

# Ideas, interests and the effectiveness of public participation

2025.2

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# Chapter 1: Introduction

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- Does commenter identity matter in notice and comment procedures?
  - Balla (2022): bureaucrats say it doesn't
  - Legal framework: participation as information exchange (a dialogue)
- Interest group theory: theoretical focus on who participates
  - Participation as representation
  - Facing the research challenges of measuring ideas: two ways to use IA
- Implications for regulatory policy
  - Concrete policy implications
  - Access is not enough (Regulations.gov, examples from Anvisa and Aneel)

# Chapter 1: Introduction

## Outline:

- Chapter 2: Theoretical Framework
- Chapter 3: ANATEL's public consultations: methodology and descriptive statistics
- Chapter 4: Who says it, or what is said?
- Chapter 5: Uncovering interest group dynamics
- Chapter 6: Issue networks and the circulation of ideas
- Chapter 7: Conclusion

# Chapter 2: Theoretical Framework

## Chapter 2: Theoretical Framework

- 🚧 UNDER CONSTRUCTION 🚧
- "Knowledge" vs. "Interests"
- More importantly: applied research

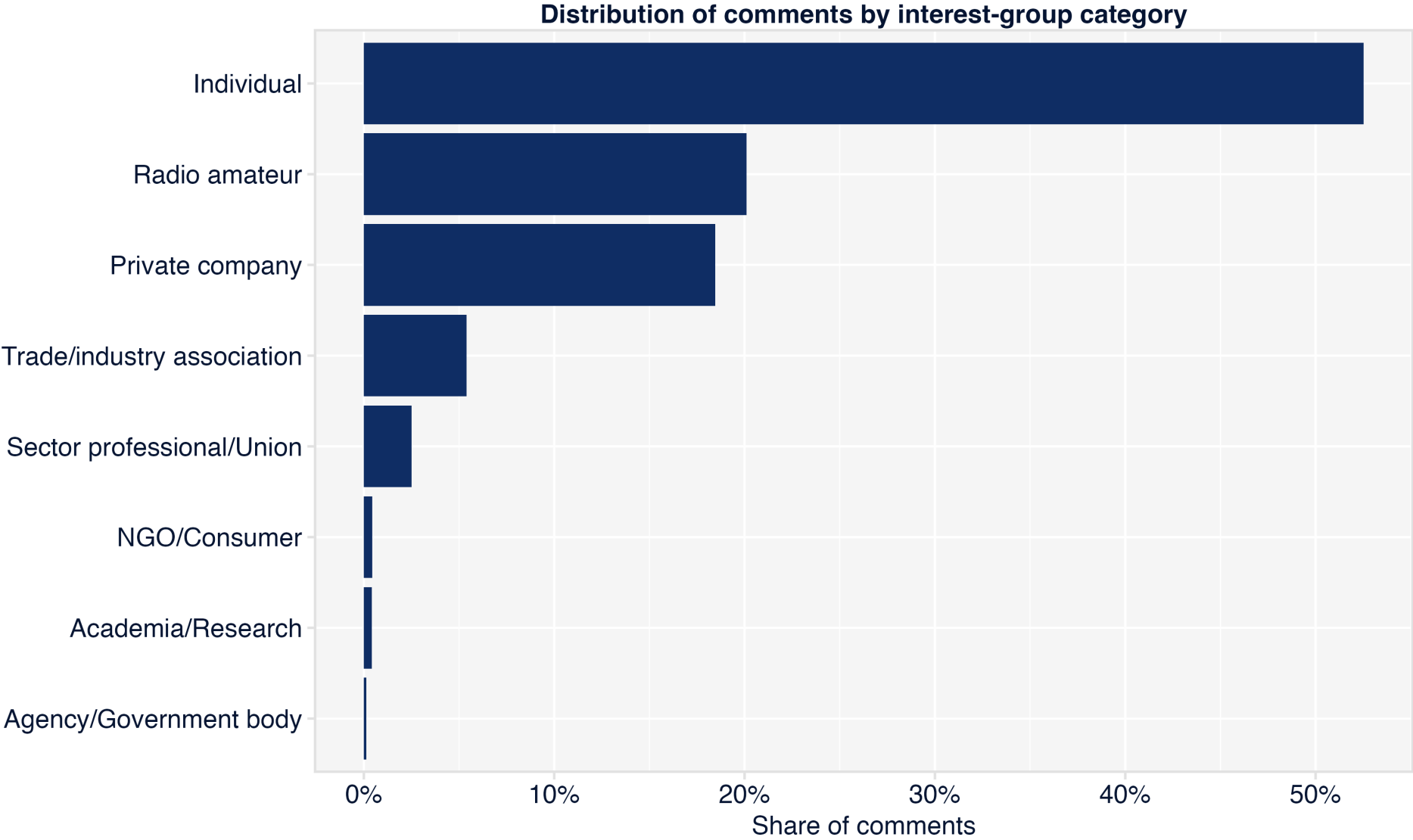
# Chapter 3: Methodology and descriptive statistics

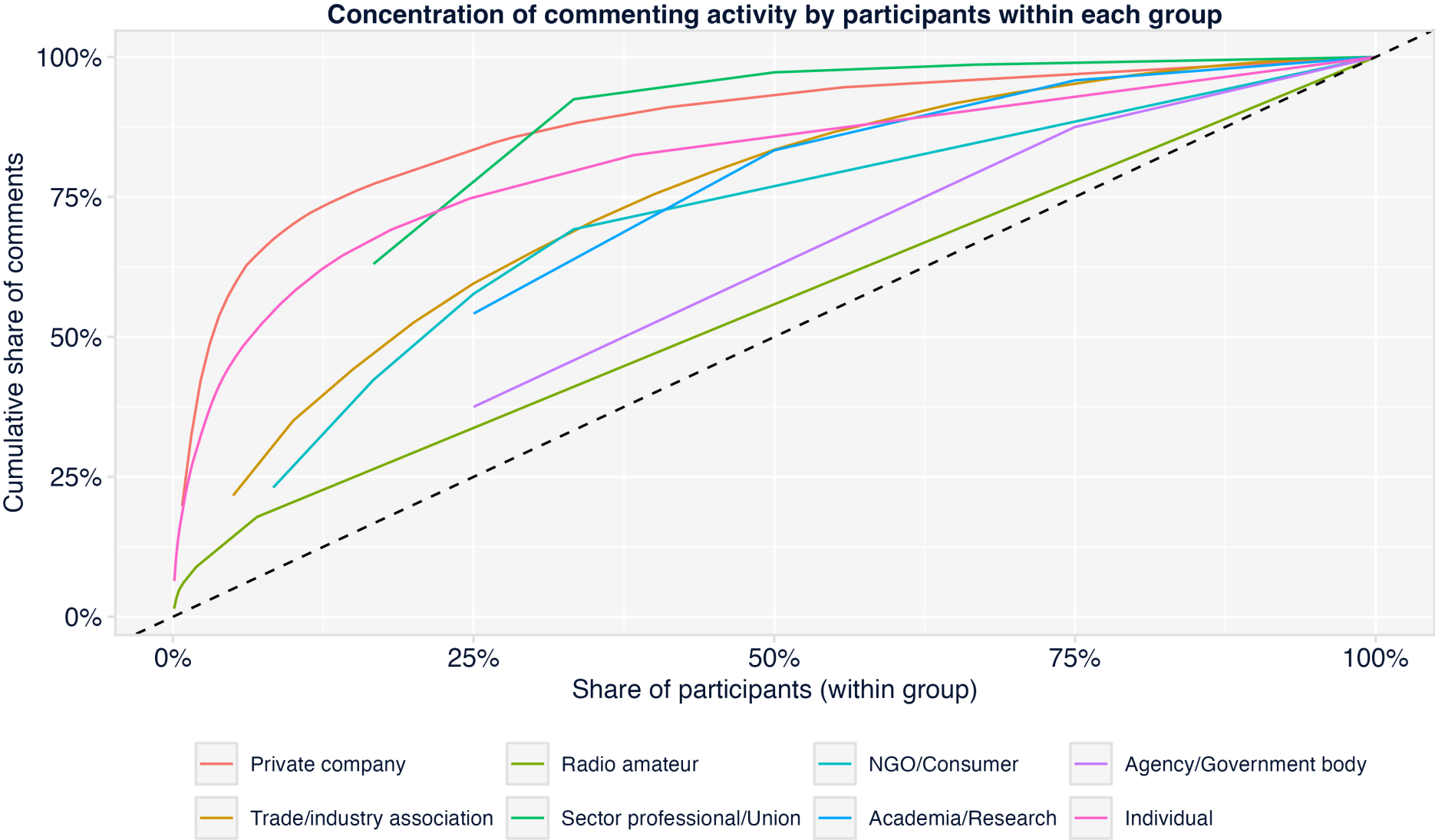
# Chapter 3: Methodology and descriptive statistics

- **Methodology**
  - Data collection
  - Text preprocessing and representation (TF-IDF, BERT, GPT-3 embeddings)
  - LLM-assisted dataset enrichment
    - Interest group classification
    - Regulatory direction classification
    - Types of arguments
- **Descriptive statistics: ...**

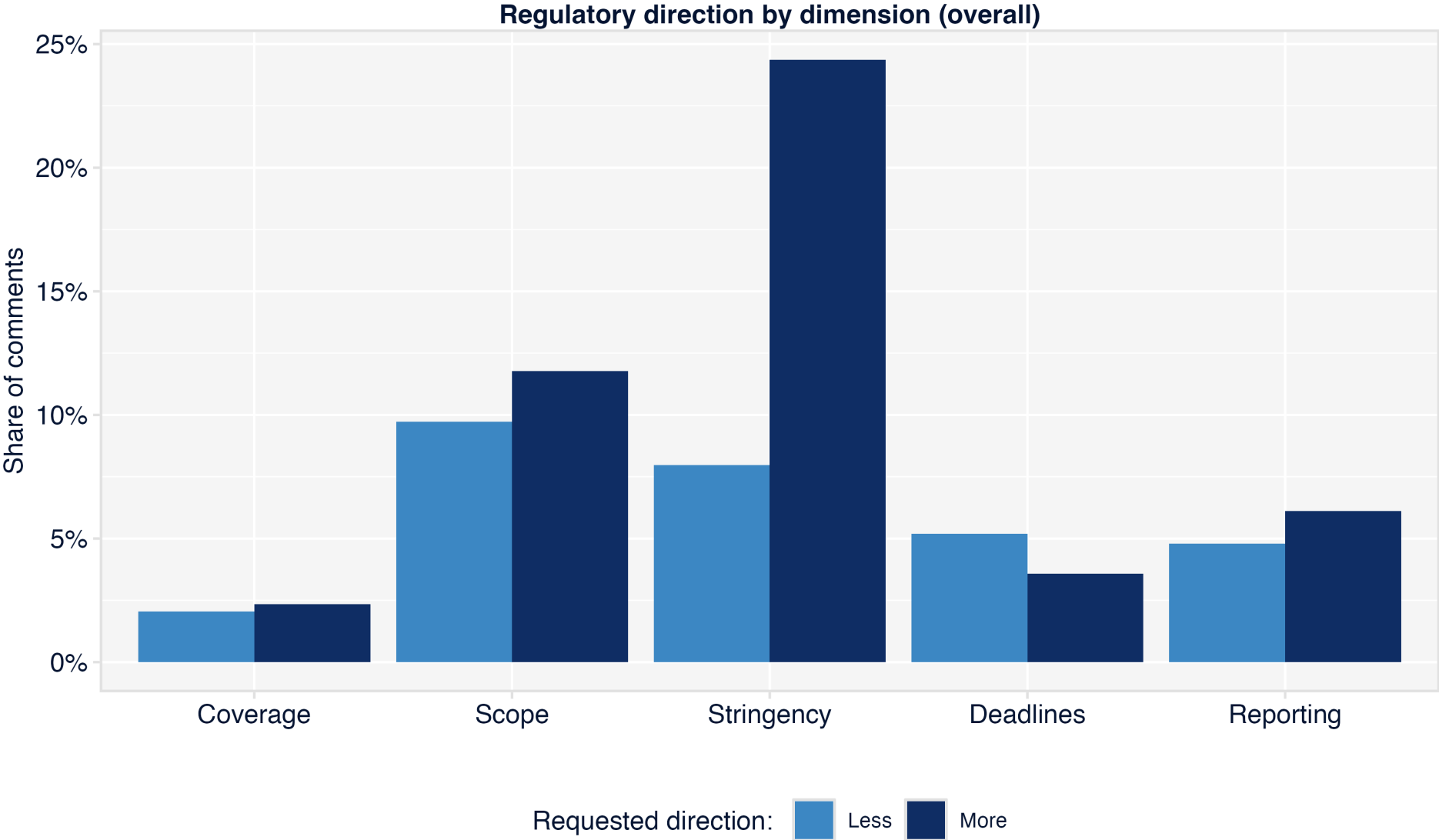


# Composition of participants



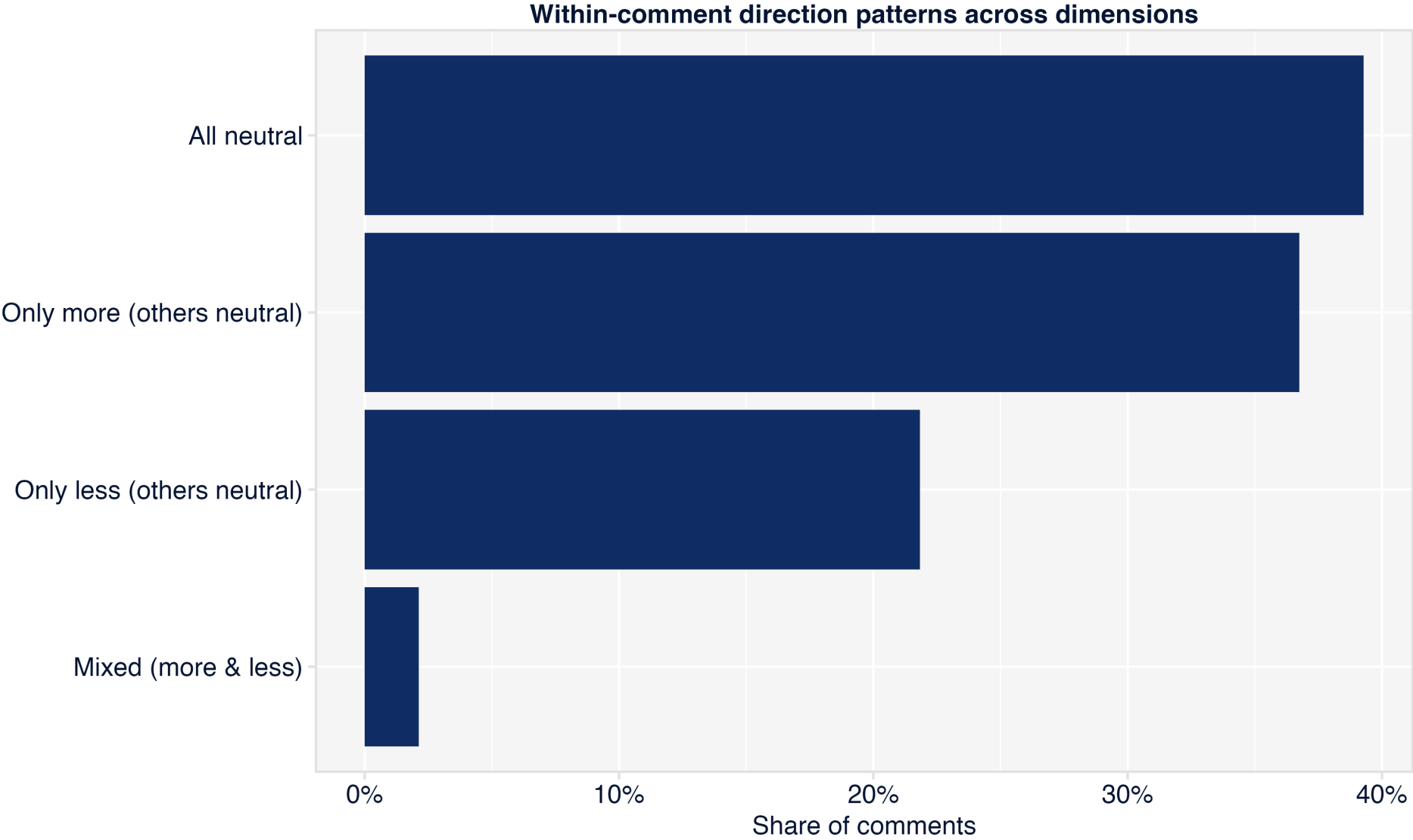


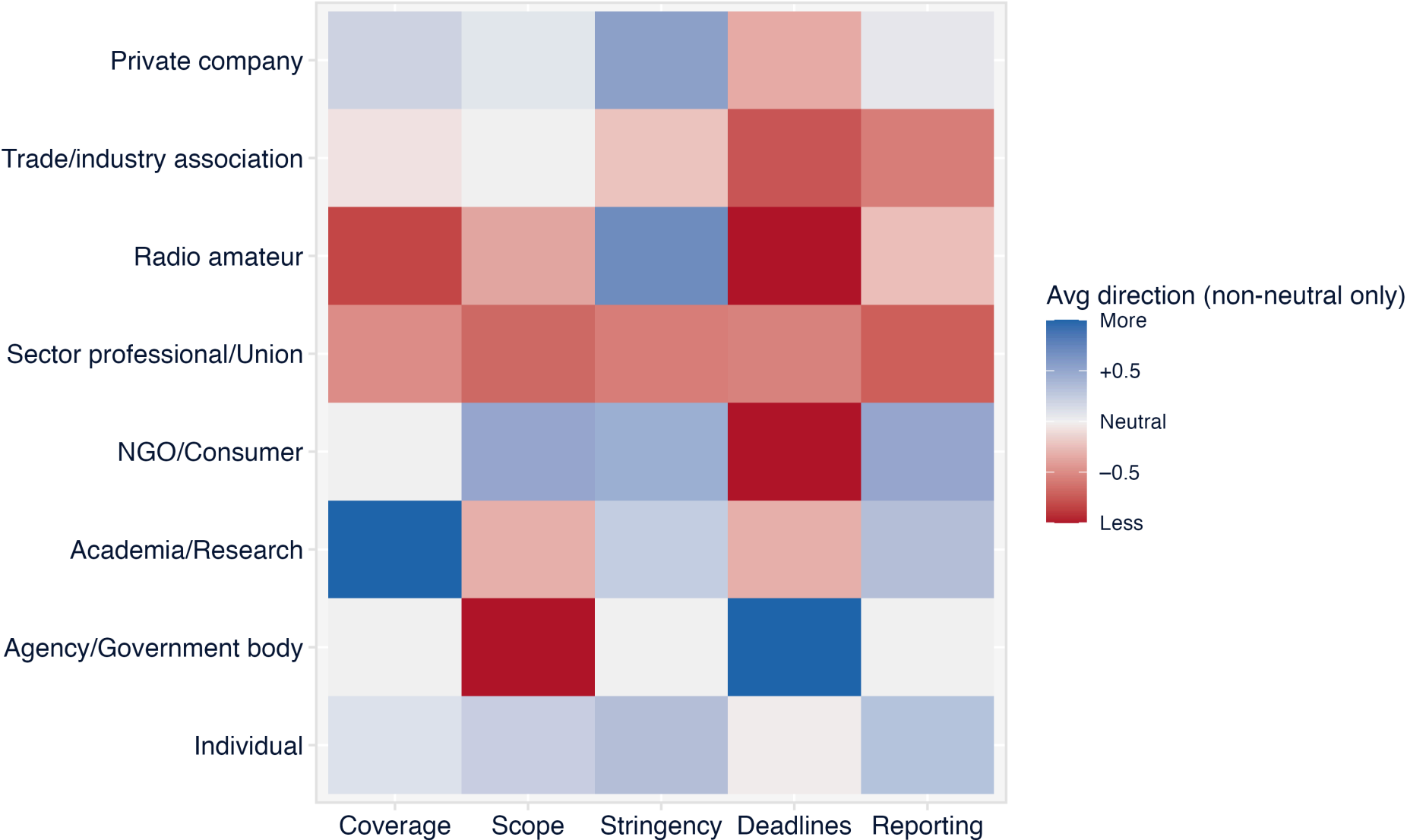
# Regulatory direction of comments



**Table X – Regulatory direction dimensions addressed in the comments**

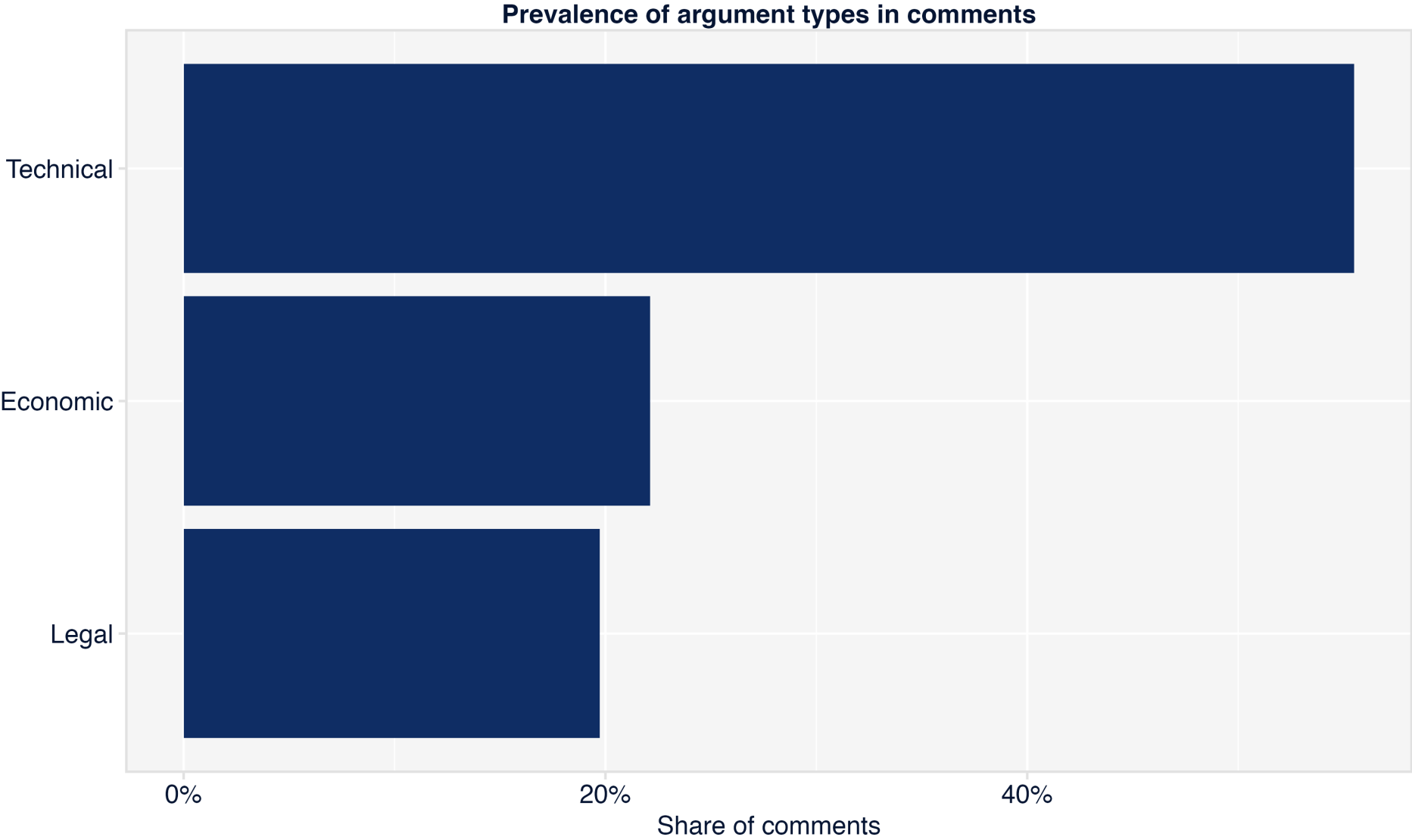
<b>Number of dimensions addressed in each comment</b>	<b>Number of comments</b>	<b>Percentage of Comments</b>
0 dimensions	2284	39.3%
1 dimension	2726	46.9%
2 dimensions	631	10.9%
3 dimensions	151	2.6%
4 dimensions	22	0.4%
5 dimensions	0	0.0%

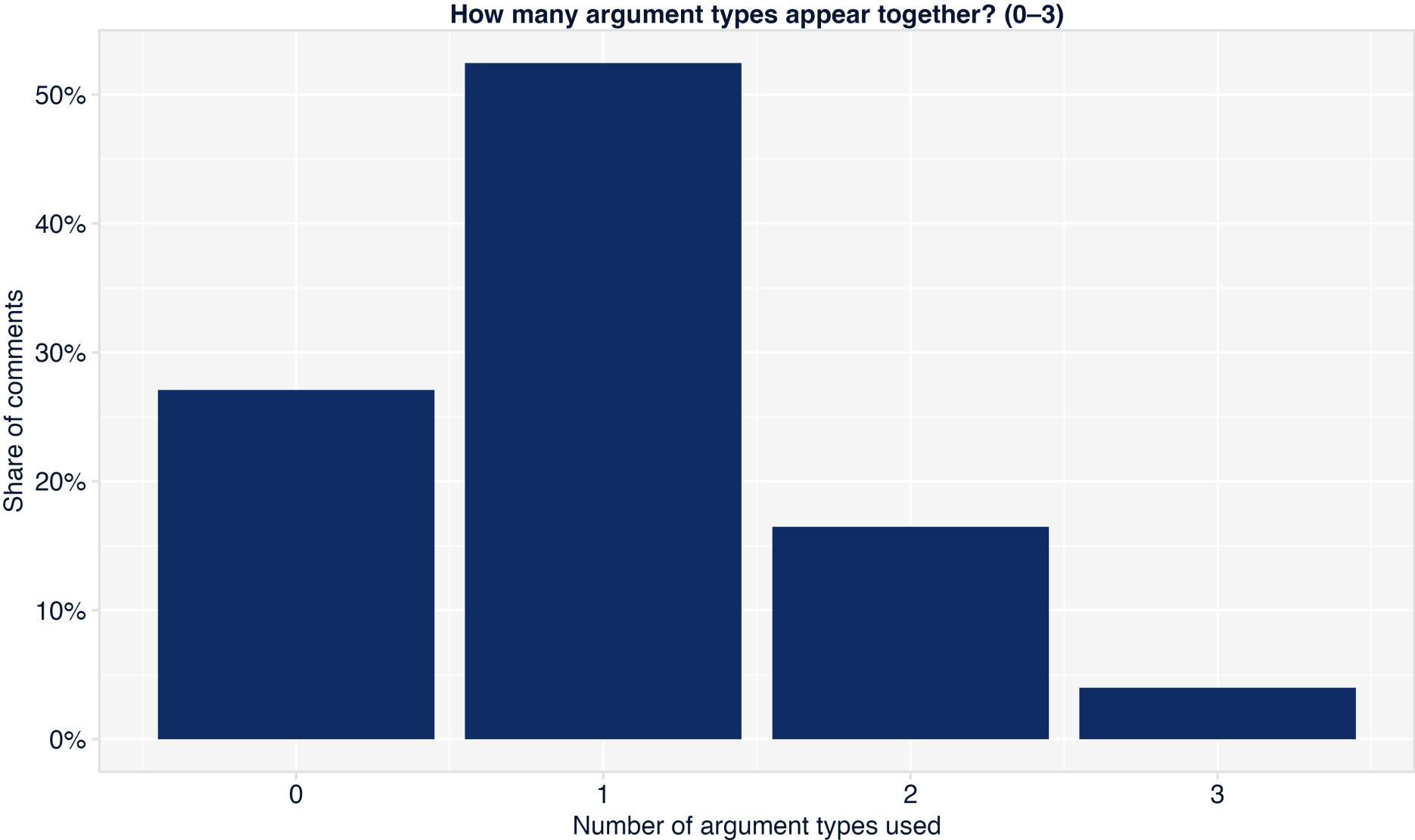






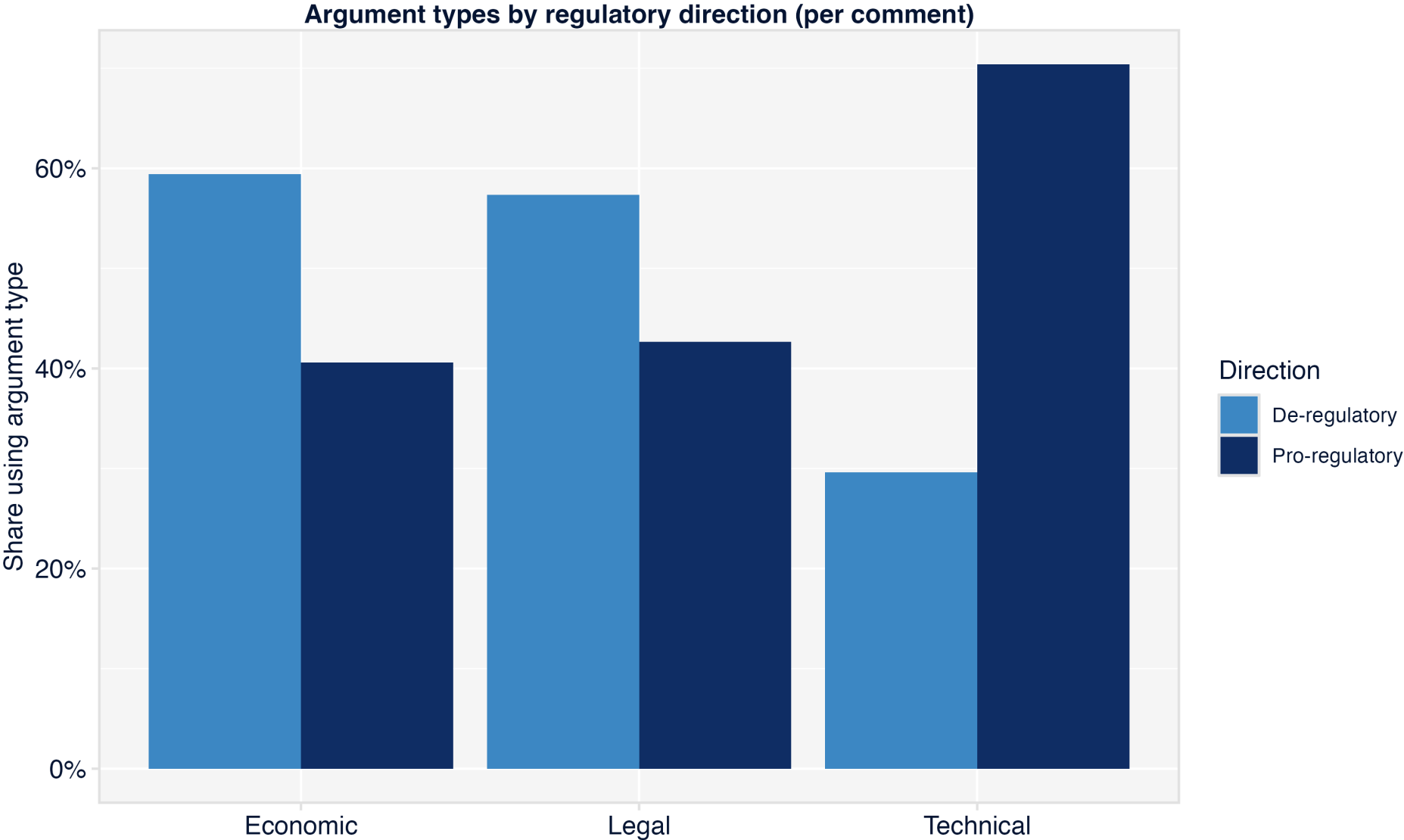
# Argument types in comments

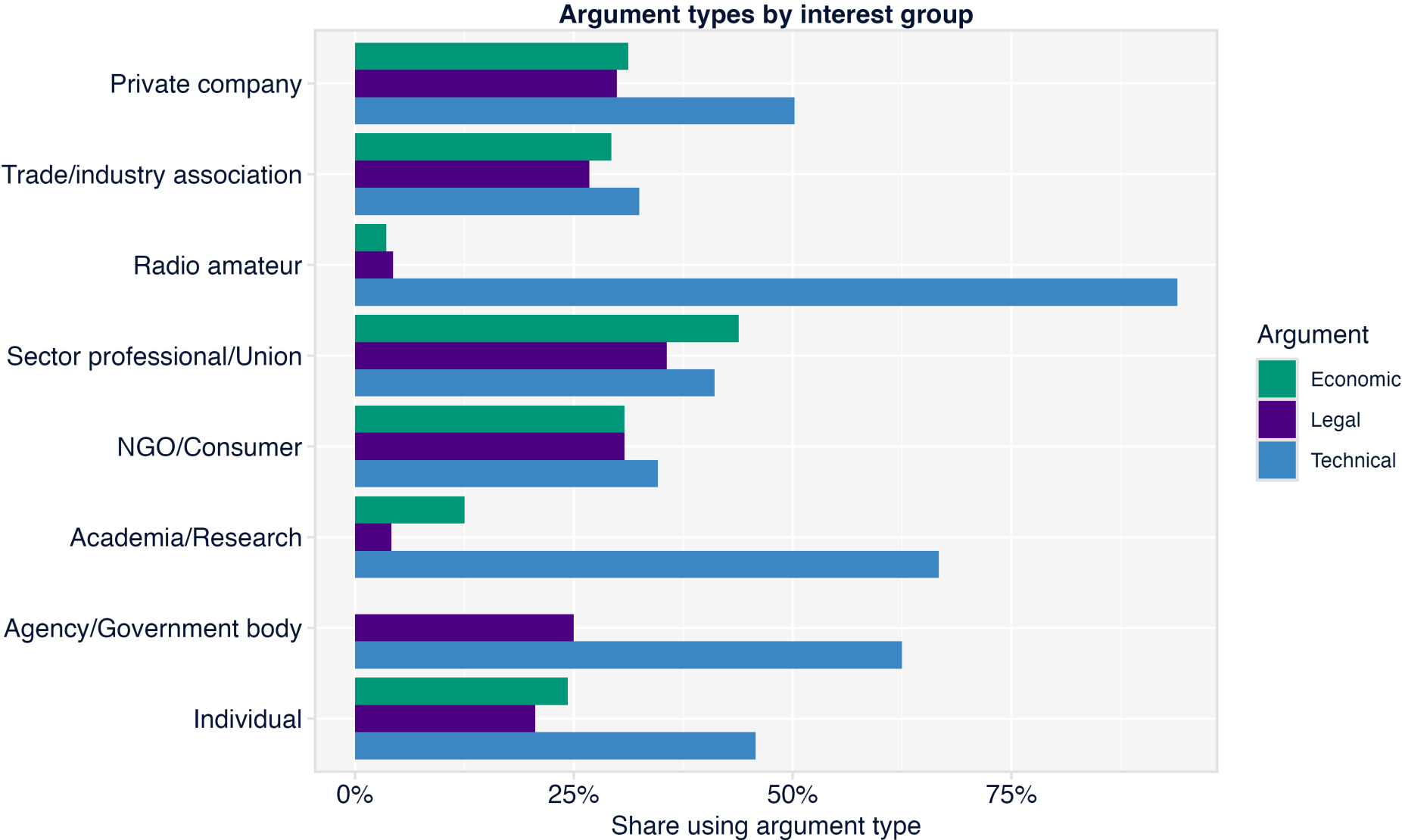




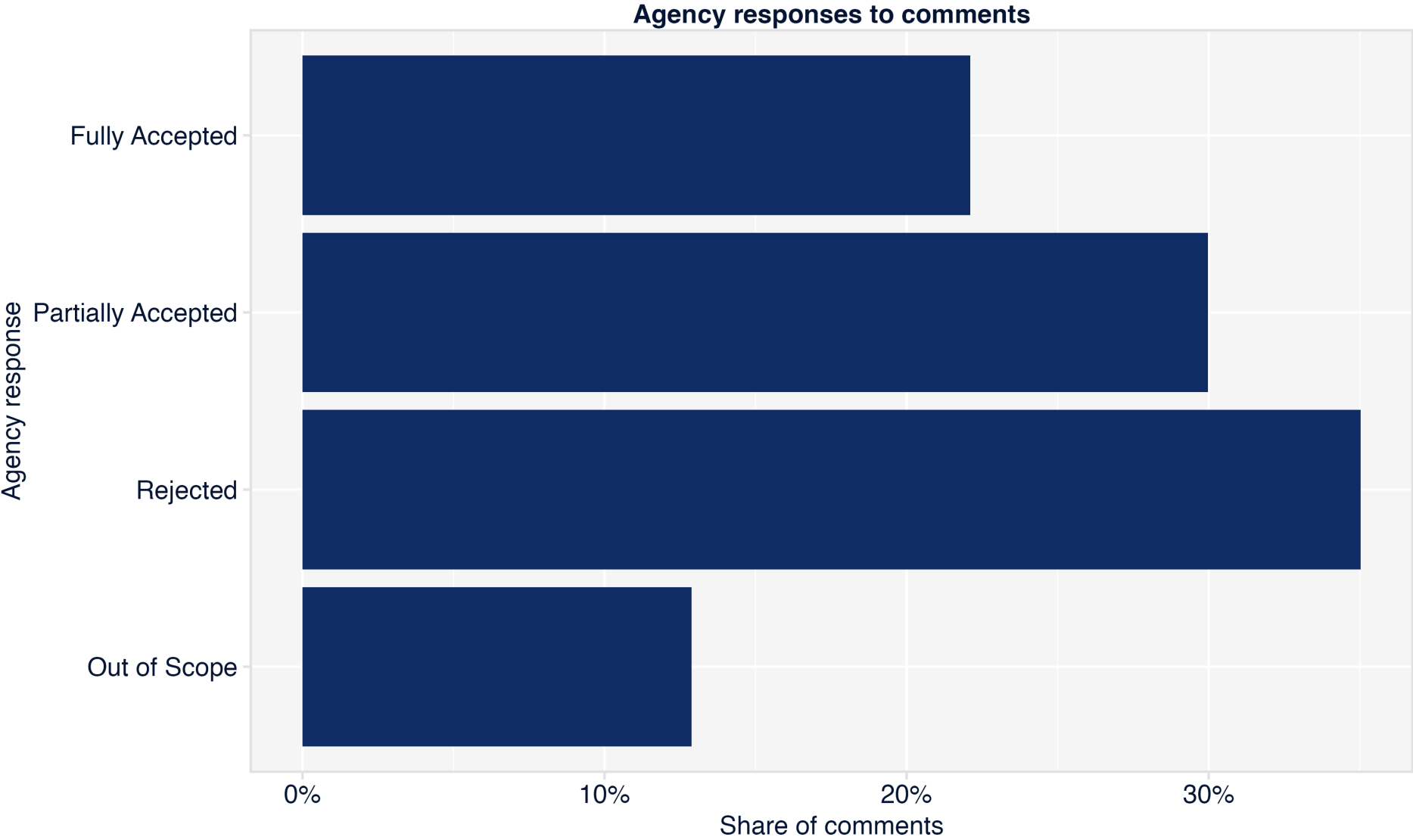
**Table X – Concurrence of types of arguments**

A	B	N Both	Jaccard (A,B)	P(B   A)	P(A   B)
Economic	Legal	451	0.228	0.351	0.393
Economic	Technical	688	0.18	0.535	0.213
Legal	Technical	514	0.133	0.448	0.159

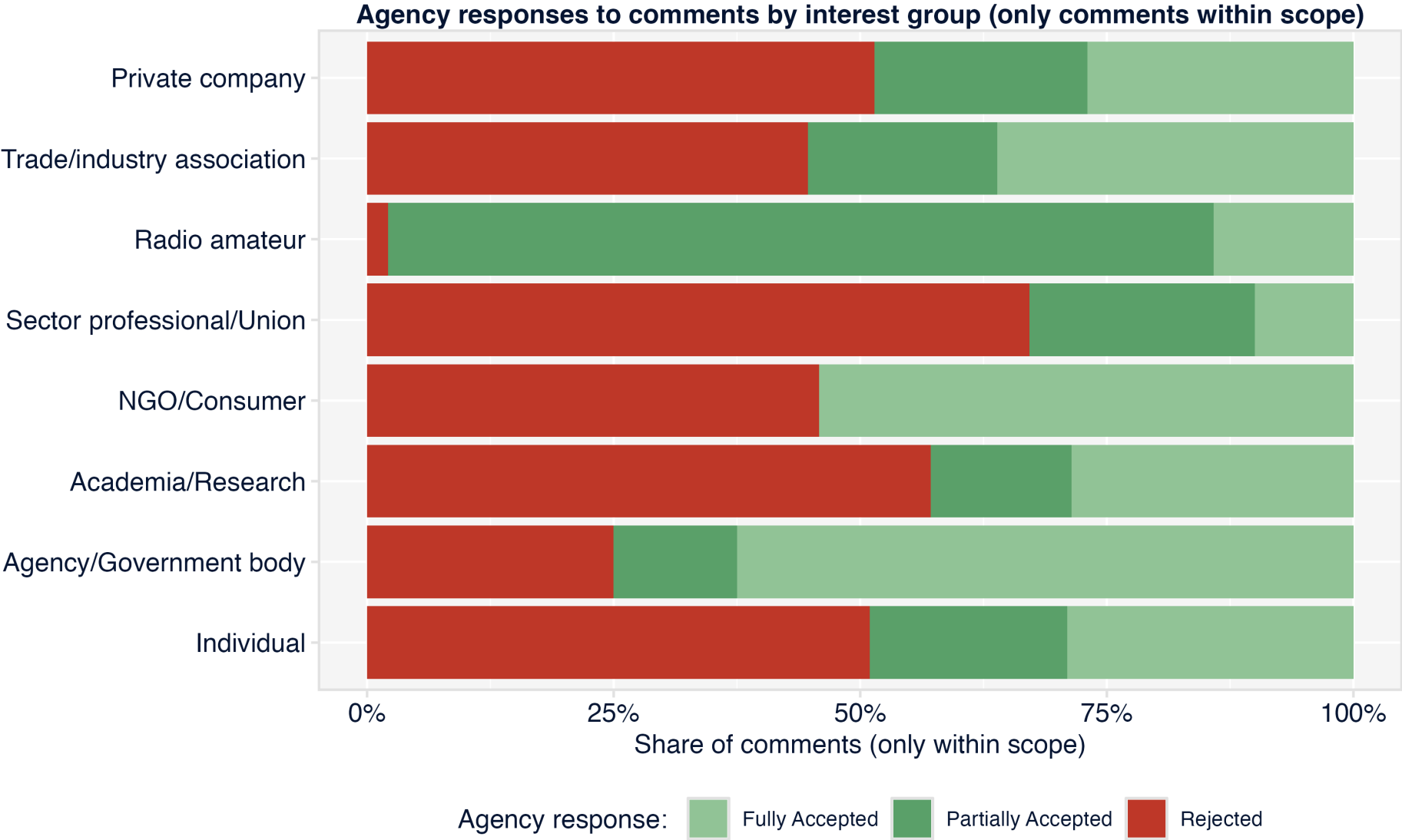


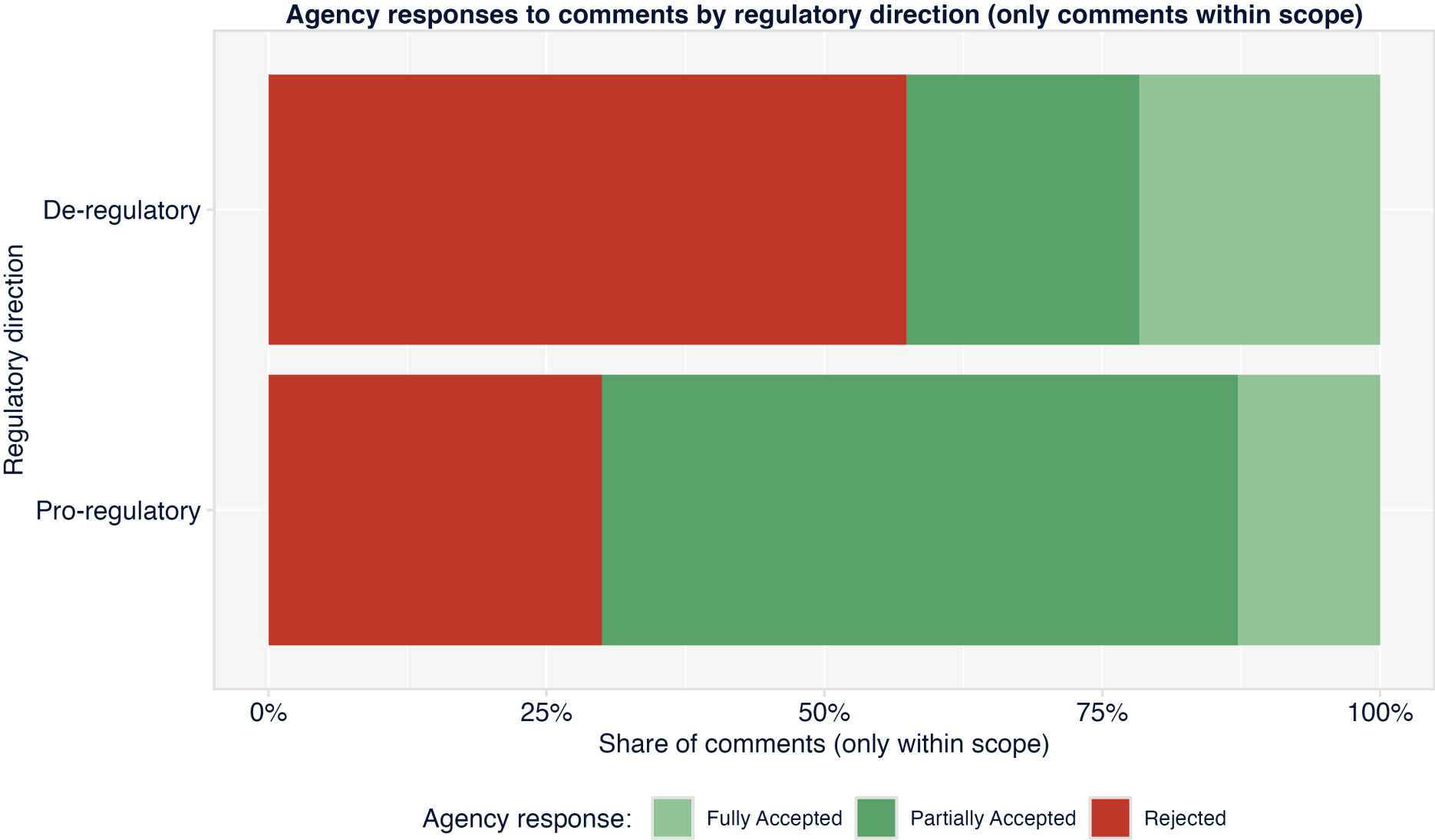


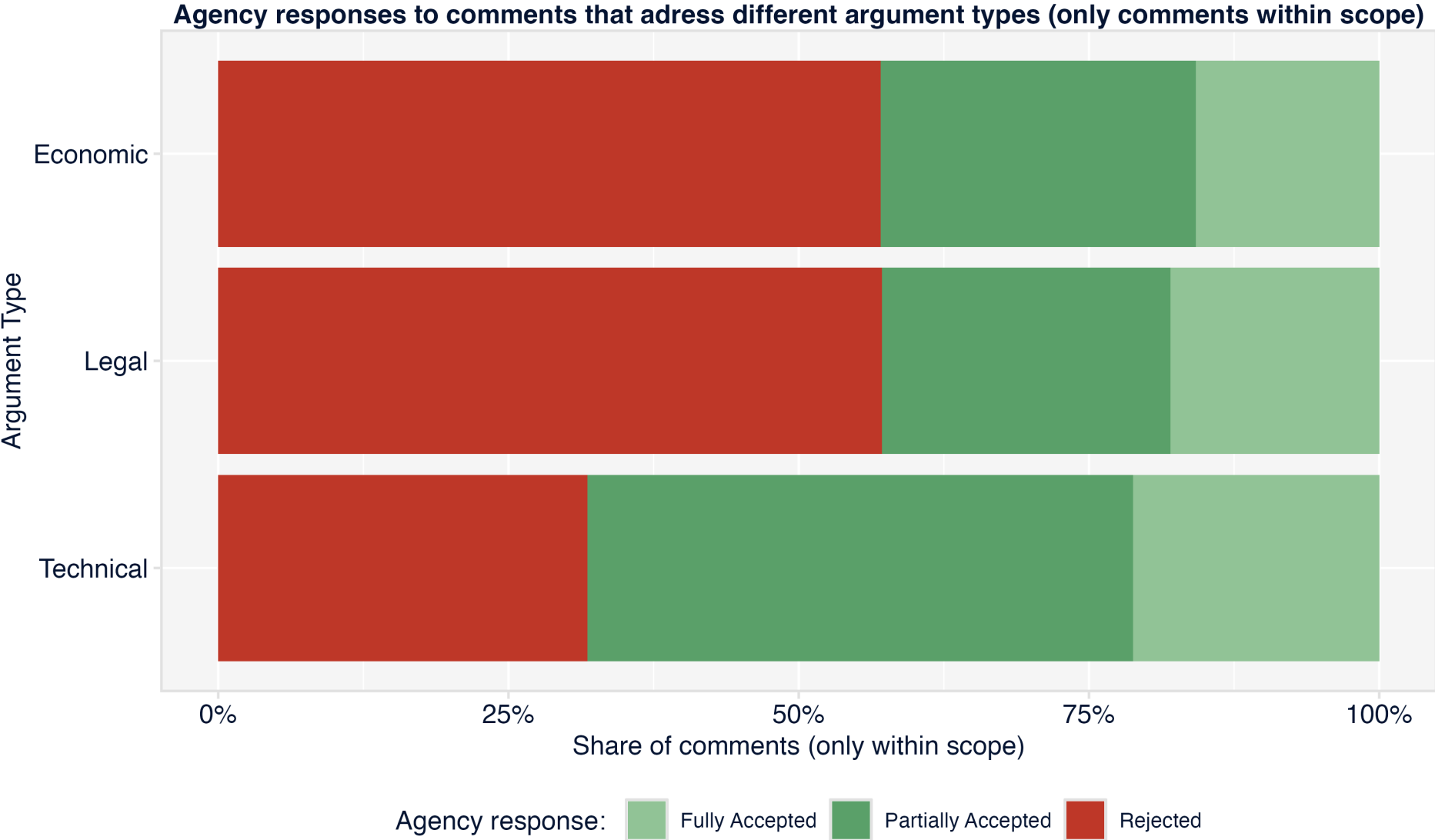
## Agency's responses to comments

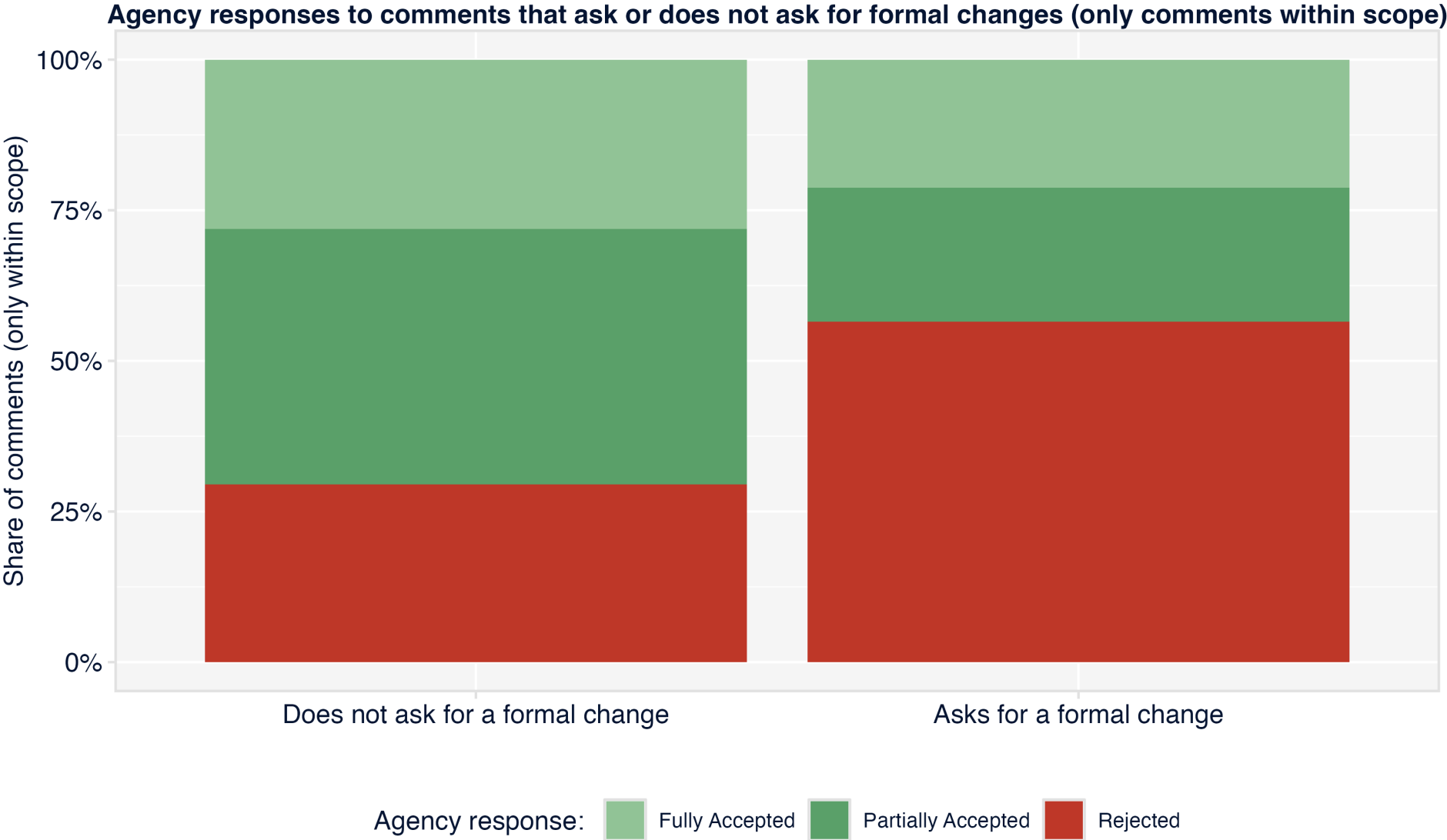












## Chapter 4: Who says it, or what is said?

## Chapter 4: Who says it, or what is said?

- **Research design and hypotheses:** what matters most, ideas or group affiliation?
  - **Predictive logic:** measuring the informational regularity of responsiveness
  - **Explanatory logic:** assessing the relative weight of ideas and interests

## Chapter 4: Who says it, or what is said?

### H1 – Predictability of scope:

*The linguistic and semantic content of comments is sufficient to predict, with high accuracy and balanced precision-recall, whether ANATEL deems them within scope or out of scope.*

**Rationale:** The agency's first procedural filter is expected to follow consistent legal and technical criteria; therefore, textual cues such as topic relevance and terminology should strongly correlate with scope classification.

## Chapter 4: Who says it, or what is said?

### H2 – Predictability of impact:

*Among comments deemed within scope, textual content predicts acceptance or rejection with performance significantly above the random baseline.*

**Rationale**: If the agency's evaluation of relevant comments is systematic and reason-based, the linguistic and argumentative features of the text should align with the agency's final decisions.



## Chapter 4: Who says it, or what is said?

### H3 – Explanatory weight of content:

*In explanatory regressions, content-based variables (textual and argumentative) substantially increase the model's explanatory power ( $R^2$ ) relative to identity-only models.*

**Rationale:** If ideas influence outcomes independently of interests, adding content variables should capture a large portion of the variance in acceptance that identity alone cannot explain.

## Chapter 4: Who says it, or what is said?

### H4 – Diminishing role of identity:

*Once content-based variables are introduced, the coefficients associated with interest-group identity should lose magnitude or statistical significance.*

**Rationale:** If responsiveness reflects the informational value of comments rather than the power or status of actors, identity effects will attenuate when controlling for content.

# How predictable is the agency identification of 'out-of-scope' cases?

- **Scope classification**
  - Best results (final validation stage, N=150): **SVM** and **KNN**
    - SVM: Accuracy  $\approx$  **89.3%**, F1  $\approx$  **0.89333**
    - KNN: Accuracy  $\approx$  **88.7%**, F1  $\approx$  **0.88654**
  - Comments judged "out of scope" can be predicted with high reliability

# How predictable are agency's acceptance/rejection responses?

- **Impact classification**
  - Best results (final validation stage, N=815): **SVM** and **KNN**
    - SVM: Accuracy  $\approx$  **83.4%**, F1  $\approx$  **0.83435**
    - KNN: Accuracy  $\approx$  **81.9%**, F1  $\approx$  **0.81867**
  - Agency acceptance/rejection is also highly predictable from comment text

## Explanatory models (logistic regressions)

- M0 - only identity
- M1 - identity + embeddings
- M2 - only embeddings
- M3 - only content variables
- M4 - embeddings + content variables
- M5 - identity + embeddings + content variables
- M6 - identity + predicted probabilities
- M7 - only predicted probabilities
- M8 - predicted probabilities + content variables
- M9 - identity + predicted probabilities + content variables

# In conclusion

## Next steps

- Finish explanatory models for chapter 4 (almost done)
- Next empirical chapters (5 and 6): all the data is there, now is just a matter of doing the analysis and writing the results.
- Chapter 2 and Conclusion: for most of next year, refining the theoretical chapter, revision and improving discussions of the results.

**Thank you**