

# Center for Studies in Demography and Ecology



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## Spatial and Temporal Diffusion of Local Antidiscrimination Policies for Sexual Orientation

by

Marieka Klawitter  
University of Washington

Brian Hammer  
University of Washington

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**Marieka Klawitter  
Graduate School of Public Affairs  
University of Washington  
Box 353055  
Seattle WA 98195-3055  
marieka@u.washington.edu**

**Brian Hammer  
Dept. Of Geography  
University of Washington**

## Introduction

In 1972, East Lansing Michigan adopted the first public policy banning discrimination on the basis of sexual orientation. Since then, hundreds of cities and counties and a few states have followed suit. These laws and policies have banned discrimination in private employment, government employment, housing, public accommodations, education, and credit. Recent federal attention focused on these policies as the Supreme Court ruled that states could not selectively ban local governments from adopting sexual orientation protections (*Romer v. Evans*, 1996) and the U.S. Senate turned down a federal antidiscrimination policy by one vote (*Employment Nondiscrimination Act* vote, 1996).

This paper tells the story of the diffusion over time and space of local antidiscrimination policies for sexual orientation. Over time, the rate of new adoptions could be influenced by previous adoptions or by changes in public opinion or political conditions. Neighboring jurisdictions may influence adoptions because policy-makers or citizens learn about policies from near-by jurisdictions or because political interest group organization efforts spill over into nearby areas. Alternatively, policies may be adopted in close jurisdictions because they are similar in economic or demographic characteristics. Adoptions by encompassing jurisdictions could dampen the demand for local policies. Previous research has investigated the effects of political and demographic determinants on the passage of these policies. No studies have yet investigated the geographic and temporal diffusion of the antidiscrimination laws.

To study these patterns, we use information on the inclusion of sexual orientation in antidiscrimination policies covering private employment in states, counties, and cities

from 1972 to 1995. In addition, the U.S. Census provides data on the economic and demographic characteristics of jurisdictions. We use discrete time hazard models to estimate the impacts of these factors and of spatial and temporal diffusion on local government adoption rates of antidiscrimination policies for private employment.

### **Antidiscrimination Policies**

Antidiscrimination policies for sexual orientation are modeled on similar policies based on race, sex, religion, and national origin. Often, state and local legislative bodies have simply added sexual orientation to existing civil rights laws or policies; at other times they have created new policies with special exceptions. Antidiscrimination policies for employment, the focus of this paper, have prohibited private employers from considering sexual orientation in employment decisions regarding hiring, pay, promotion, or firing. Before 1985, only 2 states and 30 local areas had adopted private employment protections for sexual orientation. By 1995, 9 states and more than 80 cities or counties had passed these policies [Klawitter and Flatt, forthcoming]. Other employment policies cover only government employment; these have often been adopted by executive order rather than legislation. Coverage of government employment grew from 4 state and 15 local policies in 1985 to 12 state and 53 local policies by 1995. This continued growth in the number of policies points to diffusion of the policies, though not to specific patterns or explanations for that spread.

Although public opinion regarding gays and lesbians has improved markedly in past 20 years, public support of nondiscrimination in employment is still conditional on the type of job and views about the nature of homosexuality [Moore, 1993; Schmalz, 1993].

A recent poll found that about 80 percent of respondents supported equal job opportunities for homosexuals, but only 40 percent of respondents thought that antidiscrimination laws were necessary to ensure equal rights for homosexuals [Schmalz, 1993]. Changing attitudes have undoubtedly aided in passage of antidiscrimination policies; at the same time, the remaining diversity of opinions creates demand for the policies.

Researchers have found that adoptions of sexual orientation antidiscrimination policies are more likely in places with larger and more urban populations, more nonfamily households, and higher levels of education [Dorris, this volume, Haeberle, 1996; Wald, Button, and Rienzo, 1996]--all correlates of less hostile public opinion on homosexuality [Moore, 1993]. Dorris also finds that cities with more individualistic cultures or ethnic heterogeneity are more likely to adopt protections. In addition to these demographic correlates, studies have identified the influence of policy entrepreneurs, issue framing, interest group resources, and the salience of the issue [Button, Rienzo, and Wald, 1997; Haider-Markel, in press]. None of these studies have systematically examined the geographic or temporal patterns of diffusion.

### **Policy Innovation and Diffusion**

Jack Walkers' 1969 article on the diffusion of innovative public policies posed the possibility that policy innovation and diffusion might follow systematic patterns. Walker hypothesized that particular states might serve as innovators in many types of policies, and that policies would "diffuse" geographically outward from those innovators like spreading "inkblots" (1973:1187). Innovators could provide nearby states with

information about policy options and implementation and might provoke emulation and competition. The case studies provided by Gossett (this volume) show support for this diffusion process in local antidiscrimination policies by highlighting the struggles of early adopters along with subsequent adoptions (or at least consideration) by other local governments in the same state.

Gray (1973) built on Walker's work by testing the temporal diffusion patterns of several types of state policies. She found that civil rights policies (but not all policies) evidenced stable "innovativeness" (the same states were usually early adopters) and strong association with wealth and party competition (the latter being contrary to Walker's findings). Gray showed that some, but not all policies, displayed an S-curve shape for the cumulative rate of adoptions over time--few adoptions by innovators early, many adoptions mid-cycle, and few adoptions late as the cycle tapered off. Gray also noted that some states might be "immune" to particular policies and that this would truncate the S-curve below full adoption by all states.

More recent research has extended both the theory and methodology of policy diffusion. Consistent with Gray's work, recent studies hypothesized different adoption patterns for policies covering "morality politics" and "distributive or economic politics". In contrast to economic policies, morality issues are more salient, require little technical knowledge, and provoke strong value-based opinions. The role for public opinion is larger in morality issues, and that could limit the influence of state innovation by political elites. Haider-Markel and Meier (1996) found that support for gay rights policies was more likely if the scope of conflict and salience were limited. This allowed interest group

resources to determine the policy outcomes within state legislatures rather than public opinion weighing in at the ballot box.

This points to a possible conflict with the earlier theories of diffusion which hypothesized early adoptions as sources of information and emulation. Instead, as policies become more widespread, increased public salience could widen the scope of conflict and decrease the chances for further diffusion. The story of Portland Maine in the chapter by Gossett (this volume) describes how passage of local policies in Portland and nearby Lewiston prompted opponents in both cities to broaden the conflict through the referendum process. Also consistent with the possible effects of salience is the finding of Wald, Button, and Rienzo (1996) that local ordinances for sexual orientation were less likely to be adopted in states that had adopted some kind of antidiscrimination policy. Though state policies could also discourage local action by providing state-wide coverage of private employment and thereby dampening the demand for local policies.

Mooney and Lee (1995) examine diffusion and reinvention (changes in policies) for another morality policy--state abortion policies. They found that some of the standard political, demographic, and economic characteristics of states (e.g., urbanization, wealth, liberalism, and innovativeness) did not affect diffusion of abortion policies, but that other abortion-specific characteristics did (e.g., religion and number of doctors) They find some evidence of regional patterns and a time trend in adoptions.<sup>i</sup> Their methodology builds on the work of Berry (1994) by using event history analysis of time series data for states. This methodology allows estimation of the probability of policy adoption in any given time period to depend on factors that vary over time, including adoptions in previous periods. Berry (1994) shows that this allows researchers to simultaneously

allow for the influence of diffusion and internal demographic, political, or social characteristics on adoptions.

This discussion points to the ways we build upon earlier studies of the adoption of sexual orientation antidiscrimination policies and policy diffusion. Event history analysis allows us to model the effects of preceding actions by other jurisdictions and the effects of cumulative experience with similar policies. Adoptions in nearby jurisdictions could increase the chances of subsequent adoptions because of information and emulation. In contrast, adoptions might be dampened because of increased salience or decreased demand (in the case of encompassing jurisdictions). In addition, unlike most previous studies of innovation, our model accounts for a general time trend and the possibility of stable regional differences in the chances of adoption. The time trend could reflect cumulative experience with similar policies or wide-spread changes in public opinion or interest group resources. Adoption rates could differ across regions because of stable political or cultural influences. Along with these innovations, the model simultaneously assesses the impact of local demographic and economic factors on the chances of policy adoption.



## Data and Empirical Strategy

Our analysis uses the 459 U.S. counties with populations over 100,000 in 1980. This criterion allowed us to examine the counties most likely to adopt antidiscrimination policies, but to maintain a manageable sample size for matching to census and policy information.<sup>ii</sup> This study focuses on city and county adoption of public policies prohibiting sexual orientation discrimination by private employers. As mentioned above, state and local governments have also legislated or (more often) issued executive orders banning sexual orientation discrimination in public employment. We focus on policies targeted at private employment because of their larger potential impact and more public and controversial adoption processes.

Our study uses a discrete multivariate logit to estimate an event history analysis. This method allows estimation of the probability of adoption of a policy as a function of county characteristics and the previous actions of other jurisdictions. The data set pools observations across counties and years by using a sample which includes one observation for each county in each year from 1972 until passage of the policy (if that occurs) or until 1995. Thus counties that never adopt private employment protections add 24 years to the sample; counties with adoptions add less with one observation for each year until the adoption. Prior to deletions for missing data, the sample includes 11040 county-years.<sup>iii</sup> The coefficients in the logit analyses show the effects of an explanatory factor on the log of the odds of passage in a year, conditional on the county not previously adopting the policy.

Our outcome variable indicates inclusion of sexual orientation in a antidiscrimination policy covering private employment passed by the county or by a city

within the county. By including both county and city policies, we examine the availability of covered employment within geographic areas and avoid the issue of strategic choice between city and county adoptions by policy proponents.<sup>iv</sup> Data for the outcome and for the measures of geographic spread are constructed from a list of antidiscrimination policies compiled from a number of private sources.<sup>v</sup> County level census data for 1980 provided information on demographic and economic characteristics of the population. Data on church membership in counties came from a national census of churches (National Council of Churches, 1982).

General time trends in adoptions are captured by a set of year indicators. These will reflect trends from wide-spread changes in public opinion, elite opinion, national advocacy resources, or political events. The time trend could also reflect the effects of national interaction among policy-makers that Virginia Gray (1973) hypothesized would result in an “S”-shaped curve in cumulative adoptions by states. We also use the measure of state policy innovation constructed by Walker (1969) to assess whether counties in innovative states are more likely to adopt policies.

Adoptions by other jurisdictions could provide information on the problem of discrimination and policy implementation thereby creating spatial patterns of diffusion. As discussed above, near-by adoptions may have a greater impact because those jurisdictions may serve as standards-bearers (Walker 1969), associated advocacy resources may cross jurisdictional boundaries, or the public debates may create greater salience. We have modeled these spatial interactions in several ways. For each county-year, we include a count of the number of local antidiscrimination policies covering private employment previously passed within its own state and, separately,

within its region.<sup>vi</sup> The emulation and resources hypotheses both suggest that previous adoptions within the state should increase the likelihood of passage and adoptions within the region should have a positive, but smaller impact. Alternatively, previous adoptions could increase the salience of the issue and the concentration of resources to fight adoptions and these could make additional adoptions more difficult.

Our model includes an indicator of previous passage of a state-level private employment policy for sexual orientation. State policies could encourage local government adoptions by serving as a model, or discourage them by providing coverage of local institutions.<sup>vii</sup> The model also includes an indicator of previous adoption of a policy covering public employment or other type of sexual orientation discrimination within the county. Again, the effects of previous adoptions are ambiguous because they could serve as an indicator of the propensity to adopt or, in this case, as a consolation prize in a fight for private employment coverage. In summary, all kinds of previous adoptions could change the chances of adoption by increasing salience, concentrating interest group resources, or encouraging emulation by providing information or standards.

Regional indicators and local characteristics will capture static differences in adoption rates. Indicators for the eight census regions will estimate the size of stable regional propensities toward adoption (rather than the changes associated with the number of past adoptions). The county population and degree of urbanness capture social or economic influences, as do measures of the age and education distributions. Public opinion polls, especially important in morality political issues, show more positive attitudes towards homosexuality and antidiscrimination policies among younger, urban,

and more highly educated people (Moore 1993). To assess the effects of local economic well-being on adoptions, our model includes median personal income and the unemployment rate.<sup>viii</sup> The county proportion of nonfamily households acts as another measure of diversity in household style that could be associated with public opinion. Opposition to gay rights is proxied by county-level information on the proportion of catholics and conservative Protestants. An ideal model would include annual measures of the economic and demographic measures to assess the effects of changing characteristics. However, the data are not available so the county characteristics show cross-sectional variation only.

## **Results**

Table 1 shows the results of logit analyses of the likelihood of adoption of sexual orientation antidiscrimination within the counties. Each of the multivariate models explains the pattern of adoptions significantly better than using the simple average adoption rate ( $p < .01$ ).<sup>ix</sup> In this section, we discuss the temporal patterns, spatial diffusion, the influence of county characteristics, and state innovation.

### *Temporal Pattern of Diffusion of Antidiscrimination Policies*

Figure 1 shows the rates of cumulative and annual adoption of private employment antidiscrimination policies for our data. Adoptions have numbered between 0 and less than 10 per year until slightly higher rates in the 1990s. As we discussed above, a time trend could reflect the effects of changes in public opinion, issue salience, and advocacy infrastructure, as well as a diffusion process driven by emulation. Similarly, the coefficients on the year indicators in the multivariate model (not shown here) were not statistically significant, reinforcing the lack of a strong time trend in the adoption rate.<sup>x</sup>

Gray (1973) hypothesized that national interaction could create an “S”-shaped curve for the cumulative rate of state policy adoptions (a normal curve for the adoption rate). Although some of the policies she examined did display this pattern, adoption of civil rights policies by states did not. The graph for our data does not show a completed S-shape because the rate of adoptions in the 1990s have been high relative to earlier periods. However, the rates could slow in future years if the remaining jurisdictions are, as Gray says, “immune” to the policy. Our multivariate model allows the adoption rate to vary in a nonlinear way by including a set of year indicators. These indicators which allowed the effects of time to differ from the S-shape fit our data better than the linear time variable.<sup>xi</sup> Thus, the data suggest that the adoption patterns have not followed the S-curve, but could approximate that pattern if future adoptions increase, then slow.

### *Spatial Diffusion of Policies*

If interaction or comparison with nearby jurisdictions encourages adoption, then we would expect to see policies adopted in what Walker called “spreading ink-blots” (1973: 1187). Figure 2 shows the diffusion of antidiscrimination policies over three time points: 1975, 1985, and 1995. Counties with city or county antidiscrimination policies in 1975 have the darkest shading, followed by those with policies in 1985, and 1995. Counties without policies are outlined, but not colored. The map shows several clusters of policies in the northeast and west. Some counties with policies in 1985 do have clusters of counties with 1995 policies in close proximity. However, this graphical presentation does not differentiate between spatial patterns attributable to emulation and those due to static characteristics of nearby counties.

Our multivariate results in Table 1 show some support for the spatial diffusion model for local adoptions. Before accounting for fixed regional and local characteristics (Model A), passage of private employment protection by other cities or counties within the state was associated with a greater probability of adoption ( $p < .05$ ). Similarly, the number of adoptions by local governments within the region was positively associated with adoption, but this effect was small and not statistically significant ( $p = .39$ ). After accounting for other characteristics, Model B shows that the effect of local adoptions within the state remains positive and significant ( $p < .05$ ), but additional regional adoptions are associated with lower adoption probabilities ( $p < .10$ )--completely off-setting the positive impact. As noted above, this kind of effect could result from increased salience of the issue making adoptions more difficult.

Local governments that had previously adopted antidiscrimination policies for government employment or other activities (e.g., housing, education) were much less

likely to adopt a private employment policy (Model B,  $p < .10$ ). This suggests that the earlier adoptions of policies not targeting private employment are more likely to be consolation prizes rather than precursors or that these passages make the environment less hospitable to future policy adoptions.<sup>xii</sup> The presence of state-level private employment protection also dampens the likelihood of a local adoption, though this effect is not statistically significant. Although, some local areas do adopt subsequent to state implementation, these are often more symbolic than substantive victories given coverage of local private employers under state laws.

There are static regional differences in the chances of adoption (shown by coefficients on region indicators). Pacific (the reference region), New England, and East North Central cities and counties have been most likely to adopt. Local governments in the Mountain and Southern regions have been less likely to adoption sexual orientation protections. These regional differences could reflect cultural, political, and economic factors not captured within our model.<sup>xiii</sup> Indeed, polls have found the greatest public support for these antidiscrimination policies in the East and West, and much lower in the South (Moore 1993).

#### *County Characteristics*

Consistent with previous studies, we found that more populated and urban counties are more likely to adopt antidiscrimination policies. This could reflect cultural differences or political tolerance within areas. Also, more urban areas may attract larger numbers of gays and lesbians and therefore more advocacy resources devoted to passage. Neither of the economic variables, the unemployment rate and median income,

appear to significantly affect adoption rates, though they have the expected signs reflecting fewer adoptions in places with lower economic well-being. This is consistent with the work by Mooney and Lee (1995) suggesting the morality issues are not influenced by economic considerations, though inconsistent with Gray's early finding that other civil rights laws were predicted by state wealth. County differences in age distribution did not significantly affect adoption rates. Adoption rates were lower in areas with more adults with education levels less than a bachelor's degree, though the pattern was not monotonic and most of the coefficients were not statistically significant. Although the education coefficients were large, all were imprecisely estimated perhaps reflecting relatively little variation in these proportions. As expected, the proportion of nonfamily households was positively related to the likelihood of adoption, but the coefficient was statistically insignificant. Similarly, the proportions of Catholics and conservative Protestants were negatively related to adoptions, but again statistically significant. The addition of time-varying information on county characteristics would likely aid in more precise estimation of these influences by expanding the variation within the sample.

#### *Walker's Innovation Index*

Walker (1969) created an index of state innovativeness by compiling information on the timing of adoption of 88 state policy issues before 1965. We used this index to assess whether antidiscrimination policies were adopted in counties within more innovative states. A logit model which included only the innovation index and the policy diffusion variables showed that the rate of adoptions was significantly higher within innovative states (Model C coefficient on Walker's index). However, after accounting for the demographic and economic characteristics of counties, the innovation index was no



longer statistically significant (Model D). It appears that county and regional characteristics account for at least some of this general innovation.

A similar pattern was evident for a measure of public opinion about antidiscrimination policies for sexual orientation constructed by Gamble (1994). This measure of average state support for sexual orientation antidiscrimination policies was highly correlated with Walker's measure of innovativeness and, like that measure, was significantly related to adoption of the antidiscrimination policies only in models which did not control for county level demographic characteristics.<sup>xiv</sup> Thus, antidiscrimination policies were adopted in places within more innovative states with higher levels of public support for gay rights. But those relationships were predicted to a large extent by the demographic characteristics of the counties.

## **Conclusions**

The inclusion of sexual orientation in local antidiscrimination policies has grown steadily since 1972. The analysis presented here offers only mixed support for the application of patterns of spatial and temporal diffusion developed for state-level policies. However, it provides some additional support for the findings of cross-sectional studies of the effects of local characteristics on the adoption of antidiscrimination policies. Our findings speak to the adoption influences of political climate (policy information, salience, and interest group resources), perceived need for a policy, state law compatibility, and general public support for a policy.

Consistent with patterns of public opinion and earlier studies of adoptions, these adoptions have been more frequent in larger, more urban localities. Regional patterns

also follow national poll data that shows less public support for gay rights in the south and Mountain regions. We found some patterns with education, religiosity, household type, and economic well-being though imprecise estimation prevents definitive statements about association.

Private employment protections do not show the S-curve pattern of adoptions discussed by Gray (1973). Over time, the rate of local adoption has increased slightly, with no real sign of exponential growth (for the middle of a S-shaped curve) or of dampening (for the top of an S-curve). This pattern could give credit to advocates who continue to achieve additional adoptions or to opponents who have prevented rapid diffusion of these policies. Perhaps the nature of morality politics precludes S-curve adoption patterns by increasing wide-spread salience of issues and expanding the scope of conflict (Haider-Markel and Meier, 1996) to create what Gray termed “immunity”.

Comment: Has anyone looked at effects of being in an initiative state on adoption?

The patterns of spatial diffusion are not inconsistent with the spreading ink blots hypothesized by Walker (1973), but a full multivariate treatment shows a more complex pattern. Local antidiscrimination adoptions within the state increase the chances of diffusion within the state, but regional adoptions may offset that effect. The differential effects of adoptions within the state could merely reflect proximity, but, alternatively, could be explained by the importance of state control of local actions as described by Gossett’s article on Dillon’s rule (this volume). Adoptions within the same state serve as evidence of compatibility with state law, whereas adoptions within the region would only reflect influence through policy information, interest group resources, or salience.

We found that local adoption of nonemployment policies within a county and state-level employment policy adoptions both decrease the chances of adoption of

county private employment protections. Clearly the need for a local policy diminishes with the adoption of a state-wide policy; the negative effects of the local nonemployment adoption cannot be so easily explained. It is likely that the passage of a local policy which does not include employment is the outcome of a political system which would not support the passage of a more powerful policy including private protections. This explanation suggests that the nonemployment policy serves as a marker rather than a direct causal influence, though the process of adoption could also increase salience and drum up opposition.

Contrary to the work of Walker (1969) and Gray (1973), diffusion of local antidiscrimination policies seems better described by static characteristics and a mix of diffusion and “anti-diffusion”. The “anti-diffusion” found here may be the result of increased salience of this morality issue or concentrations of interest group resources. Additional research could potentially map the temporal flows of policy information, interest group resources, and public salience to help explain their connections to adoptions.

Adoptions of antidiscrimination policies for sexual orientation show no sign of slowing as we enter the twenty-first century. Perhaps only action at the federal level (the largest encompassing jurisdiction) could stem the tide of adoptions in local policy arena. That pattern of upward diffusion from states to federal government would follow the pattern of civil rights policies for race and sex. Policy information, issue salience, and interest group resources generated by policy adoptions by state and local governments would most certainly play a role in that debate.

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**Notes:**



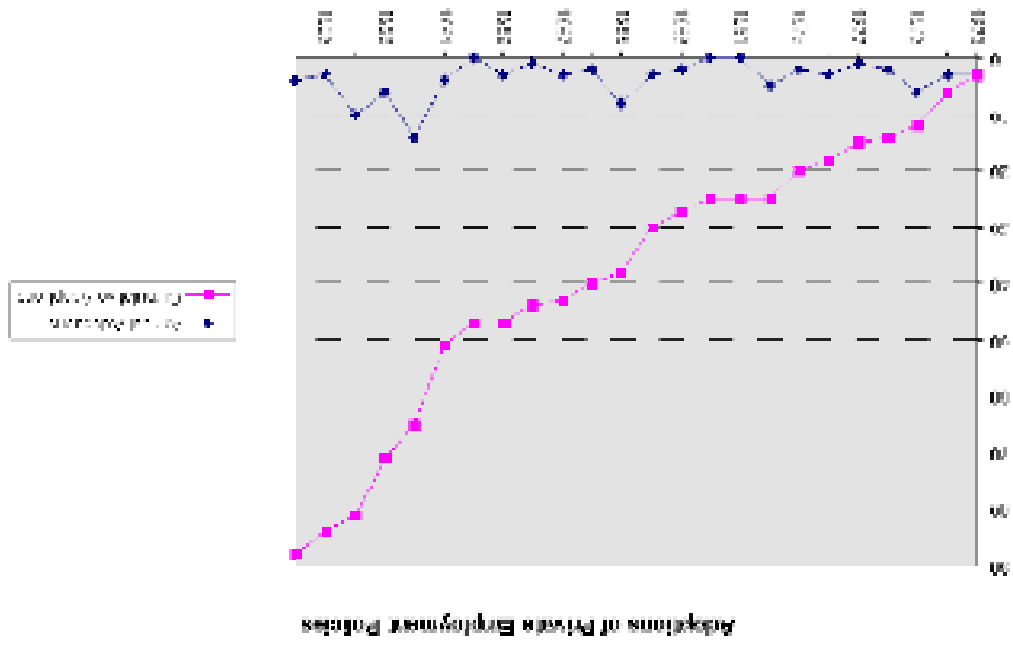


Figure 1



2019		2018		2017		2016		2015		Description
2019	2018	2019	2018	2017	2016	2015	2014	2013		
1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Operating expenses
2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	Operating expenses
3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	Operating expenses
4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	Operating expenses
5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	Operating expenses
6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	Operating expenses
7000	7000	7000	7000	7000	7000	7000	7000	7000	7000	Operating expenses
8000	8000	8000	8000	8000	8000	8000	8000	8000	8000	Operating expenses
9000	9000	9000	9000	9000	9000	9000	9000	9000	9000	Operating expenses
10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	Operating expenses
11000	11000	11000	11000	11000	11000	11000	11000	11000	11000	Operating expenses
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28000	28000	28000	28000	28000	28000	28000	28000	28000	28000	Operating expenses
29000	29000	29000	29000	29000	29000	29000	29000	29000	29000	Operating expenses
30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	Operating expenses

The following table provides information on the components of the total expense ratio for the period ended 12/31/2019. The expense ratio is the ratio of the total expenses to the net assets. The expense ratio is expressed as a percentage of net assets.

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- i. Mooney and Lee (1995:616) did not differentiate between static regional differences and diffusion of policies within regions, perhaps because of the limitations of state-level observation. Their model did not include regional indicators, but included a measure of average abortion policy permissiveness for the region. They included a linear time trend.
  - ii. Button, Rienzo, and Wald (1997) show that the rate of adoptions is much higher for larger cities than smaller for cities.
  - iii. Nine counties in Virginia could not be matched with data on church membership because of the structure of that data set. [Inclusion of these counties in a model without church information had little effect on the size or significance of other coefficients.] Also, counties in Alaska and Hawaii are missing in the models using Walker's index of innovation because he did not provide a measure for those states.
  - iv. The choice of arena to push these policies would serve as an interesting research topic because they have been adopted by states, counties, and cities. Passage by an encompassing or internal jurisdiction may decrease the need for a local policy. Alternatively, a victory at one government level might spur action in other arena. Adoption at any level could also indicate the presence of support or interest group resources that could influence adoptions by other levels.
  - v. The list was compiled from information from National Gay and Lesbian Task Force, Arthur Leonard, and Donald Haider-Markel.
  - vi. The policy counts include adoptions in counties not included in our sample (by the size criterion) because these adoptions could affect the larger counties. We also tried models with similar counts of antidiscrimination policies covering situations other than private employment (e.g., government employment, education, credit, housing). However, these variables were too highly correlated with the private employment measures to allow for estimation of separate coefficients so we excluded them from the models. The high correlations ( $r > .70$ ) probably reflect the similar adoption processes and influences.
  - vii. Gossett's work suggests another possible positive influence: adoption of a state-level policy could legislatively enable cities or counties to pass their own similar policies.
  - viii. We also tried adding the county poverty rate, but this variable was very highly correlated with the median income ( $r = -.78$ ).
  - ix. The proportion of correct predictions of the outcome is over 99 percent for each model. However, this is not a good measure of model fit because adoptions are rare and the models predict no adoption for almost every period.

- x. In an alternative model, a simple linear year variable was statistically significant showing some support for increased adoptions. However, the model with the year indicators fit the data better. The linear year model had -2 log likelihood of 667.2; for the year indicator model it was 618.7 which indicates a better fit.
- xi. A linear year variable within the logit model allows for the nonlinear S-shape because of the logit functional form.
- xii. Button et al (1996:65-66) provide a counter-example to this with their description of the process in East Lansing, the first local government to include sexual orientation. It passed a private employment policy after first adopting a policy covering public employment.
- xiii. Walker (1969) found support for diffusion of policies within regions, but he was not simultaneously accounting for demographic or economic characteristics of states.
- xiv. Gamble [1994] used questions from the 1992 National Election Studies Post-Election Study to estimate the relationship of personal characteristics to responses to the question "Do you favor or oppose laws to protect homosexuals against job discrimination?". State level measures of opposition were then calculated by using state representative samples from the National Election Studies Pooled Senate Election Studies and aggregating predicted opposition by using the regression coefficients. The mean level of the measure has been subtracted, leaving a measure with a mean of zero.