**How effective is lobbying at influencing politician stock trading?**

**Dataset**

Trading data: self-disclosed stock trades from US politicians, obtained from QuiverQuant.com, who in turn scraped the disclosure forms directly.

* Congress-people are required, by the STOCK act, to disclose trades of individual stocks within 45 days.
* Data goes from the start of 2014 to nearly the present day, and consists of some 46,000 trades from 341 different politicians. Each trade lists the stock, information on the type of trade (e.g. options, exchanges, buying or selling), and a range for the trade size.

Lobbying data: lobbying disclosures, obtained from the Office of the

* All active lobbyists must register, according to the Lobbying Disclosure Act (LDA), and must provide quarterly reports detailing their activities. These must disclose any income or expenses related to lobbying.
* Each disclosure is tied to a particular quarter of the year, and identifies (1) the client; (2) the industry of the client; (3) a range for the amount spent in that quarter.
* Data goes back reliably until (at least) 2013. Hundreds of thousands of disclosures.

**Problem**

Demonstrate correlations between the (disclosed) stock trading in a given sector by congress-people and the intensity of lobbying efforts by companies operating in that sector. E.g.: if we see a lot of lobbying on a defense bill, we may expect to see increased trading in companies in the defense sector. Basic first goal - identify and quantify such correlations.

From there, our direction of inquiry depends on feasibility given the data. Possible goals: (1) build a model that incorporates lobbying activity to predict (better than some baseline generic prediction models) politician stock trades; (2) try to establish causality rather than correlation; (3) investigate network statistics across industry clusters; (4) identify which politicians are “easily swayed” by lobbying efforts; (5) build a public interface for findings.

**Stakeholders** *(Rem: in what follows, we are thinking of a politician’s stock-trades as a rough proxy for whether or not he or she believes in that company or sector.)*

Public - Which of your elected politicians are easily swayed by lobbying? Definitely worth noting, as may indicate a willingness to go against public interest.

Lobbyists/clients of lobbyists - Presumably, they care about the effectiveness of their efforts/spending. Our work can help to identify sectors where increasing spending on lobbying has diminishing returns, or where there may be room for optimization.

**KPIs**

* Predictive power of model for stock trades. Prediction accuracy.
  + Accuracy of model on an individual politician partly measures influenceability; if we have a different way of assigning ranking or score for politicians, compare.
* Demonstrably different correlation between trading and lobbying for a given committee vs not. (Committee members get more directed focus from lobbyists in a relevant sector)
* Public interface - How complete is our website or app? Is it getting traffic?