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RESEARCH ARTICLE

Long title

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Abstract

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1. Introduction

Presidential scholars have long emphasised the role of the executive branch in federal policymaking. Presidents develop policies formally through unilateral action, but they also pursue their objectives in the legislative arena. Governors fill an analogous role within their states. They manage the bureaucracy and help set the policy agenda through speeches, calling special sessions or taking unilateral action. I analyse factors that explain gubernatorial use of executive orders, and I consider how these same executive orders influence statute adoption, using lesbian, gay, bisexual and transgender (LGBT) employment protections as an illustrative case. Presidential scholars have long emphasised the role of the executive branch in federal policymaking. Presidents develop policies formally through unilateral action, but they also pursue their objectives in the legislative arena. Governors fill an analogous role within their states. They manage the bureaucracy and help set the policy agenda through speeches, calling special sessions or taking unilateral action. I analyse factors that explain gubernatorial use of executive orders, and I consider how these same

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 22 illustrative case.

23 Once data are disseminated, whatever contractual or other obligations are placed on
 24 those receiving [Berry and Berry \(1990, 1999\)](#) the data, the data are effectively out of a
 25 data providers' control. Data providers must be certain that the data disseminated do not
 26 provide a risk of disclosure necessitating a reduction in the detail available, or they are
 27 constrained to using a resource intensive auditing regime, and are likely to discover any
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44 Let M be an n -dimensional smooth compact Riemannian manifold with boundary
 45 $\Sigma = \partial M$. The Steklov eigenvalue problem on M consists in finding all numbers $\sigma \in \mathbb{R}$
 46

01 for which there exists a nonzero function $u \in C^\infty(M)$, which solves
 02

$$\begin{cases} \Delta u = 0 & \text{in } M, \\ \partial_\nu u = \sigma u & \text{on } \Sigma. \end{cases}$$

03 Here, Δ is the Laplacian induced from the Riemannian metric g on M , and ∂_ν is the out-
 04 ward pointing normal derivative along the boundary Σ . The Steklov eigenvalues form an
 05 unbounded increasing sequence $0 = \sigma_0 \leq \sigma_1 \leq \sigma_2 \leq \dots \rightarrow \infty$, each of which is repeated
 06 according to its multiplicity. Note that if M is connected, then $\sigma_1 > 0$.

14 **2. Gubernatorial and presidential use of executive orders across the various states**

15 Presidents develop policies formally through unilateral action, but they also pursue their
 16 objectives in the legislative arena. Governors fill an analogous role within their states. They
 17 manage the bureaucracy and help set the policy agenda through speeches, calling spe-
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 21 illustrative case.

26 **2.1. Presidential use of executive orders is largely consistent with expectations and** 27 **previous literature**

28 The remainder of the findings is largely consistent [Berry et al. \(1998\)](#) with expectations
 29 and previous literature. Diffusion plays a positive role on states adopting sexual orientation
 30 protections; yet, it is not statistically significant in explaining the adoption of transgender-
 31 inclusive statutes. As anticipated, legislatures are more likely to adopt both forms of
 32 legislation in states where the citizens are more liberal.

33 2.1.1. Third level heading with two line text style format with two line text style format
 34 with two line text style format

35 They manage the bureaucracy and help set the policy agenda through speeches, calling
 36 special sessions or taking unilateral action. I analyse factors that explain gubernatorial
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10 **3. Results**

11 **3.1. Determinants of executive orders**

12 The probability of a state adopting legislation protecting Boehmke (2009) sexual orientation
13 increases by a factor of 1.11 for a one-unit increase in Liberal Citizen Ideology, and
14 the probability increases by a factor of 2.24 for a five-unit increase in citizen ideology. This
15 effect is even more pronounced for transgender protections. A one-unit increase in Liberal
16 Citizen Ideology increases the likelihood of adoption by a factor of 1.20, and the proba-
17 bility increases by a factor of 2.44 for a five-unit increase in citizen ideology. The findings
18 regarding the Evangelical population hint at a similar conclusion.
19

20 **Estimation**

21 Using Multilevel Event History Analysis, with the state/year as the unit of analysis Bolton
22 and Thrower (2015), I evaluate the following:
23

- 24 1. The probability that a governor i will issue an executive order protecting LGBT
25 employees in time t , given that no executive order is in place.
26 They manage the bureaucracy and help set the policy agenda through speeches,
27 calling special sessions or taking unilateral action.
28

- 29 2. The probability that the state legislature i will adopt an LGBT-inclusive employment
30 nondiscrimination statute in time t , given that it has not already done.
31

32 Multilevel modelling accounts for these differences and within-state patterns of adoption
33 seen throughout the years Brewer (2007). The effect of determinants that lead to successful
34 statute adoption of LGBT protections share common elements, but differ based on the type
35 of protections added – sexual orientation versus gender identity.
36

- 37 • The probability that a governor i will issue an executive order protecting LGBT
38 employees in time t , given that no executive order is in place.
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- 42 • The probability that the state legislature i will adopt an LGBT-inclusive employment
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46 tion seen throughout the years. The effect of determinants that lead to successful statute
47 adoption of LGBT protections share common elements, but differ based on the type of
protections added – sexual orientation versus gender identity.



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06 **Figure 2.** This is an example of short caption this is an example of short caption
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09 **Table 1.** Tables with short caption.
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| Projectile | Energy | σ_{calc} | σ_{expt} | Energy | σ_{calc} | σ_{expt} |
|------------|--------|-----------------|-----------------|--------|-----------------|-----------------|
| Element 3 | 990 A | 1168 | 1547 ± 12 | 780 A | 1166 | 1239 ± 100 |
| Element 4 | 500 A | 961 | 922 ± 10 | 900 A | 1268 | 1092 ± 40 |
| Element 3 | 990 A | 1168 | 1547 ± 12 | 780 A | 1166 | 1239 ± 100 |
| Element 4 | 500 A | 961 | 922 ± 10 | 900 A | 1268 | 1092 ± 40 |

17
18 **Table 2.** Tables which are too long to fit, should be written using the `table` environment
19 as shown here.
20

| Projectile | Energy | σ_{calc} | σ_{expt} | Energy | σ_{calc} | σ_{expt} |
|------------------------|--------|-----------------|-----------------|--------|-----------------|-----------------|
| Element 3 | 990 A | 1168 | 1547 ± 12 | 780 A | 1166 | 1239 ± 100 |
| Element 4 | 500 A | 961 | 922 ± 10 | 900 A | 1268 | 1092 ± 40 |
| Element 3 | 990 A | 1168 | 1547 ± 12 | 780 A | 1166 | 1239 ± 100 |
| Element 4 ^a | 500 A | 961 | 922 ± 10 | 900 A | 1268 | 1092 ± 40 |
| Element 3 | 990 A | 1168 | 1547 ± 12 | 780 A | 1166 | 1239 ± 100 |
| Element 4 | 500 A | 961 | 922 ± 10 | 900 A | 1268 | 1092 ± 40 |
| Element 3 | 990 A | 1168 | 1547 ± 12 | 780 A | 1166 | 1239 ± 100 |
| Element 4 | 500 A | 961 | 922 ± 10 | 900 A | 1268 | 1092 ± 40 |

31 ^aThis is an example of table footnote
32
33

34 The final covariates analyse social factors that influence gubernatorial use of executive
35 orders. These results differ across the models. Diffusion is not statistically significant for the
36 sexual orientation model, but reaches conventional statistical significance for the analysis of
37 gender identity protections. This tentatively suggests that governors are more likely to issue
38 executive orders as more neighbouring states add similar protections. Governors are more
39 likely to issue executive orders to protect sexual orientation when the states are more liberal,
40 and composed of fewer Evangelicals. Both terms reach conventional statistical significance.
41 However, this does not hold when the analysis turns to the determinants of executive orders
42 that protect gender identity. Citizen ideology is not statistically significant and, counter to
43 sexual orientation protections, governors are more likely to issue executive orders when the
44 Evangelical rate increases. These discrepancies may be related to the changing strategies of
45 governors and LGBT advocates in later years, or it may be a reflection of the late adopters
46 that added protections through executive orders, i.e. the remaining governors in states that
47 were still “at risk” of adopting transgender protections were in more socially conservative

01 states. Both models show that governors are more likely to issue protections later into the
 02 time frame, and the variance across the states is statistically significant.

03 Diffusion plays an inconsistent role in policy adoption, but overall it seems that the diffusion
 04 of pro-LGBT policies encourages the issuance of executive orders and adoption of
 05 similar legislation. However, diffusion does not come up as statistically significant and pos-
 06 itive across the board, and thus caution should be taken when examining its role in policy
 07 adoption. Governors used executive orders more commonly to establish protections for sex-
 08 ual orientation, whereas legislation was more prevalent for gender identity; therefore, this
 09 might explain why diffusion is only statistically significant in those respective models. One
 10 possible explanation for why diffusion of LGBT protections does not function as previous
 11 diffusion studies suggest is because states consider several competing policies at once.

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 17 Management, University of Cologne, which we gratefully acknowledge.

18 **Data availability statement.** A statement about how to access data, code and other materials allowing users to
 19 understand, verify and replicate findings – e.g. Replication data and code can be found in Harvard Dataverse:
 20 <https://doi.org/link>.

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 40 [SXXXXX-XXX-XXXX-X](http://dx.doi.org/10.1007/SXXXXX-XXX-XXXX-X).