A Room For One's Own: The Partisan Allocation of Affordable Housing *

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Abstract

Millions of Americans live in communities without an adequate supply of affordable housing. The governmental response to the crisis has focused on subsidies to private developers who build below–market housing, with the Low-Income Housing Tax Credit at the center of this effort. Although federally funded, the LIHTC program grants states wide latitude in distributing billions of dollars of tax credits annually. Do state officials exploit this discretion to channel housing subsidies to geographic constituencies for political ends? Drawing on 20 years of LIHTC administrative data, I test whether electoral support for the state's governing party predicts the level of tax credit investment directed to an area. The analysis reveals a modest relationship between partisan loyalty and housing investment, conditional on the partisan and institutional contexts. Democratic governors steer tax credits to areas of core support, but only where the governor exercises a high-level of control over the state's LIHTC–allocating agency.

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The United States faces a critical shortage of affordable housing. In 73 of the 100 largest metro areas, more than a quarter of renters are severely cost–burdened, spending more than half their incomes on rent and utilities (Joint Center for Housing Studies of Harvard University 2011). Although the crisis poses an acute challenge for low–income and urban households, affordability problems increasingly extend up the income scale, and to metro and non–metro areas alike. In addition to the burden on individual households (Heintze et al. 2006; Mueller and Tighe 2007), the lack of affordable housing also impedes state and local efforts to stabilize neighborhoods and maintain a flexible labor force (Lipman 2006; Dreier, Mollenkopf and Swanstrom 2004). A key component of the governmental response to the affordability crisis has been subsidies for the production of new affordable housing, with the federal Low–Income Housing Tax Credit (LIHTC) program at the center of this effort. The program, which provides tax credits to private developers who build or substantially rehabilitate affordable housing, now accounts for most of the subsidized housing development in the country.

The LIHTC program, while funded through the income tax system, is notable for the limited federal role in its administration. Responsibility for the distribution and monitoring of the tax credits falls entirely to the states, with each state allotted tax credit authority based on population size. State officials, operating through the state's housing finance agency and guided by local housing priorities, enjoy wide latitude in deciding where to invest LIHTC subsidies, and typically receive more requests for subsidies than they have federal allotments (National Council of State Housing Agencies 2010). These conditions enable variation across states in the administration of the LIHTC program, and raise the prospect that LIHTC allocations, an ostensibly non–political instrument of federal housing policy, nonetheless may be shaped by the local political process.

State control over the distribution of tax credits presents an opportunity for the state's governing political party, whose appointees oversee the housing finance agency, to channel affordable housing development to geographic constituencies for political ends. A large

literature on distributive politics has repeatedly affirmed the basic truth in the adage 'to the victor belong the spoils,' documenting the general tendency of the majority party to skew public funds toward areas of core electoral support (Cox 2009). The partisan allocation of resources can be a mechanism for rewarding loyal voters, mobilizing them for future elections, and maximizing opportunities for credit–claiming. While empirical research on the LIHTC program has highlighted the socio–economic determinants of allocation decisions (Buron et al. 2000; Dawkins 2011; Freeman 2004; Lang 2012), the tax credits, like other forms of discretionary public spending, also may be distributed with partisan politics in mind.

This article examines the relationship between party control of the governor's office, voter preferences, and the distribution of tax credits for affordable housing development in counties from 1990 to 2010. I test whether electoral support for the governing party predicts the level of tax credit investment directed to an area: Does partisan loyalty beget more investment? Understanding the role of politics in the administration of the LIHTC program is important as it is one way of assessing the efficacy of what has become the primary mechanism for expanding the supply of affordable housing. To my knowledge, only one study has considered partisan influences on states' administration of the LIHTC program. Eriksen and Rosenthal (2010) find that counties voting for the sitting governor receive a greater than average share of state LIHTC subsidies. This article tests more fully the partisan dimension of LIHTC allocations, with richer data on voter preferences and attention to the possibility that Democratic and Republican governors face different incentives with respect to investments in affordable housing.

The analysis draws on 20 years of administrative data from the LIHTC program, documenting the geographic distribution of tax credits issued since 1990, together with gubernatorial election returns over the same period. The results uncover a relationship between partisan loyalty and the level of LIHTC investment in an area, conditional on which party holds the governor's office. Under Democratic governors, greater electoral support in an area leads to more tax credit allocations during the governor's term, but the effect is modest in

size and dependent on a high level of gubernatorial control over the state's LIHTC–allocating agency. Under Republican governors, there is no evidence that voter preferences affect allocation decisions at all; Republicans do not direct more housing subsidies to areas of core electoral support, regardless of how much control the governor exerts over the housing finance agency. The mixed results may speak to differences in the willingness of Republican and Democratic governors to engage in distributive politics around the LIHTC program, given differences in preferences for subsidized housing among their parties' primary supporters. If Republican voters are less likely to benefit from (or support) this type of government spending, then Republican governors would face little incentive to use their political influence to steer spending to Republican areas. Democratic governors, whose constituents are more supportive of spending on affordable housing, may perceive greater benefit from the strategic use of LIHTC subsidies. Nonetheless, even Democratic governors tinker only at the margins.

This result contributes to our understanding of the governmental response to the nation's affordability crisis, and encourages a sanguine view of the trade offs involved in a program that devolves power to the states. On the one hand, the minimal federal role in the LIHTC program enables state governments to develop housing strategies responsive to local needs. On the other hand, the program's structure is arguably conducive to political manipulation. In reality, strategic targeting is limited. Governors do not use their influence over the state allocation process to dramatically alter the flow of tax credits to counties based on voter characteristics. While counties can steer a few more tax credits their way by helping to elect Democratic governors, the main drivers of affordable housing investment remain universalistic criteria, such as poverty rates.

Tax Credits and The Devolution of Housing Policy

The struggle to provide affordable housing is decades–old, and has spawned a range of programs offering subsidies to close the gap between what it costs to supply housing

and what individuals can afford to pay (Schwartz 2010). The Low–Income Housing Tax Credit program is an important element in that policy portfolio. Congress established the LIHTC as part of the 1986 Tax Reform Act and, buoyed by its early success and eager to lift uncertainty that depressed investor interest, made the program permanent in 1993. The LIHTC incentivizes private development of affordable housing by allowing investors to reduce their federal income taxes by $1 for every dollar of tax credit received, with the amount of the tax credit dependent on the cost, location and projected occupancy (by low–income households) of the housing development. When the program was introduced, with broad bipartisan support, it represented a departure from an historical approach that had relied heavily on direct public funding and management of affordable housing inventory. What began as a modest item in the Internal Revenue Code has evolved over time into the nation's single largest subsidy for affordable housing, replacing nearly all previous tax incentives for investing in rental housing of any kind. The LIHTC is widely considered one of the nation's most successful housing programs, and accounts for an estimated one–sixth of all multifamily housing—subsidized or unsubsidized—built in the U.S. since program inception (Schwartz 2010).

Unlike other tax breaks associated with real estate, the housing tax credits are not awarded automatically. Rather, authority to issue tax credits is allotted to states on an annual basis; the total dollar amount of credits available is determined by state population.[1] Developers must apply to designated state agencies (ordinarily, the state's housing finance agency) for credits, which are then awarded on a competitive basis. Demand for housing tax credits has been strong, with requests typically outnumbering available credits—at times, by as much as four–to–one (National Council of State Housing Agencies 2010; Shelburne 2008).[2] The housing finance agencies who oversee the allocation process evaluate proposed

[1]The initial credit allocation amount was $1.25 per capita. The allocation was increased to $1.50 in 2001, to $1.75 in 2002 and 2003, and indexed for inflation annually thereafter. The initial minimum tax credit ceiling for small states was $2,000,000, and was indexed for inflation annually after 2003. For 2013, states could allocate $2.25 per capita in tax credits, with a small state minimum of $2,590,000.

[2]Demand for credits declined sharply during the financial crisis, as the most active investors in the tax credits (large financial institutions bound by the requirements of the Community Reinvestment Act) pulled

developments on the basis of each state's Qualified Allocation Plan (QAP), an annual policy document setting out the state's housing priorities and selection criteria. Successful applicants to the LIHTC program receive a 10–year stream of tax credits, which then can be sold to investors (typically, large financial institutions) to raise equity for the approved construction or rehabilitation projects. By using the awarded credits to leverage private capital, developers are able to borrow less than they would have otherwise and to charge lower rents as a result.[3] As of 2011, the LIHTC program has funded the development of over 2.3 million units of affordable housing, contributing significantly to governmental efforts to address the affordability crisis.[4]

The devolution of administrative authority for the LIHTC to the states is not unusual for a program with roots in the Reagan era. In fact, the flexibility afforded to states to tailor the tax credit program to meet evolving local needs accounts for at least some of its bipartisan appeal. Yet it is also state authority over LIHTC that provides the potential for political manipulation. In a review of the governance structure of the LIHTC–allocating agency in each state, I find that the agencies are governed by boards of directors composed largely of members appointed by the governor.[5] As documented in Figure 1, in one–third of the states, the governor appoints every member of the board; in all but six states, more than half the

out of the market. Desai, Dharmapala and Singhal (2010) report that 'prior to the crisis, $1 of tax credits traded at an undiscounted price of nearly $0.90; by early 2009, the corresponding price had fallen below $0.70' (p.191).

[3]Developments subsidized through the LIHTC are required to remain affordable for a period of 15–30 years, at the end of which development owners are no longer bound by program restrictions and are permitted to convert units to market–rate status. A recent study of LIHTC properties reaching the end of their affordability period found that the vast majority remained affordable despite the absence of program restrictions (Khadduri et al. 2012).

[4]In a number of recent studies, housing development subsidized through the LIHTC program has been linked to a variety of positive spillovers beyond improvements in housing affordability. New construction and preservation programs, when well–designed and properly sited, have been shown to produce higher quality affordable housing (Eriksen 2009); raise property values in previously declining areas (Baum-Snow and Marion 2009); (Schwartz et al. 2006); reduce rates of violent crime (Freedman and Owens 2011); decrease neighborhood economic inequality (Freedman and McGavock 2013); and contribute to long term decline in poverty concentration and racial segregation (Ellen, O'Regan and Voicu 2009; Horn and O'Regan 2011). The positive spillovers associated with LIHTC subsidies may enhance their value as patronage goods.

[5]In addition to the 50 state housing finance agencies, there are also local allocating agencies for the District of Columbia, City of Chicago, and City of New York. My review focused on the 50 state agencies overseeing the LIHTC program.

members are gubernatorial appointees. Moreover, Gustafson and Walker (2002), in a multi–year study of state QAPs, conclude that there are 'no statistically significant relationships' between a state's actual housing needs, as measured by a variety of census indicators, and the annual QAP preferences and set–asides that guide the state's LIHTC allocation decisions (22).[6] The implication is that considerations other than statewide housing conditions drive state policy. The question that arises is how much decisions about where to direct housing subsidies reflect the political needs of incumbent governors. Given LIHTC's administrative structure, the opportunity exists to treat voter characteristics in the receiving area as a determining factor.

The Political Allocation of Housing Tax Credits

The notion that housing tax credits may be allocated in a manner that serves a governor's political goals finds precedent in the literature on distributive politics. There is substantial, cross–national evidence that policymaking within the realm of distributive policy—where political decisions concentrate benefits in specific geographic areas, while spreading costs through generalized taxation (Weingast, Shepsle and Johnsen 1981)—is often shaped by partisan considerations (Ansolabehere and Snyder 2006; Arulampalam et al. 2009; Berry, Burden and Howell 2010; Calvo and Murillo 2004; Cox 2009; Dahlberg and Johansson 2002; Golden and Picci 2008; Kramon and Posner 2013; Larcinese, Rizzo and Testa 2006; Levitt and Snyder 1995; Owens and Yuen 2012).[7] This pattern may be motivated as much by electoral incentives as it is by policy preferences.

For politicians mainly interested in winning elections, allocating larger shares of distribu-

[6]Gustafson and Walker (2002) did, however, find significant relationships between QAP preferences and set–asides, on the one hand, and the characteristics of the LIHTC properties developed, on the other. They note that QAPs were particularly effective at promoting 'development activities that went against industry trends such as new construction, rehabilitation, QCT [qualified census tract], and DDA [difficult development area] development' (34).

[7]Scholars disagree on whether parties and incumbents favor core voters or swing voters. Studies conducted in the (low–turnout) American context more often find support for the 'core voter' model, while support for the 'swing voter' model comes mainly from studies conducted outside of the United States(Larcinese, Snyder and Testa 2013).

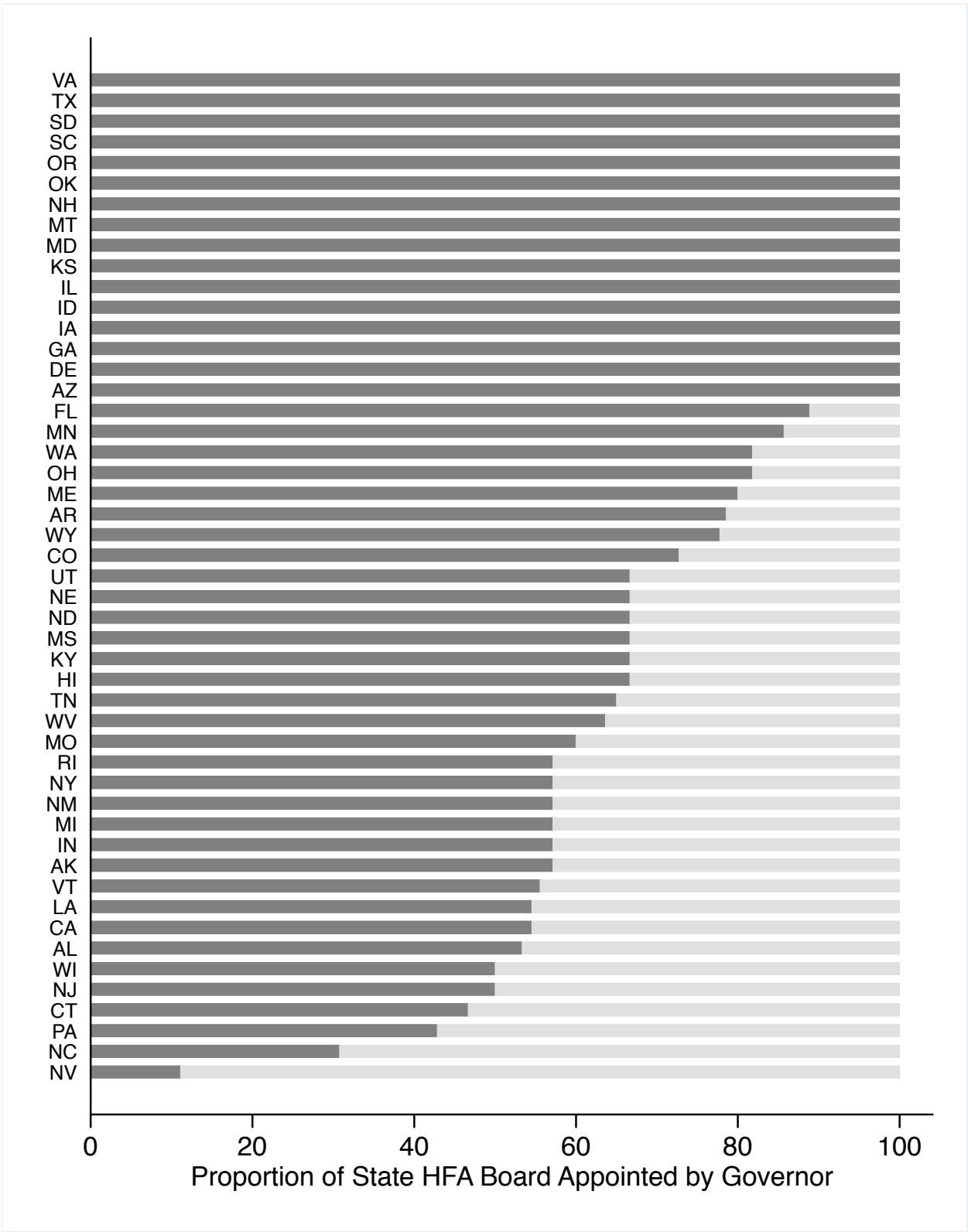


Figure 1: Gubernatorial Appointments to State Housing Finance Agency Boards: Graph reports the proportion of board seats filled by gubernatorial appointees. Data assembled from review of governance structure of the LIHTC–allocating agency in each state, as listed here: `http://lihtc.huduser.org/agency_list.htm`. Massachusetts not included due to missing data.

tive goods to geographic areas dominated by co–partisans can be rational as a strategy for mobilizing voters and maximizing opportunities for credit–claiming. As Larcinese, Snyder and Testa (2013) explain, spending may induce higher turnout 'either directly as a form of advertising or retrospective voting, or indirectly by buying the support of local elites or groups who engage in get–out–the–vote efforts' (850). The marginal benefit, in terms of net votes, to spending will be greatest in areas with a high concentration of party supporters. Additionally, where there are more party supporters, there will be more politicians of the same party, whose voices will amplify the partisan message about who is responsible for the area's good fortune (Kriner and Reeves 2012). While the empirical literature on the politics of distributive spending *within* American states is comparatively thin—most studies examine patterns of national spending—Ansolabehere and Snyder (2006), using the case of intergovernmental cash transfers, demonstrate not only that state governing parties channel local aid to counties that provide them with the highest vote shares, but also that these counties go on to have higher voter turnout rates. Governors may face strong incentives to exploit the flexibility of the LIHTC program, and the often high demand for tax credits, in the hopes of similar electoral gain. This intuition leads to the first hypothesis:

> *Hypothesis 1:* As vote share for the incumbent governor increases, the level of LIHTC investment in an area will increase.

A policy oriented politician may also target distributive spending to core areas, if the benefits tend to flow to party supporters. Bickers and Stein (2000) and others argue that Democratic and Republican politicians differ sharply in their preferences for (and the electoral gains expected from) different types of public spending (Alvarez and Saving 1997; Cann and Sidman 2011; Lazarus and Reilly 2010; Sellers 1997). Specifically, Democratic politicians prefer to spend on programs that tend to benefit (and, thus, are viewed favorably by) Democratic constituencies; Republican politicians prefer to spend on programs that benefit Republican voters. Whether areas with a high density of core voters receive a disproportionate share of distributive benefits may depend on how well those benefits align with

constituency interests. As Kramon and Posner (2013) observe, in their cross–national review of the distributive politics literature, politicians rarely use every distributive lever at their disposal; rather, they are selective when deciding which public goods to target at their core supporters. In the case of tax credits for affordable housing development, it may be Democratic politicians in particular who channel credits to heavily Democratic areas. Affordable housing may not be the type of targetable good that Republicans choose to distribute for political advantage. Thus, the second hypothesis is as follows:

> *Hypothesis 2:* As vote share for the incumbent governor increases, the level of LIHTC investment in an area will increase, if the governor is a Democrat. Incumbent vote share will not affect the level of LIHTC investment, if the governor is a Republican.

Models of distributive politics provide compelling logic for the strategic allocation of housing tax credits. Moreover, the administrative structure of the LIHTC program, and the high demand for credits, should facilitate such strategic behavior. Do governors exploit their political influence over the LIHTC program to systematically direct more tax credits to core areas? And, if they do, are Democratic and Republican governors equally likely to engage in this behavior? Or, is it only policy oriented Democrats, whose core supporters tend to benefit from investments in affordable housing, who steer subsidies to areas where supporters are highly concentrated? By linking geographic data on the allocation of tax credits with electoral data, this article identifies the extent to which partisan politics shapes LIHTC allocation decisions. I turn next to an explanation of the data.

Empirical Approach

Measures

To examine partisan influences on LIHTC allocation decisions, I draw principally on a database maintained by the Department of Housing and Urban Development documenting

the geographic distribution of tax credits awarded since 1987.[8] Specifically, the database tracks every affordable housing development approved for construction or rehabilitation using LIHTC subsidies. The database is assembled from program filings submitted annually by state housing finance agencies, and provides rich detail on the allocation history of tax credit–funded projects—when the tax credits were awarded; the identity of the developer; the number of individual housing units included in the project; and, if completed, when the project was placed in service. The database also includes the addresses for the housing developments, which permits me to map the spatial distribution of LIHTC–supported projects in every state. I have usable data on 34,707 of the 36,364 LIHTC projects to which tax credits were allocated between 1987 and 2010. The projects house approximately 2.1 million units, spread across 2,686 counties, 50 states and the District of Columbia.[9]

Using the timing and location information available in HUD's LIHTC database, I construct a panel dataset that tracks by county and year the number of tax–credit funded housing developments (and associated housing units) allocated by each state's housing finance agency. I focus on counties as the geographic unit of analysis for several reasons. First, with an average of 64 counties per state, there is sufficient within state variation to permit meaningful analysis. Counties have the additional advantage of being logical units of government that provide natural, and relatively stable, boundaries for understanding the landscape of a state and for tracking changes over time. In fact, state QAPs often use counties to identify priority areas for housing investment (Gustafson and Walker 2002; Shelburne 2008). Moreover, county statistics reflect the kind of information that a statewide office holder can be reasonably expected to possess—and, therefore, to use in decision–making (Martin 2003). Governors, for example, are likely to know about variation in partisan support at the county level.[10] The chief limitation of a county–level analysis, however, is that, if governors target

[8]This analysis uses the July 2012 version of the 'HUD National Low Income Housing Tax Credit (LIHTC) Database, 1987-2010,' which is downloadable here: `http://lihtc.huduser.org/`.

[9]Excluded from the analysis dataset are projects in Puerto Rico, Guam and the U.S. Virgin Islands; projects missing data on the allocation year; and projects missing geographic identifiers. Of the 34,707 projects with usable data, 644 have incomplete data on the number of housing units.

[10]The esimation strategy pursued here, which idenitifies the effect of partisanship based on within area

core voters more narrowly, counties may be too large to identify the relationships of interest.

I measure LIHTC allocations by the number of individual housing units funded, rather than by the dollar value of the awarded tax credits. HUD's data on tax credit dollar values are incomplete, with high levels of missingness from most states. Because the size of the tax credit award is based in part on the scale of the proposed development—the more affordable units constructed or rehabilitated, the larger the subsidy—the number of units provides a good indication for the level of tax–credit investment targeted to an area (Schwartz 2010).[11] Furthermore, in order to improve the comparability of the measure across counties, which vary substantially in population size, I calculate the number of tax credit units per 10,000 county residents.

Figure 2 depicts the tax credit data on which this analysis is based. The graph plots, by year, the distribution of the county–level measure of LIHTC investment (shaded bars, left–axis), as well as the total number of tax–credit units allocated nationally (black line, right–axis). By the end of the 1990s, the first full decade of the LIHTC program, counties on average housed 31.9 tax credit units per 10,000 residents. By 2010, when the total number of LIHTC–funded units had reached 2.1 million, counties on average housed 52.3 affordable units per 10,000 residents, a 64% increase over the previous decade. Even when scaled to population, there is considerable geographic variation in the density of LIHTC–funded housing. The between–county standard deviation over the period averaged 31.8 tax credit units per 10,000; the within–county standard deviation in LIHTC investment averaged 23.2. As described more fully below, the empirical analysis will focus on within county changes

changes in voter preferences and LIHTC investment, requires a large sample and stable geographic units. While data on tax–credit allocations can be compiled at a variety of geographic levels (e.g. census tract, municipality), the available national data on voter preferences over time are more limited. With the exception of county data, fine–grained electoral statistics are available for only some states and years—thus limiting the generalizability of results derived from such samples—or at the level of political jurisdictions (e.g. polling precinct or legislative district) whose boundaries are either unstable over time or have no straightforward relationship to census geographies.

[11] The number of units also is preferable to the number of projects. The size of LIHTC–subsidized housing developments varies substantially. A quarter of the projects funded between 1987 and 2010 had fewer than 20 units; another quarter included over 80 units, with more than half of those developments housing hundreds of units. The variation in project size makes the number of projects an imprecise measure of the scale of LIHTC investment in an area.

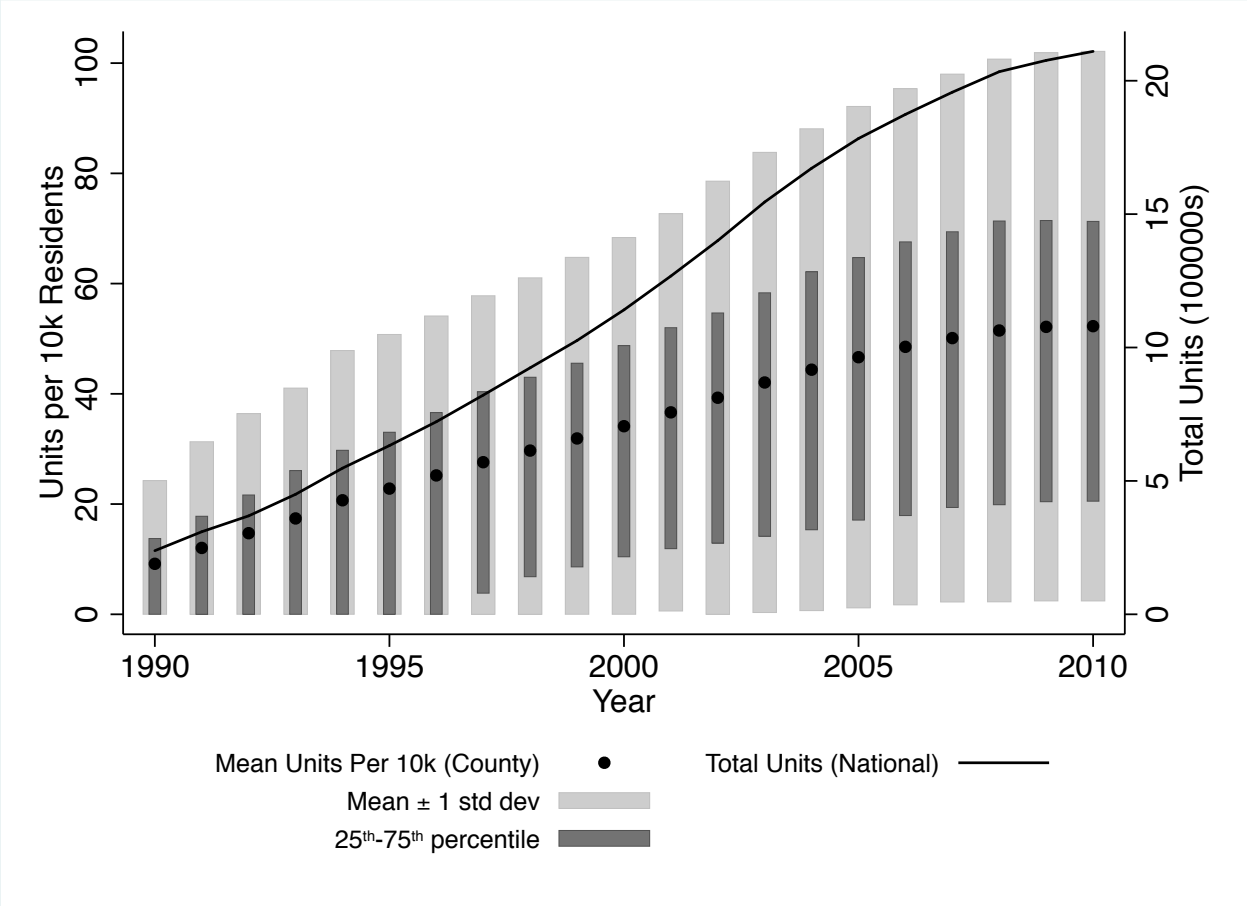


Figure 2: LIHTC Units, 1990-2010: Graph reports the growth in the total stock of tax credit units nationally (black line, right axis), and the annual county–level mean number of tax credit units per 10,000 residents (black dots, left axis). The shaded bars depict the county-level variation in the rate of tax–credit development.

in LIHTC density, linking these changes to antecedent changes in support for the governing party.

I merge the tax credit data to political data measuring county partisanship and party control of the governor's office at the time the tax credits were awarded. The political data are assembled from the *CQ Press Voting and Elections Collections*, and cover the period 1990-2010. I define a state as under Democratic [Republican] control in each year of the four–year term of a Democratic [Republican] governor. I calculate county partisanship as the Democratic share of the two–party gubernatorial vote in the most recent election.

Finally, the analysis draws on demographic data from the 1990, 2000 and 2010 Census,

and the 2006–2010 American Community Survey (ACS). The census and ACS data measure county socio–economic conditions that may influence levels of both Democratic voting and tax credit investment, including county population size and age distribution; poverty rates and household incomes; racial composition; and housing affordability.[12] Appendix Table A1 provides descriptive statistics for the full set of demographic and political variables used in the analysis.

Methodology

Theory predicts an interaction between county partisanship and party control, such that the more Democratic a county, the more LIHTC allocations it should receive when the state is under Democratic control; if the relationship is symmetrical, as Hypothesis 1 predicts, a more Republican county should benefit when the state is under Republican control. Because tax credit allocations may change incrementally, and the influence of county partisanship may not be evident in any single year, I focus on the county's LIHTC–housing density at the end of a four–year gubernatorial term. For each county, the analysis data consists of one observation per term.[13]

I exploit the longitudinal nature of the data to model the relationship between county partisanship, party control, and LIHTC investment using county–level fixed–effects. This strategy relies on *within*–county variation over time to estimate the relationship of interest. The virtue of within–county comparisons is that they are not susceptible to bias or unmeasured confounding due to omitted, time–invariant covariates. In effect, each county serves as its own control, which facilitates causal inference.

The baseline estimation model for LIHTC investment in county i in state s at time t takes the following form:

[12] I use linear interpolation for population size, racial composition, proportion 65 and proportion under 18 in the inter-census years. I use Census 1990 figures for income for the period 1990–1999; Census 2000, for the period 2000–2005; the ACS, for the period 2006–2010.

[13] Sixty–five percent of counties have data for 5 gubernatorial terms. Excluded from the sample are New Hampshire and Vermont which hold gubernatorial elections every two years; for the analysis, the periodicity of gubernatorial elections had to be constant at four years.

$$LIHTCunits_{ist} = \alpha_{is} + \lambda_t + \zeta_{st} + \gamma D_{st} + \rho_1 DemVote_{ist} + \rho_2 D_{st} DemVote_{ist} + X'_{ist}\beta + \epsilon_{ist},$$

where α_{is} is the county fixed effect; λ_t is the year fixed effect; ζ_{st} is the state–year fixed effect; D_{st} is an indicator variable equal to 1 if the governor is a Democrat, 0 if the governor is a Republican; and X_{ist} is a vector of time-varying covariates. The year fixed effects capture short–term variations and trends in tax credit allocations affecting all counties similarly, e.g. the weak market for credits during the financial crisis. The state–year fixed effects capture the influence of state policies, e.g. the needs outlined in each state's annual qualified allocation plan, on LIHTC allocations, as well as changes in those policies. In order to measure the direction in which the governing party skews funds I include the interaction between which party holds the governor's office (D_{st}) and county partisanship ($DemVote_{ist}$); this specification allows for different slopes on Democratic vote share for Republican and Democratic governors. The estimated coefficient ρ_1 represents the average within-county relationship between Democratic vote share (in the most recent election) and LIHTC allocations under a Republican governor. The sum of ρ_1 and ρ_2 represents the effect of Democratic vote share on LIHTC allocations under a Democratic governor. The baseline model includes county population as a covariate.[14] While housing demand, and developer capacity, may grow with county population, there can be lags in adjusting LIHTC allocations to population shifts. For example, land pressures due to population growth can limit the availability of suitable sites for development. The density of LIHTC investment (tax credit units per 10,000 residents) may decline as a result.

The fixed–effects approach requires sufficient within–county variability, particularly on the predictor, to obtain reliable estimates; the standard error of a coefficient for a predic-

[14] I take the log of county population in order to reduce the effect of outlier counties.

tor that varies little within county will be large because estimation is based solely on the within–county variability. A variance decomposition reveals that while tax credit density, as measured by LIHTC units per 10,000 county residents, varies more between counties (76% of the total variance) than within counties, nearly half of the variance in Democratic vote share (49%) is within–county. This should allow for a reasonably precise coefficient estimate.

Results

The Effect of Party on LIHTC Allocations

The analysis begins with the baseline model predicting LIHTC allocations as a function of county partisanship and party control of the governor's office, controlling only for county population size. The key tests of the partisan allocation argument are whether the coefficient on Democratic vote share is positive and significant for Democratic governors; for Republican governors, the coefficient should be either negative and significant (Hypothesis 1), or indistinguishable from 0 (Hypothesis 2). If governors of both parties face similar strategic incentives to skew LIHTC awards to loyal voters, then the coefficient on Democratic vote share for Republican governors should be negative and significant. If, however, it is only policy–oriented Democrats who channel credits to core areas, as affordable housing investment tends to benefit Democratic constituencies, the coefficient on Democratic vote share for Republican governors may be indistinguishable from 0.

Column one in Table 1 reports results from a fixed–effects model estimated with robust standard errors adjusted for heteroskedasticity and clusters at the county–level. As predicted by the partisan allocation argument, the coefficient on Democratic vote share under Democratic governors is positive and strongly significant ($.32 \pm .05$). However, the vote share coefficient is also positive and significant for Republican governors ($.19 \pm .06$). Regardless of party control, counties receive more credits as Democratic voting increases. The distribution of credits to more Democratic counties may occur at a higher rate under Demo-

cratic governors than under Republican governors (note the larger regression coefficient). But the baseline model offers little support for the idea that a governor's core voters are systematically favored in LIHTC allocation decisions.

Absent from the baseline model is attention to a variety of demographic and socioeconomic factors that influence tax credit allocations. For example, states' annual QAPs often put a priority on providing affordable housing to special populations, such as the lowest–income households, the elderly, and families with children, as well as to areas where the housing crunch is particularly acute (Gustafson and Walker 2002; Shelburne 2008). Such factors may be correlated with Democratic voting in ways that could make the initial analysis misleading. It may not be voters' partisan characteristics per se that determine the level of housing investment, as the baseline results would lead us to believe, but rather the socioeconomic circumstances of voters who also happen to be Democratic.[15]

With that in mind, I add a range of demographic and socioeconomic variables to the baseline model. The expanded model controls for the proportions of the county population over 65 and under 18; the (logged) median household income; and, as measures of housing affordability, median rent and median homeowner costs as a percentage of household income. Prior empirical research on the spatial distribution of LIHTC developments has found that units are located disproportionately in minority areas (Dawkins 2011; Rohe and Freeman 2001); the model, therefore, also includes proportion black among the covariates.[16]

I also construct a county–level measure that captures the financial incentives developers have to build or rehabilitate affordable housing in the most impoverished places (Hollar and Usowski 2007). Since passage of the Omnibus Reconciliation Act of 1989, LIHTC program guidelines have provided for a 30% tax–credit bonus to developments sited in the lowest income areas, termed 'Qualified Census Tracts'. The purpose of the QCT designation

[15]Of course, if Democratic administrations are using these demographic indicators to target core supporters, then including them may understate the importance of Democratic vote share on LIHTC allocations. The full model with covariates can be viewed as providing the more conservative estimate of the effect of county partisanship.

[16]When including the demographic covariates in the model, I use their values at the start of the gubernatorial term, prior to the distribution of new tax credit units.

Dep Var: Allocated LIHTC Units per 10k County Residents	(1)	(2)
Dem Governor	-9.35*	-7.77
	(2.60)	(4.02)
Dem Vote (*if* Dem Governor)	0.32*	0.23*
	(0.05)	(0.05)
Dem Vote (*if* Rep Governor)	0.19*	0.07
	(0.06)	(0.05)
Ln(Population Size)	0.07	2.97
	(4.44)	(5.14)
Ln(Median HH Income)		-18.48*
		(5.00)
Prop Black		108.42*
		(37.12)
Prop $\geq$ 65 years old		-164.53*
		(40.34)
Prop $\leq$ 18 years old		148.26*
		(44.27)
Rent Share of HH Income		-8.02
		(19.40)
Owner Share of HH Income		-9.93
		(27.62)
Post–CRTRA		9.32*
		(3.59)
Prop. High–Poverty Tracts		-6.09
		(3.65)
CRTRA * Prop. High–Poverty Tracts		32.03*
		(6.27)
Intercept	13.13	163.59
	(45.86)	(75.95)
County Fixed Effects	✓	✓
Year Fixed Effects	✓	✓
State–Year Fixed Effects	✓	✓
N	14248	14244
R^2	0.36	0.39

Table 1: Effect of County Partisanship on LIHTC Allocation. Robust standard errors in parentheses. *p<.05.

is to promote development in neighborhoods most in need of quality affordable housing. Baum-Snow and Marion (2009) and others have demonstrated that QCT status has a strong influence on the likelihood and scale of tax–credit development; the effect is to steer housing toward poorer areas (Dawkins 2011; Ellen, O'Regan and Voicu 2009; Lang 2012; Rohe and Freeman 2001; Freeman 2004).

HUD issues QCT designations annually, using a formula that initially considered only area income but was later expanded (beginning January 2002) to include a poverty rate criterion.[17] While QCT designations have been published in the *Federal Register* since 1990, electronic data on QCT status has only been available since 2000.[18] Rather than limit the scope of the analysis to post–2000 gubernatorial terms only, I develop a proxy for QCT eligibility: a census tract poverty rate of 25 percent or higher. To measure the prevalence of QCTs in a county (and, thus, the incentives for development), I use the share of the county population living in high–poverty census tracts.[19] In addition to including QCT coverage as a direct effect in the model, I also interact the measure with an indicator variable for gubernatorial terms that fall after passage of the Community Renewal Tax Relief Act of 2000 (CRTRA), which officially incorporated the poverty criterion into the QCT eligibility formula. It is post–CRTRA that the QCT coverage measure should be most strongly associated with the level of tax–credit investment. As QCT coverage increases, so does the ability of developers

[17]Initially QCT designations were determined using the HUD metro fair market rent area (HMFA)–level area median gross income (AMGI); eligible tracts were those in which at least 50% of the households had incomes below 60% of the HMFA–level AMGI. Beginning in 2002, HUD expanded the QCT eligibility criteria to also include any tracts with poverty rates of 25% or more. The new formula significantly increased the number of tracts eligible for the credit bonus (Hollar and Usowski 2007).

[18]I thank Matthew Freedman and Emily Owens for generously sharing their dataset of QCTs for the period 2000-2010, compiled from HUD's annual QCT datasets. The annual HUD datasets are posted here: `http://www.huduser.org/portal/datasets/qct.html`.

[19]I also constructed a QCT proxy based on tract household incomes, initially HUD's sole criteria for determining QCT eligibility. Because HMFA boundaries have no straightforward relationship to county boundaries, and because HUD's eligibility calculations relied on special tabulations of household income data more detailed than the data publicly released by the Census bureau, the indicator I calculated based on county–level AMGI and publicly available Census data proved to be a crude proxy for QCT status. For the period 2000–2010 (years for which official QCT designation data are available), the bivariate correlation between the income–based proxy and actual QCT status is only .13. On the other hand, tract–level poverty rates can be easily determined from available census data. The bivariate correlation between the poverty–based QCT proxy and actual QCT status for the period 2000-2010 is .74. I use the poverty–based QCT proxy in the analysis.

to take advantage of the larger tax credit by siting new housing in the county.

The estimated coefficients and standard errors from the expanded model with demographic and socioeconomic covariates are reported in column two of Table 1. The addition of these control variables alters the results dramatically. The estimates provide clear support for the argument, formalized in Hypothesis 2, that Democratic governors, whose constituents are likely to benefit from investments in affordable housing, steer tax credits to areas with high concentrations of Democratic voters. First, the coefficient on Democratic vote share for Democratic governors ($.23 \pm .05$), although smaller than in the baseline model, remains positive and statistically significant even after taking into account the confounding effects of factors such as area poverty, minority population, and QCT coverage. Second, the coefficient on Democratic vote share for Republican governors has attenuated substantially, and is now statistically indistinguishable from 0. Unlike for their Democratic counterparts, there is no evidence that Republican governors alter the flow of tax credits in response to changes in county partisanship. The earlier vote share coefficient for Republican governors reflected not the influence of partisanship, but rather the general tendency to target credits to areas of rising need.

To assess the magnitude of the effect of county partisanship, consider a county in which Democratic voting increases by 10 percentage points (the average within–county standard deviation). Under a Democratic governor, this county could expect the level of LIHTC investment in the area to grow by 2.3 tax credit units per 10,000 residents, or .12 (within–county) standard deviations. For the modal U.S county, with a total 2010 population of 25,992, the increased LIHTC investment would amount to six additional tax credit units constructed or rehabilitated. In 2010, counties of this size (20,000–30,000 residents) housed on average 137 LIHTC–subsidized units. Thus, a partisan bonus of six additional units, over a four–year gubernatorial term, would expand the affordable housing stock by 4.4%—a modest effect.

As expected, LIHTC allocations depend substantially on socioeconomic conditions in

counties. Many of the control variables are statistically significant. On average, a county receives more tax–credit investment per 10,000 residents as household incomes decline; the minority population and the number of children increases; and the senior citizen population declines. Also a significant influence on LIHTC allocations is the share of the county population living in high poverty ($\geq 25\%$) census tracts. Since passage of the CRTRA in 2000, which dramatically expanded the number of census tracts eligible for a 30% tax–credit bonus under program guidelines (Hollar and Usowski 2007), the number of tax–credit units per 10,000 residents has increased with the share of the population in high–poverty tracts. As intended, states prioritize affordable housing development in the most impoverished areas. What has no discernible effect on a county's LIHTC allocations is housing affordability, as indicated by the share of household income going to housing expenses for renters and homeowners. This result is consistent with Gustafson and Walker (2002)'s finding that state QAPs, which guide LIHTC decisions, rarely reflect a state's actual housing needs.

The Moderating Effect of Institutions

To extend the analysis, and pinpoint more precisely the institutional contexts in which the strategic targeting of tax credits emerges, I stratified the data based on the extent of gubernatorial control over the state's LIHTC–allocating agency, as indicated by the proportion of agency board members appointed by the governor. Implicit in the expectation that tax credit units will be distributed in a manner that favors a governor's core supporters is the assumption that governors *can* exert control over the LIHTC program. This control may come, at least in part, through the appointment process. The implication is that the relationship between allocations and county partisanship is conditional on the institutional structure of the housing finance agency, stronger in states where governors exercise more control over the composition of the agency's board. As Figure 1 documented earlier, while governors typically select more than half the members who sit on HFA boards, variation exists across states in the proportion of gubernatorial appointees. I segment the national

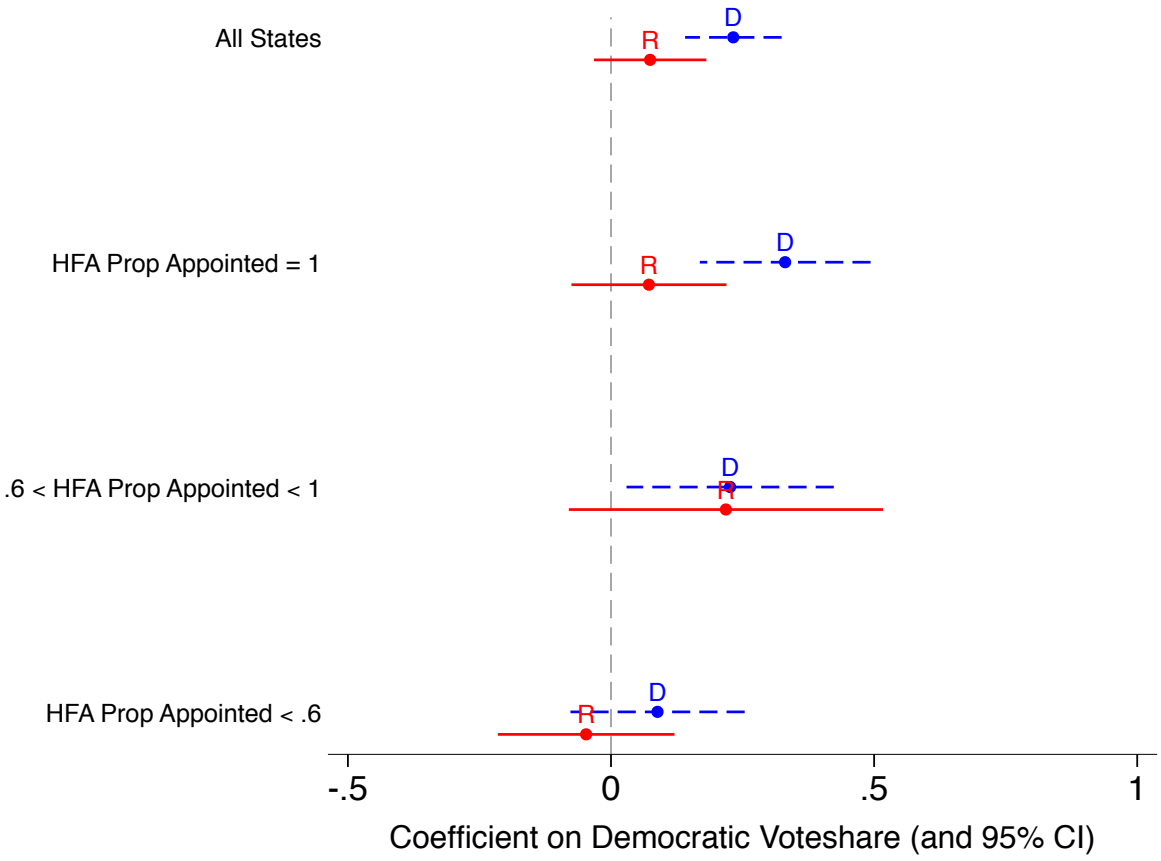


Figure 3: The Role of Gubernatorial Control: Graph reports the coefficients (and confidence intervals) on Democratic voteshare for estimation with the full dataset, and with subsets of states stratified by the proportion of housing agency board members appointed by the governor. Labels indicate coefficients for either Democratic or Republican governors.

data into three, roughly equal groups: states in which governors appoint all board members; 60–90% of members; fewer than 60% of members. I estimate the fixed–effects model, with the full set of covariates, separately for each group of states. The results are reported in Figure 3, along with the coefficients from the model estimated on the full sample (Table 1, column two).

The pattern evident in Figure 3 is consistent with the intuition about the role, and consequences, of gubernatorial control over the LIHTC program: the relationship between county partisanship and the allocation of tax–credit units is strongest in those states where governors exert the most influence over the composition of the HFA board; weakest, where

governors exert the least influence. Where the HFA board is composed entirely of gubernatorial appointees, the estimated coefficient for Democratic vote share, conditional on a Democratic governor, is .33 (± .08). As the level of gubernatorial control declines, the estimated coefficient attenuates (.23 ± .10), but remains positive and marginally statistically significant. However, for the subset of states where fewer than 60% of agency board members are appointed by the governor, the coefficient (.09 ± .08) is not only small but statistically indistinguishable from zero. In other words, in the absence of substantial institutional control over the LIHTC allocation process, Democratic governors do not steer tax credit units to core areas. Equally important, across all subsets of states, the effect of county partisanship is consistently statistically insignificant for Republican governors. Regardless of board composition and, by extension, political influence over the LIHTC program, there is no evidence that Republicans distribute housing tax credits with partisan considerations in mind.

Robustness Checks

The core model results—Democratic governors steer tax credits to core areas, while Republicans do not—are robust to a variety of different sampling restrictions. Given a geography in which there are some counties that are more politically homogenous than others, as well as counties that have unusually high (or low) concentrations of LIHTC–subsidized development, I alternately trim the data of county clusters with extreme values on Democratic voteshare or on the number of tax–credit units per 10,000 residents.[20] Observations that deviate substantially from the mean may have a disproportionately large effect on the regression results. Additionally, I generate jackknife estimates by selectively excluding from the dataset one entire state (and all counties within the state) at a time. Finally, for the 36 states with enough counties to estimate the key model parameters, I conduct separate state analyses that exploit within state changes in control of the governor's office.

When I exclude potentially high leverage observations, the model results are largely

[20]I identify as outliers counties whose average stock of LIHTC units per 10,000 residents, or Democratic vote share, is above the 99th percentile or below the 1st percentile.

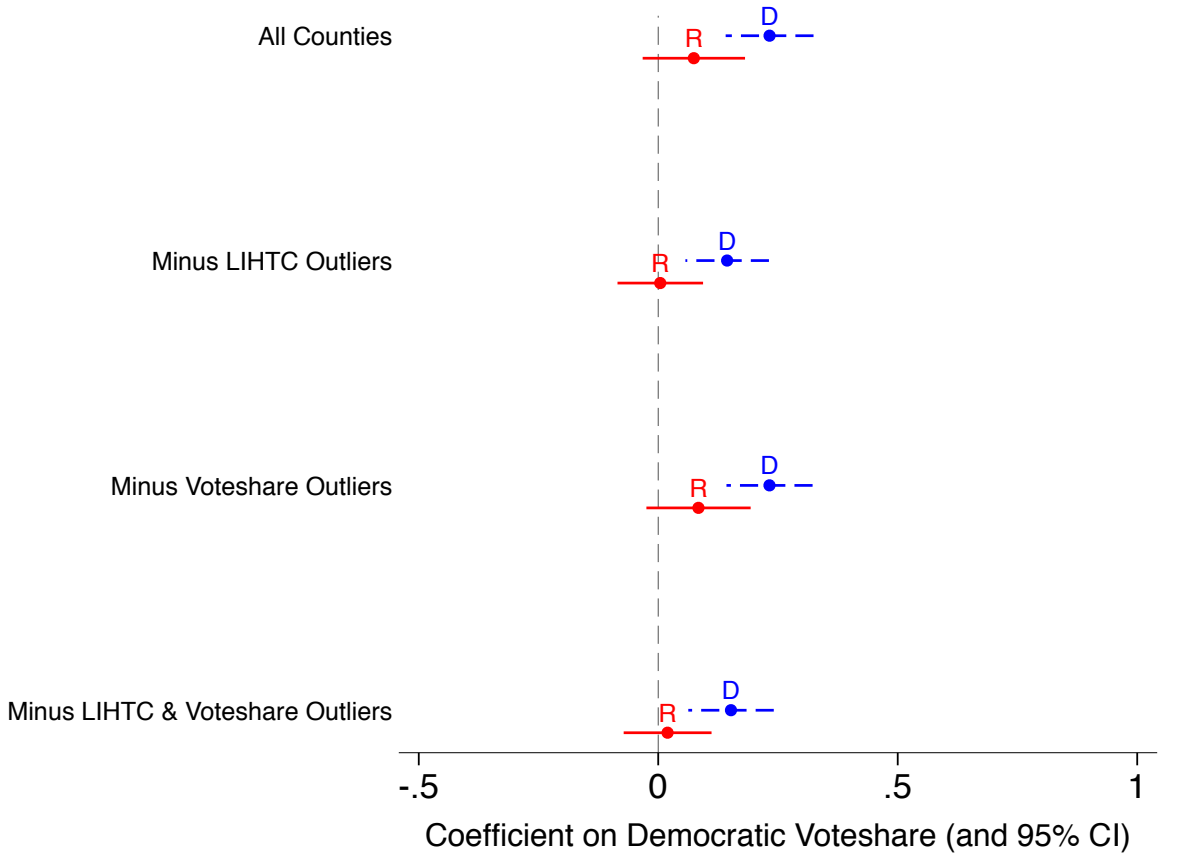


Figure 4: Sensitivity Analysis: Graph reports the coefficients (and confidence intervals) on Democratic voteshare for estimation with the full dataset, and with subsets that exclude counties with extreme values on vote share or the number of allocated LIHTC units, under Democratic and Republican governors.

unchanged. Figure 4 plots the coefficients (and 95% confidence intervals) on Democratic voteshare, under Republican and Democratic governors, when outlier observations are removed. The coefficients are remarkably stable regardless of whether the data include or exclude counties with extreme values on voteshare and/or on the level of tax–credit investment. The effect of Democratic vote share under Democratic governors is consistently positive and statistically significant.[21] The coefficient on county partisanship never achieves statistical significance (and is always smaller in magnitude) under Republican governors.

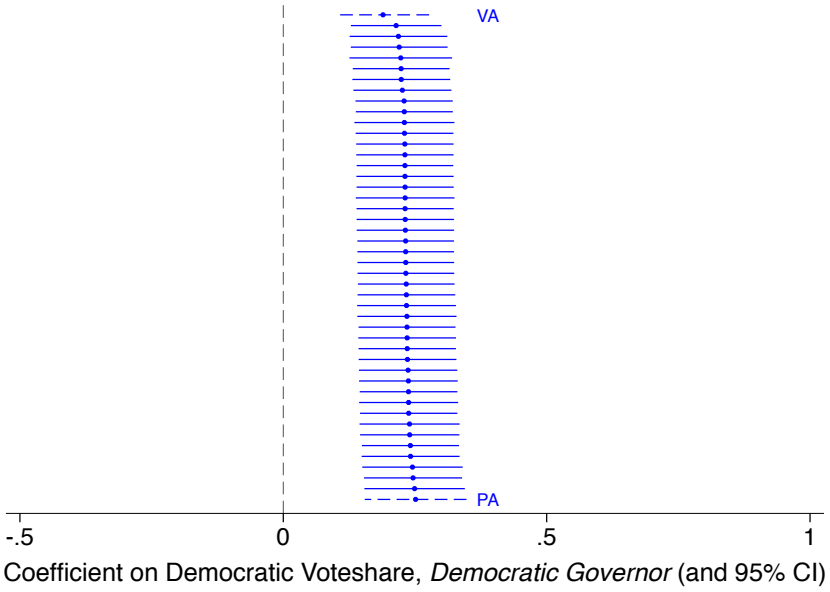
Similar to the results when outliers are excluded, the county partisanship coefficients remain stable, in terms of both magnitude and statistical significance, as individual states are trimmed from the sample. The top panel of Figure 5 reports the coefficients on Democratic vote share under Democratic governors, and indicates that no single state exercises disproportionate influence on the estimates.[22] Virginia ranks as the most influential of the states: When Virginia counties are excluded, the coefficient on Democratic vote share attenuates, though it remains positive and statistically significant ($.19 \pm .04$).[23]

In the state–by–state analysis, whose results are summarized in the bottom panel of Figure 5, the coefficient on Democratic voteshare under Democratic governors has the correct sign for two-thirds of the states. Moreover, in those states where the governor controls all of

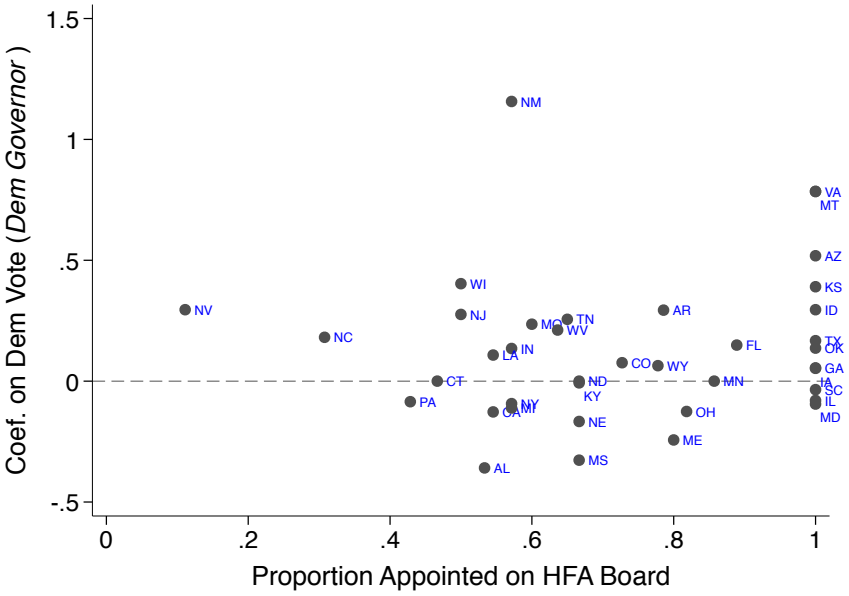
[21]The counties with extreme values on the level of LIHTC investment, not including counties with no LIHTC investment over the entire 1990-2010 period: Perry, AL; Searcy, AR; San Miguel, CO; Fulton, GA; Dallas, IA; Madison, LA; Suffolk, MA; Humphreys, Issaquena, Quitman, Tunica, MS; St. Louis City, MO; Treasure, MT; New York, NY; Sioux, ND; Texas, OK; Corson, Dewey, SD; Lake, TN; Stafford, Surry, Chesapeake, Colonial Heights, Emporia, Franklin City, Fredericksburg, Galax, Newport News, Petersburg, Portsmouth, Richmond City, VA. The counties with extreme values on Democratic vote share: Bullock, Greene, Lowndes, Macon, Perry, Sumter, AL; Hancock, GA; Sioux, IA; Elliott, KY; Orleans, LA; Prince Georges, Baltimore City, MD; Claiborne, Homes, Jefferson, MS; St. Louis City, MO; Carter, Garfield, MT; San Miguel, NM; Bronx, Hamilton, New York, NY; Bertie, Edgecombe, Gates, Hertford, Northampton, Robeson, NC; Philadelphia, PA; Shannon, SD; Andrews, Bandera, Borden, Brooks, Duval, Gillespie, Glasscock, Gray, Hansford, Kendall, Kerr, Loving, Mcmullen, Midland, Ochiltree, Parmer, Reagan, Robers, Sherman, Starr, Sterling, Zavala, TX; Box Elder, Cache, Garfield, Iron, Kane, Piute, Sevier, Utah, Washington, UT; Petersburg, VA.

[22]In the analogous graph of vote share coefficients under Republican governors, the coefficients remain consistently statistically insignificant as individual states are excluded from the analysis. All results are available from author upon request.

[23]When the allocation model is fitted to Virginia data only, the estimated effect of county partisanship is four times larger ($.78 \pm .38$) than in the full sample. Virginia is among the states where the governor appoints every member on the board of the state's housing finance agency.



(a)



(b)

Figure 5: Sensitivity Analysis: Graph (a) plots jackknife estimates of the Democratic voteshare coefficient under Democratic governors, generated from selectively eliminating a single state at a time from the sample. Highlighted (with dashed lines) are states with a relatively larger effect on the estimates. Graph (b) plots the coefficient on Democratic voteshare under Democratic governors for individual states (labeled), by the level of gubernatorial control over the state HFA. The coefficients are statistically significant in Vermont, Montana, and New Mexico.

the appointments to the housing finance board, the estimated coefficients tend to be larger. Only rarely (Virginia, Montana, New Mexico), however, are the coefficients statistically significant. (In the 13 states where the estimated coefficient had the wrong sign, it was never statistically significant.) The uncertainty in the state–by–state estimates reflects the lack of variation in party control of the governor's office in many states. A within state analysis often does not offer enough variation to reliably identify the effects. The implication is that the estimated effects uncovered in the full dataset reflect cross–state comparisons as well as within–state changes over time.

Summary

The empirical analysis, including the robustness checks, confirms that investment in affordable housing depends in part on the county's role in electing a Democratic governor. Under Democratic governors, counties receive relatively more LIHTC allocations as Democratic voting increases, but only in states that allow the governor to control appointments to the HFA board. Notably, even in contexts of substantial control (i.e. all board members appointed by the governor), the bonus to Democratic partisans is modest, amounting to 8.6 tax credit units for every 10–percentage point increase in Democratic vote share in the modal county.[24] Meanwhile, there is no evidence that under Republican governors the flow of tax credits to counties similarly shifts in response to changes in county partisanship, regardless of the level of gubernatorial control over the allocating agency. This pattern is broadly consistent with a model of policy–oriented politicians strategically distributing goods whose beneficiaries are likely to be their own partisan supporters. At the same time, the substantively modest effect must temper any strong claims about the role of patronage politics in the administration of the LIHTC program. Partisanship matters less than theory, or opportunity, would lead us to predict.

[24] $(.33 * 10) * (25,992/10,000) = 8.57 units$

Conclusion

The Low–Income Housing Tax Credit program is at the center of governmental efforts to address a housing affordability crisis that affects a broad swath of American households and most metropolitan areas. By providing states with the authority to issue tax credits to subsidize private development, Congress catalyzed the construction and rehabilitation of more than two millions units of affordable housing over the last 25 years. The devolution of tax credit authority to the states enabled a federally–financed program to be tailored to local housing needs, which accounts in no small part for its popularity. But devolution also raises the specter of political manipulation, if governors exploit their influence over the program to funnel tax credits to areas dominated by partisan supporters. The question pursued in this research is whether there is evidence that LIHTC allocations are shaped by the local political process and not simply local housing needs.

The findings from an analysis of tax credit allocations over a twenty–year period demonstrate that political considerations play a real, but limited, role in the process. The distribution of housing subsidies to counties is determined primarily by universalistic criteria, such as median income, and programmatic goals, such as improving the housing stock in the most impoverished areas. After taking these factors into account, politics enters at the margins. Democratic governors, on average, steer a few additional subsidies to a county as its share of Democratic voters increases. The effect is small, and is limited to only those states where governors are allowed near total control over the composition of the board overseeing the LIHTC program. In those circumstances, the bonus to core supporters amounts to an incremental 3.3 housing units per 10,000 residents for every 10–point gain in vote share, or 8.6 units in the modal county. There is no evidence that LIHTC distributions under Republican governors are similarly responsive to voter characteristics in the receiving areas; county partisanship does not predict the amount of tax credit investment in an area, no matter the level of gubernatorial control over appointments to the housing finance board. Thus, despite a program whose administrative structure would seem to invite the kind of strategic

behavior predicted by models of distributive politics, governors do not substantially distort the allocation process to serve their political goals.

An obvious constraint on the exercise of partisan bias is the fact that tax credit allocations are conditional on the willingness of private developers to build housing in a given area. A housing project must be proposed before tax credits can be allocated, strategically or otherwise. Governors cannot steer credits to counties in which there is insufficient developer demand. This puts a limit on a governor's ability to respond to shifts in the voting behavior of area residents. Perhaps Democratic governors, who are more likely to view their constituents as beneficiaries of investment in affordable housing, are proactive in stimulating developer interest in particular regions. Local officials and interest groups in heavily Democratic areas also may serve as recruiters, optimistic that a Democratic governor, and her appointees in the housing finance agency, will look favorably on proposed projects sited in areas of core electoral support. This kind of brokering, whether by the governor or by organized interests, may be absent under Republican administrations. That said, we should be hesitant to put too sharp a point on these partisan differences. What emerges most clearly from this analysis is the relatively marginal role of partisan politics in the administration of the LIHTC program.

Appendix

	Median	Mean	SD	Min	Max
Tax Credit Measures					
LIHTC Units (per 10k residents), *as of*					
1990	0	9.2	15.1	0	137.2
2000	28.2	34.1	34.2	0	557.5
2010	44.5	52.3	49.9	0	787.4
1990–2010	24.9	33.8	39.4	0	795.7
Electoral Data					
Democratic Gubernatorial Vote	44.5	44.7	14.6	3.9	89.4
Demographic Measures					
Ln(Population Size)	10.1	10.2	1.4	4.2	16.1
Ln(Median HH Income)	10.6	10.7	.25	9.6	11.7
Proportion Black	.02	.09	.14	0	.86
Proportion 65 and over	.15	.15	.04	.01	.43
Proportion 18 and under	.25	.25	.03	.09	.45
Median Rent as Share of HH Income	.25	.25	.04	.10	.50
Median Home Costs as Share of HH Income	.21	.21	.03	.10	.49
Proportion in High–Poverty tracts	.02	.13	.22	0	1

Table A1: County Descriptive Statistics: Numbers are county averages over the years 1990–2010. Housing figures are author's calculations using the LIHTC database from the Department of Housing and Urban Development. Vote share figures are author's calculations using *CQ Press Voting and Elections Collection*. Demographic measures are from the U.S. Census and American Community Survey.

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