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Adoption of Property Tax and Expenditure Limitations by U.S. States:
A Multiple Events History Analysis

J. W. Decker[1]

Property tax expenditure and limitations (TELs) are key tools used by U.S. states to control local government spending and taxing authority. This paper employs a multiple events history analysis to understand the factors influencing the adoption of county-level property tax TELs by state governments. The findings show that external factors such as policy learning, competition, imitation, and coercion play crucial roles in this process. Notably, the study reveals that higher out-migration rates and the presence of voter-based ballot initiatives significantly increase the likelihood of TEL adoption. Additionally, the spread of TELs is influenced more by national trends rather than neighboring state actions, highlighting the saliency of these policies. These findings shed light on the dynamics of policy diffusion and provide insights into the interplay between state-level decisions and local government financial autonomy. The study's implications extend beyond public finance, offering a nuanced understanding of policy adoption and diffusion in federal systems.

Keywords: Property Tax, Tax Diffusion, Tax and Expenditure Limitations, TELs

Tax and Expenditure Limitations (TELs) are legal measures that constrain a government's power over taxes and expenditures. These tools regained popularity in the United States during the taxpayer revolts of the 1970s and 1980s as a means to curb government growth (Goodman et al., 2021; Mullins & Wallin, 2004). Most notably, TELs have been used to restrict the ability of local governments to generate revenue through property taxes, including overall rate limits, specific tax rate limits, levy limits, and assessment increase limits (Mullins & Joyce, 1996). Research has examined the effects of property tax TELs on government finance, revealing that while these limitations prompt a reorganization of revenue channels, they do not significantly reduce overall spending (Kousser et al., 2008; Stallmann et al., 2017). Despite their mixed success, 37 states

[1]Municipal Research Lab, North Carolina State University. https://orcid.org/0000-0002-8744-3669.
Corresponding Author: winndecker@gmail.com.

have implemented some form of TEL that impacts the property tax revenues of their county governments (Tax Policy Center, 2020).

The decision to adopt a TEL is influenced by internal and external factors specific to a state's environment. Internal factors, such as political, economic, and social elements, have been shown to significantly impact the diffusion of a policy (Berry & Berry, 2018; Shipan & Volden, 2008). Conversely, external factors are intergovernmental and vary depending on the policy in question, though four factors are commonly viewed to drive the adoption of a policy. These are policy learning, competition, imitation, and coercion.

Using data from all 50 states from 1977 to 2016, a multiple-event history analysis was used to study the question of why states adopt TELs. Understanding these external dynamics is crucial for comprehending the adoption of TELs, as it will further shed light on the dynamic between state and local government financial policy.

Background

Tax and Expenditure Limits (TELs) serve as vital regulatory tools, curbing government revenue and expenditure growth to prevent excessive tax hikes and foster fiscal discipline (Decker, 2023). Primarily targeting revenue sources, TELs notably affect property taxes due to their direct impact on taxpayers. States employ various property tax TELs, including rate, levy, and assessment limits, to restrain property tax revenue expansion (Mullins & Wallin, 2004). These limits establish a comprehensive legal framework, significantly restricting county governments' revenue generation from property taxes while emphasizing their pivotal role in supporting local government functions and affecting fiscal autonomy.

TELs' impact on government outcomes, particularly property tax revenue, is multifaceted, necessitating innovative financial approaches amidst the demand for quality public services. Research highlights diverse effects, from reduced public spending to increased reliance on alternative revenue sources like sales taxes or fees (Luna, 2004; McDonald, 2019; Mullins, 2004; Zhang & Hou, 2020). This underscores property tax TELs' significance in county governance, stressing their influence on operational and fiscal stability and highlighting counties' essential role in service delivery.

Diffusion of Innovation

The Innovation and Diffusion Framework (IDF) is used to study the characteristics that support the adoption of property tax TELs. IDF explains how an innovation for a solution to a governing problem in one jurisdiction spreads, or diffuses, to other government jurisdictions (Berry & Berry, 2018). A policy is said to diffuse when other government jurisdictions decide to adopt the same innovation as the inventing jurisdiction to solve a similar issue (Shipan & Volden, 2008).

Decisions regarding innovation adoption are influenced by both internal and external mechanisms (Berry & Berry, 2018; Shipan & Volden, 2012). Internal mechanisms encompass factors within the jurisdiction driving innovation, including governmental, economic, demographic, and political characteristics (Berry & Berry, 2018). These factors are crucial as governments operate within an open system (McDonald et al., 2020). External mechanisms are pathways through which governments are influenced by others' policies, facilitating innovation adoption (Berry & Berry, 2018). Research underscores that learning, competition, imitation, and

coercion significantly shape the likelihood of policy adoption (Kim et al., 2018). By examining these dynamics, this article develops hypotheses that capture the intricate process of property tax TELs policy diffusion.

Theory and Hypotheses

The first external mechanism, *policy learning*, is when policymakers in one jurisdiction observe and evaluate the effectiveness of policies from others, facilitating the adoption of innovative solutions (Shipan & Volden, 2008). This learning process involves adjusting understandings and beliefs about policies based on new information. Due to the high costs and time required for gathering information, governments often rely on insights from others' experiences.

The adoption of property tax TELs appears to be significantly influenced by policy learning mechanisms. This learning process has been particularly catalyzed by public dissatisfaction over escalating property tax bills, leading to widespread tax revolts during the 1970s and 1980s. Such public unrest, exemplified by the tax revolts and the election of fiscal conservatives, underscored a growing concern that local governments were becoming overly reliant on expanding tax revenue, thus becoming too large and powerful (Martin, 2009; Cabral & Hoxby, 2012). In response, lawmakers sought strategies to mitigate property tax increases and curb local government growth.

The observation of California's Proposition 13 showed legislators nationwide the political appeal and public support for property tax TELs to ease growing tax burdens. This spurred interest in similar policies, particularly in states facing high property tax pressures, emphasizing the need for actions to retain voter support and ensure reelection. Thus, states with higher per capita property tax bills tended to adopt TELs, suggesting that heavier tax burdens might drive the adoption of TELs to satisfy constituent demands and secure political stability, leading to the first hypothesis.

> *H_1: States with higher average per capita property tax bills are more likely to adopt property tax TELs.*

Next, *competition* is an external diffusion mechanism that encourages governments to adopt certain innovations to achieve an economic advantage over other jurisdictions (Berry & Berry, 2018). When there are positive economic benefits from adopting a policy, a government is more inclined to implement that policy. While economic competition comes in various forms, one type of particularly prevalent competition between states is location-choice competition. Location-choice competition happens when governments seek to influence the location where individuals acquire some good or service that is available in more than one jurisdiction. Governments compete to have residents within their boundaries so that they can collect tax revenue and supply a strong workforce to promote economic growth.

Regarding property tax TELs, governments must balance encouraging residents to move into the jurisdiction through low tax rates while collecting enough revenue to provide the desired public goods and services (Boehmke & Witmer, 2004). Known as the Tiebout hypothesis, Tiebout (1956) argues that residents choose locations that provide public services desired at the appropriate cost. If either the services are lacking or the price tag is too expensive, it is thought that people will move to locations that better fit their desires (Boehmke & Witmer, 2004). If residents are moving out of a state, it indicates to lawmakers that either the public services

offered or the cost of said services do not match residents' desires. As a result, lawmakers may look to innovations that make them more competitive with the states to which their residents are migrating.

One way for a state to be more competitive in the location-choice competition is to implement property tax TELs. If people are moving into a state at a high rate, it indicates that individuals are happy with the services they are receiving in relation to the taxes paid. However, if people are migrating out of state at a high rate, this may indicate that property tax burdens are too high and that people would rather live somewhere else that matches their desires. This leads to the second hypothesis:

> *H_2: States with higher out-migration rates are more likely to adopt property tax TELs.*

Imitation, the third external diffusion mechanism, occurs when a government adopts an innovation to look like other government jurisdictions (Berry & Berry, 2018; Shipan & Volden, 2008). Imitation differs from learning mechanisms in that the innovation is adopted independently from any evaluation of the policy or its outcomes. When deciding who to imitate, jurisdictions often look to leader jurisdictions to imitate innovations. However, which governments serve as leader jurisdictions are influenced by the saliency of the policy intended to solve a problem.

Policy salience refers to how prominently a policy is known by the general public (Mitchell, 2018). A highly salient policy is likely to diffuse widely because it is easier to comprehend the policy and its consequences, and its effects are discussed more widely in society, allowing leader jurisdictions to be located anywhere. In contrast, a low-salience policy is more complicated, making it difficult to assess the consequences of adopting a policy. When policy saliency is low, policymakers try to emulate decisions of jurisdictions' demographic patterns, making states that are similar more likely to imitate each other (Shipan & Volden, 2012). As a result, the diffusion of a low-salience policy is often more geographically constrained to neighboring states or states that have similar demographic characteristics as leader governments (McDonald et al., 2021).

Heightened awareness of property tax burdens, a prominent levy in the United States (Cabral & Hoxby, 2012), is compounded by widespread media coverage of tax revolts, fostering a sense of national unity in the pursuit of tax reduction (Mitchell, 2018). These mounting citizen pressures prompted elected officials to seek solutions by observing strategies employed across states. California's implementation of Proposition 13 served as a catalyst for property tax TELs, inspiring confidence among other state leaders that similar policies would address citizen concerns. This propensity to emulate other states intensifies as more jurisdictions adopt property tax TELs, leading to the subsequent hypothesis:

> *H_3: The more states that adopt property tax TELs, the more likely the state of interest will also adopt a property tax TEL*

Coercion, as an external mechanism, involves one government actor compelling another to adopt a policy through incentives or force (Berry & Berry, 2018; Shipan & Volden, 2008). Past literature has applied coercion to explain cross-national policy innovation and vertical coercion within federalist systems (Berry & Berry, 2018). Larger, more powerful governments

leverage tools such as military force, economic sanctions, or financial incentives like grants to coerce smaller governments into policy adoption. Unlike horizontal mechanisms such as policy learning, competition, and imitation, coercion operates vertically, establishing a power dynamic necessary for enforcing policy adoption (Shipan & Volden, 2008).

This paper extends the concept of coercion beyond government entities to include the ability of voters to compel their government into action. Central to this mechanism is the disparity in power dynamics. Typically, state lawmakers remain somewhat insulated from the day-to-day concerns of their constituents, being primarily held accountable during elections every two to four years. Consequently, lawmakers traditionally dictate the agenda and shape public discourse.

Residents have sought to reclaim power from their state legislatures by initiating ballot measures through public support. These initiatives allow state citizens to propose and enact new legislation via popular vote (Smith, 2002), thereby wresting control of the agenda from lawmakers and compelling them to act or risk direct intervention by voters. This form of voter coercion through ballot initiatives is evident in the diffusion of property tax TELs. California voters, recognizing their ability to effect change independently of elected officials, passed Proposition 13 via a ballot initiative (Martin, 2009), followed by Massachusetts' adoption of Proposition 2 ½ through a similar process (Hale, 1993). While property tax TELs have predominantly been adopted through state statutes, the ability of residents to introduce ballot initiatives endows them with greater influence over their elected officials' actions.

Given that an elected official's primary objective is reelection, politicians strive to appear responsive to their constituents' concerns (Tavares et al., 2022). Faced with the prospect of voter-led initiatives, politicians may preemptively address these issues within the state legislature. In essence, residents can coerce elected officials into action by threatening ballot initiatives. Thus, states with more accessible processes for adding ballot initiatives annually are more likely to witness voter coercion of their governments into action, leading to the final hypothesis:

> *H_4: States that have easier access to voter-based ballot initiatives are more likely to adopt a property tax TEL.*

Model, Data, and Methodology

Building on the theoretical underpinning for exploring state decisions on property tax TEL adoptions, this study employs an event history analysis (EHA) methodology. An EHA is concerned with patterns and causes of qualitative changes (or "events") at a given point in time. The intent is to determine how a variable, or set of variables, affected the probability that an organization would transition into a new social state. For this study, the use of an EHA allows us to see how different factors influence the likelihood of imposing TELs on county governments, focusing on understanding the external mechanisms at play (McDonald & Gabrini, 2014).

Initially, EHA models focused on singular events, with subjects exiting the risk set upon experiencing the event. However, in the social sciences, especially in public finance, it's critical to account for multiple events, including the possibility of policy repeals or supersessions. This analysis treats the adoption of property tax TELs by state governments as unordered, varied events—encompassing rate, levy, and assessment limits—without dependence on previous

Table 1. State Adoption of County Property Tax TEL since 1977

State	Rate Limit	Levy Limit	Assessment Limit	State	Rate Limit	Levy Limit	Assessment Limit
AL	1978	---	---	MT	---	1987	---
AK	---	---	---	NE	1998	1978	---
AZ	1980	1980	1980	NV	1979	1983, 2005	---
AR	---	1981	2001	NH	---	---	---
CA	1978	---	1978	NJ	---	---	---
CO	1992	1992	1982	NM	1978	1979	2000
CT	---	---	---	NY	---	2011	1981
DE	---	---	---	NC	---	---	---
FL	2007	---	1995	ND	---	1981	---
GA	---	---	1983	OH	---	---	---
HI	---	---	---	OK	---	---	1996
ID	1978	1979-1992, 1995	1978-1982	OR	1991	---	1996
IL	---	1991	2003	PA	---	2006	---
IN	---	2008	---	RI	---	1985	---
IA	1989	---	1978	SC	1995	---	2006
KS	---	1999	---	SD	---	1997	---
KY	---	1979	---	TN	---	---	---
LA	---	1978	---	TX	---	1982	1997
ME	---	---	2005	UT	---	1987	---
MD	---	---	---	VT	---	---	---
MA	1980	1980	---	VA	---	---	---
MI	1994	1978	1994	WA	---	2007	---
MN	---	1998-1999, 2009-2011	---	WV	---	1990	---
MS	---	1980	---	WI	1994	2005	---
MO	---	1980	---	WY	---	---	---

Source: Lincoln Institute of Land Policy (2023).

actions. Consequently, this study employs a competing risks model alongside a time-constant regression approach, facilitating a nuanced examination through a time-constant, competing risks Cox regression model. The resulting hazard ratio reflects the probability of an event's occurrence within a specific timeframe. It is influenced by diverse factors across different years and states, serving as a dynamic measure of event likelihood (McDonald & Gabrini, 2014).

External mechanisms, as outlined in the theory section, play a crucial role in the diffusion of property tax TELs, interacting dynamically with internal factors. Berry and Berry (2018) highlight that policy decisions are influenced by a confluence of mechanisms, including governmental, economic, demographic, and political factors. Given that government organizations interact with and are shaped by their surroundings, integrating both external and internal determinants in a unified model is essential for a comprehensive analysis of adoption decisions.

Table 2. Variable Definitions and Sources

Variable	Measurement	Source
Dependent Variables		
Adoption - All	If a state adopted any of the three property tax TELs in a particular year, coded as 1 for all years TEL is present	Lincoln Institute of Land Policy
Adoption - Multiple Events	If a state adopts any of the three property tax TELs in a particular year, coded as 1 for that year ONLY	Lincoln Institute of Land Policy
Rate Limit Adoption	If a state adopted a property tax rate limit TEL in a particular year, coded as 1 for all years TEL is present	Lincoln Institute of Land Policy
Levy Limit Adoption	If a state adopted a property tax levy TEL in a particular year, coded as 1 for all years TEL is present	Lincoln Institute of Land Policy
Assessment Limit Adoption	If a state adopted a property tax assessment TEL in a particular year, coded as 1 for all years TEL is present	Lincoln Institute of Land Policy
Independent Variables		
Learning	Property tax per capita for a state in a given year	Lincoln Institute of Land Policy
Competition	The rate at which people move into a state in a given year	U.S. Census Bureau
Imitation - Neighbor	The ratio of neighboring states that have adopted a property tax TEL in a given year	---
Imitation - National	The ratio of U.S. states that have adopted a property tax TEL in a given year	---
Coercion	If a state has a mechanism for bringing voter initiatives, coded as 1 for all years present	National Conference of State Legislatures
Governmental Characteristics		
Special Districts	Number of special districts in a state	U.S. Census Bureau
Municipalities	Number of municipalities in a state	U.S. Census Bureau
Efficiency Ratio (ln)	The ratio of state total expenditures to revenue	Pierson et al. (2015)
IGR Ratio (ln)	The ratio of total IGR to state revenues	Pierson et al. (2015)
Debt Ratio (ln)	The ratio of state total debt to total assets	Pierson et al. (2015)
Economic Characteristics		
Economic Output (ln)	Gross State Product (GSP) of a state in a particular year	Bureau of Economic Analysis
Income (ln)	Median household income	Bureau of Economic Analysis
Unemployment (ln)	Percentage of the labor force who is unemployed	Bureau of Economic Analysis
Demographic Characteristics		
Population Density (ln)	Population per square mile	Centers for Disease Control and Prevention
Age 65+ (ln)	Percentage of residents that are aged 65 and over	Centers for Disease Control and Prevention
BIPOC Population (ln)	Percentage of the population identifying as Black, Indigenous, or Person of Color	Centers for Disease Control and Prevention
Female Population (ln)	Percentage of the population identifying as female	Centers for Disease Control and Prevention
Education (ln)	Percentage of the population with a bachelor's degree	Centers for Disease Control and Prevention
Political Characteristics		
Democratic Legislature	If a state's legislature is controlled by the Democratic Party, coded as 1 for that year	National Conference of State Legislatures
Democratic Governor	If a state's governorship is controlled by the Democratic Party, coded as 1 for that year	National Governors Association
Annual Budget	If a state's legislature has an annual budget session, coded as 1 for that year	National Conference of State Legislatures

Note: All values expressed in 2015 real dollars.
All continuous variables are logged.

Table 3. Descriptive Statistics

Variable	Mean	Std. Dev.	Minimum	Maximum
Dependent Variables				
Adoption - All	0.5520	0.4974	0	1
Adoption - Multiple Events	0.0280	0.1650	0	1
Rate Limit Adoption	0.2080	.04060	0	1
Levy Limit Adoption	0.3850	0.4071	0	1
Assessment Limit Adoption	0.2095	0.4071	0	1
Independent Variables				
Learning	0.0626	0.2442	0	3.7230
Competition	0.0099	0.0105	-0.0599	0.0863
Imitation - Neighbor	0.5802	0.3334	0	1
Imitation - National	0.5520	0.5001	0	0.7400
Coercion	0.5000	0.5001	0	1
Governmental Characteristics				
Special Districts	654.8875	660.8385	0	3,327
Municipalities	385.0675	319.0202	1	1,298
Efficiency Ratio (ln)	-0.0431	0.2186	-0.8104	1.9159
IGR Ratio (ln)	-1.4435	0.3200	-2.7786	0.7058
Debt Ratio (ln)	-1.2232	0.6096	-3.6797	0.6749
Economic Characteristics				
Economic Output (ln)	11.9198	1.1418	9.4784	17.0032
Income (ln)	10.9565	0.4372	7.8766	13.6312
Unemployment (ln)	-2.8635	0.3586	-4.0174	-0.1734
Demographic Characteristics				
Population Density (ln)	4.2827	1.3306	-0.5202	6.9246
Age 65+ (ln)	-2.0584	0.1804	-3.2096	-1.6162
BIPOC Population (ln)	0.8836	0.0255	0.8094	0.9697
Female Population (ln)	-2.6048	0.1901	-3.8463	-2.2140
Education (ln)	-1.5886	0.2382	-2.3539	-0.8486
Political Characteristics				
Democratic Legislature	0.4705	0.4992	0	1
Democratic Governor	0.5020	0.5001	0	1
Annual Budget	0.6200	0.4855	0	1

Note: All values expressed in 2015 real dollars.

State-level data were collected from 1977 to 2016 to estimate the EHA model and test the hypotheses. Table 1 provides an overview of state-imposed property tax TELs. Table 2 provides the variables, their definitions, and data sources used in this study. Table 3 provides the descriptive statistics of the data.

An event, the dependent variable of this study, is the adoption of a property tax TEL innovation by a state. Five different *adopted* dependent variables are calculated to analyze the three models mentioned previously. For the first model, an *adoption-all* dependent variable is created, coded as 1 for every year a state has a property tax TEL in place upon a county

government, regardless of the property tax TEL type, and coded as 0 for all other years. The second model, *adoption-multiple events,* is coded as a 1 for the year in which a state adopts any of the three property tax TELs only and coded as 0 in all other years. These two models are compared to determine which iteration of the dependent variable best captures the variance in the model. Once this is determined, three additional dependent variables are created, *adoption-rate, adoption-levy,* and *adoption-assessment,* and are dichotomously coded accordingly.

Next, the model incorporates external mechanisms from the theory section as independent variables to analyze state property tax TEL adoption. *Learning* is measured by per capita property tax revenue. *Competition* is defined by migration rates, representing the ratio of incoming and outgoing residents. *Imitation* is quantified through the variables neighbor and national, reflecting the adoption of property tax TELs by bordering states, and the overall U.S. *Coercion* is captured by a binary variable coded 1 to indicate the presence of state-wide ballot initiatives.

Results

As stated above, property tax TEL adoption was analyzed first by comparing two models, a pooled analysis and an event-specific analysis. Once the appropriate analysis model was selected, a nested model that contains all three types of property tax TELs is then analyzed. To understand which dependent variables best represent the risk regression analysis, the *adoption-all* and *adoption multiple events* models were estimated. These results are provided in Table 4.

As stated previously, when comparing time-constant, competing risk Cox regression models, the -2* log-likelihood is used to measure the model's contribution to the explanation of the duration of time until the event, in the case of TEL adoption. Since the log-likelihood runs from infinity to negative infinity, it cannot show specific amounts of variation explained but can be used to compare models. As seen in Table 4, the log-likelihood is significant in both of the models. The -2* log-likelihood of the *adoption-all* model is over 14,000 compared to the *adoption-multiple events*- 2* log-likelihood over nearly 700. This result indicates that the *adoption-all* model does a better job of explaining the effects of the covariates on adoption. As a result, the *adoption-all* dependent variable coding is used for the nested model, which includes rate limits, levy limits, and assessment limits nested within the *adoption-all* model.

Turning attention to the nested model that includes each of the different types of property tax TELs, the results are provided in Table 5. All three property tax TEL models demonstrate strong explanatory power for variance, highlighting their significance in multiple event analyses. The comprehensive *adoptions-all* model, integrating all TEL types, showcases superior performance with a -2LL over 14000, affirming its effectiveness in capturing the simultaneous impact of various external mechanisms.

Hazard ratios, indicating the impact of predictor variables on event occurrence risk, are vital for interpreting our model's results. These ratios, adjusted for all other predictors, show the effect size: a ratio above 1 suggests an increased event occurrence likelihood, below 1 indicates a reduced likelihood, and around 1 signifies minimal impact. Continuous variables' hazard ratios reflect risk changes per unit increase, while dichotomous variables compare hazard rates between groups. This information is critical for hypothesis evaluation.

As shown In Table 5, the first hypothesis on policy learning cannot be confirmed. Contrary to expectations, higher average per capita *property tax bills* decrease the likelihood of a

Table 4. Cox Regression, Adoption – All versus Adoption – Multiple Events

Variables	All	Multiple Events
Independent Variables		
Learning	0.7574*	1.4202
Competition	1,450,000.0000***	104,000,000.0000*
Imitation - Neighbor	0.8587	0.5137
Imitation - National	11.6854***	0.1801
Coercion	1.9590***	2.1861*
Governmental Characteristics		
Special Districts	1.0004***	1.0002
Municipalities	0.9990***	0.9997
Efficiency Ratio (ln)	3.7280***	2.4429
IGR Ratio (ln)	1.0559	0.4434
Debt Ratio (ln)	0.8316***	0.74345
Economic Characteristics		
Economic Output (ln)	1.8166***	2.0729*
Income (ln)	0.4505***	0.0851***
Unemployment (ln)	1.4736***	1.0100
Demographic Characteristics		
Population Density (ln)	0.6350***	0.6999
Age 65+ (ln)	0.0154*	6.9662
BIPOC Population (ln)	226.4539*	7.8960
Female Population (ln)	681.7920***	1.0212
Education (ln)	0.9909	1.745
Political Characteristics		
Democratic Legislative	1.0977	1.1985
Democratic Governorship	0.8432***	0.7100
Annual Budget	3.3159***	2.9952***
Significance		
-2LL	14,206.5734***	696.1490

Note: *p < .10. **p < .05. ***p < .01.

state adopting a property tax TEL, possibly due to potential revenue shortfalls. If the governments in a state rely more heavily on property tax revenue, they may be less likely to adopt a property tax TEL because of the shortfall in revenue it may cause.

The second hypothesis focuses on competition mechanisms via the state's *migration rate*. The results show that a one percent decrease in migration increases the probability of adopting a property tax TEL by 14,500,000 times, assuming all other factors remain constant. This assumption is theoretical, as isolating variables is impractical. This hazard ratio underscores the substantial effect of migration rate on property tax TEL adoption despite the migration rate ranging from 0.0863 to -0.0598.

The third hypothesis, examining imitation through *imitation-national*, finds strong support, indicating a state's increasing likelihood to adopt a property tax TEL with each percentage point increase in adoption among states. *Imitation-national* is notably significant, contrasting with the nonsignificant *imitation-neighbor*, underscoring the saliency of property tax

Table 5. Cox Regression Results

Variables	Rate Limit Adoption	Levy Limit Adoption	Assessment Limit Adoption	All Adoptions
Independent Variables				
Learning	0.2439***	0.7253*	0.7030*	0.7574*
Competition	2,350,000.0***	402,000,000.0***	432,000,000.0***	1,450,000.0***
Imitation - Neighbor	0.6902	0.8192	0.6199*	0.8587
Imitation - National	5.6604***	23.2152***	18.9963***	11.6854***
Coercion	1.0190	2.4247***	1.1677	1.9590***
Governmental Characteristics				
Special Districts	1.0005***	1.0007***	1.0000	1.0004***
Municipalities	0.9959***	0.9993**	0.9987***	0.9990***
Efficiency Ratio (ln)	14.9611***	0.9529	4.3497***	3.7280***
IRG Ratio (ln)	0.6628**	1.3025	9.5150***	1.0559
Debt Ratio (ln)	0.6537***	0.9795	0.1114***	0.8316***
Economic Characteristics				
Economic Output (ln)	4.4104***	1.0409	9.5150***	1.8166***
Income (ln)	0.1734***	0.8424	0.1114***	0.4505***
Unemployment (ln)	1.9480***	1.5890***	2.3016***	1.4736***
Demographic Characteristics				
Population Density (ln)	0.4519***	0.8339***	0.1908***	0.6350***
Age 65 + (ln)	1.1708	0.0344	0.0086	0.0154*
BIPOC Population (ln)	0.0000144*	2908.0530*	0.0000***	226.4539
Female Population (ln)	1.1346	171.5348**	46.3244	681.7920***
Education (ln)	1.6266*	0.7491	3.3035***	0.9909
Political Characteristics				
Democratic Legislature	0.9641	1.1051	1.2409*	1.1985
Democratic Governor	0.8081*	0.7990**	1.2854***	0.7100***
Annual Budget	7.3582***	2.7090***	13.04859***	2.9952***
Significance				
-2LL	4910.2848***	9912.4702***	4985.2512***	14206.5734***

Note: All values expressed in 2015 real dollars
*p < .10. **p < .05. ***p < .01.

TELs for widespread imitation rather than proximity-based adoption, thus affirming the hypothesis.

While not significant in two of the three specific TEL models, the presence of a ballot initiative is significant in the pooled model and the hypothesized direction, confirming hypothesis four regarding coercion. Since ballot initiatives are dichotomous variables, the results indicate that the presence of a ballot initiative increases the odds that adoption will occur compared to states without public ballot initiatives.

Attention is next turned to the control variables. Based on the results, governmental control variables like *special districts* and *municipalities*, though statistically significant, have minimal impact on property tax TEL adoption. Fiscal health indicators show that an increase in the efficiency ratio boosts the likelihood of TEL adoption, reflecting that more efficient

governments tend to adopt TELs. In contrast, a higher debt ratio reduces adoption chances due to increased revenue needs for debt repayment. The *IGR ratio'*s insignificance suggests it does not influence TEL adoption.

All three economic control variables were statistically significant. An increase in the economic output and unemployment rate both appear to make property tax TEL adoption more likely for a state. On the other hand, an increase in the median household income appears to decrease the likelihood of TEL adoption. As household income increases, so does the tax revenue that the government collects from this household, making governments more hesitant to implement property tax TELs and cap their increasing revenues.

Demographic characteristics of population density, the proportion of the population ages 65 and up, and the female population are significant in the nested model. Increases in population density and age 65 and up population decrease the likelihood of property tax TEL adoption. The significance of the portion of the population ages 65 and up tracks with the reasons TELs were adopted in the first place: to protect residents on fixed incomes. Further, as population density increases, local governments also grow to meet demands. As such, more revenue is needed to fund this growth. An increase in the female population also increases the likelihood of adoption.

Finally, the political characteristics of a democratic governorship and annual legislative budget session are statistically significant. The presence of a Democratic governor makes it less likely that a state adopts a property tax TEL. This aligns with the expectations of current political parties and the assumption that Democrats are more likely to support taxes. States that have an annual legislative budget session are more likely to adopt a property tax TEL than states that do not have annual budget sessions.

Conclusion

This study contributes to the public finance discourse by showcasing event history analysis in examining property tax TEL adoption, marking a shift from its traditional applications toward addressing fiscal policy dynamics. By utilizing a time-constant, competing risk Cox regression model, this work not only sheds light on the intricacies of property tax TELs but also equips future scholars with robust analytical tools for fiscal policy evaluation.

This study underscores the critical role of both external and internal fiscal factors in shaping policy outcomes. The significance of external factors on fiscal decisions underscores the intricate relationship between taxation policies and state fiscal health. This insight is pivotal for public administrators and finance professionals, emphasizing the need for nuanced fiscal strategies that consider broader economic and demographic trends.

Furthermore, the significant role of national diffusion over neighborly diffusion redefines our understanding of fiscal policy saliency and its implications for nationwide fiscal legislation trends. The examination of coercive diffusion through public ballot initiatives presents a novel perspective on citizen engagement in fiscal policy-making, challenging traditional notions of governmental authority and highlighting the power of direct democracy in shaping fiscal policies. In closing, this research advances the field of public budgeting and finance by dissecting the complex factors influencing property tax TEL adoption, offering valuable insights for both policymakers and practitioners in devising effective fiscal policies and enhancing governmental fiscal health.

Disclosure Statement

The author declares that there are no conflicts of interest that relate to the research, authorship, or publication of this article.

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