

# Privatization and the Diffusion of Innovations

Vanessa Bouché\*  
Craig Volden

Department of Political Science  
The Ohio State University

## Abstract

Privatization of government services tends to bring about a more rapid adoption of innovative policies due to the competitive pressures of the market. In federal systems, however, the possible diffusion of innovations across subnational governments may offset such benefits of privatization. In this study, we test whether county governments that have privatized their provision of foster care services are more likely to adopt policy innovations and more likely to learn from the policies of other counties than are those that have resisted privatization. We find that counties that have privatized their foster care provision are indeed more innovative than counties with publicly administered services, and that foster care innovations diffuse across both public and privatized county foster care systems through a learning process. However, the policy networks for counties with publicly administered foster care services are stronger than for privatized counties. As a result, after the first several policy adoptions, learning-based policy diffusion stimulates public counties to adopt innovations at a greater rate than their privatized counterparts.

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\* The authors thank Bobby Gulotty for valuable research assistance, Mehul Patel for web survey design, and Jon Bendor and Mat McCubbins for helpful comments at earlier stages of this research.

## **Privatization and the Diffusion of Innovations**

An age-old question in political economy is which goods and services should be provided by government and which by the market. On the one hand, the market is information-rich, provides incentives for efficiency, and makes all participants better off, as buyers and sellers would not agree to any exchange making either of them worse off. On the other hand, market failures arising from such sources as public good provision, limited information, and externalities provide well-known conditions for government action, as do inequalities and the lack of accountability in the provision of some privatized services. Yet governmental activities themselves may present new problems, as governments do not always resolve market failures in the most equitable and efficient manner. Such back-and-forth considerations go on and on, often with lively debate over specific proposals for policy change, such as privatizing aspects of Social Security or increasing public involvement in the provision of health insurance.

Among the trade-offs considered in these debates, high ground is often ceded to the market in the realm of innovativeness. Competition and profit-seeking provide incentives for firms to be on the lookout for new and better ideas, albeit not always to the benefit of those receiving the goods and services. In contrast, governments are portrayed as large, bureaucratic, and relatively unresponsive to the need for change. If a large firm neglects an innovation, its competitors or new nimble entrants could step in and take valuable market share. If a large government neglects an innovation, perhaps it becomes a campaign issue and change is adopted over time, but only if the issue is important and salient enough to the voting public. Whereas market competition absorbs the incentives and information of millions of consumers on a daily basis, governmental responses are much less instantaneous, or so the argument goes.

Yet, in federal systems, competition among subnational governments may result in a variety of benefits often deemed the exclusive territory of the market (Tiebout 1956). Among the stated benefits of federalism is the possibility that states and localities serve as policy laboratories (Brandeis 1932). Officials in these lower levels of government may come up with policy innovations for a whole host of reasons, ranging from reelection and reappointment concerns to a desire to create good public policies during their careers as public servants. Officials in other states and localities may well take notice of these innovations, adopting those that are successful elsewhere (Volden 2006). Given high levels of communication among public officials, perhaps more willing to share information than are market actors, policies diffuse from one government to the next.

To the extent that state and local governmental diffusion networks dramatically improve information flows and the adoption of new policy innovations, it may be possible for innovations in the provision of publicly provided goods and services to spread more widely and more quickly than were they provided by the market. If true, schools, prisons, children's health services, and countless other targets of privatization efforts may not suffer from a severe lack of innovation and eventual improvement if run by state and local governments. Such a finding would change the balance determining where the private sector should end and the public sector should begin. To the degree that, for example, public accountability is sacrificed in order to gain the perceived efficiency and innovativeness of the market, such a calculation may need to be reevaluated. Public accountability and the efficient adoption of policy innovations may not be at odds with one another, but may all be achievable by subnational governmental provision in a federal system.

On the other hand, the diffusion of policy innovations may instead be enhanced by private sector involvement. The same competitive pressures that lead market actors to seek out new innovations in the first place may also result in greater learning by private-sector providers in federal systems. If this is the case, then the public-private balance would be tilted further toward privatization and away from public systems.

In this paper, we explore these issues in the area of foster care provision. We study five states in which control of foster care services has been devolved to the county level. Just over half of the 384 counties in these states have privatized certain aspects of their foster care services. Using data from a unique internet-based survey about the privatization decisions and the diffusion of county foster care policies between 1995 and 2006, we explore whether privately or publicly run foster care programs were more likely to adopt each of four policy innovations. Moreover, we assess whether, upon the initial adoption of these policies by leader counties, the policies were then more likely to diffuse from one county to the next. Finally, we examine whether such diffusion is more common among publicly or privately administered foster care counties. Our findings shed new light on how governments with publicly run services differ in their policy decisions from those that contract out with private service providers.

### **Diffusion, Privatization, and Policy Innovation**

Although the empirical analysis offered in this paper is drawn from the policy area of foster care in U.S. counties, we believe that the theoretical arguments are far more general. We begin, therefore, in this section with a general discussion of diffusion, privatization, and their joint effects on policy innovation. Scholars of policy diffusion tend to define a policy innovation as the adoption of a new policy by a government (Mintrom 1997a; Walker 1969). The spread of

these innovations is then referred to as diffusion. And diffusion is thought to occur in different policy areas because of such factors as competition among governments, the emulation of one another's practices, or learning about policy success (Shipan and Volden 2007).

The literature on policy diffusion has illustrated the conditions necessary for the spread of policies ranging from school choice (Mintrom 1997b) to the death penalty (Mooney and Lee 1999) to same-sex marriage bans (Haider-Markel 2001). The politics behind policy diffusion has been shown to depend on such considerations as legislative professionalism (Shipan and Volden 2006), policy entrepreneurship (Balla 2001; Mintrom 1997a), the initiative process (Boehmke 2005), and bureaucratic decision-making (Volden 2006). And yet, none of these works has explored whether privatization affects the diffusion of innovations.

Although these studies examine different policy areas and various details of government decision-making, they all essentially explore the following main hypothesis, also crucial to the current study:

***Diffusion Hypothesis:*** *Due to economic competition, emulation, and learning, policy innovations spread from one government to another, with early adoptions stimulating later adoptions elsewhere.*

Wholly independent of studies of policy diffusion, many scholars have been working to uncover the effects of the privatization of governmental services. For example, empirical studies tend to demonstrate that privatization improves policy outcomes for public services in such areas as water quality maintenance and refuse collection (e.g., Galiani, Gertler, and Schargrotsky 2005; Morris 1997; Savas 1999). On the other hand, surveys often indicate little difference in the perceived quality of service delivery based on whether contractors or governments themselves provide the service (e.g., Sonenblum, Kirilin, and Ries 1975; Stipak 1974). Such

studies often focus on the incentives of public and private providers. Some argue that private providers of services are just as politically driven as public providers (Henig et al. 2003), that they actually increase the size of the bureaucracy (Miller and Moe 1983), and that their policy choices are far from optimal (Reed and Meyer 2004).

The empirical work arguing that contracting leads to positive policy outcomes is undergirded by a theoretical literature suggesting that privatization promotes policy innovations. Privatization introduces competition, which in turn increases efficiency, cuts costs, and spawns innovation (e.g., Donahue 1989; Ostrom and Ostrom 1977; Savas 1987). The competition produced by privatization is the window to innovation. Indeed, without competition, there are likely to be serious negative consequences to privatization, including the problems of corruption, of service-specific benefits, of increased costs, and of lack of accountability (e.g., Donahue 1989; Moe 1987). Competition, on the other hand, is presented as introducing innovative approaches to policy problems, which in turn lead to more efficient public management and better policy practices. “When it works well, privatization can boost efficiency through accelerated innovation, more appropriate technologies or management styles, or a more sensible scale of operation” (Donahue 1989: 217). Such arguments lead to the following:

***Privatization Hypothesis:*** *Privatization increases the likelihood of innovation adoptions. This effect is particularly strong in more competitive privatized environments.*

While the expected effects of policy diffusion and privatization on the adoption of innovations are derived in a straightforward manner from the extant literature, how privatization affects the diffusion of innovations is less clear. Despite the breadth of empirical and theoretical research addressing both these issues individually, how they interact has yet to be studied. Recent scholarship in comparative politics has studied the diffusion of privatization policies

(e.g., Brooks 2005; Henisz, Guillen, and Zelner 2005), but not how diffusion and privatization together impact policy innovation. Moreover, how privatization affects diffusion has not been analyzed in American politics at either the state or local levels.

As we have just argued, governments operating through private contractors face numerous different incentives from those providing goods and services directly. How these differences affect policy diffusion may well depend on the diffusion mechanism (e.g., Berry and Baybeck 2005; Boehmke and Witmer 2004; Shipan and Volden 2007; Simmons, Dobbin, and Garrett 2006). For instance, if subnational governments based their decisions on one another's policies due to economic competition, governments with privatized services may be more attuned to such competition. Indeed, the market responds to competition constantly. Contractors may want to expand their services elsewhere or to beat their competitors by rapidly innovating. When competitors strike upon a successful new idea, contractors face every incentive to adopt the new innovation as well. Thus policies are likely to diffuse quickly from one privatized service provider to the next. Governments with publicly provided services might still engage in such economic competition, but the incentives to act quickly may be more muted.

In policy areas where the main diffusion mechanism is learning, however, the opposite interactive effect may prevail. Public policymakers, whether legislators or bureaucrats, often have extensive networks of professionals who are willing and able to share ideas and to learn from one another. Especially over time, when innovations become widely seen as "best practices," such networks are likely to result in widespread policy adoptions. This is not to say that learning is irrelevant upon privatization of services. Indeed, governments with privatized services might learn rapidly through the impact of trade associations or conferences attended by their contractors. Additionally, privatized systems may be better positioned politically to adopt

innovations found elsewhere because contractors are less affected by political fallout from policy failures and because governmental actors can pass the blame to contractors if something goes wrong. However, governments that take their cues for policy adoptions from their internal contractors may be less attuned to the external policy networks that facilitate diffusion. Such considerations lead us to raise two competing hypotheses:

***Privately-Driven Diffusion Hypothesis:*** Governments that privatize the provision of their services are more likely to adopt innovations found elsewhere, especially when diffusion is driven by economic competition. Such governments are most likely to adopt the policies of other privatized governments.

***Publicly-Driven Diffusion Hypothesis:*** Governments that provide their services directly are more likely to adopt innovations found elsewhere, especially when diffusion is driven by learning. Such governments are most likely to learn from other public providers.

### **County-Administered Foster Care**

Testing these hypotheses requires, first, a policy area that has experienced significant innovation over the past several years, and second, one with a mix of privatization and publicly provided services. Foster care policy in the U.S. fits these criteria quite well. Implementation of managed care and other organizational reforms in foster care systems across the country are among some of the recent policies adopted by state- and county-level foster care administrators. In 1997, Congress passed the Adoption and Safe Families Act, primarily in response to a struggling foster care system experiencing increased caseloads and costs, and because of system failures with respect to permanency and safety of children in the system. As a result, many states began to implement significant reforms, including policies of performance-based funding,

outcome-based standards, and flexible funding (Geen and Tumlin 1999; Malm et al. 2001; U.S. GAO 1995; Wulczyn 2000a; Wulczyn 2000b).<sup>1</sup>

Second, there has been a movement towards privatization of foster care in a number of state-administered foster care programs. For example, in 1997 and 1998 respectively, Kansas and Florida passed sweeping legislation privatizing their entire foster care programs. More recently, Michigan and Texas passed legislation requiring gradual implementation of a privatized foster care system (McBeath and Meezan 2006; McCullough 2005). Privatization also has occurred locally, in states that have devolved control of their foster care services to the county level. It is at this level that there has been sufficient variation in privatization and in the adoption of innovations needed to test the above hypotheses.

We examine county-level foster care decisions in five states (California, Minnesota, North Carolina, Pennsylvania, and Wisconsin) in which the state government has devolved control of their foster care policies to the county level.<sup>2</sup> Conducting our analysis across five different states ensures that our findings are not simply driven by odd patterns in a single state. In a similar manner, it is important to explore the adoption of multiple innovations, to ensure that the diffusion patterns are not simply caused by the spread of a single, potentially non-representative policy. Specifically, we investigate the adoption of four distinct foster care policies: performance-based funding, outcome-based standards, flexible funding, and comprehensive information management systems. In an effort to ensure quality provision of services, “performance-based funding” makes funding contingent on the policy outcomes, and

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<sup>1</sup> At least two studies have noted the potential diffusion of such “managed care” reforms from the health care sector to child welfare services (McCullough and Schmitt 1999; U.S. GAO 1998). Cross-sector diffusion of innovations, while beyond the scope of the present study, is likely a fruitful area for future research. Neither of these two studies, however, explore whether privatization affected the diffusion of these policy innovations.

<sup>2</sup> Five additional states (Colorado, New York, North Dakota, Ohio, and Virginia) feature full or partial county control of foster care decisions. Future work extending and replicating our analysis in these states may be useful.

“outcome-based standards” involve the codification of what those outcomes should be. “Flexible funding” allows service providers to spend on a variety of services as needs arise, rather than having fixed spending requirements. Finally, “comprehensive information management systems” involve the implementation of database systems that track relevant foster care information. We chose the first three policies because they fall within the broader category of “managed care,” a reform effort that has received widespread attention within the past decade in numerous health and welfare services. The last policy, implementation of information management systems, is important because the Adoption and Safe Families Act of 1997 required state and local governments to begin tracking and organizing pertinent data in order to better measure performance and outcomes. Some governments complied with this mandate within the year; others already maintained databases that tracked such information; while still others have yet to comply. Thus, implementation of information management systems is another salient policy innovation within foster care, the causal mechanisms of which are worth investigating.

While county-level foster care services thus have sufficient variance in privatization and in major policy adoptions needed to test our main hypotheses, data on the degree of privatization and the policies adopted by these counties had been largely unavailable prior to our study. No comprehensive data source existed summarizing the counties that had or had not adopted such policies, their years of adoption, or whether they had privatized key foster care services. To overcome this data availability problem, we designed an internet-based survey, with instructions emailed to foster care administrators in the 384 counties across our five states, to obtain the relevant data. With significant follow-up, the ultimate response rates were: California (78%), Minnesota (91%), North Carolina (95%), Pennsylvania (91%), and Wisconsin (88%).

The survey first asked questions about whether or not the county has privatized various aspects of foster care, ranging from provision of food and shelter, to recruitment and licensing of foster parents, to case management, to other miscellaneous services. If respondents answered affirmatively to any of these, they were prompted to provide additional information on what percentage of those services are privatized, how the degree of privatization has changed over the past decade, how many contractors they use, and the degree of turnover among those contractors, among other things. The second part of the survey asked whether or not, and in what year, each county adopted the aforementioned four policy innovations. The final section of the survey asked a series of demographic control questions, including the current number of foster children in the system. Specific question wording is given in detail in Appendix A.

Before turning to the details of the data analysis, it is useful to reconsider the general hypotheses raised above within the context of county-level foster care policymaking. Similar to numerous diffusion studies at other levels of government in other policy areas, we have every reason to expect that the foster care policies we study across counties would indeed diffuse. The mechanism of that diffusion, however, is likely to be learning-based, rather than based on economic competition or emulation. Shipan and Volden (2007) define competitive diffusion as when “policymakers consider the economic effects of adoption (or lack of adoption) by other governments.” Unlike Indian gaming (Boehmke and Witmer 2004), the lottery (Berry and Baybeck 2005), and “race to the bottom” welfare policies (Bailey and Rom 2004; Peterson and Rom 1990; Volden 2002), foster care programs do not have extensive economic spillover effects. There are not reports of counties undercutting their neighbors in attempts to avoid becoming “foster care magnets,” for example. Likewise, foster care policies are unlikely to diffuse via emulation. Emulation takes place when one government imitates another in order to appear

similar to that other government, irrespective of the policy's effectiveness or appropriateness (Shipan and Volden 2007). Such governments wish to look like leaders rather than laggards (e.g., Crain 1966; Grupp and Richards 1975; Walker 1969), for reasons that have little to do with the policy choice itself, such as to appear more progressive, cosmopolitan, or otherwise attractive. Yet it does not seem particularly plausible that county foster care policies are sufficiently salient to potential businesses and residents as to provide incentives for emulation.

Rather, to the extent that foster care policies diffuse from one county to the next, we believe that such a spread is likely due to learning. Learning from others provides an efficient way to solve a problem by choosing an alternative solution that has succeeded elsewhere (Berry and Baybeck 2005). County foster care administrators are interested in programs and policies that produce positive outcomes, such as reducing the number of reentries into the system and increasing the permanency of placements. County foster care administrators have extensive networks of contacts through which they can identify policies that may help produce these valued outcomes.

Privatization of foster care services seems as likely to result in innovation as would privatization of many other governmental activities. Contractors, especially in competitive environments, face pressures to try new policy innovations. Demonstrating competence in achieving satisfactory performance not only guarantees future contracts within the context of counties where these contractors already work, but also likely opens opportunities to expand to other counties. In such a competitive environment, successful innovators thrive and laggards are likely replaced.

How learning-based diffusion of county foster care services is influenced by privatization is certainly an open question. On the one hand, administrators who do not contract out for their

services likely rely on their extensive communication networks with other county administrators. Those counties that have privatized their services may instead rely on contractors for policy inputs, foregoing the powerful public diffusion networks. On the other hand, private contractors are likely to be on the lookout for policies that have worked in other counties as this will help them thrive in their competitive environment. Thus, either the Privately-Driven Diffusion Hypothesis or the Publicly-Driven Diffusion Hypothesis may find support in our data analysis. It is to such an analysis that we now turn.

### **Empirical Approach**

As is now common in studies of policy diffusion (Berry and Berry 1990), we utilize an event history analysis, where the event is the adoption of each of the four foster care policies identified above. Each observation in this analysis is a county-policy-year. Specifically, in each policy area, our dependent variable takes a value of zero in each year in which the county has yet to adopt the innovation. In the year of its adoption, the dependent variable takes a value of one for that county in that policy area. In subsequent years, the county is dropped from the dataset for that policy area, as the county is no longer at risk of adopting the policy. Our dataset includes each county that responded to the survey for each year from 1995 to 2006 for each of the four foster care innovations. This eleven-year period is ideal for our analysis because of the high degree of variance in the privatization of county foster care services during these years and because all four policy innovations spread significantly across the counties during this time frame. Increasing costs, escalating caseloads, and questionable foster care practices drew national attention in the mid-1990s, spurring Congress to take action. Around this time, states and counties began to consider alternative methods for foster care service delivery.

The four separate policy choices by the same counties in the same years represents a type of repeated event (Box-Steffensmeier and Zorn 2002). We therefore follow the approach of Shipan and Volden (2006), building off of Wei, Lin, and Weissfeld (1989), and pool the data together, yielding one observation per county per year per policy. This pooling approach is appropriate because any of the four policies could be adopted at any time in any order. The results are robust to either pooled or separate analyses, and controls for potential dependence across observations are discussed below.

### *Diffusion and Privatization Variables*

Although we believe that the mechanism of diffusion of county foster care innovations is likely learning, we follow the lead of Shipan and Volden (2007) in testing for multiple diffusion mechanisms. We first examine the possibility of economic competition. Economic spillovers are typically geographically limited (Berry and Baybeck 2005). In the context of U.S. counties, geographically neighboring counties are more likely to compete with each other in order to attract or deter positive and negative economic spillovers than are those counties that do not border upon one another. To test the competition mechanism, therefore, we constructed a variable, *Neighboring Counties*, which captures the proportion of all contiguous counties to the observed county that have previously adopted the policy in question. Where one or more neighboring counties did not respond to our survey, this variable is constructed based on only those neighbors that did respond.

To test for emulation of antismoking policies across U.S. cities, Shipan and Volden (2007) rely on a nearest bigger city variable. We follow their protocol in constructing *Nearest Bigger County*. This measure looks within the state to see whether the nearest county with a

larger population than the county in question has previously adopted the policy. If it has, the variable takes on a value of 1; and if it has not, this variable is set equal to 0. If the county being observed is itself the most populous county in the state, we code Nearest Bigger County based on whether the second most populous county in the state has already adopted the policy or not. To the extent that smaller laggard counties simply imitate bigger counties, and especially those that are nearby, this variable would capture such an emulative diffusion effect.

To test the final diffusion mechanism, learning, we constructed a variable, *Proportion of State Population Already Covered*. This variable likewise follows the approach of Shipan and Volden (2007). It is calculated by identifying the counties that have each type of foster care policy at the beginning of the calendar year, summing up the populations of those counties, and dividing by the overall population within the state. This variable accurately captures the possibility of learning, to the extent that counties are able to learn from others' experiences regardless of where in the state those model policies exist, and to the extent that more information on the effectiveness of policies is available from the counties that have larger populations affected by the policy.<sup>3</sup>

While we agree with Shipan and Volden (2007) that these three coding schemes are likely to capture key elements of competition, emulation, and learning, respectively, we believe that none of these variables exclusively captures these mechanisms. For example, in addition to learning from counties throughout the state, foster care administrators might be particularly open to learning from neighboring counties and nearby larger leaders. Thus evidence of diffusion through these multiple mechanisms may all be caused by learning or may reveal a combination of diffusion mechanisms at work. Positive coefficients would indicate diffusion, and we expect

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<sup>3</sup> An alternative specification, capturing merely the number of previously adopting counties in the state, shows similar, albeit somewhat less significant results, as would be expected.

the strongest positive effects to appear for the learning mechanism, as captured by *Proportion of State Population Already Covered*.

In addition to the diffusion variables, we created two measures of privatization. The first privatization variable is *Ratio of Services Privatized*. As detailed in Appendix A, county administrators were asked whether and when they had privatized aspects of seven different foster care services. The number of positive responses across these seven categories was added together and divided by seven to create our ratio measure. The higher the ratio, the more privatized the county. The second privatization variable is *Privatization Dummy*. This variable is a dummy variable for whether or not a county privatized *any* of the seven services. Thus, while this measure is less precise, it not only serves as a robustness check on the *Ratio of Services Privatized* variable in the event of outliers, but also reveals whether or not even a small amount of privatization matters for innovation. Both privatization measures should yield positive coefficients if privatization enhances innovation. Interactions among the privatization and diffusion variables, as well as some recoding, are needed to test the Publicly-Driven Diffusion Hypothesis and the Privately-Driven Diffusion Hypothesis, as described in detail below.

#### *County and Temporal Controls*

In addition to the diffusion and privatization variables, it is essential also to control for county-level factors that may influence the adoption of foster care policies. Lack of such internal determinants could lead to omitted variable biases and potentially spurious effects. In our particular case, without such controls we would be unable to discern whether counties are adopting similar policies due to their similar demographic and economic conditions or due to

policy diffusion. We therefore incorporate county-level control variables that are designed to capture separate internal influences on county-level foster care policy adoptions. First, *Foster Children Per 1000 Residents* is calculated as the total number of foster children in the county divided by the county's total population (scaled per thousand residents). More foster children per capita translates into more need and greater burden on the foster care system. We expect these counties to seek alternative service delivery models, and therefore anticipate a positive coefficient on this variable.

The second control variable is *County Population*, which is simply the county's population in the year 2000 (in millions of people). Larger counties have greater capabilities to adopt innovations and are anticipated to be early leaders, so we expect this variable to have a positive effect on the likelihood that the county will adopt a policy.<sup>4</sup> The third control variable is *Proportion Non-White*. This variable is based on 2000 census data. Foster care services may respond to minority populations differently than white populations, as has been found to be the case in other social service areas (e.g., Fellowes and Rowe 2004; Keiser, Mueser, and Choi 2004; Soss et al. 2001). If counties with larger minority populations are less likely to adopt the policy innovations explored here, this variable will take a negative coefficient. Fourth, we control for *Per Capita Income* in each county, which is the average income per resident in thousands of dollars. We anticipate this variable to be positively related to policy innovation in foster care because these counties have more resources to experiment with alternative service delivery models.

Finally, we include *Year* (taking a value of 1 in 1996, 2 in 1997, and so on), and *Year-Squared* variables to account for temporal changes in the baseline hazard rates. Inclusion of

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<sup>4</sup> Also including population density shows no additional effect on adoption in more densely populated counties. Its inclusion does not substantively affect the diffusion or privatization relationships.

these terms allows us to control for possible temporal dependence (Beck, Katz, and Tucker 1998). Our results are not substantively altered if we use year dummies, rather than *Year* and *Year-Squared*. All variables, data sources, and descriptions are summarized in Appendix B.

## Results

As described above, we pool our observations across the four types of foster care policies. We test our hypotheses using logit analyses, although the results are robust to other functional forms, such as probit or the complementary log-log function (Buckley and Westerland 2004). Other distributions of the hazard rates, such as revealed by a Cox proportional hazards model, yield very similar results. We rely on logit for ease of explanation, and to be consistent with prior work on these sorts of diffusion mechanisms. To account for heteroskedasticity and correlation across observations, we cluster by county-year using the cluster procedure in Stata 9.2, which allows the possibility of dependence in the four policy choices within each county in a given year and relies on Huber/White robust standard errors.<sup>5</sup> The number of observations is determined by the number of counties at risk for each policy's adoption in each year.<sup>6</sup>

### *Diffusion Mechanisms*

We proceed by testing each of the hypotheses in order, building each model upon previous results. Although this means that many early models are lacking key independent variables, this approach allows us to illustrate the effects of each additional variable on the overall findings in a systematic way, eventually culminating in fully specified models. Testing

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<sup>5</sup> Similar results follow from clustering by county instead of by county-year.

<sup>6</sup> Somewhat fewer observations are found in regressions including *Neighboring Counties* because, for a limited number of counties in our dataset, none of their neighboring counties responded to the survey. Thus no value of *Neighboring Counties* could be assigned, and these observations are removed from the dataset.

the Diffusion Hypothesis is straightforward given our data construction. As noted above, we use three different independent variables to capture alternative mechanisms of policy diffusion. In Table 1 we report the results for each of these variables included separately and then for all three included jointly.

[Insert Table 1 about here]

Model 1 includes the *Neighboring Counties* variable to test for diffusion through economic competition. The positive and highly significant coefficient suggests that such competition is taking place. In a similar manner, the positive coefficient on *Nearest Bigger County* in Model 2 suggests an emulation mechanism and the positive coefficient on *Proportion of State Population Already Covered* in Model 3 points to learning-based diffusion. Intriguingly, when all three of these mechanisms are explored together, as shown in Model 4, the only mechanism that remains positive and significant is that of learning. The coefficient on the competition variable is now negative and insignificant. The coefficient on the emulation variable remains positive, but also becomes statistically insignificant.

These results are not surprising in the context of foster care policy. As we posited above, one would not anticipate counties vying with one another for positive or negative economic spillovers with respect to foster care. Likewise, county reputations are not sufficiently affected by foster care decisions so as to stimulate emulative diffusion. Rather, policies appear to spread across the counties due to a process of learning from the experiments found not just among geographic neighbors and near larger counties, but those throughout the state. The size of this effect is quite large. Each additional percent of the state population covered by a particular foster care innovation elsewhere is associated with a rise of 4.1 percent in the odds of adoption of that innovation by each other county in the state. Put another way, a one-standard-deviation

increase in the *Proportion of State Population Already Covered* variable nearly triples the odds of adoption by the remaining counties. Thus the results of Table 1, and Model 4 in particular, support the Diffusion Hypothesis, here through the apparent mechanism of policy learning.

The results of the four models in Table 1 yield general implications for the study of diffusion. Specifically, it is important to explore multiple diffusion mechanisms in order to distinguish which one is operating within a given policy arena. For example, testing only for competition or emulation would have led to incorrect conclusions about the nature of foster care policy diffusion. This implies that, without controlling for multiple diffusion mechanisms, diffusion models can easily be mis-specified and produce biased results. Therefore it is possible that previous diffusion studies focusing only on one diffusion mechanism, like the effects of neighboring governments, to the exclusion of other possible mechanisms, have model misspecifications that yield somewhat questionable results.

Beyond the diffusion results, Table 1 also shows that the county control variables generally behave as expected, especially in the full Model 4. *Foster Children Per 1000 Residents* is positive and significant. Each increase of one foster child per 1000 residents is associated with a twenty-one-percent rise in the odds of the county adopting each of the four policy innovations examined here. *County Population* is also positive and significant, as expected. Just as larger cities tend to be the leaders in terms of new policy adoptions, larger counties follow the same pattern. Counties with an additional million residents are eighty-nine-percent more likely to adopt foster care innovations in any given year. Put another way, a one-standard-deviation increase in *County Population* is associated with a forty-four-percent rise in the odds of a foster care policy adoption.

Also as anticipated, the *Proportion Non-White* variable has a negative and significant coefficient in Model 4. Each one-percent rise in the minority population in a county is associated with a one-percent drop in the odds of a policy innovation being adopted. *Per Capita Income* is positive and significant, indicating that counties with more resources have more leeway to experiment with alternative service delivery models for foster care. Each increase in per capita income by one thousand dollars is linked to a 7.2-percent rise in the odds of a policy adoption. As shown by the insignificant coefficients on *Year* and *Year-Squared* in Model 4, there appear to be few temporal effects not already accounted for in the substantive independent variables. Although there are slight changes in magnitude, all of these effects of county and time controls remain robust to the inclusion of the additional independent variables used in testing the remaining key hypotheses.

### *Privatization*

In Table 2 we report the results of our tests of the Privatization Hypothesis, which are accomplished by adding our privatization variables to Model 4 discussed above. Before discussing these results, it is important to consider the possibility of spurious findings for these privatization variables. In particular, one may be concerned that the same counties that are likely to innovate are also likely to privatize their service provisions. We address this concern in three ways. First, the temporal ordering of privatization and innovation adoptions removes any endogeneity concerns. Specifically, the degree of privatization for a county is determined by their privatization at the start of the year, whereas their policy adoption (or not) takes place within the given year. Thus there is no possibility of a spurious relationship caused by a county adopting a new foster care innovation and privatizing in order to implement that new policy, or

by a form of reverse causality. Second, to the extent that larger counties, for example, are both more likely to privatize and more likely to adopt innovations, incorporating *County Population* as an independent variable controls for its separate effect. The same holds for the other county-level variables and time trends. Third, one might be concerned that there is some unobserved variable yielding both greater privatization and greater innovation in particular counties. To explore this possibility, we ran a biprobit model with one dependent variable being that used throughout the analysis conducted here and the second dependent variable being *Privatization Dummy*. Upon accounting for all of the variables included in the models of Table 2, important common omitted variables would result in a correlation between the errors of the two models. However, we find these errors to be uncorrelated ( $p = 0.667$ ). Thus we are confident that the relationships found here between privatization and innovation are not spurious.

[Insert Table 2 about here]

Turning to these specific relationships, we rely on three models, as shown in Table 2. The results of Model 5 yield significant support for the Privatization Hypothesis, showing that the more privatized a county is along the seven possible privatization dimensions, the more likely the county is to adopt foster care policy innovations. Specifically, a one-standard-deviation increase in *Ratio of Services Privatized* is associated with a thirty-six-percent rise in the odds of the county adopting each policy innovation. Model 6 shows that any degree of privatization results in greater innovation. About sixty-two percent of counties in our data set have privatized at least some of their foster care services. Compared to those with no privatization, these counties have seventy-six percent greater odds of adopting each foster care innovation in each year, all else equal.

In an additional aspect of the Privatization Hypothesis, we proposed that such innovation is stimulated by the competitive environment often surrounding privatized services. Although we cannot directly measure the degree of competition faced by contractors in each county, we did ask county administrators in these privatized counties about whether they have had significant turnover in their foster care contractors. We use their answers to this question to create a variable *Privatization with Turnover*. This variable is a dummy variable taking a value of one if a county has experienced “Some” or “Complete” turnover of private foster care service providers across the range of privatized services over the past five years. About half of the counties with privatized services had such turnover of contractors and half did not. The more turnover of contractors, the more competitive the privatized environment, and competition is hypothesized to lead to more policy adoptions, thus yielding a positive coefficient. Model 7 adds this variable to Model 6, showing the additional effect of competition. Counties with privatization but no turnover have fifty-seven percent greater odds of adopting each policy innovation than do those that have not privatized. For those with significant competition and turnover in contractors, this boost in odds rises to more than one-hundred percent.

### *Conditional Effects*

The analyses thus far confirm that foster care innovations diffuse across counties through a learning process, and that these innovations are more likely to be adopted by counties that have privatized their service delivery, especially when faced with a competitive environment. What has yet to be addressed, however, is whether that learning-based diffusion varies between privatized and public counties, and whether such a variance allows public providers to achieve the same degree of innovativeness as was found among privatized providers. It is to such an

analysis that we now turn. As a first test of the Publicly-Driven Diffusion Hypothesis and the Privately-Driven Diffusion Hypothesis, we create an interactive variable, multiplying *Proportion of State Population Already Covered by Ratio of Services Privatized*. A positive coefficient would indicate that counties with greater privatization are also more likely to learn from the innovations of others, in support of the Privately-Driven Diffusion Hypothesis. A negative coefficient would indicate a greater degree of learning by the counties that have not privatized their services, thus supporting the Publicly-Driven Diffusion Hypothesis. Model 8 in Table 3 shows the results.

[Insert Table 3 about here]

In the model, the interactive term has a coefficient that is negative and significant. The size of this coefficient (-1.82) is not so negative as to cancel out the main diffusion effect (4.34), even for the most privatized counties. Specifically, for a county with no privatization, each additional percent of the state population operating under the policy innovations of other counties is associated with a 4.4 percent rise in the odds of adopting that same innovation. For a fully privatized county, however, that rise is only 2.6 percent. Thus the response to diffusion pressures is nearly twice as strong for foster care administrators in public counties than for those in privatized counties. This finding supports the Publicly-Driven Diffusion Hypothesis, and leads us to reject the Privately-Driven Diffusion Hypothesis.

It may be reasonable to expect that the findings of Model 8 are driven by the strong communication networks among foster care administrators in counties that have not privatized their services. To explore this possibility in greater detail, we subdivide *Proportion of State Population Already Covered* into two variables: *Proportion of State Population Already Covered (Public)* and *Proportion of State Population Already Covered (Private)*. The former of these

variables captures what part of the state population already has the policy in question, as adopted by counties that have not privatized any of their foster care services. The latter variable captures a similar proportion, this time for those covered by counties that have privatized at least some of their services. Together, these variables sum to the values of the original *Proportion of State Population Already Covered*. But this subdivision allows us to answer the question of whether counties are more likely to learn from the prior experiences of public counties or of privatized counties. We expect both variables to have positive coefficients – diffusion through learning should emerge from the prior actions of both public and privatized counties. However, based on the results of Model 8, we anticipate the coefficient for the public counties to be substantively larger than that for the privatized ones.

Model 9 shows the results of this subdivision of the learning-based diffusion variable. Rather than use the *Ratio of Services Privatized* variable in this model, we use the *Privatization Dummy* variable because this is the way we characterized what counties fall into the categories “private” or “public” for the learning diffusion variables. Model 9 shows that counties learn from both public and private counties; however, they are more likely to learn from public counties. Based on a chi-squared test, these coefficients are shown to differ significantly from one another ( $p = 0.047$ ). Substantively, each additional percent of the population covered by the policies of public foster care providers is associated with a rise of 6.1 percent in the odds of each other county adopting similar policies. The comparable learning effect from privatized counties, however, is only 3.6 percent.

In addition to illustrating a greater learning effect from public counties, it is important to establish that the public counties learn greatly from one another. Model 10 makes this demonstration by interacting the subdivided learning variables from Model 9 with dummies for

whether the county being analyzed has privatized any services (*Privatization Dummy*) or whether the county has privatized none of its services (*Public Dummy*). The results of this model are significant and telling. First, it is worth noting that the positive and significant coefficients on all four interactive variables indicate that both public and privatized counties learn, and learn from the experiences of both public and privatized counties. However, the size of these coefficients is also important. While the size of the effects of learning of and from privatized counties are not statistically distinct from one another, the coefficient on public counties learning from other public counties (8.47) is statistically and substantively larger than the other interactive effects.

Public counties are dramatically more likely to learn from other public counties rather than from private counties. And the experiences of public counties are more likely to lead to an adoption by other public counties than by counties that have privatized. Specifically, each additional percent of the state population covered by the policy innovations of public counties increases the odds of a similar adoption by another public county by 8.8 percent, while only increasing the odds of adoption by privatized counties by 4.6 percent. Is this difference sufficient to make up for the greater innovativeness of privatized counties absent diffusion, as indicated by the strong positive coefficient on the *Privatization Dummy*? The answer seems to be “Yes,” but certainly depends on the relative make-up of privatized and non-privatized counties in the state, as well as on which counties are the early adopters of policy innovations.

Put most bluntly, when no other counties have adopted an innovation, privatized counties are about twice as likely to adopt the innovation. But public counties catch up over time. When seventeen percent of the state population is already covered by a new innovative policy adopted by public counties, other public counties are just as likely to adopt that innovation as are

privatized counties.<sup>7</sup> For a larger percent of the state population already covered by public counties' innovations, the remaining public counties are even more likely to adopt policy innovations than are those that have privatized their services. Thus, while private contractors are more likely to take the lead with new innovations, public administrators are not far behind. As active middle-adopters, they actually are more likely to base their decisions on learning from the tried and true policies of others in their diffusion networks.

### **Discussion and Conclusion**

When considering privatization of government services, scholars and practitioners alike assess the new incentives, policies, and outcomes that would accompany such a shift. Competition and market-based incentives are thought to spur innovative policies with new outcomes for good or ill. If present performance is sufficiently poor, privatization and its innovations are more likely to be embraced, even if they limit accountability and equality. All of this has been well studied and broadly understood.

What has been neglected as part of this story, however, is the fact that many of potentially privatized services are delivered by states and localities within federal systems. It is at these levels that most governmental experimentation and innovation takes place. Moreover, competition and the ability to learn across subnational governments has been shown to lead to the diffusion of innovations, especially those innovations that yield successful outcomes.

In this study, we illustrate how the adoption of policy innovations can be achieved both through privatization and through policy diffusion. We also show, however, some tension between these modes of delivering innovative new policy solutions. Where policy diffusion is

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<sup>7</sup> The relevant calculation compares public counties to private counties. Their coefficients in Model 10 are equal when  $8.47 \times 0.174 = 0.695 + 4.47 \times 0.174$ . Under these circumstances, their odds of adoption are equal, *ceteris*

based on learning, and where policy networks of governmental decision-makers facilitate that learning-based diffusion, privatization actually upsets the flow of information and slows the spread of innovations. At least in the area of county-level foster care policies, counties with publicly provided services were able to catch up to the more innovative privatized counties through their diffusion networks.

The main implication of this study, then, is that the benefits of privatization within federal systems need to be reassessed in light of considerations about policy diffusion. Absent diffusion considerations, such as in national-level policymaking, privatization is likely to spur innovation and the adoption of new policies. However, at the state or local level, privatization may disrupt learning networks that bring about better policies over time. If another societal benefit, such as accountability or equity, is lost through privatization, it is necessary to reconsider whether the small or potentially nonexistent boost in innovativeness is worthwhile.

Other implications of our work are more tentative. First, it is possible that a mix of private and public provision of goods and services across state and local governments is preferred over a system with no privatization or with complete privatization. Private service providers appear to be more likely to adopt innovative policies when no one else will. Public providers then act as middle adopters, presumably picking up the innovations that work well and setting aside those that fail. In a federal system, the bold or desperate few can take the risks that will benefit the many. Second, it is possible and even likely that policies that diffuse through economic competition or other mechanisms than learning may not face the tradeoffs identified here. In such areas, economic competition across governments coupled with the economic incentives of the market may entice private service providers to become even more innovative and competitive. While beneficial on occasion, many of the circumstances leading to

competition-based diffusion also have the potential to produce a race to the bottom in service provision, which may be exacerbated upon privatization.

## Appendix A: Survey Questions

### *Privatization Questions (Y/N):*

1. Do you currently contract out to any privately-run entities to provide food and shelter to the foster children in your county?
2. Do you contract out to private entities for case work services in your county?
3. Does your county contract out to private entities to recruit and license foster parents?
4. Does your county contract out to private entities to conduct investigations of abused and neglected children?
5. Does your county contract out to private entities to manage foster care records and data?
6. Does your county contract out to private entities to monitor outcomes of foster care programs and services, or to monitor the progress of foster children while they are in the system?
7. Are there other aspects of your county's foster care system that have been privatized?

### *If answered "Yes" to any of the above, then:*

1. Today, approximately what percent of [Privatization 1-7 above] was provided by privately run organizations? (*Less than 10%; 10-30%; 30-50%; 50-80%; More than 80%*)
2. Five years ago, approximately what percent of [Privatization 1-7 above] was provided by privately run organizations? (*Don't Know; Less than 10%; 10-30%; 30-50%; 50-80%; More than 80%*)
3. Ten years ago, approximately what percent of [Privatization 1-7 above] was provided by privately run organizations? (*Don't Know; Less than 10%; 10-30%; 30-50%; 50-80%; More than 80%*)
4. How many of the private care providers of [Privatization 1-7 above] are non-profit organizations (rather than for-profit)? (*None; Some; Most; All*)
5. About how many different contractors provide [Privatization 1-7 above] in your county? (*Open-ended*)
6. Has there been significant turnover in contractors within the past five years? (*Almost No Turnover; Some Turnover; Almost Complete Turnover*)

*Policy Questions:*

1. Has your county implemented outcome based standards separate from what the state guidelines are? For example, for either publicly or privately administered programs, has your county implemented program standards with respect to safety of children in the system, permanency of reunification, reentry into the system, time in the system, movement within the system, or other outcome measures? (*No; Yes Before 1995; Yes 1996; Yes 1997; Yes 1998; Yes 1999; Yes 2000; Yes 2001; Yes 2002; Yes 2003; Yes 2004; Yes 2005; Yes 2006*)
2. Has your county implemented performance based funding? In other words, has your county tied funding to outcome-based measures? (*No; Yes Before 1995; Yes 1996; Yes 1997; Yes 1998; Yes 1999; Yes 2000; Yes 2001; Yes 2002; Yes 2003; Yes 2004; Yes 2005; Yes 2006*)
3. Has your county implemented information systems and databases that track children in the system, placement, court decisions, permanency, or other information management items? (*No; Yes Before 1995; Yes 1996; Yes 1997; Yes 1998; Yes 1999; Yes 2000; Yes 2001; Yes 2002; Yes 2003; Yes 2004; Yes 2005; Yes 2006*)
4. Has your county implemented flexible funding for contracted service providers (not including foster parents)? In other words, can service providers spend on a range of services as needs arise (rather than fixed spending requirements)? (*No; Yes Before 1995; Yes 1996; Yes 1997; Yes 1998; Yes 1999; Yes 2000; Yes 2001; Yes 2002; Yes 2003; Yes 2004; Yes 2005; Yes 2006*)

*Control Question:*

How many total foster children are in your county? (*Open-ended*)

## Appendix B: Variable Descriptions, Summary Statistics, and Sources

<b>Variable</b>	<b>Description</b>	<b>Mean</b>	<b>St. Dev.</b>
<i>Foster Care Policy Adoption<sup>a</sup></i>	Dependent variable = 1 if county adopts the policy in this area in this year. Set = 0 if no adoption to date. Observation removed if already adopted.	0.033	0.178
<i>Neighboring Counties<sup>a</sup></i>	Proportion of contiguous counties that had adopted the policy in this area prior to the observation year.	0.179	0.264
<i>Nearest Bigger County<sup>a</sup></i>	Dummy = 1 if the nearest county that is larger than the observation county adopted the policy in this area prior to the observation year.	0.234	0.423
<i>Proportion of State Population Already Covered<sup>a,b</sup></i>	Proportion of state population living in counties with the policy in this area at start of the year.	0.255	0.249
<i>Ratio of Services Privatized<sup>a</sup></i>	Number of services with some degree of privatization at start of year, divided by seven.	0.132	0.142
<i>Privatization Dummy<sup>a</sup></i>	Dummy = 1 if county privatized any of its services prior to this year.	0.621	0.485
<i>Privatization with Turnover<sup>a</sup></i>	Dummy = 1 if county privatized any of its services prior to this year and if there was some or complete turnover in contractors.	0.269	0.444
<i>Foster Children Per 1000 Residents<sup>a,b</sup></i>	Number of foster children in county divided by county population in thousands	1.35	1.02
<i>County Population<sup>b</sup></i>	County population (in millions) based on 2000 census.	0.168	0.571
<i>Proportion Non-White<sup>b</sup></i>	Proportion of residents self-identified as non-white.	0.168	0.179
<i>Per Capita Income<sup>b</sup></i>	Average income per resident (\$000s).	18.9	3.82

*Data sources:*

<sup>a</sup>Calculated by authors from internet-based survey.

<sup>b</sup>Constructed by authors based on U.S. Census data.

## References

- Bailey, Michael A., and Mark Carl Rom. 2004. A Wider Race? Interstate Competition across Health and Welfare Programs. *Journal of Politics* 66(2): 326-347.
- Balla, Steven J. 2001. Interstate Professional Associations and the Diffusion of Policy Innovations. *American Politics Research* 29(3): 221-245.
- Beck, Nathaniel, Jonathan N. Katz, and Richard Tucker. 1998. Taking Time Seriously: Time-Series-Cross-Section Analysis with a Binary Dependent Variable. *American Journal of Political Science* 42(4): 1260-1288.
- Berry, Frances Stokes, and William D. Berry. 1990. State Lottery Adoptions as Policy Innovations: An Event History Analysis. *American Political Science Review* 84(2): 395-415.
- Berry, William D., and Brady Baybeck. 2005. Using Geographic Information Systems to Study Interstate Competition. *American Political Science Review* 99(4): 505-519.
- Boehmke, Frederick J. 2005. *The Indirect Effect of Direct Legislation: How Institutions Shape Interest Group Systems*. Columbus, OH: Ohio State University Press.
- Boehmke, Frederick J., and Richard Witmer. 2004. Disentangling Diffusion: The Effects of Social Learning and Economic Competition on State Policy Innovation and Expansion. *Political Research Quarterly* 57(1): 39-51.
- Box-Steffensmeier, Janet M., and Christopher Zorn. 2002. Duration Models for Repeated Events. *Journal of Politics* 64(4): 1069-1094.
- Brandeis, Louis Dembitz. 1932. Dissenting opinion. *New State Ice Co. v. Liebmann*, 285 U.S. 262, 311.
- Brooks, Sarah M. 2005. Interdependent and Domestic Foundations of Policy Change: The Diffusion of Pension Privatization around the World. *International Studies Quarterly* 49: 273-294.
- Buckley, Jack and Chad Westerland. 2004. "Duration Dependence, Functional Form, and Correct Standard Errors: Improving EHA Models of State Policy Diffusion." *State Politics and Policy Quarterly* 4(1): 94-114.
- Crain, Robert L. 1966. Fluoridation: Diffusion of an Innovation among Cities. *Social Forces* 44(4): 467-476.
- Donahue, John D. 1989. *The Privatization Decision: Public Ends, Private Means*. New York: Basic Books.

- Fellowes, Matthew C., and Gretchen Rowe. 2004. Politics and the New American Welfare States. *American Journal of Political Science* 48(2): 362-373.
- Galiani, Sebastian, Paul Gertler, and Ernesto Schargrotsky. 2005. Water for Life: The Impact of the Privatization of Water Services on Child Mortality. *Journal of Political Economy* 113(1): 83-120.
- Geen, R., and V. Tumlin. 1999. *State Efforts to Remake Child Welfare: Responses to New Challenges and Increased Scrutiny*. Occasional Paper 29. Washington, D.C.: The Urban Institute.
- Grupp, Fred W., Jr., and Alan R. Richards. 1975. Variations in Elite Perceptions of American States as Referents for Public Policy Making. *American Political Science Review* 69(3): 850-858.
- Haider-Markel, Donald P. 2001. Policy Diffusion as a Geographical Expansion of the Scope of Political Conflict: Same-Sex Marriage Bans in the 1990s. *State Politics and Policy Quarterly* 1(1): 5-26.
- Henig, Jeffrey R., Thomas T. Holyoke, Natalie Lacireno-Paquet, and Michele Moser. 2003. Privatization, Politics, and Urban Services: The Political Behavior of Charter Schools. *Journal of Urban Affairs* 25(1): 37-54.
- Henisz, Witold, J., Mauro F. Guillen, and Bennet A. Zelner. 2005. The Worldwide Diffusion of Market-Oriented Infrastructure Reform, 1977-1999. *American Sociological Review* 70: 871-897.
- Keiser, Lael R., Peter R. Mueser, and Seung-Whan Choi. 2004. Race, Bureaucratic Discretion, and the Implementation of Welfare Reform. *American Journal of Political Science* 48(2): 314-327.
- Malm, K., R. Bess, J. Leos-Urbel, R. Green, and T. Markowitz. 2001. *Running to Keep in Place: The Continuing Evolution of Our Nation's Child Welfare System*. Occasional Paper 54. Washington, D.C.: The Urban Institute.
- McBeath, Bowen, and William Meezan. 2006. Non-Profit Adaptation to Performance-Based, Managed Care Contracting in Michigan's Foster Care System. *Administration in Social Work* 30(2): 39-70.
- McCullough, C., and B.J. Schmitt. 1999. *Child Welfare League of America Managed Care and Privatization Child Welfare Tracking Project: 1998 State and County Results*. Washington, D.C.: Child Welfare League of America Press.
- McCullough, C. 2005. Child Welfare Privatization Summary of National Trends: A Synthesis of Research. Online:

[www.cfsa.dc.gov/cfsa/lib/cfsa/frames/pdf/ChildWelfarePrivatization.pdf](http://www.cfsa.dc.gov/cfsa/lib/cfsa/frames/pdf/ChildWelfarePrivatization.pdf). Accessed: September 9, 2007.

- Miller, Gary J., and Terry M. Moe. 1983. Bureaucrats, Legislators, and the Size of Government. *American Political Science Review* 77(2): 297-322.
- Mintrom, Michael. 1997a. Policy Entrepreneurs and the Diffusion of Innovation. *American Journal of Political Science* 41(3): 738-770.
- Mintrom, Michael. 1997b. The State-Local Nexus in Policy Innovation Diffusion: The Case of School Choice. *Publius: The Journal of Federalism* 27(3): 41-59.
- Moe, Ronald C. 1987. Exploring the Limits of Privatization. *Public Administration Review* 47(6): 453-460.
- Mooney, Christopher Z., and Mei-Hsien Lee. 1999. The Temporal Diffusion of Morality Policy: The Case of Death Penalty Legislation in the American States. *Policy Studies Journal* 27(4): 766-780.
- Morris, John C. 1997. The Distributional Impacts of Privatization in National Water-Quality Policy. *Journal of Politics* 59(1): 56-72.
- Ostrom, Vincent, and Elinor Ostrom. 1977. Public Goods and Public Choices. In E.S. Savas, ed., *Alternatives for Delivering Public Services: Toward Improved Performance*. Boulder, CO: Westview Press.
- Peterson, Paul E., and Mark C. Rom. 1990. *Welfare Magnets: A New Case for a National Standard*. Washington, DC: The Brookings Institute.
- Reed, Christine M., and Kyle P. Meyer. 2004. Medicaid Managed Care for Children with Special Health Care Needs: Examining Legislative and Judicial Constraints on Privatization. *Public Administration Review* 64(2): 234-242.
- Savas, E.S. 1987. *Privatization: The Key to Better Government*. Chatham, NJ: Chatham House Publishers, Inc.
- Savas, E.S. 1999. An Empirical Study of Competition in Municipal Service Delivery. In Richard C. Kearney and Evan M. Berman, Eds. *Public Sector Performance: Management, Motivation, and Measurement*. Boulder, CO: Westview Press.
- Shipan, Charles R., and Craig Volden. 2006. Bottom-Up Federalism: The Diffusion of Antismoking Policies from U.S. Cities to States. *American Journal of Political Science* 50(4): 825-843.
- Shipan, Charles R., and Craig Volden. 2007. Local Antismoking Laws and the Mechanisms of Policy Diffusion. Typescript, University of Michigan.

- Simmons, Beth A., Frank Dobbin, and Geoffrey Garrett. 2006. Introduction: The International Diffusion of Liberalism. *International Organization* 60(4): 781-810.
- Sonenblum, Sidney, John J. Kirlin, and John C. Ries. 1975. *Providing Municipal Services: The Effects of Alternative Structures*. Los Angeles, CA: UCLA Institute of Government and Public Affairs.
- Soss, Joe, Sanford F. Schram, Thomas P. Vartanian, and Erin O'Brien. 2001. Setting the Terms of Relief: Explaining State Policy Choices in the Devolution Revolution. *American Journal of Political Science* 45(2): 378-395.
- Stipak, Brian. 1974. *Citizen Evaluations of Municipal Services in Los Angeles County*. Los Angeles, CA: UCLA Institute of Government and Public Affairs.
- Tiebout, Charles. 1956. "A Pure Theory of Local Expenditures." *The Journal of Political Economy* 64(5): 416-424.
- U.S. General Accounting Office. 1995. *Child Welfare: Complex Needs Strain Capacity to Provide Services*. GAO/HEHS-95-208. Washington, DC.
- U.S. General Accounting Office. 1998. *Child Welfare: Early Experiences Implementing a Managed Care Approach*. GAO/HEHS-99-8. Washington, DC.
- Volden, Craig. 2002. The Politics of Competitive Federalism: A Race to the Bottom in Welfare Benefits? *American Journal of Political Science* 46(2): 352-363.
- Volden, Craig. 2006. States as Policy Laboratories: Emulating Successes in the Children's Health Insurance Program. *American Journal of Political Science* 50(2): 294-312.
- Walker, Jack L. 1969. The Diffusion of Innovations among the American States. *American Political Science Review* 63(3): 880-899.
- Wei, L. J., D. Y. Lin, and L. Weissfeld. 1989. Regression Analysis of Multivariate Incomplete Failure Time Data by Modeling Marginal Distributions. *Journal of the American Statistical Association* 84(408): 1065-1073.
- Wulczyn, Fred. 2000a. Federal Fiscal Reform in Child Welfare Services. *Children and Youth Services Review* 22(2): 131-159.
- Wulczyn, Fred. 2000b. Fiscal Reform and Managed Care in Child Welfare Services. *Policy and Practice of Public Human Services* 58(3): 26-31.

**Table 1: The Impact of Diffusion on County-Level Foster Care Innovation**

	<b><u>Model 1</u></b> <b><u>Competition</u></b>	<b><u>Model 2</u></b> <b><u>Emulation</u></b>	<b><u>Model 3</u></b> <b><u>Learning</u></b>	<b><u>Model 4</u></b> <b><u>All</u></b>
<b><i>Competitive Diffusion</i></b>				
Neighboring Counties	2.23** (0.182)	-----	-----	-0.195 (0.306)
<b><i>Emulative Diffusion</i></b>				
Nearest Bigger County	-----	1.12** (0.108)	-----	0.113 (0.173)
<b><i>Learning-Based Diffusion</i></b>				
Proportion of State Population Already Covered	-----	-----	4.23** (0.211)	4.01** (0.297)
<b><i>County-level Controls</i></b>				
Foster Children Per 1000 Residents	0.166** (0.0627)	0.169** (0.0502)	0.197** (0.0569)	0.194** (0.0674)
County Population (in millions)	0.487** (0.176)	0.339* (0.170)	0.549** (0.153)	0.637** (0.162)
Proportion Non-White	-0.413 (0.372)	-0.469 (0.366)	-0.883** (0.377)	-0.931** (0.391)
Per Capita Income (in thousands)	0.0533** (0.0177)	0.0616** (0.0159)	0.0679** (0.0159)	0.0694** (0.0176)
Year	0.248** (0.0971)	-0.234** (0.0679)	-0.406** (0.0718)	0.0699 (0.103)
Year-Squared	-0.0161** (0.00669)	0.0159** (0.00500)	0.0210** (0.00520)	-0.00837 (0.00701)
Constant	-5.99** (0.498)	-4.42** (0.372)	-4.65** (0.378)	-6.27** (0.515)
<b>Wald <math>\chi^2</math></b>	235.6**	178.8**	507.2**	513.0**
<b>N</b>	12,186	13,572	13,574	12,184

Robust standard errors in parentheses, clustered by county-year.

\*\* $p < 0.01$ , \* $p < 0.05$  (one-tailed tests).

**Table 2: The Impact of Privatization on Foster Care Innovation**

	<b>Model 5</b> <b><u>Ratio Privatized</u></b>	<b>Model 6</b> <b><u>Dummy Privatized</u></b>	<b>Model 7</b> <b><u>With Turnover</u></b>
<i><b>Diffusion</b></i>			
Competition (Neighboring Counties)	-0.125 (0.303)	-0.160 (0.306)	-0.148 (0.308)
Emulation (Nearest Bigger County)	0.120 (0.174)	0.119 (0.172)	0.136 (0.173)
Learning (Proportion of State Population Already Covered)	4.05** (0.291)	4.06** (0.293)	4.05** (0.296)
<i><b>Privatization</b></i>			
Ratio of Services Privatized	2.15** (0.401)	-----	-----
Privatization Dummy	-----	0.564** (0.135)	0.452** (0.153)
Privatization with Turnover	-----	-----	0.265* (0.156)
<i><b>County-level Controls</b></i>			
Foster Children Per 1000 Residents	0.159* (0.0687)	0.169** (0.0667)	0.157** (0.0672)
County Population (in millions)	0.453** (0.189)	0.472** (0.171)	0.446** (0.170)
Proportion Non-White	-0.695* (0.394)	-0.746* (0.391)	-0.787* (0.392)
Per Capita Income (in thousands)	0.0651** (0.0176)	0.0695** (0.0172)	0.0680** (0.0172)
Year	0.0637 (0.103)	0.0663 (0.103)	0.0687 (0.103)
Year-Squared	-0.00775 (0.00703)	-0.00800 (0.00700)	-0.00819 (0.00699)
Constant	-6.48** (0.519)	-6.64** (0.518)	-6.59** (0.517)
<b>Wald <math>\chi^2</math></b>	546.2**	533.8**	540.5**
<b>N</b>	12,184	12,184	12,184

Robust standard errors in parentheses, clustered by county-year.

\*\* $p < 0.01$ , \* $p < 0.05$  (one-tailed tests).

**Table 3: The Impact of Diffusion and Privatization on Foster Care Innovation**

	<b>Model 8</b> <b><u>Interactive</u></b> <b><u>Effect</u></b>	<b>Model 9</b> <b><u>Learning from</u></b> <b><u>Whom?</u></b>	<b>Model 10</b> <b><u>Who Learns</u></b> <b><u>from Whom?</u></b>
<b><i>Diffusion</i></b>			
Competition (Neighboring Counties)	-0.163 (0.304)	-0.157 (0.308)	-0.117 (0.310)
Emulation (Nearest Bigger County)	0.124 (0.175)	0.108 (0.171)	0.104 (0.171)
Learning (Proportion of State Population Already Covered)	4.34** (0.337)	-----	-----
Proportion of State Population Already Covered (Public)	-----	5.92** (1.00)	-----
Proportion of State Population Already Covered (Private)	-----	3.51** (0.388)	-----
<b><i>Privatization</i></b>			
Ratio of Services Privatized	2.78** (0.507)	-----	-----
Privatization Dummy	-----	0.595** (0.135)	0.695** (0.222)
<b><i>Conditional Effects</i></b>			
Learning × Ratio of Services Privatized	-1.82* (1.03)	-----	-----
Proportion Already Covered (Public) × Public Dummy	-----	-----	8.47** (1.57)
Proportion Already Covered (Private) × Public Dummy	-----	-----	2.89** (0.746)
Proportion Already Covered (Public) × Privatization Dummy	-----	-----	4.47** (1.28)
Proportion Already Covered (Private) × Privatization Dummy	-----	-----	3.75** (0.418)
<b>Wald <math>\chi^2</math></b>	537.7**	543.4**	556.1**
<b>N</b>	12,184	12,184	12,184

Robust standard errors in parentheses, clustered by county-year. County-level controls, time controls, and constant included in regression, omitted from table due to space considerations.

\*\* $p < 0.01$ , \* $p < 0.05$  (one-tailed tests).