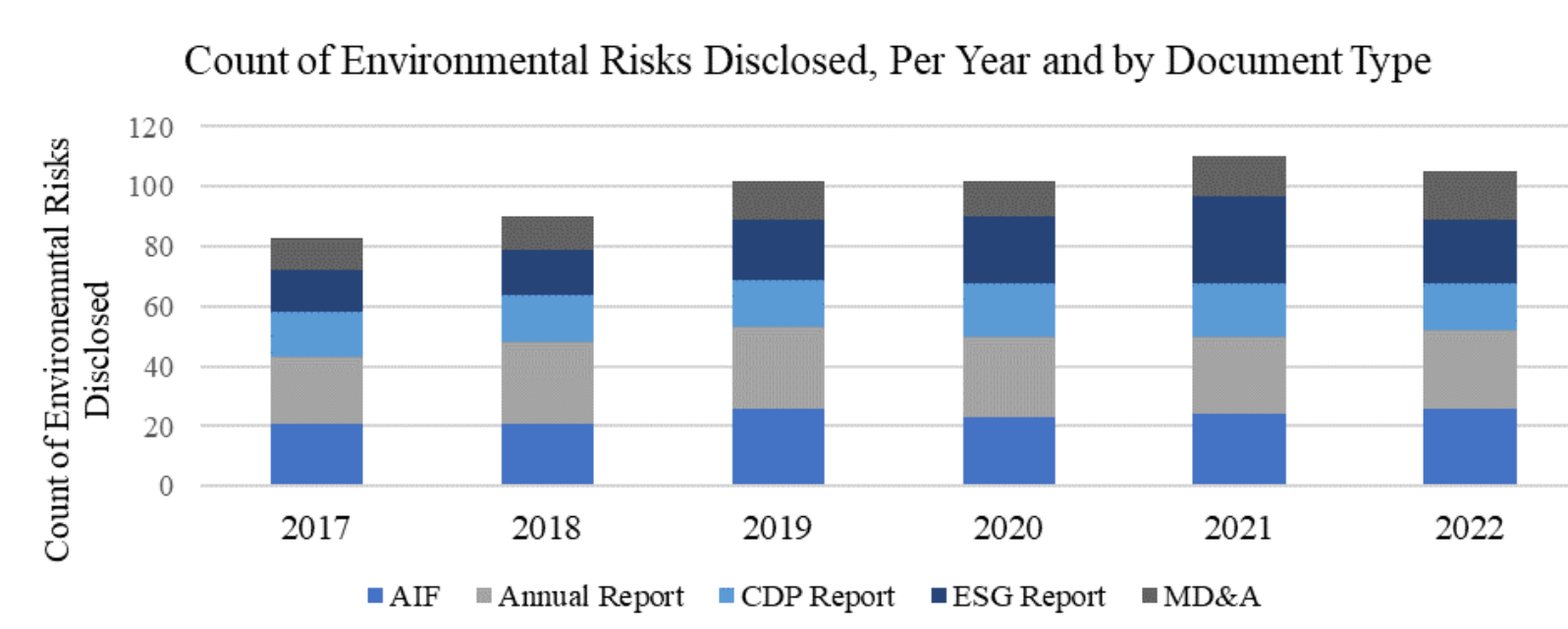
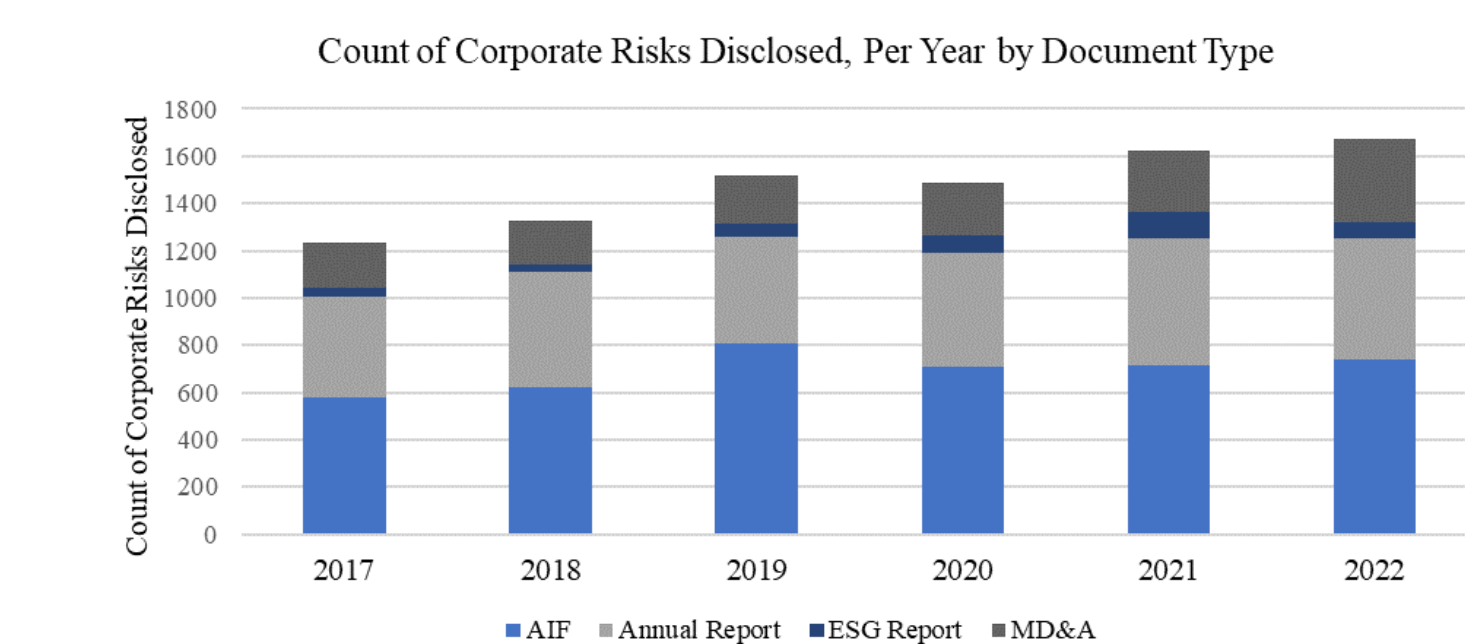
Risk Scoring:

- Firms scored on the extent and quality of their risk management practices.
- Scores ranged from 0 to 5 based on the depth of risk discussion and strategies.

ANOVA Calculations:

- ANOVA performed to test null hypothesis across different groups within the sample.
- Key measures analyzed included the number of ES risks, non-ES risks, and variance in environmental risk disclosures.

Results



Conclusion

ANOVA Analysis:

- No statistically significant effect of firm size and subsector on environmental risks or intrafirm discrepancies.
- Size had a statistically significant effect on non-environmental risks disclosed but not on intrafirm discrepancies.

Interfirm Homogeneity:

- WCPI firms showed significant homogeneity in risk disclosures and ES application.
- Coercive and mimetic institutional isomorphic forces were evident.

Impact of Dominant Strategy:

- Dominant homogenous strategy may have unintended negative consequences.
- Quality of ES reporting found to be spurious with significant gaps in risk management, mitigation, assessment, and prevention.
- Lack of consistency in reporting standards, formatting, layout, and risk definitions complicates comparisons.

Challenges for Investors:

- Limited comparability of reports hinders informed investment decisions.
- Difficulty in differentiating firms from peers may negatively impact industry competitiveness.
- Overall, ES reports in WCPI were found to be of questionable quality.