

Definition

- Interest Group:** a group or organization with particular aims and ideas that tries to influence the government (e.g., nonprofit organization, company,..)
- Legislative Process:** the series of steps to pass a proposed law
- Lobbying Activity:** the act of attempting to influence government decisions

Motivation

- Interest groups** intend to influence the **legislative process** through their **lobbying activities**
- However, revealing their true interests is a challenging task
- Existing research often relies on costly data collection methods, such as manual human searches, to uncover these positions

Contribution

- We create **Bill Position Dataset** reflecting legislative activities with diverse bill positions
- We propose a **scalable approach** using LLM and GNN for automatic labeling of bill positions
- Our dataset provides insights into **lobbying strategies** and **latent interests**

Bill Position Dataset

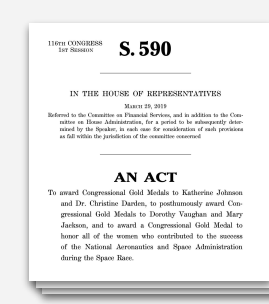
- Our dataset contains 175,861 bill positions including 5.7k interest groups and 21.3k bills

Bill Position	LLM	GNN	Overall
Interest Group	5,461	4,632	5,785
Bill	20,047	15,273	21,259
Support	33,381	38,546	71,927
Oppose	5,421	3,640	9,061
Others (Amend, Monitor)	31,556	63,317	94,873
Total	70,358	105,503	175,861

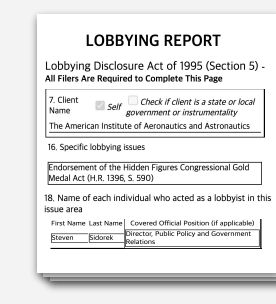
Bill Position Annotation Pipeline

Raw Data Sources

Bill



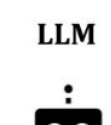
Lobbying Disclosure Act (LDA) Reports



Fetch relevant Bill & LDA Report to get bill positions

1. LLM Annotation

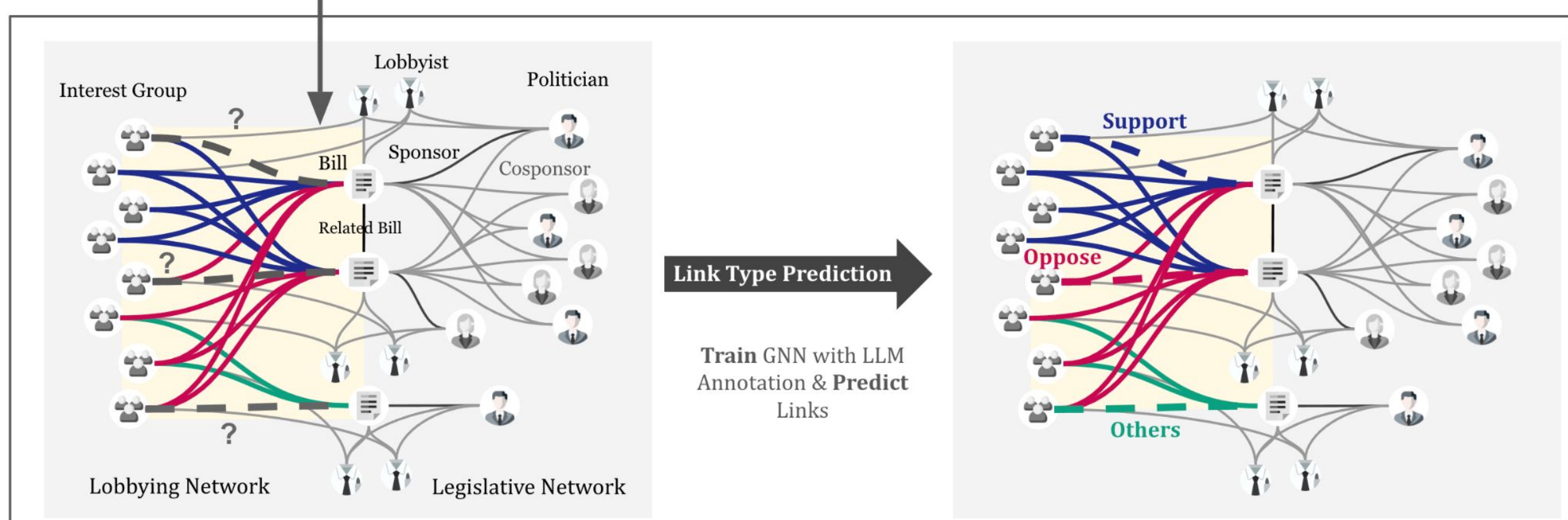
Bill Id	Bill Title	Lobbying Issues Text from LDA Report	Bill Position
S.590	Hidden Figures Congressional Gold Medal Act	Endorsement of the Hidden Figures Congressional Gold Medal Act (H.R. 1396, S. 590)	Support
H.R.1249	Leahy-Smith America Invents Act	defeat S. 23 and H.R. 1249, and pass funding only bill for USPTO	Oppose
H.R.9	Innovation Act	Advocacy for changes to H.R. 9, the Innovation Act regarding the potential impact ...	Others (Amend)
S.744	Border Security, Economic Opportunity, and Immigration Modernization Act	... Legislation watched includes: S 169, S 744, HR 2131, HR 459, HR 15 and S 600.	Others (Monitor)



Text Classification

Classify the Lobbying Issues for a given bill as Support, Oppose, and Others.

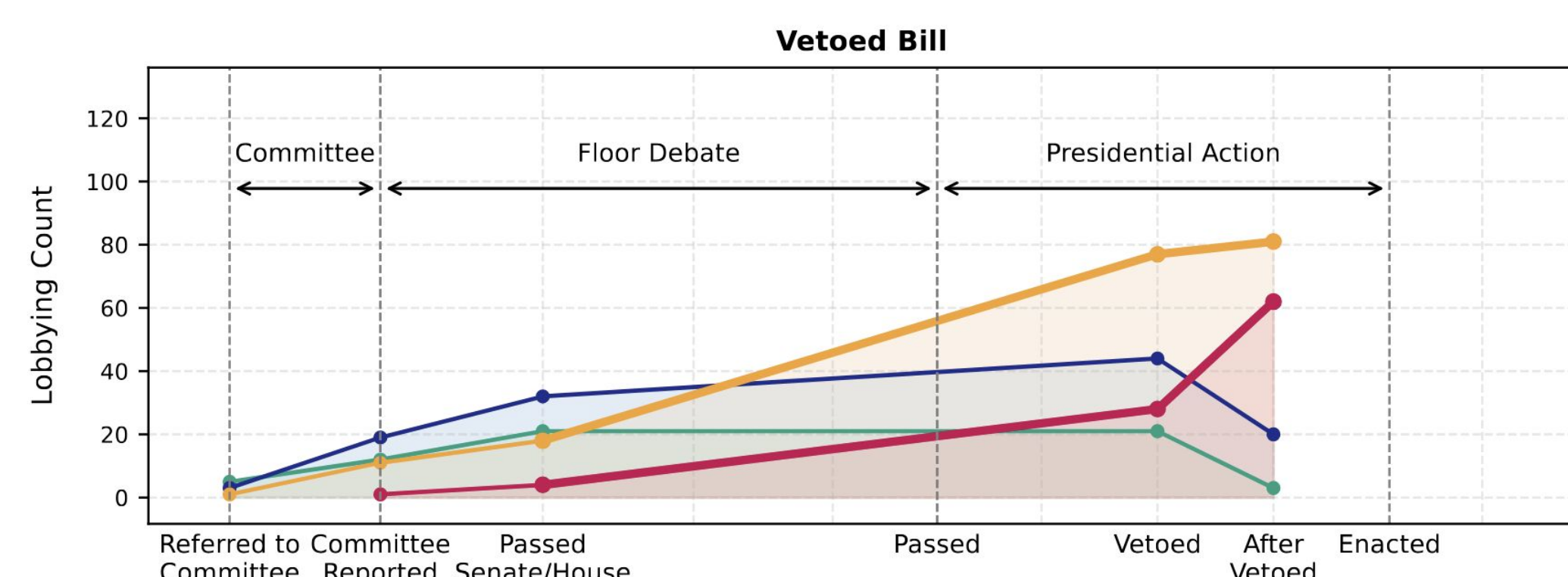
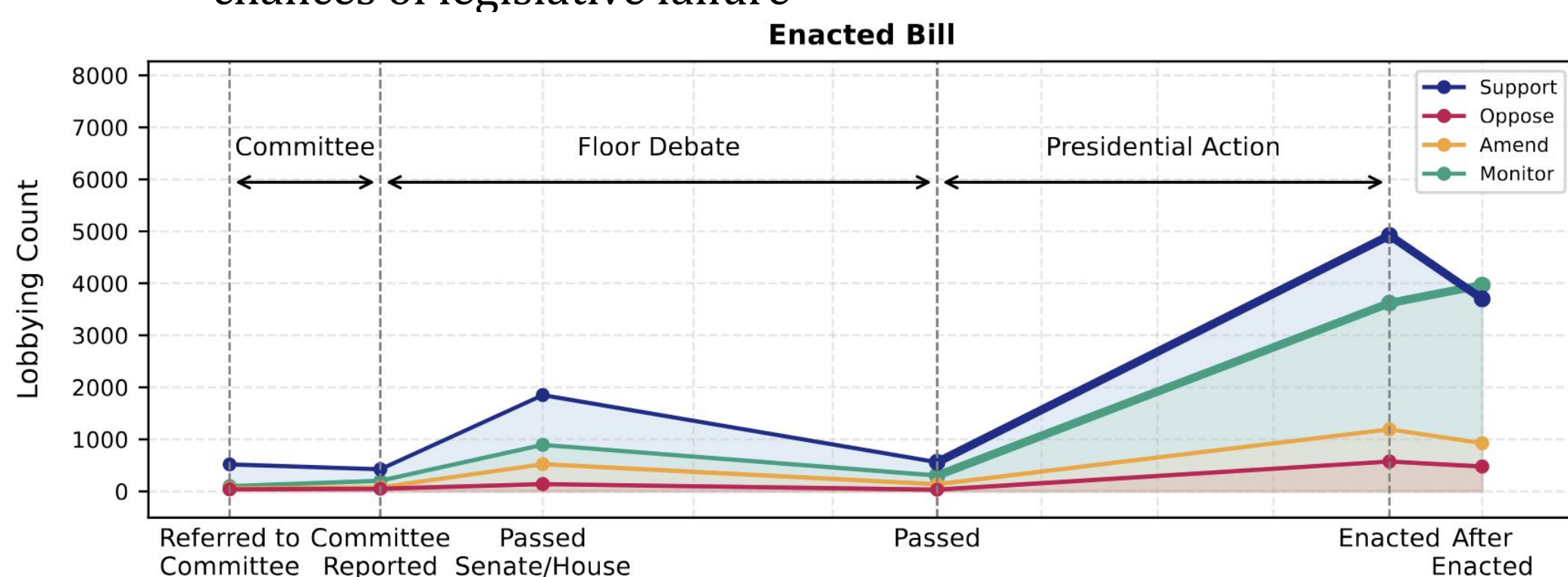
2. GNN Annotation



Analysis

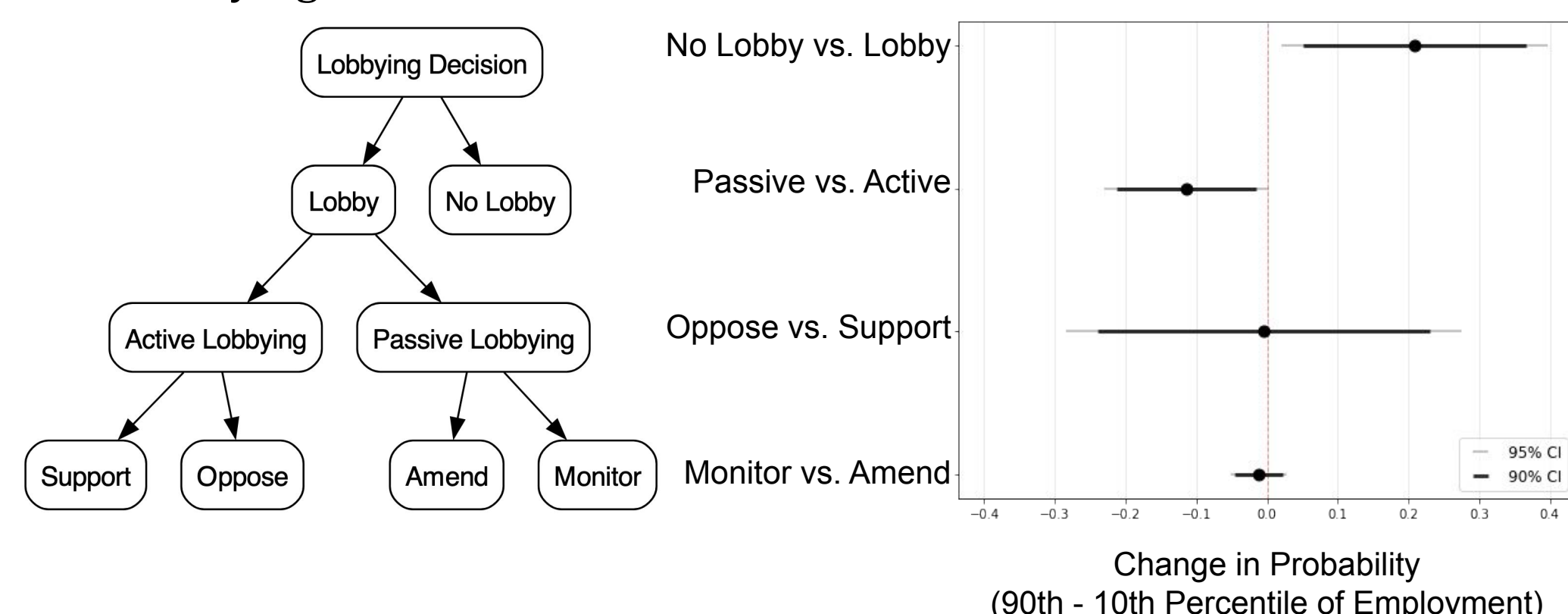
Lobbying Patterns Across Legislative Stages

- Bill positions vary depending on the bill stage
- Interest group positions correlate with legislative outcomes
 - Enacted** Support peaks after chamber approval and at enactment
 - Vetoed** Increased opposition to a bill correlates with higher chances of legislative failure



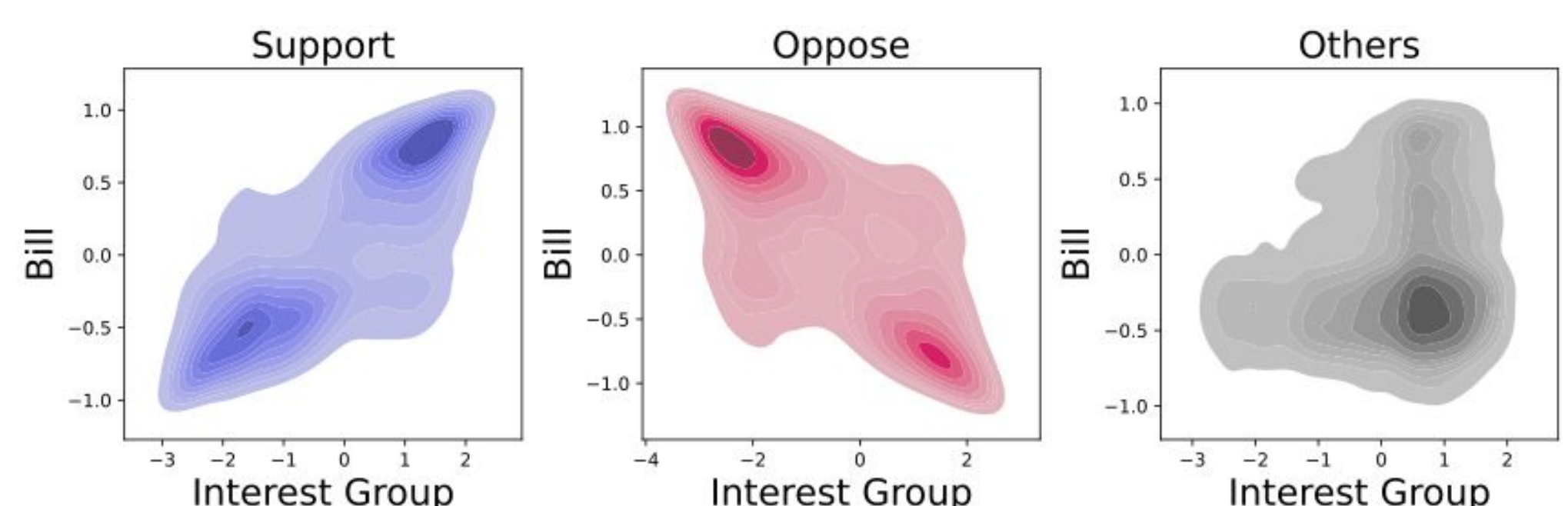
Firm Size and Lobbying Strategies

- Significant correlation between employment size and bill position
- Larger** firms are more likely to **lobby** and engage in more **passive** lobbying



The Distribution of Bill Positions by Bills

- The distribution of bill positions varies based on the bills and interest groups
- Support** aligns with bills reflecting extreme preferences, while **Oppose** targets bills with opposing views



- At the bill level, we observe conflict in bill positions across industries with differing interests
- It shows divided positions between Commercial and labor interest groups

