**Examining the diffusion of public health laws: the case of Tobacco 21**

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What part of the paper would we have to write? Would we have to some literature review as well? Or is it going to be just methodology? Do we need to read up on these political theory on what is up with these hypothesis?

How do we divide the tasks within this paper? It doesn’t look to be that much of work for a semester for 3 people?

Background: Most studies of policy diffusion across US states and/or localities are based on the assumption that evidence of the policy’s success is generated first by the early adopters and that this evidence (in addition to other factors) is an important determinant of subsequent adoption by other localities.

Since 2013, 207 cities and two states have changed the minimum legal purchase age for tobacco from 18 to 21 (tobacco 21 or T21 laws), signaling a major change in the US tobacco regulatory landscape. But, there is little evidence that T21 laws are effective in changing youth tobacco use, other than a 2015 Institute of Medicine (IOM) report based on simulation models.

We are using the speed and scope of how T21 spreads as a proxy to measure how effective the legislation is.

The scope and speed of diffusion of T21 laws may therefore provide insights into the spread of new health laws and policies across different legislative units in the absence of empirical evidence of their effectiveness.

Objective: We test the following hypotheses: 1) Consistent with theories of bottom-up federalism, T21 adoption should occur in cities located in states with relatively weak tobacco legislation (low cigarette taxes, poor indoor air laws) with local adoption leading to state-level action;

I have doubts on how federalism leads to cities with relatively weak tobacco legislation adopting them? What is the reasoning there?

2) Consistent with theories of policy competition and cooperation, T21 adoption should be positively associated with adoption by a neighboring city;

Neighbors tend to collude in terms of policy. How come? Shouldn’t neighbors adopt different policies due to different interests? Is this conditional upon sin regulation? Should we examine it across different types of regulation?

3) All else equal, higher city smoking rates should be positively associated with T21 adoption; and

What of the role of the Tobacco lobby?

4) T21 adoption should be more common among cities with mayors on the political left.

How would all these four hypothesis interact and interplay? Would they move in conjunction together?

Data: We merge data on the date of enactment of T21 laws in 208 cities/counties with RWJF county health rankings of risky health behaviors; data on the political party of the current mayor; data on local and state cigarette taxes and clean indoor air laws; and HRSA’s area resource files for population and economic measures.

Check if the data they have given is similar to what I expect of them?

Statistical analysis: We use event history analysis to identify predictors of T21 law adoption in all US counties (adopters and non-adopters) from 2013 to 2017, using days as the unit of time. Independent variables were internal city factors (smoking rates, tobacco laws, mayor’s political party, income and unemployment rates, population size and proportion under 19). External factors included state cigarette tax and clean indoor air laws, a count of neighboring cities with T21 laws, the publication date of the IOM report, and state tobacco cultivation.

1. What is IOM report?
2. What is internal factors vs external factors?

Challenges for the analysis:

1. Need to create a spatial matrix that shows not only clustering by being in the same state, but also some cities are in the same county.  In such a case, we would have to use the same variables as covariates.

What do you mean by same variables as covariates? Is this going to require GIS? How would we go about doing it?

2. Need some measure of physical closeness, since most studies of diffusion of laws find that geographical closeness is a predictor of a law’s adoption.  However, those studies all look at state-to-state diffusion. Possible to use the Moran's I for that, but also need to account for actual contiguous cities. Should it be more heavily weighted if the cities are in the same state or if they border each other but are in different states?

What is Moran’s I?

Good question. What is the criteria to decide whether to weight cities in the same state or cities closer but in different states? Would we have to write out our own linear combination that gives an optimal result? How would we do that?

3. Do we have all the needed and relevant covariates? May need to be ready to get any missing ones.

More variable scoping!

4. Political scientists use a dyads analysis, but that may not make sense here. Still, we believe it makes sense to include all counties in the at-risk dataset, with cities/counties dropping out when they adopt T21.

We want to see which cities drop out of at risk data set after adopting T21. However, what is the timeline we are looking at? Are we going to see what cities are dropping out at what time line ? What analysis would we conduct in this?

5. Might want to include some specific dates as dummies – such as the publication of the IOM report.

Where do we get this IOM report?

6. At least one state, Florida, moved to pre-empt localities from enacting T21 laws. How should this be handled?

Florida has a big Tobacco lobby?

Big Question

* Do we really want to control all these variables?