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Research Article

Effects of vacation properties on local education budgets

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Public Interest Statement

Do vacation properties swell the budgets of their school districts? As with commercial and industrial properties, the existence of vacation homes in a community presents an opportunity for year-round residents to spread the cost of public education across taxpayers who do not vote and will not use education services. Using data from the state of Georgia in the United States, I find that the more vacation properties a school district has, the larger its budgets will be. Those larger budgets, however, do not necessarily mean that the districts will hire more teachers than other districts with fewer vacation properties.

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1. Introduction

The presence of vacation homes in a community creates an opportunity for full-time residents to export a portion of their local taxes. As residents choose to increase the tax rates in their communities, a portion of the tax burden falls upon vacation property owners who typically neither vote in local elections nor consume many local government services, particularly education services. Owners of vacation properties are certainly interested in reliable police and fire departments to protect their investments, but they are unlikely to consume local education services. Therefore, year-round
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In fact, the entire county is located within Black Rock Mountain State Park and less than two hours from the city of Atlanta, which may explain why it happens to have the state’s largest percentage of vacation properties. Greene and Putnam have percentages of vacation properties that are smaller than Rabun’s but still fall into the top decile of the state. They too are an easy drive from Atlanta and have numerous opportunities for outdoor recreation and scenic tourism.

These few cases suggest that counties may indeed take advantage of the tax-exporting opportunities that vacation properties provide. This paper investigates that issue further through a review of relevant literature and a quantitative analysis of data from all 159 counties in the state of Georgia. The next section includes a discussion of previous research. Following that is an explanation of methods for this study, a description of the analysis and results, and implications for policy.

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2. Previous research

This review of literature is divided into two parts, reflecting the fact that local education budgets and vacation property rates fall into separate areas of research. The first part describes major studies of the effects property types and local income levels have on education budgets. Overall, this literature shows that education budgets do vary with
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enjoys more mobility than commercial activities, so any drastic increase in education taxes will be limited by the possibility that such businesses will leave the community. Commercial properties, on the other hand, are less mobile as they must be located near their target customers.

A more recent study in Norway supports Ladd's conclusions. Hægeland, Raaum, and Salvanes (2012) examined the effects that hydroelectric stations, facilities that are exceptionally immobile, have on education budgets and student outcomes. The authors found that the presence of such resources in a school district caused increases in education expenditures which in turn were associated with increases in academic outcomes.

In response to such studies connecting the mix of property types to education resources, equity-minded education finance reformers pushed for states, rather than localities, to tax industrial properties and spread the revenue across districts. However, a second study by Ladd (1976) and a later study by Nelson (1983) argued that the redistribution of taxes on industry would do little to improve equity in education budgets because communities with industrial development had a combination of price effects and wealth effects influencing education revenues; moving the taxes on industry elsewhere could adversely affect school systems.

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So far, research on the effects of vacation properties in a given district has examined local government finances generally and not education budgets specifically. On average, they find that vacation properties are associated with local government budgets that are larger than if the properties were owned by year-round residents. Fritz (1982), for example, found that high percentages of vacation homes in Vermont increase local property tax rates, even to the point of increasing the burden on year-round residents beyond that found in other communities. Hadsell and Colarusso (2009), in a study of communities in New York state, found a similar effect in rural areas but not in more densely populated towns, perhaps because of the greater presence of commercial and industrial properties in the towns.

Studies that focus on local government spending rather than tax rates also report an increase associated with vacation properties. Anderson's (2006) study in Minnesota found that an increase in vacation properties within a community leads to an increase in local government spending. Anderson's later (2008) work found that the impact of vacation properties on government spending depends in part on the wealth of the year-round residents. Poorer communities, he reported, increased their local government spending to a greater degree than wealthy communities with similar proportions of vacation

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3. Research question and hypothesis

Owners of vacation properties sometimes complain that they must pay a share of taxes that is disproportionate to their consumption of local services. This displacement of costs is especially true of education services. While vacation property owners want police and fire protection to preserve their property, they typically do not enroll their children (or their renter's children) in schools. Some states go a step further by imposing higher taxes on second homes than they do on primary residences (Saltzman, 2009). The popular homestead exemption is one way that some states and local governments have shifted costs away from year-round residents. Furthermore, the values of seasonal properties are tied more to tourist amenities of the area, such as mountain views and waterfront access, than to government services, giving their owners little incentive to support or care about local public schools (Anderson, 2008).

Do year-round residents of vacation areas take advantage of the opportunity to increase education services beyond what they might otherwise spend? Literature suggests that when communities have the chance to export taxes and increase services, they will do so, at least until income effects and the departure of vacation home buyers prevent such increases. This study proposes the following hypothesis:

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2006; Fritz, 1982; Hadsell & Colarusso, 2009; Hoxby, 1998; Ladd, 1975, 1976; Nelson, 1984). I selected Georgia as the state for study because its school districts rely heavily on local taxes, it has a large number of school districts, and the boundaries of the vast majority of those districts match the boundaries of the county government, for the most part keeping local budget decisions and their relationships with property use well aligned. These criteria are helpful for this study and rarely found in the same state.

Nearly half of Georgia's education funding comes from local revenues, making it more suitable for this research than states which rely more heavily on state funding. Georgia has 159 counties, each of which operates its own public school system with financial support from both the state and federal governments. All 159 districts are represented in the data. Georgia also has 18 smaller autonomous school districts operating separately from the county-run school systems, but these entities are excluded from the data because several of the necessary variables are only available at the county level.

The US Census website provides data on the use of housing, offering a measurement for the main independent variable as well as some control variables discussed later. The independent variable of interest is the percentage of properties in each district that are designated for vacation, seasonal, or occasional use in 2010. The dependent variable for H1 is the local share of the budget for education per pupil within each
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capacity of local districts. Bergstrom and Goodman (1973) used data from 10 different states to show that residents' race, income, and age are significantly related to local government expenditures. Denzau and Grier (1984) similarly found evidence that income and race affect local school spending.

Drawing on the work of Ladd (1975), this study also includes control variables for the presence of non-residential properties by including four variables for the percent of school taxes coming from industrial, commercial, agricultural, and utility properties. As Ladd found, such properties affect the choices faced by the median voter by presenting opportunities to export taxes, much the same as vacation properties as posited in the hypothesis. Data for these variables come from the Department of Revenue of the State of Georgia. To control for the costs of educating students who tend to be more difficult to teach, the study includes variables of the percent of students who have individualized education programs (IEP), the agreed-to accommodations by the district for students found to have disabilities affecting their learning, as well as the percentage receiving free or reduced lunch at school (often referred to as FRL), a common measure of poverty among school children.

The decisions faced by the median voter are also influenced by opportunities for funding by other levels of government. To account for state funding policies, the study includes a control variable that measures the funding per pupil that comes from the
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5. Results

Results support the hypothesis that vacation properties have a positive effect on local education budgets when controlling for other factors. A 1% increase in vacation properties is associated with an average increase in local per-pupil spending of about $78, controlling for other factors. Ladd's work in 1975 similarly showed that residents of a locality will choose more expensive services when some of the burden can be shifted onto commercial and industrial entities that do not vote; this study adds vacation properties to that list. In fact, the coefficient for vacation properties is substantially higher (and more statistically significant) than any of the other property-related independent variables (Table 2).

Table 2. WLS regression analysis for local education revenue per pupil and student–teacher ratio

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With expanded budgets, districts have the opportunity to hire more personnel, thereby reducing class sizes and the student–teacher ratio. The second model tests the effects of vacation homes and other variables on class student–teacher ratio and finds evidence that the ratio shrinks as vacation homes increase in proportion, but the
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pronounced on the local portion of the budget. Communities with disproportionately high rates of students with learning disabilities are raising revenue among their own taxpayers to cover the costs, it would seem, over and above whatever grants they might be getting from state and federal sources for those purposes.

A few other interesting patterns appear in the results table. While commercial properties have a powerful impact on lowering the student–teacher ratio, they have no significant effect on the local revenue for education. Utility properties, on the other hand, are associated with more local education revenue, but have no significant impact on student–teacher ratios. Similarly, as state revenues in a district increase, the local share decreases, but the shift has no effect on student–teacher ratios, and as federal dollars increase the local share does not move but the student–teacher ratio shrinks. On those counts, one could presume that grants from the state and federal government are earmarked for different purposes, the former for administrative costs and the latter for instructional, for example. As for why commercial properties affect only ratios and utilities affect only budgets, the causal mechanism is more difficult to discern. Perhaps commercial properties are a mark of communities with more personal interaction, which translates into more teachers being hired, while utilities represent a source of revenue unaccompanied by incentives for hiring educators. Whatever the cause, the numbers go beyond the scope of this study but offer potential for future research.

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There are several limitations to this study. The first is the use of a single state as the sole source of data. While the state is well suited for this study, Georgia’s experience may not be applicable to other settings with different political cultures and economic conditions, but, for those same reasons, it would not be an improvement to lump districts from different states together unless an adequate way of controlling for the many differences could be implemented. Nearly all studies of school funding examine only one state at a time for this reason. A second limitation is the fact that in addition to Georgia’s 159 county-based school districts, there are 18 autonomous school districts that are separate from the county systems. Their absence from the study may introduce some bias to the findings. If better data could be found in the future, a more precise study could improve upon the work presented here.

This study has implications for the issue of homestead exemptions and efforts for district resource equalization. Anderson’s (2011) study of Minnesota found that local government budgets are sufficiently elastic that when homestead exemptions offered reductions in tax burdens, communities responded with a proportional increase in taxes leaving tax payments essentially the same. Currently, Georgia’s state and county governments allow only relatively small tax exemptions for primary residences. Counties are free to offer their own opportunities for exemptions, but the state option is a $2000 reduction in assessed value for most homeowners. Certain qualifications such as age, income, and veteran status qualify residents for much higher exemptions, some
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behind in their school funding, or will need to tax their own residents all the more, something state government would do well to notice.

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Additional information

Notes on contributors

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Jason Giersch is a lecturer in the Department of Political Science and Public Administration at the University of North Carolina at Charlotte. His area of research is education policy, including school choice, school equity, and accountability.

Notes

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2. Anderson, N. B. (2008). Local amenities and rents: Tiebout takes a vacation. Journal of Regional Science, 48, 595–613.10.1111/jors.2008.48.issue-3
Web of Science ® | Google Scholar

3. Anderson, N. B. (2011). No relief: Tax prices and property tax burdens. Regional Science and Urban Economics, 41, 537–549.10.1016/j.regsciurbeco.2011.03.014
Web of Science ® | Google Scholar

4. Bergstrom, T. C., & Goodman, R. P. (1973). Private demands for public goods. American Economic Review, 63, 280–296.
Web of Science ® | Google Scholar

5. Berkman, M. B., & Plutzer, E. (2004). Gray peril or loyal support? The effects of the elderly on educational expenditures. Social Science Quarterly, 85, 1178–1192.10.1111/ssqu.2004.85.issue-5
Web of Science ® | Google Scholar

6. Denzau, A., & Grier, K. (1984). Determinants of local school spending: Some consistent estimates. Public Choice, 44, 375–383.10.1007/BF00118770
Web of Science ® | Google Scholar

7. Fletch spending in
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8. Fritz, ax burden.
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9. Hadse y tax:
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0. Hægeland, T., Raaum, O., & Salvanes, K. G. (2012). Pennies from heaven? Using exogenous tax variation to identify effects of school resources on pupil achievement. Economics of Education Review, 31, 601–614.10.1016/j.econedurev.2012.03.004
Web of Science ® | Google Scholar

1. Hanushek, E. A., & Rivkin, S. G. (1997). Understanding the twentieth-century growth in US school spending. The Journal of Human Resources, 32, 35–68.10.2307/146240
Web of Science ® | Google Scholar

2. Hoxby, C. M. (1998). How much does school spending depend on family income? The historical origins of the current school finance dilemma. AEA Papers and Proceedings, 88, 309–314.
Web of Science ® | Google Scholar

3. Johnson, E., & Walsh, R. (2007). The effect of property taxes on location decisions: Evidence from the market for second homes. Working paper from the Center for Economic Analysis at the University of Colorado at Boulder.
Google Scholar

4. Johnson, E., & Walsh, R. (2013). The effect of property taxes on vacation home growt omics, 43, 740–7

5. Ladd, composition of the

6. Ladd, erty for educa

7. Nelsor ducational Evalua

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8. Nelson, F. H. (1984). A note on the effects of commercial and industrial property in school spending decisions. National Tax Journal, 37, 121–125.
Web of Science ® | Google Scholar

9. Rockoff, J. E. (2010). Local response to fiscal incentives in heterogeneous communities. Journal of Urban Economics, 68, 138–147.10.1016/j.jue.2010.03.010
| Web of Science ® | Google Scholar

0. Saltzman, E. W. (2009). State property tax comparisons: Residential property. Policy Brief from the Jim Self Center on the Future at the Strom Thurmond Institute, Clemson University.
Google Scholar

21. Tiebout, C. (1956). A pure theory of local expenditures. Journal of Political Economy, 64, 416–424.10.1086/jpe.1956.64.issue-5
| Web of Science ® | Google Scholar

2. Wildasin, D. (1987). The demand for public goods in the presence of tax exporting. National Tax Journal, 40, 591–601.
Web of Science ® | Google Scholar

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