

The Value of Historic District Status

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Abstract: Comparing properties in districts listed on the National Register of Historic Places and in locally designated historic districts with those in properties proposed, eligible but not designated districts, this paper estimates the differential effect on housing values of National Register and local historic district status while explicitly considering the effects of overlapping designations. Results indicate significant 14-17% increases in property values after the district is listed on the National Register and no effects from local district designation after accounting for their overlap with National Register districts. The property value results are not driven by changes in sales volume within the districts.

Keywords: historic district, property values, regulation, housing

JEL Codes: R21, R28, R31, R52

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1. Introduction

The creation of historic districts is a popular policy tool for preserving neighborhood character and culturally significant areas. Historic districts are also sometimes considered an economic development tool for promoting investment as well as a de facto housing policy (Ryberg-Webster 2014; Kinahan 2018). In practice, there are many types of historic districts, with designation occurring at the Federal, state, and local levels. Federal designation through listing on the National Register of Historic Places provides prestige and recognition as well as conveys financial incentives for historically-appropriate rehabilitation and renovation to income-producing properties; however, location within a National Register listed historic district does not place restrictions upon the property. On the other hand, local districts often include specific restrictions on the property, such as use and type of renovation. Rehabilitation, construction, and demolition projects with locally designated historic districts generally require approval from local oversight bodies. The restrictions and oversight associated with local historic district designation makes them controversial as a policy tool.

The National Trust for Historic Preservation lists investment protection and greater appreciation as the first two points in its top 10 reasons for establishing a local historic district (National Trust for Historic Preservation 2015). On the other hand, concerns over potentially negative property value effects create opposition to historic district designations and listings.

Economic theory suggests that historic districts could induce both positive and negative changes in property values within the district. Historic district designation may convey status and recognition with amenity value that raises the perceived value. Location within a historic district may also provide access to financial resources and incentives that are positively capitalized. If historic district designation includes regulatory restrictions, then it may also remove uncertainty about the future character of the area. Regulatory restrictions also increase the redevelopment costs for properties and remove the option value associated with some types of redevelopment – both of which would be expected to decrease property values (Been et al. 2016; Ahlfeldt et al. 2017). The theory outlined by Ahlfeldt et al. suggests that the marginal costs and benefits of historic district regulations should be equated in equilibrium such that the net effect on designated property values should be zero.

There is mixed empirical evidence on the net effect on property values and little work distinguishing the differential effects of listing on the National Register and local designations

when the two overlap (as is often the case). Studies of local historic districts have found negative price effects (Noonan and Krupka 2011; Heintzelman and Altieri 2013) as well as price increases after designation (Been et al. 2016; Waights 2019; Zhou 2021). Zhou considers the effects of new districts listed on the National Register and local designation on residential properties in Denver, CO within a difference-in-differences hedonic empirical strategy. The study finds increases in residential house prices of 12-23% for local districts and a smaller premium for listing on the National Register.

The research contained herein closely relates to Zhou by estimating the effects of listing on the National Register and local historic district designations on residential property values in Atlanta, GA from 1990 to 2015. Atlanta contains significantly more National Register districts comprised of single-family residential homes than Denver, many of which also overlap with locally designated districts. The larger sample of residential districts and differential timing of National Register listing and local designation provides a better opportunity identify the differential effects on residential property values. The empirical strategy also improves upon the existing literature in important ways.

Homes located in designated historic districts and those located in other areas differ in ways that are not observable in the data. Thus, attributing the change in property values to historic district status requires a strategy to control for these differences. The existing literature relies on Census Tract fixed effects. To strengthen identification, this paper compares the change in property values of districts newly listed in the National Register and locally designated districts with the change in historic districts that were proposed for the National Register, met the eligibility criteria, and have not yet been listed. This strategy identifies the change in property values attributable to each type of historic district status change under the assumption that properties proposed and eligible for the National Register, those listed in the National Register, and those designated locally as historic districts have similar observable and unobservable characteristics.

The empirical strategy also extends the hedonic difference-in-differences to explicitly address overlapping designations and their differential timing through a triple-difference framework. Event study estimates incorporate the new research on heterogenous treatment timing and treatment effects.

The paper also adds heretofore undocumented evidence on the change in the volume of demand and supply for housing in these areas by estimating the effect of designation on sales volume with the improved empirical strategy.

The results indicate significant 14-17 percent increase in residential housing prices after listing on the National Register. The hedonic DID estimate for local historic districts suggests a smaller 6 percent increase after designation; however, this effect disappears when explicitly accounting for the overlap between National Register and local districts. Accounting for heterogeneous treatment timing with the Sun and Abraham (2021) interaction weighted (IW) estimator, event study estimates confirm the validity of the empirical design and estimated housing price effects. Further, IW estimates of the effects on district sales volume indicate neither National Register listing nor local designation significantly influence the demand and supply of housing in the districts.

2. Background

In general, historic districts are delineated geographic areas containing a significant concentration, linkage or continuity of buildings, properties, structures, sites or objects united in historic context by past events, people, architectural design, landscape history, physical development, engineering, or have the potential to yield significant information about the past through archeological discovery (NRHP, 2004; National Register Fact Sheet, n.d.). Historic district designation may be undertaken at the federal, state, or local levels, each with its own set of designation criteria, oversight and regulatory environments, and benefits. Federal designation occurs through listing on the National Register of Historic Places as authorized by the 1966 National Historic Preservation Act and subsequent amendments. The legal framework associated with listing on the National Register does not vary across districts. On the other hand, local historic districts are remarkably heterogeneous both across and within local government units.

The next sections provide some additional institutional detail on National Register listed and locally designated historic districts in the Atlanta area. More detail is available in Patrick (2019).

2.1 National Register-Listed Historic Districts

A state historic preservation agency submits nominations of properties and geographic areas (districts) to the U.S. Department of the Interior for listing on the National Register of Historic Places. The Department of the Interior makes the final determination for listing. In the case of a

district, listing on the National Register of Historic Places provides recognition of the significance of the group of properties, structures, or objects within tightly drawn geographic boundaries. Although primarily honorific, it does convey some benefits and protections to encourage preservation. Property owners within listed districts are eligible for federal and state tax incentives for qualifying rehabilitation expenses on income-producing historic properties. Owners of properties within National Register listed districts also qualify for some federal and state historic preservation grant programs. Such financial benefits should result in property value increases within newly created districts.

National Register historic district property owners maintain unrestricted property rights. Unless the owner utilizes a specific preservation tax incentive or grant, they are not subject to regulation governing rehabilitation, demolitions, design, etc. The primary preservation regulation is the requirement that Federally funded, licensed, or permitted projects minimize their impact on district. As such, listing in the National Register provides little protection against development or redevelopment activity that may significantly alter the historic resources or character of the district. Such minimal regulation should limit any negative property value effects, while also limiting any increase associated with reducing uncertainty about future development.

Thus, the nature of listing on the National Register suggests the benefits should outweigh costs, and properties in newly listed districts should increase in value.

2.2 Local Historic Districts

Local historic districts are designated by local governments and provide a framework for regulating development activity within the specified geographic area. The process for designation varies across locations; however, in Georgia, the Georgia Historic Preservation Act of 1980 establishes the process by which local governments may create them. The outcome of the designation process is a designation ordinance that details the district boundaries and affected properties as well as the preservation standards for the district and a mandate that a Certificate of Appropriateness (COA) be obtained prior to making any material changes to the appearance of properties located within the district (GADNRa, n.d.). District design guidelines generally accompany the designation ordinance. Material changes include new construction, rehabilitations and maintenance, and demolition of existing structures. Once designated, material changes must

be reviewed and approved. Local historic district designation does not qualify property owners for tax incentives or grants unless those are specially designated by the local government.

The designation process includes opportunities for public input on the included properties, standards, and other factors. Patrick (2019) details the politics of historic district designation in the study area through analysis of local and regional newspaper articles. The analysis reveals that, even within the study area, there is substantial variation in the impetus for the designation, length of the process, and the degree of resident participation. The loss of one important historic resource, development pressures, out-of-character developments, and larger movements to preserve historic heritage serve to spark interest. Patrick (2019) documents proposed designations that were extremely controversial amongst potentially affected residents as well as designations with broad support. There is no requirement that property owners vote on the designation. Some proposed designations included little property owner involvement. On the other hand, many included years of community meetings in which boundaries and regulations evolved in response to community concerns.

The final geographic boundaries and regulatory environments in this context are the outcome of historical, natural, and political factors. This helps alleviate some concerns over endogenous district boundaries as well as provide an environment that is closely tied to the theory outlined by Ahlfeldt et al. The highly differentiated regulations across different types of local districts create the potential for an equilibrium in which marginal costs are equated to marginal benefits such that the net effect on property values is zero.

3. Methodology

Identifying the change in property values associated with one of the historic district designations requires detailed information on sales prices, housing characteristics, and precise geographic information for each home and district. Additionally, homes located in designated historic districts and those located in other areas differ in ways that are not observable in the data. Thus, attributing the change in property values to historic district status requires a strategy to control for these differences. To strengthen identification, the estimated effects are obtained by comparing the change in property values of districts newly listed in the National Register and locally designated districts with the change in historic districts that were proposed for the National Register, met the eligibility criteria, and have not yet been listed. This strategy

identifies the change in property values attributable to each type of historic district status change under the assumption that properties proposed and eligible for the National Register, those listed in the National Register, and those designated locally as historic districts have similar observable and unobservable characteristics.

3.1 Data

The study properties are in the Fulton and DeKalb counties, which are the two counties in which the city of Atlanta, GA is located. Several other cities are also located within the two counties. They also contain several National Register districts and locally designated districts.

The Atlanta Regional Commission (ARC) works with the county and city governments within this area on planning and transportation issues as the State and Federal metropolitan planning organization. As part of the ongoing Section 106 process for ensuring Federal projects do not have an undue impact on historic resources, the ARC identifies sites and districts that are potentially eligible for listing on the National Register of Historic Places. The ARC provided detailed eligibility and geographic data for all of the districts included in the survey process, including districts that are: 1) currently listed on the National Register of Historic Places, 2) proposed and eligible for listing on the National Register of Historic Places, 3) proposed but ineligible for listing on the National Register of Historic Places, and 4) districts that have been surveyed but have not yet been proposed for listing on the National Register by any group.¹ The empirical design limits the counterfactual districts to those that are both proposed and eligible to control for both unobservable political economy and historical factors.

The ARC does not maintain detailed data on local historic district designations, but the Georgia process for designation requires notifying the Georgia Department of Natural Resources Historic Preservation Division (HPD). HPD provided the district nomination reports for all the locally designated historic districts within the area. Boundary maps from the HPD reports were cross-checked with the enacted local ordinance and zoning maps for each jurisdiction before manually digitizing them. Figure 1 depicts the districts considered for this study by status.

¹ The boundaries of districts listed on the National Register of Historic Places were cross-checked with Federal and State resources.

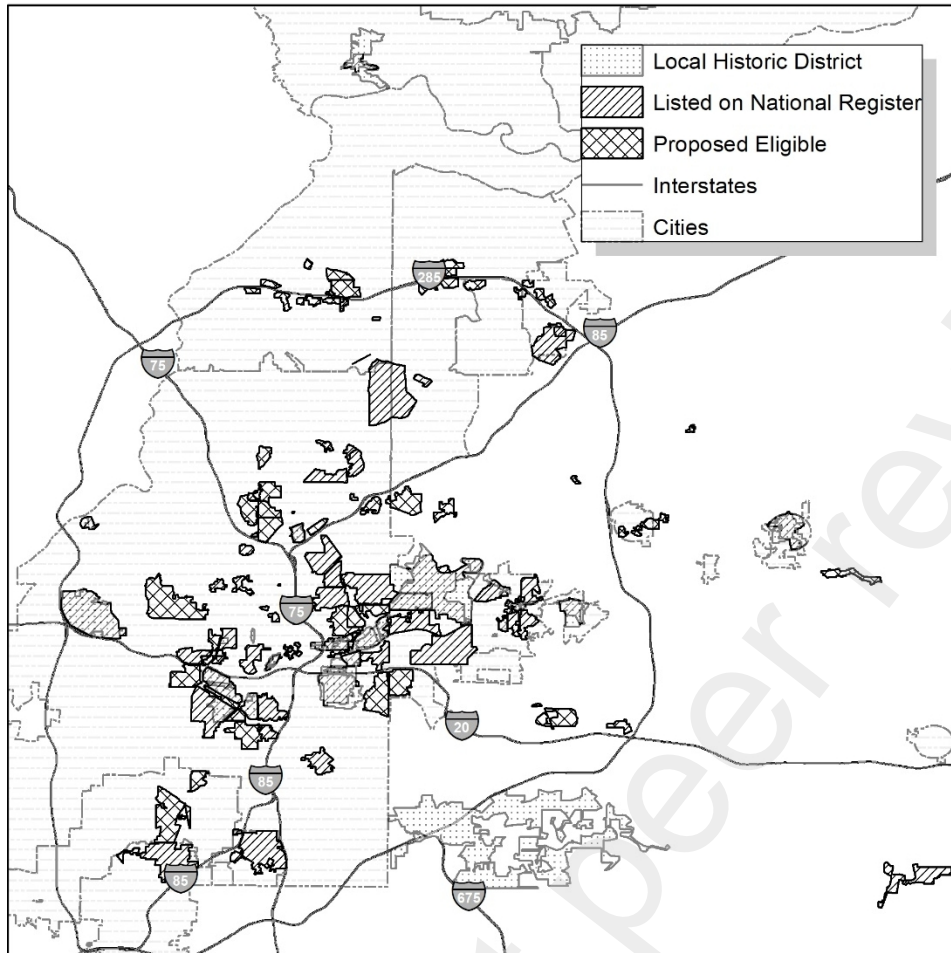


Figure 1: Historic Districts by Type and Status

Patrick (2019) contains a listing for each district in Figure 1 along with its local district status, National Register status, and the associated date if the district was either designated as a local historic district or listed on the National Register.² Table 1 summarizes the total number of districts by status.

Table 1: Summary of Fulton and DeKalb County Districts by Status

District Status	Count
Locally designated historic districts	31
Listed on the National Register of Historic Places	76
Proposed and eligible for listing on the National Register	65

A district can be both designated as a local historic district and listed on the National Register of Historic Places; therefore, the categories in Table 2 are not mutually exclusive.

² The National Register listing date was collected directly from the National Park Service, and the local district designation dates came directly from enabling documents.

However, in general the boundaries of the district as listed on the National Register and the local district boundaries are not the same. For example, Figure 2 demonstrates overlapping but incongruent boundaries of the Stone Mountain Historic District listed on the National Register and the Stone Mountain Local Historic District. While there are areas in Figure 2 in both types of districts, some areas lie within only one type of district. There are 26 districts either listed or proposed for listing on the National Register that have some portion of the area within a locally designated district. The detailed property location and district boundary information used for this study allows identification of whether a property is in both, one, or none of these districts.

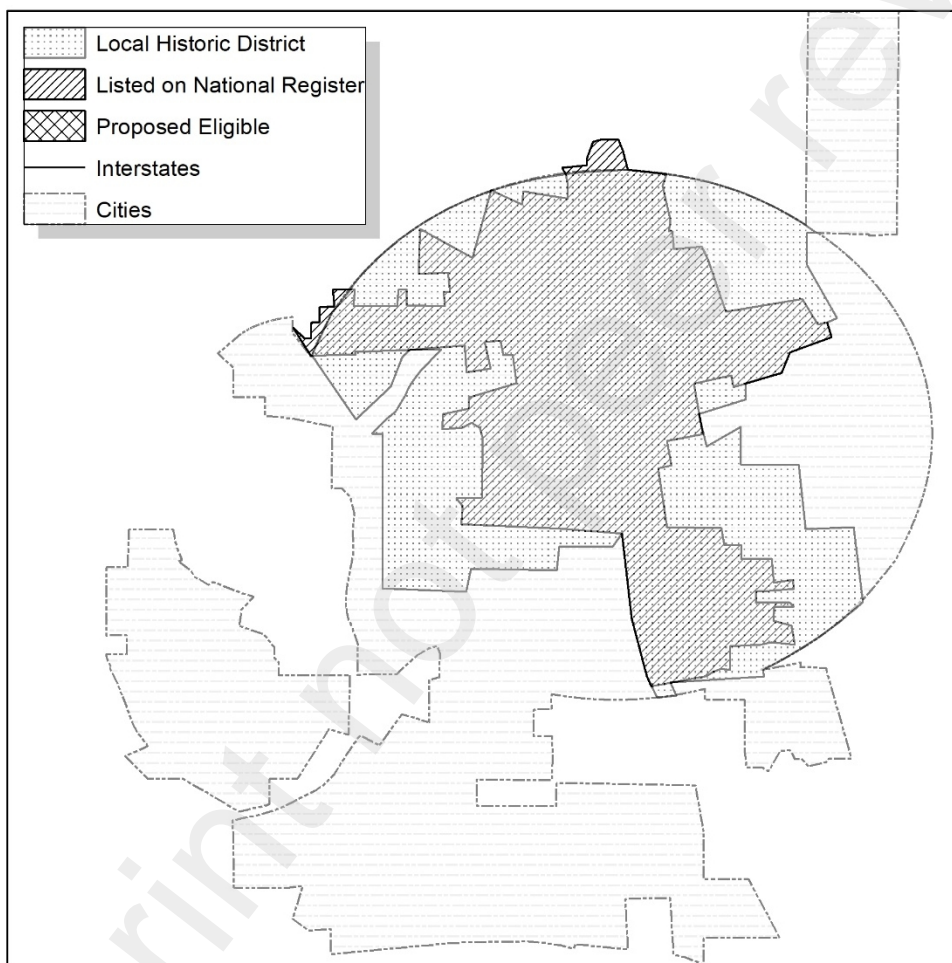


Figure 2: Stone Mountain Historic Districts

I overlay the geographic boundary files for the National Register districts, the ARC proposed and eligible districts, and the local historic districts with parcel boundary files to identify properties located within each of the areas. Property transaction and characteristic data are a combination of DataQuick, Inc. (CoreLogic) and county assessor data from 1990-2015. As

described in more detail below, the empirical strategy requires a change in status to identify the effect of designation; therefore, I restrict the analysis sample to proposed eligible districts and those designated historic districts with a designation occurring between 1994 and 2013, leaving 16 local and 30 National Register districts.

3.2 Empirical specification

The typical hedonic difference-in-differences estimator given by:

$$1) \ln(\text{sales price})_{idt} = \theta[1(\tau \geq 0)_{dt} \times 1(\text{Designated})_{id}] + X_{it} + \mu_t + \pi_d + \varepsilon_{idt}$$

where $1(\tau \geq 0)_{dt}$ is an indicator equal to one if time t is after designation, $1(\text{Designated})_{id}$ is an indicator equal to one if district d is listed on the National Register of Historic Places in the National Register regression or in a designated local historic district in the local district specification, μ_t is a vector of quarter-year fixed effects, π_d is a vector of district fixed effects, and X_{it} is a vector of housing characteristics. I include dwelling square footage, lot size, number of bedrooms, number of bathrooms, and indicators for garages and fireplaces.

In the current context, the typical approach is to estimate Equation (1) separately for sales in districts that are listed in the National Register of Historic Places and in local historic districts. Then, interpret θ as the change in housing values attributable to designation. However, this approach ignores the fact that some homes are located in both a National Register and local district. The timing of designation for the two types of districts also tends to vary. To account for this, my preferred specification is a triple-difference estimator given by:

$$2) \ln(\text{sales price})_{idt} = \theta\{[1(\tau_n \geq 0)_{dt} \times 1(\text{National})_{id}] \times [1(\tau_l \geq 0)_{dt} \times 1(\text{Local})_{id}]\} + \theta_n [1(\tau_n \geq 0)_{dt} \times 1(\text{National})_{id}] + \theta_l [1(\tau_l \geq 0)_{dt} \times 1(\text{Local})_{id}] + X_{it} + \mu_t + \pi_d + \varepsilon_{idt}$$

where τ_n and τ_l are defined relative to National Register and Local District designation, respectively, as are $1(\text{National})_{id}$ and $1(\text{Local})_{id}$. Equation (2) allows for θ_n and θ_l to be interpreted as the change in price associated with the National Register and local district designation, respectively, and θ is the differential change in price associated with an additional designation.

4. Results

4.1 DD and DDD

Table 2 presents the results of estimating variants of Equations (1) and (2). Columns (1) and (4) present estimates using the sample of national register treated districts and the proposed, eligible control districts; while Columns (2) and (5) use sample of locally designated treated districts and proposed, eligible control districts. The preferred triple difference estimates from Equation (2) in Column (3) employ the pooled treated districts.

The separate DID estimates indicate substantial increases in price associated with historic district designation, with a 14% increase after listing on the National Register of Historic Places and 6% increase after the enactment of a local district designation. Recall, though, that many of the properties in these samples are in both types of districts and therefore it is difficult to fully attribute the changes in Columns (1) and (2) to one type of designation. The estimates in columns (3) – (5) address this issue.

According to the preferred estimates in Column (3), listing on the National Register of Historic Places increases housing sales prices by 15%. However, there is no change associated with local designation or with an additional designation. This suggests that the positive capitalization associated with local historic districts in Column 2 are driven by those properties located in the parts of the local district that are also in districts listed on the National Register. As noted above, properties within National Register listed districts receive benefits without substantial regulatory costs. On the other hand, local districts impose additional burdens on the property that, in equilibrium, should exactly offset the additional benefits (Ahlfeldt et al. 2017). The null finding for local historic district capitalization suggests that this is the case.

The estimates in Columns (4) and (5) confirm that location in a district that is listed on the National Register of Historic Places confers significant price premiums whereas the costs associated with increased regulatory burdens in local historic districts offset the benefit-driven price increases. Column (4) reports a 17% increase in prices for the sample of transactions in districts that become listed on the National Register compared to those in proposed, eligible but not yet listed districts. The DDD estimate in Column 4 is the change in price for properties in districts listed on the National Register that then become part of a local historic district. It indicates a decrease of 12.5%. Similarly, Column (5) shows no significant change in housing prices associated with creation of a new local district, but a significant 14% for housing in local districts that are later listed on the National Register.

Table 2: Change in Housing Values from Historic District Designation

	(1)	(2)	(3)	(4)	(5)
	National Register	Local	Pooled National and Local	National Register	Local
DDD			0.0059 (0.0204)	-0.125*** (0.0313)	0.141*** (0.0160)
National DID	0.142*** (0.0143)		0.152*** (0.0133)	0.167*** (0.0154)	
Local DID		0.0626*** (0.0202)	-0.0122 (0.0228)		-0.0196 (0.0224)
Property Characteristics	Y	Y	Y	Y	Y
Quarter-Year FE	Y	Y	Y	Y	Y
District FE	Y	Y	Y	Y	Y
Observations	34,456	26,417	43,751	34,456	26,417
R-squared	0.574	0.588	0.579	0.574	0.589

Notes: The table contains the results from (5) separate regressions. Columns (1) and (2) report the results from the hedonic DID using the samples National Register and local district treatments, respectively. Columns (3) – (5) present results from the triple-difference specification using the pooled, National Register, and local district treatment samples, respectively. All specifications employ transactions in the proposed, eligible districts as the counterfactual sample.

4.2 Pre-trends and the IW

The validity of the empirical strategy relies, in part, on whether the difference-in-differences identifying assumptions hold in our context. While standard practice tests the parallel trends assumption using an event study specification, recent research documents the potential for inaccurate estimates of the relative period coefficients when the timing of treatment varies among cross-sectional units (Athey and Imbens 2018; Borusyak and Jaravel 2017; Callaway and Sant’Anna 2018; Sun and Abraham 2021). In particular, Sun and Abraham (2021) establish that the relative period coefficients in such an event study are contaminated by effects from *other* relative periods.

Sun and Abraham (2021) develop an estimator that provides relative period coefficients that can be used to reliably draw conclusions about pretrends in the presence of varied treatment timing and heterogeneous treatment effects. Their "interaction-weighted" (IW) event study estimator first estimates the leads and lags in event time separately for each “cohort”, and then computes a weighted average of these effects across cohorts. The results from the Sun and Abraham IW

estimator for the national and local designations samples are presented in Figures 3 and 4.

The IW event studies produce estimates in the pre-periods that are generally statistically indistinguishable from zero or each other, suggesting that the empirical strategy does a relatively good job of producing credible estimates. The results in Figure 3 confirm a significant increase in residential sales prices for properties in districts listed in the National Register, with the largest effects in the two years immediately after. Estimates in Figure 4 also corroborate the earlier results regarding local districts.

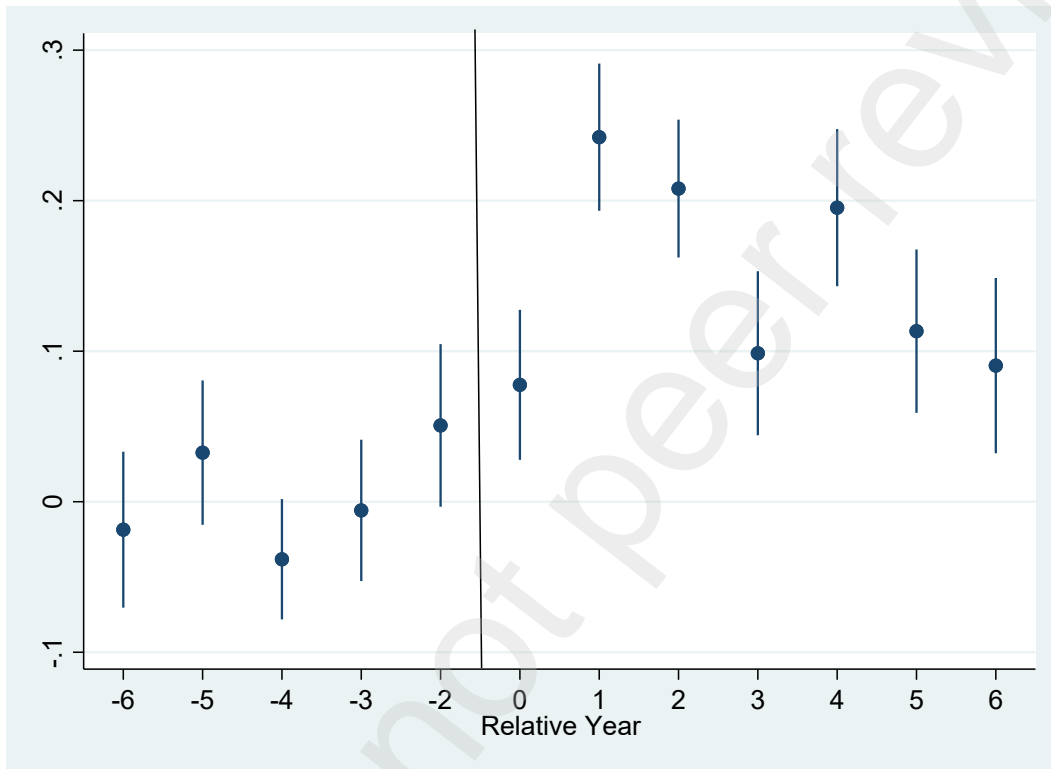


Figure 3: Interaction Weighted Event Study of National Register Listing on Prices

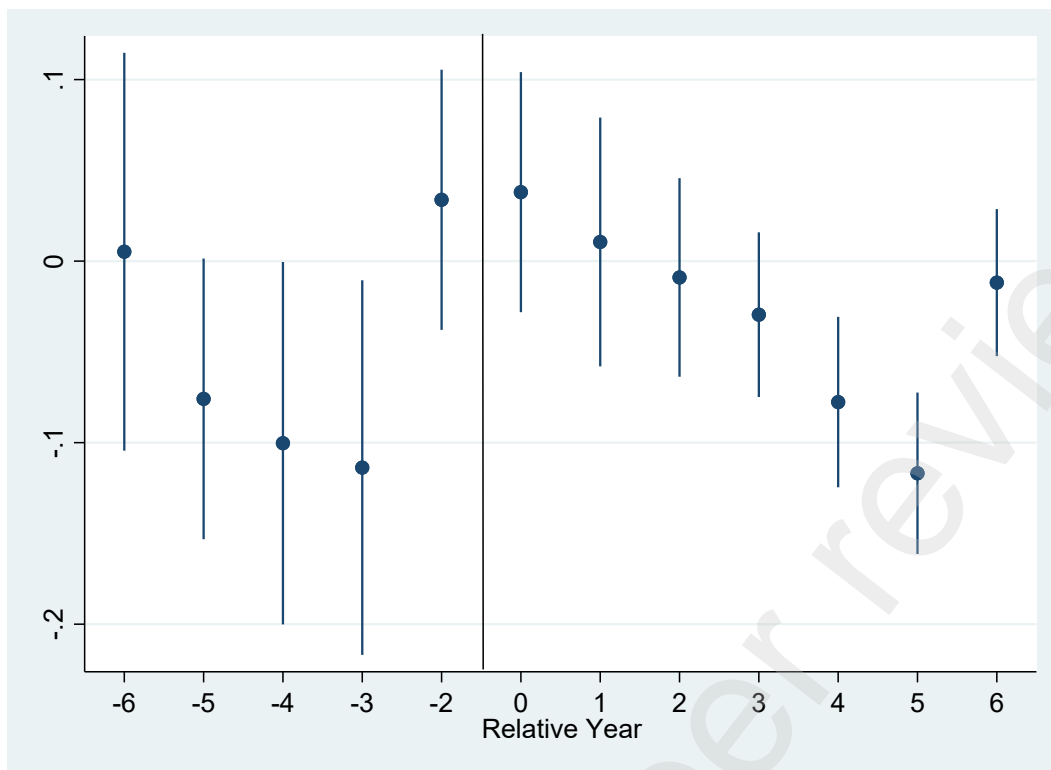


Figure 4: Interaction Weighted Event Study of Local Historic District Designation Effect on Prices

4.3 Sales Volume

Finally, I investigate whether the estimated changes in housing prices are attributable to a change in the volume of demand and supply for housing in these areas by estimating the effect of designation on sales volume. Following Berger et al. (2020), I aggregate transactions to the district-year level to calculate the districts' log sales volume and sales' characteristics. The IW event study specification is weighted by 2002 sales volume and includes time and district fixed effects.³ Figures 5 and 6 present the results for National Register and local historic districts, respectively.

Districts eventually listed on the National Register appear to experience an increase in sales volume relative to those that are proposed, eligible but have not yet been listed. Figure 5 suggests the increase begins prior to listing and does not change significantly after. Coupled with the results in Figure 3, this suggests that listing may be related to increased demand in the area that does not influence sales prices until the benefits of listing can be realized. It also suggests that

³ Results were similar when estimates were weighted by other years.

the increase in sales prices is not attributable to a significant change in the volume of demand or supply of units in these districts.

Figure 6 indicates no statistically significant changes in sales volumes within local historic districts, which is consistent with the lack of price effects documented above.

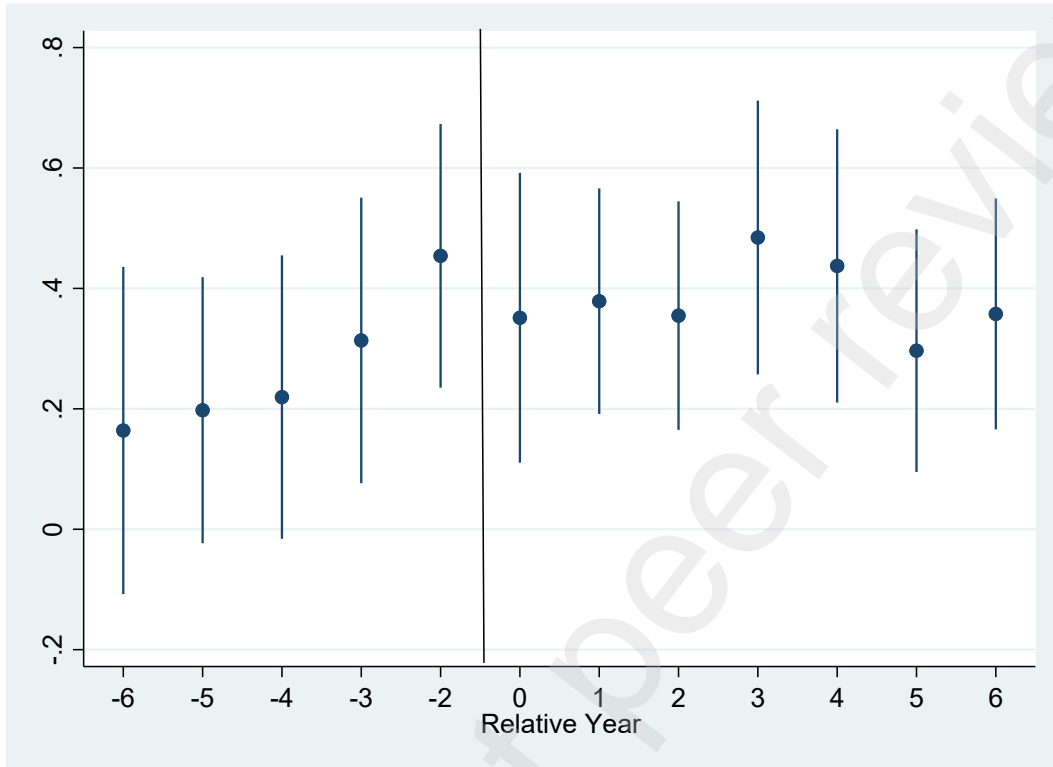


Figure 5: Sales Volume in National Register Districts Interaction Weighted Event Study

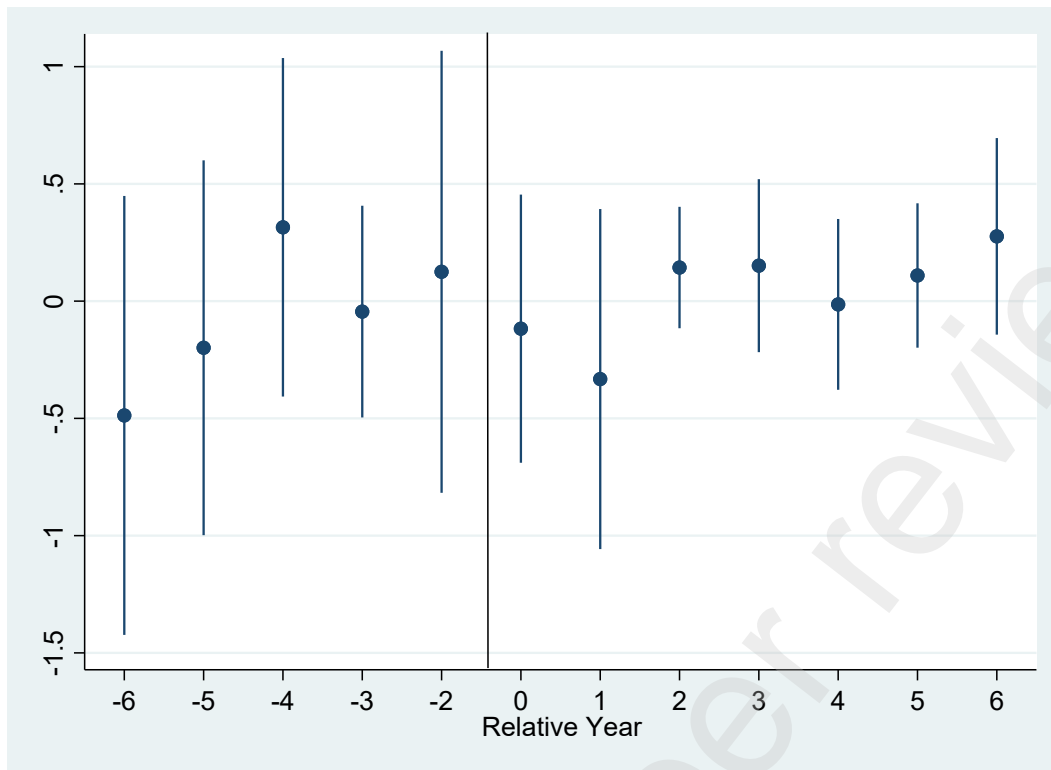


Figure 6: Sales Volume in Local Historic Districts Interaction Weighted Event Study

5. Conclusions and Discussion

Historic districts are one potential tool for preservation of cultural resources and/or neighborhood character. Historic district designations can also be controversial, with property owners concerned about regulation and the potential effect on home prices in the area. In the U.S., geographic areas can be designated as historic districts by Federal, state, and local governments. The different types of designations convey different costs and benefits for property owners, which economic theory would suggest creates different equilibrium effects on property values. Quantifying the effects on property values is complicated by the fact that Federal, state, and local designation can overlap for some geographic areas. Causal interpretation of changes in property values within designated districts is further complicated by the fact that historic districts are different than other neighborhoods in observable and unobservable ways. This paper addresses both of these challenges to provide evidence on the extent to which historic district designations change residential property values in Atlanta, Ga. The empirical strategy explicitly accounts for overlapping designations and compares designated districts with areas that have been deemed historically significant and proposed for designations but not yet designated.

The results indicate a significant increase in property values associated with listing on the National Register of Historic Places. On the other hand, local historic districts are not associated with an increase in property values. These results are consistent with economic theory that indicates capitalization is the equilibrium difference between costs and benefits. Federal designation entails listing on the National Register of Historic Places, which conveys prestige and recognition as well as allowing property owners to access financial incentives under specific circumstances. There are few costs associated with listing on the National Register. Local historic districts typically entail regulatory oversight, and, in the Georgia, case, the regulatory environment is the outcome of a process involving local officials and property owners. The null effect on property values suggests that this process creates regulatory environments that equate costs and benefits.

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